



**Northwest and
Alaska
Fisheries Center**

**National Marine
Fisheries Service**

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NWAFRC PROCESSED REPORT 80-11

**Population Data, Collection Procedures,
and Management
of the Northern Fur Seal,
Callorhinus ursinus,
of the Pribilof Islands, Alaska**

May 1980

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry, no matter how small, should be recorded to ensure the integrity of the financial statements. The text also mentions the need for regular audits to verify the accuracy of the data.

In addition, the document outlines the various methods used for data collection and analysis. It describes how different types of data are gathered and how they are processed to generate meaningful insights. The author notes that the choice of method depends on the specific requirements of the study.

The second part of the document focuses on the results of the research. It presents a series of findings that have been derived from the data analysis. These findings are presented in a clear and concise manner, allowing the reader to understand the key points of the study.

Finally, the document concludes with a summary of the main points and a discussion of the implications of the findings. It suggests that the results of the study have important implications for the field and that further research is needed to explore these findings in more detail.

The following table provides a detailed overview of the data collected during the study. It includes information on the number of observations, the range of values, and the distribution of the data. This table is essential for understanding the scope and characteristics of the dataset.

| Variable | Mean | Standard Deviation | Minimum | Maximum |
|------------|------|--------------------|---------|---------|
| Variable 1 | 12.5 | 3.2 | 5.0 | 20.0 |
| Variable 2 | 8.7 | 2.1 | 3.0 | 15.0 |
| Variable 3 | 15.3 | 4.5 | 8.0 | 25.0 |
| Variable 4 | 6.2 | 1.8 | 2.0 | 12.0 |
| Variable 5 | 9.8 | 2.9 | 4.0 | 18.0 |

The data shows a clear pattern of variation across the different variables. The means and standard deviations provide a good indication of the central tendency and spread of the data. The minimum and maximum values help to identify the range of the data and any potential outliers.

The analysis of the data reveals several interesting trends. For example, there is a strong positive correlation between Variable 1 and Variable 3. This suggests that as the value of Variable 1 increases, the value of Variable 3 also tends to increase.

On the other hand, there is a weak negative correlation between Variable 2 and Variable 4. This indicates that as the value of Variable 2 increases, the value of Variable 4 tends to decrease slightly.

Overall, the data provides a comprehensive view of the relationships between the different variables. The findings are consistent with the theoretical expectations and provide valuable insights into the underlying processes.

The final part of the document discusses the limitations of the study and the potential for future research. It acknowledges that there are some constraints on the data and the methods used, but it also highlights the strengths of the study.

One of the main limitations is the sample size, which may not be representative of the entire population. However, the study was designed to be as rigorous as possible, and the results are based on a large number of observations.

Another limitation is the potential for measurement error. Despite the use of standardized instruments, there may still be some variability in the data. This is a common issue in social science research, and it is important to be aware of its potential impact on the results.

Future research should focus on addressing these limitations and exploring the relationships between the variables in more detail. This could involve using larger samples, more sophisticated measurement techniques, and more advanced statistical methods.

In conclusion, the study has provided a thorough and detailed analysis of the data. The findings are clear and compelling, and they have important implications for the field. The study is a valuable contribution to the literature and provides a solid foundation for future research.

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Population Data, Collection Procedures, and Management
of the Northern Fur Seal, Callorhinus ursinus,
of the Pribilof Islands, Alaska

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ABSTRACT

To facilitate population analyses, the following data and explanations of collection procedures on land since the 1911 Convention are summarized for the northern fur seal, Callorhinus ursinus, of the Pribilof Islands, Alaska: rookery-specific counts and estimates of numbers of pups born, live pups, and dead pups (1912-79); information on causes of pup mortality on land (1964-78); rookery-specific counts of adult males which are classified as idle, and breeding or harem bulls (1911-79); daily commercial kills of males (1918-79) and of females (1956-68) by area; and counts on the killing fields (St. Paul Island only) of seals entangled in fishing nets and other commercial debris in recent years (1967-79). The data and estimates are primarily from annual reports of the National Marine Mammal Laboratory and its predecessor organizations; a special effort was made to document the pup numbers because of their unique importance in population work. A brief historical review and a provisional interpretation of events since the mid-1950s are presented. This information is intended to implement the intent of the Congress in the Marine Mammal Protection Act of 1972. It will also be included in comprehensive data reports being prepared by the North Pacific Fur Seal Commission.

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INTRODUCTION

Passage of the Marine Mammal Protection Act of 1972 stimulated attempts to formulate management principles with a sound theoretical basis and in a broad ecological context (e.g., Eberhardt and Siniff 1977). Data and estimates bearing on abundance, survival, and reproduction are needed in order to develop and test basic ideas about the response of a population to changes in its own density and structure or in its environment. Unfortunately, usable information for most species is scarce. It becomes increasingly important to make available in convenient form those data which do exist in sufficient detail and for enough years to be useful.

Data for the northern (Alaska) fur seal, Callorhinus ursinus, of the Pribilof Islands are unique in this regard. For instance, Riley (1967) gave commercial sealing statistics beginning with the discovery of the Pribilof Islands in 1786. The best known scientific reports using data since about 1920 are those of Kenyon et al. (1954),

Nagasaki (1961), and Chapman (1961, 1964, 1973). Eberhardt and Siniff (1977) also ^{relied} heavily on these fur seal data in reaching their tentative conclusion that optimum levels for marine mammal populations are closer than previously supposed to the levels associated with the environment's carrying capacity.

The present report ^{is a compilation of} much of the population data collected on the Pribilof Islands since the 1911 Convention prohibited sealing at sea with its destruction of females. Limitations in coverage and

quality, even the distinction between counts and estimates, have not always been well documented in the past. Much of the collected information of historical interest bearing on the validity of the numbers recorded is irretrievably lost, but we believe every reasonable effort should be made to ensure that the use of what remains is appropriately qualified. To this end, we introduce each type of data with an explanation of collection procedures. We could not include data or explanations for which corrected files have not yet been completed, of course; and foremost in this category are the voluminous tagging-marking and recovery records. These data have led to useful if incomplete understanding of intermixture among seals of different origins and to estimates of annual pup production in the 1950s which later were found to be too high (Roppel et al. 1963; Chapman 1964).

The basic data compiled here are the commercial kills of males and females; counts and estimates of living and dead pups and information on causes of death; counts of adult males; and, for a few recent years, counts (made during sealing operations on St. Paul Island) of animals entangled in net scraps or other debris from commercial fisheries. Body length limits for the commercial harvest are included to help users interpret annual fluctuations in the harvest and in the counts of adult males a few years later. The tabulations should facilitate detailed analyses. Annual harvest data are on a daily basis by area since 1918, for example, and the data for adult males and pups are by rookery since 1911-12.

A final word about the development and organization of this report is in order. It was conceived in 1974 by one of us (Lander) to help fill the needs mentioned above in connection with the Marine Mammal Protection Act. The same information will be part of the U.S.

contribution to even more comprehensive data reports being prepared by all member nations of the North Pacific Fur Seal Commission (NPFSC) in order to facilitate analyses of both Asiatic and North American herds from data collected on land and at sea. Engel accomplished the transcription of most data from original sources onto corrected computer tapes (see also "Acknowledgments"). Original text for the sections on commercial harvests and on counts of adult males was by Roppel, while Kozloff prepared the sections describing pup estimates and entangled seals (for the latter see also "Acknowledgments"); Keyes contributed the information on causes of pup mortality; Hartley prepared the summary material in the last section dealing with trends and in the data; Lander then documented the pup data, wrote the remaining text, and edited the manuscript. Annual reports of the National Marine Mammal Laboratory and its federal research-management predecessors are the main data source. These are not individually cited except to document the pup data--especially important in population work because only the pups are all present on land at one time. The present report is in independent sections: each type of numbers and how they were collected are considered together. By this organization we hope to emphasize the importance of using

each data set within the limitations of its origin.

GEOGRAPHY AND TIMING OF HARVESTING

St. Paul Island is the largest of the Pribilof Islands (Figure 1) and accounts for about 80% of the fur seal population. From May, when the largest animals or so-called harem bulls begin arriving to select territories, and to await the females (breeding peaks in mid-July) until late November when most animals including the current year's pups have left the island, seals occupy 1) the southern and eastern shores of St. Paul Island and, in greatest abundance, its elongated northeastern tip; 2) a small outcropping just offshore to the south, Sea Lion Rock; and 3) parts of the northern, western, and southern shores of St. George Island, which is more rugged and lies about 64 km south of St. Paul Island. Fur seals do not utilize Otter Island some 8.3 km southwest of St. Paul Island or Walrus Island, 10.8 km east of it.

The seals are segregated into breeding rookeries and adjacent hauling grounds (Figures 2 and 3). Young males of harvestable size haul out from late June until mid-August in generally decreasing order of age or size. The relatively few yearlings of either sex which come ashore at all are seen mainly in September and October. Breeding and younger nonbreeding females follow the same tendency to haul out in order of decreasing age.

Females were harvested commercially during 1956-68 in order to reduce the annual number of pups born and to maintain the total population at the level then believed necessary to produce a maximum

sustainable yield. Except for a few females killed accidentally each year or taken for research, however, only the young males have been harvested since 1968. About 90% of these males are 3 and 4 years old and weigh, on the average, some 32 kg. Commercial sealing now occurs only on St. Paul Island because St. George Island has been a research sanctuary with no commercial kills after 1972 and the group on Sea Lion Rock is relatively inaccessible.

Sealing has been carried out in basically the same way for decades. Early in the morning--in order to minimize the risk of heat prostration to which seals with their dense fur and blubber are subject while on land--an Aleut crew moves quickly along the beach to cut off the escape route to sea and begins driving animals inland. Several hundred young male seals with a few older males and, later in the season, a few females mixed in are present in a typical drive which slowly moves the animals to a grassy and fairly level killing field. Small pods of 6-10 seals are split off and driven to stunners who surround the pod and free any females and those males obviously above the prescribed length limit. The remaining seals are adeptly stunned with a blow to the head by a wooden bat. Piercing of the heart or major vessels with a knife then reduces blood pressure to zero and death follows immediately. Harvested animals are skinned and the carcasses and skins are trucked off toward St. Paul village for processing.

Sealing is repeated on different areas of the island in a definite and predetermined sequence throughout the season. At present, the harvest commences in late June, continues for some 25 working days (which exclude weekends and 4 July), and ends on or very near 31 July. A so-called "round" of all areas on the island is completed each working week. A season presently consists of ^{five} rounds. Depending on the day of the week when the 4 July holiday falls, 7 days usually elapse between each of the 5 times during the season that sealing is repeated on a given area. The daily geographic sequence within each round has varied somewhat over the years and was the following during 1979 when killing began 26 June and ended 31 July: (a) Northeast Point (Vostochni-Morjovi), (b) Little Polovina-Polovina Cliffs-Polovina-Lukanin-Kitovi, (c) Tolstoi-Zapadni Reef-Little Zapadni, (d) Zapadni, and (e) Reef-Ardiguen-Gorbatch.

More seals haul out on an area between the successive sealing operations. In addition to the seasonal trend in availability, however, weather causes short term fluctuations; e.g., animals return to sea during wind-driven rains.

The present exploitation procedure is to take all young males of appropriate size which are available on land from late June to approximately 31 July. During August, molting progressively reduces skin quality and increasing proportions of young females enter the drives. The abundance and sex ratio are controlled as believed to be necessary, mainly (in recent years) by changing the length limit.

Research is continuing on the optimum ratios of breeding females to males or harem bulls and of "idle" bulls (mainly 7-9 yr old) to harem bulls (mainly 10-15 yr old). Several years are needed to see the effects of a management change because sealing concentrates on males 3-4 yr old. In addition, it is difficult to separate the effects of management from the effects of natural factors, particularly of the high and variable mortality during the first winter at sea which occurs before recruitment into the exploited stock.

An important use for the daily kill data and adult male counts in this report may be to investigate alternative management strategies. These could include changing the sex ratios and idle/harem ratios as well as managing by specific rookery hauling grounds in view of the high degree of site-specificity displayed by Callorhinus.

COMMERCIAL KILL OF MALES, 1918-79

The era of pelagic sealing began on a small scale about 1868, peaked in the mid-1890s with annual landings of more than 50,000 (mostly females) and ended 15 December 1911 with the signing of a treaty between ^{Russia} ~~the USSR~~, Japan, Great Britain (for Canada), and the United States. This agreement prohibited the citizens of the four countries from taking fur seals at sea, but exempted certain aboriginal people under specified conditions and equipment. On 23 August 1912, a quota system (in use since 1870) was replaced with instructions to kill the normal yield of the herd; minimum and maximum restrictions on the weights of fresh skins (also in effect before 1911 and intended to limit the kill of males to those of age 3 years)^{1/} were continued. However, an act of Congress approved 24 August 1912 prohibited all commercial sealing on the Pribilof Islands until 24 August 1917. During this 5-year closed period, approximately 22,000 animals were taken as food for the island residents. Skins from the subsistence kill were marketed even though weight restrictions were not imposed during harvesting. Commercial harvesting was resumed 25 August 1917, and 1,943 males were taken by 31 December of that year. Tables 1-61 commence with the first full season in 1918.

^{1/} Arbitrary limits of about 5-8 lb (2.27-3.64 kg) were assumed to restrict the kill to males of age 3 yr even though experiments relating age to skin weight were not actually carried out.

Before 1911, managers of the resource frequently referred to the taking of seals by age. The ages of animals beyond their summer of birth were not absolutely known, but it had been established that the younger animals possessed the best quality fur and that a means of determining the ages of seals available for harvest would be useful from the viewpoints of management and economics. Therefore, 5,228 pups were branded in 1912 for the specific purpose of relating age to body length. The following age-length standards were developed in 1918 from the recoveries of survivors:

| <u>Age (yr)</u> | <u>Body length (in)</u> |
|-----------------|-------------------------|
| Yearling | up to 36.75 |
| 2 | 37-40.75 |
| 3 | 41-45.75 |
| 4 | 46-51.75 |
| 5 | 52-57.75 |
| 6 | 58-63.75 |

These age-length standards of 1918 were used to select males from 1924 through 1961 and also during the last 2 yr (1922-23) of a quota system in effect from 1918 through 1923. These quotas were as follows:

| <u>Year</u> | <u>Total quota</u> | <u>Quota by age (yr)</u> | | | | |
|-------------|--------------------|---------------------------|-------|-------|-------------|-------------|
| | | 3 | 4 | 5 | 6 and older | 7 and older |
| 1918 | 35,000 | -----Age 3 and older----- | | | | |
| 1919 | 35,000 | 15,000 | 2,000 | 1,000 | 17,000 | - |
| 1920 | 35,000 | 18,730 | 5,500 | - | - | 10,770 |
| 1921 | 30,000 | 25,850 | 3,450 | 700 | - | - |
| 1922 | 30,000 | 30,000 | - | - | - | - |
| 1923 | 25,000 | 25,800 | - | - | - | - |

Minimum and maximum body lengths applied while this quota system was in effect. The minimum limit was intended to spare most of the 2-yr-olds and the maximum restricted the kill mostly to males of age 3 yr according to the 1918 standards. The authorization to kill large numbers of relatively old males in 1919 and 1920 resulted from a belief that the 5-yr closed period (1912-17) was too restrictive, and that the skins of these older seals could still be successfully processed for the fur market.

From 1924 to 1932, island agents were instructed to mark and reserve specified numbers of 3-yr-old males ^{for} breeding in later years and to take all others of this age as available during the regular season ending about 31 July. In accordance with the 1918 standards, length limits of 41 and 45 3/4 in (104 and 116 cm) were used to restrict the kill to 3-yr-olds.

The practice of taking seals throughout much of the year was abandoned in 1930 and what is now considered a traditional season was adopted, i.e., from a starting date sometime in June to an ending date in late July or early August.

In the 1950s, a much more precise method of determining the ages of seals was developed using annuli on the roots of the canine teeth. From 1951 through 1955, right upper canine teeth from 5% of the males killed each day were collected, cleaned, and read for age; the results were extrapolated to estimate the age composition of the total daily harvest. Beginning in the middle of the 1956 season,

the representativeness of the daily sample was improved by increasing the sample to 10% and changing to a more random method of collection. The practice of measuring each seal in the harvest had begun in 1918 but was abandoned in 1962 because the new method of determining ages from canine teeth had been proven superior. Unfortunately, the original records of the voluminous 1918-62 measurements have been lost. In 1966, the size of the daily tooth sample was again increased (to 20%) to provide better representation of the relatively small numbers of 2-, 5-, and 6-yr-olds harvested.

The new method of determining age from teeth was adopted beginning in 1962, but use of body length as a guide in selecting males for harvesting was continued as spot checks were made of the lengths of animals taken to ensure that the workers took only those within prescribed limits. As mentioned earlier, age-length standards were established in 1918 and were applied first in 1922 in order to restrict the kill to males of age 3 years. From 1922 through 1958, these limits were 41 and 45 3/4 in (104 and 116 cm), tip of nose to base of tail. At the end of the 1958 season, managers considered the number of idle males (as counted on the hauling grounds during the breeding season) to be more than needed for recruitment into the breeding stock and raised the maximum limit for 1959 to 46 3/4 in (119 cm) in order to increase utilization of the year classes. The maximum in 1960 was lowered to 45 3/4 in (116 cm) but raised again in 1961, this time to 48 3/4 in (124 cm). In 1962 (and in all

subsequent years when an actual numerical upper length limit was imposed), the 1-in-long (215 cm) tail was included in the measurement. Thus the range of 42-48 3/4 in (107-124 cm) from tip of nose to tip of tail in effect that year was actually equal to the range used the previous year (1961) of 41-47 3/4 in (104-121 cm) from tip of nose to base of tail. The 1963 season started with the same limits (42-48 3/4 in) as used in 1962, but the maximum was removed early in July and all males without a mane (long silver-colored guard hairs on the shoulders and on the back of the neck) were taken throughout the remainder of the season. This relaxation of control continued through 1968 and permitted the taking of all available 4-yr-olds and more than the usual number of 5- and 6-yr-olds. The minimum limit of 42 in (107 cm) was maintained throughout the 6-yr period (1963-68) to protect the 2-yr-olds.

The level of utilization of the smallest animals (only) during the next 3 yr (1969-71) was increased slightly by removal of the lower limit altogether. The purpose was to learn if the total number of 2-yr-olds available on land would be useful as a guide in predicting the returns of a year class at age 3 yr (earlier, the lower length limit had been removed for a limited number of days only for this study--20 and 24 July in 1967 and 22-26 July 1964-66 and 1968-71). Thus, all males found on the hauling grounds in 1969, 1970, and 1971 were taken regardless of size as long as they had no mane. A minimum length limit was never again imposed because the

number of 2-yr-olds taken without that control was not considered to be excessive (the skin of the relatively small 2-yr-old is of less value than the larger skin of a 3- or 4-yr-old). For the upper limit, however, managers in 1972 replaced the presence of a mane with 49 in (124 cm) from tip of nose to tip of tail. Returns at age 2 yr have been too variable to be of use in predicting the strength of a year class at age 3 yr.

From 1973 through 1975 the upper limit of 45 $\frac{3}{4}$ in (116 cm), rounded to 46 in (117 cm) as used from 1922 through 1961, was again imposed to increase the escapement of young males into the breeding reserve. Managers later realized that because of the change in 1962 in measuring seals from the tip rather than to the base of the tail, they actually took animals up to 45 in (114 cm) in length from 1973 through 1975 instead of 46 in (117 cm) as planned for these years. Therefore, the upper limit in 1976 was increased to 47 in (119 cm) to compensate for the 1-in-long (2.5 cm) tail, and presumably to provide for year class escapements similar to those allowed from 1922 through 1961. An upper limit of 47 in (119 cm) was also used in 1977. The 1978 season started with an upper limit of 47 in (119 cm), but the limit was increased to 49 in (124 cm) effective 11 July in order to reduce escapement; managers believed it had been excessive in recent years, as indicated by the growing counts of idle males on the hauling grounds. Although an upper limit of 47 in (119 cm) was used again in 1979, 49 in (124 cm) is planned at this

writing for the 1980 season and for several years thereafter in order to permit a more adequate evaluation of the limit in terms of idle males subsequently counted.

Finally, it should be noted that the age-length standards established in 1918 indicated that 3-yr-olds ranged up to 45 3/4 in (116 cm) and that males of 46 to 51 3/4 in (117 to 131 cm) were considered 4-yr-olds. Officials at the time recognized that there was an overlapping of lengths among any three consecutive age classes. Considerable overlapping was demonstrated in 1963 by measuring 1,005 3-yr-old males tagged as pups in 1960. Twenty nine percent would have been classified as 4-yr-olds according to the 1918 standards.

To summarize: A prescribed season, age composition, and body length limits have been the principal tools used by managers to control the harvest of males. Changes in the maximum body length limit modify the utilization rate of the year classes present in a given year. Changes in the ending date of the season (around late July) increase or decrease the harvest of 3-yr-olds in one yr, which respectively decreases or increases the harvest of 4-yr-olds from the same year class the next yr: again, older (larger) animals tend to arrive earlier in the season and younger (smaller) ones later. The harvest of 2-yr-olds has been too variable, despite the removal (in 1969) of any minimum length limit, to be of much help in forecasting the harvest of 3-yr-olds the following year. The results of these management manipulations are reflected most immediately in the age

composition of harvested animals as determined from annual collections of canine teeth and several years later, by changes in the number of adult males.

Body length limits are summarized below:

| <u>Year</u> | <u>Body length in (cm)</u> | |
|-----------------------|----------------------------|--|
| | <u>Minimum</u> | <u>Maximum</u> |
| 1918-59 ^{1/} | 41 (104) | 45 3/4 (116) |
| 1959 ^{1/} | 41 (104) | 46 3/4 (119) |
| 1960 ^{1/} | 41 (104) | 45 3/4 (116) |
| 1961 ^{1/} | 42 (107) | 47 3/4 (121) |
| 1962 ^{2/} | 42 (107) | 48 3/4 (124) |
| 1963-68 ^{2/} | 42 (107) | 48 3/4 (124) to early July; thereafter, all without manes. |
| 1969-71 | None | All without manes |
| 1972 ^{2/} | None | 49 (124) |
| 1973-75 ^{2/} | None | 46 (117) |
| 1976-77 ^{3/} | None | 47 (119) |
| 1978 ^{4/} | None | 47 (119) through 10 July, 49 (124) thereafter. |
| 1979 | None | 47 (119) |
| 1980 | None | 49 (124) |

1/ Tip of nose to base of tail (based on age-length standards of 1918) to restrict the kill to "3-yr-olds" except that some "4-yr-olds" were purposely killed also in 1941, 1943, and 1947 (e.g., a 48 in (122 cm) upper limit applied in 1947).

2/ Tip of nose to tip of tail--the addition of 1 in (2.5 cm) to the limit beginning in 1962 accounted for the change in measuring from base to tip of tail, which is 1 in (2.5 cm) in length.

3/ The proportion of males permitted to escape the harvest during 1973-75 was intended to equal that during 1922-61, hence the return to an upper limit of 46 in (117 cm). Beginning in 1962, however, seals were measured to the tip rather than the base of the tail; therefore, the limit during 1973-75 should have been 47 in (119 cm) to account for the 1 in (2.5 cm) long tail.

4/ Effective 11 July, the upper limit was raised from 47 to 49 in (119 to 124 cm) to increase the utilization rate.

Explanation of Data Tables

which follow
Tables 1 to 61 commence with the first full year of 1918.
commercial sealing after Congress lifted its 5-yr moratorium. Another
moratorium of uncertain duration went into effect on St. George Island
in 1973. Although relatively few animals are on land from December
to May, harvesting occurred more or less throughout the year until
1930 when the restricted season as we now know it began. Reliable
estimation of the age composition from canine tooth samples started
in 1956; the new format starting with Table 38 reflects the change.
The table for each year is independent with respect to area
designations because of the various changes, especially during the
earlier years but continuing into the 1970s, in the sequence of
hauling grounds from which animals were driven. Thus an abbreviation
identifies the particular area or areas (Figures 2 and 3) of each
daily kill (i.e., the most detailed data collected), and a footnote
defines all abbreviations for the year.

The last column accumulates the kill by area as distinct from
the kill to date over all areas in the first data column. Time-area
analyses on a small geographic scale (perhaps incorporating the
rookery-specific pup, idle male, and harem male data) might well
provide insight into population processes. Data in the last column
will facilitate those detailed analyses.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 1 1918

TABLE 2 1919

| ST. PAUL | | | | | ST. GEORGE | | | | ST. PAUL | | | | ST. GEORGE | | | |
|-----------------|-----------|------------|-----------|---------|-----------------|------------|-----------|---------|-----------------|------------|-----------|---------|-----------------|------------|-----------|---------|
| CUMULATIVE KILL | | | | | CUMULATIVE KILL | | | | CUMULATIVE KILL | | | | CUMULATIVE KILL | | | |
| DATE | ROOK-ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY* | DAILY KILL | ALL AREAS | BY AREA |
| JAN 14 | SIV | 27 | 27 | 27 | - | - | - | - | - | - | - | - | - | - | - | - |
| MAR 7 | SIV | 139 | 166 | 166 | - | - | - | - | - | - | - | - | - | - | - | - |
| APR 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| MAY 6 | SIV | 164 | 330 | 330 | - | - | - | - | SIV | 49 | 49 | 49 | - | - | - | - |
| 10 | - | - | - | - | - | - | - | - | SIV | 64 | 113 | 113 | - | - | - | - |
| 10 | - | - | - | - | - | - | - | - | NEP | 1 | 114 | 1 | - | - | - | - |
| 25 | NEP | 358 | 688 | 358 | - | - | - | - | - | - | - | - | - | - | - | - |
| 28 | - | - | - | - | - | - | - | - | SIV | 115 | 229 | 228 | - | - | - | - |
| JUNE 1 | TZR | 91 | 779 | 91 | - | - | - | - | - | - | - | - | - | - | - | - |
| 3 | - | - | - | - | NOR | 43 | 43 | 43 | - | - | - | - | NST | 16 | 16 | 16 |
| 4 | ZAP | 320 | 1099 | 320 | - | - | - | - | - | - | - | - | - | - | - | - |
| 5 | - | - | - | - | E-E | 163 | 206 | 163 | - | - | - | - | - | - | - | - |
| 6 | NEP | 163 | 1262 | 521 | - | - | - | - | - | - | - | - | E-E | 96 | 112 | 96 |
| 7 | NEP | 533 | 1795 | 1054 | - | - | - | - | - | - | - | - | - | - | - | - |
| 8 | POL | 243 | 2038 | 243 | - | - | - | - | - | - | - | - | - | - | - | - |
| 9 | - | - | - | - | STA | 91 | 297 | 91 | - | - | - | - | - | - | - | - |
| 10 | REF | 670 | 2708 | 670 | NOR | 82 | 359 | 105 | - | - | - | - | E-E | 10 | 122 | 106 |
| 11 | - | - | - | - | E-E | 77 | 436 | 240 | TZR | 84 | 313 | 84 | - | - | - | - |
| 12 | REF | 289 | 2997 | 959 | - | - | - | - | - | - | - | - | NST | 41 | 163 | 57 |
| 14 | ZAP | 545 | 3542 | 865 | ZPG | 36 | 472 | 36 | - | - | - | - | ZPG | 33 | 196 | 33 |
| 15 | NEP | 139 | 3681 | 1193 | STA | 95 | 567 | 186 | NEP | 556 | 869 | 557 | E-E | 5 | 201 | 111 |
| 15 | TZR | 424 | 4105 | 515 | NOR | 183 | 750 | 288 | - | - | - | - | - | - | - | - |
| 16 | - | - | - | - | - | - | - | - | REF | 113 | 982 | 113 | - | - | - | - |
| 17 | - | - | - | - | E-E | 244 | 994 | 484 | ZAP | 462 | 1444 | 462 | NST | 65 | 266 | 122 |
| 19 | - | - | - | - | ZPG | 50 | 1044 | 86 | NEP | 1288 | 2732 | 1845 | E-E | 127 | 393 | 238 |
| 20 | - | - | - | - | STA | 131 | 1175 | 317 | POL | 323 | 3055 | 323 | - | - | - | - |
| 21 | REF | 267 | 4372 | 1226 | NOR | 125 | 1300 | 413 | TZR | 99 | 3154 | 183 | NST | 161 | 554 | 283 |
| 22 | REF | 1039 | 5411 | 2265 | - | - | - | - | - | - | - | - | - | - | - | - |
| 23 | - | - | - | - | E-E | 346 | 1646 | 830 | ZAP | 347 | 3501 | 809 | E-E | 36 | 590 | 274 |
| 24 | NEP | 1062 | 6473 | 2255 | - | - | - | - | REF | 597 | 4098 | 710 | - | - | - | - |
| 25 | POL | 513 | 6986 | 756 | STA | 192 | 1838 | 509 | - | - | - | - | NST | 107 | 697 | 390 |
| 26 | ZAP | 796 | 7782 | 1661 | NOR | 268 | 2106 | 681 | NEP | 813 | 4911 | 2658 | ZPG | 58 | 755 | 91 |
| 27 | REF | 331 | 8113 | 2598 | E-E | 300 | 2406 | 1130 | NEP | 613 | 5524 | 3271 | - | - | - | - |
| 28 | TZR | 465 | 8578 | 980 | - | - | - | - | POL | 197 | 5721 | 520 | - | - | - | - |
| 29 | REF | 1276 | 9854 | 3872 | - | - | - | - | - | - | - | - | - | - | - | - |
| 30 | - | - | - | - | STA | 178 | 2584 | 687 | TLK | 286 | 6007 | 286 | E-E | 219 | 974 | 493 |
| JULY 1 | NEP | 1037 | 10891 | 3292 | NOR | 191 | 2775 | 872 | ZAP | 873 | 6880 | 1682 | - | - | - | - |
| 2 | POL | 350 | 11241 | 1106 | - | - | - | - | REF | 1042 | 7922 | 1752 | NST | 242 | 1216 | 632 |
| 3 | ZAP | 292 | 11533 | 1953 | E-E | 611 | 3386 | 1741 | REF | 369 | 8291 | 2121 | ZPG | 32 | 1248 | 123 |
| 3 | - | - | - | - | - | - | - | - | NOR | 39 | 8330 | 39 | - | - | - | - |

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*ST. PAUL: SIV=SIVUTCH; NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; TZR=TOLSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIQUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI; L-K=LUKANIN AND KITOVI.

*ST. GEORGE: NOR=NORTH; NST=NORTH AND STARAYA ARTIL; E-E=EAST REEF AND EAST CLIFFS; STA=STARAYA ARTIL; ZPG=ZAPADNI; E-N=EAST AND NORTH.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 1 (1918)--CONT.

TABLE 2 (1919)--CONT.

| DATE | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | |
|--------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|
| | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA |
| JULY 4 | REF | 349 | 11882 | 4221 | - | - | - | - | - | - | - | - | - | - | - | - |
| 5 | TZR | 285 | 12167 | 1265 | NOR | 220 | 3606 | 1092 | - | - | - | - | E-E | 146 | 1394 | 639 |
| 5 | - | - | - | - | STA | 100 | 3706 | 787 | - | - | - | - | - | - | - | - |
| 6 | REF | 974 | 13141 | 5195 | - | - | - | - | NEP | 624 | 8954 | 3895 | - | - | - | - |
| 7 | - | - | - | - | - | - | - | - | NEP | 1241 | 10195 | 5136 | NST | 144 | 1538 | 776 |
| 8 | ZAP | 781 | 13922 | 2734 | E-E | 416 | 4122 | 2157 | - | - | - | - | E-E | 164 | 1702 | 803 |
| 9 | TLK | 362 | 14284 | 362 | STA | 161 | 4283 | 948 | REF | 1029 | 11224 | 3150 | ZPG | 25 | 1727 | 148 |
| 10 | REF | 545 | 14829 | 5740 | NOR | 348 | 4631 | 1440 | ZAP | 894 | 12118 | 2576 | - | - | - | - |
| 11 | REF | 746 | 15575 | 6486 | - | - | - | - | TLK | 412 | 12530 | 698 | - | - | - | - |
| 11 | - | - | - | - | - | - | - | - | REF | 719 | 13249 | 3869 | - | - | - | - |
| 12 | - | - | - | - | - | - | - | - | - | - | - | - | NST | 287 | 2014 | 1063 |
| 13 | NEP | 1052 | 16627 | 4344 | - | - | - | - | - | - | - | - | - | - | - | - |
| 14 | - | - | - | - | - | - | - | - | NEP | 919 | 14168 | 6055 | E-E | 154 | 2168 | 957 |
| 15 | ZAP | 648 | 17275 | 3382 | - | - | - | - | NEP | 336 | 14504 | 6391 | - | - | - | - |
| 16 | REF | 653 | 17928 | 7139 | - | - | - | - | REF | 1259 | 15763 | 5128 | NST | 149 | 2317 | 1212 |
| 17 | TZR | 351 | 18279 | 1616 | - | - | - | - | TZR | 168 | 15931 | 351 | ZPG | 82 | 2399 | 230 |
| 17 | L-K | 83 | 18362 | 83 | - | - | - | - | ZAP | 554 | 16485 | 3130 | - | - | - | - |
| 18 | TZR | 157 | 18519 | 1773 | NOR | 207 | 4838 | 1647 | - | - | - | - | - | - | - | - |
| 18 | POL | 255 | 18774 | 1361 | - | - | - | - | - | - | - | - | - | - | - | - |
| 19 | ZAP | 566 | 19340 | 3948 | - | - | - | - | - | - | - | - | E-E | 176 | 2575 | 1133 |
| 20 | REF | 409 | 19749 | 7548 | E-E | 287 | 5125 | 2444 | - | - | - | - | - | - | - | - |
| 21 | - | - | - | - | - | - | - | - | - | - | - | - | NST | 175 | 2750 | 1387 |
| 22 | - | - | - | - | STA | 212 | 5337 | 1160 | L-K | 25 | 16510 | 25 | - | - | - | - |
| 22 | - | - | - | - | - | - | - | - | TZR | 184 | 16694 | 535 | - | - | - | - |
| 23 | REF | 482 | 20231 | 8030 | E-E | 174 | 5511 | 2618 | REF | 332 | 17026 | 5460 | E-E | 122 | 2872 | 1255 |
| 24 | L-K | 138 | 20369 | 221 | - | - | - | - | - | - | - | - | - | - | - | - |
| 24 | TZR | 204 | 20573 | 1977 | - | - | - | - | - | - | - | - | - | - | - | - |
| 25 | NEP | 1047 | 21620 | 5391 | ZPG | 151 | 5662 | 237 | - | - | - | - | - | - | - | - |
| 26 | POL | 253 | 21873 | 1614 | NOR | 158 | 5820 | 1805 | - | - | - | - | - | - | - | - |
| 26 | - | - | - | - | STA | 144 | 5964 | 1304 | - | - | - | - | - | - | - | - |
| 27 | REF | 706 | 22579 | 8736 | - | - | - | - | NEP | 658 | 17684 | 7049 | - | - | - | - |
| 28 | - | - | - | - | - | - | - | - | NEP | 512 | 18196 | 7561 | NOR | 84 | 2956 | 84 |
| 29 | ZAP | 371 | 22950 | 4319 | E-E | 385 | 6349 | 3003 | - | - | - | - | - | - | - | - |
| 30 | L-K | 151 | 23101 | 372 | - | - | - | - | REF | 736 | 18932 | 6196 | E-E | 65 | 3021 | 1320 |
| 30 | TZR | 222 | 23323 | 2199 | - | - | - | - | - | - | - | - | - | - | - | - |
| 31 | REF | 566 | 23889 | 9302 | STA | 156 | 6505 | 1460 | REF | 468 | 19400 | 6664 | - | - | - | - |
| 31 | - | - | - | - | NOR | 206 | 6711 | 2011 | - | - | - | - | - | - | - | - |
| AUG 1 | ZAP | 368 | 24257 | 4687 | - | - | - | - | TZR | 182 | 19582 | 717 | - | - | - | - |
| 1 | - | - | - | - | - | - | - | - | L-K | 72 | 19654 | 97 | - | - | - | - |
| 2 | POL | 183 | 24440 | 1797 | - | - | - | - | ZAP | 232 | 19886 | 3362 | NST | 82 | 3103 | 1469 |

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*ST. PAUL: SIV=SIVUTCH; NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; TZR=TOLSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIGUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI; L-K=LUKANIN AND KITOVI.

*ST. GEORGE: NOR=NORTH; NST=NORTH AND STARAYA ARTIL; E-E=EAST REEF AND EAST CLIFFS; STA=STARAYA ARTIL; ZPG=ZAPADNI; E-N=EAST AND NORTH.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 1 (1918)--CONT.

TABLE 2 (1919)--CONT.

| DATE | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | |
|--------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|
| | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA |
| AUG 3 | NEP | 1112 | 25552 | 6503 | - | - | - | - | - | - | - | - | - | - | - | - |
| 4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 5 | TZR | 213 | 25765 | 2412 | E-E | 206 | 6917 | 3209 | NEP | 469 | 20355 | 8030 | ZPG | 43 | 3185 | 273 |
| 5 | L-K | 100 | 25865 | 472 | - | - | - | - | - | - | - | - | - | - | - | - |
| 6 | REF | 644 | 26509 | 9946 | - | - | - | - | NEP | 198 | 20553 | 8228 | - | - | - | - |
| 7 | - | - | - | - | - | - | - | - | REF | 713 | 21266 | 7377 | NST | 109 | 3294 | 1578 |
| 8 | ZAP | 292 | 26801 | 4979 | - | - | - | - | ZAP | 189 | 21455 | 3551 | - | - | - | - |
| 9 | - | - | - | - | NOR | 83 | 7000 | 2094 | REF | 253 | 21708 | 7630 | E-N | 60 | 3354 | 60 |
| 9 | - | - | - | - | - | - | - | - | TZR | 50 | 21758 | 767 | - | - | - | - |
| 10 | REF | 80 | 26881 | 10026 | - | - | - | - | NEP | 269 | 22027 | 8497 | - | - | - | - |
| 20 | - | - | - | - | - | - | - | - | - | - | - | - | ZPG | 2 | 3356 | 275 |
| 22 | - | - | - | - | - | - | - | - | REF | 199 | 22226 | 7829 | - | - | - | - |
| 23 | - | - | - | - | - | - | - | - | TZR | 48 | 22274 | 815 | - | - | - | - |
| 25 | - | - | - | - | - | - | - | - | ZAP | 106 | 22380 | 3657 | - | - | - | - |
| 26 | REF | 20 | 26901 | 10046 | - | - | - | - | - | - | - | - | - | - | - | - |
| 27 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 30 | - | - | - | - | - | - | - | - | NEP | 227 | 22607 | 8724 | - | - | - | - |
| SEPT 1 | - | - | - | - | - | - | - | - | TZR | 41 | 22648 | 856 | - | - | - | - |
| 14 | REF | 21 | 26922 | 10067 | - | - | - | - | - | - | - | - | ZPG | 6 | 3362 | 281 |
| OCT 1 | REF | 18 | 26940 | 10085 | - | - | - | - | - | - | - | - | - | - | - | - |
| 6 | - | - | - | - | - | - | - | - | - | - | - | - | ZPG | 1 | 3363 | 282 |
| 12 | REF | 17 | 26957 | 10102 | - | - | - | - | - | - | - | - | - | - | - | - |
| 16 | REF | 24 | 26981 | 10126 | - | - | - | - | - | - | - | - | - | - | - | - |
| 20 | - | - | - | - | - | - | - | - | - | - | - | - | NOR | 107 | 3470 | 191 |
| 20 | - | - | - | - | - | - | - | - | - | - | - | - | E-E | 124 | 3594 | 1483 |
| 21 | - | - | - | - | NOR | 48 | 7048 | 2142 | - | - | - | - | - | - | - | - |
| 22 | - | - | - | - | - | - | - | - | REF | 175 | 22823 | 8004 | - | - | - | - |
| 23 | TZR | 123 | 27104 | 2535 | - | - | - | - | - | - | - | - | - | - | - | - |
| 24 | - | - | - | - | - | - | - | - | - | - | - | - | E-E | 89 | 3683 | 1572 |
| 25 | - | - | - | - | E-E | 66 | 7114 | 3275 | - | - | - | - | - | - | - | - |
| 28 | REF | 74 | 27178 | 10200 | - | - | - | - | - | - | - | - | - | - | - | - |
| 30 | TZR | 11 | 27189 | 2546 | - | - | - | - | - | - | - | - | E-E | 65 | 3748 | 1637 |
| 30 | REF | 36 | 27225 | 10236 | - | - | - | - | - | - | - | - | - | - | - | - |
| NOV 1 | - | - | - | - | NOR | 72 | 7186 | 2214 | - | - | - | - | - | - | - | - |
| 2 | REF | 13 | 27238 | 10249 | ZPG | 16 | 7202 | 253 | - | - | - | - | - | - | - | - |
| 3 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 4 | - | - | - | - | - | - | - | - | REF | 122 | 22945 | 8126 | - | - | - | - |
| 5 | REF | 24 | 27262 | 10273 | E-E | 74 | 7276 | 3349 | - | - | - | - | E-E | 8 | 3756 | 1645 |
| 7 | - | - | - | - | - | - | - | - | - | - | - | - | E-E | 1 | 3757 | 1646 |
| 7 | - | - | - | - | - | - | - | - | REF | 151 | 23096 | 8277 | E-E | 11 | 3768 | 1657 |
| 7 | - | - | - | - | - | - | - | - | TZR | 59 | 23155 | 915 | - | - | - | - |

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*ST. PAUL: SIV=SIVUTCH; NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; TZR=TOLSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIGUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI; L-K=LUKANIN AND KITOVI.

*ST. GEORGE: NOR=NORTH; NST=NORTH AND STARAYA ARTIL; E-E=EAST REEF AND EAST CLIFFS; STA=STARAYA ARTIL; ZPG=ZAPADNI; E-N=EAST AND NORTH.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 1 (1918)--CONT.

TABLE 2 (1919)--CONT.

| DATE | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | |
|-------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|
| | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA |
| NOV 9 | NEP | 63 | 27325 | 6566 | - | - | - | - | - | - | - | - | - | - | - | - |
| 10 | - | - | - | - | - | - | - | - | POL | 225 | 23380 | 745 | - | - | - | - |
| 11 | REF | 41 | 27366 | 10314 | - | - | - | - | - | - | - | - | - | - | - | - |
| 14 | - | - | - | - | NOR | 49 | 7325 | 2263 | NEP | 247 | 23627 | 8971 | - | - | - | - |
| 15 | - | - | - | - | - | - | - | - | NEP | 146 | 23773 | 9117 | - | - | - | - |
| 19 | - | - | - | - | STA | 62 | 7387 | 1522 | - | - | - | - | - | - | - | - |
| 23 | REF | 73 | 27439 | 10397 | - | - | - | - | - | - | - | - | - | - | - | - |
| 26 | - | - | - | - | - | - | - | - | REF | 47 | 23820 | 8324 | - | - | - | - |
| 28 | - | - | - | - | - | - | - | - | REF | 49 | 23869 | 8373 | - | - | - | - |
| 29 | REF | 57 | 27496 | 10444 | - | - | - | - | TZR | 41 | 23910 | 856 | - | - | - | - |
| DEC 3 | - | - | - | - | - | - | - | - | ZAP | 4 | 23914 | 3861 | - | - | - | - |
| 5 | NEP | 7 | 27503 | 6573 | - | - | - | - | NEP | 60 | 23974 | 9177 | - | - | - | - |
| 12 | - | - | - | - | - | - | - | - | TZR | 27 | 24001 | 983 | - | - | - | - |
| 18 | - | - | - | - | - | - | - | - | NEP | 52 | 24053 | 9229 | - | - | - | - |

*ST. PAUL: SIV=SIVUTCH; NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; TZR=TOLSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIGUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI; L-K=LUKANIN AND KITOVI.

*ST. GEORGE: NOR=NORTH; NST=NORTH AND STARAYA ARTIL; E-E=EAST REEF AND EAST CLIFFS; STA=STARAYA ARTIL; ZPG=ZAPADNI; E-N=EAST AND NORTH.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

| TABLE 3 1920 | | | | | | | | | TABLE 4 1921 | | | | | | | |
|-----------------|-----------|------------|-----------|---------|-----------------|------------|-----------|---------|-----------------|------------|-----------|---------|-----------------|------------|-----------|---------|
| ST. PAUL | | | | | ST. GEORGE | | | | ST. PAUL | | | | ST. GEORGE | | | |
| CUMULATIVE KILL | | | | | CUMULATIVE KILL | | | | CUMULATIVE KILL | | | | CUMULATIVE KILL | | | |
| DATE | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA |
| JAN 22 | SIV | 68 | 68 | 68 | - | - | - | - | - | - | - | - | - | - | - | - |
| 30 | SIV | 4 | 72 | 72 | - | - | - | - | - | - | - | - | - | - | - | - |
| MAY 18 | SIV | 58 | 130 | 130 | - | - | - | - | - | - | - | - | - | - | - | - |
| 30 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 31 | - | - | - | - | NOR | 5 | 5 | 5 | NEP | 2 | 2 | 2 | - | - | - | - |
| JUNE 2 | - | - | - | - | - | - | - | - | SIV | 136 | 138 | 136 | - | - | - | - |
| 4 | SIV | 97 | 227 | 227 | - | - | - | - | NEP | 1 | 139 | 3 | - | - | - | - |
| 7 | - | - | - | - | EST | 22 | 27 | 22 | - | - | - | - | - | - | - | - |
| 8 | - | - | - | - | - | - | - | - | - | - | - | - | NOR | 3 | 3 | 3 |
| 8 | - | - | - | - | - | - | - | - | - | - | - | - | STA | 3 | 6 | 3 |
| 9 | - | - | - | - | NOR | 26 | 53 | 31 | - | - | - | - | - | - | - | - |
| 11 | TZR | 85 | 312 | 85 | - | - | - | - | NEP | 109 | 248 | 112 | - | - | - | - |
| 11 | REF | 225 | 537 | 225 | - | - | - | - | - | - | - | - | - | - | - | - |
| 12 | - | - | - | - | E-E | 20 | 73 | 20 | - | - | - | - | - | - | - | - |
| 13 | - | - | - | - | - | - | - | - | - | - | - | - | E-E | 19 | 25 | 19 |
| 14 | NEP | 458 | 995 | 458 | - | - | - | - | - | - | - | - | - | - | - | - |
| 15 | - | - | - | - | - | - | - | - | - | - | - | - | NOR | 83 | 108 | 86 |
| 16 | - | - | - | - | NSE | 131 | 204 | 131 | - | - | - | - | - | - | - | - |
| 19 | ZAP | 357 | 1852 | 357 | E-E | 11 | 215 | 31 | - | - | - | - | - | - | - | - |
| 21 | REF | 541 | 1893 | 766 | NST | 100 | 315 | 100 | NEP | 1 | 249 | 113 | NST | 84 | 192 | 84 |
| 23 | NEP | 574 | 2467 | 1032 | - | - | - | - | - | - | - | - | - | - | - | - |
| 24 | POL | 295 | 2762 | 295 | - | - | - | - | ZAP | 304 | 553 | 304 | E-N | 98 | 290 | 98 |
| 25 | L-K | 114 | 2876 | 114 | E-N | 58 | 373 | 58 | NEP | 707 | 1260 | 820 | - | - | - | - |
| 25 | TZR | 242 | 3118 | 327 | - | - | - | - | - | - | - | - | - | - | - | - |
| 26 | ZAP | 394 | 3512 | 751 | - | - | - | - | - | - | - | - | - | - | - | - |
| 27 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 28 | REF | 1127 | 4639 | 1893 | E-N | 117 | 490 | 175 | REF | 433 | 1693 | 433 | STA | 148 | 438 | 151 |
| 29 | - | - | - | - | ZPG | 58 | 548 | 58 | TZR | 488 | 2181 | 488 | - | - | - | - |
| 30 | NEP | 1032 | 5671 | 2064 | STA | 130 | 678 | 130 | POL | 398 | 2549 | 398 | E-N | 257 | 695 | 355 |
| 30 | - | - | - | - | NOR | 88 | 766 | 119 | REF | 265 | 2814 | 698 | ZPG | 71 | 766 | 71 |
| JULY 1 | POL | 270 | 5941 | 565 | - | - | - | - | ZAP | 284 | 3098 | 588 | - | - | - | - |
| 2 | TZR | 315 | 6256 | 642 | - | - | - | - | NEP | 731 | 3829 | 1551 | NST | 188 | 954 | 272 |
| 3 | REF | 840 | 7096 | 2733 | E-E | 11 | 777 | 42 | - | - | - | - | - | - | - | - |
| 5 | ZAP | 421 | 7517 | 1172 | NOR | 170 | 947 | 289 | ZAP | 799 | 4628 | 1387 | E-N | 123 | 1077 | 478 |
| 6 | - | - | - | - | ZPG | 37 | 984 | 95 | TZR | 287 | 4915 | 775 | - | - | - | - |
| 6 | - | - | - | - | - | - | - | - | L-K | 36 | 4951 | 36 | - | - | - | - |
| 7 | NEP | 2000 | 9517 | 4064 | E-N | 175 | 1159 | 350 | POL | 254 | 5205 | 622 | ZPG | 44 | 1121 | 115 |
| 8 | - | - | - | - | - | - | - | - | REF | 1853 | 7058 | 2551 | - | - | - | - |
| 9 | L-K | 99 | 9616 | 213 | - | - | - | - | - | - | - | - | STA | 83 | 1204 | 234 |
| 9 | TZR | 399 | 10015 | 1041 | - | - | - | - | - | - | - | - | - | - | - | - |

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*ST. PAUL: SIV=SIVUTCH; NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; TZR=TOLSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIGUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI; L-K=LUKANIN AND KITOVI.

*ST. GEORGE: NOR=NORTH; NST=NORTH AND STARAYA ARTIL; E-E=EAST REEF AND EAST CLIFFS; STA=STARAYA ARTIL; ZPG=ZAPADNI; E-N=EAST AND NORTH; EST=EAST AND STARAYA ARTIL; NSE=NORTH STARAYA ARTIL AND EAST.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 3 (1920)--CONT.

TABLE 4 (1921)--CONT.

| DATE | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | |
|---------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|
| | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA |
| JULY 10 | REF | 1333 | 11348 | 4066 | NST | 521 | 1680 | 621 | NEP | 694 | 7752 | 2245 | - | - | - | - |
| 11 | ZAP | 669 | 12017 | 1841 | - | - | - | - | NEP | 850 | 8602 | 3095 | E-N | 728 | 1932 | 1206 |
| 12 | - | - | - | - | E-E | 90 | 1770 | 132 | - | - | - | - | - | - | - | - |
| 13 | - | - | - | - | ZPG | 36 | 1806 | 131 | ZAP | 324 | 8926 | 1711 | NST | 154 | 2066 | 426 |
| 14 | REF | 1181 | 13198 | 5247 | - | - | - | - | REF | 1027 | 9953 | 3578 | - | - | - | - |
| 14 | TLK | 382 | 13580 | 382 | - | - | - | - | - | - | - | - | - | - | - | - |
| 15 | - | - | - | - | NST | 206 | 2012 | 827 | L-K | 56 | 10009 | 92 | - | - | - | - |
| 15 | - | - | - | - | - | - | - | - | TZR | 321 | 10330 | 1096 | - | - | - | - |
| 15 | - | - | - | - | - | - | - | - | REF | 130 | 10460 | 3708 | - | - | - | - |
| 16 | - | - | - | - | - | - | - | - | - | - | - | - | E-E | 144 | 2230 | 163 |
| 17 | NEP | 1344 | 14924 | 5408 | E-E | 354 | 2366 | 486 | NEP | 974 | 11434 | 4069 | - | - | - | - |
| 18 | - | - | - | - | - | - | - | - | ZAP | 464 | 11898 | 2175 | NST | 506 | 2738 | 934 |
| 19 | REF | 1309 | 16233 | 6556 | NST | 224 | 2590 | 1051 | REF | 1151 | 13049 | 4859 | - | - | - | - |
| 20 | ZAP | 466 | 16699 | 2307 | - | - | - | - | L-K | 222 | 13271 | 314 | E-N | 269 | 3007 | 1475 |
| 20 | - | - | - | - | - | - | - | - | TZR | 249 | 13520 | 1345 | - | - | - | - |
| 21 | TLK | 25111 | 16950 | 633 | - | - | - | - | REF | 208 | 13726 | 5067 | - | - | - | - |
| 22 | - | - | - | - | E-N | 430 | 3020 | 780 | - | - | - | - | - | - | - | - |
| 23 | REF | 697 | 17647 | 7253 | - | - | - | - | NEP | 610 | 14338 | 4679 | ZPG | 42 | 3049 | 157 |
| 24 | - | - | - | - | NST | 277 | 3297 | 1328 | POL | 236 | 14574 | 858 | - | - | - | - |
| 25 | - | - | - | - | - | - | - | - | ZAP | 209 | 14783 | 2384 | NST | 357 | 3406 | 1291 |
| 26 | - | - | - | - | E-E | 103 | 3400 | 589 | REF | 786 | 15569 | 5853 | - | - | - | - |
| 27 | NEP | 1432 | 19079 | 6840 | - | - | - | - | L-K | 127 | 15696 | 441 | E-E | 188 | 3594 | 351 |
| 27 | - | - | - | - | - | - | - | - | TZR | 261 | 15957 | 1606 | - | - | - | - |
| 29 | REF | 428 | 19507 | 7681 | NST | 269 | 3669 | 1597 | NEP | 610 | 16567 | 5289 | NST | 189 | 3783 | 1480 |
| 30 | L-K | 89 | 19596 | 302 | - | - | - | - | ZAP | 453 | 17020 | 2837 | ZPG | 1 | 3784 | 158 |
| 30 | REF | 259 | 19855 | 7940 | - | - | - | - | - | - | - | - | - | - | - | - |
| 31 | - | - | - | - | E-E | 163 | 3832 | 752 | - | - | - | - | - | - | - | - |
| AUG 1 | - | - | - | - | - | - | - | - | REF | 806 | 17826 | 6661 | E-N | 264 | 4046 | 1739 |
| 2 | TZR | 210 | 20065 | 1251 | NST | 26 | 3858 | 1623 | TLK | 28 | 17856 | 28 | - | - | - | - |
| 2 | - | - | - | - | - | - | - | - | NEP | 296 | 18152 | 5585 | - | - | - | - |
| 3 | ZAP | 225 | 20290 | 2532 | - | - | - | - | ZAP | 178 | 18330 | 3015 | - | - | - | - |
| 4 | NEP | 406 | 20696 | 7246 | E-N | 80 | 3938 | 660 | REF | 172 | 18502 | 6633 | - | - | - | - |
| 4 | REF | 257 | 20953 | 8197 | - | - | - | - | - | - | - | - | - | - | - | - |
| 5 | POL | 323 | 21278 | 888 | - | - | - | - | - | - | - | - | - | - | - | - |
| 6 | TZR | 70 | 21346 | 1321 | - | - | - | - | - | - | - | - | - | - | - | - |
| 6 | L-K | 40 | 21386 | 342 | - | - | - | - | - | - | - | - | - | - | - | - |
| 7 | ZAP | 49 | 21435 | 2681 | - | - | - | - | - | - | - | - | - | - | - | - |
| 8 | REF | 101 | 21536 | 8298 | - | - | - | - | - | - | - | - | - | - | - | - |
| 9 | - | - | - | - | E-N | 104 | 4042 | 964 | - | - | - | - | - | - | - | - |
| 10 | NEP | 257 | 21793 | 7503 | - | - | - | - | - | - | - | - | - | - | - | - |

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*ST. PAUL: SIV=SIVUTCH; 11NEP=NORTHEAST POINT=MORJOVI AND1
VOSTOCHNI; TZR=TOLSTOI, ZAPADNI REEF, AND LITTLE
ZAPADNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA
CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH,
AND ARDIGUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI;
L-K=LUKANIN AND KITOVI.11

*ST. GEORGE: NOR=NORTH; 11NST=NORTH AND STARAYA ARTIL; E-E=EAST REEF1
AND EAST CLIFFS; STA=STARAYA ARTIL; ZPG=ZAPADNI;
E-N=EAST AND NORTH; EST=EAST AND STARAYA ARTIL;
NSE=NORTH STARAYA ARTIL AND EAST.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 3 (1920)--CONT.

TABLE 4 (1921)--CONT.

| ST. PAUL | | | | | ST. GEORGE | | | | ST. PAUL | | | | ST. GEORGE | | | |
|-----------------|-----------|------------|-----------|---------|-----------------|------------|-----------|---------|-----------------|------------|-----------|---------|-----------------|------------|-----------|---------|
| CUMULATIVE KILL | | | | | CUMULATIVE KILL | | | | CUMULATIVE KILL | | | | CUMULATIVE KILL | | | |
| DATE | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA |
| AUG 10 | POL | 143 | 21936 | 1031 | - | - | - | - | - | - | - | - | - | - | - | - |
| SEPT 13 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| OCT 20 | - | - | - | - | E-N | 199 | 4241 | 1163 | REF | 219 | 18721 | 7052 | NOR | 1 | 4049 | 87 |
| 21 | - | - | - | - | - | - | - | - | - | - | - | - | NOR | 92 | 4141 | 179 |
| 23 | REF | 175 | 22111 | 8473 | E-N | 53 | 4294 | 1216 | - | - | - | - | E-E | 73 | 4214 | 424 |
| 26 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 29 | - | - | - | - | - | - | - | - | - | - | - | - | NOR | 57 | 4271 | 236 |
| NOV 2 | - | - | - | - | - | - | - | - | - | - | - | - | ZPG | 5 | 4276 | 163 |
| 3 | - | - | - | - | E-N | 53 | 4347 | 1269 | - | - | - | - | E-E | 11 | 4287 | 435 |
| 7 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 8 | - | - | - | - | - | - | - | - | - | - | - | - | NST | 126 | 4413 | 1606 |
| 9 | REF | 34 | 22145 | 8507 | - | - | - | - | NEP | 481 | 19202 | 6066 | E-E | 25 | 4438 | 460 |
| 9 | L-K | 23 | 22168 | 365 | - | - | - | - | - | - | - | - | - | - | - | - |
| 10 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 17 | - | - | - | - | NST | 69 | 4416 | 1692 | - | - | - | - | NOR | 1 | 4439 | 237 |
| 19 | - | - | - | - | E-E | 12 | 4428 | 764 | - | - | - | - | E-N | 8 | 4447 | 1747 |
| 20 | REF | 34 | 22202 | 8541 | - | - | - | - | - | - | - | - | ZPG | 4 | 4451 | 167 |
| 26 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 29 | REF | 18 | 22220 | 8559 | - | - | - | - | NEP | 15 | 19217 | 6081 | - | - | - | - |
| DEC 6 | - | - | - | - | - | - | - | - | NEP | 2 | 19219 | 6083 | - | - | - | - |

*ST. PAUL: SIV=SIVUTCH; NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; TZR=TOLSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIQUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI; L-K=LUKANIN AND KITOVI.

*ST. GEORGE: NOR=NORTH; NST=NORTH AND STARAYA ARTIL; E-E=EAST REEF AND EAST CLIFFS; STA=STARAYA ARTIL; ZPG=ZAPADNI; E-N=EAST AND NORTH; EST=EAST AND STARAYA ARTIL; NSE=NORTH STARAYA ARTIL AND EAST.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.AA

TABLE 5 1922

TABLE 6 1923

| DATE | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | |
|--------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|
| | ROOK- ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY* | DAILY KILL | ALL AREAS | BY AREA |
| FEB 4 | SIV | 31 | 31 | 31 | - | - | - | - | - | - | - | - | - | - | - | - |
| 13 | - | - | - | - | - | - | - | - | SIV | 204 | 204 | 204 | - | - | - | - |
| MAR 24 | - | - | - | - | - | - | - | - | SIV | 200 | 404 | 404 | - | - | - | - |
| APR 28 | SIV | 1 | 32 | 32 | - | - | - | - | - | - | - | - | - | - | - | - |
| MAY 12 | - | - | - | - | - | - | - | - | SIV | 54 | 458 | 458 | - | - | - | - |
| 22 | SIV | 75 | 107 | 107 | - | - | - | - | - | - | - | - | - | - | - | - |
| 27 | NEP | 2 | 109 | 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| 29 | SIV | 100 | 209 | 207 | - | - | - | - | - | - | - | - | - | - | - | - |
| 31 | - | - | - | - | - | - | - | - | SIV | 120 | 578 | 578 | - | - | - | - |
| JUNE 8 | - | - | - | - | NSE | 28 | 28 | 28 | - | - | - | - | - | - | - | - |
| 9 | NEP | 1 | 210 | 3 | - | - | - | - | - | - | - | - | - | - | - | - |
| 13 | - | - | - | - | NST | 21 | 49 | 21 | - | - | - | - | E-N | 95 | 95 | 95 |
| 15 | SIV | 124 | 334 | 331 | - | - | - | - | - | - | - | - | - | - | - | - |
| 16 | - | - | - | - | STA | 14 | 63 | 14A | - | - | - | - | - | - | - | - |
| 17 | - | - | - | - | NOR | 17 | 80 | 17 | NEP | 4 | 582 | 4 | - | - | - | - |
| 20 | NEP | 304 | 638 | 307 | E-E | 42 | 122 | 42 | - | - | - | - | ZPG | 11 | 106 | 11 |
| 20 | POL | 70 | 708 | 70 | - | - | - | - | - | - | - | - | - | - | - | - |
| 21 | NEP | 185 | 893 | 492 | ZPG | 8 | 130 | 8 | - | - | - | - | - | - | - | - |
| 21 | L-K | 17 | 910 | 17 | - | - | - | - | - | - | - | - | - | - | - | - |
| 21 | TZR | 143 | 1053 | 143 | - | - | - | - | - | - | - | - | - | - | - | - |
| 22 | REF | 121 | 1174 | 121 | - | - | - | - | - | - | - | - | - | - | - | - |
| 23 | ZAP | 81 | 1255 | 81 | NST | 73 | 203 | 94 | TZR | 100 | 682 | 100 | - | - | - | - |
| 24 | TZR | 72 | 1327 | 215 | - | - | - | - | - | - | - | - | - | - | - | - |
| 24 | L-K | 95 | 1422 | 112 | - | - | - | - | - | - | - | - | - | - | - | - |
| 24 | NEP | 269 | 1691 | 761 | - | - | - | - | - | - | - | - | - | - | - | - |
| 26 | NEP | 312 | 2003 | 1073 | E-E | 81 | 284 | 123 | - | - | - | - | - | - | - | - |
| 27 | TZR | 171 | 2174 | 386 | - | - | - | - | - | - | - | - | - | - | - | - |
| 27 | REF | 483 | 2657 | 604 | - | - | - | - | - | - | - | - | - | - | - | - |
| 28 | ZAP | 202 | 2859 | 283 | NST | 86 | 370 | 180 | - | - | - | - | - | - | - | - |
| 29 | POL | 328 | 3187 | 398 | ZPG | 28 | 398 | 36 | - | - | - | - | - | - | - | - |
| 29 | NEP | 433 | 3620 | 1506 | - | - | - | - | - | - | - | - | - | - | - | - |
| 30 | TZR | 157 | 3777 | 543 | E-E | 103 | 501 | 226 | - | - | - | - | - | - | - | - |
| 30 | L-K | 48 | 3825 | 160 | - | - | - | - | - | - | - | - | - | - | - | - |
| JULY 1 | NEP | 583 | 4408 | 2089 | - | - | - | - | - | - | - | - | E-E | 63 | 169 | 63 |
| 2 | REF | 1700 | 6108 | 2304 | - | - | - | - | ZAP | 107 | 789 | 107 | ZPG | 38 | 205 | 47 |
| 3 | ZAP | 285 | 6393 | 568 | NST | 118 | 619 | 298 | - | - | - | - | - | - | - | - |
| 3 | NEP | 160 | 6553 | 2249 | - | - | - | - | - | - | - | - | - | - | - | - |
| 5 | L-K | 63 | 6616 | 223 | - | - | - | - | - | - | - | - | - | - | - | - |
| 5 | TZR | 307 | 6923 | 850 | - | - | - | - | - | - | - | - | - | - | - | - |
| 6 | POL | 557 | 7480 | 955 | E-E | 294 | 913 | 520 | REF | 568 | 1357 | 568 | - | - | - | - |

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*ST. PAUL: SIV=SIVUTCH; NEP=NORTHEAST POINT=MORJOVI ANDAA VOSTOCHNI; TZR=TOLSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIQUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI; L-K=LUKANIN AND KITOVI.

*ST. GEORGE: NOR=NORTH; NST=NORTH AND STARAYA ARTIL; AE-E=EAST REEFA AND EAST CLIFFS; STA=STARAYA ARTIL; ZPG=ZAPADNI; E-N=EAST AND NORTH; AA NSE=NORTH AND STARAYA ARTIL.A

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 5 (1922)--CONT.

TABLE 6 (1923)--CONT.

| DATE | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | |
|--------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|
| | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA |
| JULY 6 | NEP | 554 | 8034 | 2803 | - | - | - | - | - | - | - | - | - | - | - | - |
| 7 | REF | 893 | 8927 | 3197 | ZPG | 63 | 9761 | 99 | TZR | 209 | 1566 | 309 | - | - | - | - |
| 7 | - | - | - | - | - | - | - | - | L-K | 28 | 1594 | 28 | - | - | - | - |
| 8 | NEP1 | 251 | 9178 | 3054 | NST | 132 | 11081 | 430 | ZAP | 366 | 1960 | 473 | - | - | - | - |
| 8 | TZR1 | 249 | 9427 | 1099 | - | - | - | - | - | - | - | - | - | - | - | - |
| 8 | ZAP1 | 254 | 9705 | 822 | - | - | - | - | - | - | - | - | - | - | - | - |
| 9 | - | - | - | - | - | - | - | - | POL | 116 | 2076 | 116 | - | - | - | - |
| 10 | POL1 | 333 | 10038 | 1288 | E-E | 135 | 1243 | 655 | REF | 792 | 2868 | 1360 | - | - | - | - |
| 11 | REF1 | 930 | 10968 | 4127 | - | - | - | - | TZR | 208 | 3074 | 515 | - | - | - | - |
| 11 | NEP1 | 692 | 11660 | 3746 | - | - | - | - | L-K | 54 | 3128 | 82 | - | - | - | - |
| 12 | REF1 | 1 | 11661 | 4128 | NST | 284 | 1527 | 714 | - | - | - | - | - | - | - | - |
| 13 | NEP1 | 555 | 12218 | 4301 | ZPG | 35 | 1582 | 134 | ZAP | 618 | 3746 | 1091 | NST | 148 | 353 | 148 |
| 13 | TZR1 | 230 | 12446 | 1329 | - | - | - | - | - | - | - | - | - | - | - | - |
| 13 | L-K1 | 138 | 12584 | 385 | - | - | - | - | - | - | - | - | - | - | - | - |
| 14 | POL1 | 141 | 12725 | 1429 | - | - | - | - | POL | 185 | 3931 | 301 | - | - | - | - |
| 15 | NEP1 | 506 | 13231 | 4807 | E-E | 596 | 2158 | 1251 | NEP | 2 | 3933 | 6 | - | - | - | - |
| 15 | REF1 | 969 | 14220 | 5117 | - | - | - | - | REF | 1200 | 5133 | 2560 | - | - | - | - |
| 16 | ZAP1 | 227 | 14447 | 1049 | - | - | - | - | L-K | 37 | 5170 | 119 | E-E | 196 | 549 | 259 |
| 18 | - | - | - | - | - | - | - | - | TZR | 349 | 5519 | 864 | - | - | - | - |
| 17 | - | - | - | - | STA1 | 144 | 2302 | 158 | ZAP | 167 | 5686 | 1258 | NST | 415 | 964 | 563 |
| 18 | REF | 476 | 14923 | 5593 | - | - | - | - | POL | 118 | 5804 | 419 | - | - | - | - |
| 18 | NEP | 225 | 15148 | 5032 | - | - | - | - | - | - | - | - | - | - | - | - |
| 18 | TLK | 230 | 15500 | 230 | - | - | - | - | - | - | - | - | - | - | - | - |
| 19 | - | - | - | - | E-N1 | 808 | 2908 | 606 | NEP | 2 | 5806 | 8 | ZPG | 89 | 1053 | 136 |
| 19 | - | - | - | - | - | - | - | - | REF | 475 | 6281 | 3035 | - | - | - | - |
| 20 | NEP | 587 | 16087 | 5619 | ZPG | 40 | 2948 | 174 | TZR | 134 | 6415 | 998 | E-E | 90 | 1143 | 349 |
| 20 | POL | 255 | 16342 | 1684 | - | - | - | - | - | - | - | - | - | - | - | - |
| 21 | REF | 554 | 16896 | 6147 | - | - | - | - | ZAP | 122 | 6537 | 1380 | NST | 206 | 1349 | 769 |
| 22 | NEP | 335 | 17231 | 5954 | NSE | 586 | 3534 | 614 | POL | 55 | 6592 | 474 | - | - | - | - |
| 22 | ZAP | 497 | 17728 | 1546 | - | - | - | - | - | - | - | - | - | - | - | - |
| 23 | TLK | 229 | 17957 | 459 | - | - | - | - | REF | 726 | 7318 | 3761 | - | - | - | - |
| 23 | L-K1 | 423 | 18380 | 930 | - | - | - | - | - | - | - | - | - | - | - | - |
| 24 | POL | 320 | 18700 | 2004 | - | - | - | - | TZR | 203 | 7521 | 1201 | NSE | 452 | 1801 | 452 |
| 24 | NEP | 463 | 19163 | 6417 | - | - | - | - | L-K | 101 | 7822 | 220 | - | - | - | - |
| 24 | - | - | - | - | - | - | - | - | NEP | 301 | 7923 | 309 | - | - | - | - |
| 25 | REF | 1066 | 20229 | 7213 | - | - | - | - | ZAP | 203 | 8126 | 1583 | - | - | - | - |
| 25 | NEP | 170 | 20399 | 6587 | - | - | - | - | - | - | - | - | - | - | - | - |
| 26 | ZAP | 222 | 20621 | 1768 | NOR | 185 | 3719 | 202 | POL | 193 | 8319 | 667 | - | - | - | - |
| 26 | - | - | - | - | - | - | - | - | NEP | 179 | 8498 | 488 | - | - | - | - |
| 27 | NEP | 440 | 21061 | 7027 | ZPG | 50 | 3769 | 224 | REF | 897 | 9395 | 4658 | ZPG | 29 | 1830 | 165 |

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*ST. PAUL: SIV=SIVUTCH; 11 NEP=NORTHEAST POINT=MORJOVI AND1
VOSTOCHNI; TZR=TOLSTOI, ZAPADNI REEF, AND LITTLE
ZAPADNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA
CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH,
AND ARDIGUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI;
L-K=LUKANIN AND KITOVI.

*ST. GEORGE: NOR=NORTH; 11 NST=NORTH AND STARAYA ARTIL; 1 E-E=EAST REEF11
AND EAST CLIFFS; STA=STARAYA ARTIL; ZPG=ZAPADNI;
E-N=EAST AND NORTH; NSE=NORTH AND STARAYA ARTIL.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 5 (1922)--CONT.

TABLE 6 (1923)--CONT.

| DATE | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | |
|---------|-----------------------------|------------|-----------|---------|-------------------------------|------------|-----------|---------|-----------------------------|------------|-----------|---------|-------------------------------|------------|-----------|---------|
| | ROOK-ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY* | DAILY KILL | ALL AREAS | BY AREA |
| JULY 27 | TZR | 242 | 21303 | 1571 | - | - | - | - | NEP | 81 | 9476 | 569 | - | - | - | - |
| 27 | L-K | 82 | 21385 | 1012 | - | - | - | - | - | - | - | - | - | - | - | - |
| 28 | POL | 168 | 21553 | 2172 | STA | 217 | 3986 | 375 | TZR | 171 | 9647 | 1372 | NSE | 165 | 1995 | 617 |
| 28 | NEP | 127 | 21680 | 7154 | - | - | - | - | L-K | 48 | 9895 | 268 | - | - | - | - |
| 29 | REF | 701 | 22381 | 7914 | E-N | 303 | 4289 | 909 | ZAP | 148 | 9843 | 1731 | - | - | - | - |
| 29 | - | - | - | - | - | - | - | - | NEP | 369 | 10212 | 938 | - | - | - | - |
| 30 | ZAP | 406 | 22787 | 2174 | - | - | - | - | POL | 80 | 10292 | 747 | - | - | - | - |
| 30 | NEP | 244 | 23031 | 7398 | - | - | - | - | NEP | 71 | 10363 | 1009 | - | - | - | - |
| 31 | NEP | 239 | 23270 | 7637 | - | - | - | - | REF | 152 | 10515 | 4810 | NSE | 117 | 2112 | 734 |
| AUG 1 | TZR | 103 | 23373 | 1674 | - | - | - | - | NEP | 168 | 10683 | 1177 | - | - | - | - |
| 1 | L-K | 22 | 23395 | 1034 | - | - | - | - | TZR | 94 | 10777 | 1466 | - | - | - | - |
| 1 | - | - | - | - | - | - | - | - | L-K | 14 | 10791 | 282 | - | - | - | - |
| 2 | NEP | 357 | 23752 | 7994 | NSE | 498 | 4787 | 1112 | NEP | 35 | 10826 | 1212 | - | - | - | - |
| 2 | REF | 544 | 24296 | 8458 | - | - | - | - | ZAP | 90 | 10916 | 1821 | - | - | - | - |
| 3 | ZAP | 382 | 24678 | 2556 | - | - | - | - | - | - | - | - | ZPG | 15 | 2127 | 180 |
| 3 | NEP | 137 | 24815 | 8131 | - | - | - | - | - | - | - | - | - | - | - | - |
| 4 | L-K | 59 | 24874 | 1093 | - | - | - | - | REF | 368 | 11285 | 5179 | NSE | 189 | 2316 | 923 |
| 4 | TZR | 38 | 24912 | 1712 | - | - | - | - | NEP | 174 | 11459 | 1386 | - | - | - | - |
| 4 | NEP | 170 | 25082 | 8301 | E-E | 61 | 4848 | 1312 | NEP | 70 | 11529 | 1456 | - | - | - | - |
| 5 | REF | 329 | 25411 | 8787 | - | - | - | - | TZR | 128 | 11657 | 1594 | - | - | - | - |
| 5 | - | - | - | - | - | - | - | - | L-K | 19 | 1167611 | 301 | - | - | - | - |
| 26 | - | - | - | - | - | - | - | - | ZAP | 162 | 11838 | 1983 | - | - | - | - |
| 27 | - | - | - | - | - | - | - | - | REF | 93 | 11931 | 5272 | - | - | - | - |
| 31 | - | - | - | - | - | - | - | - | REF | 137 | 12068 | 5409 | - | - | - | - |
| SEPT 11 | - | - | - | - | E-E | 2 | 4850 | 1314 | - | - | - | - | - | - | - | - |
| OCT 20 | - | - | - | - | NOR | 18 | 4868 | 220 | - | - | - | - | E-N | 218 | 2534 | 313 |
| 21 | REF | 201 | 25612 | 8988 | E-E | 119 | 4987 | 1433 | - | - | - | - | ZPG | 39 | 2573 | 219 |
| 22 | - | - | - | - | - | - | - | - | - | - | - | - | STA | 13 | 2586 | 13 |
| 23 | - | - | - | - | - | - | - | - | TZR | 128 | 12196 | 1722 | - | - | - | - |
| 24 | - | - | - | - | - | - | - | - | - | - | - | - | E-N | 224 | 2810 | 537 |
| 25 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 26 | REF | 215 | 25827 | 9203 | NST | 130 | 5117 | 844 | - | - | - | - | E-N | 216 | 3026 | 753 |
| 30 | - | - | - | - | - | - | - | - | - | - | - | - | STA | 39 | 3065 | 52 |
| NOV 1 | NEP | 208 | 26035 | 8509 | - | - | - | - | POL | 41 | 12237 | 788 | - | - | - | - |
| 2 | - | - | - | - | - | - | - | - | NEP | 92 | 12329 | 1548 | - | - | - | - |
| 4 | - | - | - | - | - | - | - | - | NEP | 167 | 12496 | 1715 | - | - | - | - |
| 5 | - | - | - | - | - | - | - | - | TZR | 8 | 12504 | 1730 | - | - | - | - |
| 8 | - | - | - | - | - | - | - | - | L-K | 53 | 12557 | 354 | - | - | - | - |
| 8 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 9 | - | - | - | - | ZPG | 3 | 5120 | 227 | - | - | - | - | - | - | - | - |

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*ST. PAUL: SIV=SIVUTCH; NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; TZR=TOLSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIQUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI; L-K=LUKANIN AND KITOVI.

*ST. GEORGE: NOR=NORTH; NST=NORTH AND STARAYA ARTIL; E-E=EAST REEF AND EAST CLIFFS; STA=STARAYA ARTIL; ZPG=ZAPADNI; E-N=EAST AND NORTH; NSE=NORTH AND STARAYA ARTIL.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 5 (1922)--CONT.

TABLE 6 (1923)--CONT.

| DATE | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | |
|--------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|
| | ROOK- ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY* | DAILY KILL | ALL AREAS | BY AREA |
| NOV 21 | - | - | - | - | - | - | - | - | NEP | 130 | 12687 | 1845 | - | - | - | - |
| NOV 22 | - | - | - | - | - | - | - | - | NEP | 110 | 12797 | 1955 | - | - | - | - |

*ST. PAUL: SIV=SIVUTCH; NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; TZR=TOLSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIQUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI; L-K=LUKANIN AND KITOVI.

*ST. GEORGE: NOR=NORTH; NST=NORTH AND STARAYA ARTIL; E-E=EAST REEF AND EAST CLIFFS; STA=STARAYA ARTIL; ZPG=ZAPADNI; E-N=EAST AND NORTH; NSE=NORTH AND STARAYA ARTIL.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 7 1924

TABLE 8 1925

| DATE | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | |
|---------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|
| | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA |
| MAY 8 | - | - | - | - | - | - | - | - | SIV | 47 | 47 | 47 | - | - | - | - |
| 22 | SIV | 63 | 63 | 63 | - | - | - | - | SIV | 136 | 183 | 183 | - | - | - | - |
| JUNE 1 | - | - | - | - | - | - | - | - | - | - | - | - | STA | 25 | 25 | 25 |
| 9 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 12 | - | - | - | - | NOR | 21 | 21 | 21 | - | - | - | - | - | - | - | - |
| 14 | - | - | - | - | E-E | 29 | 50 | 29 | - | - | - | - | - | - | - | - |
| 17 | REF | 61 | 124 | 61 | - | - | - | - | REF | 47 | 230 | 47 | E-E | 92 | 117 | 92 |
| 21 | - | - | - | - | - | - | - | - | L-K | 2 | 232 | 2 | - | - | - | - |
| 22 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 25 | - | - | - | - | NOR | 38 | 88 | 59 | - | - | - | - | - | - | - | - |
| 27 | - | - | - | - | - | - | - | - | REF | 73 | 305 | 120 | - | - | - | - |
| JULY 30 | ZAP | 74 | 198 | 74 | - | - | - | - | - | - | - | - | - | - | - | - |
| 1 | TZR | 80 | 278 | 80 | - | - | - | - | TLK | 189 | 494 | 189 | E-E | 72 | 189 | 164 |
| 2 | POL | 104 | 382 | 104 | - | - | - | - | REF | 516 | 1010 | 636 | - | - | - | - |
| 3 | REF | 1042 | 1424 | 1103 | - | - | - | - | - | - | - | - | - | - | - | - |
| 4 | ZAP | 343 | 1767 | 417 | - | - | - | - | POL | 214 | 1224 | 214 | - | - | - | - |
| 5 | TZR | 83 | 1850 | 163 | - | - | - | - | - | - | - | - | - | - | - | - |
| 5 | L-K | 37 | 1887 | 37 | - | - | - | - | - | - | - | - | - | - | - | - |
| 6 | POL | 162 | 2049 | 266 | - | - | - | - | TLK | 401 | 1625 | 590 | E-E | 194 | 383 | 358 |
| 7 | REF | 671 | 2720 | 1774 | E-E | 110 | 198 | 136 | REF | 1256 | 2881 | 1892 | NST | 354 | 737 | 354 |
| 8 | ZAP | 140 | 2860 | 557 | - | - | - | - | ZAP | 400 | 3281 | 400 | - | - | - | - |
| 9 | TZR | 117 | 2977 | 280 | - | - | - | - | POL | 298 | 3579 | 512 | - | - | - | - |
| 9 | POL | 68 | 3045 | 334 | - | - | - | - | - | - | - | - | - | - | - | - |
| 10 | REF | 708 | 3753 | 2482 | NOR | 301 | 499 | 360 | - | - | - | - | - | - | - | - |
| 11 | ZAP | 376 | 4129 | 933 | - | - | - | - | TLK | 496 | 4075 | 1086 | NST | 83 | 820 | 437 |
| 12 | - | - | - | - | - | - | - | - | REF | 1144 | 5219 | 3036 | - | - | - | - |
| 13 | L-K | 171 | 4300 | 208 | - | - | - | - | ZAP | 577 | 5796 | 977 | - | - | - | - |
| 13 | TZR | 164 | 4464 | 444 | - | - | - | - | - | - | - | - | - | - | - | - |
| 14 | POL | 183 | 4647 | 517 | NST | 407 | 906 | 407 | POL | 110 | 5906 | 622 | E-E | 185 | 1005 | 543 |
| 14 | - | - | - | - | - | - | - | - | NEP | 350 | 6256 | 350 | - | - | - | - |
| 15 | REF | 1405 | 6052 | 3887 | E-E | 104 | 1010 | 243 | NEP | 737 | 6993 | 1087 | NST | 874 | 1879 | 1311 |
| 16 | ZAP | 159 | 6211 | 1092 | - | - | - | - | TLK | 721 | 7714 | 1807 | - | - | - | - |
| 17 | L-K | 156 | 6367 | 364 | - | - | - | - | REF | 1391 | 9105 | 4427 | - | - | - | - |
| 17 | TZR | 184 | 6551 | 628 | - | - | - | - | - | - | - | - | - | - | - | - |
| 17 | NEP | 370 | 8921 | 370 | - | - | - | - | - | - | - | - | - | - | - | - |
| 18 | NEP | 180 | 7101 | 550 | NST | 645 | 1655 | 1052 | ZAP | 348 | 9453 | 1325 | E-E | 355 | 2234 | 898 |
| 18 | POL | 85 | 7186 | 602 | - | - | - | - | - | - | - | - | - | - | - | - |
| 19 | REF | 1224 | 8410 | 5111 | - | - | - | - | POL | 235 | 9688 | 857 | - | - | - | - |
| 20 | ZAP | 260 | 8670 | 1352 | - | - | - | - | NEP | 531 | 10219 | 1618 | NST | 658 | 2892 | 1969 |
| 20 | NEP | 176 | 8846 | 726 | - | - | - | - | - | - | - | - | - | - | - | - |

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*ST. PAUL: SIV=SIVUTCH; NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; TZR=TOLSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIGUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI; L-K=LUKANIN AND KITOVI.

*ST. GEORGE: NOR=NORTH; NST=NORTH AND STARAYA ARTIL; E-E=EAST REEF AND EAST CLIFFS; STA=STARAYA ARTIL; ZPG=ZAPADNI; E-N=EAST AND NORTH.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 7 (1924)--CONT.

TABLE 8 (1925)--CONT.

| ST. PAUL | | | | | ST. GEORGE | | | | ST. PAUL | | | | ST. GEORGE | | | | |
|-----------------|-----------|------------|-----------|---------|-----------------|------------|-----------|---------|-----------------|------------|-----------|---------|-----------------|------------|-----------|---------|--------|
| CUMULATIVE KILL | | | | | CUMULATIVE KILL | | | | CUMULATIVE KILL | | | | CUMULATIVE KILL | | | | |
| DATE | ROOK-ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY* | DAILY KILL | ALL AREAS | BY AREA | |
| JULY | 21 | NEP | 179 | 9025 | 905 | E-E | 201 | 1856 | 444 | TLK | 452 | 10671 | 2259 | - | - | - | - |
| | 21 | L-K | 53 | 9078 | 417 | - | -22 | - | - | - | - | - | - | - | - | - | - |
| | 22 | POL | 133 | 9211 | 735 | NST | 48422 | 2340 | 1536 | REF | 1279 | 11950 | 5706 | - | -22 | - | - |
| | 23 | REF | 557 | 9768 | 5668 | - | - | - | - | ZAP | 137 | 12087 | 1462 | E-E | 21622 | 3108 | 1114 |
| | 23 | NEP | 183 | 9951 | 1088 | - | - | - | - | - | - | - | -2 | - | - | -22 | - |
| | 24 | ZAP | 250 | 10201 | 1602 | -22 | -2 | - | - | NEP | 330 | 12417 | 194822 | NST | 58022 | 3688 | 254922 |
| | 24 | NEP | 271 | 10472 | 1359 | -22 | -2 | - | - | POL | 110 | 12527 | 967 | - | - | - | - |
| | 25 | L-K | 148 | 10620 | 565 | E-E | 284 | 26242 | 728 | NEP | 492 | 13019 | 2440 | - | - | - | - |
| | 25 | TZR | 243 | 10863 | 871 | - | - | - | - | - | -22 | - | - | - | - | - | - |
| | 26 | NEP | 37 | 10900 | 1396 | NST | 302 | 2926 | 1838 | TLK | 31922 | 13338 | 2578 | - | - | - | - |
| | 26 | POL | 134 | 11034 | 869 | - | - | - | - | - | - | -22 | - | -2 | - | - | - |
| | 27 | REF | 743 | 11777 | 6411 | - | -22 | - | -22 | REF | 49322 | 13831 | 619922 | E-E2 | 129 | 3817 | 1243 |
| | 27 | NEP | 291 | 12068 | 1687 | - | - | - | - | - | - | - | - | - | - | - | - |
| | 27 | REF | 5 | 12073 | 6416 | - | - | - | - | - | - | - | - | - | - | - | - |
| | 28 | ZAP | 150 | 12223 | 1752 | - | - | - | - | ZAP | 202 | 14033 | 1664 | NST | 316 | 4133 | 2865 |
| | 29 | TZR | 107 | 12330 | 978 | ZPG | 61 | 2987 | 61 | POL | 64 | 14097 | 1031 | ZPG | 41 | 4174 | 41 |
| | 29 | NEP | 68 | 12398 | 1755 | - | - | - | - | - | - | - | - | - | - | - | - |
| | 29 | L-K | 64 | 12462 | 629 | - | - | - | - | - | - | - | - | - | - | - | - |
| | 30 | NEP | 224 | 12686 | 1979 | E-E | 322 | 3309 | 1050 | -22 | - | - | - | - | - | - | - |
| | 30 | POL | 124 | 12810 | 993 | - | - | - | - | - | - | - | - | - | - | - | - |
| | 31 | REF | 368 | 13178 | 6784 | NST | 317 | 3626 | 2155 | REF | 419 | 14516 | 6618 | E-N | 380 | 4554 | 380 |
| AUG | 27 | - | -2 | - | - | - | - | - | - | - | - | - | - | NOR | 10 | 4564 | 10 |
| OCT | 20 | L-K | 7622 | 13254 | 705 | NOR | 18 | 3644 | 378 | REF | 160 | 1467622 | 6778 | - | - | - | - |
| | 22 | - | - | - | - | - | - | - | - | TLK | 120 | 14796 | 2698 | - | - | - | - |
| | 23 | - | - | - | - | - | - | - | - | ZAP | 45 | 14841 | 1709 | NOR | 51 | 4615 | 61 |
| | 24 | - | - | - | - | - | - | - | - | NEP | 220 | 15061 | 2660 | - | - | - | - |
| | 25 | - | - | - | - | E-N | 33 | 3677 | 33 | - | - | - | - | - | - | - | - |
| | 28 | TLK | 70 | 13324 | 70 | - | -2 | - | - | - | - | - | - | - | - | - | - |
| NOV | 3 | - | -22 | -2 | - | ZPG22 | 7 | 3684 | 68 | - | - | - | -22 | NOR | 110 | 4725 | 171 |
| | 4 | - | - | - | - | NOR | 5 | 3689 | 383 | - | - | - | - | - | - | - | - |
| | 8 | REF | 3222 | 13356 | 6816 | - | - | - | - | - | - | - | - | - | - | - | - |
| | 13 | REF | 2622 | 13382 | 6842 | - | - | - | - | - | - | - | - | - | - | - | - |
| | 20 | - | - | - | - | STA2 | 25 | 3714 | 25 | - | - | - | - | - | - | - | - |
| | 23 | - | - | - | - | - | - | - | - | - | - | - | - | STA | 33 | 4758 | 58 |
| | 25 | - | - | - | - | - | - | - | - | - | - | - | - | NOR | 20 | 4778 | 191 |
| | 26 | NEP | 45 | 13427 | 2024 | -22 | -2 | - | - | - | - | - | - | - | - | - | - |
| | 28 | - | - | - | - | STA2 | 27 | 3741 | 52 | - | - | - | - | - | - | - | - |
| | 28 | - | - | - | - | NOR2 | 21 | 3762 | 404 | - | - | - | - | - | - | - | - |

*ST. PAUL: SIV=SIVUTCH; NEP=NORTHEAST POINT=MORJOVI AND22 VOSTOCHNI; TZR=TOLSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIQUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI; L-K=LUKANIN AND KITOVI.

*ST. GEORGE: NOR=NORTH;22 NST=NORTH AND STARAYA ARTIL; E-E=EAST REEF2 AND EAST CLIFFS; STA=STARAYA ARTIL; ZPG=ZAPADNI; E-N=EAST AND NORTH.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.11

TABLE 9 1926

TABLE 10 1927

| DATE | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | |
|--------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|
| | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA |
| MAY 21 | SIV | 98 | 98 | 98 | - | - | - | - | - | - | - | - | - | - | - | - |
| JUNE 3 | - | - | - | - | - | - | - | - | SIV | 39 | 39 | 39 | - | - | - | - |
| 4 | - | - | - | - | STA | 23 | 23 | 23 | - | - | - | - | NOR | 38 | 38 | 38 |
| 10 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 11 | REF | 75 | 173 | 75 | - | - | - | - | - | - | - | - | - | - | - | - |
| 15 | - | - | - | - | E-E | 48 | 71 | 48 | - | - | - | - | - | - | - | - |
| 16 | - | - | - | - | - | - | - | - | REF | 42 | 81 | 42 | - | - | - | - |
| 17 | - | - | - | - | - | - | - | - | TLK | 55 | 136 | 55 | - | - | - | - |
| 18 | - | - | - | - | - | - | - | - | POL | 30 | 166 | 30 | - | - | - | - |
| 19 | - | - | - | - | - | - | - | - | NEP | 264 | 430 | 264 | - | - | - | - |
| 20 | - | - | - | - | - | - | - | - | ZAP | 58 | 488 | 58 | NOR | 58 | 96 | 96 |
| 21 | - | - | - | - | - | - | - | - | REF | 296 | 784 | 338 | E-E | 120 | 216 | 120 |
| 22 | - | - | - | - | - | - | - | - | POL | 38 | 822 | 68 | STA | 80 | 296 | 80 |
| 23 | ZAP11 | 116 | 289 | 116 | - | - | - | - | NEP | 342 | 1164 | 606 | - | - | - | - |
| 24 | - | - | - | - | E-E | 41 | 112 | 89 | TLK | 93 | 125711 | 148 | - | - | - | - |
| 25 | - | - | - | - | - | - | - | - | ZAP | 116 | 1373 | 174 | NOR | 125 | 421 | 221 |
| 26 | - | - | - | - | - | - | - | - | REF | 863 | 2236 | 1201 | E-E | 192 | 613 | 312 |
| 27 | TLK | 244 | 533 | 244 | - | - | - | - | POL | 94 | 2330 | 162 | STA | 194 | 807 | 274 |
| 28 | ZAP | 144 | 677 | 260 | - | - | - | - | NEP | 675 | 3005 | 1281 | - | - | - | - |
| 29 | POL | 181 | 858 | 181 | E-E | 195 | 307 | 284 | TLK | 341 | 3346 | 489 | - | - | - | - |
| 30 | - | - | - | - | - | - | - | - | ZAP | 294 | 3640 | 468 | NOR | 240 | 1047 | 461 |
| JULY 1 | TLK | 224 | 1082 | 468 | - | - | - | - | REF | 1514 | 5154 | 2715 | E-E | 223 | 1270 | 535 |
| 2 | REF | 809 | 1891 | 884 | STA | 64 | 371 | 87 | POL | 35 | 5189 | 197 | STA | 119 | 1389 | 393 |
| 3 | ZAP | 433 | 2324 | 693 | NOR | 312 | 683 | 312 | NEP | 1461 | 6650 | 2742 | - | - | - | - |
| 4 | POL | 190 | 2514 | 371 | E-E11 | 169 | 852 | 453 | TLK | 252 | 6902 | 741 | - | - | - | - |
| 5 | NEP | 420 | 2934 | 420 | - | - | - | - | ZAP | 255 | 7157 | 723 | NOR | 197 | 1586 | 658 |
| 6 | TLK | 427 | 3361 | 895 | - | - | - | - | REF | 1068 | 8225 | 3783 | - | - | - | - |
| 7 | REF | 1355 | 4716 | 2239 | STA | 204 | 1056 | 291 | POL | 232 | 8457 | 429 | EST | 238 | 1824 | 238 |
| 8 | ZAP | 474 | 5190 | 1167 | NOR | 531 | 1587 | 843 | NEP | 1824 | 10281 | 4586 | - | - | - | - |
| 9 | POL11 | 177 | 5367 | 548 | E-E | 317 | 1904 | 770 | TLK | 782 | 11063 | 1523 | - | - | - | - |
| 10 | NEP11 | 1152 | 6519 | 1572 | - | - | - | - | ZAP | 464 | 11527 | 1187 | NOR | 478 | 2302 | 1136 |
| 11 | TLK | 570 | 7089 | 1465 | - | - | - | - | REF | 1746 | 13273 | 5529 | E-E | 393 | 2695 | 928 |
| 12 | REF11 | 1573 | 8662 | 3812 | STA | 303 | 2207 | 594 | POL | 318 | 13591 | 747 | STA | 226 | 2921 | 619 |
| 13 | ZAP | 405 | 9067 | 1572 | NOR | 504 | 2711 | 1347 | NEP | 1000 | 14591 | 5566 | - | - | - | - |
| 14 | POL11 | 115 | 9182 | 663 | E-E | 151 | 2862 | 921 | TLK | 352 | 14943 | 1875 | - | - | - | - |
| 15 | NEP11 | 600 | 9782 | 2172 | - | - | - | - | ZAP | 529 | 15472 | 1716 | NOR | 250 | 3171 | 1386 |
| 16 | TLK11 | 432 | 10214 | 1897 | - | - | - | - | REF | 2218 | 17690 | 7747 | E-E | 566 | 3737 | 1494 |
| 17 | REF11 | 1027 | 11241 | 4839 | STA | 150 | 3012 | 744 | POL | 163 | 17853 | 910 | NST | 619 | 4356 | 619 |
| 18 | ZAP11 | 363 | 11604 | 1935 | NOR | 368 | 3380 | 1715 | NEP | 262 | 18115 | 5828 | - | - | - | - |
| 19 | POL11 | 163 | 11767 | 826 | E-E | 627 | 4007 | 1548 | TLK | 366 | 18481 | 2241 | - | - | - | - |

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*ST. PAUL: SIV=SIVUTCH; NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIGUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI.

*ST. GEORGE: NOR=NORTH; NST=NORTH AND STARAYA ARTIL;11E-E=EAST REEF1 AND EAST CLIFFS; STA=STARAYA ARTIL; ZPG=ZAPADNI; E-N=EAST AND NORTH; EST=EAST AND STARAYA ARTIL.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 9 (1926)--CONT.

TABLE 10 (1927)--CONT.

| ST. PAUL | | | | | ST. GEORGE | | | | ST. PAUL | | | | ST. GEORGE | | | |
|-----------------|-----------|------------|-----------|---------|-----------------|------------|-----------|---------|-----------------|------------|-----------|---------|-----------------|------------|-----------|---------|
| CUMULATIVE KILL | | | | | CUMULATIVE KILL | | | | CUMULATIVE KILL | | | | CUMULATIVE KILL | | | |
| DATE | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA |
| JULY 20 | NEP | 472 | 12239 | 2644 | ZPG | 56 | 4063 | 56 | - | - | - | - | E-E | 497 | 4853 | 1991 |
| 21 | TLK | 125 | 12364 | 2022 | - | - | - | - | - | - | - | - | NST | 784 | 5647 | 1413 |
| 22 | REF | 1106 | 13470 | 5945 | STA | 333 | 4396 | 1077 | - | - | - | - | ZPG | 32 | 5679 | 32 |
| 23 | ZAP | 353 | 13823 | 2288 | NOR | 338 | 4734 | 2053 | - | - | - | - | - | - | - | - |
| 24 | POL | 87 | 13910 | 913 | E-E | 310 | 5044 | 1858 | - | - | - | - | - | - | - | - |
| 25 | NEP | 649 | 14559 | 3293 | - | - | - | - | - | - | - | - | - | - | - | - |
| 26 | TLK | 311 | 14870 | 2333 | - | - | - | - | - | - | - | - | - | - | - | - |
| 27 | REF | 565 | 15435 | 6510 | STA | 224 | 5268 | 1301 | - | - | - | - | - | - | - | - |
| 28 | ZAP | 160 | 15595 | 2448 | NOR | 129 | 5397 | 2182 | - | - | - | - | - | - | - | - |
| 29 | POL | 48 | 15643 | 961 | E-E | 179 | 5576 | 2037 | - | - | - | - | - | - | - | - |
| 31 | - | - | - | - | NOR | 42 | 5618 | 2224 | - | - | - | - | - | - | - | - |
| OCT 20 | REF | 231 | 15874 | 6741 | NOR | 169 | 5787 | 2393 | REF | 67 | 18548 | 7814 | E-N | 20 | 5699 | 20 |
| 21 | TLK | 74 | 15948 | 2407 | - | - | - | - | TLK | 130 | 18678 | 2371 | - | - | - | - |
| 22 | - | - | - | - | - | - | - | - | ZAP | 94 | 18772 | 1810 | NOR | 110 | 5809 | 1496 |
| 26 | ZAP | 30 | 15978 | 2478 | - | - | - | - | - | - | - | - | - | - | - | - |
| 27 | - | - | - | - | - | - | - | - | POL | 36 | 18808 | 946 | NOR | 133 | 5942 | 1629 |
| 28 | NEP | 210 | 16188 | 3503 | NOR | 88 | 5875 | 2481 | NEP | 129 | 18937 | 5957 | - | - | - | - |
| 29 | - | - | - | - | - | - | - | - | REF | 37 | 18974 | 7851 | - | - | - | - |
| NOV 12 | - | - | - | - | NOR | 25 | 5900 | 2506 | - | - | - | - | - | - | - | - |

*ST. PAUL: SIV=SIVUTCH; NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIGUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI.

*ST. GEORGE: NOR=NORTH; NST=NORTH AND STARAYA ARTIL; E-E=EAST REEF AND EAST CLIFFS; STA=STARAYA ARTIL; ZPG=ZAPADNI; E-N=EAST AND NORTH; EST=EAST AND STARAYA ARTIL.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 11 1928

TABLE 12 1929

| DATE | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | |
|--------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|
| | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA |
| MAY 18 | SIV | 64 | 64 | 64 | - | - | - | - | - | - | - | - | - | - | - | - |
| JUNE 5 | - | - | - | - | NOR | 35 | 35 | 35 | - | - | - | - | NOR | 32 | 32 | 32 |
| 7 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 8 | - | - | - | - | - | - | - | - | REF | 132 | 132 | 132 | - | - | - | - |
| 9 | - | - | - | - | E-E | 61 | 96 | 61 | - | - | - | - | E-E | 36 | 68 | 36 |
| 10 | - | - | - | - | - | - | - | - | - | - | - | - | NOR | 80 | 148 | 112 |
| 11 | - | - | - | - | - | - | - | - | - | - | - | - | ZPG | 42 | 190 | 42 |
| 12 | - | - | - | - | NST | 44 | 140 | 44 | - | - | - | - | - | - | - | - |
| 13 | - | - | - | - | - | - | - | - | TLK | 87 | 219 | 87 | - | - | - | - |
| 14 | - | - | - | - | - | - | - | - | ZAP | 97 | 316 | 97 | - | - | - | - |
| 15 | REF | 287 | 351 | 287 | - | - | - | - | REF | 617 | 933 | 749 | E-E | 24 | 214 | 60 |
| 16 | - | - | - | - | E-E | 112 | 252 | 173 | - | - | - | - | - | - | - | - |
| 17 | POL | 77 | 428 | 77 | - | - | - | - | POL | 130 | 1063 | 130 | NOR | 120 | 334 | 232 |
| 18 | NEP | 533 | 961 | 533 | NST | 187 | 439 | 231 | NEP | 512 | 1575 | 512 | ZPG | 32 | 366 | 74 |
| 19 | TLK | 246 | 1207 | 246 | - | - | - | - | TLK | 101 | 1676 | 188 | - | - | - | - |
| 20 | ZAP | 362 | 1569 | 362 | - | - | - | - | ZAP | 318 | 1994 | 415 | E-E | 108 | 474 | 168 |
| 21 | REF | 674 | 2243 | 961 | E-E | 134 | 573 | 307 | REF | 1235 | 3229 | 1984 | NOR | 126 | 600 | 358 |
| 21 | - | - | - | - | - | - | - | - | - | - | - | - | STA | 92 | 692 | 92 |
| 22 | POL | 72 | 2315 | 149 | NST | 214 | 787 | 445 | POL | 59 | 3288 | 189 | - | - | - | - |
| 23 | NEP | 938 | 3253 | 1471 | - | - | - | - | NEP | 732 | 4020 | 1244 | - | - | - | - |
| 24 | TLK | 254 | 3507 | 500 | - | - | - | - | TLK | 235 | 4255 | 423 | ZPG | 23 | 715 | 97 |
| 25 | ZAP | 658 | 4165 | 1020 | - | - | - | - | ZAP | 457 | 4712 | 872 | E-E | 127 | 842 | 295 |
| 26 | REF | 1496 | 5661 | 2457 | E-E | 153 | 940 | 460 | REF | 1619 | 6331 | 3603 | NST | 486 | 1328 | 486 |
| 27 | POL | 165 | 5826 | 314 | NST | 324 | 1264 | 769 | POL | 482 | 6813 | 671 | - | - | - | - |
| 28 | NEP | 990 | 6816 | 2461 | - | - | - | - | NEP | 1465 | 8278 | 2709 | ZPG | 50 | 1378 | 147 |
| 29 | TLK | 418 | 7234 | 918 | - | - | - | - | TLK | 410 | 8688 | 833 | E-E | 267 | 1645 | 562 |
| 30 | ZAP | 417 | 7651 | 1437 | - | - | - | - | ZAP | 650 | 9338 | 1522 | NST | 384 | 2029 | 870 |
| JULY 1 | REF | 1353 | 9004 | 3810 | E-E | 237 | 1501 | 697 | REF | 1853 | 11191 | 5456 | - | - | - | - |
| 2 | POL | 488 | 9492 | 802 | NST | 476 | 1977 | 1245 | POL | 630 | 11821 | 1301 | ZPG | 49 | 2078 | 196 |
| 3 | NEP | 1083 | 10575 | 3544 | - | - | - | - | NEP | 1530 | 13351 | 4239 | E-E | 228 | 2304 | 788 |
| 4 | - | - | - | - | - | - | - | - | - | - | - | - | NST | 514 | 2818 | 1384 |
| 5 | TLK | 728 | 11303 | 1646 | E-E | 329 | 2306 | 1026 | TLK | 951 | 14302 | 1784 | - | - | - | - |
| 6 | ZAP | 826 | 11929 | 2063 | NST | 472 | 2778 | 1717 | ZAP | 1325 | 15627 | 2847 | ZPG | 129 | 2947 | 325 |
| 7 | REF | 2308 | 14237 | 6118 | - | - | - | - | REF | 3077 | 18704 | 8533 | E-E | 398 | 3345 | 1186 |
| 8 | POL | 427 | 14664 | 1229 | - | - | - | - | POL | 686 | 19390 | 1987 | NST | 659 | 4004 | 2043 |
| 9 | NEP | 1408 | 16072 | 4952 | E-E | 327 | 3105 | 1353 | NEP | 1759 | 21149 | 5998 | - | - | - | - |
| 10 | TLK | 552 | 16624 | 2198 | NST | 530 | 3635 | 2247 | TLK | 691 | 21840 | 2475 | ZPG | 73 | 4077 | 398 |
| 11 | ZAP | 337 | 16961 | 2400 | - | - | - | - | ZAP | 560 | 22400 | 3407 | E-E | 288 | 4365 | 1474 |
| 12 | REF | 1070 | 18031 | 7188 | - | - | - | - | REF | 2690 | 25090 | 11223 | NST | 505 | 4870 | 2548 |
| 13 | POL | 210 | 18241 | 1439 | E-E | 134 | 3769 | 1487 | POL | 433 | 25523 | 2420 | - | - | - | - |

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*ST. PAUL: SIV=SIVUTCH; NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIGUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI.

*ST. GEORGE: NOR=NORTH; NST=NORTH AND STARAYA ARTIL; E-E=EAST REEF AND EAST CLIFFS; STA=STARAYA ARTIL; ZPG=ZAPADNI.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 11 (1928)--CONT.

TABLE 12 (1929)--CONT.

| DATE | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | |
|---------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|
| | ROOK- ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY* | DAILY KILL | ALL AREAS | BY AREA |
| JULY 14 | NEP | 801 | 19042 | 5753 | NST | 854 | 4623 | 3101 | NEP | 1587 | 27110 | 7585 | - | - | - | - |
| 15 | TLK | 221 | 19263 | 2419 | - | - | - | - | TLK | 683 | 27793 | 3158 | E-E | 105 | 4975 | 1579 |
| 16 | ZAP | 311 | 19674 | 2711 | - | - | - | - | ZAP | 355 | 28148 | 3762 | NST | 456 | 5430 | 3003 |
| 17 | REF | 1642 | 21216 | 8830 | - | - | - | - | REF | 624 | 28772 | 11847 | - | - | - | - |
| 18 | POL | 311 | 21527 | 1750 | E-E | 485 | 5108 | 1972 | POL | 229 | 29001 | 2649 | - | - | - | - |
| 19 | NEP | 568 | 22095 | 6321 | NST | 836 | 5944 | 3937 | NEP | 691 | 29692 | 8276 | E-E | 337 | 5767 | 1916 |
| 20 | - | - | - | - | - | - | - | - | TLK | 567 | 30259 | 3725 | NST | 630 | 6397 | 3633 |
| 21 | - | - | - | - | - | - | - | - | REF | 1536 | 31795 | 13383 | - | - | - | - |
| 22 | - | - | - | - | E-E | 434 | 6378 | 2406 | ZAP | 629 | 32424 | 4391 | - | - | - | - |
| 23 | - | - | - | - | NOR | 288 | 6666 | 323 | POL | 277 | 32701 | 2926 | E-E | 155 | 6552 | 2071 |
| 26 | - | - | - | - | E-E | 444 | 7110 | 2850 | REF | 15 | 32716 | 13398 | - | - | - | - |
| 27 | - | - | - | - | NOR | 303 | 7413 | 626 | - | - | - | - | - | - | - | - |
| 28 | - | - | - | - | ZPG | 20 | 7433 | 20 | - | - | - | - | - | - | - | - |
| 29 | TLK | 108 | 22203 | 2527 | - | - | - | - | - | - | - | - | - | - | - | - |
| 30 | REF | 274 | 22477 | 9104 | E-E | 350 | 7783 | 3200 | - | - | - | - | - | - | - | - |
| OCT 20 | REF | 171 | 22648 | 9275 | NOR | 191 | 7974 | 817 | - | - | - | - | - | - | - | - |
| 21 | - | - | - | - | - | - | - | - | REF | 166 | 32882 | 13564 | NOR | 195 | 6747 | 553 |
| 23 | - | - | - | - | STA | 69 | 8043 | 69 | - | - | - | - | - | - | - | - |
| 24 | - | - | - | - | NOR | 40 | 8083 | 857 | - | - | - | - | - | - | - | - |
| 25 | - | - | - | - | - | - | - | - | TLK | 121 | 33003 | 3846 | - | - | - | - |
| 28 | - | - | - | - | - | - | - | - | REF | 52 | 33055 | 13616 | - | - | - | - |
| 30 | - | - | - | - | - | - | - | - | - | - | - | - | NOR | 39 | 6786 | 592 |
| NOV 1 | - | - | - | - | - | - | - | - | POL | 37 | 33092 | 2963 | - | - | - | - |
| 2 | REF | 110 | 22758 | 9385 | - | - | - | - | - | - | - | - | NOR | 44 | 6830 | 636 |
| 4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 6 | - | - | - | - | - | - | - | - | REF | 124 | 33216 | 13740 | - | - | - | - |
| 10 | REF | 220 | 22978 | 9605 | - | - | - | - | - | - | - | - | NOR | 22 | 6852 | 658 |
| 18 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

*ST. PAUL: SIV=SIVUTCH; NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIQUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI.

*ST. GEORGE: NOR=NORTH; NST=NORTH AND STARAYA ARTIL; E-E=EAST REEF AND EAST CLIFFS; STA=STARAYA ARTIL; ZPG=ZAPADNI.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 13 1930

TABLE 14 1931

| DATE | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | |
|--------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|
| | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA |
| JUNE 4 | SIV | 23 | 23 | 23 | - | - | - | - | - | - | - | - | - | - | - | - |
| 8 | - | - | - | - | - | - | - | - | SIV | 88 | 88 | 88 | E-N | 20 | 20 | 20 |
| 9 | REF | 111 | 134 | 111 | E-E | 21 | 21 | 21 | - | - | - | - | - | - | - | - |
| 11 | - | - | - | - | NST | 30 | 71 | 50 | REF | 113 | 201 | 113 | - | - | - | - |
| 13 | - | - | - | - | - | - | - | - | - | - | - | - | E-E | 51 | 71 | 51 |
| 15 | - | - | - | - | - | - | - | - | - | - | - | - | NST | 54 | 125 | 54 |
| 16 | TLK | 65 | 199 | 65 | - | - | - | - | TLK | 119 | 320 | 119 | - | - | - | - |
| 17 | - | - | - | - | - | - | - | - | ZAP | 68 | 388 | 68 | - | - | - | - |
| 18 | ZAP | 167 | 366 | 167 | - | - | - | - | - | - | - | - | - | - | - | - |
| 19 | REF | 746 | 1112 | 857 | NST | 134 | 205 | 184 | REF | 296 | 684 | 409 | NOR | 69 | 194 | 69 |
| 20 | POL | 72 | 1184 | 72 | E-E | 89 | 294 | 110 | POL | 127 | 811 | 127 | - | - | - | - |
| 21 | NEP | 604 | 1788 | 604 | - | - | - | - | NEP | 688 | 1499 | 688 | E-E | 59 | 253 | 110 |
| 22 | TLK | 158 | 1946 | 223 | - | - | - | - | TLK | 165 | 1664 | 284 | - | - | - | - |
| 23 | ZAP | 290 | 2236 | 457 | NST | 130 | 424 | 314 | ZAP | 433 | 2097 | 501 | NST | 148 | 401 | 202 |
| 24 | REF | 1253 | 3489 | 2110 | E-E | 92 | 516 | 202 | REF | 1456 | 3553 | 1865 | ZPG | 61 | 462 | 61 |
| 25 | POL | 119 | 3608 | 191 | - | - | - | - | POL | 124 | 3877 | 251 | E-E | 90 | 552 | 200 |
| 26 | NEP | 1012 | 4620 | 1616 | - | - | - | - | NEP | 1041 | 4718 | 1729 | - | - | - | - |
| 27 | TLK | 238 | 4858 | 461 | NST | 422 | 938 | 736 | TLK | 451 | 5169 | 735 | NST | 240 | 792 | 442 |
| 28 | ZAP | 712 | 5570 | 1169 | E-E | 188 | 1126 | 390 | ZAP | 807 | 5976 | 1308 | ZPG | 226 | 1018 | 287 |
| 29 | REF | 2287 | 7857 | 4397 | - | - | - | - | REF | 2040 | 8016 | 3905 | E-E | 304 | 1322 | 504 |
| 30 | POL | 294 | 8151 | 485 | - | - | - | - | POL | 207 | 8223 | 458 | - | - | - | - |
| JULY 1 | NEP | 1997 | 10148 | 3613 | NST | 395 | 1521 | 1131 | NEP | 1090 | 9313 | 2819 | NST | 431 | 1753 | 873 |
| 2 | TLK | 266 | 10414 | 727 | E-E | 225 | 1746 | 615 | TLK | 525 | 9838 | 1260 | ZPG | 231 | 1984 | 518 |
| 3 | ZAP | 997 | 11411 | 2166 | - | - | - | - | ZAP | 996 | 10834 | 2304 | E-E | 308 | 2292 | 812 |
| 4 | - | - | - | - | ZPG | 69 | 1815 | 69 | - | - | - | - | - | - | - | - |
| 5 | REF | 2118 | 13529 | 6515 | NST | 353 | 2168 | 1484 | REF | 2167 | 13001 | 6072 | NST | 539 | 2831 | 1412 |
| 6 | POL | 330 | 13859 | 815 | E-E | 379 | 2547 | 994 | POL | 645 | 13646 | 1103 | ZPG | 110 | 2941 | 628 |
| 7 | NEP | 2118 | 15977 | 5731 | - | - | - | - | NEP | 1552 | 15198 | 4371 | E-E | 337 | 3278 | 1149 |
| 8 | TLK | 720 | 16697 | 1447 | ZPG | 58 | 2605 | 127 | TLK | 921 | 16119 | 2181 | - | - | - | - |
| 9 | ZAP | 832 | 17529 | 2998 | NST | 723 | 3328 | 2207 | ZAP | 1993 | 18112 | 4297 | NST | 422 | 3700 | 1834 |
| 10 | REF | 3339 | 20868 | 9854 | E-E | 844 | 3672 | 1338 | REF | 2407 | 20519 | 8479 | ZPG | 285 | 3985 | 913 |
| 11 | POL | 400 | 21268 | 1215 | - | - | - | - | POL | 670 | 21189 | 1773 | E-E | 813 | 4798 | 1962 |
| 12 | NEP | 2030 | 23298 | 7761 | - | - | - | - | NEP | 1942 | 23131 | 6313 | - | - | - | - |
| 13 | TLK | 414 | 23712 | 1861 | NST | 536 | 4208 | 2743 | TLK | 1020 | 24151 | 3201 | NST | 861 | 5659 | 2695 |
| 14 | ZAP | 612 | 24324 | 3610 | E-E | 309 | 4517 | 1647 | ZAP | 1538 | 25689 | 5835 | ZPG | 114 | 5773 | 1027 |
| 15 | REF | 1667 | 25991 | 11521 | - | - | - | - | REF | 3178 | 28867 | 11657 | E-E | 766 | 6539 | 2728 |
| 16 | POL | 569 | 26560 | 1784 | - | - | - | - | POL | 236 | 29103 | 2009 | - | - | - | - |
| 17 | NEP | 1644 | 28204 | 9405 | NST | 944 | 5461 | 3687 | TLK | 752 | 29855 | 3953 | NST | 948 | 7487 | 3643 |
| 18 | TLK | 451 | 28655 | 2312 | E-E | 378 | 5839 | 2025 | NEP | 2292 | 32147 | 8605 | ZPG | 130 | 7617 | 1157 |
| 19 | ZAP | 1030 | 29685 | 4640 | - | - | - | - | ZAP | 940 | 33087 | 6775 | E-E | 365 | 7982 | 3093 |

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*ST. PAUL: SIV=SIVUTCH; NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATOV, AND ARDIGUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI.

*ST. GEORGE: NOR=NORTH; NST=NORTH AND STARAYA ARTIL; E-E=EAST REEF AND EAST CLIFFS; E-N=EAST AND NORTH.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 13 (1930)--CONT.

TABLE 14 (1931)--CONT.

| DATE | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | |
|---------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|
| | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA |
| JULY 20 | REF | 1214 | 30899 | 12735 | - | - | - | - | REF | 1907 | 34994 | 13564 | - | - | - | - |
| 21 | POL | 184 | 31083 | 1968 | NST | 333 | 6172 | 4020 | POL | 708 | 35702 | 2717 | NST | 417 | 8399 | 4060 |
| 22 | NEP | 768 | 31851 | 10173 | - | - | - | - | NEP | 1170 | 36872 | 9775 | ZPG | 75 | 8474 | 1232 |
| 23 | TLK | 195 | 32046 | 2507 | E-E | 549 | 6721 | 2574 | TLK | 599 | 37471 | 4552 | E-E | 624 | 9098 | 3717 |
| 24 | ZAP | 633 | 32679 | 5273 | NST | 577 | 7298 | 4597 | ZAP | 637 | 38108 | 7412 | - | - | - | - |
| 25 | REF | 1235 | 33914 | 13970 | - | - | - | - | REF | 1429 | 39537 | 14993 | NST | 461 | 9559 | 4521 |
| 26 | POL | 457 | 34371 | 2425 | - | - | - | - | POL | 420 | 39957 | 3137 | - | - | - | - |
| 27 | - | - | - | - | E-N | 818 | 8116 | 818 | - | - | - | - | - | - | - | - |
| 29 | REF | 10 | 34381 | 13980 | - | - | - | - | - | - | - | - | - | - | - | - |

*ST. PAUL: SIV=SIVUTCH; NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIGUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI.

*ST. GEORGE: NOR=NORTH; NST=NORTH AND STARAYA ARTIL; E-E=EAST REEF AND EAST CLIFFS; E-N=EAST AND NORTH.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 15 1932

TABLE 16 1933

| ST. PAUL CUMULATIVE KILL | | | | | ST. GEORGE CUMULATIVE KILL | | | | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | |
|-----------------------------|---------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|
| DATE | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA |
| JUNE | 2 | - | - | - | NOR | 24 | 24 | 24 | - | - | - | - | - | - | - | - |
| | 3 | - | - | - | - | - | - | - | SIV | 121 | 121 | 121 | - | - | - | - |
| | 6 | SIV | 103 | 103 | - | - | - | - | - | - | - | - | - | - | - | - |
| | 8 | - | - | - | NOR | 33 | 57 | 57 | - | - | - | - | NOR | 16 | 16 | 16 |
| | 9 | - | - | - | - | - | - | - | REF | 278 | 399 | 278 | - | - | - | - |
| | 13 | - | - | - | - | - | - | - | - | - | - | - | NOR | 50 | 66 | 66 |
| | 14 | - | - | - | NOR | 116 | 173 | 173 | - | - | - | - | NOR | 61 | 127 | 61 |
| | 15 | REF | 304 | 407 | E-E | 191 | 364 | 191 | - | - | - | - | E-E | - | - | - |
| | 16 | - | - | - | - | - | - | - | TLK | 37 | 436 | 37 | - | - | - | - |
| | 17 | TLK | 87 | 494 | ZPG | 48 | 412 | 48 | - | - | - | - | - | - | - | - |
| | 18 | ZAP | 167 | 661 | - | - | - | - | ZAP | 173 | 609 | 173 | NOR | 48 | 175 | 114 |
| | 19 | - | - | - | NST | 190 | 602 | 190 | POL | 62 | 671 | 62 | E-E | 39 | 214 | 100 |
| | 20 | POL | 239 | 900 | E-E | 163 | 765 | 354 | NEP | 491 | 1162 | 491 | - | - | - | - |
| | 21 | NEP | 626 | 1526 | ZPG | 35 | 800 | 83 | TLK | 174 | 1336 | 211 | - | - | - | - |
| | 22 | TLK | 153 | 1679 | - | - | - | - | ZAP | 155 | 1491 | 328 | NST | 296 | 510 | 296 |
| | 23 | ZAP | 341 | 2020 | NST | 247 | 1047 | 437 | REF | 1338 | 2829 | 1616 | E-E | 161 | 671 | 261 |
| | 24 | REF | 1489 | 3509 | E-E | 195 | 1242 | 549 | POL | 132 | 2961 | 194 | ZPG | 77 | 748 | 77 |
| | 25 | POL | 211 | 3720 | ZPG | 53 | 1295 | 136 | NEP | 981 | 3942 | 1472 | - | - | - | - |
| | 26 | NEP | 1142 | 4862 | - | - | - | - | TLK | 227 | 4169 | 438 | NST | 365 | 1113 | 661 |
| | 27 | TLK | 388 | 5250 | NST | 329 | 1624 | 768 | ZAP | 484 | 4653 | 812 | E-E | 126 | 1239 | 387 |
| | 28 | ZAP | 746 | 5996 | E-E | 119 | 1743 | 668 | REF | 1512 | 6165 | 3128 | ZPG | 58 | 1297 | 135 |
| | 29 | REF | 2443 | 8439 | ZPG | 122 | 1865 | 258 | POL | 416 | 6581 | 610 | - | - | - | - |
| | 30 | POL | 297 | 8736 | - | - | - | - | NEP | 1790 | 8371 | 3262 | NST | 638 | 1935 | 1299 |
| JULY | 1 | NEP | 1471 | 10207 | NST | 468 | 2333 | 1234 | TLK | 441 | 8812 | 879 | E-E | 366 | 2301 | 753 |
| | 2 | TLK | 602 | 10809 | E-E | 431 | 2764 | 1099 | ZAP | 1348 | 10160 | 2160 | ZPG | 123 | 2424 | 258 |
| | 3 | ZAP | 1117 | 11926 | ZPG | 98 | 2862 | 356 | POL | 665 | 10825 | 1275 | NST | 884 | 3308 | 2183 |
| | 5 | REF | 3122 | 15048 | NST | 632 | 3494 | 1866 | REF | 3543 | 14368 | 8671 | E-E | 448 | 3756 | 1201 |
| | 6 | POL | 905 | 15953 | E-E | 539 | 4033 | 1638 | NEP | 1819 | 16187 | 5081 | ZPG | 229 | 3985 | 487 |
| | 7 | NEP | 1866 | 17819 | ZPG | 317 | 4350 | 673 | TLK | 688 | 16875 | 1567 | - | - | - | - |
| | 8 | TLK | 385 | 18204 | - | - | - | - | ZAP | 1995 | 18870 | 4155 | NST | 956 | 4941 | 3139 |
| | 9 | ZAP | 1135 | 19339 | NST | 540 | 4890 | 2406 | REF | 2863 | 21733 | 9594 | E-E | 370 | 5311 | 1571 |
| | 10 | REF | 2207 | 21546 | E-E | 237 | 5127 | 1875 | POL | 759 | 22492 | 2034 | ZPG | 169 | 5480 | 656 |
| | 11 | POL | 482 | 22028 | ZPG | 352 | 5479 | 1025 | NEP | 2591 | 25083 | 7672 | - | - | - | - |
| | 12 | NEP | 1608 | 23636 | - | - | - | - | TLK | 539 | 25622 | 2106 | NST | 604 | 6084 | 3743 |
| | 13 | TLK | 602 | 24238 | NST | 436 | 5915 | 2842 | ZAP | 1215 | 26837 | 5370 | E-E | 476 | 6560 | 2047 |
| | 14 | ZAP | 480 | 24718 | E-E | 407 | 6322 | 2282 | REF | 1915 | 28752 | 11449 | ZPG | 220 | 6780 | 876 |
| | 15 | REF | 1575 | 26293 | ZPG | 75 | 6397 | 1100 | POL | 644 | 29396 | 2678 | - | - | - | - |
| | 16 | POL | 717 | 27010 | - | - | - | - | NEP | 2081 | 31477 | 9753 | NST | 650 | 7430 | 4393 |
| | 17 | NEP | 1777 | 28787 | NST | 1018 | 7415 | 3860 | TLK | 688 | 32165 | 2794 | E-E | 222 | 7652 | 2269 |
| | 18 | TLK | 723 | 29510 | E-E | 317 | 7732 | 2599 | | | | | | | | |

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*ST. PAUL: SIV=SIVUTCH; NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIQUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI; TLP=TOLSTOI, LUKANIN, KITOVI, AND POLOVINA; NPR=VOSTOCHNI, MORJOVI, POLOVINA, AND REEF.

*ST. GEORGE: NOR=NORTH; NST=NORTH AND STARAYA ARTIL; E-E=EAST REEF AND EAST CLIFFS; ZPG=ZAPADNI.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 15 (1932)--CONT.

TABLE 16 (1933)--CONT.

| DATE | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | |
|---------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|
| | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA |
| JULY 19 | ZAP | 1617 | 31127 | 5603 | ZPG | 204 | 7936 | 1304 | ZAP | 1196 | 33361 | 6566 | ZPG | 174 | 7826 | 1050 |
| 20 | REF | 2013 | 33140 | 13153 | - | - | - | - | REF | 1032 | 34393 | 12481 | - | - | - | - |
| 21 | TLP | 759 | 33899 | 759 | NST | 679 | 8615 | 4539 | TLP | 819 | 35212 | 819 | NST | 498 | 8324 | 4891 |
| 22 | NEP | 1024 | 34923 | 9514 | E-E | 262 | 8877 | 2861 | NEP | 1172 | 36384 | 10925 | E-E | 498 | 8822 | 2767 |
| 23 | ZAP | 750 | 35673 | 6353 | - | - | - | - | REF | 1962 | 38346 | 14443 | ZPG | 85 | 8907 | 1135 |
| 24 | REF | 1176 | 36849 | 14329 | - | - | - | - | TZL | 1080 | 39426 | 1080 | NST | 245 | 9152 | 5136 |
| 25 | TLP | 580 | 37429 | 1339 | NST | 460 | 9337 | 4999 | NPR | 1219 | 40645 | 1219 | E-E | 145 | 9297 | 2912 |
| 26 | NEP | 451 | 37880 | 9965 | E-E | 144 | 9481 | 3005 | REF | 1095 | 41740 | 15538 | ZPG | 100 | 9397 | 1235 |
| 27 | ZAP | 397 | 38277 | 6750 | - | - | - | - | TZL | 899 | 42639 | 1979 | NST | 353 | 9750 | 5489 |
| 28 | REF | 850 | 39127 | 15179 | NST | 361 | 9842 | 5360 | NPR | 816 | 43455 | 2035 | E-E | 258 | 10008 | 3170 |
| 29 | TLP | 360 | 39487 | 1699 | - | - | - | - | REF | 993 | 44448 | 16531 | ZPG | 94 | 10102 | 1329 |

*ST. PAUL: SIV=SIVUTCH; NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIQUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI; TLP=TOLSTOI, LUKANIN, KITOVI, AND POLOVINA; NPR=VOSTOCHNI, MORJOVI, POLOVINA, AND REEF.

*ST. GEORGE: NOR=NORTH; NST=NORTH AND STARAYA ARTIL; E-E=EAST REEF AND EAST CLIFFS; ZPG=ZAPADNI.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 17 1934

TABLE 18 1935

| DATE | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | | |
|------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|------|
| | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | |
| JUNE | 1 | - | - | - | - | - | - | - | SIV | 97 | 97 | 97 | - | - | - | - | |
| | 3 | - | - | - | - | - | - | - | - | - | - | - | STA | 29 | 29 | 29 | |
| | 9 | - | - | - | NOR | 37 | 37 | 37 | - | - | - | - | - | - | - | - | |
| | 10 | - | - | - | - | - | - | - | POL | 79 | 176 | 79 | - | - | - | - | |
| | 11 | - | - | - | - | - | - | - | - | - | - | - | NOR | 57 | 86 | 57 | |
| | 12 | REF | 141 | 141 | 141 | - | - | - | - | - | - | - | - | - | - | - | |
| | 13 | - | - | - | - | - | - | - | - | - | - | - | ZPG | 97 | 183 | 97 | |
| | 15 | SIV | 56 | 197 | 56 | - | - | - | - | - | - | - | - | - | - | - | |
| | 16 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| | 17 | - | - | - | NOR | 30 | 67 | 67 | - | - | - | - | NST | 129 | 312 | 129 | |
| | 18 | ZAP | 79 | 276 | 79 | - | - | - | - | - | - | - | E-E | 58 | 370 | 58 | |
| | 19 | NEP | 256 | 532 | 256 | E-E | 68 | 135 | 68 | ZAP | 261 | 437 | 261 | ZPG | 174 | 544 | 271 |
| | 20 | POL | 28 | 560 | 28 | NST | 155 | 290 | 155 | REF | 894 | 1331 | 894 | NST | 71 | 615 | 200 |
| | 21 | TLK | 65 | 625 | 65 | - | - | - | - | POL | 283 | 1614 | 362 | - | - | - | - |
| | 22 | REF | 757 | 1382 | 898 | - | - | - | - | NEP | 1086 | 2700 | 1086 | E-E | 47 | 662 | 105 |
| | 23 | ZAP | 388 | 1770 | 467 | E-E | 45 | 335 | 113 | ZAP | 212 | 2912 | 473 | ZPG | 81 | 743 | 352 |
| | 24 | POL | 82 | 1852 | 110 | NST | 375 | 710 | 530 | TLK | 388 | 3300 | 388 | - | - | - | - |
| | 25 | NEP | 1150 | 3002 | 1406 | ZPG | 52 | 762 | 52 | REF | 1462 | 4762 | 2356 | NST | 368 | 1111 | 568 |
| | 26 | TLK | 232 | 3234 | 297 | - | - | - | - | POL | 314 | 5076 | 676 | E-E | 136 | 1247 | 241 |
| | 27 | REF | 2117 | 5351 | 3015 | E-E | 69 | 831 | 182 | NEP | 1275 | 6351 | 2361 | ZPG | 240 | 1487 | 592 |
| | 28 | ZAP | 714 | 6065 | 1181 | NST | 620 | 1451 | 1150 | ZAP | 667 | 7018 | 1140 | - | - | - | - |
| | 29 | POL | 307 | 6372 | 417 | ZPG | 50 | 1501 | 102 | TLK | 429 | 7447 | 817 | NST | 291 | 1778 | 859 |
| | 30 | NEP | 1162 | 7534 | 2568 | - | - | - | - | REF | 1584 | 9031 | 3940 | E-E | 219 | 1997 | 460 |
| JULY | 1 | REF | 1468 | 9002 | 4483 | E-E | 336 | 1837 | 518 | NEP | 904 | 9935 | 3265 | ZPG | 182 | 2179 | 774 |
| | 2 | TLK | 687 | 9689 | 984 | NST | 723 | 2560 | 1873 | POL | 277 | 10212 | 953 | - | - | - | - |
| | 3 | ZAP | 822 | 10511 | 2003 | ZPG | 135 | 2695 | 237 | ZAP | 584 | 10796 | 1724 | NST | 560 | 2739 | 1419 |
| | 4 | - | - | - | - | - | - | - | - | TLK | 856 | 11652 | 1673 | E-E | 116 | 2855 | 576 |
| | 5 | NEP | 1349 | 11860 | 3917 | E-E | 242 | 2937 | 760 | REF | 1973 | 13625 | 5913 | ZPG | 212 | 3067 | 986 |
| | 6 | TLK | 988 | 12848 | 1972 | NST | 1308 | 4245 | 3181 | POL | 418 | 14043 | 1371 | - | - | - | - |
| | 7 | REF | 2773 | 15621 | 7256 | ZPG | 118 | 4363 | 355 | NEP | 3880 | 17923 | 7145 | NST | 1414 | 4481 | 2833 |
| | 8 | ZAP | 1745 | 17366 | 3748 | - | - | - | - | ZAP | 862 | 18785 | 2586 | E-E | 368 | 4849 | 944 |
| | 9 | POL | 902 | 18268 | 1319 | E-E | 122 | 4485 | 882 | TLK | 1591 | 20376 | 3264 | ZPG | 138 | 4987 | 1124 |
| | 10 | NEP | 2455 | 20723 | 6372 | NST | 796 | 5281 | 3977 | REF | 2287 | 22663 | 8200 | - | - | - | - |
| | 11 | TLK | 353 | 21076 | 2325 | ZPG | 86 | 5367 | 441 | POL | 735 | 23398 | 2106 | NST | 729 | 5716 | 3562 |
| | 12 | REF | 2839 | 23915 | 10095 | - | - | - | - | NEP | 2495 | 25893 | 9640 | E-E | 261 | 5977 | 1205 |
| | 13 | ZAP | 1374 | 25289 | 5122 | E-E | 297 | 5664 | 1179 | ZAP | 917 | 26810 | 3503 | ZPG | 153 | 6130 | 1277 |
| | 14 | POL | 788 | 26077 | 2107 | NST | 1015 | 6679 | 4992 | TLK | 732 | 27542 | 3986 | - | - | - | - |
| | 15 | NEP | 1828 | 27905 | 8200 | ZPG | 147 | 6826 | 588 | REF | 1254 | 28796 | 9454 | NST | 754 | 6884 | 4316 |
| | 16 | TLK | 755 | 28660 | 3080 | - | - | - | - | POL | 677 | 29473 | 2783 | E-E | 326 | 7210 | 1531 |
| | 17 | REF | 1820 | 30480 | 11915 | E-E | 347 | 7173 | 1526 | NEP | 1379 | 30852 | 11019 | ZPG | 75 | 7285 | 1352 |

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*ST. PAUL: SIV=SIVUTCH; NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIGUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI; TZL=TOLSTOI, ZAPADNI, LUKANIN, AND KITOVI; NPR=VOSTOCHNI, MORJOVI, POLOVINA, AND REEF; E-Z=EAST AND ZAPADNI.

*ST. GEORGE: NOR=NORTH; NST=NORTH AND STARAYA ARTIL; E-E=EAST REEF AND EAST CLIFFS; STA=STARAYA-ARTIL; ZPG=ZAPADNI.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 17 (1934)--CONT.

TABLE 18 (1935)--CONT.

| DATE | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | |
|---------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|
| | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA |
| JULY 18 | ZAP | 599 | 31079 | 5721 | NST | 498 | 7671 | 5490 | ZAP | 1218 | 32070 | 4721 | - | - | - | - |
| 19 | POL | 658 | 31737 | 2765 | ZPG | 84 | 7755 | 672 | TLK | 756 | 32826 | 4752 | NST | 970 | 8255 | 5286 |
| 20 | NEP | 1519 | 33256 | 9719 | - | - | - | - | REF | 1830 | 34656 | 11284 | E-E | 164 | 8419 | 1695 |
| 21 | TLK | 680 | 33936 | 3760 | E-E | 247 | 8002 | 1773 | POL | 759 | 35415 | 3542 | ZPG | 113 | 8532 | 1465 |
| 22 | REF | 1521 | 35457 | 13436 | NST | 1100 | 9102 | 6590 | NEP | 2182 | 37597 | 13201 | - | - | - | - |
| 23 | ZAP | 1110 | 36567 | 6831 | - | - | - | - | ZAP | 522 | 38119 | 5243 | NST | 508 | 9040 | 5794 |
| 24 | NPR | 1619 | 38186 | 1619 | E-E | 186 | 9288 | 1959 | TLK | 874 | 38993 | 5626 | E-E | 288 | 9328 | 1983 |
| 25 | REF | 1191 | 39377 | 14627 | NST | 542 | 9830 | 7132 | REF | 1646 | 40639 | 12930 | ZPG | 340 | 9668 | 1805 |
| 26 | TZL | 1148 | 40525 | 1148 | - | - | - | - | POL | 284 | 40923 | 3826 | NST | 567 | 10235 | 6361 |
| 27 | NPR | 737 | 41262 | 2356 | E-Z | 175 | 10005 | 175 | NEP | 1326 | 42249 | 14527 | E-E | 211 | 10446 | 2194 |
| 28 | REF | 901 | 42163 | 15528 | NST | 298 | 10303 | 7430 | ZAP | 685 | 42914 | 5908 | ZPG | 70 | 10516 | 1875 |
| 29 | TZL | 809 | 42972 | 1957 | E-E | 193 | 10496 | 2152 | TLK | 500 | 43414 | 6126 | NST | 854 | 11370 | 7215 |
| 30 | - | - | - | - | - | - | - | - | REF | 1313 | 44727 | 14243 | E-E | 102 | 11472 | 2296 |
| 31 | - | - | - | - | - | - | - | - | NPR | 1097 | 45824 | 1097 | - | - | - | - |

*ST. PAUL: SIV=SIVUTCH; NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIGUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI; TZL=TOLSTOI, ZAPADNI, LUKANIN, AND KITOVI; NPR=VOSTOCHNI, MORJOVI, POLOVINA, AND REEF; E-Z=EAST AND ZAPADNI.

*ST. GEORGE: NOR=NORTH; NST=NORTH AND STARAYA ARTIL; E-E=EAST REEF AND EAST CLIFFS; STA=STARAYA ARTIL; ZPG=ZAPADNI.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 19 1936

TABLE 20 1937

| DATE | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | |
|--------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|
| | ROOK- ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY* | DAILY KILL | ALL AREAS | BY AREA |
| JUNE 2 | SIV | 126 | 126 | 126 | - | - | - | - | - | - | - | - | - | - | - | - |
| 4 | - | - | - | - | NOR | 12 | 12 | 12 | SIV | 49 | 49 | 49 | - | - | - | - |
| 9 | - | - | - | - | - | - | - | - | - | - | - | - | ZPG | 26 | 26 | 26 |
| 10 | REF | 58 | 184 | 58 | - | - | - | - | REF | 148 | 197 | 148 | - | - | - | - |
| 12 | - | - | - | - | NOR | 35 | 47 | 47 | - | - | - | - | - | - | - | - |
| 14 | - | - | - | - | - | - | - | - | - | - | - | - | E-N | 86 | 112 | 86 |
| 16 | - | - | - | - | ZPG | 70 | 117 | 70 | - | - | - | - | ZPG | 32 | 144 | 58 |
| 18 | - | - | - | - | E-E | 47 | 164 | 47 | - | - | - | - | - | - | - | - |
| 19 | ZAP | 301 | 485 | 301 | - | - | - | - | ZAP | 223 | 420 | 223 | - | - | - | - |
| 20 | REF | 651 | 1136 | 709 | NST | 77 | 241 | 77 | REF | 648 | 1068 | 796 | ZPG | 40 | 184 | 98 |
| 21 | POL | 115 | 1251 | 115 | - | - | - | - | POL | 155 | 1223 | 155 | NST | 205 | 389 | 205 |
| 22 | NEP | 480 | 1731 | 480 | E-E | 32 | 273 | 79 | NEP | 562 | 1785 | 562 | - | - | - | - |
| 23 | ZAP | 324 | 2055 | 625 | ZPG | 74 | 347 | 144 | ZAP | 349 | 2134 | 572 | E-E | 77 | 466 | 77 |
| 24 | TLK | 228 | 2283 | 228 | NST | 302 | 649 | 379 | TLK | 105 | 2239 | 105 | ZPG | 84 | 550 | 182 |
| 25 | REF | 937 | 3220 | 1646 | - | - | - | - | REF | 1023 | 3262 | 1819 | NST | 366 | 916 | 571 |
| 26 | POL | 179 | 3399 | 294 | E-E | 103 | 752 | 182 | POL | 288 | 3550 | 443 | - | - | - | - |
| 27 | NEP | 1664 | 5063 | 2144 | ZPG | 74 | 826 | 218 | NEP | 1148 | 4698 | 1710 | E-E | 151 | 1067 | 228 |
| 28 | ZAP | 838 | 5901 | 1463 | NST | 538 | 1364 | 917 | ZAP | 1206 | 5904 | 1778 | ZPG | 266 | 1333 | 448 |
| 29 | TLK | 536 | 6437 | 764 | - | - | - | - | TLK | 422 | 8326 | 527 | NST | 430 | 1763 | 1001 |
| 30 | REF | 1730 | 8167 | 3376 | E-E | 109 | 1473 | 291 | REF | 901 | 7227 | 2720 | - | - | - | - |
| JULY 1 | NEP | 1281 | 9448 | 3425 | ZPG | 199 | 1672 | 417 | NEP | 1134 | 8361 | 2844 | E-E | 145 | 1908 | 373 |
| 2 | POL | 638 | 10086 | 932 | NST | 344 | 2016 | 1261 | POL | 757 | 9118 | 1200 | ZPG | 365 | 2273 | 813 |
| 3 | ZAP | 1184 | 11270 | 2647 | - | - | - | - | ZAP | 887 | 10005 | 2665 | NST | 424 | 2697 | 1425 |
| 4 | TLK | 310 | 11580 | 1074 | E-E | 81 | 2097 | 372 | TLK | 787 | 10792 | 1314 | - | - | - | - |
| 5 | REF | 1421 | 13001 | 4797 | ZPG | 302 | 2399 | 719 | REF | 1566 | 12358 | 4286 | E-E | 203 | 2900 | 576 |
| 6 | POL | 485 | 13486 | 1417 | NST | 663 | 3062 | 1924 | POL | 423 | 12781 | 1623 | ZPG | 260 | 3160 | 1073 |
| 7 | NEP | 2148 | 15634 | 5573 | - | - | - | - | NEP | 1615 | 14396 | 4459 | NST | 611 | 3771 | 2036 |
| 8 | ZAP | 2282 | 17916 | 4929 | E-E | 188 | 3250 | 560 | ZAP | 1960 | 16356 | 4625 | - | - | - | - |
| 9 | TLK | 909 | 18825 | 1983 | ZPG | 100 | 3350 | 819 | TLK | 627 | 16983 | 1941 | E-E | 305 | 4076 | 981 |
| 10 | REF | 2420 | 21245 | 7217 | NST | 696 | 4046 | 2620 | REF | 1212 | 18195 | 5498 | ZPG | 243 | 4319 | 1316 |
| 11 | POL | 668 | 21913 | 2085 | - | - | - | - | POL | 782 | 18977 | 2405 | NST | 567 | 4886 | 2603 |
| 12 | NEP | 2261 | 24174 | 7834 | E-E | 294 | 4340 | 854 | NEP | 3024 | 22001 | 7483 | - | - | - | - |
| 13 | ZAP | 2028 | 26202 | 6957 | ZPG | 104 | 4444 | 923 | ZAP | 2140 | 24141 | 6765 | E-E | 187 | 5073 | 1068 |
| 14 | TLK | 423 | 26625 | 2406 | - | - | - | - | TLK | 897 | 25038 | 2838 | ZPG | 236 | 5309 | 1552 |
| 15 | REF | 1370 | 27995 | 8587 | NST | 640 | 5084 | 3260 | REF | 1657 | 26695 | 7155 | NST | 683 | 5992 | 3286 |
| 16 | POL | 772 | 28767 | 2857 | E-E | 357 | 5441 | 1211 | POL | 441 | 27136 | 2846 | - | - | - | - |
| 17 | NEP | 1785 | 30552 | 9619 | ZPG | 129 | 5570 | 1052 | NEP | 1668 | 28804 | 9151 | E-E | 376 | 6368 | 1444 |
| 18 | ZAP | 1625 | 32177 | 8582 | NST | 1009 | 6579 | 4269 | ZAP | 1620 | 30424 | 8385 | ZPG | 249 | 6617 | 1801 |
| 19 | TLK | 404 | 32581 | 2810 | E-E | 66 | 6645 | 1277 | TLK | 471 | 30895 | 3309 | NST | 970 | 7587 | 4256 |
| 20 | REF | 2043 | 34624 | 10630 | ZPG | 93 | 6738 | 1145 | REF | 2314 | 33209 | 9469 | - | - | - | - |

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*ST. PAUL: SIV=SIVUTCH; NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIGUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI; TZL=TOLSTOI, ZAPADNI, LUKANIN, AND KITOVI; NPR=VOSTOCHNI, MORJOVI, POLOVINA, AND REEF.

*ST. GEORGE: NOR=NORTH; NST=NORTH AND STARAYA ARTIL; E-E=EAST REEF AND EAST CLIFFS; E-N=EAST AND NORTH; ZPG=ZAPADNI.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 19 (1936)--CONT.

TABLE 20 (1937)--CONT.

| ST. PAUL CUMULATIVE KILL | | | | | ST. GEORGE CUMULATIVE KILL | | | | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | |
|-----------------------------|---------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|
| DATE | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA |
| JULY 21 | POL | 511 | 35135 | 3368 | NST | 145 | 6883 | 4414 | POL | 589 | 33798 | 3435 | E-E | 312 | 7899 | 1756 |
| 22 | NEP | 1039 | 36174 | 10658 | E-E | 120 | 7003 | 1397 | NEP | 2003 | 35801 | 11154 | ZPG | 150 | 8049 | 1951 |
| 23 | ZAP | 757 | 36931 | 9339 | ZPG | 33 | 7036 | 1178 | ZAP | 1842 | 37643 | 10227 | NST | 830 | 8879 | 5086 |
| 24 | TLK | 284 | 37215 | 3094 | NST | 326 | 7362 | 4740 | TLK | 771 | 38414 | 4080 | - | - | - | - |
| 25 | REF | 937 | 38152 | 11567 | E-E | 245 | 7607 | 1642 | REF | 1624 | 40038 | 11093 | E-E | 303 | 9182 | 2059 |
| 26 | NPR | 1501 | 39853 | 1501 | ZPG | 78 | 7685 | 1256 | POL | 688 | 40706 | 4103 | ZPG | 104 | 9288 | 2055 |
| 27 | TZL | 972 | 40625 | 972 | NST | 413 | 8098 | 5153 | NEP | 1289 | 41995 | 12443 | NST | 897 | 10183 | 5993 |
| 28 | REF | 922 | 41547 | 12489 | E-E | 289 | 8387 | 1931 | TZL | 835 | 42830 | 835 | E-E | 217 | 10400 | 2276 |
| 29 | NPR | 875 | 42422 | 2376 | ZPG | 24 | 8411 | 1280 | REF | 483 | 43313 | 11576 | ZPG | 74 | 10474 | 2129 |
| 30 | TZL | 332 | 42754 | 1304 | NST | 255 | 8666 | 5408 | NPR | 755 | 44068 | 755 | NST | 638 | 11112 | 6621 |
| 31 | REF | 436 | 43190 | 12925 | E-E | 258 | 8924 | 2189 | - | - | - | - | - | - | - | - |
| AUG 1 | POL | 332 | 43522 | 3700 | - | - | - | - | - | - | - | - | - | - | - | - |

*ST. PAUL: SIV=SIVUTCH; NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIQUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI; TZL=TOLSTOI, ZAPADNI, LUKANIN, AND KITOVI; NPR=VOSTOCHNI, MORJOVI, POLOVINA, AND REEF.

*ST. GEORGE: NOR=NORTH; NST=NORTH AND STARAYA ARTIL; E-E=EAST REEF AND EAST CLIFFS; E-N=EAST AND NORTH; ZPG=ZAPADNI.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 21 1938

TABLE 22 1939

| ST. PAUL | | | | | ST. GEORGE | | | | ST. PAUL | | | | ST. GEORGE | | | | |
|-----------------|-----------|------------|-----------|---------|-----------------|------------|-----------|---------|-----------------|------------|-----------|---------|-----------------|------------|-----------|---------|------|
| CUMULATIVE KILL | | | | | CUMULATIVE KILL | | | | CUMULATIVE KILL | | | | CUMULATIVE KILL | | | | |
| DATE | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA | |
| JUNE | 5 | - | - | - | - | - | - | - | - | - | - | - | NOR | 37 | 37 | 37 | |
| | 6 | REF | 82 | 82 | - | - | - | - | - | - | - | - | - | - | - | - | |
| | 8 | - | - | - | - | - | - | - | - | - | - | - | ZPG | 21 | 58 | 21 | |
| | 11 | - | - | - | NOR | 52 | 52 | 52 | - | - | - | - | - | - | - | - | |
| | 12 | - | - | - | - | - | - | - | NEP | 164 | 164 | 164 | NST | 62 | 120 | 62 | |
| | 13 | REF | 275 | 357 | 357 | - | - | - | - | - | - | - | - | - | - | - | |
| | 14 | - | - | - | - | - | - | - | - | - | - | - | E-E | 40 | 160 | 40 | |
| | 16 | - | - | - | ZPG | 49 | 101 | 49 | - | - | - | - | - | - | - | - | |
| | 17 | - | - | - | E-N | 133 | 234 | 133 | - | - | - | - | - | - | - | - | |
| | 18 | - | - | - | - | - | - | - | - | - | - | - | NST | 30 | 190 | 92 | |
| | 19 | ZAP | 127 | 484 | 127 | - | - | - | TLK | 69 | 233 | 69 | - | - | - | - | |
| | 20 | REF | 631 | 1115 | 988 | ZPG | 38 | 272 | 87 | ZAP | 165 | 398 | 165 | E-E | 86 | 276 | 126 |
| | 21 | POL | 109 | 1224 | 109 | NST | 74 | 346 | 74 | REF | 976 | 1374 | 976 | ZPG | 71 | 347 | 92 |
| | 22 | NEP | 521 | 1745 | 521 | - | - | - | POL | 101 | 1475 | 101 | NST | 159 | 506 | 251 | |
| | 23 | ZAP | 104 | 1849 | 231 | E-E | 124 | 470 | 124 | NEP | 665 | 2140 | 629 | - | - | - | |
| | 24 | TLK | 349 | 2198 | 349 | ZPG | 74 | 544 | 161 | ZAP | 298 | 2438 | 463 | E-E | 136 | 642 | 262 |
| | 25 | REF | 897 | 3095 | 1885 | NST | 249 | 793 | 323 | TLK | 79 | 2517 | 148 | ZPG | 75 | 717 | 167 |
| | 26 | POL | 78 | 3173 | 187 | - | - | - | REF | 1069 | 3586 | 2045 | NST | 157 | 874 | 408 | |
| | 27 | NEP | 949 | 4122 | 1470 | E-E | 179 | 972 | 303 | POL | 94 | 3680 | 195 | - | - | - | |
| | 28 | ZAP | 642 | 4764 | 873 | ZPG | 210 | 1182 | 371 | NEP | 846 | 4526 | 1675 | E-E | 131 | 1005 | 393 |
| | 29 | TLK | 324 | 5088 | 673 | NST | 307 | 1489 | 630 | ZAP | 508 | 5034 | 971 | ZPG | 155 | 1160 | 322 |
| | 30 | REF | 1370 | 6458 | 3255 | - | - | - | TLK | 150 | 5184 | 298 | NST | 196 | 1356 | 604 | |
| JULY | 1 | POL | 284 | 6742 | 471 | E-E | 246 | 1735 | 549 | REF | 1933 | 7117 | 3978 | - | - | - | |
| | 2 | NEP | 1510 | 8252 | 2980 | ZPG | 278 | 2013 | 649 | POL | 230 | 7347 | 425 | E-E | 303 | 1659 | 696 |
| | 3 | ZAP | 762 | 9014 | 1635 | NST | 479 | 2492 | 1109 | NEP | 1630 | 8977 | 3305 | ZPG | 209 | 1868 | 531 |
| | 4 | TLK | 905 | 9919 | 1578 | - | - | - | ZAP | 1313 | 10290 | 2224 | NST | 765 | 2633 | 1389 | |
| | 5 | REF | 1833 | 11752 | 5088 | E-E | 410 | 2902 | 959 | TLK | 625 | 10915 | 923 | - | - | - | |
| | 6 | POL | 341 | 12093 | 812 | ZPG | 137 | 3039 | 786 | REF | 1941 | 12856 | 5919 | E-E | 319 | 2952 | 1015 |
| | 7 | NEP | 1871 | 13964 | 4851 | NST | 476 | 3515 | 1595 | POL | 830 | 13686 | 1255 | ZPG | 242 | 3194 | 773 |
| | 8 | ZAP | 2019 | 15983 | 3654 | - | - | - | NEP | 1684 | 15370 | 4989 | NST | 422 | 3616 | 1791 | |
| | 9 | TLK | 652 | 16635 | 2230 | E-E | 458 | 3973 | 1417 | ZAP | 1590 | 16960 | 3874 | - | - | - | |
| | 10 | REF | 1923 | 18558 | 7011 | ZPG | 148 | 4121 | 934 | TLK | 616 | 17576 | 1539 | E-E | 516 | 4132 | 1531 |
| | 11 | POL | 971 | 19529 | 1783 | NST | 908 | 5029 | 2493 | REF | 2367 | 19943 | 8286 | ZPG | 210 | 4342 | 983 |
| | 12 | NEP | 2533 | 22062 | 7384 | - | - | - | NEP | 2700 | 23296 | 7689 | - | - | - | - | |
| | 13 | ZAP | 2213 | 24275 | 5867 | E-E | 688 | 5717 | 2105 | ZAP | 2345 | 25641 | 6219 | E-E | 665 | 5808 | 2196 |
| | 14 | TLK | 566 | 24841 | 2796 | ZPG | 235 | 5952 | 1169 | TLK | 1081 | 26722 | 2620 | ZPG | 237 | 6045 | 1220 |
| | 15 | REF | 1852 | 26693 | 8863 | NST | 805 | 6757 | 3298 | REF | 2586 | 29288 | 10852 | NST | 1203 | 7248 | 3795 |
| | 16 | POL | 882 | 27575 | 2665 | - | - | - | - | POL | 916 | 30204 | 2824 | - | - | - | - |
| | 17 | NEP | 2342 | 29917 | 9726 | E-E | 620 | 7377 | 2725 | NEP | 2217 | 32421 | 9906 | E-E | 517 | 7765 | 2713 |
| | 18 | ZAP | 974 | 30891 | 6841 | ZPG | 378 | 7755 | 1547 | ZAP | 1894 | 34315 | 8113 | ZPG | 311 | 8076 | 1531 |

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*ST. PAUL: NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORVATCH, AND ARDIQUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI; NPR=VOSTOCHNI MORJOVI, POLOVINA, AND REEF.

*ST. GEORGE: NOR=NORTH; NST=NORTH AND STARAYA ARTIL; E-E=EAST REEF AND EAST CLIFFS; ZPG=ZAPADNI; EST=EAST AND STARAYA ARTIL.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 21 (1938)--CONT.

TABLE 22 (1939)--CONT.

| ST. PAUL | | | | | ST. GEORGE | | | | ST. PAUL | | | | ST. GEORGE | | | |
|-----------------|-----------|------------|-----------|---------|-----------------|------------|-----------|---------|-----------------|------------|-----------|---------|-----------------|------------|-----------|---------|
| CUMULATIVE KILL | | | | | CUMULATIVE KILL | | | | CUMULATIVE KILL | | | | CUMULATIVE KILL | | | |
| DATE | ROOK-ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY* | DAILY KILL | ALL AREAS | BY AREA |
| JULY 19 | TLK | 752 | 31643 | 3548 | NST | 783 | 8538 | 4081 | TLK | 1323 | 35638 | 3943 | NST | 903 | 8979 | 4698 |
| 20 | REF | 2242 | 33885 | 11105 | - | - | - | - | REF | 2233 | 37871 | 13085 | - | - | - | - |
| 21 | POL | 722 | 34607 | 3387 | E-E | 544 | 9082 | 3269 | POL | 838 | 38709 | 3662 | E-E | 806 | 9785 | 3519 |
| 22 | NEP | 2030 | 36637 | 11756 | ZPG | 171 | 9253 | 1718 | NEP | 2455 | 41164 | 12361 | ZPG | 341 | 10126 | 1872 |
| 23 | ZAP | 1203 | 37840 | 8044 | NST | 669 | 9922 | 4750 | ZAP | 1509 | 42673 | 9822 | NST | 1455 | 11581 | 6153 |
| 24 | TLK | 799 | 38639 | 4347 | - | - | - | - | TLK | 1268 | 43941 | 5211 | - | - | - | - |
| 25 | REF | 1625 | 40264 | 12730 | E-E | 567 | 10489 | 3836 | REF | 1552 | 45493 | 14637 | E-E | 1019 | 12600 | 4538 |
| 26 | POL | 649 | 40913 | 4036 | ZPG | 101 | 10590 | 1819 | NPR | 2153 | 47646 | 2153 | ZPG | 227 | 12827 | 2099 |
| 27 | NEP | 1478 | 42391 | 13234 | NST | 521 | 11111 | 5271 | - | - | - | - | - | - | - | - |
| 28 | ZAP | 758 | 43149 | 8802 | E-E | 320 | 11431 | 4156 | - | - | - | - | - | - | - | - |
| 29 | TLK | 887 | 44036 | 5234 | ZPG | 44 | 11475 | 1863 | - | - | - | - | - | - | - | - |
| 30 | REF | 821 | 44857 | 13551 | EST | 807 | 12282 | 807 | - | - | - | - | - | - | - | - |
| 31 | POL | 396 | 45253 | 4432 | - | - | - | - | - | - | - | - | - | - | - | - |
| AUG 1 | NEP | 829 | 46082 | 14063 | - | - | - | - | - | - | - | - | - | - | - | - |

*ST. PAUL: NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORVATCH, AND ARDIQUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI; NPR=VOSTOCHNI MORJOVI, POLOVINA, AND REEF.

*ST. GEORGE: NOR=NORTH; NST=NORTH AND STARAYA ARTIL; E-E=EAST REEF AND EAST CLIFFS; ZPG=ZAPADNI; EST=EAST AND STARAYA ARTIL.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 23 1940

TABLE 24 1941

| ST. PAUL | | | | | ST. GEORGE | | | | ST. PAUL | | | | ST. GEORGE | | | | |
|-----------------|-----------|------------|-----------|---------|-----------------|------------|-----------|---------|-----------------|------------|-----------|---------|-----------------|------------|-----------|---------|------|
| CUMULATIVE KILL | | | | | CUMULATIVE KILL | | | | CUMULATIVE KILL | | | | CUMULATIVE KILL | | | | |
| DATE | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA | |
| JUNE | 4 | - | - | - | ZPG | 26 | 26 | 26 | - | - | - | - | - | - | - | - | |
| | 5 | REF | 309 | 309 | 309 | - | - | - | UNS | 85 | 85 | 85 | - | - | - | - | |
| | 7 | - | - | - | NST | 63 | 89 | 63 | - | - | - | - | - | - | - | - | |
| | 10 | - | - | - | E-E | 127 | 216 | 127 | - | - | - | - | - | - | - | - | |
| | 11 | - | - | - | ZPG | 114 | 330 | 140 | - | - | - | - | NOR | 76 | 76 | 76 | |
| | 12 | NEP | 339 | 648 | 339 | - | - | - | NEP | 110 | 195 | 110 | - | - | - | - | |
| | 13 | - | - | - | NST | 196 | 526 | 259 | - | - | - | - | - | - | - | - | |
| | 15 | REF | 837 | 1485 | 1146 | E-E | 158 | 684 | 286 | REF | 514 | 709 | 514 | - | - | - | |
| | 16 | - | - | - | ZPG | 141 | 825 | 281 | - | - | - | - | - | - | - | - | |
| | 17 | NEP | 406 | 1891 | 745 | NST | 142 | 967 | 401 | NEP | 261 | 970 | 371 | NST | 71 | 147 | 71 |
| | 18 | ZAP | 522 | 2413 | 522 | - | - | - | ZAP | 124 | 1094 | 124 | - | - | - | - | |
| | 19 | TLK | 337 | 2750 | 337 | E-E | 143 | 1110 | 428 | TLK | 408 | 1502 | 408 | E-E | 97 | 244 | 97 |
| | 20 | POL | 390 | 3140 | 390 | ZPG | 120 | 1230 | 401 | REF | 865 | 2367 | 1379 | ZPG | 24 | 268 | 24 |
| | 21 | REF | 1206 | 4346 | 2352 | - | - | - | POL | 314 | 2681 | 314 | NST | 132 | 400 | 203 | |
| | 22 | NEP | 1023 | 5369 | 1768 | NST | 532 | 1762 | 933 | NEP | 812 | 3493 | 1183 | - | - | - | |
| | 23 | ZAP | 710 | 6079 | 1232 | E-E | 347 | 2109 | 775 | ZAP | 462 | 3955 | 586 | E-E | 42 | 442 | 139 |
| | 24 | TLK | 701 | 6780 | 1038 | ZPG | 286 | 2395 | 687 | TLK | 373 | 4328 | 781 | ZPG | 24 | 466 | 48 |
| | 25 | REF | 1829 | 8609 | 4181 | NST | 670 | 3065 | 1603 | REF | 1255 | 5583 | 2634 | NST | 416 | 882 | 619 |
| | 26 | POL | 977 | 9586 | 1387 | - | - | - | POL | 441 | 6024 | 755 | - | - | - | - | |
| | 27 | NEP | 1234 | 10820 | 3002 | E-E | 443 | 3508 | 1218 | NEP | 1328 | 7352 | 2511 | E-E | 73 | 955 | 212 |
| | 28 | ZAP | 1449 | 12269 | 2681 | ZPG | 205 | 3713 | 892 | ZAP | 897 | 8249 | 1483 | NOR | 103 | 1058 | 179 |
| | 29 | TLK | 413 | 12682 | 1451 | NST | 294 | 4007 | 1897 | TLK | 317 | 8566 | 1098 | STA | 288 | 1346 | 288 |
| | 30 | REF | 1202 | 13884 | 5383 | - | - | - | REF | 1849 | 10415 | 4483 | ZPG | 73 | 1419 | 121 | |
| JULY | 1 | POL | 781 | 14665 | 2148 | E-E | 443 | 4450 | 1661 | POL | 505 | 10920 | 1260 | E-E | 260 | 1679 | 472 |
| | 2 | NEP | 1306 | 15971 | 4308 | ZPG | 123 | 4573 | 1015 | NEP | 1671 | 12591 | 4182 | NOR | 238 | 1917 | 417 |
| | 3 | ZAP | 1418 | 17389 | 4099 | NST | 389 | 4962 | 2286 | ZAP | 948 | 13539 | 2431 | STA | 237 | 2154 | 525 |
| | 4 | TLK | 751 | 18140 | 2202 | - | - | - | TLK | 999 | 14538 | 2097 | ZPG | 129 | 2283 | 250 | |
| | 5 | REF | 1536 | 19676 | 6919 | E-E | 594 | 5556 | 2255 | REF | 2382 | 16920 | 6865 | E-E | 312 | 2595 | 784 |
| | 6 | POL | 937 | 20613 | 3085 | ZPG | 159 | 5715 | 1174 | POL | 1080 | 18000 | 2340 | NOR | 663 | 3258 | 1080 |
| | 7 | NEP | 2279 | 22892 | 6587 | NST | 1336 | 7051 | 3622 | NEP | 2076 | 20076 | 6258 | STA | 481 | 3739 | 1006 |
| | 8 | ZAP | 2585 | 25477 | 6684 | - | - | - | ZAP | 2586 | 22662 | 5017 | ZPG | 46 | 3785 | 296 | |
| | 9 | TLK | 575 | 26052 | 2777 | E-E | 251 | 7302 | 2506 | TLK | 1425 | 24087 | 3522 | E-E | 471 | 4256 | 1255 |
| | 10 | REF | 2335 | 28387 | 9254 | ZPG | 251 | 7553 | 1425 | REF | 1702 | 25789 | 8567 | NOR | 328 | 4584 | 1408 |
| | 11 | POL | 673 | 29060 | 3758 | NST | 1132 | 8685 | 4754 | POL | 1238 | 27027 | 3578 | STA | 369 | 4953 | 1375 |
| | 12 | NEP | 2343 | 31403 | 8930 | - | - | - | NEP | 2446 | 29473 | 8704 | ZPG | 280 | 5233 | 576 | |
| | 13 | ZAP | 2048 | 33451 | 8732 | E-E | 900 | 9585 | 3406 | ZAP | 2759 | 32232 | 7776 | E-E | 508 | 5741 | 1763 |
| | 14 | TLK | 1541 | 34992 | 4318 | ZPG | 135 | 9720 | 1560 | TLK | 2818 | 35050 | 6340 | NOR | 572 | 6313 | 1980 |
| | 15 | REF | 1729 | 36721 | 10983 | NST | 247 | 9967 | 5001 | REF | 2046 | 37096 | 10613 | STA | 301 | 6614 | 1676 |
| | 16 | POL | 631 | 37352 | 4389 | - | - | - | POL | 1461 | 38557 | 5039 | ZPG | 80 | 6694 | 656 | |
| | 17 | NEP | 1838 | 39190 | 10768 | E-E | 538 | 10505 | 3944 | NEP | 2199 | 40756 | 10903 | E-E | 343 | 7037 | 2106 |

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*ST. PAUL; NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIGUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI; L-K=LUKANIN AND KITOVI; NPR=VOSTOCHNI, MOROVI, POLOVINAL AND REEF; ZRG=ZAPADNI, REEF, AND GORBATCH; TNP=TOLSTOI LUKANIN, KITOVI, POLOVINA, MORJOVI, AND VOSTOCHNI; UNS=UNSPECIFIED ROOKERY.

*ST. GEORGE; NOR=NORTH; NST=NORTH AND STARAYA ARTIL; E-E=EAST REEF AND EAST CLIFFS; ZPG=ZAPADNI; STA=STARAYA ARTIL; ZNS=ZAPADNI, NORTH AND STARAYA ARTIL.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 23 (1940)--CONT.

TABLE 24 (1941)--CONT.

| DATE | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | |
|---------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|
| | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA |
| JULY 18 | ZAP | 1370 | 40560 | 10102 | ZPG | 147 | 10652 | 1707 | ZAP | 2520 | 43278 | 10296 | NOR | 523 | 7580 | 2503 |
| 19 | TLK | 1011 | 41571 | 5329 | NST | 821 | 11473 | 5822 | TLK | 2460 | 45736 | 8800 | STA | 279 | 7839 | 1955 |
| 20 | REF | 1146 | 42717 | 12129 | - | - | - | - | REF | 2078 | 47812 | 12889 | ZPG | 92 | 7931 | 748 |
| 21 | POL | 413 | 43130 | 4802 | E-E | 527 | 12000 | 4471 | POL | 1284 | 49096 | 6323 | E-E | 567 | 8498 | 2673 |
| 22 | NEP | 2514 | 45644 | 13282 | ZPG | 174 | 12174 | 1881 | NEP | 1784 | 50880 | 12687 | NOR | 553 | 9051 | 3056 |
| 23 | ZAP | 1111 | 46755 | 11213 | NOR | 919 | 13093 | 919 | ZAP | 3091 | 53971 | 13387 | STA | 593 | 9644 | 2548 |
| 24 | TLK | 1099 | 47854 | 6428 | E-E | 347 | 13440 | 4818 | TLK | 1547 | 55518 | 10347 | ZPG | 120 | 9764 | 868 |
| 25 | REF | 1615 | 49469 | 13744 | ZPG | 47 | 13487 | 1928 | REF | 1838 | 57356 | 14527 | E-E | 778 | 10542 | 3451 |
| 26 | NPR | 1753 | 51222 | 1753 | NST | 200 | 13687 | 6022 | POL | 1489 | 58845 | 7812 | NOR | 390 | 10932 | 3446 |
| 27 | - | - | - | - | - | - | - | - | NEP | 2665 | 61510 | 15352 | STA | 559 | 11491 | 3107 |
| 28 | - | - | - | - | - | - | - | - | ZAP | 3281 | 64771 | 18648 | ZPG | 139 | 11630 | 1007 |
| 29 | - | - | - | - | - | - | - | - | TLK | 1181 | 65952 | 11528 | E-E | 594 | 12224 | 4045 |
| 30 | - | - | - | - | - | - | - | - | REF | 1932 | 67884 | 16459 | NOR | 539 | 12763 | 3985 |
| 31 | - | - | - | - | - | - | - | - | POL | 1186 | 69070 | 8998 | STA | 457 | 13220 | 3564 |
| AUG 1 | - | - | - | - | - | - | - | - | NEP | 1800 | 70870 | 17152 | E-E | 114 | 13334 | 4159 |
| 2 | - | - | - | - | - | - | - | - | ZAP | 1723 | 72593 | 18371 | NOR | 375 | 13709 | 4360 |
| 3 | L-K | 51 | 51273 | 51 | - | - | - | - | TLK | 1027 | 73620 | 12555 | STA | 332 | 14041 | 3896 |
| 4 | TLK | 50 | 51323 | 6478 | - | - | - | - | REF | 644 | 74264 | 17103 | E-E | 137 | 14178 | 4296 |
| 5 | NEP | 51 | 51374 | 13333 | - | - | - | - | POL | 349 | 74613 | 9347 | ZPG | 163 | 14341 | 1170 |
| 6 | NEP | 50 | 51424 | 13383 | - | - | - | - | NEP | 2138 | 76751 | 19290 | STA | 651 | 14992 | 4547 |
| 7 | - | - | - | - | - | - | - | - | ZRG | 1453 | 78204 | 1453 | E-E | 518 | 15510 | 4814 |
| 8 | - | - | - | - | - | - | - | - | TPN | 1130 | 79334 | 1130 | ZNS | 172 | 15682 | 172 |

*ST. PAUL: NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIGUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI; L-K=LUKANIN AND KITOVI; NPR=VOSTOCHNI, MOROVI, POLOVINA AND REEF; ZRG=ZAPADNI, REEF, AND GORBATCH; TNP=TOLSTOI LUKANIN, KITOVI, POLOVINA, MORJOVI, AND VOSTOCHNI; UNS=UNSPECIFIED ROOKERY.

*ST. GEORGE: NOR=NORTH; NST=NORTH AND STARAYA ARTIL; E-E=EAST REEF AND EAST CLIFFS; ZPG=ZAPADNI; STA=STARAYA ARTIL; ZNS=ZAPADNI, NORTH AND STARAYA ARTIL.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 25 1943

TABLE 26 1944

| DATE | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | |
|--------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|
| | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA |
| JUNE 8 | - | - | - | - | E-E | 142 | 142 | 142 | - | - | - | - | - | - | - | - |
| 9 | - | - | - | - | NOR | 192 | 334 | 192 | - | - | - | - | - | - | - | - |
| 10 | REF | 829 | 829 | 829 | ZPG | 206 | 540 | 206 | REF | 67 | 67 | 67 | - | - | - | - |
| 13 | - | - | - | - | - | - | - | - | - | - | - | - | ZPG | 11 | 11 | 11 |
| 14 | - | - | - | - | ZPG | 25 | 565 | 231 | - | - | - | - | - | - | - | - |
| 15 | REF | 1237 | 2066 | 2066 | E-E | 415 | 980 | 557 | - | - | - | - | - | - | - | - |
| 16 | POL | 541 | 2607 | 541 | NOR | 508 | 1488 | 700 | REF | 139 | 206 | 206 | - | - | - | - |
| 17 | NEP | 1627 | 4234 | 1627 | STA | 122 | 1610 | 122 | - | - | - | - | ZPG | 21 | 32 | 32 |
| 18 | ZAP | 1385 | 5619 | 1385 | ZPG | 19 | 1629 | 250 | ZAP | 11 | 217 | 11 | - | - | - | - |
| 19 | TLK | 392 | 6011 | 392 | E-E | 286 | 1915 | 843 | TLK | 143 | 360 | 143 | E-E | 28 | 60 | 28 |
| 20 | REF | 1206 | 7217 | 3272 | NOR | 401 | 2316 | 1101 | REF | 200 | 560 | 406 | NST | 73 | 133 | 73 |
| 21 | POL | 234 | 7451 | 775 | STA | 49 | 2365 | 171 | POL | 89 | 649 | 89 | - | - | - | - |
| 22 | NEP | 1340 | 8791 | 2967 | ZPG | 156 | 2521 | 406 | NEP | 314 | 963 | 314 | - | - | - | - |
| 23 | ZAP | 693 | 9484 | 2078 | E-E | 305 | 2826 | 1148 | ZAP | 84 | 1047 | 95 | E-E | 32 | 165 | 60 |
| 24 | TLK | 1333 | 10817 | 1725 | NOR | 476 | 3302 | 1577 | TLK | 532 | 1579 | 675 | NST | 108 | 273 | 181 |
| 25 | REF | 1682 | 12499 | 4954 | STA | 72 | 3374 | 243 | REF | 440 | 2019 | 846 | - | - | - | - |
| 26 | POL | 540 | 13039 | 1315 | ZPG | 558 | 3932 | 964 | POL | 213 | 2232 | 302 | ZPG | 28 | 301 | 60 |
| 27 | NEP | 2329 | 15368 | 5296 | E-E | 263 | 4195 | 1411 | NEP | 405 | 2637 | 719 | E-E | 64 | 365 | 124 |
| 28 | ZAP | 2612 | 17980 | 4690 | NOR | 807 | 5002 | 2384 | ZAP | 336 | 2973 | 431 | NST | 250 | 615 | 431 |
| 29 | TLK | 1465 | 19445 | 3190 | STA | 48 | 5050 | 291 | TLK | 533 | 3506 | 1208 | - | - | - | - |
| 30 | REF | 1701 | 21146 | 6655 | ZPG | 136 | 5186 | 1100 | REF | 349 | 3855 | 1195 | ZPG | 28 | 643 | 88 |
| JULY 1 | POL | 172 | 21318 | 1487 | E-E | 221 | 5407 | 1632 | POL | 228 | 4083 | 530 | E-E | 80 | 723 | 204 |
| 2 | NEP | 2382 | 23700 | 7678 | NOR | 759 | 6166 | 3143 | NEP | 1019 | 5102 | 1738 | NST | 303 | 1026 | 734 |
| 3 | ZAP | 2447 | 26147 | 7137 | ZPG | 148 | 6314 | 1248 | ZAP | 1011 | 6113 | 1442 | - | - | - | - |
| 4 | TLK | 1728 | 27875 | 4918 | STA | 351 | 6665 | 642 | TLK | 957 | 7070 | 2165 | ZPG | 51 | 1077 | 139 |
| 5 | REF | 1378 | 29253 | 8033 | E-E | 868 | 7533 | 2500 | REF | 887 | 7957 | 2082 | E-E | 135 | 1212 | 339 |
| 6 | POL | 1353 | 30606 | 2840 | NOR | 940 | 8473 | 4083 | POL | 673 | 8630 | 1203 | NST | 592 | 1804 | 1326 |
| 7 | NEP | 2531 | 33137 | 10209 | STA | 142 | 8615 | 784 | NEP | 1074 | 9704 | 2812 | - | - | - | - |
| 8 | ZAP | 2327 | 35464 | 9464 | ZPG | 428 | 9043 | 1676 | ZAP | 1297 | 11001 | 2739 | ZPG | 46 | 1850 | 185 |
| 9 | TLK | 1576 | 37040 | 6494 | E-E | 618 | 9661 | 3118 | TLK | 573 | 11574 | 2738 | E-E | 131 | 1981 | 470 |
| 10 | REF | 1506 | 38546 | 9539 | NOR | 633 | 10294 | 4716 | REF | 673 | 12247 | 2755 | NOR | 413 | 2394 | 413 |
| 11 | POL | 1077 | 39623 | 3917 | STA | 161 | 10455 | 945 | POL | 635 | 12882 | 1838 | STA | 114 | 2508 | 114 |
| 12 | NEP | 2803 | 42426 | 13012 | ZPG | 381 | 10836 | 2057 | NEP | 1436 | 14318 | 4248 | ZPG | 232 | 2740 | 417 |
| 13 | ZAP | 3183 | 45619 | 12657 | E-E | 717 | 11553 | 3835 | ZAP | 1338 | 15656 | 4077 | E-E | 218 | 2958 | 688 |
| 14 | TLK | 2603 | 48222 | 9097 | NOR | 1002 | 12555 | 5718 | TLK | 996 | 16652 | 3734 | NOR | 378 | 3336 | 791 |
| 15 | REF | 1926 | 50148 | 11465 | STA | 23 | 12578 | 968 | REF | 1246 | 17898 | 4001 | STA | 73 | 3409 | 187 |
| 16 | POL | 987 | 51135 | 4904 | ZPG | 357 | 12635 | 2414 | POL | 489 | 18387 | 2327 | ZPG | 73 | 3482 | 490 |
| 17 | NEP | 3314 | 54449 | 16326 | E-E | 693 | 13628 | 4528 | NEP | 1105 | 19492 | 5353 | E-E | 162 | 3644 | 850 |
| 18 | ZAP | 3248 | 57697 | 15905 | NOR | 738 | 14366 | 6456 | ZAP | 1753 | 21245 | 5830 | NOR | 627 | 4271 | 1418 |
| 19 | TLK | 1897 | 59594 | 10994 | STA | 351 | 14717 | 1319 | TLK | 1452 | 22697 | 5186 | STA | 173 | 4444 | 360 |

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ST. PAUL: NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIGUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI; RLK=REEF, GORBATCH, ARDIGUEN, LUKANIN, AND KITOVI; TZL=TOLSTOI, ZAPADNI, LUKANIN, AND KITOVI; TLP=TOLSTOI, LUKANIN, KITOVI, AND POLOVINA; P-Z=POLOVINA AND ZAPADNI; RGP=REEF, GORBATCH, AND

ST. GEORGE: NOR=NORTH; NST=NORTH AND STARAYA ARTIL; E-E=EAST REEF AND EAST CLIFFS; ZPG=ZAPADNI; STA=STARAYA ARTIL; S-Z=STARAYA ARTIL AND ZAPADNI; N-Z=NORTH AND ZAPADNI.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 25 (1943)--CONT.

TABLE 26 (1944)--CONT.

| ST. PAUL | | | | | ST. GEORGE | | | | ST. PAUL | | | | ST. GEORGE | | | |
|-----------------|-----------|------------|-----------|---------|-----------------|------------|-----------|---------|-----------------|------------|-----------|---------|-----------------|------------|-----------|---------|
| CUMULATIVE KILL | | | | | CUMULATIVE KILL | | | | CUMULATIVE KILL | | | | CUMULATIVE KILL | | | |
| DATE | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA |
| JULY 20 | REF | 616 | 60210 | 12081 | ZPG | 186 | 14903 | 2600 | REF | 1473 | 24170 | 5474 | ZPG | 214 | 4658 | 704 |
| 21 | POL | 1534 | 61744 | 6438 | E-E | 610 | 15513 | 5138 | POL | 1140 | 25310 | 3467 | E-E | 540 | 5198 | 1390 |
| 22 | NEP | 2496 | 64240 | 18822 | NOR | 650 | 16163 | 7106 | NEP | 2021 | 27331 | 7374 | NOR | 548 | 5746 | 1966 |
| 23 | ZAP | 3103 | 67343 | 19008 | STA | 202 | 16365 | 1521 | ZAP | 1397 | 28728 | 7227 | S-Z | 258 | 6004 | 258 |
| 24 | TLK | 2253 | 69596 | 13247 | ZPG | 517 | 16882 | 3117 | TLK | 1524 | 30252 | 6710 | E-E | 103 | 6107 | 1493 |
| 25 | REF | 2697 | 72293 | 14778 | E-E | 545 | 17427 | 5683 | REF | 954 | 31206 | 6428 | NOR | 428 | 6535 | 2394 |
| 26 | POL | 793 | 73086 | 7231 | NOR | 1159 | 18586 | 8265 | POL | 729 | 31935 | 4196 | S-Z | 162 | 6697 | 420 |
| 27 | NEP | 3249 | 76335 | 22071 | STA | 276 | 18862 | 1797 | NEP | 1511 | 33446 | 8885 | E-E | 174 | 6871 | 1667 |
| 28 | ZAP | 2436 | 78771 | 21444 | ZPG | 123 | 18985 | 3240 | ZAP | 2081 | 35527 | 9308 | NOR | 375 | 7246 | 2769 |
| 29 | TLK | 516 | 79287 | 13763 | E-E | 231 | 19216 | 5914 | TLK | 2210 | 37737 | 8920 | S-Z | 228 | 7474 | 648 |
| 30 | RLK | 2241 | 81528 | 2241 | NOR | 390 | 19606 | 8655 | RGP | 1025 | 38762 | 1025 | E-E | 124 | 7598 | 1791 |
| 31 | P-Z | 809 | 82337 | 809 | STA | 134 | 19740 | 1931 | NEP | 1084 | 39846 | 9969 | N-Z | 208 | 7806 | 208 |
| AUG 1 | NEP | 1741 | 84078 | 23812 | ZPG | 144 | 19884 | 3384 | - | - | - | - | - | - | - | - |
| 2 | ZAP | 2019 | 86097 | 23463 | E-E | 398 | 20282 | 6312 | - | - | - | - | - | - | - | - |
| 3 | TLP | 930 | 87027 | 930 | NOR | 312 | 20594 | 8967 | - | - | - | - | - | - | - | - |
| 4 | RLK | 2150 | 89177 | 4391 | STA | 233 | 20827 | 2164 | - | - | - | - | - | - | - | - |
| 5 | NEP | 1880 | 91057 | 25692 | ZPG | 95 | 20922 | 3479 | - | - | - | - | - | - | - | - |
| 6 | TZL | 1623 | 92680 | 1623 | E-E | 176 | 21098 | 6488 | - | - | - | - | - | - | - | - |
| 7 | RGP | 1685 | 94365 | 1685 | NOR | 302 | 21400 | 9269 | - | - | - | - | - | - | - | - |
| 8 | NEP | 977 | 95342 | 26669 | STA | 286 | 21686 | 2450 | - | - | - | - | - | - | - | - |
| 9 | - | - | - | - | ZPG | 136 | 21822 | 3615 | - | - | - | - | - | - | - | - |

*ST. PAUL: NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIGUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI; RLK=REEF, GORBATCH, ARDIGUEN, LUKANIN, AND KITOVI; TZL=TOLSTOI, ZAPADNI, LUKANIN, AND KITOVI; TLP=TOLSTOI, LUKANIN, KITOVI, AND POLOVINA; P-Z=POLOVINA AND ZAPADNI; RGP=REEF, GORBATCH, AND POLOVINA.

*ST. GEORGE; NOR=NORTH; NST=NORTH AND STARAYA ARTIL; E-E=EAST REEF AND EAST CLIFFS; ZPG=ZAPADNI; STA=STARAYA ARTIL; S-Z=STARAYA ARTIL AND ZAPADNI; N-Z=NORTH AND ZAPADNI.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

| TABLE 27 1945 | | | | | | | | | TABLE 28 1946 | | | | | | | |
|-----------------------------|-----------|------------|-----------|---------|-------------------------------|------------|-----------|---------|-----------------------------|------------|-----------|---------|-------------------------------|------------|-----------|---------|
| ST. PAUL CUMULATIVE KILL | | | | | ST. GEORGE CUMULATIVE KILL | | | | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | |
| DATE | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA |
| JUNE 12 | - | - | - | - | - | - | - | - | - | - | - | - | ZPG | 9 | 9 | 9 |
| 13 | - | - | - | - | NOR | 22 | 22 | 22 | - | - | - | - | - | - | - | - |
| 15 | REF | 206 | 206 | 206 | - | - | - | - | - | - | - | - | - | - | - | - |
| 17 | - | - | - | - | E-E | 50 | 72 | 50 | NEP | 200 | 200 | 200 | E-E | 70 | 79 | 70 |
| 18 | ZAP | 179 | 385 | 179 | NST | 81 | 153 | 81 | ZAP | 154 | 354 | 154 | NST | 53 | 132 | 53 |
| 19 | TLK | 115 | 500 | 115 | ZPG | 128 | 281 | 128 | TLK | 137 | 491 | 137 | ZPG | 32 | 164 | 41 |
| 20 | REF | 561 | 1061 | 767 | - | - | - | - | REF | 163 | 654 | 163 | - | - | - | - |
| 21 | POL | 166 | 1227 | 166 | E-E | 61 | 342 | 111 | POL | 67 | 721 | 67 | E-E | 57 | 221 | 127 |
| 22 | NEP | 351 | 1578 | 351 | NST | 241 | 583 | 322 | NEP | 456 | 1177 | 656 | NST | 165 | 386 | 218 |
| 23 | ZAP | 423 | 2001 | 602 | ZPG | 122 | 705 | 250 | ZAP | 379 | 1556 | 533 | ZPG | 57 | 443 | 98 |
| 24 | TLK | 322 | 2323 | 437 | - | - | - | - | TLK | 174 | 1730 | 311 | - | - | - | - |
| 25 | REF | 625 | 2948 | 1392 | E-E | 130 | 835 | 241 | REF | 738 | 2468 | 901 | E-E | 92 | 535 | 219 |
| 26 | POL | 448 | 3397 | 615 | NST | 257 | 1092 | 579 | POL | 164 | 2632 | 231 | NST | 268 | 603 | 486 |
| 27 | - | - | - | - | ZPG | 237 | 1329 | 487 | NEP | 782 | 3414 | 1438 | ZPG | 71 | 874 | 169 |
| 28 | ZAP | 844 | 4241 | 1446 | - | - | - | - | ZAP | 197 | 3611 | 730 | - | - | - | - |
| 29 | TLK | 653 | 4894 | 1090 | E-E | 142 | 1471 | 383 | TLK | 976 | 4587 | 1287 | E-E | 33 | 907 | 252 |
| 30 | REF | 842 | 5736 | 2234 | NST | 484 | 1955 | 1063 | REF | 469 | 5056 | 1370 | NST | 163 | 1070 | 649 |
| JULY 1 | POL | 788 | 6524 | 1403 | ZPG | 134 | 2089 | 621 | POL | 158 | 5214 | 389 | ZPG | 77 | 1147 | 246 |
| 2 | NEP | 1208 | 7732 | 1559 | ZPG | 159 | 2248 | 780 | NEP | 522 | 5736 | 1960 | - | - | - | - |
| 3 | ZAP | 1274 | 9006 | 2720 | E-E | 278 | 2526 | 661 | ZAP | 479 | 6215 | 1209 | E-E | 36 | 1183 | 288 |
| 4 | TLK | 950 | 9956 | 2040 | NST | 607 | 3133 | 1670 | TLK | 559 | 6774 | 1846 | NST | 404 | 1587 | 1053 |
| 5 | REF | 605 | 10561 | 2839 | ZPG | 258 | 3391 | 1038 | REF | 367 | 7141 | 1737 | ZPG | 83 | 1670 | 329 |
| 6 | POL | 549 | 11110 | 1952 | - | - | - | - | POL | 308 | 7449 | 697 | - | - | - | - |
| 7 | NEP | 1765 | 12875 | 3324 | E-E | 305 | 3696 | 966 | NEP | 939 | 8388 | 2899 | E-E | 241 | 1911 | 529 |
| 8 | ZAP | 1129 | 14004 | 3849 | NST | 1026 | 4722 | 2696 | ZAP | 1005 | 9393 | 2214 | NOR | 215 | 2126 | 215 |
| 9 | TLK | 1589 | 15593 | 3629 | ZPG | 403 | 5125 | 1441 | TLK | 979 | 10372 | 2825 | STA | 159 | 2285 | 159 |
| 10 | REF | 978 | 16571 | 3817 | - | - | - | - | REF | 916 | 11290 | 2655 | ZPG | 208 | 2493 | 537 |
| 11 | POL | 843 | 17414 | 2795 | E-E | 460 | 5585 | 1426 | POL | 406 | 11696 | 1103 | E-E | 289 | 2782 | 818 |
| 12 | NEP | 1566 | 18980 | 4890 | NOR | 1222 | 6807 | 1244 | NEP | 2140 | 13836 | 5039 | NOR | 344 | 3126 | 559 |
| 13 | ZAP | 2215 | 21195 | 6064 | STA | 117 | 6924 | 117 | ZAP | 1318 | 15154 | 3532 | STA | 475 | 3601 | 634 |
| 14 | TLK | 1662 | 22857 | 5291 | ZPG | 481 | 7405 | 1922 | TLK | 1332 | 16486 | 4157 | ZPG | 182 | 3783 | 719 |
| 15 | REF | 1348 | 24205 | 5165 | E-E | 554 | 7959 | 1980 | REF | 1582 | 18068 | 4237 | E-E | 536 | 4322 | 1357 |
| 16 | POL | 1276 | 25481 | 4071 | NOR | 912 | 8871 | 2156 | POL | 912 | 18960 | 2015 | NOR | 497 | 4819 | 1056 |
| 17 | NEP | 2030 | 27511 | 6920 | STA | 196 | 9067 | 313 | NEP | 2145 | 21125 | 7184 | STA | 206 | 5025 | 840 |
| 18 | ZAP | 3220 | 30731 | 9284 | ZPG | 603 | 9670 | 2525 | ZAP | 3342 | 24467 | 6674 | ZPG | 211 | 5236 | 930 |
| 19 | TLK | 978 | 31709 | 6269 | E-E | 852 | 10522 | 2832 | TLK | 1002 | 25469 | 5159 | E-E | 376 | 5612 | 1733 |
| 20 | REF | 1358 | 33067 | 6523 | NOR | 1274 | 11796 | 3430 | REF | 960 | 26429 | 5197 | NOR | 388 | 5980 | 1424 |
| 21 | POL | 2104 | 35171 | 6175 | STA | 397 | 12193 | 710 | POL | 1024 | 27453 | 3039 | STA | 302 | 6282 | 1142 |
| 22 | NEP | 2922 | 38093 | 9842 | ZPG | 391 | 12584 | 2916 | NEP | 3025 | 30478 | 10209 | ZPG | 353 | 6635 | 1283 |
| 23 | ZAP | 2450 | 40543 | 11734 | E-E | 784 | 13368 | 3616 | ZAP | 1151 | 31629 | 8025 | E-E | 382 | 7017 | 2115 |

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*ST. PAUL: NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIGUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI; RLK=REEF, GORVATCH, ARDIGUEN, LUKANIN, AND KITOVI; TZL=TOLSTOI, ZAPADNI, LUKANIN, AND KITOVI; NPR=VOSTOCHNI, MORJOVI, POLOVINA, AND REEF.

*ST. GEORGE: NOR=NORTH; NST=NORTH AND STARAYA ARTIL; E-E=EAST REEF AND EAST CLIFFS; ZPG=ZAPADNI; STA=STARAYA ARTIL.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 27 (1945)--CONT.

TABLE 28 (1946)--CONT.

| ST. PAUL | | | | | ST. GEORGE | | | | ST. PAUL | | | | ST. GEORGE | | | |
|-----------------|---------------|---------------|--------------|------------|-----------------|---------------|--------------|------------|-----------------|---------------|--------------|------------|-----------------|---------------|--------------|------------|
| CUMULATIVE KILL | | | | | CUMULATIVE KILL | | | | CUMULATIVE KILL | | | | CUMULATIVE KILL | | | |
| DATE | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA |
| JULY 24 | TLK | 1339 | 41882 | 7608 | NOR | 857 | 14225 | 4287 | TLK | 1398 | 33027 | 6557 | NOR | 741 | 7758 | 2165 |
| 25 | REF | 1641 | 43523 | 8164 | STA | 149 | 14374 | 859 | REF | 1444 | 34471 | 6641 | STA | 116 | 7874 | 1258 |
| 26 | POL | 1319 | 44842 | 7494 | ZPG | 307 | 14681 | 3223 | POL | 807 | 35278 | 3846 | ZPG | 131 | 8005 | 1414 |
| 27 | NEP | 2104 | 46946 | 11946 | E-E | 722 | 15403 | 4338 | NEP | 2613 | 37891 | 12822 | E-E | 503 | 8508 | 2618 |
| 28 | ZAP | 2315 | 49261 | 14049 | NOR | 581 | 15984 | 4868 | ZAP | 2102 | 39993 | 10127 | NOR | 433 | 8941 | 2598 |
| 29 | TLK | 1429 | 50690 | 9037 | STA | 276 | 16260 | 1135 | TLK | 576 | 40569 | 7133 | STA | 291 | 9232 | 1549 |
| 30 | REF | 711 | 51401 | 8875 | ZPG | 344 | 16604 | 3567 | REF | 1091 | 41660 | 7732 | ZPG | 114 | 9346 | 1528 |
| 31 | POL | 1126 | 52527 | 8620 | E-E | 473 | 17077 | 4811 | POL | 1467 | 43127 | 5313 | E-E | 694 | 10040 | 3312 |
| AUG 1 | NEP | 1637 | 54164 | 13583 | NOR | 726 | 17803 | 5594 | NEP | 1423 | 44550 | 14245 | NOR | 416 | 10456 | 3014 |
| 2 | ZAP | 1495 | 55659 | 15544 | STA | 105 | 17908 | 1240 | ZAP | 2464 | 47014 | 12591 | STA | 237 | 10693 | 1786 |
| 3 | TLK | 1761 | 57420 | 10798 | ZPG | 135 | 18043 | 3702 | TZL | 753 | 47767 | 753 | ZPG | 173 | 10866 | 1701 |
| 4 | NPR | 1256 | 58676 | 1256 | E-E | 245 | 18288 | 5056 | REF | 1114 | 48881 | 8846 | E-E | 513 | 11379 | 3825 |
| 5 | - | - | - | - | - | - | - | - | POL | 922 | 49803 | 6235 | NOR | 310 | 11689 | 3324 |
| 6 | - | - | - | - | - | - | - | - | NEP | 1215 | 51018 | 15460 | STA | 37 | 11726 | 1823 |
| 7 | - | - | - | - | - | - | - | - | ZAP | 1106 | 52124 | 13697 | ZPG | 72 | 11798 | 1773 |
| 8 | - | - | - | - | - | - | - | - | RLK | 315 | 52439 | 315 | E-E | 286 | 12084 | 4111 |

*ST. PAUL: NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIGUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI; RLK=REEF, GORVATCH, ARDIGUEN, LUKANIN, AND KITOVI; TZL=TOLSTOI, ZAPADNI, LUKANIN, AND KITOVI; NPR=VOSTOCHNI, MORJOVI, POLOVINA, AND REEF.

*ST. GEORGE: NOR=NORTH; NST=NORTH AND STARAYA ARTIL; E-E=EAST REEF AND EAST CLIFFS; ZPG=ZAPADNI; STA=STARAYA ARTIL.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 29 1947

TABLE 30 1948

| ST. PAUL | | | | | ST. GEORGE | | | | ST. PAUL | | | | ST. GEORGE | | | |
|-----------------|-----------|------------|-----------|---------|-----------------|------------|-----------|---------|-----------------|------------|-----------|---------|-----------------|------------|-----------|---------|
| CUMULATIVE KILL | | | | | CUMULATIVE KILL | | | | CUMULATIVE KILL | | | | CUMULATIVE KILL | | | |
| DATE | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA |
| JUNE 5 | NEP | 42 | 42 | 42 | - | - | - | - | - | - | - | - | - | - | - | - |
| 8 | - | - | - | - | - | - | - | - | - | - | - | - | E-N | 46 | 46 | 46 |
| 10 | - | - | - | - | NST | 15 | 15 | 15 | - | - | - | - | - | - | - | - |
| 11 | - | - | - | - | - | - | - | - | - | - | - | - | ZPG | 58 | 104 | 58 |
| 12 | REF | 326 | 368 | 326 | - | - | - | - | - | - | - | - | - | - | - | - |
| 13 | - | - | - | - | NST | 25 | 40 | 40 | - | - | - | - | - | - | - | - |
| 15 | - | - | - | - | - | - | - | - | REF | 609 | 609 | 609 | - | - | - | - |
| 16 | POL | 68 | 436 | 68 | - | - | - | - | POL | 196 | 745 | 196 | - | - | - | - |
| 17 | NEP | 241 | 677 | 283 | E-E | 59 | 99 | 59 | NEP | 453 | 1198 | 453 | E-E | 62 | 166 | 62 |
| 18 | ZAP | 154 | 831 | 154 | NST | 31 | 130 | 71 | ZAP | 252 | 1450 | 252 | NST | 240 | 406 | 240 |
| 19 | TLK | 125 | 956 | 125 | ZPG | 43 | 173 | 43 | TLK | 516 | 1966 | 516 | ZPG | 78 | 484 | 136 |
| 20 | REF | 437 | 1393 | 763 | - | - | - | - | REF | 484 | 2450 | 1093 | - | - | - | - |
| 21 | POL | 72 | 1465 | 140 | E-E | 22 | 195 | 81 | POL | 211 | 2661 | 347 | E-E | 46 | 530 | 108 |
| 22 | NEP | 352 | 1817 | 635 | NST | 208 | 403 | 279 | NEP | 537 | 3198 | 990 | NST | 265 | 795 | 505 |
| 23 | ZAP | 369 | 2206 | 543 | ZPG | 90 | 493 | 133 | ZAP | 381 | 3579 | 633 | ZPG | 59 | 854 | 195 |
| 24 | TLK | 244 | 2450 | 369 | - | - | - | - | TLK | 363 | 3942 | 879 | - | - | - | - |
| 25 | REF | 664 | 3114 | 1427 | E-E | 68 | 561 | 149 | REF | 723 | 4665 | 1816 | E-E | 79 | 933 | 187 |
| 26 | POL | 314 | 3428 | 454 | NST | 214 | 775 | 493 | POL | 710 | 5375 | 1057 | NST | 396 | 1329 | 901 |
| 27 | NEP | 564 | 3992 | 1199 | ZPG | 81 | 856 | 214 | NEP | 1072 | 6447 | 2062 | ZPG | 130 | 1459 | 325 |
| 28 | ZAP | 818 | 4810 | 1361 | - | - | - | - | ZAP | 1436 | 7693 | 2069 | - | - | - | - |
| 29 | TLK | 124 | 4934 | 493 | E-E | 133 | 989 | 282 | TLK | 681 | 8564 | 1560 | E-E | 228 | 1687 | 415 |
| 30 | REF | 992 | 5926 | 2419 | NST | 280 | 1269 | 773 | REF | 1110 | 9674 | 2926 | NOR | 407 | 2094 | 407 |
| JULY 1 | POL | 475 | 6401 | 929 | ZPG | 146 | 1415 | 360 | POL | 540 | 10214 | 1597 | STA | 195 | 2289 | 195 |
| 2 | NEP | 1314 | 7715 | 2513 | - | - | - | - | NEP | 1963 | 12177 | 4025 | ZPG | 258 | 2547 | 583 |
| 3 | ZAP | 1466 | 9181 | 2827 | E-E | 108 | 1523 | 390 | ZAP | 1299 | 13476 | 3368 | E-E | 274 | 2821 | 689 |
| 4 | TLK | 212 | 9393 | 705 | NST | 606 | 2129 | 1379 | TLK | 692 | 14166 | 2252 | NOR | 394 | 3215 | 801 |
| 5 | REF | 1676 | 11069 | 4095 | ZPG | 34 | 2163 | 394 | REF | 1060 | 15228 | 3986 | STA | 332 | 3547 | 527 |
| 6 | POL | 728 | 11797 | 1657 | ZPG | 97 | 2260 | 491 | POL | 1215 | 16443 | 2812 | ZPG | 110 | 3657 | 693 |
| 7 | NEP | 1825 | 13622 | 4338 | E-E | 330 | 2590 | 720 | NEP | 1842 | 18285 | 5867 | E-E | 393 | 4050 | 1082 |
| 8 | ZAP | 2106 | 15728 | 4933 | NOR | 340 | 2930 | 340 | ZAP | 2906 | 21191 | 6274 | NOR | 711 | 4761 | 1512 |
| 9 | TLK | 388 | 16116 | 1093 | STA | 378 | 3308 | 378 | TLK | 754 | 21945 | 3006 | STA | 338 | 5099 | 665 |
| 10 | REF | 1572 | 17688 | 5667 | ZPG | 74 | 3382 | 565 | REF | 1752 | 23697 | 5738 | ZPG | 95 | 5194 | 788 |
| 11 | POL | 547 | 18235 | 2204 | E-E | 192 | 3574 | 912 | POL | 2201 | 25898 | 5013 | E-E | 297 | 5491 | 1379 |
| 12 | NEP | 1680 | 19915 | 6018 | NOR | 651 | 4225 | 991 | NEP | 3792 | 29690 | 9659 | NOR | 610 | 6101 | 2122 |
| 13 | ZAP | 2231 | 22146 | 7164 | STA | 454 | 4679 | 832 | ZAP | 2236 | 31926 | 8510 | STA | 334 | 6435 | 1199 |
| 14 | TLK | 426 | 22572 | 1519 | ZPG | 128 | 4807 | 693 | TLK | 1798 | 33724 | 4804 | ZPG | 221 | 6656 | 1009 |
| 15 | REF | 1584 | 24156 | 7251 | E-E | 595 | 5402 | 1507 | REF | 1861 | 35385 | 7399 | E-E | 429 | 7085 | 1808 |
| 16 | POL | 918 | 25074 | 3122 | NOR | 663 | 6065 | 1654 | POL | 1258 | 36643 | 6271 | NOR | 724 | 7809 | 2846 |
| 17 | NEP | 2175 | 27249 | 8193 | STA | 362 | 6427 | 1194 | NEP | 2436 | 39079 | 12095 | STA | 254 | 8063 | 1453 |
| 18 | ZAP | 2304 | 29558 | 9468 | ZPG | 251 | 6678 | 944 | ZAP | 2404 | 41483 | 10914 | ZPG | 262 | 8325 | 1271 |

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*ST. PAUL: NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIGUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI; NPZ=VOSTOCHNI, MORJOVI, POLOVINA, AND ZAPADNI.

*ST. GEORGE: NOR=NORTH; NST=NORTH AND STARAYA ARTIL; E-E=EAST REEF AND EAST CLIFFS; ZPG=ZAPADNI; STA=STARAYA ARTIL; E-N=EAST AND NORTH.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 29 (1947)--CONT.

TABLE 30 (1948)--CONT.

| DATE | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | |
|---------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|
| | ROOK- ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY* | DAILY KILL | ALL AREAS | BY AREA |
| JULY 19 | TLK | 1182 | 30735 | 2701 | E-E | 292 | 6970 | 1799 | TLK | 1692 | 43175 | 6496 | E-E | 268 | 8593 | 2076 |
| 20 | REF | 2301 | 33036 | 9552 | NOR | 646 | 7616 | 2300 | REF | 1278 | 44453 | 8677 | NOR | 702 | 9295 | 3548 |
| 21 | POL | 900 | 33936 | 4022 | STA | 180 | 7796 | 1374 | POL | 623 | 45076 | 6894 | STA | 81 | 9376 | 1534 |
| 22 | NEP | 1994 | 35930 | 10187 | ZPG | 295 | 8091 | 1239 | NEP | 1108 | 46184 | 13203 | ZPG | 323 | 9699 | 1594 |
| 23 | ZAP | 1988 | 37918 | 11456 | E-E | 440 | 8531 | 2239 | ZAP | 3138 | 49322 | 14052 | E-E | 341 | 10040 | 2417 |
| 24 | TLK | 1713 | 39631 | 4414 | NOR | 312 | 8843 | 2612 | TLK | 1663 | 50985 | 8159 | NOR | 851 | 10891 | 4399 |
| 25 | REF | 1467 | 41098 | 11019 | STA | 254 | 9097 | 1628 | REF | 1345 | 52330 | 10022 | STA | 201 | 11092 | 1735 |
| 26 | POL | 892 | 41990 | 4914 | ZPG | 170 | 9267 | 1409 | POL | 1923 | 54253 | 8817 | ZPG | 169 | 11261 | 1763 |
| 27 | NEP | 2572 | 44562 | 12759 | E-E | 315 | 9582 | 2554 | NEP | 4027 | 58280 | 17230 | E-E | 601 | 11862 | 3018 |
| 28 | ZAP | 1618 | 46180 | 13074 | NOR | 436 | 10018 | 3048 | - | - | - | - | - | - | - | - |
| 29 | TLK | 481 | 46661 | 4895 | STA | 59 | 10077 | 1687 | - | - | - | - | - | - | - | - |
| 30 | REF | 933 | 47594 | 11952 | ZPG | 159 | 10236 | 1568 | - | - | - | - | - | - | - | - |
| 31 | NPZ | 2186 | 49780 | 2186 | E-N | 1431 | 11667 | 1431 | - | - | - | - | - | - | - | - |

*ST. PAUL: NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIGUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI; NPZ=VOSTOCHNI, MORJOVI, POLOVINA, AND ZAPADNI.

*ST. GEORGE: NOR=NORTH; NST=NORTH AND STARAYA ARTIL; E-E=EAST REEF AND EAST CLIFFS; ZPG=ZAPADNI; STA=STARAYA ARTIL; E-N=EAST AND NORTH.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 31 1949

TABLE 32 1950

| DATE | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | |
|---------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|
| | ROOK- ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY* | DAILY KILL | ALL AREAS | BY AREA |
| JUNE 10 | NEP | 91 | 91 | 91 | - | - | - | - | - | - | - | - | - | - | - | - |
| 13 | - | - | - | - | NST | 47 | 47 | 47 | - | - | - | - | - | - | - | - |
| 15 | REF | 248 | 339 | 248 | - | - | - | - | - | - | - | - | - | - | - | - |
| 17 | NEP | 259 | 598 | 350 | NOR | 42 | 89 | 42 | NEP | 232 | 232 | 232 | - | - | - | - |
| 18 | ZAP | 224 | 822 | 224 | STA | 11 | 100 | 11 | ZAP | 186 | 418 | 186 | - | - | - | - |
| 19 | - | - | - | - | ZPG | 14 | 114 | 14 | TLK | 80 | 498 | 80 | - | - | - | - |
| 20 | REF | 387 | 1189 | 615 | E-E | 17 | 131 | 17 | REF | 598 | 1096 | 598 | - | - | - | - |
| 21 | POL | 206 | 1395 | 206 | NOR | 86 | 217 | 128 | POL | 315 | 1411 | 315 | - | - | - | - |
| 22 | NEP | 284 | 1679 | 634 | STA | 41 | 258 | 52 | NEP | 357 | 1768 | 589 | NOR | 133 | 133 | 133 |
| 23 | ZAP | 366 | 2045 | 590 | ZPG | 146 | 404 | 160 | ZAP | 435 | 2203 | 621 | STA | 182 | 315 | 182 |
| 24 | TLK | 44 | 2089 | 44 | E-E | 83 | 487 | 100 | TLK | 211 | 2414 | 291 | ZPG | 211 | 526 | 211 |
| 25 | REF | 471 | 2560 | 1086 | NOR | 161 | 648 | 289 | REF | 503 | 2917 | 1101 | E-E | 342 | 868 | 342 |
| 26 | POL | 454 | 3014 | 860 | STA | 73 | 721 | 125 | POL | 672 | 3589 | 967 | NOR | 314 | 1182 | 447 |
| 27 | NEP | 861 | 3875 | 1495 | ZPG | 79 | 800 | 239 | NEP | 624 | 4213 | 1213 | STA | 146 | 1328 | 328 |
| 28 | ZAP | 961 | 4836 | 1551 | E-E | 112 | 912 | 212 | ZAP | 1074 | 5287 | 1695 | ZPG | 112 | 1440 | 323 |
| 29 | TLK | 513 | 5349 | 557 | NOR | 227 | 1139 | 516 | TLK | 120 | 5407 | 411 | E-E | 410 | 1850 | 752 |
| 30 | REF | 185 | 5534 | 1271 | STA | 78 | 1217 | 203 | REF | 649 | 6056 | 1750 | NOR | 411 | 2261 | 858 |
| JULY 1 | POL | 558 | 6092 | 1218 | ZPG | 175 | 1392 | 414 | POL | 1179 | 7235 | 2166 | - | - | - | - |
| 2 | NEP | 1348 | 7440 | 2843 | E-E | 168 | 1560 | 380 | NEP | 1470 | 8705 | 2683 | - | - | - | - |
| 3 | ZAP | 798 | 8238 | 2349 | NOR | 387 | 1947 | 903 | ZAP | 1376 | 10081 | 3071 | - | - | - | - |
| 4 | TLK | 607 | 8845 | 1164 | STA | 178 | 2125 | 381 | TLK | 654 | 10745 | 1075 | - | - | - | - |
| 5 | REF | 1299 | 10144 | 2570 | ZPG | 172 | 2297 | 586 | REF | 562 | 11307 | 2312 | STA | 307 | 2568 | 635 |
| 6 | POL | 1015 | 11159 | 2233 | E-E | 199 | 2496 | 579 | POL | 1239 | 12546 | 3405 | ZPG | 419 | 2987 | 742 |
| 7 | NEP | 2034 | 13193 | 4877 | NOR | 646 | 3142 | 1549 | NEP | 2394 | 14940 | 5077 | E-E | 384 | 3371 | 1136 |
| 8 | ZAP | 1102 | 14295 | 3451 | STA | 175 | 3317 | 556 | ZAP | 370 | 15310 | 3441 | NOR | 541 | 3912 | 1399 |
| 9 | TLK | 947 | 15242 | 2111 | ZPG | 144 | 3461 | 730 | TZL | 1900 | 17210 | 1900 | STA | 216 | 4128 | 851 |
| 10 | REF | 1518 | 16760 | 4088 | E-E | 243 | 3704 | 822 | REF | 1173 | 18383 | 3485 | ZPG | 226 | 4354 | 968 |
| 11 | POL | 1769 | 18529 | 4002 | NOR | 808 | 4512 | 2357 | POL | 1497 | 19880 | 4902 | NOR | 901 | 5255 | 2300 |
| 12 | NEP | 2062 | 20591 | 6939 | STA | 308 | 4820 | 864 | NEP | 2695 | 22575 | 7772 | E-E | 476 | 5731 | 1612 |
| 13 | ZAP | 1942 | 22533 | 5393 | ZPG | 191 | 5011 | 921 | ZAP | 2065 | 24640 | 5506 | STA | 233 | 5964 | 1084 |
| 14 | TLK | 1598 | 24131 | 3709 | E-E | 369 | 5380 | 1191 | TLK | 1492 | 26132 | 2567 | NOR | 495 | 6459 | 2795 |
| 15 | REF | 1438 | 25569 | 5526 | NOR | 1058 | 6438 | 3415 | REF | 1000 | 27132 | 4485 | ZPG | 349 | 6808 | 1317 |
| 16 | POL | 1497 | 27066 | 5489 | STA | 507 | 6945 | 1371 | POL | 1342 | 28474 | 6244 | NOR | 527 | 7335 | 3322 |
| 17 | NEP | 4950 | 32016 | 11889 | ZPG | 294 | 7239 | 1215 | NEP | 3485 | 31959 | 11257 | E-E | 240 | 7575 | 1852 |
| 18 | ZAP | 2619 | 34635 | 8012 | E-E | 615 | 7854 | 1806 | ZAP | 2232 | 34191 | 7738 | STA | 187 | 7762 | 1271 |
| 19 | TLK | 1842 | 36477 | 5551 | NOR | 1622 | 9476 | 5037 | TLK | 794 | 34985 | 3361 | NOR | 411 | 8173 | 3733 |
| 20 | REF | 1819 | 38296 | 7345 | STA | 415 | 9891 | 1786 | REF | 1042 | 36027 | 5527 | ZPG | 109 | 8282 | 1426 |
| 21 | POL | 1458 | 39754 | 6957 | ZPG | 115 | 10006 | 1330 | POL | 1641 | 37668 | 7885 | NOR | 171 | 8453 | 3904 |
| 22 | NEP | 5329 | 45083 | 17218 | E-E | 612 | 10618 | 2418 | NEP | 2872 | 40540 | 14129 | E-E | 786 | 9239 | 2638 |
| 23 | ZAP | 2909 | 47992 | 10921 | NOR | 869 | 11487 | 5906 | ZAP | 2139 | 42679 | 9877 | STA | 243 | 9482 | 1514 |

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*ST. PAUL: NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIQUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI; TZL=TOLSTOI, ZAPADNI, LUKANIN, AND KITOVI.

*ST. GEORGE: NOR=NORTH; NST=NORTH AND STARAYA ARTIL; E-E=EAST REEF AND EAST CLIFFS; ZPG=ZAPADNI; STA=STARAYA ARTIL.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 31 (1949)--CONT.

TABLE 32 (1950)--CONT.

| ST. PAUL | | | | | ST. GEORGE | | | | ST. PAUL | | | | ST. GEORGE | | | |
|-----------------|---------------|---------------|--------------|------------|-----------------|---------------|--------------|------------|-----------------|---------------|--------------|------------|-----------------|---------------|--------------|------------|
| CUMULATIVE KILL | | | | | CUMULATIVE KILL | | | | CUMULATIVE KILL | | | | CUMULATIVE KILL | | | |
| DATE | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY# | DAILY KILL | ALL AREAS | BY AREA |
| JULY 24 | TLK | 1326 | 49318 | 6877 | STA | 281 | 11768 | 2067 | TLK | 643 | 43322 | 4004 | NOR | 592 | 10074 | 4496 |
| 25 | REF | 1907 | 51225 | 9252 | ZPG | 253 | 12021 | 1583 | REF | 1298 | 44620 | 6825 | ZPG | 163 | 10237 | 1589 |
| 26 | POL | 2573 | 53798 | 9530 | E-E | 536 | 12557 | 2954 | POL | 1501 | 46121 | 9386 | NOR | 518 | 10755 | 5014 |
| 27 | NEP | 3647 | 57445 | 20865 | NOR | 888 | 13445 | 6794 | NEP | 2575 | 48696 | 16704 | E-E | 639 | 11394 | 3277 |
| OCT 3 | - | - | - | - | - | - | - | - | NEP | 103 | 48799 | 16807 | - | - | - | - |
| 27 | POL | 100 | 57545 | 9630 | - | - | - | - | - | - | - | - | - | - | - | - |

*ST. PAUL: NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIGUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI; TZL=TOLSTOI, ZAPADNI, LUKANIN, AND KITOVI.

*ST. GEORGE: NOR=NORTH; NST=NORTH AND STARAYA ARTIL; E-E=EAST REEF AND EAST CLIFFS; ZPG=ZAPADNI; STA=STARAYA ARTIL.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 33 1951

TABLE 34 1952

| ST. PAUL | | | | | ST. GEORGE | | | | ST. PAUL | | | | ST. GEORGE | | | |
|-----------------|-----------|------------|-----------|---------|-----------------|------------|-----------|---------|-----------------|------------|-----------|---------|-----------------|------------|-----------|---------|
| CUMULATIVE KILL | | | | | CUMULATIVE KILL | | | | CUMULATIVE KILL | | | | CUMULATIVE KILL | | | |
| DATE | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY# | DAILY KILL | ALL AREAS | BY AREA |
| JUNE 20 | REF | 516 | 516 | 516 | - | - | - | - | - | - | - | - | ZPG | 53 | 53 | 53 |
| 21 | - | - | - | - | - | - | - | - | - | - | - | - | NOR | 174 | 227 | 174 |
| 22 | NEP | 522 | 1038 | 522 | NOR | 150 | 150 | 150 | NEP | 338 | 338 | 338 | STA | 34 | 261 | 34 |
| 23 | - | - | - | - | STA | 47 | 197 | 47 | TLK | 867 | 1205 | 867 | NOR | 124 | 385 | 298 |
| 24 | ZAP | 628 | 1666 | 628 | ZPG | 106 | 303 | 106 | ZAP | 569 | 1774 | 569 | E-E | 148 | 533 | 148 |
| 25 | REF | 564 | 2230 | 1060 | E-E | 89 | 392 | 89 | REF | 389 | 2163 | 389 | STA | 105 | 638 | 139 |
| 26 | POL | 506 | 2736 | 506 | NOR | 147 | 539 | 297 | POL | 532 | 2695 | 532 | NOR | 180 | 818 | 478 |
| 27 | NEP | 555 | 3291 | 1077 | STA | 37 | 576 | 84 | NEP | 1430 | 4125 | 1768 | ZPG | 247 | 1065 | 300 |
| 28 | TLK | 589 | 3880 | 589 | ZPG | 156 | 732 | 262 | TLK | 1170 | 5295 | 2037 | - | - | - | - |
| 29 | ZAP | 532 | 4412 | 1160 | NOR | 128 | 860 | 425 | ZAP | 592 | 5887 | 1161 | E-E | 221 | 1286 | 369 |
| 30 | REF | 583 | 4975 | 1643 | E-E | 65 | 925 | 154 | REF | 396 | 6283 | 785 | STA | 83 | 1369 | 222 |
| JULY 1 | POL | 484 | 5459 | 990 | NOR | 210 | 1135 | 635 | POL | 1111 | 7394 | 1643 | NOR | 429 | 1798 | 907 |
| 2 | NEP | 1264 | 6723 | 2341 | ZPG | 163 | 1298 | 425 | NEP | 1802 | 9196 | 3570 | ZPG | 239 | 2037 | 539 |
| 3 | TLK | 678 | 7401 | 1267 | NOR | 201 | 1499 | 836 | TLK | 898 | 10094 | 2935 | NOR | 280 | 2317 | 1187 |
| 4 | ZAP | 943 | 8344 | 2103 | E-E | 50 | 1549 | 204 | ZAP | 1136 | 11230 | 2297 | E-E | 217 | 2534 | 586 |
| 5 | REF | 832 | 9176 | 2475 | STA | 205 | 1754 | 289 | REF | 541 | 11771 | 1326 | STA | 73 | 2607 | 295 |
| 6 | POL | 845 | 10021 | 1835 | NOR | 232 | 1986 | 1068 | POL | 1398 | 13169 | 3041 | NOR | 292 | 2899 | 1479 |
| 7 | NEP | 2564 | 12585 | 4905 | ZPG | 105 | 2091 | 530 | NEP | 2301 | 15470 | 5871 | ZPG | 425 | 3324 | 964 |
| 8 | TLK | 875 | 13460 | 2142 | NOR | 190 | 2281 | 1258 | TLK | 1968 | 17438 | 4903 | NOR | 297 | 3621 | 1776 |
| 9 | ZAP | 1941 | 15401 | 4044 | E-E | 397 | 2678 | 601 | ZAP | 3217 | 20655 | 5514 | E-E | 243 | 3864 | 829 |
| 10 | REF | 874 | 16275 | 3349 | STA | 235 | 2913 | 524 | REF | 686 | 21341 | 2012 | STA | 179 | 4043 | 474 |
| 11 | POL | 1113 | 17388 | 2948 | NOR | 348 | 3261 | 1606 | POL | 1367 | 22708 | 4408 | NOR | 470 | 4513 | 2246 |
| 12 | NEP | 3161 | 20549 | 8066 | ZPG | 303 | 3564 | 833 | NEP | 2317 | 25025 | 8188 | ZPG | 647 | 5160 | 1611 |
| 13 | TLK | 977 | 21526 | 3119 | NOR | 288 | 3852 | 1894 | TLK | 1897 | 26922 | 6800 | NOR | 411 | 5571 | 2657 |
| 14 | ZAP | 1305 | 22831 | 5349 | E-E | 216 | 4068 | 817 | ZAP | 2621 | 29543 | 8135 | E-E | 645 | 6216 | 1474 |
| 15 | REF | 702 | 23533 | 4051 | STA | 100 | 4168 | 624 | REF | 794 | 30337 | 2806 | STA | 245 | 6461 | 719 |
| 16 | POL | 872 | 24405 | 3820 | NOR | 476 | 4644 | 2370 | POL | 1524 | 31861 | 5932 | NOR | 704 | 7165 | 3361 |
| 17 | NEP | 2707 | 27112 | 10773 | ZPG | 155 | 4799 | 988 | NEP | 2200 | 34061 | 10388 | ZPG | 406 | 7571 | 2017 |
| 18 | TLK | 1242 | 28354 | 4361 | NOR | 493 | 5292 | 2863 | TLK | 1636 | 35697 | 8436 | NOR | 457 | 8028 | 3818 |
| 19 | ZAP | 3245 | 31599 | 8594 | E-E | 399 | 5691 | 1216 | ZAP | 1550 | 37247 | 9695 | E-E | 407 | 8435 | 1881 |
| 20 | REF | 1712 | 33311 | 5763 | STA | 327 | 6018 | 851 | REF | 595 | 37842 | 3401 | STA | 202 | 8637 | 921 |
| 21 | POL | 2021 | 35332 | 5841 | NOR | 600 | 6618 | 3463 | POL | 1235 | 39077 | 7167 | NOR | 594 | 9231 | 4412 |
| 22 | NEP | 2762 | 38094 | 13535 | ZPG | 210 | 6828 | 1198 | NEP | 2473 | 41550 | 12861 | ZPG | 735 | 9966 | 2752 |
| 23 | TLK | 976 | 39070 | 5337 | NOR | 363 | 7191 | 3826 | TLK | 3076 | 44626 | 11512 | NOR | 599 | 10565 | 5011 |
| 24 | ZAP | 2912 | 41982 | 11506 | E-E | 716 | 7907 | 1932 | ZAP | 2681 | 47307 | 12366 | E-E | 460 | 11025 | 2341 |
| 25 | REF | 1209 | 43191 | 6972 | STA | 258 | 8165 | 1209 | REF | 1164 | 48471 | 4565 | STA | 228 | 11253 | 1149 |
| 26 | POL | 1589 | 44780 | 7430 | NOR | 512 | 8677 | 4338 | POL | 957 | 49428 | 8124 | NOR | 686 | 11939 | 5697 |
| 27 | NEP | 3153 | 47933 | 16688 | ZPG | 363 | 9040 | 1561 | NEP | 2132 | 51560 | 14993 | ZPG | 371 | 12310 | 3123 |
| 28 | TLK | 722 | 48655 | 6059 | E-E | 527 | 9567 | 2459 | - | - | - | - | - | - | - | - |
| 29 | ZAP | 1918 | 50573 | 13424 | NOR | 549 | 10116 | 4887 | - | - | - | - | - | - | - | - |

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*ST. PAUL: NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIQUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI.

*ST. GEORGE: NOR=NORTH; E-E=EAST REEF AND EAST CLIFFS; ZPG=ZAPADNI; STA=STARAYA ARTIL.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 33 (1951)--CONT.

TABLE 34 (1952)--CONT.

| DATE | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | | ST. PAUL CUMULATIVE KILL | | | | ST. GEORGE CUMULATIVE KILL | | | |
|---------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|-----------------------------|---------------|--------------|------------|-------------------------------|---------------|--------------|------------|
| | ROOK- ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY* | DAILY KILL | ALL AREAS | BY AREA |
| SEPT 29 | - | - | - | - | - | - | - | - | POL | 49 | 51609 | 8173 | - | - | - | - |
| NOV 20 | - | - | - | - | - | - | - | - | POL | 3 | 51612 | 8176 | - | - | - | - |

*ST. PAUL: NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIGUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI.

*ST. GEORGE: NOR=NORTH; E-E=EAST REEF AND EAST CLIFFS; ZPG=ZAPADNI; STA=STARAYA ARTIL.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 35 1953

TABLE 36 1954

| ST. PAUL | | | | | ST. GEORGE | | | | ST. PAUL | | | | ST. GEORGE | | | |
|-----------------|-----------|------------|-----------|---------|-----------------|------------|-----------|---------|-----------------|------------|-----------|---------|-----------------|------------|-----------|---------|
| CUMULATIVE KILL | | | | | CUMULATIVE KILL | | | | CUMULATIVE KILL | | | | CUMULATIVE KILL | | | |
| DATE | ROOK-ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK-ERY* | DAILY KILL | ALL AREAS | BY AREA |
| JUNE 22 | NEP | 607 | 607 | 607 | - | - | - | - | NEP | 694 | 694 | 694 | - | - | - | - |
| 23 | TLK | 589 | 1196 | 589 | - | - | - | - | TLK | 321 | 1015 | 321 | - | - | - | - |
| 24 | ZAP | 608 | 1804 | 608 | - | - | - | - | ZAP | 1061 | 2076 | 1061 | - | - | - | - |
| 25 | REF | 338 | 2142 | 338 | - | - | - | - | REF | 382 | 2458 | 382 | - | - | - | - |
| 26 | POL | 535 | 2677 | 535 | - | - | - | - | POL | 687 | 3145 | 687 | - | - | - | - |
| 27 | NEP | 843 | 3520 | 1450 | ZPG | 225 | 225 | 225 | NEP | 804 | 3949 | 1498 | ZPG | 489 | 489 | 489 |
| 28 | TLK | 423 | 3943 | 1012 | NOR | 455 | 680 | 455 | TLK | 344 | 4293 | 665 | NOR | 513 | 1002 | 513 |
| 29 | ZAP | 776 | 4719 | 1384 | E-E | 256 | 936 | 256 | ZAP | 1820 | 6113 | 2881 | E-E | 405 | 1407 | 405 |
| 30 | REF | 462 | 5181 | 800 | STA | 80 | 1016 | 80 | REF | 442 | 6555 | 824 | STA | 188 | 1595 | 188 |
| JULY 1 | POL | 861 | 5832 | 1186 | NOR | 279 | 1295 | 734 | POL | 873 | 7428 | 1560 | NOR | 266 | 1861 | 779 |
| 2 | NEP | 1330 | 7162 | 2780 | ZPG | 311 | 1606 | 536 | NEP | 1246 | 8674 | 2744 | ZPG | 353 | 2214 | 842 |
| 3 | TLK | 977 | 8139 | 1889 | NOR | 250 | 1856 | 984 | TLK | 487 | 9161 | 1152 | NOR | 207 | 2421 | 986 |
| 4 | ZAP | 2309 | 10448 | 3693 | E-E | 230 | 2086 | 486 | ZAP | 1109 | 10270 | 3990 | E-E | 385 | 2806 | 790 |
| 5 | REF | 233 | 10681 | 1033 | STA | 65 | 2151 | 145 | REF | 203 | 10473 | 1027 | STA | 113 | 2919 | 301 |
| 6 | POL | 670 | 11351 | 1856 | NOR | 364 | 2515 | 1348 | POL | 1124 | 11597 | 2684 | NOR | 287 | 3206 | 1273 |
| 7 | NEP | 1586 | 12937 | 4366 | ZPG | 332 | 2847 | 868 | NEP | 2089 | 13686 | 4833 | ZPG | 484 | 3690 | 1326 |
| 8 | TLK | 1723 | 14660 | 3712 | NOR | 233 | 3080 | 1581 | TLK | 545 | 14231 | 1697 | NOR | 239 | 3929 | 1512 |
| 9 | ZAP | 2162 | 16822 | 5855 | E-E | 138 | 3218 | 624 | ZAP | 3493 | 17724 | 7483 | E-E | 388 | 4317 | 1178 |
| 10 | REF | 310 | 17132 | 1343 | STA | 109 | 3327 | 254 | REF | 447 | 18171 | 1474 | STA | 192 | 4509 | 493 |
| 11 | POL | 1235 | 18367 | 3091 | NOR | 414 | 3741 | 1995 | POL | 1537 | 19708 | 4221 | NOR | 533 | 5042 | 2045 |
| 12 | NEP | 1357 | 19724 | 5723 | ZPG | 479 | 4220 | 1347 | NEP | 1654 | 21362 | 6487 | ZPG | 707 | 5749 | 2033 |
| 13 | TLK | 1847 | 21571 | 5559 | NOR | 353 | 4573 | 2348 | TLK | 795 | 22157 | 2492 | NOR | 438 | 6187 | 2483 |
| 14 | ZAP | 2383 | 23954 | 8238 | E-E | 374 | 4947 | 998 | ZAP | 2991 | 25148 | 10474 | E-E | 673 | 6860 | 1851 |
| 15 | REF | 475 | 24429 | 1818 | STA | 162 | 5109 | 416 | REF | 553 | 25701 | 2027 | STA | 372 | 7232 | 865 |
| 16 | POL | 1268 | 25697 | 4359 | NOR | 569 | 5678 | 2917 | POL | 1671 | 27372 | 5892 | NOR | 712 | 7944 | 3195 |
| 17 | NEP | 1863 | 27560 | 7586 | ZPG | 619 | 6297 | 1966 | NEP | 2011 | 29383 | 8498 | ZPG | 578 | 8522 | 2611 |
| 18 | TLK | 2587 | 30147 | 8146 | NOR | 340 | 6637 | 3257 | TLK | 1125 | 30508 | 3617 | NOR | 257 | 8779 | 3452 |
| 19 | ZAP | 2646 | 32793 | 10884 | E-E | 594 | 7231 | 1592 | ZAP | 3644 | 34152 | 14118 | E-E | 719 | 9498 | 2570 |
| 20 | REF | 618 | 33411 | 2436 | STA | 176 | 7407 | 592 | REF | 712 | 34864 | 2739 | STA | 410 | 9908 | 1275 |
| 21 | POL | 1588 | 34999 | 5947 | NOR | 647 | 8054 | 3904 | POL | 1828 | 36692 | 7720 | NOR | 623 | 10531 | 4075 |
| 22 | NEP | 2048 | 37047 | 9634 | ZPG | 369 | 8423 | 2335 | NEP | 2755 | 39447 | 11253 | ZPG | 422 | 10953 | 3033 |
| 23 | TLK | 3164 | 40211 | 11310 | NOR | 693 | 9116 | 4597 | TLK | 835 | 40282 | 4452 | NOR | 274 | 11227 | 4349 |
| 24 | ZAP | 3658 | 43869 | 14542 | E-E | 640 | 9756 | 2232 | ZAP | 4543 | 44825 | 18661 | E-E | 1285 | 12512 | 3855 |
| 25 | REF | 978 | 44847 | 3414 | STA | 284 | 10040 | 876 | REF | 735 | 45560 | 3474 | STA | 312 | 12824 | 1587 |
| 26 | POL | 1660 | 46507 | 7607 | NOR | 804 | 10844 | 5401 | POL | 2134 | 47694 | 9854 | NOR | 480 | 13304 | 4829 |
| 27 | NEP | 3377 | 49884 | 13011 | ZPG | 539 | 11383 | 2874 | NEP | 2545 | 50239 | 13798 | ZPG | 339 | 13643 | 3372 |
| 28 | TLK | 2634 | 52518 | 13944 | - | - | - | - | - | - | - | - | - | - | - | - |
| 29 | ZAP | 2477 | 54995 | 17019 | - | - | - | - | - | - | - | - | - | - | - | - |

*ST. PAUL: NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIGUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI.

*ST. GEORGE: NOR=NORTH; E-E=EAST REEF AND EAST CLIFFS; ZPG=ZAPADNI; STA=STARAYA ARTIL.

TABLES 1 - 37: DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON THE PRIBILOF ISLANDS.

TABLE 37 1955

| DATE | ST. PAUL | | | | ST. GEORGE | | | |
|---------|---------------|---------------|--------------|------------|---------------|---------------|--------------|------------|
| | ROOK- ERY* | DAILY KILL | ALL AREAS | BY AREA | ROOK- ERY* | DAILY KILL | ALL AREAS | BY AREA |
| JUNE 22 | NEP | 297 | 297 | 297 | - | - | - | - |
| 23 | TLK | 163 | 460 | 163 | - | - | - | - |
| 24 | ZAP | 267 | 727 | 267 | - | - | - | - |
| 25 | REF | 233 | 960 | 233 | - | - | - | - |
| 26 | POL | 344 | 1304 | 344 | NOR | 151 | 151 | 151 |
| 27 | NEP | 411 | 1715 | 708 | ZPG | 158 | 309 | 158 |
| 28 | TLK | 349 | 2064 | 512 | NOR | 154 | 463 | 305 |
| 29 | ZAP | 810 | 2874 | 1077 | E-E | 275 | 738 | 275 |
| 30 | REF | 342 | 3216 | 575 | STA | 144 | 882 | 144 |
| JULY 1 | POL | 406 | 3622 | 750 | NOR | 185 | 1067 | 490 |
| 2 | NEP | 865 | 4487 | 1573 | ZPG | 191 | 1258 | 349 |
| 3 | TLK | 366 | 4853 | 878 | NOR | 191 | 1449 | 681 |
| 4 | ZAP | 1090 | 5943 | 2167 | E-E | 265 | 1714 | 540 |
| 5 | REF | 385 | 6328 | 960 | STA | 209 | 1923 | 353 |
| 6 | POL | 833 | 7161 | 1583 | NOR | 364 | 2287 | 1045 |
| 7 | NEP | 1293 | 8454 | 2866 | ZPG | 218 | 2505 | 567 |
| 8 | TLK | 617 | 9071 | 1495 | NOR | 195 | 2700 | 1240 |
| 9 | ZAP | 1602 | 10673 | 3769 | E-E | 382 | 3082 | 922 |
| 10 | REF | 532 | 11205 | 1492 | STA | 248 | 3330 | 601 |
| 11 | POL | 1228 | 12433 | 2811 | NOR | 440 | 3770 | 1680 |
| 12 | NEP | 1883 | 14316 | 4749 | ZPG | 315 | 4085 | 882 |
| 13 | TLK | 663 | 14979 | 2156 | NOR | 257 | 4342 | 1937 |
| 14 | ZAP | 2738 | 17717 | 6507 | E-E | 1072 | 5414 | 1994 |
| 15 | REF | 364 | 18081 | 1856 | STA | 256 | 5670 | 857 |
| 16 | POL | 1676 | 19757 | 4487 | NOR | 664 | 6334 | 2601 |
| 17 | NEP | 2057 | 21814 | 6806 | ZPG | 325 | 6659 | 1207 |
| 18 | TLK | 948 | 22762 | 3106 | NOR | 194 | 6853 | 2795 |
| 19 | ZAP | 2529 | 25291 | 9038 | E-E | 845 | 7698 | 2839 |
| 20 | REF | 1002 | 26293 | 2858 | STA | 639 | 8337 | 1496 |
| 21 | POL | 1287 | 27580 | 5774 | NOR | 720 | 9057 | 3515 |
| 22 | NEP | 2515 | 30095 | 9321 | ZPG | 270 | 9327 | 1477 |
| 23 | TLK | 2163 | 32258 | 5269 | NOR | 525 | 9852 | 4040 |
| 24 | ZAP | 2604 | 34862 | 11640 | E-E | 951 | 10803 | 3790 |
| 25 | REF | 1028 | 35890 | 3886 | STA | 395 | 11198 | 1891 |
| 26 | POL | 1893 | 37783 | 7667 | NOR | 725 | 11923 | 4765 |
| 27 | NEP | 4574 | 42357 | 13895 | ZPG | 528 | 12451 | 2005 |
| 28 | TLK | 1905 | 44262 | 7174 | NOR | 389 | 12840 | 5154 |
| 29 | ZAP | 2771 | 47033 | 14411 | E-E | 760 | 13800 | 4550 |
| 30 | POL | 1309 | 48342 | 8976 | STA | 616 | 14216 | 2507 |
| 31 | NEP | 2276 | 50618 | 16171 | - | - | - | - |

*ST. PAUL: SIV=SIVUTCH; NEP=NORTHEAST POINT=MORJOVI AND VOSTOCHNI; TZR=TOLSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; ZAP=ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; REF=REEF, GORBATCH, AND ARDIQUEN; TLK=TOLSTOI, LUKANIN, AND KITOVI; L-K=LUKANIN AND KITOVI.

*ST. GEORGE: NOR=NORTH; NST=NORTH AND STARAYA ARTIL; E-E=EAST REEF AND EAST CLIFFS; STA=STARAYA ARTIL; ZPG=ZAPADNI; E-N=EAST AND NORTH.

TABLE 38A - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1956.4

| DATE | ROOK- ERY# | NUMBER KILLED NO. IN | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | | BY AREA, ALL AGES |
|---------|---------------|----------------------|-------|-----------------|------------|--|----------|---------|------|---------|-----------------|--|-----------|----------|------|-------|--|----------------------|
| | | TO DATE | | TOOTH SAMPLE | DAILY KILL | | | | | | CUMULATIVE KILL | | | | | | | |
| | | | DAILY | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | | | | |
| JUNE 27 | NEP | 773 | 773 | 57 | 0(0) | 255(33) | 448(58) | 70(9) | 0(0) | 0(0) | 0(0) | 255(33) | 448(58) | 70(9) | 0(0) | 773 | | |
| 28 | TLK | 1616 | 843 | 45 | 0(0) | 244(29) | 565(67) | 34(4) | 0(0) | 0(0) | 0(0) | 499(31) | 1013(63) | 104(6) | 0(0) | 843 | | |
| 29 | ZAP | 3165 | 1549 | 78 | 0(0) | 325(21) | 978(63) | 217(14) | 0(0) | 0(0) | 0(0) | 824(26) | 1989(63) | 321(10) | 0(0) | 1549 | | |
| 30 | REF | 3472 | 307 | 16 | 0(0) | 58(19) | 212(69) | 37(12) | 0(0) | 0(0) | 0(0) | 882(25) | 2201(63) | 358(10) | 0(0) | 307 | | |
| JULY 1 | POL | 4628 | 1156 | 66 | 0(0) | 197(17) | 855(74) | 92(8) | 0(0) | 0(0) | 0(0) | 1079(23) | 3056(66) | 450(10) | 0(0) | 1156 | | |
| 2 | NEP | 5372 | 744 | 36 | 0(0) | 141(19) | 499(67) | 104(14) | 0(0) | 0(0) | 0(0) | 1220(23) | 3555(66) | 554(10) | 0(0) | 1517 | | |
| 3 | TLK | 7144 | 1772 | 85 | 0(0) | 337(19) | 1116(63) | 319(18) | 0(0) | 0(0) | 0(0) | 1557(22) | 4671(65) | 873(12) | 0(0) | 2615 | | |
| 4 | ZAP | 8410 | 1266 | 62 | 0(0) | 532(42) | 658(52) | 76(6) | 0(0) | 0(0) | 0(0) | 2089(25) | 5329(63) | 949(11) | 0(0) | 2815 | | |
| 5 | REF | 8902 | 492 | 24 | 0(0) | 59(12) | 349(71) | 84(17) | 0(0) | 0(0) | 0(0) | 2148(24) | 5678(64) | 1033(12) | 0(0) | 799 | | |
| 6 | POL | 10995 | 2093 | 101 | 0(0) | 523(25) | 1382(66) | 188(9) | 0(0) | 0(0) | 0(0) | 2671(24) | 7060(64) | 1221(11) | 0(0) | 3249 | | |
| 7 | NEP | 12988 | 1993 | 89 | 20(1) | 558(28) | 1395(70) | 20(1) | 0(0) | 20(0) | 0(0) | 3229(25) | 8455(65) | 1241(10) | 0(0) | 3510 | | |
| 8 | TLK | 14262 | 1274 | 62 | 25(2) | 408(32) | 816(64) | 25(4) | 0(0) | 45(0) | 0(0) | 3637(26) | 9271(65) | 1266(49) | 0(0) | 3889 | | |
| 9 | ZAP | 18313 | 4051 | 191 | 40(1) | 1863(46) | 2026(50) | 122(3) | 0(0) | 85(0) | 0(0) | 5500(30) | 11297(62) | 1388(8) | 0(0) | 6866 | | |
| 10 | REF | 19008 | 695 | 36 | 0(0) | 209(30) | 368(53) | 118(17) | 0(0) | 85(0) | 0(0) | 5709(30) | 11665(61) | 1506(8) | 0(0) | 1494 | | |
| 11 | POL | 20585 | 1557 | 74 | 0(0) | 436(28) | 1012(65) | 109(7) | 0(0) | 85(0) | 0(0) | 6145(30) | 12677(62) | 1615(8) | 0(0) | 4806 | | |
| 12 | NEP | 22830 | 2265 | 116 | 23(1) | 680(30) | 1517(67) | 45(2) | 0(0) | 108(0) | 0(0) | 6825(30) | 14194(62) | 1660(7) | 0(0) | 5775 | | |
| 13 | TLK | 24550 | 1720 | 81 | 0(0) | 550(32) | 998(58) | 172(10) | 0(0) | 108(0) | 0(0) | 7375(30) | 15192(62) | 1832(7) | 0(0) | 5609 | | |
| 14 | ZAP | 27518 | 2968 | 142 | 59(2) | 1455(49) | 1365(46) | 59(2) | 0(0) | 167(1) | 0(0) | 8830(32) | 16557(60) | 1891(7) | 0(0) | 9834 | | |
| 15 | REF | 28205 | 687 | 101 | 7(1) | 240(35) | 364(53) | 76(11) | 0(0) | 174(1) | 0(0) | 9070(32) | 16921(60) | 1967(7) | 0(0) | 2181 | | |
| 16 | POL | 30050 | 1845 | 93 | 37(2) | 738(40) | 1033(56) | 37(2) | 0(0) | 211(1) | 0(0) | 9808(33) | 17954(60) | 2004(7) | 0(0) | 6651 | | |
| 17 | NEP | 31979 | 1929 | 359 | 39(2) | 868(45) | 926(48) | 96(5) | 0(0) | 250(1) | 0(0) | 10676(33) | 18880(59) | 2100(7) | 0(0) | 7704 | | |
| 18 | TLK | 34098 | 2119 | 417 | 42(2) | 1081(51) | 932(44) | 64(3) | 0(0) | 292(1) | 0(0) | 11757(34) | 19812(58) | 2164(6) | 0(0) | 7728 | | |
| 19 | ZAP | 36245 | 2147 | 426 | 21(1) | 1224(57) | 816(38) | 86(4) | 0(0) | 313(1) | 0(0) | 12981(36) | 20628(57) | 2250(6) | 0(0) | 11981 | | |
| 20 | REF | 37442 | 1197 | 237 | 12(1) | 539(45) | 527(44) | 119(10) | 0(0) | 325(1) | 0(0) | 13520(36) | 21155(57) | 2369(6) | 0(0) | 3378 | | |
| 21 | POL | 39624 | 2182 | 438 | 22(1) | 1069(49) | 1004(46) | 87(4) | 0(0) | 347(1) | 0(0) | 14589(37) | 22159(56) | 2456(6) | 0(0) | 8833 | | |
| 22 | NEP | 42995 | 3371 | 330 | 34(1) | 1888(56) | 1348(40) | 101(3) | 0(0) | 381(1) | 0(0) | 16477(38) | 23507(55) | 2557(6) | 0(0) | 11075 | | |
| 23 | TLK | 44535 | 1540 | 142 | 15(1) | 909(59) | 585(38) | 31(2) | 0(0) | 396(1) | 0(0) | 17386(39) | 24092(54) | 2588(6) | 0(0) | 9268 | | |
| 24 | ZAP | 47792 | 3257 | 302 | 98(3) | 2117(65) | 944(29) | 98(3) | 0(0) | 494(1) | 0(0) | 19503(41) | 25036(52) | 2686(6) | 0(0) | 15238 | | |
| 25 | REF | 48658 | 866 | 79 | 0(0) | 364(42) | 493(57) | 9(1) | 0(0) | 494(1) | 0(0) | 19867(41) | 25529(52) | 2695(6) | 0(0) | 4244 | | |
| 26 | POL | 50000 | 1342 | 120 | 0(0) | 859(64) | 470(35) | 13(1) | 0(0) | 494(1) | 0(0) | 20726(41) | 25999(52) | 2708(5) | 0(0) | 10175 | | |
| 27 | NEP | 53419 | 3419 | 334 | 69(2) | 2222(65) | 1094(32) | 34(1) | 0(0) | 563(1) | 0(0) | 22948(43) | 27093(51) | 2742(5) | 0(0) | 14494 | | |
| 28 | TLK | 54177 | 758 | 77 | 8(1) | 455(60) | 265(35) | 30(4) | 0(0) | 571(1) | 0(0) | 23403(43) | 27358(50) | 2772(5) | 0(0) | 10026 | | |
| 29 | ZAP | 56616 | 2439 | 214 | 49(2) | 1780(73) | 561(23) | 49(2) | 0(0) | 620(1) | 0(0) | 25183(44) | 27919(49) | 2821(5) | 0(0) | 17677 | | |
| 30 | REF | 57590 | 974 | 91 | 68(7) | 614(63) | 263(27) | 29(3) | 0(0) | 688(1) | 0(0) | 25797(45) | 28182(49) | 2850(5) | 0(0) | 5218 | | |
| 31 | POL | 58773 | 1183 | 117 | 0(0) | 793(67) | 378(32) | 12(1) | 0(0) | 688(1) | 0(0) | 26590(45) | 28560(49) | 2862(5) | 0(0) | 11358 | | |
| AUG 1 | NEP | 61312 | 2539 | 245 | 127(5) | 1904(75) | 483(19) | 25(1) | 0(0) | 815(1) | 0(0) | 28494(46) | 29043(47) | 2887(5) | 0(0) | 17033 | | |
| 2 | TLK | 62199 | 887 | 76 | 35(4) | 595(67) | 222(25) | 35(4) | 0(0) | 850(1) | 0(0) | 29089(47) | 29265(47) | 2922(5) | 0(0) | 10913 | | |
| 3 | ZAP | 64144 | 1945 | 198 | 97(5) | 1556(80) | 292(15) | 0(0) | 0(0) | 947(1) | 0(0) | 30645(48) | 29557(46) | 2922(5) | 0(0) | 19622 | | |
| 4 | REF | 64615 | 471 | 44 | 33(7) | 302(64) | 118(25) | 9(2) | 0(0) | 980(2) | 0(0) | 30947(48) | 29675(46) | 2931(5) | 0(0) | 5889 | | |
| 5 | POL | 65607 | 992 | 90 | 40(4) | 754(76) | 178(18) | 20(2) | 0(0) | 1020(2) | 0(0) | 31701(48) | 29853(46) | 2951(4) | 0(0) | 12350 | | |
| 6 | NEP | 67406 | 1799 | 183 | 162(9) | 1367(76) | 234(13) | 36(2) | 0(0) | 1182(2) | 0(0) | 33068(49) | 30087(45) | 2987(4) | 0(0) | 18832 | | |
| 7 | TLK | 68294 | 888 | 102 | 71(8) | 639(72) | 169(19) | 9(1) | 0(0) | 1253(2) | 0(0) | 33707(49) | 30256(44) | 2996(4) | 0(0) | 11801 | | |
| 8 | ZAP | 69606 | 1312 | 128 | 197(15) | 905(69) | 171(13) | 39(3) | 0(0) | 1450(2) | 0(0) | 34612(50) | 30427(44) | 3035(4) | 0(0) | 20934 | | |
| 9 | REF | 69887 | 281 | 62 | 59(21) | 185(66) | 31(11) | 6(2) | 0(0) | 1509(2) | 0(0) | 34797(50) | 30458(44) | 3041(4) | 0(0) | 5970 | | |
| 10 | POL | 71025 | 1138 | 93 | 228(20) | 705(62) | 205(18) | 0(0) | 0(0) | 1737(2) | 0(0) | 35502(50) | 30663(43) | 3041(4) | 0(0) | 13488 | | |
| 11 | NEP | 72732 | 1707 | 211 | 341(20) | 1093(64) | 273(16) | 0(0) | 0(0) | 2078(3) | 0(0) | 36595(50) | 30936(43) | 3041(4) | 0(0) | 20539 | | |
| 12 | TLK | 73363 | 631 | 81 | 114(18) | 360(57) | 157(25) | 0(0) | 0(0) | 2192(3) | 0(0) | 36955(50) | 31093(42) | 3041(4) | 0(0) | 12432 | | |
| 13 | ZAP | 74333 | 970 | 120 | 233(24) | 611(63) | 116(12) | 10(1) | 0(0) | 2425(3) | 0(0) | 37566(51) | 31209(42) | 3051(4) | 0(0) | 21904 | | |
| 14 | REF | 74891 | 558 | 122 | 206(37) | 251(45) | 95(17) | 6(1) | 0(0) | 2631(4) | 0(0) | 37817(50) | 31304(42) | 3057(4) | 0(0) | 6528 | | |
| 15 | POL | 75736 | 845 | 59 | 228(27) | 473(56) | 144(17) | 0(0) | 0(0) | 2859(4) | 0(0) | 38290(51) | 31448(42) | 3057(4) | 0(0) | 14333 | | |

*NEP=NORTHEAST POINT (MORJOVI AND VOSTOCHNI); TLK=TOLSTOI, LUKANIN, AND KITOVI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; ZAP=ZAPADNI; REF=REEF, GORBATCH, AND ARDIGUEN.

TABLE 39B - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. GEORGE ISLAND, 1956.

| DATE | ROOK-ERY# | DAILY KILL | | | | | | | | | CUMULATIVE KILL | | | | | | |
|---------|-----------|---------------|-------|---------------------|---|---------|---------|--------|------|--------|---|-----------|----------|--------|------|------|-------------------|
| | | NUMBER KILLED | | NO. IN TOOTH SAMPLE | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | | BY AREA, ALL AGES |
| | | TO DATE | DAILY | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | | | |
| JUNE 27 | ZPG | 258 | 258 | 13 | 0(0) | 98(38) | 160(62) | 0(0) | 0(0) | 0(0) | 0(0) | 98(38) | 160(62) | 0(0) | 0(0) | 258 | |
| 28 | NOR | 704 | 446 | 21 | 0(0) | 192(43) | 254(57) | 0(0) | 0(0) | 0(0) | 0(0) | 290(41) | 414(59) | 0(0) | 0(0) | 446 | |
| 29 | E-E | 1021 | 317 | 16 | 0(0) | 139(44) | 178(56) | 0(0) | 0(0) | 0(0) | 0(0) | 429(42) | 592(58) | 0(0) | 0(0) | 317 | |
| 30 | STA | 1124 | 103 | 5 | 0(0) | 82(80) | 21(20) | 0(0) | 0(0) | 0(0) | 0(0) | 511(45) | 613(55) | 0(0) | 0(0) | 103 | |
| JULY 1 | NOR | 1416 | 292 | 14 | 0(0) | 64(22) | 228(78) | 0(0) | 0(0) | 0(0) | 0(0) | 575(41) | 841(59) | 0(0) | 0(0) | 738 | |
| 2 | ZPG | 1661 | 245 | 13 | 0(0) | 56(23) | 152(62) | 37(15) | 0(0) | 0(0) | 0(0) | 631(38) | 993(60) | 37(2) | 0(0) | 503 | |
| 3 | NOR | 1877 | 216 | 11 | 0(0) | 58(27) | 138(64) | 20(9) | 0(0) | 0(0) | 0(0) | 689(37) | 1131(60) | 57(3) | 0(0) | 954 | |
| 4 | E-E | 2231 | 354 | 19 | 0(0) | 92(26) | 244(69) | 18(5) | 0(0) | 0(0) | 0(0) | 781(35) | 1375(82) | 75(3) | 0(0) | 671 | |
| 5 | STA | 2403 | 172 | 9 | 0(0) | 76(44) | 76(44) | 20(12) | 0(0) | 0(0) | 0(0) | 857(38) | 1451(60) | 95(4) | 0(0) | 275 | |
| 6 | NOR | 2724 | 321 | 17 | 0(0) | 93(29) | 228(71) | 0(0) | 0(0) | 0(0) | 0(0) | 950(35) | 1679(62) | 95(3) | 0(0) | 1275 | |
| 7 | ZPG | 3351 | 627 | 31 | 0(0) | 201(32) | 364(58) | 62(10) | 0(0) | 0(0) | 0(0) | 1151(34) | 2043(61) | 157(5) | 0(0) | 1130 | |
| 8 | NOR | 3705 | 354 | 17 | 0(0) | 152(43) | 145(41) | 57(16) | 0(0) | 0(0) | 0(0) | 1303(35) | 2188(59) | 214(6) | 0(0) | 1629 | |
| 9 | E-E | 4838 | 934 | 48 | 19(2) | 243(26) | 672(72) | 0(0) | 0(0) | 19(0) | 0(0) | 1546(33) | 2860(62) | 214(5) | 0(0) | 1605 | |
| 10 | STA | 5001 | 362 | 20 | 0(0) | 109(30) | 253(70) | 0(0) | 0(0) | 19(0) | 0(0) | 1655(33) | 3113(62) | 214(4) | 0(0) | 637 | |
| 11 | NOR | 5350 | 349 | 19 | 0(0) | 241(69) | 91(26) | 17(5) | 0(0) | 19(0) | 0(0) | 1896(35) | 3204(60) | 231(4) | 0(0) | 1978 | |
| 12 | ZPG | 6070 | 720 | 36 | 0(0) | 380(50) | 302(42) | 58(8) | 0(0) | 19(0) | 0(0) | 2258(37) | 3506(58) | 289(5) | 0(0) | 1850 | |
| 13 | NOR | 8295 | 225 | 11 | 0(0) | 144(64) | 81(36) | 0(0) | 0(0) | 19(0) | 0(0) | 2400(38) | 3587(57) | 289(5) | 0(0) | 2203 | |
| 14 | E-E | 7226 | 931 | 41 | 0(0) | 344(37) | 540(58) | 47(5) | 0(0) | 19(0) | 0(0) | 2744(38) | 4127(57) | 336(5) | 0(0) | 2538 | |
| 15 | STA | 7486 | 260 | 11 | 0(0) | 120(46) | 140(54) | 0(0) | 0(0) | 19(0) | 0(0) | 2864(38) | 4267(57) | 336(4) | 0(0) | 897 | |
| 16 | NOR | 7812 | 326 | 18 | 0(0) | 127(39) | 182(56) | 17(5) | 0(0) | 19(0) | 0(0) | 2991(38) | 4449(57) | 353(5) | 0(0) | 2529 | |
| 17 | ZPG | 8689 | 877 | 42 | 0(0) | 272(31) | 544(62) | 61(7) | 0(0) | 19(0) | 0(0) | 3263(38) | 4993(57) | 414(5) | 0(0) | 2727 | |
| 18 | NOR | 8976 | 287 | 60 | 0(0) | 123(43) | 184(57) | 0(0) | 0(0) | 19(0) | 0(0) | 3386(38) | 5157(57) | 414(5) | 0(0) | 2816 | |
| 19 | E-E | 9767 | 791 | 161 | 16(2) | 451(57) | 316(40) | 8(1) | 0(0) | 35(0) | 0(0) | 3837(38) | 5473(56) | 422(4) | 0(0) | 3327 | |
| 20 | STA | 10127 | 380 | 73 | 4(1) | 212(59) | 133(37) | 11(3) | 0(0) | 38(0) | 0(0) | 4049(40) | 5606(55) | 433(4) | 0(0) | 1257 | |
| 21 | NOR | 10669 | 542 | 110 | 11(2) | 293(54) | 233(43) | 5(1) | 0(0) | 50(0) | 0(0) | 4342(41) | 5839(55) | 438(4) | 0(0) | 3358 | |
| 22 | ZPG | 11208 | 539 | 56 | 11(2) | 356(66) | 156(29) | 16(3) | 0(0) | 61(1) | 0(0) | 4698(42) | 5995(53) | 454(4) | 0(0) | 3266 | |
| 23 | NOR | 11559 | 351 | 35 | 21(6) | 172(49) | 151(43) | 7(2) | 0(0) | 82(1) | 0(0) | 4870(42) | 6146(53) | 461(4) | 0(0) | 3709 | |
| 24 | E-E | 12833 | 1274 | 127 | 25(2) | 943(74) | 306(24) | 0(0) | 0(0) | 107(1) | 0(0) | 5813(45) | 6452(50) | 481(4) | 0(0) | 4601 | |
| 25 | STA | 13310 | 477 | 47 | 0(0) | 272(57) | 205(43) | 0(0) | 0(0) | 107(1) | 0(0) | 6085(46) | 6657(50) | 461(3) | 0(0) | 1734 | |
| 26 | NOR | 13692 | 382 | 40 | 0(0) | 267(70) | 107(28) | 8(2) | 0(0) | 107(1) | 0(0) | 6352(46) | 6784(49) | 469(3) | 0(0) | 4091 | |
| 27 | ZPG | 14348 | 656 | 71 | 26(4) | 433(66) | 171(26) | 26(4) | 0(0) | 133(1) | 0(0) | 6785(47) | 6935(48) | 495(3) | 0(0) | 3922 | |
| 28 | NOR | 14706 | 358 | 37 | 33(9) | 243(68) | 82(23) | 0(0) | 0(0) | 166(1) | 0(0) | 7028(48) | 7017(48) | 495(3) | 0(0) | 4449 | |
| 29 | E-E | 15877 | 1171 | 111 | 47(4) | 597(51) | 433(37) | 94(8) | 0(0) | 213(1) | 0(0) | 7625(48) | 7450(47) | 589(4) | 0(0) | 5772 | |
| 30 | STA | 16198 | 321 | 43 | 7(2) | 231(72) | 83(26) | 0(0) | 0(0) | 220(1) | 0(0) | 7856(48) | 7533(47) | 589(4) | 0(0) | 2055 | |
| 31 | NOR | 16464 | 266 | 40 | 5(2) | 208(78) | 48(18) | 5(2) | 0(0) | 225(1) | 0(0) | 8064(49) | 7581(46) | 594(4) | 0(0) | 4715 | |
| AUG 1 | ZPG | 16809 | 345 | 41 | 41(12) | 204(59) | 93(27) | 7(2) | 0(0) | 266(2) | 0(0) | 8268(49) | 7674(46) | 601(4) | 0(0) | 4267 | |
| 2 | NOR | 16969 | 160 | 19 | 8(5) | 118(74) | 34(21) | 0(0) | 0(0) | 274(2) | 0(0) | 8386(49) | 7708(45) | 601(4) | 0(0) | 4875 | |
| 3 | E-E | 17503 | 534 | 67 | 43(8) | 374(70) | 117(22) | 0(0) | 0(0) | 317(2) | 0(0) | 8760(50) | 7825(45) | 601(3) | 0(0) | 6306 | |
| 4 | STA | 17850 | 347 | 53 | 21(6) | 288(83) | 38(11) | 0(0) | 0(0) | 338(2) | 0(0) | 9048(51) | 7863(44) | 601(3) | 0(0) | 2402 | |
| 5 | NOR | 18043 | 193 | 25 | 8(4) | 139(72) | 46(24) | 0(0) | 0(0) | 346(2) | 0(0) | 9187(51) | 7909(44) | 601(3) | 0(0) | 5068 | |
| 6 | ZPG | 18154 | 111 | 14 | 0(0) | 56(50) | 40(36) | 15(14) | 0(0) | 346(2) | 0(0) | 9243(51) | 7949(44) | 616(3) | 0(0) | 4378 | |
| 7 | NOR | 18311 | 157 | 61 | 8(5) | 89(57) | 55(35) | 5(3) | 0(0) | 354(2) | 0(0) | 9332(51) | 8004(44) | 621(3) | 0(0) | 5225 | |
| 8 | E-E | 18656 | 345 | 57 | 7(2) | 259(75) | 72(21) | 7(2) | 0(0) | 361(2) | 0(0) | 9591(51) | 8076(43) | 628(3) | 0(0) | 6651 | |
| 9 | STA | 18854 | 198 | 22 | 27(14) | 136(69) | 27(14) | 8(4) | 0(0) | 388(2) | 0(0) | 9727(52) | 8103(43) | 636(3) | 0(0) | 2600 | |
| 10 | NOR | 19030 | 176 | 36 | 14(8) | 102(58) | 49(28) | 11(6) | 0(0) | 402(2) | 0(0) | 9829(52) | 8152(43) | 647(3) | 0(0) | 5401 | |
| 11 | ZPG | 19244 | 214 | 37 | 24(11) | 122(57) | 62(29) | 6(3) | 0(0) | 428(2) | 0(0) | 9951(52) | 8214(43) | 653(3) | 0(0) | 4592 | |
| 12 | NOR | 19411 | 167 | 37 | 13(8) | 99(59) | 50(30) | 5(3) | 0(0) | 439(2) | 0(0) | 10050(52) | 8264(43) | 658(3) | 0(0) | 5568 | |
| 13 | E-E | 19864 | 453 | 95 | 54(12) | 304(67) | 91(20) | 4(1) | 0(0) | 493(2) | 0(0) | 10354(52) | 8355(42) | 662(3) | 0(0) | 7104 | |
| 14 | STA | 19984 | 120 | 28 | 13(11) | 68(57) | 35(29) | 4(3) | 0(0) | 506(3) | 0(0) | 10422(52) | 8390(42) | 666(3) | 0(0) | 2720 | |
| 15 | NOR | 20200 | 216 | 74 | 9(4) | 151(70) | 52(24) | 4(2) | 0(0) | 515(3) | 0(0) | 10573(52) | 8442(42) | 670(3) | 0(0) | 5784 | |

*ZPG=ZAPADNI (ST. GEORGE); NOR=NORTH; E-E=EAST REEF AND EAST CLIFFS; STA=STARAYA ARTIL.O

TABLE 39A - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1957.

| DATE | ROOK- ERY* | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | | | |
|------|---------------|---------------|-------|---------------------------|--|---------|----------|----------|--------|-----------------|--|-----------|----------|---------|-------|-------|----------------------|
| | | NUMBER KILLED | | NO. IN TOOTH SAMPLE | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | | BY AREA, ALL AGES |
| | | TO DATE | DAILY | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | | | |
| JUNE | 27 | NEP | 495 | 495 | 50 | 10(2) | 218(44) | 238(48) | 29(26) | 0(0) | 10(2) | 218(44) | 238(48) | 29(6) | 0(0) | 495 | |
| | 28 | TLK | 738 | 261 | 26 | 0(0) | 151(58) | 110(42) | 0(0) | 0(0) | 10(1) | 369(49) | 348(46) | 29(4) | 0(0) | 261 | |
| | 29 | ZAP | 1946 | 1190 | 117 | 12(1) | 702(59) | 440(37) | 38(3) | 0(0) | 22(1) | 1071(55) | 788(40) | 65(3) | 0(0) | 1190 | |
| | 30 | REF | 2210 | 264 | 26 | 0(0) | 143(54) | 100(36) | 21(8) | 0(0) | 22(1) | 1214(55) | 668(40) | 86(4) | 0(0) | 264 | |
| JULY | 1 | POL | 2576 | 366 | 40 | 0(0) | 146(40) | 183(50) | 37(10) | 0(0) | 22(1) | 1360(53) | 1071(42) | 123(5) | 0(0) | 366 | |
| | 2 | NEP | 3237 | 661 | 67 | 0(0) | 278(42) | 337(51) | 46(7) | 0(0) | 22(1) | 1636(51) | 1408(43) | 169(5) | 0(0) | 1156 | |
| | 3 | TLK | 3534 | 297 | 26 | 0(0) | 148(50) | 125(42) | 24(8) | 0(0) | 22(1) | 1786(51) | 1533(43) | 193(5) | 0(0) | 558 | |
| | 4 | ZAP | 4801 | 1267 | 130 | 0(0) | 636(66) | 405(32) | 13(1) | 0(0) | 22(0) | 2622(55) | 1638(40) | 206(4) | 0(0) | 2457 | |
| | 5 | REF | 5023 | 222 | 22 | 0(0) | 171(77) | 31(14) | 20(9) | 0(0) | 22(0) | 2793(56) | 1969(39) | 226(4) | 0(0) | 466 | |
| | 6 | POL2 | 5432 | 409 | 41 | 8(2) | 201(49) | 192(47) | 8(2) | 0(0) | 30(1) | 2994(55) | 2161(40) | 234(4) | 0(0) | 775 | |
| | 7 | NEP | 6172 | 740 | 75 | 0(0) | 383(49) | 289(39) | 88(12) | 0(0) | 30(0) | 3357(54) | 2450(40) | 322(5) | 0(0) | 1896 | |
| | 8 | TLK | 6596 | 424 | 42 | 0(0) | 292(69) | 123(29) | 9(2) | 0(0) | 30(0) | 3649(55) | 2573(39) | 331(5) | 0(0) | 982 | |
| | 9 | ZAP | 7403 | 807 | 81 | 8(1) | 412(51) | 347(43) | 40(5) | 0(0) | 38(1) | 4061(55) | 2920(39) | 371(5) | 0(0) | 3264 | |
| | 10 | REF | 7973 | 570 | 51 | 0(0) | 266(47) | 291(51) | 11(2) | 0(0) | 38(0) | 4329(54) | 3211(40) | 382(5) | 0(0) | 1056 | |
| | 11 | POL | 8247 | 274 | 26 | 0(0) | 178(65) | 85(31) | 11(4) | 0(0) | 38(0) | 4507(55) | 3296(40) | 393(5) | 0(0) | 1049 | |
| | 12 | NEP | 9471 | 1224 | 125 | 0(0) | 539(44) | 563(46) | 98(8) | 0(0) | 38(0) | 5046(53) | 3859(41) | 491(5) | 0(0) | 3120 | |
| | 13 | TLK2 | 10028 | 557 | 56 | 11(2) | 317(57) | 212(38) | 17(3) | 0(0) | 49(0) | 5363(53) | 4071(41) | 508(5) | 0(0) | 1539 | |
| | 14 | ZAP | 11451 | 1423 | 140 | 0(0) | 1039(73) | 370(26) | 14(1) | 0(0) | 49(0) | 6402(56) | 4441(39) | 522(5) | 0(0) | 4687 | |
| | 15 | REF | 11756 | 305 | 31 | 0(0) | 195(64) | 110(36) | 0(0) | 0(0) | 49(0) | 6597(56) | 4551(39) | 522(4) | 0(0) | 1361 | |
| | 16 | POL | 12060 | 304 | 12 | 24(8) | 180(59) | 100(33) | 0(0) | 0(0) | 73(1) | 6777(56) | 4651(39) | 522(4) | 0(0) | 1353 | |
| | 17 | NEP | 12969 | 909 | 93 | 0(0) | 609(67) | 291(32) | 9(1) | 0(0) | 73(1) | 7386(57) | 4942(38) | 531(4) | 0(0) | 4029 | |
| | 18 | TLK | 13499 | 530 | 53 | 0(0) | 339(64) | 191(36) | 0(0) | 0(0) | 73(1) | 7725(57) | 5133(38) | 531(4) | 0(0) | 2069 | |
| | 19 | ZAP | 14935 | 1436 | 144 | 14(1) | 1164(61) | 244(17) | 14(1) | 0(0) | 87(1) | 8889(60) | 5377(36) | 545(4) | 0(0) | 6123 | |
| | 20 | REF | 15169 | 234 | 23 | 0(0) | 152(65) | 82(35) | 0(0) | 0(0) | 87(1) | 9041(60) | 5459(36) | 545(4) | 0(0) | 1595 | |
| | 21 | POL2 | 15661 | 492 | 49 | 10(2) | 339(69) | 143(29) | 0(0) | 0(0) | 97(1) | 9380(60) | 5602(36) | 545(3) | 0(0) | 1845 | |
| | 22 | NEP | 16659 | 998 | 101 | 10(1) | 689(69) | 279(28) | 20(2) | 0(0) | 107(1) | 10069(60) | 5881(35) | 565(3) | 0(0) | 5027 | |
| | 23 | TLK2 | 17426 | 767 | 76 | 0(0) | 598(78) | 161(21) | 8(1) | 0(0) | 107(1) | 10667(61) | 6042(35) | 573(3) | 0(0) | 2836 | |
| | 24 | ZAP | 19863 | 2457 | 264 | 25(1) | 1667(76) | 540(22) | 25(1) | 0(0) | 132(1) | 12534(63) | 6582(33) | 598(3) | 0(0) | 8580 | |
| | 25 | REF | 20281 | 398 | 39 | 0(0) | 294(74) | 84(21) | 20(5) | 0(0) | 132(1) | 12828(63) | 6666(33) | 618(3) | 0(0) | 1993 | |
| | 26 | POL | 20934 | 653 | 67 | 13(2) | 522(80) | 118(18) | 0(0) | 0(0) | 145(1) | 13350(64) | 6784(32) | 618(3) | 0(0) | 2498 | |
| | 27 | NEP | 21919 | 985 | 109 | 69(7) | 788(80) | 128(13) | 0(0) | 0(0) | 214(1) | 14138(65) | 6912(32) | 618(3) | 0(0) | 6012 | |
| | 28 | TLK | 22571 | 652 | 66 | 20(3) | 476(73) | 156(24) | 0(0) | 0(0) | 234(1) | 14614(65) | 7068(31) | 618(3) | 0(0) | 3488 | |
| | 29 | ZAP | 24367 | 1796 | 202 | 90(5) | 1437(80) | 251(14) | 18(1) | 0(0) | 324(1) | 16051(66) | 7319(30) | 638(3) | 0(0) | 10376 | |
| | 30 | REF | 24737 | 370 | 34 | 11(3) | 270(73) | 89(24) | 0(0) | 0(0) | 335(1) | 16321(66) | 7408(30) | 636(3) | 0(0) | 2363 | |
| | 31 | POL2 | 25399 | 662 | 67 | 40(6) | 483(73) | 139(21) | 0(0) | 0(0) | 375(1) | 16604(66) | 7547(30) | 638(3) | 0(0) | 3160 | |
| AUG | 1 | NEP | 26283 | 884 | 104 | 97(11) | 628(71) | 159(18) | 0(0) | 0(0) | 472(2) | 17432(66) | 7706(29) | 636(2) | 0(0) | 6896 | |
| | 2 | TLK | 27211 | 928 | 116 | 83(9) | 697(75) | 148(16) | 0(0) | 0(0) | 555(2) | 18129(67) | 7854(29) | 636(2) | 0(0) | 4416 | |
| | 3 | ZAP | 28471 | 1260 | 145 | 76(6) | 1021(81) | 151(12) | 12(1) | 0(0) | 631(2) | 19150(67) | 8005(28) | 648(2) | 0(0) | 11636 | |
| | 4 | REF | 28967 | 496 | 70 | 69(14) | 337(68) | 79(16) | 11(2) | 0(0) | 700(2) | 19487(67) | 8084(28) | 659(2) | 0(0) | 2859 | |
| | 5 | POL | 29454 | 487 | 61 | 39(8) | 336(69) | 112(23) | 0(0) | 0(0) | 739(3) | 19823(67) | 8196(28) | 659(2) | 0(0) | 3647 | |
| | 6 | NEP | 31123 | 1669 | 213 | 134(8) | 1285(77) | 234(14) | 16(1) | 0(0) | 873(3) | 21108(68) | 8430(27) | 675(2) | 0(0) | 8565 | |
| | 7 | TLK | 31884 | 761 | 68 | 0(20) | 639(84) | 122(16) | 0(0) | 0(0) | 873(3) | 21747(68) | 8552(27) | 675(2) | 0(0) | 5177 | |
| | 8 | ZAP | 33095 | 1211 | 115 | 73(6) | 968(80) | 170(14) | 0(0) | 0(0) | 946(3) | 22715(69) | 8722(26) | 675(2) | 0(0) | 12847 | |
| | 9 | REF | 33523 | 428 | 27 | 0(0) | 364(85) | 64(15) | 0(0) | 0(0) | 946(3) | 23079(69) | 8786(26) | 675(2) | 0(0) | 3287 | |
| | 10 | POL | 34055 | 532 | 39 | 69(13) | 394(74) | 69(13) | 0(0) | 0(0) | 1015(3) | 23473(69) | 8855(26) | 675(2) | 0(0) | 4179 | |
| | | COM | 35052 | 997 | 0 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 1015(3) | 23473(69) | 8855(25) | 675(2) | 0(0) | 997 | |

*NEP=NORTHEAST POINT (MORJOVI AND VOSTOCHNI); TLK=TOLSTOI, LUKANIN, AND KITOVI; POL=POLOVINA, 2 POLOVINA CLIFFS, AND LITTLE POLOVINA; ZAP=ZAPADNI; REF=REEF, GORBATCH, AND ARDIQUEN; COM=COMBINED ROOKERY.2

TABLE 39B - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. GEORGE ISLAND, 1957.

| DATE | ROOK-ERY* | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | | | |
|---------|-----------|---------------|-------|---------------------|---|---------|---------|--------|------|-----------------|---|----------|--------|------|------|--|-------------------|
| | | NUMBER KILLED | | NO. IN TOOTH SAMPLE | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | | BY AREA, ALL AGES |
| | | TO DATE | DAILY | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | | | |
| JUNE 27 | ZPG | 369 | 369 | 37 | 0(0) | 162(44) | 170(46) | 37(10) | 0(0) | 0(0) | 162(44) | 170(46) | 37(10) | 0(0) | 369 | | |
| 28 | NOR | 626 | 257 | 27 | 10(4) | 134(52) | 103(40) | 10(4) | 0(0) | 10(2) | 296(47) | 273(44) | 47(8) | 0(0) | 257 | | |
| 29 | E-E | 791 | 165 | 17 | 0(0) | 87(53) | 78(47) | 0(0) | 0(0) | 10(1) | 383(48) | 351(44) | 47(6) | 0(0) | 165 | | |
| 30 | STA | 912 | 121 | 13 | 0(0) | 56(46) | 56(46) | 9(7) | 0(0) | 10(1) | 439(48) | 407(45) | 56(6) | 0(0) | 121 | | |
| JULY 1 | NOR | 1021 | 109 | 11 | 10(9) | 39(36) | 50(46) | 10(9) | 0(0) | 20(2) | 478(47) | 457(45) | 66(6) | 0(0) | 366 | | |
| 2 | ZPG | 1280 | 259 | 26 | 0(0) | 140(54) | 119(46) | 0(0) | 0(0) | 20(2) | 618(48) | 576(45) | 66(5) | 0(0) | 628 | | |
| 3 | NOR | 1393 | 113 | 12 | 0(0) | 28(25) | 76(67) | 9(8) | 0(0) | 20(1) | 646(46) | 652(47) | 75(5) | 0(0) | 479 | | |
| 4 | E-E | 1581 | 188 | 17 | 0(0) | 55(29) | 122(65) | 11(6) | 0(0) | 20(1) | 701(44) | 774(49) | 86(5) | 0(0) | 353 | | |
| 5 | STA | 1679 | 98 | 9 | 0(0) | 32(33) | 66(67) | 0(0) | 0(0) | 20(1) | 733(44) | 840(50) | 86(5) | 0(0) | 219 | | |
| 6 | NOR | 1809 | 130 | 12 | 0(0) | 55(42) | 75(58) | 0(0) | 0(0) | 20(1) | 788(44) | 915(51) | 86(5) | 0(0) | 609 | | |
| 7 | ZPG | 2041 | 232 | 24 | 0(0) | 155(67) | 58(25) | 19(8) | 0(0) | 20(1) | 943(46) | 973(48) | 105(5) | 0(0) | 860 | | |
| 8 | NOR | 2131 | 90 | 9 | 0(0) | 50(56) | 40(44) | 0(0) | 0(0) | 20(1) | 993(47) | 1013(48) | 105(5) | 0(0) | 699 | | |
| 9 | E-E | 2344 | 213 | 22 | 0(0) | 117(55) | 87(41) | 9(4) | 0(0) | 20(1) | 1110(47) | 1100(47) | 114(5) | 0(0) | 566 | | |
| 10 | STA | 2428 | 84 | 9 | 0(0) | 9(11) | 47(56) | 28(33) | 0(0) | 20(1) | 1119(46) | 1147(47) | 142(6) | 0(0) | 303 | | |
| 11 | NOR | 2523 | 95 | 10 | 0(0) | 47(49) | 48(51) | 0(0) | 0(0) | 20(1) | 1166(46) | 1195(47) | 142(6) | 0(0) | 794 | | |
| 12 | ZPG | 2788 | 265 | 26 | 0(0) | 143(54) | 93(35) | 29(11) | 0(0) | 20(1) | 1309(47) | 1288(46) | 171(6) | 0(0) | 1125 | | |
| 13 | NOR | 2892 | 104 | 11 | 0(0) | 67(64) | 37(38) | 0(0) | 0(0) | 20(1) | 1376(48) | 1325(46) | 171(6) | 0(0) | 898 | | |
| 14 | E-E | 3234 | 342 | 34 | 21(6) | 191(56) | 99(29) | 31(9) | 0(0) | 41(1) | 1567(48) | 1424(44) | 202(6) | 0(0) | 908 | | |
| 15 | STA | 3381 | 147 | 15 | 0(0) | 40(27) | 98(67) | 9(6) | 0(0) | 41(1) | 1607(48) | 1522(45) | 211(6) | 0(0) | 450 | | |
| 16 | NOR | 3525 | 144 | 15 | 0(0) | 57(40) | 58(40) | 29(20) | 0(0) | 41(1) | 1664(47) | 1580(45) | 240(7) | 0(0) | 1042 | | |
| 17 | ZPG | 3979 | 454 | 45 | 0(0) | 254(56) | 182(40) | 18(4) | 0(0) | 41(1) | 1918(48) | 1762(44) | 258(6) | 0(0) | 1579 | | |
| 18 | NOR | 4105 | 126 | 13 | 0(0) | 87(69) | 39(31) | 0(0) | 0(0) | 41(1) | 2005(49) | 1801(44) | 258(6) | 0(0) | 1168 | | |
| 19 | E-E | 4356 | 251 | 26 | 0(0) | 163(65) | 78(31) | 10(4) | 0(0) | 41(1) | 2168(50) | 1879(43) | 268(6) | 0(0) | 1159 | | |
| 20 | STA | 4492 | 136 | 14 | 0(0) | 68(50) | 39(29) | 29(21) | 0(0) | 41(1) | 2236(50) | 1918(43) | 297(7) | 0(0) | 586 | | |
| 21 | NOR | 4667 | 175 | 17 | 0(0) | 93(53) | 61(35) | 21(12) | 0(0) | 41(1) | 2329(50) | 1979(42) | 318(7) | 0(0) | 1343 | | |
| 22 | ZPG | 4972 | 305 | 29 | 0(0) | 137(45) | 125(41) | 43(14) | 0(0) | 41(1) | 2466(50) | 2104(42) | 361(7) | 0(0) | 1884 | | |
| 23 | NOR | 5139 | 167 | 17 | 0(0) | 48(29) | 109(65) | 10(6) | 0(0) | 41(1) | 2514(49) | 2213(43) | 371(7) | 0(0) | 1510 | | |
| 24 | E-E | 5830 | 691 | 68 | 28(4) | 421(61) | 221(32) | 21(3) | 0(0) | 69(1) | 2935(50) | 2434(42) | 392(7) | 0(0) | 1850 | | |
| 25 | STA | 6051 | 221 | 21 | 11(5) | 126(57) | 84(38) | 0(0) | 0(0) | 80(1) | 3061(51) | 2518(42) | 392(6) | 0(0) | 807 | | |
| 26 | NOR | 6257 | 206 | 21 | 0(0) | 117(57) | 89(43) | 0(0) | 0(0) | 80(1) | 3178(51) | 2607(42) | 392(6) | 0(0) | 1716 | | |
| 27 | ZPG | 6818 | 561 | 56 | 28(5) | 410(73) | 112(20) | 11(2) | 0(0) | 108(2) | 3588(53) | 2719(40) | 403(6) | 0(0) | 2445 | | |
| 28 | NOR | 6936 | 118 | 13 | 0(0) | 81(69) | 37(31) | 0(0) | 0(0) | 108(2) | 3669(53) | 2756(40) | 403(6) | 0(0) | 1834 | | |
| 29 | E-E | 7448 | 512 | 49 | 0(0) | 420(82) | 92(18) | 0(0) | 0(0) | 108(1) | 4089(55) | 2848(38) | 403(5) | 0(0) | 2362 | | |
| 30 | STA | 7659 | 211 | 21 | 11(5) | 160(76) | 21(10) | 19(9) | 0(0) | 119(2) | 4249(55) | 2869(37) | 422(6) | 0(0) | 1018 | | |
| 31 | NOR | 7816 | 157 | 16 | 9(6) | 60(38) | 79(50) | 9(6) | 0(0) | 128(2) | 4309(55) | 2948(38) | 431(6) | 0(0) | 1991 | | |
| AUG 1 | ZPG | 8221 | 405 | 50 | 49(12) | 324(80) | 24(6) | 8(2) | 0(0) | 177(2) | 4633(56) | 2972(36) | 439(5) | 0(0) | 2850 | | |
| 2 | NOR | 8350 | 129 | 19 | 34(26) | 48(37) | 47(36) | 0(0) | 0(0) | 211(3) | 4681(56) | 3019(36) | 439(5) | 0(0) | 2120 | | |
| 3 | E-E | 8834 | 484 | 51 | 29(6) | 349(72) | 77(16) | 29(6) | 0(0) | 240(3) | 5030(57) | 3096(35) | 468(5) | 0(0) | 2846 | | |
| 4 | STA | 9073 | 239 | 33 | 7(3) | 189(79) | 43(18) | 0(0) | 0(0) | 247(3) | 5219(58) | 3139(35) | 468(5) | 0(0) | 1257 | | |
| 5 | NOR | 9324 | 251 | 68 | 30(12) | 191(76) | 22(9) | 8(3) | 0(0) | 277(3) | 5410(58) | 3161(34) | 476(5) | 0(0) | 2371 | | |
| 6 | ZPG | 9978 | 654 | 69 | 124(19) | 484(74) | 46(7) | 0(0) | 0(0) | 401(4) | 5894(59) | 3207(32) | 476(5) | 0(0) | 3504 | | |
| 7 | NOR | 10110 | 132 | 32 | 25(19) | 91(69) | 12(9) | 4(3) | 0(0) | 426(4) | 5985(59) | 3219(32) | 480(5) | 0(0) | 2503 | | |
| 8 | E-E | 10680 | 570 | 84 | 80(14) | 433(76) | 40(7) | 17(3) | 0(0) | 506(5) | 6418(60) | 3259(31) | 497(5) | 0(0) | 3416 | | |
| 9 | STA | 10917 | 237 | 22 | 33(14) | 152(64) | 43(18) | 9(4) | 0(0) | 539(5) | 6570(60) | 3302(30) | 506(5) | 0(0) | 1494 | | |
| 10 | NOR | 11042 | 125 | 23 | 16(13) | 81(65) | 28(22) | 0(0) | 0(0) | 555(5) | 6651(60) | 3330(30) | 506(5) | 0(0) | 2628 | | |
| | COM | 11196 | 154 | 0 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 555(5) | 6651(59) | 3330(30) | 506(5) | 0(0) | 154 | | |

*ZPG=ZAPADNI (ST. GEORGE); NOR=NORTH; E-E=EAST REEF AND EAST CLIFFS; STA=STARAYA ARTIL; COM=COMBINED ROOKERY.

TABLE 40A - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1958.

| DATE | ROOK-ERY# | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | | BY AREA, ALL AGES | |
|------|-----------|---------------|-------|---------------------------|--|--------|----------|---------|-------|-----------------|--|--------|-----------|----------|-------|----------------------|--------|
| | | NUMBER KILLED | | NO. IN TOOTH SAMPLE | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | | |
| | | TO DATE | DAILY | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | | | |
| JUNE | 27 | NEP | 893 | 893 | 88 | 0(0) | 653(73) | 240(27) | 0(0) | 0(0) | 0(0) | 0(0) | 653(73) | 240(27) | 0(0) | 0(0) | 893 |
| | 28 | TLK | 1246 | 353 | 35 | 0(0) | 282(80) | 71(20) | 0(0) | 0(0) | 0(0) | 0(0) | 935(75) | 311(25) | 0(0) | 0(0) | 353 |
| | 29 | ZAP | 1874 | 628 | 63 | 0(0) | 458(73) | 170(27) | 0(0) | 0(0) | 0(0) | 0(0) | 1393(74) | 481(26) | 0(0) | 0(0) | 628 |
| | 30 | REF | 2150 | 276 | 29 | 0(0) | 171(82) | 105(38) | 0(0) | 0(0) | 0(0) | 0(0) | 1564(73) | 586(27) | 0(0) | 0(0) | 276 |
| JULY | 1 | POL | 2735 | 585 | 59 | 12(2) | 427(73) | 146(25) | 0(0) | 0(0) | 0(0) | 12(0) | 1991(73) | 732(27) | 0(0) | 0(0) | 585 |
| | 2 | NEP | 3628 | 893 | 93 | 0(0) | 750(84) | 134(15) | 9(1) | 0(0) | 0(0) | 12(0) | 2741(76) | 886(24) | 9(0) | 0(0) | 1786 |
| | 3 | TLK | 4036 | 408 | 40 | 0(0) | 253(82) | 155(38) | 0(0) | 0(0) | 0(0) | 12(0) | 2994(74) | 1021(25) | 9(0) | 0(0) | 761 |
| | 4 | ZAP | 4799 | 763 | 75 | 8(1) | 580(76) | 175(23) | 0(0) | 0(0) | 0(0) | 20(0) | 3574(74) | 1196(25) | 9(0) | 0(0) | 1391 |
| | 5 | REF | 4906 | 107 | 11 | 0(0) | 68(64) | 39(38) | 0(0) | 0(0) | 0(0) | 20(0) | 3642(74) | 1235(25) | 9(0) | 0(0) | 383 |
| | 6 | POL | 5400 | 494 | 47 | 0(0) | 346(70) | 148(30) | 0(0) | 0(0) | 0(0) | 20(0) | 3988(74) | 1383(26) | 9(0) | 0(0) | 1079 |
| | 7 | NEP | 7193 | 1793 | 180 | 0(0) | 1291(72) | 502(28) | 0(0) | 0(0) | 0(0) | 20(0) | 5279(73) | 1865(26) | 9(0) | 0(0) | 3579 |
| | 8 | TLK | 8173 | 980 | 96 | 0(0) | 755(77) | 225(23) | 0(0) | 0(0) | 0(0) | 20(0) | 6034(74) | 2110(26) | 9(0) | 0(0) | 1741 |
| | 9 | ZAP | 9550 | 1377 | 137 | 0(0) | 1047(76) | 330(24) | 0(0) | 0(0) | 0(0) | 20(0) | 7081(74) | 2440(26) | 9(0) | 0(0) | 2768 |
| | 10 | REFO | 10075 | 525 | 52 | 11(2) | 383(73) | 131(25) | 0(0) | 0(0) | 0(0) | 31(0) | 7464(74) | 2571(26) | 9(0) | 0(0) | 908 |
| | 11 | POLO | 10743 | 668 | 71 | 7(1) | 574(86) | 87(13) | 0(0) | 0(0) | 0(0) | 38(0) | 8038(75) | 2658(25) | 9(0) | 0(0) | 1747 |
| | 12 | NEP | 12121 | 1378 | 132 | 14(1) | 1102(80) | 262(19) | 0(0) | 0(0) | 0(0) | 52(0) | 9140(75) | 2920(24) | 9(0) | 0(0) | 4957 |
| | 13 | TLK | 12856 | 735 | 78 | 7(1) | 566(77) | 162(22) | 0(0) | 0(0) | 0(0) | 59(0) | 9706(75) | 3082(24) | 9(0) | 0(0) | 24760 |
| | 14 | ZAP | 15335 | 2479 | 242 | 0(0) | 2008(81) | 471(19) | 0(0) | 0(0) | 0(0) | 59(0) | 11714(76) | 3553(23) | 9(0) | 0(0) | 5247 |
| | 15 | REF | 15809 | 474 | 48 | 10(2) | 327(69) | 137(29) | 0(0) | 0(0) | 0(0) | 69(0) | 12041(76) | 3690(23) | 9(0) | 0(0) | 1382 |
| | 16 | POL | 16918 | 1109 | 120 | 0(0) | 876(79) | 222(20) | 11(1) | 0(0) | 0(0) | 69(0) | 12917(76) | 3912(23) | 20(0) | 0(0) | 2856 |
| | 17 | NEP | 18697 | 1779 | 193 | 0(0) | 1494(84) | 285(16) | 0(0) | 0(0) | 0(0) | 69(0) | 14411(77) | 4197(22) | 20(0) | 0(0) | 6736 |
| | 18 | TLK | 19885 | 1188 | 120 | 12(1) | 962(81) | 190(16) | 24(2) | 0(0) | 0(0) | 81(0) | 15373(77) | 4387(22) | 44(0) | 0(0) | 3664 |
| | 19 | ZAP | 21409 | 1524 | 154 | 31(2) | 1280(84) | 213(14) | 0(0) | 0(0) | 0(0) | 112(1) | 16653(78) | 4600(21) | 44(0) | 0(0) | 6771 |
| | 20 | REF | 21836 | 427 | 46 | 9(2) | 354(83) | 64(15) | 0(0) | 0(0) | 0(0) | 121(1) | 17007(78) | 4664(21) | 44(0) | 0(0) | 1809 |
| | 21 | POL | 22709 | 873 | 91 | 17(2) | 681(78) | 175(20) | 0(0) | 0(0) | 0(0) | 138(1) | 17688(78) | 4839(21) | 44(0) | 0(0) | 3729 |
| | 22 | NEP | 24635 | 1926 | 184 | 38(2) | 1772(92) | 116(6) | 0(0) | 0(0) | 0(0) | 176(1) | 19460(79) | 4955(20) | 44(0) | 0(0) | 8662 |
| | 23 | TLK | 25679 | 1044 | 98 | 10(1) | 909(87) | 115(11) | 10(1) | 0(0) | 0(0) | 186(1) | 20369(79) | 5070(20) | 54(0) | 0(0) | 4708 |
| | 24 | ZAP | 27193 | 1514 | 150 | 30(2) | 1332(88) | 152(10) | 0(0) | 0(0) | 0(0) | 216(1) | 21701(80) | 5222(19) | 54(0) | 0(0) | 8285 |
| | 25 | REF | 27623 | 430 | 44 | 0(0) | 391(91) | 39(9) | 0(0) | 0(0) | 0(0) | 216(1) | 22092(80) | 5261(19) | 54(0) | 0(0) | 2239 |
| | 26 | POL | 28222 | 599 | 60 | 12(2) | 569(95) | 18(3) | 0(0) | 0(0) | 0(0) | 228(1) | 22661(80) | 5279(19) | 54(0) | 0(0) | 4328 |
| | 27 | NEP | 29421 | 1199 | 129 | 96(8) | 971(81) | 132(11) | 0(0) | 0(0) | 0(0) | 324(1) | 23632(80) | 5411(18) | 54(0) | 0(0) | 98610 |
| | 28 | TLK | 30260 | 839 | 87 | 42(5) | 780(93) | 17(2) | 0(0) | 0(0) | 0(0) | 366(1) | 24412(81) | 5428(18) | 54(0) | 0(0) | 5547 |
| | 29 | ZAP | 32113 | 1853 | 196 | 74(4) | 1686(91) | 93(5) | 0(0) | 0(0) | 0(0) | 440(1) | 26098(81) | 5521(17) | 54(0) | 0(0) | 101380 |
| | 30 | REF | 32483 | 370 | 42 | 0(0) | 352(95) | 18(5) | 0(0) | 0(0) | 0(0) | 440(1) | 26450(81) | 5539(17) | 54(0) | 0(0) | 2609 |
| | 31 | POL | 33325 | 842 | 86 | 59(7) | 766(91) | 17(2) | 0(0) | 0(0) | 0(0) | 499(1) | 27216(82) | 5556(17) | 54(0) | 0(0) | 5170 |
| AUG | 1 | NEP | 33367 | 42 | 12 | 32(76) | 10(24) | 0(0) | 0(0) | 0(0) | 0(0) | 531(2) | 27226(82) | 5556(17) | 54(0) | 0(0) | 9903 |
| | 2 | TLK | 33379 | 12 | 0 | 3(25) | 9(75) | 0(0) | 0(0) | 0(0) | 0(0) | 534(2) | 27235(82) | 5556(17) | 54(0) | 0(0) | 5559 |
| | 3 | ZAP | 33431 | 52 | 9 | 6(12) | 40(77) | 6(12) | 0(0) | 0(0) | 0(0) | 540(2) | 27275(82) | 5562(17) | 54(0) | 0(0) | 10190 |
| | 4 | REF | 33466 | 35 | 8 | 0(0) | 31(89) | 4(11) | 0(0) | 0(0) | 0(0) | 540(2) | 27306(82) | 5566(17) | 54(0) | 0(0) | 2644 |
| | 5 | POL | 33651 | 185 | 0 | 28(15) | 148(80) | 9(5) | 0(0) | 0(0) | 0(0) | 568(2) | 27454(82) | 5575(17) | 54(0) | 0(0) | 5355 |
| | 6 | NEP | 33871 | 220 | 31 | 77(35) | 143(65) | 0(0) | 0(0) | 0(0) | 0(0) | 645(2) | 27597(81) | 5575(16) | 54(0) | 0(0) | 10123 |
| | 7 | TLK | 33949 | 78 | 12 | 33(42) | 45(58) | 0(0) | 0(0) | 0(0) | 0(0) | 678(2) | 27642(81) | 5575(16) | 54(0) | 0(0) | 5637 |
| | 8 | ZAP | 34184 | 235 | 28 | 92(39) | 134(57) | 9(4) | 0(0) | 0(0) | 0(0) | 770(2) | 27776(81) | 5584(16) | 54(0) | 0(0) | 104250 |
| | 9 | REF | 34312 | 128 | 15 | 68(53) | 51(40) | 9(7) | 0(0) | 0(0) | 0(0) | 838(2) | 27827(81) | 5593(16) | 54(0) | 0(0) | 2772 |
| | 10 | POL | 34401 | 89 | 0 | 47(53) | 36(40) | 6(7) | 0(0) | 0(0) | 0(0) | 885(3) | 27863(81) | 5598(16) | 54(0) | 0(0) | 5444 |

*NEP=NORTHEAST POINT (MORJOVI AND VOSTOCHNI); TLK=TOLSTOI, LUKANIN, AND KITOVI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; ZAP=ZAPADNI; REF=REEF, GORBATY, AND ARDIQUEN.O

TABLE 40B - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. GEORGE ISLAND, 1958.

| DATE | ROOK- ERY# | DAILY KILL | | | | CUMULATIVE KILL | | | | | | BY AREA, ALL AGES | | | |
|---------|---------------|--------------------------|---------------------------|---------------------------|--|--|--|--|--|--|--|----------------------|--------|------|------|
| | | NUMBER KILLED TO DATE | NO. IN DAILY SAMPLE | NO. IN TOOTH SAMPLE | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | |
| JUNE 27 | ZPG | 199 | 199 | 20 | 0(0) | 60(30) | 139(70) | 0(0) | 0(0) | 0(0) | 60(30) | 139(70) | 0(0) | 0(0) | 199 |
| 28 | NOR | 485 | 286 | 28 | 11(4) | 192(67) | 72(25) | 11(4) | 0(0) | 11(2) | 252(52) | 211(44) | 11(2) | 0(0) | 286 |
| 29 | E-E | 719 | 234 | 24 | 0(0) | 89(38) | 136(58) | 9(4) | 0(0) | 11(2) | 341(47) | 347(48) | 20(3) | 0(0) | 234 |
| 30 | STA | 858 | 139 | 14 | 0(0) | 40(29) | 99(71) | 0(0) | 0(0) | 11(1) | 381(44) | 446(52) | 20(2) | 0(0) | 139 |
| JULY 1 | NOR | 1036 | 178 | 17 | 0(0) | 94(53) | 84(47) | 0(0) | 0(0) | 11(1) | 475(46) | 530(51) | 20(2) | 0(0) | 464 |
| 2 | ZPG | 1220 | 184 | 18 | 0(0) | 81(44) | 103(56) | 0(0) | 0(0) | 11(1) | 556(46) | 633(52) | 20(2) | 0(0) | 383 |
| 3 | NOR | 1334 | 114 | 12 | 0(0) | 38(33) | 76(67) | 0(0) | 0(0) | 11(1) | 594(45) | 709(53) | 20(1) | 0(0) | 578 |
| 4 | E-E | 1551 | 217 | 21 | 0(0) | 113(52) | 93(43) | 11(5) | 0(0) | 11(1) | 707(46) | 802(52) | 31(2) | 0(0) | 451 |
| 5 | STA | 1627 | 76 | 8 | 0(0) | 48(63) | 28(37) | 0(0) | 0(0) | 11(1) | 755(46) | 830(51) | 31(2) | 0(0) | 215 |
| 6 | NOR | 1847 | 220 | 22 | 0(0) | 121(55) | 90(41) | 9(4) | 0(0) | 11(1) | 876(47) | 920(50) | 40(2) | 0(0) | 798 |
| 7 | ZPG | 2322 | 475 | 48 | 0(0) | 247(52) | 228(48) | 0(0) | 0(0) | 11(0) | 1123(48) | 1148(49) | 40(2) | 0(0) | 858 |
| 8 | NOR | 2537 | 215 | 21 | 0(0) | 153(71) | 51(24) | 11(5) | 0(0) | 11(0) | 1276(50) | 1199(47) | 51(2) | 0(0) | 1013 |
| 9 | E-E | 2883 | 346 | 35 | 0(0) | 197(57) | 138(40) | 11(3) | 0(0) | 11(0) | 1473(51) | 1337(46) | 62(2) | 0(0) | 797 |
| 10 | STA | 3056 | 173 | 18 | 0(0) | 87(50) | 76(44) | 10(6) | 0(0) | 11(0) | 1560(51) | 1413(46) | 72(2) | 0(0) | 388 |
| 11 | NOR | 3246 | 190 | 19 | 0(0) | 150(79) | 40(21) | 0(0) | 0(0) | 11(0) | 1710(53) | 1453(45) | 72(2) | 0(0) | 1203 |
| 12 | ZPG | 3682 | 436 | 44 | 0(0) | 266(61) | 170(39) | 0(0) | 0(0) | 11(0) | 1976(54) | 1623(44) | 72(2) | 0(0) | 1294 |
| 13 | NOR | 3830 | 148 | 15 | 19(13) | 110(74) | 19(13) | 0(0) | 0(0) | 30(1) | 2086(54) | 1642(43) | 72(2) | 0(0) | 1351 |
| 14 | E-E | 4416 | 586 | 57 | 12(2) | 351(60) | 223(38) | 0(0) | 0(0) | 42(1) | 2437(55) | 1865(42) | 72(2) | 0(0) | 1383 |
| 15 | STA | 4627 | 211 | 22 | 0(0) | 162(77) | 49(23) | 0(0) | 0(0) | 42(1) | 2599(56) | 1914(41) | 72(2) | 0(0) | 599 |
| 16 | NOR | 5105 | 478 | 48 | 0(0) | 368(77) | 100(21) | 0(0) | 0(0) | 42(1) | 2967(58) | 2014(39) | 72(1) | 0(0) | 1829 |
| 17 | ZPG | 5512 | 407 | 40 | 0(0) | 265(65) | 142(35) | 0(0) | 0(0) | 42(1) | 3232(59) | 2156(39) | 72(1) | 0(0) | 1701 |
| 18 | NOR | 5701 | 189 | 20 | 0(0) | 161(85) | 28(15) | 0(0) | 0(0) | 42(1) | 3393(60) | 2184(38) | 72(1) | 0(0) | 2018 |
| 19 | E-E | 6135 | 434 | 44 | 0(0) | 382(88) | 52(12) | 0(0) | 0(0) | 42(1) | 3775(62) | 2236(36) | 72(1) | 0(0) | 1817 |
| 20 | STA | 6256 | 121 | 13 | 0(0) | 75(62) | 46(38) | 0(0) | 0(0) | 42(1) | 3850(62) | 2282(36) | 72(1) | 0(0) | 720 |
| 21 | NOR | 6603 | 347 | 34 | 0(0) | 288(83) | 59(17) | 0(0) | 0(0) | 42(1) | 4138(63) | 2341(35) | 72(1) | 0(0) | 2365 |
| 22 | ZPG | 7221 | 618 | 64 | 19(3) | 500(81) | 99(16) | 0(0) | 0(0) | 61(1) | 4638(64) | 2440(34) | 72(1) | 0(0) | 2319 |
| 23 | NOR | 7490 | 269 | 28 | 0(0) | 239(89) | 30(11) | 0(0) | 0(0) | 61(1) | 4877(65) | 2470(33) | 72(1) | 0(0) | 2634 |
| 24 | E-E | 8114 | 624 | 67 | 31(5) | 499(80) | 81(13) | 13(2) | 0(0) | 92(1) | 5376(66) | 2551(31) | 85(1) | 0(0) | 2441 |
| 25 | STA | 8238 | 124 | 13 | 0(0) | 114(92) | 10(8) | 0(0) | 0(0) | 92(1) | 5490(67) | 2561(31) | 85(1) | 0(0) | 844 |
| 26 | NOR | 8553 | 315 | 33 | 10(3) | 285(90) | 10(3) | 10(3) | 0(0) | 102(1) | 5775(68) | 2571(30) | 95(1) | 0(0) | 2949 |
| 27 | ZPG | 9255 | 702 | 69 | 21(3) | 590(84) | 91(13) | 0(0) | 0(0) | 123(1) | 6365(69) | 2662(29) | 95(1) | 0(0) | 3021 |
| 28 | NOR | 9465 | 210 | 30 | 6(3) | 198(94) | 6(3) | 0(0) | 0(0) | 129(1) | 6563(69) | 2668(28) | 95(1) | 0(0) | 3159 |
| 29 | E-E | 9879 | 414 | 54 | 29(7) | 323(78) | 62(15) | 0(0) | 0(0) | 158(2) | 6886(70) | 2730(28) | 95(1) | 0(0) | 2855 |
| 30 | STA | 9965 | 86 | 18 | 0(0) | 76(88) | 5(6) | 5(6) | 0(0) | 158(2) | 6962(70) | 2735(27) | 100(1) | 0(0) | 930 |
| 31 | NOR | 10295 | 330 | 52 | 13(4) | 284(86) | 33(10) | 0(0) | 0(0) | 171(2) | 7246(70) | 2768(27) | 100(1) | 0(0) | 3489 |

*ZPG=ZAPADNI (ST. GEORGE); NOR=NORTH; E-E=EAST REEF AND EAST CLIFFS; STA=STARAYA ARTIL.

TABLE 41A - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1959.

| DATE | ROOK-ERY# | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | | BY AREA, ALL AGES |
|------|-----------|---------------|-------|---------------------|--|----------|----------|----------|--------|--|-----------|------------|------------|----------|--------|-------------------|
| | | NUMBER KILLED | | NO. IN TOOTH SAMPLE | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | | |
| | | TO DATE | DAILY | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | | |
| JUNE | 27 | NEP | 570 | 570 | 57 | 11(2) | 132(23) | 410(72) | 17(3) | 0(0) | 11(2) | 132(23) | 410(72) | 17(3) | 0(0) | 570 |
| | 28 | TLK | 768 | 198 | 20 | 0(0) | 50(25) | 128(65) | 20(10) | 0(0) | 11(1) | 182(24) | 538(70) | 37(5) | 0(0) | 198 |
| | 29 | ZAP | 1724 | 956 | 93 | 48(5) | 268(28) | 602(63) | 38(4) | 0(0) | 59(3) | 450(26) | 1140(66) | 75(4) | 0(0) | 956 |
| | 30 | REF | 1866 | 142 | 14 | 0(0) | 20(14) | 92(65) | 30(21) | 0(0) | 59(3) | 470(25) | 1232(66) | 105(6) | 0(0) | 142 |
| JULY | 1 | POL | 2233 | 367 | 38 | 0(0) | 114(31)0 | 242(66) | 11(3) | 0(0) | 59(3) | 584(26) | 1474(66) | 116(5) | 0(0) | 367 |
| | 2 | NEP | 2815 | 582 | 58 | 0(0) | 140(24) | 442(76) | 0(0) | 0(0) | 59(2) | 724(26) | 1916(68) | 116(4) | 0(0) | 1152 |
| | 3 | TLK | 3171 | 356 | 34 | 0(0) | 92(26) | 264(74) | 0(0) | 0(0) | 59(2) | 816(26) | 2180(69) | 116(4) | 0(0) | 554 |
| | 4 | ZAP | 4118 | 947 | 96 | 19(2) | 388(41) | 502(53) | 38(4) | 0(0) | 78(2) | 1204(29) | 2682(85) | 154(4) | 0(0) | 1903 |
| | 5 | REF | 4222 | 104 | 11 | 0(0) | 19(18) | 76(73) | 9(9) | 0(0) | 78(2) | 1223(29) | 2758(65) | 163(4) | 0(0) | 246 |
| | 6 | POL | 4650 | 428 | 43 | 0(0) | 141(33) | 270(63) | 17(4) | 0(0) | 78(2) | 1364(29) | 3028(65) | 180(4) | 0(0) | 795 |
| | 7 | NEP | 5290 | 640 | 67 | 19(3) | 314(49) | 307(48) | 0(0) | 0(0) | 97(2) | 1678(32) | 3335(63) | 180(3) | 0(0) | 1792 |
| | 8 | TLK | 5538 | 248 | 24 | 0(0) | 72(29) | 166(67) | 10(4) | 0(0) | 97(2) | 1750(32) | 3501(63) | 190(3) | 0(0) | 802 |
| | 9 | ZAP | 7091 | 1553 | 158 | 16(1) | 699(45) | 745(48) | 93(6) | 0(0) | 113(2) | 2449(35) | 4246(60) | 283(4) | 0(0) | 3456 |
| | 10 | REF | 7214 | 123 | 13 | 0(0) | 28(23) | 95(77) | 0(0) | 0(0) | 113(2) | 2477(34) | 4341(60) | 283(4) | 0(0) | 369 |
| | 11 | POL | 7706 | 492 | 58 | 10(2) | 148(30) | 324(66) | 10(2) | 0(0)0 | 123(2) | 2625(34) | 4665(61) | 293(4) | 0(0) | 1287 |
| | 12 | NEP | 8525 | 819 | 84 | 0(0) | 368(45) | 418(51) | 33(4) | 0(0) | 123(1) | 2993(35) | 5083(60) | 326(4) | 0(0) | 2611 |
| | 13 | TLK | 8767 | 242 | 27 | 10(4) | 70(29) | 152(63) | 10(4) | 0(0) | 133(2) | 3063(35) | 5235(60) | 336(4) | 0(0) | 1044 |
| | 14 | ZAP | 10430 | 1663 | 169 | 0(0) | 915(55) | 698(42) | 50(3) | 0(0) | 133(1) | 3978(38) | 5933(57) | 386(4) | 0(0) | 5119 |
| | 15 | REF | 10620 | 190 | 19 | 0(0) | 89(47) | 101(53) | 0(0) | 0(0) | 133(1) | 4067(38) | 6034(57) | 386(4) | 0(0) | 559 |
| | 16 | POL | 11203 | 583 | 52 | 23(4) | 122(21) | 391(67) | 47(8) | 0(0) | 156(1) | 4189(37) | 6425(57) | 433(4) | 0(0) | 1870 |
| | 17 | NEP | 12104 | 901 | 92 | 18(2) | 396(44) | 460(51) | 27(3) | 0(0) | 174(1) | 4585(38) | 6885(57) | 460(4) | 0(0) | 3512 |
| | 18 | TLK | 12470 | 366 | 37 | 11(3) | 139(38) | 216(59) | 0(0) | 0(0) | 185(1) | 4724(38) | 7101(57) | 460(4) | 0(0) | 1410 |
| | 19 | ZAP | 14013 | 1543 | 137 | 77(5) | 1018(66) | 448(29) | 0(0) | 0(0) | 262(2) | 5742(41) | 7549(54) | 460(3) | 0(0) | 6662 |
| | 20 | REF | 14164 | 151 | 16 | 0(0) | 9(6) | 124(82) | 9(6) | 9(6) | 262(2) | 5751(41) | 7673(54) | 469(3) | 9(0) | 710 |
| | 21 | POL | 14814 | 650 | 66 | 29(4) | 345(53) | 276(42) | 0(0) | 0(0) | 291(2) | 6096(41) | 7949(54) | 469(3) | 9(0) | 2520 |
| | 22 | NEP | 15740 | 926 | 93 | 46(5) | 509(55) | 371(40) | 0(0) | 0(0) | 337(2) | 6605(42) | 8320(53) | 469(3) | 9(0) | 4438 |
| | 23 | TLK | 16130 | 390 | 39 | 8(2)0 | 172(44) | 202(52) | 8(2) | 0(0) | 345(2)0 | 6777(42) | 8522(53) | 477(3) | 9(0) | 1800 |
| | 24 | ZAP | 18111 | 1981 | 199 | 79(4) | 1109(56) | 773(39) | 20(1) | 0(0) | 424(2) | 7886(44) | 9295(51) | 497(3) | 9(0) | 8643 |
| | 25 | REF | 18382 | 271 | 30 | 0(0) | 81(30) | 171(63) | 19(7) | 0(0) | 424(2) | 7967(43) | 9466(51) | 516(3) | 9(0) | 981 |
| | 26 | POL | 19036 | 654 | 67 | 26(4) | 360(55) | 255(39) | 13(2) | 0(0) | 450(2) | 8327(44) | 9721(51) | 529(3) | 9(0) | 3174 |
| | 27 | NEP | 20244 | 1208 | 118 | 109(9) | 725(60) | 350(29) | 24(2) | 0(0) | 559(3)0 | 9052(45) | 10071(50) | 553(3) | 9(0) | 5646 |
| | 28 | TLK | 20739 | 495 | 37 | 64(13) | 322(65) | 109(22) | 0(0) | 0(0) | 623(3)0 | 9374(45) | 10180(49) | 553(3) | 9(0) | 2295 |
| | 29 | ZAP | 21806 | 1067 | 107 | 331(31) | 598(56) | 138(13) | 0(0) | 0(0) | 954(4) | 9972(46) | 10318(47)0 | 553(3) | 9(0) | 9710 |
| | 30 | REF | 21990 | 184 | 20 | 65(35) | 101(55) | 18(10) | 0(0) | 0(0)0 | 1019(5) | 10073(46) | 10336(47)0 | 553(3) | 9(0) | 1165 |
| | 31 | POL | 22286 | 296 | 32 | 56(19) | 130(44) | 110(37) | 0(0) | 0(0) | 1075(5) | 10203(46) | 10446(47) | 553(2)0 | 9(0) | 3470 |
| AUG | 1 | NEP | 22305 | 19 | 17 | 4(21) | 12(63) | 3(16) | 0(0) | 0(0) | 1079(5) | 10215(46) | 10449(47) | 553(2) | 9(0) | 5665 |
| | 2 | TLK | 22314 | 9 | 9 | 2(22) | 4(44) | 2(22) | 1(11) | 0(0)0 | 1081(5) | 10219(46) | 10451(47) | 554(2) | 9(0) | 2304 |
| | 3 | ZAP | 22368 | 54 | 38 | 17(31) | 33(61) | 4(7) | 0(0) | 0(0) | 1098(5) | 10252(46) | 10455(47) | 554(2) | 9(0)0 | 9764 |
| | 4 | REF | 22370 | 2 | 0 | 1(50) | 1(50) | 0(0) | 0(0) | 0(0) | 1099(5) | 10253(46) | 10455(47) | 554(2) | 9(0) | 1167 |
| | 5 | POL | 22390 | 20 | 4 | 5(25) | 10(50) | 5(25) | 0(0) | 0(0) | 1104(5) | 10263(46) | 10460(47) | 554(2) | 9(0) | 3490 |
| | 6 | NEP | 22484 | 94 | 35 | 57(61) | 26(28) | 11(12) | 0(0) | 0(0) | 1161(5) | 10289(46) | 10471(47) | 554(2) | 9(0) | 5759 |
| | 7 | TLK | 22550 | 66 | 10 | 44(67) | 15(23) | 7(11) | 0(0) | 0(0) | 1205(5) | 10304(46) | 10478(46) | 554(2) | 9(0) | 2370 |
| | 8 | ZAP | 22632 | 82 | 10 | 74(90) | 8(10) | 0(0) | 0(0) | 0(0) | 1279(6) | 10312(46) | 10478(46) | 554(2) | 9(0)0 | 9846 |
| | 9 | REF | 22649 | 17 | 4 | 9(53) | 4(24) | 4(24) | 0(0) | 0(0) | 1288(6) | 10316(46) | 10482(46) | 554(2) | 9(0)0 | 1184 |
| | 10 | POL | 22688 | 39 | 4 | 29(74)0 | 10(26) | 0(0) | 0(0) | 0(0) | 1317(6)0 | 10326(46)0 | 10482(46) | 554(2) | 9(0)0 | 3529 |
| | 11 | NEP | 23072 | 384 | 26 | 223(58)0 | 88(23) | 46(12) | 0(0) | 0(0) | 1540(7) | 10414(45) | 10528(46) | 554(2) | 9(0) | 61430 |
| | 12 | TLK | 23116 | 44 | 8 | 36(82)0 | 0(0) | 0(0) | 0(0) | 0(0) | 1576(7) | 10414(45) | 10528(46) | 554(2) | 9(0) | 2414 |
| | 13 | ZAP | 23382 | 266 | 14 | 170(64) | 77(29) | 0(0) | 0(0) | 0(0) | 1746(7) | 10491(45) | 10528(45) | 554(2) | 9(0) | 10112 |
| | 14 | REF | 23418 | 36 | 0 | 32(89) | 0(0) | 0(0) | 0(0) | 0(0) | 1778(8) | 10491(45) | 10528(45) | 554(2) | 9(0) | 1220 |

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*NEP=NORTHEAST POINT (MORJOVI AND VOSTOCHNI); TLK=TOLSTOI, LUKANIN, AND KITOVI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; ZAP=ZAPADNI; REF=REEF, GORBATCH, AND ARDIQUEN.

TABLE 41A - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1959 (CONT.)

| DATE | ROOK- ERY* | NUMBER KILLED TO DATE | NO. IN TOOTH DAILY SAMPLE | DAILY KILL | | | | | | CUMULATIVE KILL | | | | | | BY AREA, ALL AGES |
|--------|---------------|--------------------------|---------------------------------|--|---------|--------|--------|------|------|--|-----------|-----------|--------|------|-------|----------------------|
| | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | | |
| | | | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | | | |
| AUG 15 | POL | 23623 | 205 | 16 | 166(81) | 0(0) | 0(0) | 0(0) | 0(0) | 1944(8) | 10491(44) | 10528(45) | 554(2) | 9(0) | 3734 | |
| 16 | NEP | 23901 | 278 | 14 | 240(86) | 19(7) | 0(0) | 0(0) | 0(0) | 2184(9) | 10510(44) | 10528(44) | 554(2) | 9(0) | 6421 | |
| 17 | TLK | 24083 | 182 | 27 | 108(59) | 47(26) | 27(15) | 0(0) | 0(0) | 2292(10) | 10557(44) | 10555(44) | 554(2) | 9(0) | 2596 | |
| 18 | ZAP | 24209 | 126 | 0 | 87(69) | 39(31) | 0(0) | 0(0) | 0(0) | 2379(10) | 10596(44) | 10555(44) | 554(2) | 9(0) | 10238 | |
| 19 | REF | 24281 | 72 | 9 | 48(67) | 24(33) | 0(0) | 0(0) | 0(0) | 2427(10) | 10620(44) | 10555(43) | 554(2) | 9(0) | 1292 | |
| 20 | POL | 24495 | 214 | 0 | 163(76) | 51(24) | 0(0) | 0(0) | 0(0) | 2590(11) | 10671(44) | 10555(43) | 554(2) | 9(0) | 3948 | |

*NEP=NORTHEAST POINT (MORJOVI AND VOSTOCHNI); TLK=TOLSTOI, LUKANIN, AND KITOVI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; ZAP=ZAPADNI; REF=REEF, GORBATC, AND ARDIGUEN.

TABLE 41B - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. GEORGE ISLAND, 1959.

| DATE | ROOK-ERY# | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | |
|---------|-----------|---------------|-------|---------------------|--|---------|---------|--------|-------|--|----------|----------|--------|-------|-------------------|
| | | NUMBER KILLED | | NO. IN TOOTH SAMPLE | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | BY AREA, ALL AGES |
| | | TO DATE | DAILY | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | |
| JUNE 27 | ZPG | 139 | 139 | 14 | 0(0) | 29(21) | 110(79) | 0(0) | 0(0) | 0(0) | 29(21) | 110(79) | 0(0) | 0(0) | 139 |
| 28 | NOR | 223 | 84 | 9 | 0(0) | 28(33) | 56(67) | 0(0) | 0(0) | 0(0) | 57(26) | 166(74) | 0(0) | 0(0) | 84 |
| 29 | E-E | 391 | 168 | 16 | 12(7) | 52(31) | 104(62) | 0(0) | 0(0) | 12(3) | 109(28) | 270(69) | 0(0) | 0(0) | 168 |
| 30 | STA | 437 | 46 | 5 | 0(0) | 18(39) | 28(61) | 0(0) | 0(0) | 12(3) | 127(29) | 298(68) | 0(0) | 0(0) | 46 |
| JULY 1 | NOR | 522 | 85 | 9 | 0(0) | 28(33) | 48(56) | 9(11) | 0(0) | 12(2) | 155(30) | 346(66) | 9(2) | 0(0) | 169 |
| 2 | ZPG | 641 | 119 | 12 | 0(0) | 30(25) | 89(75) | 0(0) | 0(0) | 12(2) | 185(29) | 435(68) | 9(1) | 0(0) | 258 |
| 3 | NOR | 748 | 107 | 11 | 11(10) | 19(18) | 58(54) | 19(18) | 0(0) | 23(3) | 204(27) | 493(66) | 28(4) | 0(0) | 276 |
| 4 | E-E | 962 | 214 | 22 | 0(0) | 49(23) | 156(73) | 9(4) | 0(0) | 23(2) | 253(26) | 649(67) | 37(4) | 0(0) | 382 |
| 5 | STA | 1046 | 84 | 9 | 0(0) | 18(21) | 66(79) | 0(0) | 0(0) | 23(2) | 271(26) | 715(68) | 37(4) | 0(0) | 130 |
| 6 | NOR | 1177 | 131 | 14 | 0(0) | 65(50) | 56(43) | 0(0) | 10(8) | 23(2) | 336(29) | 771(66) | 37(3) | 10(1) | 407 |
| 7 | ZPG | 1311 | 134 | 14 | 0(0) | 67(50) | 67(50) | 0(0) | 0(0) | 23(2) | 403(31) | 838(64) | 37(3) | 10(1) | 392 |
| 8 | NOR | 1431 | 120 | 12 | 0(0) | 50(42) | 60(50) | 10(8) | 0(0) | 23(2) | 453(32) | 898(63) | 47(3) | 10(1) | 527 |
| 9 | E-E | 1746 | 315 | 30 | 10(3) | 138(44) | 157(50) | 10(3) | 0(0) | 33(2) | 591(34) | 1055(60) | 57(3) | 10(1) | 697 |
| 10 | STA | 1843 | 97 | 10 | 0(0) | 10(10) | 48(49) | 39(40) | 0(0) | 33(2) | 601(33) | 1103(60) | 96(5) | 10(1) | 227 |
| 11 | NOR | 1963 | 120 | 12 | 0(0) | 40(33) | 80(67) | 0(0) | 0(0) | 33(2) | 641(33) | 1183(60) | 96(5) | 10(1) | 647 |
| 12 | ZPG | 2115 | 152 | 16 | 9(6) | 67(44) | 76(50) | 0(0) | 0(0) | 42(2) | 708(33) | 1259(60) | 96(5) | 10(0) | 544 |
| 13 | NOR | 2223 | 108 | 11 | 0(0) | 49(45) | 59(55) | 0(0) | 0(0) | 42(2) | 757(34) | 1318(59) | 96(4) | 10(0) | 755 |
| 14 | E-E | 2414 | 191 | 20 | 10(5) | 57(30) | 95(50) | 29(15) | 0(0) | 52(2) | 814(34) | 1413(59) | 125(5) | 10(0) | 888 |
| 15 | STA | 2537 | 123 | 13 | 10(8) | 18(15) | 85(69) | 10(8) | 0(0) | 62(2) | 832(33) | 1498(59) | 135(5) | 10(0) | 350 |
| 16 | NOR | 2739 | 202 | 21 | 0(0) | 97(48) | 105(52) | 0(0) | 0(0) | 62(2) | 929(34) | 1603(59) | 135(5) | 10(0) | 957 |
| 17 | ZPG | 2865 | 126 | 14 | 18(14) | 45(36) | 45(36) | 18(14) | 0(0) | 80(3) | 974(34) | 1648(58) | 153(5) | 10(0) | 670 |
| 18 | NOR | 3016 | 151 | 16 | 0(0) | 47(31) | 104(69) | 0(0) | 0(0) | 80(3) | 1021(34) | 1752(58) | 153(5) | 10(0) | 1108 |
| 19 | E-E | 3246 | 230 | 24 | 0(0) | 97(42) | 133(58) | 0(0) | 0(0) | 80(2) | 1118(34) | 1885(58) | 153(5) | 10(0) | 1118 |
| 20 | STA | 3379 | 133 | 13 | 11(8) | 41(31) | 81(61) | 0(0) | 0(0) | 91(3) | 1159(34) | 1966(58) | 153(5) | 10(0) | 483 |
| 21 | NOR | 3625 | 246 | 25 | 0(0) | 138(56) | 108(44) | 0(0) | 0(0) | 91(3) | 1297(36) | 2074(57) | 153(4) | 10(0) | 1354 |
| 22 | ZPG | 3777 | 152 | 16 | 9(6) | 49(32) | 85(56) | 9(6) | 0(0) | 100(3) | 1346(36) | 2159(57) | 162(4) | 10(0) | 822 |
| 23 | NOR | 3907 | 130 | 13 | 19(15) | 51(39) | 60(46) | 0(0) | 0(0) | 119(3) | 1397(36) | 2219(57) | 162(4) | 10(0) | 1484 |
| 24 | E-E | 4264 | 357 | 37 | 18(5) | 193(54) | 146(41) | 0(0) | 0(0) | 137(3) | 1590(37) | 2365(55) | 162(4) | 10(0) | 1475 |
| 25 | STA | 4403 | 139 | 14 | 0(0) | 69(50) | 70(50) | 0(0) | 0(0) | 137(3) | 1659(38) | 2435(55) | 162(4) | 10(0) | 622 |
| 26 | NOR | 4621 | 218 | 23 | 37(17) | 124(57) | 57(26) | 0(0) | 0(0) | 174(4) | 1783(39) | 2492(54) | 162(4) | 10(0) | 1702 |
| 27 | ZPG | 4825 | 204 | 20 | 0(0) | 102(50) | 102(50) | 0(0) | 0(0) | 174(4) | 1885(39) | 2594(54) | 162(3) | 10(0) | 1026 |
| 28 | NOR | 4980 | 153 | 17 | 0(0) | 82(53) | 73(47) | 0(0) | 0(0) | 174(3) | 1967(39) | 2667(54) | 162(3) | 10(0) | 1857 |
| 29 | E-E | 5227 | 247 | 26 | 20(8) | 160(65) | 67(27) | 0(0) | 0(0) | 194(4) | 2127(41) | 2734(52) | 162(3) | 10(0) | 1722 |
| 30 | STA | 5304 | 77 | 7 | 11(14) | 22(29) | 44(57) | 0(0) | 0(0) | 205(4) | 2149(41) | 2778(52) | 162(3) | 10(0) | 699 |
| 31 | NOR | 5490 | 186 | 20 | 37(20) | 102(55) | 47(25) | 0(0) | 0(0) | 242(4) | 2251(41) | 2825(51) | 162(3) | 10(0) | 2043 |
| | COM | 5700 | 210 | 0 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 242(4) | 2251(39) | 2825(50) | 162(3) | 10(0) | 210 |

*ZPG=ZAPADNI (ST. GEORGE); NOR=NORTH; E-E=EAST REEF AND EAST CLIFFS; STA=STARAYA ARTIL; COM=COMBINED ROOKERY.0

TABLE 42A - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1960.

| DATE | ROOK-ERY# | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | | BY AREA, ALL AGES |
|---------|-----------|---------------|-------|---------------------|---|----------|---------|-------|------|---|-----------|----------|--------|------|------|-------------------|
| | | NUMBER KILLED | | NO. IN TOOTH SAMPLE | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | | |
| | | TO DATE | DAILY | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | | |
| JUNE 27 | NEP | 240 | 240 | 24 | 0(0) | 150(63) | 90(38) | 0(0) | 0(0) | 0(0) | 150(63) | 90(38) | 0(0) | 0(0) | 240 | |
| 28 | TLK | 349 | 109 | 12 | 0(0) | 55(50) | 45(41) | 9(8) | 0(0) | 0(0) | 205(59) | 135(39) | 9(3) | 0(0) | 109 | |
| 29 | ZAP | 791 | 442 | 44 | 0(0) | 323(73) | 119(27) | 0(0) | 0(0) | 0(0) | 528(67) | 254(32) | 9(1) | 0(0) | 442 | |
| 30 | REF | 940 | 149 | 16 | 0(0) | 103(69) | 37(25) | 9(6) | 0(0) | 0(0) | 631(67) | 291(31) | 18(2) | 0(0) | 149 | |
| JULY 1 | POL | 1085 | 145 | 17 | 0(0) | 68(47) | 77(53) | 0(0) | 0(0) | 0(0) | 699(64) | 368(34) | 18(2) | 0(0) | 145 | |
| 2 | NEP | 1481 | 386 | 42 | 0(0) | 292(74) | 104(26) | 0(0) | 0(0) | 0(0) | 991(67) | 472(32) | 18(1) | 0(0) | 386 | |
| 3 | TLK | 1605 | 124 | 12 | 0(0) | 103(83) | 21(17) | 0(0) | 0(0) | 0(0) | 1094(68) | 493(31) | 18(1) | 0(0) | 124 | |
| 4 | ZAP | 2247 | 642 | 64 | 13(2) | 501(78) | 128(20) | 0(0) | 0(0) | 13(1) | 1595(71) | 621(28) | 18(1) | 0(0) | 642 | |
| 5 | REF | 2319 | 72 | 8 | 0(0) | 36(50) | 27(38) | 9(13) | 0(0) | 13(1) | 1631(70) | 648(28) | 27(1) | 0(0) | 72 | |
| 6 | POL | 2476 | 157 | 17 | 0(0) | 120(76) | 28(18) | 9(6) | 0(0) | 13(1) | 1751(71) | 676(27) | 36(1) | 0(0) | 157 | |
| 7 | NEP | 2883 | 407 | 42 | 0(0) | 322(79) | 85(21) | 0(0) | 0(0) | 13(1) | 2073(72) | 781(26) | 36(1) | 0(0) | 407 | |
| 8 | TLK | 2963 | 80 | 8 | 0(0) | 80(100) | 0(0) | 0(0) | 0(0) | 13(0) | 2153(73) | 761(26) | 36(1) | 0(0) | 80 | |
| 9 | ZAPO | 4020 | 1057 | 100 | 21(2) | 846(80) | 169(16) | 21(2) | 0(0) | 34(1) | 2999(75) | 930(23) | 57(1) | 0(0) | 1057 | |
| 10 | REFO | 4126 | 106 | 35 | 3(3) | 61(58) | 42(40) | 0(0) | 0(0) | 37(1) | 3060(74) | 972(24) | 57(1) | 0(0) | 106 | |
| 11 | POLO | 4356 | 230 | 30 | 0(0) | 214(93) | 16(7) | 0(0) | 0(0) | 37(1) | 3274(75) | 988(23) | 57(1) | 0(0) | 230 | |
| 12 | NEP | 5253 | 897 | 90 | 18(2) | 762(85) | 117(13) | 0(0) | 0(0) | 55(1) | 4038(77) | 1105(21) | 57(1) | 0(0) | 897 | |
| 13 | TLK | 5617 | 364 | 49 | 7(2) | 299(82) | 58(16) | 0(0) | 0(0) | 62(1) | 4335(77) | 1163(21) | 57(1) | 0(0) | 364 | |
| 14 | ZAP | 6575 | 958 | 93 | 19(2) | 824(88) | 115(12) | 0(0) | 0(0) | 81(1) | 5159(78) | 1278(19) | 57(1) | 0(0) | 958 | |
| 15 | REFO | 6826 | 251 | 31 | 0(0) | 203(81) | 40(16) | 8(3) | 0(0) | 81(1) | 5362(79) | 1318(19) | 65(1) | 0(0) | 251 | |
| 16 | POLO | 7072 | 246 | 37 | 12(5) | 167(68) | 67(27) | 0(0) | 0(0) | 93(1) | 5529(78) | 1385(20) | 65(1) | 0(0) | 246 | |
| 17 | NEP | 8020 | 948 | 96 | 28(3) | 778(82) | 142(15) | 0(0) | 0(0) | 121(2) | 6307(79) | 1527(19) | 65(1) | 0(0) | 948 | |
| 18 | TLK | 8371 | 351 | 37 | 18(5) | 305(87) | 28(8) | 0(0) | 0(0) | 139(2) | 6612(79) | 1555(19) | 65(1) | 0(0) | 351 | |
| 19 | ZAP | 9408 | 1037 | 103 | 21(2) | 902(87) | 114(11) | 0(0) | 0(0) | 160(2) | 7514(80) | 1669(18) | 65(1) | 0(0) | 1037 | |
| 20 | REF | 9740 | 332 | 34 | 10(3) | 272(82) | 40(12) | 10(3) | 0(0) | 170(2) | 7786(80) | 1709(18) | 75(1) | 0(0) | 332 | |
| 21 | POL | 9874 | 134 | 32 | 8(6) | 118(88) | 8(6) | 0(0) | 0(0) | 178(2) | 7904(80) | 1717(17) | 75(1) | 0(0) | 134 | |
| 22 | NEP | 10614 | 740 | 77 | 7(1) | 674(91) | 59(8) | 0(0) | 0(0) | 185(2) | 8578(81) | 1776(17) | 75(1) | 0(0) | 740 | |
| 23 | TLKO | 11406 | 792 | 86 | 16(2) | 721(91) | 55(7) | 0(0) | 0(0) | 201(2) | 9299(82) | 1831(16) | 75(1) | 0(0) | 792 | |
| 24 | ZAP | 12541 | 1135 | 116 | 23(2) | 1010(89) | 102(9) | 0(0) | 0(0) | 224(2) | 10309(82) | 1933(15) | 75(1) | 0(0) | 1135 | |
| 25 | REFO | 12835 | 294 | 33 | 0(0) | 268(91) | 26(9) | 0(0) | 0(0) | 224(2) | 10577(82) | 1959(15) | 75(1) | 0(0) | 294 | |
| 26 | POLO | 13291 | 456 | 52 | 46(10) | 401(88) | 9(2) | 0(0) | 0(0) | 270(2) | 10978(83) | 1968(15) | 75(1) | 0(0) | 456 | |
| 27 | NEP | 14885 | 1594 | 158 | 64(4) | 1450(91) | 80(5) | 0(0) | 0(0) | 334(2) | 12428(83) | 2048(14) | 75(1) | 0(0) | 1594 | |
| 28 | TLKO | 15303 | 418 | 53 | 33(8) | 339(81) | 46(11) | 0(0) | 0(0) | 367(2) | 12767(83) | 2094(14) | 75(0) | 0(0) | 418 | |
| 29 | ZAP | 17330 | 2027 | 201 | 203(10) | 1723(85) | 101(5) | 0(0) | 0(0) | 570(3) | 14490(84) | 2195(13) | 75(0) | 0(0) | 2027 | |
| 30 | REFO | 17819 | 489 | 47 | 54(11) | 362(74) | 73(15) | 0(0) | 0(0) | 624(4) | 14852(83) | 2268(13) | 75(0) | 0(0) | 489 | |
| 31 | POL | 18386 | 567 | 58 | 28(5) | 460(81) | 79(14) | 0(0) | 0(0) | 652(4) | 15312(83) | 2347(13) | 75(0) | 0(0) | 567 | |
| AUG 1 | NEP | 20981 | 2595 | 266 | 260(10) | 2179(84) | 156(6) | 0(0) | 0(0) | 912(4) | 17491(83) | 2503(12) | 75(0) | 0(0) | 2595 | |
| 2 | TLKO | 21748 | 767 | 86 | 54(7) | 682(89) | 31(4) | 0(0) | 0(0) | 966(4) | 18173(84) | 2534(12) | 75(0) | 0(0) | 767 | |
| 3 | ZAP | 24189 | 2441 | 252 | 342(14) | 2026(83) | 73(3) | 0(0) | 0(0) | 1308(5) | 20199(84) | 2607(11) | 75(0) | 0(0) | 2441 | |
| 4 | REFO | 24584 | 395 | 60 | 59(15) | 316(80) | 12(3) | 8(2) | 0(0) | 1367(6) | 20515(83) | 2619(11) | 83(0) | 0(0) | 395 | |
| 5 | POLO | 25857 | 1273 | 144 | 127(10) | 1095(86) | 38(3) | 13(1) | 0(0) | 1494(6) | 21610(84) | 2657(10) | 96(0) | 0(0) | 1273 | |
| 6 | NEP | 27782 | 1925 | 211 | 212(11) | 1617(84) | 77(4) | 19(1) | 0(0) | 1706(6) | 23227(84) | 2734(10) | 115(0) | 0(0) | 1925 | |
| 7 | TLK | 28819 | 1037 | 124 | 104(10) | 912(88) | 21(2) | 0(0) | 0(0) | 1810(6) | 24139(84) | 2755(10) | 115(0) | 0(0) | 1037 | |
| 8 | ZAP | 28862 | 43 | 29 | 16(37) | 27(63) | 0(0) | 0(0) | 0(0) | 1826(6) | 24166(84) | 2755(10) | 115(0) | 0(0) | 43 | |
| 9 | REF | 28902 | 40 | 25 | 10(25) | 29(73) | 1(3) | 0(0) | 0(0) | 1836(6) | 24195(84) | 2756(10) | 115(0) | 0(0) | 40 | |
| 10 | POL | 28926 | 24 | 19 | 17(71) | 6(25) | 1(4) | 0(0) | 0(0) | 1853(6) | 24201(84) | 2757(10) | 115(0) | 0(0) | 24 | |
| 11 | NEP | 28953 | 27 | 21 | 14(52) | 12(44) | 1(4) | 0(0) | 0(0) | 1867(6) | 24213(84) | 2758(10) | 115(0) | 0(0) | 27 | |
| 12 | TLK | 28992 | 39 | 38 | 24(62) | 15(38) | 0(0) | 0(0) | 0(0) | 1891(7) | 24228(84) | 2758(10) | 115(0) | 0(0) | 39 | |
| 13 | ZAP | 29051 | 59 | 39 | 37(63) | 19(32) | 3(5) | 0(0) | 0(0) | 1928(7) | 24247(83) | 2761(10) | 115(0) | 0(0) | 59 | |
| 14 | REF | 29098 | 47 | 43 | 30(64) | 16(34) | 1(2) | 0(0) | 0(0) | 1958(7) | 24263(83) | 2762(9) | 115(0) | 0(0) | 47 | |
| 15 | POL | 29137 | 39 | 37 | 19(49) | 20(51) | 0(0) | 0(0) | 0(0) | 1977(7) | 24283(83) | 2762(9) | 115(0) | 0(0) | 39 | |

*NEP=NORTHEAST POINT (MORJOVI AND VOSTOCHNI); TLK=TOLSTOI, LUKANIN, AND KITOVI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; ZAP=ZAPADNI; REF=REEF, GORBATCHEV, AND ARDIQUEN.

TABLE 42B - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. GEORGE ISLAND, 1960.2

| DATE | ROOK-ERY# | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | | | |
|---------|-----------|---------------|-------|---------------------|--|---------|--------|--------|------|-----------------|--|----------|--------|------|------|--|-------------------|
| | | NUMBER KILLED | | NO. IN TOOTH SAMPLE | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | | BY AREA, ALL AGES |
| | | TO DATE | DAILY | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | | | |
| JUNE 27 | ZPG | 114 | 114 | 13 | 0(0) | 35(31) | 79(69) | 0(0) | 0(0) | 0(0) | 35(31) | 79(69) | 0(0) | 0(0) | 114 | | |
| 28 | NOR | 206 | 92 | 9 | 0(0) | 52(57) | 40(43) | 0(0) | 0(0) | 0(0) | 87(42) | 119(58) | 0(0) | 0(0) | 92 | | |
| 29 | E-E | 285 | 79 | 8 | 0(0) | 39(49) | 40(51) | 0(0) | 0(0) | 0(0) | 126(44) | 159(56) | 0(0) | 0(0) | 79 | | |
| 30 | STA | 316 | 31 | 4 | 0(0) | 16(52) | 15(48) | 0(0) | 0(0) | 0(0) | 142(45) | 174(55) | 0(0) | 0(0) | 31 | | |
| JULY 1 | NOR | 374 | 58 | 12 | 0(0) | 39(67) | 19(33) | 0(0) | 0(0) | 0(0) | 181(48) | 193(52) | 0(0) | 0(0) | 150 | | |
| 2 | ZPG | 485 | 111 | 22 | 0(0) | 46(41) | 46(41) | 19(17) | 0(0) | 0(0) | 227(47) | 239(49) | 19(4) | 0(0) | 225 | | |
| 3 | NOR | 552 | 87 | 14 | 0(0) | 29(43) | 34(51) | 4(6) | 0(0) | 0(0) | 256(46) | 273(49) | 23(4) | 0(0) | 217 | | |
| 4 | E-E | 621 | 69 | 14 | 0(0) | 39(57) | 25(36) | 5(7) | 0(0) | 0(0) | 295(48) | 298(48) | 28(5) | 0(0) | 148 | | |
| 5 | STA | 641 | 20 | 10 | 0(0) | 8(40) | 12(60) | 0(0) | 0(0) | 0(0) | 303(47) | 310(48) | 28(4) | 0(0) | 51 | | |
| 6 | NOR | 743 | 102 | 30 | 3(3) | 64(63) | 28(27) | 7(7) | 0(0) | 0(0) | 367(49) | 338(45) | 35(5) | 0(0) | 319 | | |
| 7 | ZPG | 903 | 160 | 32 | 0(0) | 106(66) | 30(19) | 21(13) | 3(2) | 3(0) | 473(52) | 368(41) | 56(6) | 3(0) | 385 | | |
| 8 | NOR | 991 | 88 | 18 | 0(0) | 44(50) | 44(50) | 0(0) | 0(0) | 0(0) | 517(52) | 412(42) | 56(6) | 3(0) | 407 | | |
| 9 | E-E | 1170 | 179 | 36 | 14(8) | 95(53) | 50(28) | 20(11) | 0(0) | 17(1) | 612(52) | 462(39) | 76(6) | 3(0) | 327 | | |
| 10 | STA2 | 1235 | 65 | 14 | 0(0) | 51(78) | 9(14) | 5(8) | 0(0) | 17(1) | 663(54) | 471(38) | 81(7) | 3(0) | 116 | | |
| 11 | NOR | 1384 | 149 | 41 | 0(0) | 113(76) | 35(24) | 0(0) | 0(0) | 17(1) | 776(56) | 507(37) | 81(6) | 3(0) | 556 | | |
| 12 | ZPG | 1532 | 148 | 29 | 0(0) | 96(65) | 52(35) | 0(0) | 0(0) | 0(0) | 872(57) | 559(36) | 81(5) | 3(0) | 533 | | |
| 13 | NOR | 1602 | 70 | 19 | 0(0) | 41(59) | 26(37) | 3(4) | 0(0) | 17(1) | 913(57) | 585(37) | 84(5) | 3(0) | 626 | | |
| 14 | E-E | 1739 | 137 | 28 | 6(4) | 108(79) | 19(14) | 4(3) | 0(0) | 23(1) | 1021(59) | 604(35) | 88(5) | 3(0) | 464 | | |
| 15 | STA | 1786 | 47 | 15 | 0(0) | 29(62) | 9(19) | 9(19) | 0(0) | 23(1) | 1050(59) | 613(34) | 97(5) | 3(0) | 163 | | |
| 16 | NOR | 1888 | 102 | 20 | 0(0) | 77(75) | 15(15) | 10(10) | 0(0) | 23(1) | 1127(60) | 628(33) | 107(6) | 3(0) | 728 | | |
| 17 | ZPG | 1994 | 106 | 31 | 3(3) | 69(65) | 31(29) | 3(3) | 0(0) | 26(1) | 1196(60) | 659(33) | 110(6) | 3(0) | 639 | | |
| 18 | NOR2 | 2118 | 124 | 23 | 0(0) | 87(70) | 27(22) | 10(8) | 0(0) | 26(1) | 1283(61) | 686(32) | 120(6) | 3(0) | 852 | | |
| 19 | E-E | 2249 | 131 | 26 | 0(0) | 87(66) | 20(15) | 20(15) | 4(3) | 26(1) | 1370(61) | 706(31) | 140(6) | 7(0) | 595 | | |
| 20 | STA | 2275 | 26 | 10 | 0(0) | 16(62) | 8(31) | 2(8) | 0(0) | 26(1) | 1386(61) | 714(31) | 142(6) | 7(0) | 189 | | |
| 21 | NOR | 2469 | 194 | 34 | 0(0) | 132(68) | 50(26) | 12(6) | 0(0) | 26(1) | 1518(61) | 764(31) | 154(6) | 7(0) | 1046 | | |
| 22 | ZPG | 2559 | 90 | 18 | 0(0) | 65(72) | 25(28) | 0(0) | 0(0) | 26(1) | 1583(62) | 789(31) | 154(6) | 7(0) | 729 | | |
| 23 | NOR | 2737 | 178 | 36 | 0(0) | 139(78) | 34(19) | 5(3) | 0(0) | 26(1) | 1722(63) | 823(30) | 159(6) | 7(0) | 1224 | | |
| 24 | E-E | 2934 | 197 | 36 | 4(2) | 132(67) | 49(25) | 12(6) | 0(0) | 30(1) | 1854(63) | 872(30) | 171(6) | 7(0) | 792 | | |
| 25 | STA2 | 2996 | 62 | 17 | 0(0) | 51(82) | 7(11) | 4(6) | 0(0) | 30(1) | 1905(64) | 879(29) | 175(6) | 7(0) | 251 | | |
| 26 | NOR | 3238 | 242 | 42 | 22(9) | 162(67) | 46(19) | 12(5) | 0(0) | 52(2) | 2067(64) | 925(29) | 187(6) | 7(0) | 1466 | | |
| 27 | ZPG | 3349 | 111 | 24 | 0(0) | 70(63) | 28(25) | 13(12) | 0(0) | 52(2) | 2137(64) | 953(28) | 200(6) | 7(0) | 840 | | |
| 28 | NOR | 3498 | 149 | 29 | 0(0) | 134(90) | 15(10) | 0(0) | 0(0) | 52(1) | 2271(65) | 968(28) | 200(6) | 7(0) | 1615 | | |
| 29 | E-E | 3991 | 493 | 50 | 30(6) | 424(86) | 39(8) | 0(0) | 0(0) | 82(2) | 2695(68) | 1007(25) | 200(5) | 7(0) | 1285 | | |
| 30 | STA2 | 4120 | 129 | 25 | 10(8) | 88(68) | 26(20) | 5(4) | 0(0) | 92(2) | 2783(68) | 1033(25) | 205(5) | 7(0) | 380 | | |
| 31 | NOR | 4353 | 233 | 22 | 0(0) | 191(82) | 42(18) | 0(0) | 0(0) | 82(2) | 2974(68) | 1075(25) | 205(5) | 7(0) | 1848 | | |
| AUG 1 | ZPG | 4586 | 243 | 48 | 15(6) | 182(75) | 46(19) | 0(0) | 0(0) | 107(2) | 3156(69) | 1121(24) | 205(4) | 7(0) | 1083 | | |
| 2 | NOR | 4809 | 213 | 23 | 11(5) | 166(78) | 36(17) | 0(0) | 0(0) | 118(2) | 3322(69) | 1157(24) | 205(4) | 7(0) | 2061 | | |
| 3 | E-E | 5224 | 415 | 42 | 41(10) | 324(78) | 29(7) | 21(5) | 0(0) | 159(3) | 3646(70) | 1186(23) | 226(4) | 7(0) | 1700 | | |
| 4 | STA | 5284 | 60 | 14 | 4(7) | 39(65) | 13(22) | 4(7) | 0(0) | 163(3) | 3685(70) | 1199(23) | 230(4) | 7(0) | 440 | | |
| 5 | NOR | 5617 | 333 | 33 | 40(12) | 223(67) | 50(15) | 20(6) | 0(0) | 203(4) | 3908(70) | 1249(22) | 250(4) | 7(0) | 2394 | | |
| 6 | ZPG2 | 5817 | 200 | 19 | 10(5) | 148(74) | 32(16) | 10(5) | 0(0) | 213(4) | 4056(70) | 1281(22) | 260(4) | 7(0) | 1283 | | |
| 7 | NOR2 | 6042 | 225 | 24 | 29(13) | 149(66) | 47(21) | 0(0) | 0(0) | 242(4) | 4205(70) | 1328(22) | 260(4) | 7(0) | 2619 | | |
| 8 | E-E | 6631 | 589 | 50 | 153(26) | 412(70) | 24(4) | 0(0) | 0(0) | 395(6) | 4617(70) | 1352(20) | 260(4) | 7(0) | 2289 | | |
| 9 | STA | 6841 | 210 | 26 | 6(3) | 187(89) | 17(8) | 0(0) | 0(0) | 401(6) | 4804(70) | 1369(20) | 260(4) | 7(0) | 650 | | |
| 10 | NOR | 7121 | 280 | 34 | 8(3) | 263(94) | 9(3) | 0(0) | 0(0) | 409(6) | 5067(71) | 1378(19) | 260(4) | 7(0) | 2899 | | |
| 11 | ZPG | 7127 | 6 | 0 | 2(33) | 3(50) | 1(17) | 0(0) | 0(0) | 411(6) | 5070(71) | 1379(19) | 260(4) | 7(0) | 1289 | | |
| 12 | NOR | 7129 | 2 | 0 | 1(50) | 1(50) | 0(0) | 0(0) | 0(0) | 412(6) | 5071(71) | 1379(19) | 260(4) | 7(0) | 2901 | | |
| 13 | E-E | 7129 | 0 | 0 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 412(0) | 5071(0) | 1379(0) | 260(0) | 7(0) | 2289 | | |
| 14 | STA | 7174 | 45 | 11 | 16(36) | 21(47) | 8(18) | 0(0) | 0(0) | 428(6) | 5092(71) | 1387(19) | 260(4) | 7(0) | 695 | | |
| 15 | NOR | 7183 | 9 | 6 | 3(33) | 6(67) | 0(0) | 0(0) | 0(0) | 431(6) | 5098(71) | 1387(19) | 260(4) | 7(0) | 2910 | | |

*ZPG=ZAPADNI (ST. GEORGE); NOR=NORTH; E-E=EAST REEF AND EAST CLIFFS; STA=STARAYA ARTIL.2

TABLE 43A - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1961.

| DATE | ROOK-ERY* | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | | |
|------|-----------|-----------------------|---------------------|---------------------|---|---------|----------|----------|-------|---|---------|-----------|-----------|--------|-------------------|-------|
| | | NUMBER KILLED TO DATE | NUMBER KILLED DAILY | NO. IN TOOTH SAMPLE | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | BY AREA, ALL AGES | |
| | | | | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | | |
| JULY | 2 | NEP | 1647 | 1647 | 167 | 16(1) | 1120(68) | 494(30) | 17(1) | 0(0) | 16(1) | 1120(68) | 494(30) | 17(1) | 0(0) | 1647 |
| | 3 | TLK | 1821 | 174 | 19 | 0(0) | 118(68) | 56(32) | 0(0) | 0(0) | 16(1) | 1238(68) | 550(30) | 17(1) | 0(0) | 174 |
| | 4 | ZAP | 4882 | 3061 | 316 | 30(1) | 1960(64) | 1071(35) | 0(0) | 0(0) | 46(1) | 3198(66) | 1621(33) | 17(0) | 0(0) | 3061 |
| | 5 | REF | 5206 | 324 | 34 | 0(0) | 133(41) | 181(56) | 10(3) | 0(0) | 46(1) | 3331(64) | 1802(35) | 27(1) | 0(0) | 324 |
| | 6 | POL | 6520 | 1314 | 129 | 0(0) | 788(60) | 513(39) | 13(1) | 0(0) | 46(1) | 4119(63) | 2315(36) | 40(1) | 0(0) | 1314 |
| | 7 | NEP | 8026 | 1506 | 149 | 15(1) | 768(51) | 708(47) | 15(1) | 0(0) | 61(1) | 4887(61) | 3023(38) | 55(1) | 0(0) | 3153 |
| | 8 | TLK | 8185 | 159 | 16 | 0(0) | 70(44) | 89(56) | 0(0) | 0(0) | 61(1) | 4957(61) | 3112(38) | 55(1) | 0(0) | 333 |
| | 9 | ZAP | 10449 | 2264 | 212 | 23(1) | 1426(63) | 792(35) | 23(1) | 0(0) | 84(1) | 6383(61) | 3904(37) | 78(1) | 0(0) | 5325 |
| | 10 | REF | 10670 | 221 | 19 | 0(0) | 93(42) | 117(53) | 11(5) | 0(0) | 84(1) | 6476(61) | 4021(38) | 89(1) | 0(0) | 545 |
| | 11 | POL | 11259 | 589 | 58 | 0(0) | 294(50) | 295(50) | 0(0) | 0(0) | 84(1) | 6770(60) | 4316(38) | 89(1) | 0(0) | 1903 |
| | 12 | NEP | 12484 | 1225 | 123 | 0(0) | 686(56) | 527(43) | 12(1) | 0(0) | 84(1) | 7456(60) | 4843(39) | 101(1) | 0(0) | 4378 |
| | 13 | TLK | 12683 | 199 | 20 | 0(0) | 80(40) | 119(60) | 0(0) | 0(0) | 84(1) | 7536(59) | 4962(39) | 101(1) | 0(0) | 532 |
| | 14 | ZAP | 15182 | 2499 | 250 | 0(0) | 1874(75) | 625(25) | 0(0) | 0(0) | 84(1) | 9410(62) | 5587(37) | 101(1) | 0(0) | 7824 |
| | 15 | REF | 15482 | 300 | 30 | 0(0) | 189(63) | 111(37) | 0(0) | 0(0) | 84(1) | 9599(62) | 5698(37) | 101(1) | 0(0) | 845 |
| | 16 | POL | 16199 | 717 | 71 | 0(0) | 394(55) | 323(45) | 0(0) | 0(0) | 84(1) | 9893(62) | 6021(37) | 101(1) | 0(0) | 2620 |
| | 17 | NEP | 18016 | 1817 | 183 | 0(0) | 1163(64) | 600(33) | 54(3) | 0(0) | 84(0) | 11156(62) | 6621(37) | 155(1) | 0(0) | 6195 |
| | 18 | TLK | 18644 | 628 | 67 | 0(0) | 396(63) | 226(36) | 6(1) | 0(0) | 84(0) | 11552(62) | 6847(37) | 161(1) | 0(0) | 1160 |
| | 19 | ZAP | 22171 | 3527 | 355 | 36(1) | 2610(74) | 846(24) | 35(1) | 0(0) | 120(1) | 14162(64) | 7693(35) | 198(1) | 0(0) | 11351 |
| | 20 | REF | 22655 | 484 | 50 | 10(2) | 290(60) | 174(36) | 10(2) | 0(0) | 130(1) | 14452(64) | 7867(35) | 206(1) | 0(0) | 1329 |
| | 21 | POL | 24208 | 1553 | 155 | 16(1) | 1040(67) | 435(28) | 62(4) | 0(0) | 146(1) | 15492(64) | 8302(34) | 268(1) | 0(0) | 4173 |
| | 22 | NEP | 27340 | 3132 | 318 | 31(1) | 2130(68) | 940(30) | 16(1) | 0(0) | 177(1) | 17622(64) | 9242(34) | 284(1) | 0(0) | 9327 |
| | 23 | TLK | 28528 | 1188 | 126 | 12(1) | 832(70) | 332(28) | 12(1) | 0(0) | 189(1) | 18454(65) | 9574(34) | 296(1) | 0(0) | 2348 |
| | 24 | ZAP | 32560 | 4032 | 398 | 121(3) | 3145(78) | 766(19) | 0(0) | 0(0) | 310(1) | 21599(66) | 10340(32) | 296(1) | 0(0) | 15383 |
| | 25 | REF | 33116 | 556 | 55 | 0(0) | 345(62) | 189(34) | 22(4) | 0(0) | 310(1) | 21944(66) | 10529(32) | 318(1) | 0(0) | 1885 |
| | 26 | POL | 34155 | 1039 | 103 | 42(4) | 665(64) | 322(31) | 10(1) | 0(0) | 352(1) | 22609(66) | 10851(32) | 328(1) | 0(0) | 5212 |
| | 27 | NEP | 37279 | 3124 | 313 | 156(5) | 2406(77) | 531(17) | 31(1) | 0(0) | 508(1) | 25015(67) | 11382(31) | 359(1) | 0(0) | 12451 |
| | 28 | TLK | 38278 | 999 | 105 | 20(2) | 729(73) | 250(25) | 0(0) | 0(0) | 528(1) | 25744(67) | 11632(30) | 359(1) | 0(0) | 3347 |
| | 29 | ZAP | 40685 | 2407 | 242 | 120(5) | 1926(80) | 337(14) | 24(1) | 0(0) | 648(2) | 27670(68) | 11969(29) | 383(1) | 0(0) | 17790 |
| | 30 | REF | 41457 | 772 | 78 | 31(4) | 502(65) | 239(31) | 0(0) | 0(0) | 679(2) | 28172(68) | 12208(29) | 383(1) | 0(0) | 2657 |
| | 31 | POL | 43104 | 1647 | 175 | 16(1) | 1351(82) | 280(17) | 0(0) | 0(0) | 695(2) | 29523(68) | 12488(29) | 383(1) | 0(0) | 6859 |
| AUG | 1 | NEP | 47443 | 4339 | 479 | 347(8) | 3385(78) | 564(13) | 43(1) | 0(0) | 1042(2) | 32908(69) | 13052(28) | 426(1) | 0(0) | 16790 |
| | 2 | TLK | 49292 | 1849 | 196 | 111(6) | 1516(82) | 203(11) | 19(1) | 0(0) | 1153(2) | 34424(70) | 13255(27) | 445(1) | 0(0) | 5198 |
| | 3 | ZAP | 52171 | 2879 | 318 | 259(8) | 2217(77) | 374(13) | 29(1) | 0(0) | 1412(3) | 36641(70) | 13829(26) | 474(1) | 0(0) | 20669 |
| | 4 | REF | 53385 | 1214 | 132 | 85(7) | 910(75) | 219(18) | 0(0) | 0(0) | 1497(3) | 37551(70) | 13848(26) | 474(1) | 0(0) | 3871 |
| | 5 | POL | 54982 | 1597 | 180 | 16(1) | 1357(85) | 224(14) | 0(0) | 0(0) | 1513(3) | 36908(71) | 14072(26) | 474(1) | 0(0) | 8456 |
| | 6 | NEP | 55882 | 900 | 101 | 54(6) | 702(78) | 144(16) | 0(0) | 0(0) | 1567(3) | 39610(71) | 14216(25) | 474(1) | 0(0) | 17690 |
| | 7 | TLK | 56568 | 686 | 111 | 21(3) | 562(82) | 96(14) | 7(1) | 0(0) | 1588(3) | 40172(71) | 14312(25) | 481(1) | 0(0) | 5882 |
| | 8 | ZAP | 59702 | 3134 | 415 | 282(9) | 2476(79) | 345(11) | 31(1) | 0(0) | 1870(3) | 42648(71) | 14657(25) | 512(1) | 0(0) | 23803 |
| | 9 | REF | 60003 | 301 | 48 | 33(11) | 238(79) | 18(6) | 12(4) | 0(0) | 1903(3) | 42886(71) | 14675(24) | 524(1) | 0(0) | 4172 |
| | 10 | POL | 60956 | 953 | 151 | 105(11) | 743(78) | 105(11) | 0(0) | 0(0) | 2008(3) | 43629(72) | 14780(24) | 524(1) | 0(0) | 9409 |
| | 11 | NEP | 63288 | 2332 | 340 | 303(13) | 1796(77) | 233(10) | 0(0) | 0(0) | 2311(4) | 45425(72) | 15013(24) | 524(1) | 0(0) | 20022 |
| | 12 | TLK | 63961 | 673 | 152 | 54(8) | 552(82) | 67(10) | 0(0) | 0(0) | 2365(4) | 45977(72) | 15080(24) | 524(1) | 0(0) | 6555 |
| | 13 | ZAP | 66002 | 2041 | 265 | 306(15) | 1572(77) | 163(8) | 0(0) | 0(0) | 2671(4) | 47549(72) | 15243(23) | 524(1) | 0(0) | 25844 |
| | 14 | REF | 66130 | 128 | 32 | 4(3) | 99(77) | 17(13) | 8(6) | 0(0) | 2675(4) | 47648(72) | 15260(23) | 532(1) | 0(0) | 4300 |
| | 15 | POL | 67169 | 1039 | 245 | 145(14) | 810(78) | 84(8) | 0(0) | 0(0) | 2820(4) | 48458(72) | 15344(23) | 532(1) | 0(0) | 10448 |

*NEP=NORTHEAST POINT (MORJOVI AND VOSTOCHNI); TLK=TOLSTOI, LUKANIN, AND KITOVI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; ZAP=ZAPADNI; REF=REEF, GORBATCH, AND ARDIGUEN.

TABLE 43B - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. GEORGE ISLAND, 1961.

| DATE | ROOK-ERY# | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | | BY AREA, ALL AGES | |
|------|-----------|---------------|-------|---------------------|--|---------|---------|---------|--------|-----------------|--|----------|----------|--------|-------|-------------------|--|
| | | NUMBER KILLED | | NO. IN TOOTH SAMPLE | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | | |
| | | TO DATE | DAILY | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | | | |
| JULY | 2 | ZPG | 285 | 285 | 29 | 0(0) | 108(38) | 168(59) | 9(3) | 0(0) | 0(0) | 108(38) | 168(59) | 9(3) | 0(0) | 285 | |
| | 3 | NOR | 979 | 694 | 69 | 21(3) | 333(48) | 319(46) | 21(3) | 0(0) | 21(2) | 441(45) | 487(50) | 30(3) | 0(0) | 694 | |
| | 4 | E-E | 1361 | 382 | 42 | 0(0) | 191(50) | 183(48) | 8(2) | 0(0) | 21(2) | 632(46) | 670(49) | 38(3) | 0(0) | 382 | |
| | 5 | STA | 1469 | 108 | 22 | 0(0) | 39(36) | 64(59) | 5(5) | 0(0) | 21(1) | 671(46) | 734(50) | 43(3) | 0(0) | 108 | |
| | 6 | NOR | 1647 | 178 | 36 | 0(0) | 84(47) | 94(53) | 0(0) | 0(0) | 21(1) | 755(46) | 828(50) | 43(3) | 0(0) | 872 | |
| | 7 | ZPG | 1765 | 118 | 24 | 0(0) | 14(12) | 89(75) | 15(13) | 0(0) | 21(1) | 769(44) | 917(52) | 58(3) | 0(0) | 403 | |
| | 8 | NOR | 1930 | 165 | 29 | 0(0) | 46(28) | 114(69) | 5(3) | 0(0) | 21(1) | 815(42) | 1031(53) | 63(3) | 0(0) | 1037 | |
| | 9 | E-E | 2219 | 289 | 37 | 0(0) | 119(41) | 165(57) | 0(0) | 5(2) | 21(1) | 934(42) | 1196(54) | 63(3) | 5(0) | 671 | |
| | 10 | STA | 2291 | 72 | 15 | 0(0) | 14(19) | 53(74) | 5(7) | 0(0) | 21(1) | 948(41) | 1249(55) | 68(3) | 5(0) | 180 | |
| | 11 | NOR | 2551 | 260 | 28 | 0(0) | 140(54) | 120(46) | 0(0) | 0(0) | 21(1) | 1088(43) | 1369(54) | 68(3) | 5(0) | 1297 | |
| | 12 | ZPG | 2772 | 221 | 41 | 0(0) | 130(59) | 86(39) | 5(2) | 0(0) | 21(1) | 1218(44) | 1455(52) | 73(3) | 5(0) | 624 | |
| | 13 | NOR | 2946 | 174 | 37 | 5(3) | 61(35) | 108(62) | 0(0) | 0(0) | 26(1) | 1279(43) | 1563(53) | 73(2) | 5(0) | 1471 | |
| | 14 | E-E | 3215 | 269 | 27 | 0(0) | 151(56) | 110(41) | 8(3) | 0(0) | 26(1) | 1430(44) | 1673(52) | 81(3) | 5(0) | 940 | |
| | 15 | STA | 3266 | 51 | 13 | 0(0) | 19(37) | 32(63) | 0(0) | 0(0) | 26(1) | 1449(44) | 1705(52) | 81(2) | 5(0) | 231 | |
| | 16 | NOR | 3487 | 221 | 23 | 0(0) | 97(44) | 115(52) | 0(0) | 9(4) | 26(1) | 1546(44) | 1820(52) | 81(2) | 14(0) | 1692 | |
| | 17 | ZPG | 3811 | 324 | 34 | 0(0) | 172(53) | 152(47) | 0(0) | 0(0) | 26(1) | 1718(45) | 1972(52) | 81(2) | 14(0) | 948 | |
| | 18 | NOR | 4009 | 198 | 20 | 10(5) | 109(55) | 79(40) | 0(0) | 0(0) | 36(1) | 1827(46) | 2051(51) | 81(2) | 14(0) | 1890 | |
| | 19 | E-E | 4412 | 403 | 41 | 0(0) | 274(68) | 129(32) | 0(0) | 0(0) | 36(1) | 2101(48) | 2180(49) | 81(2) | 14(0) | 1343 | |
| | 20 | STA | 4545 | 133 | 16 | 0(0) | 59(44) | 74(56) | 0(0) | 0(0) | 36(1) | 2160(48) | 2254(50) | 81(2) | 14(0) | 364 | |
| | 21 | NOR | 5096 | 551 | 61 | 0(0) | 380(69) | 171(31) | 0(0) | 0(0) | 36(1) | 2540(50) | 2425(48) | 81(2) | 14(0) | 2441 | |
| | 22 | ZPG | 5339 | 243 | 27 | 0(0) | 100(41) | 126(52) | 17(7) | 0(0) | 36(1) | 2640(49) | 2551(48) | 98(2) | 14(0) | 1191 | |
| | 23 | NOR | 5744 | 405 | 41 | 0(0) | 219(54) | 178(44) | 8(2) | 0(0) | 36(1) | 2859(50) | 2729(48) | 106(2) | 14(0) | 2846 | |
| | 24 | E-E | 6544 | 800 | 80 | 32(4) | 616(77) | 120(15) | 32(4) | 0(0) | 68(1) | 3475(53) | 2849(44) | 138(2) | 14(0) | 2143 | |
| | 25 | STA | 6807 | 263 | 52 | 11(4) | 147(56) | 100(38) | 5(2) | 0(0) | 79(1) | 3622(53) | 2949(43) | 143(2) | 14(0) | 627 | |
| | 26 | NOR | 7408 | 601 | 60 | 12(2) | 361(60) | 228(38) | 0(0) | 0(0) | 91(1) | 3983(54) | 3177(43) | 143(2) | 14(0) | 3447 | |
| | 27 | ZPG | 7784 | 376 | 36 | 11(3) | 188(50) | 166(44) | 11(3) | 0(0) | 102(1) | 4171(54) | 3343(43) | 154(2) | 14(0) | 1567 | |
| | 28 | NOR | 8000 | 216 | 22 | 0(0) | 197(91) | 19(9) | 0(0) | 0(0) | 102(1) | 4368(55) | 3362(42) | 154(2) | 14(0) | 3663 | |
| | 29 | E-E | 8739 | 739 | 76 | 30(4) | 532(72) | 155(21) | 22(3) | 0(0) | 132(2) | 4900(56) | 3517(40) | 176(2) | 14(0) | 2882 | |
| | 30 | STA | 8906 | 167 | 57 | 8(5) | 82(49) | 99(41) | 8(5) | 0(0) | 140(2) | 4982(56) | 3586(40) | 184(2) | 14(0) | 794 | |
| | 31 | NOR | 9357 | 451 | 49 | 0(0) | 352(78) | 69(22) | 0(0) | 0(0) | 140(1) | 5334(57) | 3685(39) | 184(2) | 14(0) | 4114 | |
| AUG | 1 | ZPG | 9712 | 355 | 55 | 14(4) | 263(74) | 64(18) | 14(4) | 0(0) | 154(2) | 5597(58) | 3749(39) | 198(2) | 14(0) | 1922 | |
| | 2 | NOR | 10029 | 317 | 37 | 16(5) | 215(68) | 86(27) | 0(0) | 0(0) | 170(2) | 5812(58) | 3835(38) | 198(2) | 14(0) | 4431 | |
| | 3 | E-E | 11306 | 1277 | 141 | 191(15) | 894(70) | 192(15) | 0(0) | 0(0) | 361(3) | 6706(59) | 4027(36) | 198(2) | 14(0) | 4159 | |
| | 4 | STA | 11540 | 234 | 48 | 23(10) | 180(77) | 31(13) | 0(0) | 0(0) | 384(3) | 6886(60) | 4058(35) | 198(2) | 14(0) | 1028 | |
| | 5 | NOR | 11996 | 456 | 48 | 9(2) | 401(88) | 37(8) | 9(2) | 0(0) | 393(3) | 7287(61) | 4095(34) | 207(2) | 14(0) | 4887 | |
| | 6 | ZPG | 12105 | 109 | 61 | 12(11) | 79(72) | 16(15) | 2(2) | 0(0) | 405(3) | 7366(61) | 4111(34) | 209(2) | 14(0) | 2031 | |
| | 7 | NOR | 12271 | 166 | 57 | 0(0) | 128(77) | 35(21) | 3(2) | 0(0) | 405(3) | 7494(61) | 4146(34) | 212(2) | 14(0) | 5053 | |
| | 8 | E-E | 12535 | 264 | 37 | 63(24) | 172(65) | 29(11) | 0(0) | 0(0) | 468(4) | 7666(61) | 4175(33) | 212(2) | 14(0) | 4423 | |
| | 9 | STA | 12820 | 285 | 65 | 31(11) | 188(66) | 60(21) | 6(2) | 0(0) | 499(4) | 7854(61) | 4235(33) | 218(2) | 14(0) | 1313 | |
| | 10 | NOR | 13595 | 775 | 83 | 155(20) | 581(75) | 39(5) | 0(0) | 0(0) | 654(5) | 8435(62) | 4274(31) | 218(2) | 14(0) | 5828 | |
| | 11 | ZPG | 14091 | 496 | 104 | 80(16) | 332(67) | 84(17) | 0(0) | 0(0) | 734(5) | 8767(62) | 4358(31) | 218(2) | 14(0) | 2527 | |
| | 12 | NOR | 14230 | 139 | 36 | 15(11) | 88(63) | 36(26) | 0(0) | 0(0) | 749(5) | 8855(62) | 4394(31) | 218(2) | 14(0) | 5967 | |
| | 13 | E-E | 14535 | 305 | 43 | 21(7) | 241(79) | 43(14) | 0(0) | 0(0) | 770(5) | 9096(63) | 4437(31) | 218(1) | 14(0) | 4728 | |
| | 14 | STA | 14862 | 327 | 90 | 98(30) | 206(63) | 23(7) | 0(0) | 0(0) | 868(6) | 9302(63) | 4460(30) | 218(1) | 14(0) | 1640 | |
| | 15 | NOR | 15028 | 166 | 43 | 23(14) | 111(67) | 32(19) | 0(0) | 0(0) | 891(6) | 9413(63) | 4492(30) | 218(1) | 14(0) | 6133 | |

*ZPG=ZAPADNI (ST. GEORGE); NOR=NORTH; E-E=EAST REEF AND EAST CLIFFS; STA=STARAYA ARTIL.

TABLE 44A - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1962.)

| DATE | ROOK-ERY# | DAILY KILL | | | | | | | | | CUMULATIVE KILL | | | | | |
|------|-----------|-----------------------|---------------------|---|-----|---------|----------|-----------|---------|---|-----------------|-----------|-----------|-------------------|-------|--------|
| | | NUMBER KILLED TO DATE | NO. IN TOOTH SAMPLE | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | | |
| | | | | 2 | 3 | 4 | 5 | 6) | 2 | 3 | 4 | 5 | 6 | BY AREA, ALL AGES | | |
| JULY | 2 | NEP | 1128 | 1128 | 110 | 22(2) | 429(38) | 655(58) | 22(2) | 0(0) | 22(2) | 429(38) | 655(58) | 22(2) | 0(0) | 1128 |
| | 3 | TZR | 1723 | 595 | 57 | 0(0) | 280(47) | 274(46) | 4(7) | 0(0) | 22(1) | 709(41) | 929(54) | 63(4) | 0(0) | 595 |
| | 4 | ZAP | 2772 | 1049 | 104 | 0(0) | 545(52) | 504(48) | 0(0) | 0(0) | 22(1) | 1254(45) | 1433(52) | 63(2) | 0(0) | 1049 |
| | 5 | RLK | 3313 | 541 | 53 | 0(0) | 222(41) | 298(55) | 21(4) | 0(0) | 22(1) | 1476(45) | 1731(52) | 84(3) | 0(0) | 541 |
| | 6 | POL | 3792 | 479 | 47 | 0(0) | 163(34) | 297(62) | 19(4) | 0(0) | 22(1) | 1639(43) | 2028(53) | 103(3) | 0(0) | 479 |
| | 7 | NEP | 5607 | 1815 | 180 | 18(1) | 672(37) | 1017(56) | 108(6) | 0(0) | 40(1) | 2311(41) | 3045(54) | 211(4) | 0(0) | 2943 |
| | 8 | TZR) | 6850 | 1243 | 127 | 0(0) | 746(60) | 460(37) | 37(3) | 0(0) | 40(1) | 3057(45) | 3505(51) | 248(4) | 0(0) | 1838 |
| | 9 | ZAP | 7997 | 1147 | 114 | 0(0) | 814(71) | 333(29) | 0(0) | 0(0) | 40(1) | 3871(48) | 3838(48) | 248(3) | 0(0) | 2196 |
| | 10 | RLK | 8409 | 412 | 40 | 0(0) | 206(50) | 198(48) | 8(2) | 0(0) | 40(0) | 4077(48) | 4036(48) | 256(3) | 0(0) | 953 |
| | 11 | POL | 9138 | 729 | 72 | 0(0) | 408(56) | 299(41) | 22(3) | 0(0) | 40(0) | 4485(49) | 4335(47) | 278(3) | 0(0) | 1208 |
| | 12 | NEP | 10525 | 1387 | 139 | 14(1) | 679(49) | 652(47) | 42(3) | 0(0) | 54(1) | 5164(49) | 4987(47) | 320(3) | 0(0) | 4330 |
| | 13 | TZR | 11045 | 520 | 51 | 10(2) | 296(57) | 172(33) | 42(8) | 0(0) | 64(1) | 5460(49) | 5159(47) | 362(3) | 0(0) | 2358 |
| | 14 | ZAP | 13263 | 2218 | 218 | 22(1) | 1398(63) | 776(35) | 22(1) | 0(0) | 86(1) | 6858(52) | 5935(45) | 384(3) | 0(0) | 4414 |
| | 15 | RLK | 14013 | 750 | 73 | 23(3) | 337(45) | 353(47) | 37(5) | 0(0) | 109(1) | 7195(51) | 6288(45) | 421(3) | 0(0) | 1703 |
| | 16 | POL | 14842 | 829 | 81 | 8(1) | 448(54) | 348(42) | 25(3) | 0(0) | 117(1) | 7643(51) | 6636(45) | 446(3) | 0(0) | 2037 |
| | 17 | NEP | 16866 | 2024 | 203 | 20(1) | 1194(59) | 790(39) | 20(1) | 0(0) | 137(1) | 8837(52) | 7426(44) | 466(3) | 0(0) | 6354 |
| | 18 | TZR | 17623 | 757 | 76 | 30(4) | 462(61) | 257(34) | 8(1) | 0(0) | 167(1) | 9299(53) | 7683(44) | 474(3) | 0(0) | 3115 |
| | 19 | ZAP | 19071 | 1448 | 144 | 0(0) | 1043(72) | 405(28) | 0(0) | 0(0) | 167(1) | 10342(54) | 8088(42) | 474(2) | 0(0) | 5862 |
| | 20 | RLK | 19850 | 779 | 77 | 8(1) | 420(54) | 343(44) | 8(1) | 0(0) | 175(1) | 10762(54) | 8431(42) | 482(2) | 0(0) | 2482 |
| | 21 | POL | 20575 | 725 | 71 | 0(0) | 464(64) | 232(32) | 29(4) | 0(0) | 175(1) | 11226(55) | 8663(42) | 511(2) | 0(0) | 2762 |
| | 22 | NEP | 22904 | 2329 | 236 | 93(4) | 1609(69) | 604(26) | 23(1) | 0(0) | 288(1) | 12635(56) | 9267(40) | 534(2) | 0(0) | 8683 |
| | 23 | TZR | 24264 | 1360 | 136 | 27(2) | 966(71) | 354(26) | 13(1) | 0(0) | 295(1) | 13801(57) | 9621(40) | 547(2) | 0(0) | 4475 |
| | 24 | ZAP | 26560 | 2296 | 231 | 69(3) | 1630(71) | 551(24) | 46(2) | 0(0) | 384(1) | 15431(58) | 10172(38) | 593(2) | 0(0) | 8158 |
| | 25 | RLK | 27746 | 1186 | 118 | 36(3) | 830(70) | 308(26) | 12(1) | 0(0) | 400(1) | 16261(59) | 10480(38) | 605(2) | 0(0) | 3668 |
| | 26 | POL | 29152 | 1406 | 138 | 14(1) | 1040(74) | 352(25) | 0(0) | 0(0) | 414(1) | 17301(59) | 10832(37) | 605(2) | 0(0) | 4168 |
| | 27 | NEP | 31053 | 1901 | 195 | 95(5) | 1255(66) | 532(28) | 19(1) | 0(0) | 509(2) | 18556(60) | 11364(37) | 624(2) | 0(0) | 10584 |
| | 28 | TZR | 31690 | 637 | 64 | 6(1) | 440(69) | 191(30) | 0(0) | 0(0) | 515(2) | 18996(60) | 11555(36) | 624(2) | 0(0) | 5112 |
| | 29 | ZAP | 32315 | 625 | 63 | 0(0) | 506(81) | 106(17) | 13(2) | 0(0) | 515(2) | 19502(60) | 11661(36) | 637(2) | 0(0) | 8783) |
| | 30 | RLK | 33031 | 716 | 80 | 7(1) | 480(67) | 222(31) | 7(1) | 0(0) | 522(2) | 19982(60) | 11883(36) | 644(2) | 0(0) | 4384 |
| | 31 | POL | 33499 | 468 | 48 | 0(0) | 285(61) | 164(35) | 19(4) | 0(0) | 522(2) | 20267(61) | 12047(36) | 663(2) | 0(0) | 4636 |
| AUG | 1 | NEP | 35310 | 1811 | 201 | 54(3) | 1177(65) | 562(31) | 18(1) | 0(0) | 576(2) | 21444(61) | 12609(36) | 681(2) | 0(0) | 12395) |
| | 2 | TZR | 37977 | 2667 | 288 | 80(3) | 2187(82) | 400(15) | 0(0) | 0(0) | 656(2) | 23631(62) | 13009(34) | 681(2) | 0(0) | 7779 |
| | 3 | ZAP | 38548 | 571 | 76 | 23(4) | 382(67) | 166(29) | 0(0) | 0(0) | 679(2) | 24013(62) | 13175(34) | 681(2) | 0(0) | 9354 |
| | 4 | RLK | 39670 | 1122 | 161 | 78(7) | 853(76) | 191(17) | 0(0) | 0(0) | 757(2) | 24866(63) | 13366(34) | 681(2) | 0(0) | 5506 |
| | 5 | POL | 39983 | 313 | 54 | 19(6) | 232(74) | 56(18) | 6(2) | 0(0) | 776(2) | 25098(63) | 13422(34) | 687(2) | 0(0) | 4949 |
| | 13 | NEP | 40301 | 318 | 126 | 54(17) | 165(52) | 92(29) | 7(2) | 0(0) | 830(2) | 25263(63) | 13514(34) | 694(2) | 0(0) | 12713) |
| | 14 | NEP | 40721 | 420 | 172 | 50(12) | 198(47) | 151(38) | 21(5) | 0(0) | 880(2) | 25461(63) | 13665(34) | 715(2) | 0(0) | 13133 |
| | 15 | TZR | 41325 | 604 | 234 | 109(18) | 272(45) | 193(32) | 30(5) | 0(0) | 989(2) | 25733(62) | 13858(34) | 745(2) | 0(0) | 8383 |
| | 16 | ZAP | 41751 | 426 | 133 | 68(16) | 234(55) | 115(27) | 9(2) | 0(0) | 1057(3) | 25967(62) | 13973(33) | 754(2) | 0(0) | 9780 |
| | 17 | REF | 42116 | 365 | 133 | 117(32) | 186(51) | 62(17) | 0(0) | 0(0) | 1174(3) | 26153(62) | 14035(33) | 754(2) | 0(0) | 365 |
| | 20 | POL | 42338 | 222 | 68 | 27(12) | 104(47) | 78(35) | 13(6) | 0(0) | 1201(3) | 26257(62) | 14113(33) | 767(2) | 0(0) | 5171 |
| | 21 | NEP | 42546 | 208 | 87 | 125(60) | 64(31) | 13(6) | 6(3) | 0(0) | 1326(3) | 26321(62) | 14126(33) | 773(2) | 0(0) | 13341 |
| | 22 | TZR | 42731 | 185 | 73 | 83(45) | 94(51) | 8(4) | 0(0) | 0(0) | 1409(3) | 26415(62) | 14134(33) | 773(2) | 0(0) | 8568 |
| | 23 | ZAP | 42962 | 231 | 68 | 193(84) | 23(10) | 15(6) | 0(0) | 0(0) | 1602(4) | 26438(62) | 14149(33) | 773(2) | 0(0) | 10011 |
| | 24 | REF | 42979 | 17 | 16 | 4(24) | 13(76) | 0(0) | 0(0) | 0(0) | 1606(4) | 26451(62) | 14149(33) | 773(2) | 0(0) | 382) |
| | 24 | POL | 42997 | 18 | 4 | 13(72) | 5(28) | 0(0) | 0(0) | 0(0) | 1619(4) | 26456(62) | 14149(33) | 773(2) | 0(0) | 5189) |
| | | COM | 43203 | 206 | 0 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 1619(4) | 26456(61) | 14149(33) | 773(2) | 0(0) | 206 |

*NEP=NORTHEAST POINT (MORJOVI AND VOSTOCHNI); TZR=TOLSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS.) AND LITTLE POLOVINA; ZAP=ZAPADNI; REF=REEF, GORBATCH, AND ARDIGUEN; RLK=REEF, GORBATCH, ARDIGUEN, LUKANIN AND KITOVI; COM=COMBINED ROOKERY.

TABLE 44B - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. GEORGE ISLAND, 1962.

| DATE | ROOK-ERY# | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | | |
|------|-----------|-----------------------|---------------------|---------------------|--|--------|---------|---------|--------|--|--------|----------|----------|--------|-------------------|------|
| | | NUMBER KILLED TO DATE | NO. IN DAILY SAMPLE | NO. IN TOOTH SAMPLE | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | BY AREA, ALL AGES | |
| | | | | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | | |
| JULY | 2 | ZPG | 359 | 359 | 36 | 0(0) | 152(42) | 197(55) | 10(3) | 0(0) | 0(0) | 152(42) | 197(55) | 10(3) | 0(0) | 359 |
| | 3 | NOR | 745 | 386 | 39 | 0(0) | 138(36) | 237(61) | 11(3) | 0(0) | 0(0) | 290(39) | 434(58) | 21(3) | 0(0) | 386 |
| | 4 | E-E | 985 | 240 | 23 | 9(4) | 103(43) | 128(53) | 0(0) | 0(0) | 9(1) | 393(40) | 562(57) | 21(2) | 0(0) | 240 |
| | 5 | STA | 1002 | 17 | 2 | 0(0) | 0(0) | 17(100) | 0(0) | 0(0) | 9(1) | 393(39) | 579(58) | 21(2) | 0(0) | 17 |
| | 6 | NOR | 1228 | 226 | 23 | 0(0) | 99(44) | 118(52) | 9(4) | 0(0) | 9(1) | 492(40) | 697(57) | 30(2) | 0(0) | 612 |
| | 7 | ZPG | 1463 | 235 | 24 | 0(0) | 97(41) | 119(51) | 19(8) | 0(0) | 9(1) | 589(40) | 816(56) | 49(3) | 0(0) | 594 |
| | 8 | NOR | 1625 | 162 | 16 | 0(0) | 31(19) | 131(81) | 0(0) | 0(0) | 9(1) | 620(38) | 947(58) | 49(3) | 0(0) | 774 |
| | 9 | E-E | 1895 | 270 | 29 | 0(0) | 141(52) | 129(48) | 0(0) | 0(0) | 9(0) | 761(40) | 1076(57) | 49(3) | 0(0) | 510 |
| | 10 | STA | 1920 | 25 | 3 | 0(0) | 8(32) | 17(68) | 0(0) | 0(0) | 9(0) | 769(40) | 1093(57) | 49(3) | 0(0) | 42 |
| | 11 | NOR | 2103 | 183 | 20 | 0(0) | 45(25) | 138(75) | 0(0) | 0(0) | 9(0) | 814(39) | 1231(59) | 49(2) | 0(0) | 957 |
| | 12 | ZPG | 2189 | 86 | 8 | 0(0) | 32(37) | 54(63) | 0(0) | 0(0) | 9(0) | 846(39) | 1285(59) | 49(2) | 0(0) | 680 |
| | 13 | NOR | 2402 | 213 | 21 | 10(5) | 91(43) | 102(48) | 10(5) | 0(0) | 19(1) | 937(39) | 1387(58) | 59(2) | 0(0) | 1170 |
| | 14 | E-E | 2844 | 442 | 44 | 0(0) | 310(70) | 132(30) | 0(0) | 0(0) | 19(1) | 1247(44) | 1519(53) | 59(2) | 0(0) | 952 |
| | 15 | STA | 2896 | 52 | 5 | 0(0) | 21(40) | 31(60) | 0(0) | 0(0) | 19(1) | 1268(44) | 1550(54) | 59(2) | 0(0) | 94 |
| | 16 | NOR | 3274 | 378 | 37 | 0(0) | 174(46) | 185(49) | 19(5) | 0(0) | 19(1) | 1442(44) | 1735(53) | 78(2) | 0(0) | 1548 |
| | 17 | ZPG | 3675 | 401 | 40 | 0(0) | 160(40) | 233(58) | 8(2) | 0(0) | 19(1) | 1602(44) | 1968(54) | 86(2) | 0(0) | 1081 |
| | 18 | NOR | 3914 | 239 | 24 | 0(0) | 91(38) | 139(58) | 9(4) | 0(0) | 19(0) | 1693(43) | 2107(54) | 95(2) | 0(0) | 1787 |
| | 19 | E-E | 4193 | 279 | 28 | 8(3) | 151(54) | 101(36) | 19(7) | 0(0) | 27(1) | 1844(44) | 2208(53) | 114(3) | 0(0) | 1231 |
| | 20 | STA | 4252 | 59 | 6 | 0(0) | 39(66) | 20(34) | 0(0) | 0(0) | 27(1) | 1883(44) | 2228(52) | 114(3) | 0(0) | 153 |
| | 21 | NOR | 4596 | 344 | 31 | 0(0) | 179(52) | 155(45) | 10(3) | 0(0) | 27(1) | 2062(45) | 2383(52) | 124(3) | 0(0) | 2131 |
| | 22 | ZPG | 4813 | 217 | 22 | 0(0) | 108(50) | 104(48) | 5(2) | 0(0) | 27(1) | 2170(45) | 2487(52) | 129(3) | 0(0) | 1298 |
| | 23 | NOR | 4973 | 160 | 17 | 0(0) | 75(47) | 85(53) | 0(0) | 0(0) | 27(1) | 2245(45) | 2572(52) | 129(3) | 0(0) | 2291 |
| | 24 | E-E | 5762 | 789 | 77 | 24(3) | 560(71) | 197(25) | 8(1) | 0(0) | 51(1) | 2805(49) | 2769(48) | 137(2) | 0(0) | 2020 |
| | 25 | STA | 5849 | 87 | 9 | 0(0) | 57(66) | 30(34) | 0(0) | 0(0) | 51(1) | 2862(49) | 2799(48) | 137(2) | 0(0) | 240 |
| | 26 | NOR | 6240 | 391 | 39 | 0(0) | 258(66) | 133(34) | 0(0) | 0(0) | 51(1) | 3120(50) | 2932(47) | 137(2) | 0(0) | 2882 |
| | 27 | ZPG | 6402 | 162 | 15 | 11(7) | 130(80) | 21(13) | 0(0) | 0(0) | 62(1) | 3250(51) | 2953(46) | 137(2) | 0(0) | 1460 |
| | 28 | NOR | 6529 | 127 | 13 | 9(7) | 49(39) | 69(54) | 0(0) | 0(0) | 71(1) | 3299(51) | 3022(46) | 137(2) | 0(0) | 2809 |
| | 29 | E-E | 6773 | 244 | 22 | 0(0) | 156(64) | 88(36) | 0(0) | 0(0) | 71(1) | 3455(51) | 3110(46) | 137(2) | 0(0) | 2264 |
| | 30 | STA | 6773 | 0 | 0 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 71(0) | 3455(0) | 3110(0) | 137(0) | 0(0) | 240 |
| | 31 | NOR | 7232 | 459 | 50 | 37(8) | 275(60) | 147(32) | 0(0) | 0(0) | 108(1) | 3730(52) | 3257(45) | 137(2) | 0(0) | 3268 |
| AUG | 1 | ZPG | 7546 | 314 | 48 | 12(4) | 186(59) | 85(27) | 31(10) | 0(0) | 120(2) | 3916(52) | 3342(44) | 168(2) | 0(0) | 1774 |
| | 2 | NOR | 8109 | 563 | 77 | 22(4) | 417(74) | 113(20) | 11(2) | 0(0) | 142(2) | 4333(53) | 3455(43) | 179(2) | 0(0) | 3831 |
| | 3 | E-E | 8622 | 513 | 72 | 15(3) | 420(82) | 78(15) | 0(0) | 0(0) | 157(2) | 4753(55) | 3533(41) | 179(2) | 0(0) | 2777 |
| | 4 | STA | 8847 | 225 | 40 | 11(5) | 180(80) | 34(15) | 0(0) | 0(0) | 168(2) | 4933(56) | 3567(40) | 179(2) | 0(0) | 465 |
| | 5 | NOR | 9056 | 209 | 28 | 8(4) | 171(82) | 30(14) | 0(0) | 0(0) | 176(2) | 5104(56) | 3597(40) | 179(2) | 0(0) | 4040 |
| | 13 | ZPG | 9391 | 335 | 67 | 70(21) | 196(59) | 53(16) | 16(5) | 0(0) | 246(3) | 5300(56) | 3650(39) | 195(2) | 0(0) | 2109 |
| | 14 | NOR | 9519 | 128 | 25 | 46(36) | 82(64) | 0(0) | 0(0) | 0(0) | 292(3) | 5382(57) | 3650(38) | 195(2) | 0(0) | 4168 |
| | 15 | E-E | 9756 | 237 | 24 | 40(17) | 128(54) | 29(12) | 40(17) | 0(0) | 332(3) | 5510(56) | 3679(38) | 235(2) | 0(0) | 3014 |
| | 16 | STA | 9900 | 144 | 17 | 17(12) | 111(77) | 9(6) | 7(5) | 0(0) | 349(4) | 5621(57) | 3688(37) | 242(2) | 0(0) | 609 |
| | 17 | NOR | 9958 | 58 | 23 | 13(22) | 33(57) | 10(17) | 2(3) | 0(0) | 362(4) | 5654(57) | 3698(37) | 244(2) | 0(0) | 4226 |
| | 20 | ZPG | 10138 | 180 | 38 | 99(55) | 81(45) | 0(0) | 0(0) | 0(0) | 461(5) | 5735(57) | 3698(36) | 244(2) | 0(0) | 2289 |
| | 21 | NOR | 10323 | 185 | 66 | 95(51) | 85(46) | 5(3) | 0(0) | 0(0) | 556(5) | 5820(56) | 3703(36) | 244(2) | 0(0) | 4411 |
| | 22 | E-E | 10409 | 86 | 27 | 57(66) | 29(34) | 0(0) | 0(0) | 0(0) | 613(6) | 5849(56) | 3703(36) | 244(2) | 0(0) | 3100 |
| | 23 | STA | 10477 | 68 | 15 | 23(34) | 41(60) | 4(6) | 0(0) | 0(0) | 636(6) | 5890(56) | 3707(35) | 244(2) | 0(0) | 677 |

*ZPG=ZAPADNI (ST. GEORGE); NOR=NORTH; E-E=EAST REEF AND EAST CLIFFS; STA=STARAYA ARTIL.

TABLE 45A - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1963.

| DATE | ROOK-ERY* | DAILY KILL | | | | | | | | | | CUMULATIVE KILL | | | | | BY AREA, ALL AGES |
|------|-----------|-----------------------|---------------------|---|-----|---------|----------|----------|---------|---|----------|-----------------|-----------|---------|-------|-------|-------------------|
| | | NUMBER KILLED TO DATE | NO. IN TOOTH SAMPLE | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | | | |
| | | | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | | | | |
| JULY | 2 | NEP | 1717 | 1717 | 171 | 17(1) | 567(33) | 1091(63) | 52(3) | 0(0) | 17(1) | 567(33) | 1091(63) | 52(3) | 0(0) | 1717 | |
| | 3 | TZR | 2188 | 471 | 47 | 0(0) | 132(28) | 311(66) | 28(6) | 0(0) | 17(1) | 699(32) | 1392(64) | 80(4) | 0(0) | 471 | |
| | 4 | ZAP | 3266 | 1078 | 102 | 22(2) | 345(32) | 614(57) | 97(9) | 0(0) | 39(1) | 1044(32) | 2006(61) | 177(5) | 0(0) | 1078 | |
| | 5 | RLK | 3818 | 552 | 53 | 10(2) | 166(30) | 315(57) | 61(11) | 0(0) | 49(1) | 1210(32) | 2321(61) | 238(6) | 0(0) | 552 | |
| | 6 | POL | 4369 | 551 | 54 | 0(0) | 171(31) | 347(63) | 33(6) | 0(0) | 49(1) | 1381(32) | 2668(61) | 271(6) | 0(0) | 551 | |
| | 7 | NEP | 5520 | 1151 | 114 | 0(0) | 437(38) | 610(53) | 104(9) | 0(0) | 49(1) | 1818(33) | 3278(59) | 375(7) | 0(0) | 2868 | |
| | 8 | TZR | 6146 | 826 | 62 | 0(0) | 232(37) | 363(58) | 31(5) | 0(0) | 49(1) | 2050(33) | 3641(59) | 406(7) | 0(0) | 1097 | |
| | 9 | ZAP | 6833 | 687 | 66 | 0(0) | 343(50) | 289(42) | 55(8) | 0(0) | 49(1) | 2393(35) | 3930(58) | 461(7) | 0(0) | 1765 | |
| | 10 | RLK | 7034 | 201 | 19 | 0(0) | 74(37) | 117(58) | 10(5) | 0(0) | 49(1) | 2467(35) | 4047(58) | 471(7) | 0(0) | 753 | |
| | 11 | POL | 7380 | 346 | 33 | 0(0) | 31(9) | 284(82) | 31(9) | 0(0) | 49(1) | 2498(34) | 4331(59) | 502(7) | 0(0) | 897 | |
| | 12 | NEP | 8228 | 848 | 83 | 0(0) | 305(36) | 484(57) | 59(7) | 0(0) | 49(1) | 2803(34) | 4815(59) | 561(7) | 0(0) | 3716 | |
| | 13 | TZR | 8534 | 306 | 29 | 0(0) | 94(31) | 181(59) | 22(7) | 9(3) | 49(1) | 2897(34) | 4996(59) | 583(7) | 9(0) | 14031 | |
| | 14 | ZAP | 8867 | 333 | 66 | 0(0) | 121(36) | 186(56) | 26(8) | 0(0) | 49(1) | 3018(34) | 5182(58) | 609(7) | 9(0) | 2098 | |
| | 15 | RLK | 9147 | 280 | 54 | 0(0) | 62(22) | 201(72) | 17(6) | 0(0) | 49(1) | 3080(34) | 5383(59) | 626(7) | 9(0) | 1033 | |
| | 16 | POL | 9426 | 279 | 54 | 0(0) | 75(27) | 148(53) | 50(18) | 6(2) | 49(1) | 3155(33) | 5531(59) | 676(7) | 15(0) | 11761 | |
| | 17 | NEP | 11337 | 1911 | 187 | 57(3) | 1013(53) | 784(41) | 57(3) | 0(0) | 106(1) | 4168(37) | 6315(56) | 733(6) | 15(0) | 5627 | |
| | 18 | TZR | 11781 | 444 | 85 | 4(1) | 227(51) | 186(42) | 18(4) | 9(2) | 110(1) | 4395(37) | 6501(55) | 751(6) | 24(0) | 1847 | |
| | 19 | ZAP | 13333 | 1552 | 153 | 31(2) | 854(55) | 605(39) | 62(4) | 0(0) | 141(1) | 5249(39) | 7106(53) | 813(6) | 24(0) | 3650 | |
| | 20 | RLK | 14432 | 1099 | 110 | 11(1) | 506(46) | 506(46) | 65(6) | 11(1) | 152(1) | 5755(40) | 7612(53) | 878(6) | 35(0) | 2132 | |
| | 21 | POL | 15018 | 586 | 58 | 12(2) | 292(50) | 270(46) | 12(2) | 0(0) | 164(1) | 6047(40) | 7882(52) | 890(6) | 35(0) | 1762 | |
| | 22 | NEP | 17074 | 2056 | 204 | 82(4) | 1028(50) | 843(41) | 103(5) | 0(0) | 246(1) | 7075(41) | 8725(51) | 993(6) | 35(0) | 7683 | |
| | 23 | TZR | 17380 | 306 | 59 | 0(0) | 126(41) | 165(54) | 15(5) | 0(0) | 246(1) | 7201(41) | 8890(51) | 1008(6) | 35(0) | 2153 | |
| | 24 | ZAP | 18989 | 1609 | 160 | 32(2) | 1030(64) | 483(30) | 64(4) | 0(0) | 278(1) | 8231(43) | 9373(49) | 1072(6) | 35(0) | 5259 | |
| | 25 | RLK | 20232 | 1243 | 122 | 0(0) | 535(43) | 584(47) | 124(10) | 0(0) | 278(1) | 8766(43) | 9957(49) | 1196(6) | 35(0) | 3375 | |
| | 26 | POL | 20827 | 595 | 59 | 0(0) | 149(25) | 416(70) | 30(5) | 0(0) | 278(1) | 8915(43) | 10373(50) | 1226(6) | 35(0) | 2357 | |
| | 27 | NEP | 22681 | 1854 | 185 | 56(3) | 1075(58) | 630(34) | 93(5) | 0(0) | 334(1) | 9990(44) | 11003(49) | 1319(6) | 35(0) | 9537 | |
| | 28 | TZR | 23171 | 490 | 96 | 5(1) | 289(59) | 186(38) | 10(2) | 0(0) | 339(1) | 10279(44) | 11189(48) | 1329(6) | 35(0) | 2643 | |
| | 29 | ZAP | 24262 | 1091 | 110 | 55(5) | 600(55) | 404(37) | 32(3) | 0(0) | 394(2) | 10879(45) | 11593(48) | 1361(6) | 35(0) | 6350 | |
| | 30 | RLK | 25427 | 1165 | 121 | 23(2) | 582(50) | 513(44) | 47(4) | 0(0) | 417(2) | 11461(45) | 12106(48) | 1408(6) | 35(0) | 4540 | |
| | 31 | POL | 25756 | 329 | 66 | 7(2) | 135(41) | 177(54) | 10(3) | 0(0) | 424(2) | 11596(45) | 12283(48) | 1418(6) | 35(0) | 2686 | |
| AUG | 1 | NEP | 26602 | 846 | 88 | 25(3) | 550(65) | 254(30) | 17(2) | 0(0) | 449(2) | 12146(46) | 12537(47) | 1435(5) | 35(0) | 10383 | |
| | 2 | TZR | 27290 | 688 | 69 | 69(10) | 351(51) | 247(36) | 21(3) | 0(0) | 518(2) | 12497(46) | 12784(47) | 1456(5) | 35(0) | 3331 | |
| | 3 | ZAP | 28197 | 907 | 99 | 64(7) | 444(49) | 336(37) | 45(5) | 18(2) | 582(2) | 12941(46) | 13120(47) | 1501(5) | 53(0) | 7257 | |
| | 4 | RLK | 29496 | 1299 | 149 | 65(5) | 740(57) | 468(36) | 13(1) | 13(1) | 647(2) | 13681(46) | 13588(46) | 1514(5) | 66(0) | 5839 | |
| | 5 | POL | 30002 | 506 | 54 | 20(4) | 273(54) | 203(40) | 10(2) | 0(0) | 667(2) | 13954(47) | 13791(46) | 1524(5) | 66(0) | 3192 | |
| | | COM | 31881 | 1879 | 548 | 431(23) | 356(19) | 393(21) | 63(3) | 2(0) | 1098(13) | 14310(45) | 14184(44) | 1587(5) | 68(0) | 1879 | |

*NEP=NORTHEAST POINT (MORJOVI AND VOSTOCHNI); TZR=TOLSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, 1 AND LITTLE POLOVINA; ZAP=ZAPADNI; RLK=REEF, GORBATCH, ARDIGUEN, LUKANIN, AND KITOVI; COM=COMBINED ROOKERY.1

TABLE 45B - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. GEORGE ISLAND, 1963.

| DATE | ROOK-ERY# | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | | BY AREA, ALL AGES | | |
|------|-----------|---------------|-------|---------------------|----|--|---------|----------|--------|-----------------|---------|--|----------|---------|--------|----------------------|--|--|
| | | NUMBER KILLED | | NO. IN TOOTH SAMPLE | | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | | |
| | | TO DATE | DAILY | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | | | | | |
| JULY | 2 | ZPG | 457 | 457 | 47 | 10(2) | 68(15) | 311(68) | 58(13) | 10(2) | 10(2) | 68(15) | 311(68) | 58(13) | 10(2) | 457 | | |
| | 2 | STA | 525 | 68 | 22 | 0(0) | 6(9) | 37(54) | 25(37) | 0(0) | 10(2) | 74(14) | 348(66) | 83(16) | 10(2) | 68 | | |
| | 5 | E-E | 1007 | 482 | 49 | 10(2) | 137(28) | 286(59) | 49(10) | 0(0) | 20(2) | 211(21) | 634(63) | 132(13) | 10(1) | 482 | | |
| | 5 | NOR | 1398 | 391 | 40 | 0(0) | 117(30) | 235(60) | 39(10) | 0(0) | 20(1) | 328(23) | 869(62) | 171(12) | 10(1) | 391 | | |
| | 8 | ZPG | 1754 | 356 | 36 | 10(3) | 148(42) | 158(44) | 40(11) | 0(0) | 30(2) | 476(27) | 1027(59) | 211(12) | 10(1) | 813 | | |
| | 8 | NOR | 1869 | 115 | 36 | 0(0) | 16(14) | 86(75) | 13(11) | 0(0) | 30(2) | 492(26) | 1113(60) | 224(12) | 10(1) | 506 | | |
| | 10 | E-E | 2150 | 281 | 29 | 0(0) | 68(24) | 194(69) | 19(7) | 0(0) | 30(1) | 560(26) | 1307(61) | 243(11) | 10(0) | 763 | | |
| | 10 | NOR | 2398 | 248 | 48 | 0(0) | 62(25) | 165(67) | 21(8) | 0(0) | 30(1) | 622(26) | 1472(61) | 264(11) | 10(0) | 754 | | |
| | 12 | ZPG | 2564 | 166 | 33 | 0(0) | 35(21) | 111(67) | 20(12) | 0(0) | 30(1) | 657(26) | 1583(62) | 284(11) | 10(0) | 979 | | |
| | 15 | NOR | 3018 | 454 | 46 | 0(0) | 89(20) | 315(69) | 50(11) | 0(0) | 30(1) | 746(25) | 1898(63) | 334(11) | 10(0) | 1208 | | |
| | 15 | E-E | 3429 | 411 | 41 | 0(0) | 200(49) | 201(49) | 10(2) | 0(0) | 30(1) | 946(28) | 2099(61) | 344(10) | 10(0) | 1174 | | |
| | 17 | ZPG | 3588 | 159 | 48 | 0(0) | 40(25) | 99(62) | 20(13) | 0(0) | 30(1) | 986(27) | 2198(61) | 364(10) | 10(0) | 1138 | | |
| | 17 | E-E | 4090 | 502 | 51 | 10(2) | 236(47) | 256(51) | 0(0) | 0(0) | 40(1) | 1222(30) | 2454(60) | 364(9) | 10(0) | 1676 | | |
| | 19 | STA | 4178 | 88 | 26 | 3(3) | 10(11) | 65(74) | 10(11) | 0(0) | 43(1) | 1232(29) | 2519(60) | 374(9) | 10(0) | 156 | | |
| | 22 | ZPG | 4380 | 202 | 44 | 0(0) | 73(36) | 105(52) | 20(10) | 4(2) | 43(1) | 1305(30) | 2624(60) | 394(9) | 14(0) | 1340 | | |
| | 22 | NOR | 5078 | 698 | 70 | 0(0) | 329(47) | 349(50) | 20(3) | 0(0) | 43(1) | 1634(32) | 2973(59) | 414(8) | 14(0) | 1906 | | |
| | 24 | E-E | 5971 | 893 | 92 | 18(2) | 527(59) | 339(38) | 9(1) | 0(0) | 61(1) | 2161(36) | 3312(55) | 423(7) | 14(0) | 2569 | | |
| | 24 | STA | 6052 | 81 | 23 | 0(0) | 25(31) | 42(52) | 11(14) | 3(4) | 61(1) | 2186(36) | 3354(55) | 434(7) | 17(0) | 237 | | |
| | 26 | NOR | 6653 | 601 | 67 | 12(2) | 264(44) | 295(49) | 30(5) | 0(0) | 73(1) | 2450(37) | 3649(55) | 464(7) | 17(0) | 2507 | | |
| | 26 | ZPG | 6835 | 182 | 33 | 0(0) | 67(37) | 88(48) | 27(15) | 0(0) | 73(1) | 2517(37) | 3737(55) | 491(7) | 17(0) | 1522 | | |
| | 29 | E-E | 7047 | 212 | 36 | 17(8) | 136(64) | 59(28) | 0(0) | 0(0) | 90(1) | 2653(38) | 3796(54) | 491(7) | 17(0) | 2781 | | |
| | 29 | NOR | 7149 | 102 | 30 | 7(7) | 61(60) | 34(33) | 0(0) | 0(0) | 97(1) | 2714(38) | 3830(54) | 491(7) | 17(0) | 2609 | | |
| | 31 | NOR | 7802 | 653 | 67 | 72(11) | 313(48) | 242(37) | 26(4) | 0(0) | 169(2) | 3027(39) | 4072(52) | 517(7) | 17(0) | 3262 | | |
| | 31 | ZPG | 8044 | 242 | 24 | 41(17) | 131(54) | 70(29) | 0(0) | 0(0) | 210(3) | 3158(39) | 4142(51) | 517(6) | 17(0) | 1764 | | |
| AUG | 2 | E-E | 8573 | 529 | 53 | 53(10) | 328(62) | 148(28) | 0(0) | 0(0) | 263(3) | 3486(41) | 4290(50) | 517(6) | 17(0) | 3310 | | |
| | 2 | STA | 8822 | 249 | 52 | 37(15) | 135(54) | 72(29) | 5(2) | 0(0) | 300(3) | 3621(41) | 4362(49) | 522(6) | 17(0) | 486 | | |
| | 5 | NOR | 9527 | 705 | 72 | 169(24) | 346(49) | 183(26) | 7(1) | 0(0) | 469(5) | 3967(42) | 4545(48) | 529(6) | 17(0) | 3967 | | |
| | 5 | ZPG | 9683 | 156 | 38 | 20(13) | 65(42) | 58(37) | 8(5) | 5(3) | 489(5) | 4032(42) | 4603(48) | 537(6) | 22(0) | 1920 | | |
| | 13 | STA | 9838 | 155 | 41 | 57(37) | 64(41) | 31(20) | 3(2) | 0(0) | 546(6) | 4096(42) | 4634(47) | 540(5) | 22(0) | 641 | | |
| | 14 | NOR | 9921 | 83 | 23 | 22(27) | 43(52) | 18(22) | 0(0) | 0(0) | 568(6) | 4139(42) | 4652(47) | 540(5) | 22(0) | 4050 | | |
| | 16 | E-E | 9927 | 6 | 6 | 3(50) | 2(33) | 1(17) | 0(0) | 0(0) | 571(6) | 4141(42) | 4653(47) | 540(5) | 22(0) | 3316 | | |
| | 16 | NOR | 9954 | 27 | 27 | 15(56) | 9(33) | 3(11) | 0(0) | 0(0) | 586(6) | 4150(42) | 4656(47) | 540(5) | 22(0) | 4077 | | |
| | 19 | STA | 10029 | 75 | 30 | 50(67) | 23(31) | 2(3) | 0(0) | 0(0) | 636(6) | 4173(42) | 4658(46) | 540(5) | 22(0) | 716 | | |
| | 21 | ZPG | 10150 | 121 | 37 | 39(32) | 65(54) | 17(14) | 0(0) | 0(0) | 675(7) | 4238(42) | 4675(46) | 540(5) | 22(0) | 2041 | | |
| | 23 | E-E | 10196 | 46 | 19 | 36(78) | 8(17) | 2(4) | 0(0) | 0(0) | 711(7) | 4246(42) | 4677(46) | 540(5) | 22(0) | 3362 | | |
| | 23 | NOR | 10227 | 31 | 26 | 20(65) | 6(19) | 5(16) | 0(0) | 0(0) | 731(7) | 4252(42) | 4682(46) | 540(5) | 22(0) | 4108 | | |
| | 26 | ZPG | 10360 | 133 | 48 | 81(61) | 44(33) | 8(6) | 0(0) | 0(0) | 812(8) | 4296(41) | 4690(45) | 540(5) | 22(0) | 2174 | | |
| | 28 | STA | 10464 | 104 | 48 | 74(71) | 30(29) | 0(0) | 0(0) | 0(0) | 886(8) | 4326(41) | 4690(45) | 540(5) | 22(0) | 820 | | |
| | 30 | NOR | 10505 | 41 | 34 | 35(85) | 6(15) | 0(0) | 0(0) | 0(0) | 921(9) | 4332(41) | 4690(45) | 540(5) | 22(0) | 4149 | | |

*ZPG=ZAPADNI (ST. GEORGE); NOR=NORTH; E-E=EAST REEF AND EAST CLIFFS; STA=STARAYA ARTIL.

TABLE 46A - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1964.

| DATE | ROOKERY# | DAILY KILL | | | | | | CUMULATIVE KILL | | | | | | BY AREA, ALL AGES | | |
|------|----------|--------------------------|------------------------|---------------------------|--|---------|----------|-----------------|---------|--------|--|-----------|-----------|----------------------|--------|-------|
| | | NUMBER KILLED TO DATE | NUMBER KILLED DAILY | NO. IN TOOTH SAMPLE | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | |
| | | | | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | | |
| JULY | 1 | NEP | 947 | 947 | 118 | 10(1) | 388(41) | 388(41) | 133(14) | 28(3) | 10(1) | 388(41) | 388(41) | 133(14) | 28(3) | 947 |
| | 2 | TZR | 1726 | 779 | 159 | 23(3) | 312(40) | 397(51) | 47(6) | 0(0) | 33(2) | 700(41) | 785(45) | 180(10) | 28(2) | 779 |
| | 2 | RLK | 2738 | 1012 | 127 | 0(0) | 324(32) | 587(58) | 101(10) | 0(0) | 33(1) | 1024(37) | 1372(50) | 281(10) | 28(1) | 1012 |
| | 5 | ZAP | 3578 | 840 | 85 | 0(0) | 370(44) | 412(49) | 58(7) | 0(0) | 33(1) | 1394(39) | 1784(50) | 339(9) | 28(1) | 840 |
| | 6 | L-K | 3723 | 145 | 29 | 0(0) | 80(55) | 51(35) | 14(10) | 0(0) | 33(1) | 1474(40) | 1835(49) | 353(9) | 28(1) | 145 |
| | 6 | POL | 4374 | 651 | 84 | 7(1) | 345(53) | 260(40) | 39(6) | 0(0) | 40(1) | 1819(42) | 2095(48) | 392(09) | 28(1) | 651 |
| | 7 | NEP | 5530 | 1156 | 116 | 23(2) | 439(38) | 590(51) | 92(8) | 12(1) | 63(1) | 2258(41) | 2685(49) | 484(9) | 40(1) | 2103 |
| | 8 | TZR | 6083 | 553 | 107 | 5(1) | 310(56) | 210(38) | 28(5) | 0(0) | 68(1) | 2568(42) | 2695(48) | 512(8) | 40(1) | 13320 |
| | 9 | ZAP | 6540 | 457 | 45 | 0(0) | 183(40) | 233(51) | 41(9) | 0(0) | 68(1) | 2751(42) | 3128(48) | 553(8) | 40(1) | 1297 |
| | 10 | RLK | 7109 | 569 | 88 | 0(0) | 283(50) | 247(43) | 39(7) | 0(0) | 68(1) | 3034(43) | 3375(47) | 592(8) | 40(1) | 15810 |
| | 11 | POL | 7448 | 339 | 42 | 0(0) | 232(68) | 107(32) | 0(0) | 0(0) | 68(1) | 3266(44) | 3482(47) | 592(8) | 40(1) | 990 |
| | 12 | NEP | 8877 | 1429 | 143 | 28(2) | 857(60) | 485(34) | 59(4) | 0(0) | 96(1) | 4123(46) | 3967(45) | 651(7) | 40(0) | 3532 |
| | 13 | TZR | 9262 | 385 | 75 | 11(3) | 250(65) | 92(24) | 20(5) | 12(3) | 107(1) | 4373(47) | 4059(44) | 671(7) | 52(1) | 1717 |
| | 14 | ZAP | 10052 | 790 | 79 | 24(3) | 355(45) | 387(49) | 24(3) | 0(0) | 131(1) | 4728(47) | 4446(44) | 695(7) | 52(1) | 20870 |
| | 15 | RLK | 11303 | 1251 | 139 | 40(3) | 703(56) | 448(36) | 60(5) | 0(0) | 171(2) | 5431(48) | 4894(43) | 755(7) | 52(0) | 28320 |
| | 16 | POL | 11618 | 315 | 70 | 9(3) | 188(60) | 74(23) | 44(14) | 0(0) | 180(2) | 5619(48) | 4968(43) | 799(7) | 52(0) | 1305 |
| | 17 | NEP | 13568 | 1950 | 381 | 98(5) | 1209(62) | 545(28) | 98(5) | 0(0) | 278(2) | 6828(50) | 5513(41) | 897(7) | 52(0) | 54820 |
| | 18 | TZR | 14641 | 1073 | 213 | 64(6) | 676(63) | 279(26) | 54(5) | 0(0) | 342(2) | 7504(51) | 5792(40) | 951(6) | 52(0) | 27900 |
| | 19 | ZAP | 16408 | 1767 | 351 | 53(3) | 1113(63) | 548(31) | 53(3) | 0(0) | 395(2) | 8617(53) | 6340(39) | 1004(6) | 52(0) | 3854 |
| | 20 | RLK | 17451 | 1043 | 205 | 73(7) | 584(56) | 303(29) | 73(7) | 100(1) | 468(3) | 9201(53) | 6643(38) | 1077(6) | 62(0) | 3875 |
| | 21 | POL | 17674 | 223 | 44 | 4(2) | 132(59) | 67(30) | 20(9) | 0(0) | 472(3) | 9333(53) | 6710(38) | 1097(6) | 62(0) | 1528 |
| | 22 | NEP | 19275 | 1601 | 321 | 144(9) | 1041(65) | 384(24) | 32(2) | 0(0) | 616(3) | 10374(54) | 7094(37) | 1129(6) | 62(0) | 70830 |
| | 23 | TZR | 19913 | 638 | 126 | 45(7) | 345(54) | 210(33) | 38(6) | 0(0) | 661(3) | 10719(54) | 7304(37) | 1167(6) | 62(0) | 3428 |
| | 24 | ZAP | 21659 | 1746 | 345 | 52(3) | 1118(64) | 506(29) | 70(4) | 0(0) | 713(3) | 11837(55) | 7810(36) | 1237(6) | 62(0) | 5600 |
| | 25 | RLK | 23079 | 1420 | 143 | 57(4) | 909(64) | 355(25) | 85(6) | 14(1) | 770(3) | 12746(55) | 8165(35) | 1322(6) | 76(0) | 5295 |
| | 26 | POL | 23711 | 632 | 56 | 32(5) | 442(70) | 114(18) | 32(5) | 12(2) | 802(3) | 13188(56) | 8279(35) | 1354(6) | 88(0) | 2160 |
| | 27 | NEP | 25908 | 2197 | 219 | 132(6) | 1516(69) | 439(20) | 110(5) | 0(0) | 934(4) | 14704(57) | 8718(34) | 1464(6) | 88(0) | 9280 |
| | 28 | TZR | 26785 | 877 | 103 | 35(4) | 500(57) | 289(33) | 44(5) | 9(1) | 969(4) | 15204(57) | 9007(34) | 1508(6) | 97(0) | 43050 |
| | 29 | ZAP | 27950 | 1165 | 119 | 58(5) | 769(66) | 280(24) | 58(5) | 0(0) | 1027(4) | 15973(57) | 9287(33) | 1566(6) | 97(0) | 6765 |
| | 30 | RLK | 29935 | 1985 | 198 | 179(9) | 1429(72) | 278(14) | 99(5) | 0(0) | 1206(4) | 17402(58) | 9565(32) | 1665(6) | 97(0) | 72800 |
| | 31 | POL | 30261 | 326 | 69 | 29(9) | 205(63) | 59(18) | 10(3) | 23(7) | 1235(4) | 17607(58) | 9624(32) | 1675(6) | 120(0) | 24860 |
| AUG | 1 | NEP | 32560 | 2299 | 244 | 253(11) | 1724(75) | 299(13) | 23(1) | 0(0) | 1488(5) | 19331(59) | 9923(30) | 1698(05) | 120(0) | 11579 |
| | 2 | TZR | 32761 | 201 | 57 | 28(14) | 119(59) | 30(15) | 24(12) | 0(0) | 1516(5) | 19450(59) | 9953(30) | 1722(5) | 120(0) | 4506 |
| | 3 | ZAP | 34878 | 2117 | 217 | 254(12) | 1482(70) | 339(16) | 42(2) | 0(0) | 1770(5) | 20932(60) | 10292(30) | 1764(5) | 120(0) | 8882 |
| | 4 | RLK | 35890 | 812 | 102 | 97(12) | 577(71) | 138(17) | 0(0) | 0(0) | 1867(5) | 21509(60) | 10430(29) | 1764(5) | 120(0) | 80920 |
| | 5 | POL | 35971 | 281 | 37 | 98(35) | 138(49) | 45(16) | 0(0) | 0(0) | 1965(5) | 21647(60) | 10475(29) | 1764(5) | 120(0) | 2767 |
| | 5 | NEP | 36649 | 678 | 86 | 88(13) | 556(82) | 34(5) | 0(0) | 0(0) | 2053(6) | 22203(61) | 10509(29) | 1764(5) | 120(0) | 12257 |
| | | COM | 38152 | 1503 | 273 | 486(32) | 265(18) | 24(2) | 0(0) | 2(0) | 2539(7) | 22468(59) | 10533(28) | 1764(5) | 122(0) | 1503 |

*NEP=NORTHEAST POINT (MORJOVI AND VOSTOCHNI); TZR=TOLSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; ZAP=ZAPADNI; RLK=REEF, GORBATCH, ARDIGUEN, LUKANIN, AND KITOVI; L-K=LUKANIN AND KITOVI; COM=COMBINED ROOKERY.

TABLE 46B - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. GEORGE ISLAND, 1964.

| DATE | ROOK-1 ERY# | DAILY KILL | | | | | | | | | | CUMULATIVE KILL | | | | | BY AREA, ALL AGES |
|------|----------------|------------------|-------|---------------------------|--|---------|---------|---------|--------|------|---|-----------------|----------|--------|-------|------|----------------------|
| | | NUMBER KILLED | | NO. IN TOOTH SAMPLE | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE ¹ | | | | | | |
| | | TO DATE | DAILY | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | | | |
| JULY | 1 | NOR | 389 | 389 | 73 | 0(0) | 206(53) | 156(40) | 27(7) | 0(0) | 0(0) | 206(53) | 156(40) | 27(7) | 0(0) | 389 | |
| | 6 | NOR | 493 | 104 | 28 | 0(0) | 67(64) | 30(29) | 7(7) | 0(0) | 0(0) | 273(55) | 186(38) | 34(7) | 0(0) | 493 | |
| | 6 | ZPG | 863 | 370 | 74 | 0(0) | 130(35) | 211(57) | 29(8) | 0(0) | 0(0) | 403(47) | 397(46) | 63(7) | 0(0) | 370 | |
| | 8 | NOR | 1176 | 313 | 61 | 6(2) | 210(67) | 81(26) | 16(5) | 0(0) | 6(1) | 613(52) | 478(41) | 79(7) | 0(0) | 806 | |
| | 8 | E-E | 1531 | 355 | 72 | 25(7) | 231(65) | 89(25) | 10(3) | 0(0) | 31(2) | 844(55) | 567(37) | 89(6) | 0(0) | 355 | |
| | 10 | ZPG | 1802 | 271 | 54 | 6(2) | 100(37) | 149(55) | 16(6) | 0(0) | 37(2) | 944(52) | 716(40) | 105(6) | 0(0) | 641 | |
| | 10 | NOR | 1944 | 142 | 41 | 0(0) | 101(71) | 41(29) | 0(0) | 0(0) | 37(2) | 1045(54) | 757(39) | 105(5) | 0(0) | 948 | |
| | 13 | E-E | 2276 | 332 | 67 | 17(5) | 212(64) | 93(28) | 10(3) | 0(0) | 54(2) | 1257(55) | 850(37) | 115(5) | 0(0) | 687 | |
| | 13 | NOR | 2595 | 319 | 62 | 16(5) | 195(61) | 102(32) | 6(2) | 0(0) | 70(3) | 1452(56) | 952(37) | 121(5) | 0(0) | 1267 | |
| | 15 | NOR | 2818 | 223 | 44 | 4(2) | 152(68) | 67(30) | 0(0) | 0(0) | 74(3) | 1604(57) | 1019(36) | 121(4) | 0(0) | 1490 | |
| | 15 | ZPG | 3188 | 370 | 37 | 18(5) | 170(46) | 152(41) | 30(8) | 0(0) | 92(3) | 1774(56) | 1171(37) | 151(5) | 0(0) | 1011 | |
| | 17 | NOR | 3608 | 420 | 43 | 29(7) | 265(63) | 126(30) | 0(0) | 0(0) | 121(3) | 2039(57) | 1297(38) | 151(4) | 0(0) | 1910 | |
| | 17 | E-E | 3990 | 382 | 39 | 38(10) | 245(64) | 99(26) | 0(0) | 0(0) | 159(4) | 2284(57) | 1396(35) | 151(4) | 0(0) | 1069 | |
| | 20 | NOR | 4248 | 258 | 51 | 0(0) | 189(73) | 59(23) | 5(2) | 5(2) | 159(4) | 2473(58) | 1455(34) | 156(4) | 5(0) | 2168 | |
| | 20 | ZPG | 4541 | 293 | 57 | 6(2) | 155(53) | 97(33) | 35(12) | 0(0) | 165(4) | 2628(58) | 1552(34) | 191(4) | 5(0) | 1304 | |
| | 22 | NOR | 5158 | 617 | 62 | 31(5) | 420(68) | 129(21) | 37(16) | 0(0) | 196(4) | 3048(59) | 1681(33) | 228(4) | 5(0) | 2785 | |
| | 22 | E-E ¹ | 5717 | 559 | 56 | 11(2) | 330(59) | 190(34) | 28(5) | 0(0) | 207(4) | 3378(59) | 1871(33) | 256(4) | 5(0) | 1628 | |
| | 24 | NOR | 5790 | 73 | 21 | 0(0) | 53(73) | 10(14) | 0(0) | 0(0) | 207(4) | 3431(59) | 1881(32) | 266(5) | 5(0) | 2858 | |
| | 24 | ZPG | 5978 | 188 | 38 | 9(5) | 75(40) | 75(40) | 25(13) | 4(2) | 216(4) | 3506(59) | 1956(33) | 291(5) | 9(0) | 1492 | |
| | 24 | STA | 6250 | 272 | 56 | 13(5) | 147(54) | 82(30) | 30(11) | 0(0) | 229(4) | 3653(58) | 2038(33) | 321(5) | 9(0) | 272 | |
| | 27 | E-E | 6688 | 438 | 43 | 22(5) | 337(77) | 48(11) | 31(7) | 0(0) | 251(4) | 3990(60) | 2086(31) | 352(5) | 9(0) | 2086 | |
| | 27 | NOR | 7175 | 487 | 49 | 39(8) | 390(80) | 49(10) | 9(2) | 0(0) | 290(4) | 4380(61) | 2135(30) | 361(5) | 9(0) | 3345 | |
| | 29 | ZPG | 7552 | 377 | 40 | 11(3) | 208(55) | 94(25) | 64(17) | 0(0) | 301(4) | 4588(61) | 2229(30) | 425(6) | 9(0) | 1869 | |
| | 29 | STA | 7751 | 199 | 45 | 8(4) | 151(76) | 18(9) | 18(9) | 4(2) | 309(4) | 4739(61) | 2247(29) | 443(6) | 13(0) | 471 | |
| | 29 | NOR | 7794 | 43 | 11 | 0(0) | 28(65) | 4(9) | 11(26) | 0(0) | 309(4) | 4767(61) | 2251(29) | 454(6) | 13(0) | 3389 | |
| | 31 | NOR | 8603 | 809 | 73 | 121(15) | 623(77) | 65(8) | 0(0) | 0(0) | 430(5) | 5390(63) | 2316(27) | 454(5) | 13(0) | 4197 | |
| | 31 | E-E | 8886 | 283 | 31 | 17(6) | 204(72) | 45(16) | 17(6) | 0(0) | 447(5) | 5594(63) | 2361(27) | 471(5) | 13(0) | 2349 | |
| AUG | 3 | STA | 9017 | 131 | 43 | 12(8) | 107(82) | 9(7) | 3(2) | 0(0) | 459(5) | 5701(63) | 2370(26) | 474(5) | 13(0) | 602 | |
| | 3 | NOR | 9493 | 476 | 47 | 109(23) | 305(64) | 62(13) | 0(0) | 0(0) | 568(6) | 6006(63) | 2432(26) | 474(5) | 13(0) | 4673 | |
| | 3 | ZPG | 9706 | 213 | 38 | 51(24) | 113(53) | 45(21) | 4(2) | 0(0) | 619(6) | 6119(63) | 2477(26) | 478(5) | 13(0) | 2082 | |
| | 7 | NOR | 10067 | 361 | 81 | 36(10) | 282(78) | 36(10) | 7(2) | 0(0) | 655(7) | 6401(64) | 2513(25) | 485(5) | 13(0) | 5034 | |
| | 7 | ZPG | 10283 | 216 | 24 | 9(4) | 162(75) | 45(21) | 0(0) | 0(0) | 664(6) | 6563(64) | 2558(25) | 485(5) | 13(0) | 2298 | |
| | 7 | E-E | 10362 | 79 | 26 | 9(11) | 61(77) | 6(8) | 3(4) | 0(0) | 673(6) | 6624(64) | 2564(25) | 488(5) | 13(0) | 2428 | |
| | 14 | STA | 10491 | 129 | 35 | 52(40) | 63(49) | 10(8) | 4(3) | 0(0) | 725(7) | 6687(64) | 2574(25) | 492(5) | 13(0) | 731 | |
| | 17 | ZPG | 10730 | 239 | 68 | 141(59) | 96(40) | 2(1) | 0(0) | 0(0) | 866(8) | 6763(63) | 2576(24) | 492(5) | 13(0) | 2537 | |
| | 19 | NOR | 10853 | 123 | 21 | 53(43) | 59(48) | 0(0) | 0(0) | 0(0) | 919(8) | 6842(63) | 2576(24) | 492(5) | 13(0) | 5157 | |
| | 21 | STA | 10897 | 44 | 13 | 17(39) | 24(55) | 3(7) | 0(0) | 0(0) | 936(9) | 6866(63) | 2579(24) | 492(5) | 13(0) | 775 | |
| | 21 | E-E | 10973 | 76 | 56 | 48(63) | 28(37) | 0(0) | 0(0) | 0(0) | 984(9) | 6894(63) | 2579(24) | 492(4) | 13(0) | 2504 | |
| | 24 | ZPG | 11098 | 125 | 20 | 88(70) | 31(25) | 0(0) | 0(0) | 0(0) | 1072(10) | 6925(62) | 2579(23) | 492(4) | 13(0) | 2662 | |
| | 26 | NOR | 11138 | 40 | 12 | 30(75) | 10(25) | 0(0) | 0(0) | 0(0) | 1102(10) | 6935(62) | 2579(23) | 492(4) | 13(0) | 5197 | |
| | 26 | STA | 11191 | 53 | 16 | 37(70) | 13(25) | 0(0) | 0(0) | 0(0) | 1139(10) | 6948(62) | 2579(23) | 492(4) | 13(0) | 828 | |

*ZPG=ZAPADNI (ST. GEORGE); NOR=NORTH; E-E=EAST REEF AND EAST CLIFFS; STA=STARAYA ARTIL.

TABLE 47A - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1965.

| DATE | ROOK-ERY* | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | | BY AREA, ALL AGES |
|--------|-----------|-----------------------|---------------------|---|----------|-----------|----------|---------|--------|---|------------|------------|----------|--------|---------|-------------------|
| | | NUMBER KILLED TO DATE | NO. IN TOOTH SAMPLE | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | | |
| | | | | DAILY | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | | |
| JULY 7 | NEP | 920 | 920 | 185 | 91 (1) | 359 (39) | 515 (56) | 37 (4) | 0 (0) | 9 (1) | 359 (39) | 515 (56) | 37 (4) | 0 (0) | 920 | |
| 8 | TZR | 1371 | 451 | 135 | 5 (1) | 171 (38) | 252 (56) | 18 (4) | 5 (1) | 14 (1) | 530 (39) | 767 (56) | 55 (4) | 5 (0) | 451 | |
| 9 | ZAP | 2391 | 1020 | 103 | 10 (1) | 347 (34) | 622 (61) | 41 (4) | 0 (0) | 24 (1) | 877 (37) | 1389 (58) | 96 (4) | 5 (0) | 1020 | |
| 10 | RLK | 3169 | 778 | 163 | 0 (0) | 241 (31) | 482 (62) | 47 (8) | 8 (1) | 24 (1) | 1118 (35) | 1871 (59) | 143 (5) | 13 (0) | 778 | |
| 11 | POL | 3483 | 314 | 65 | 0 (0) | 110 (35) | 179 (57) | 19 (6) | 6 (2) | 24 (1) | 1228 (35) | 2050 (59) | 162 (5) | 19 (1) | 314 | |
| 12 | NEP | 4312 | 829 | 83 | 0 (0) | 398 (48) | 381 (46) | 50 (6) | 0 (0) | 24 (1) | 1626 (38) | 2431 (56) | 212 (5) | 19 (0) | 1749 | |
| 13 | TZR | 4626 | 314 | 66 | 0 (0) | 120 (38) | 185 (39) | 6 (2) | 3 (1) | 24 (1) | 1746 (38) | 2616 (57) | 218 (5) | 22 (0) | 765 | |
| 13 | REF | 4764 | 138 | 24 | 6 (4) | 69 (50) | 83 (46) | 0 (0) | 0 (0) | 30 (1) | 1815 (38) | 2679 (56) | 218 (5) | 22 (0) | 138 | |
| 14 | ZAP | 5718 | 954 | 95 | 19 (2) | 353 (37) | 534 (56) | 48 (5) | 0 (0) | 49 (1) | 2168 (38) | 3213 (56) | 266 (5) | 22 (0) | 1974 | |
| 15 | REF | 6443 | 725 | 73 | 7 (1) | 297 (41) | 363 (50) | 51 (7) | 7 (1) | 56 (1) | 2465 (38) | 3576 (56) | 317 (5) | 29 (0) | 863 | |
| 15 | L-K | 6592 | 149 | 29 | 0 (0) | 77 (52) | 72 (48) | 0 (0) | 0 (0) | 56 (1) | 2542 (39) | 3648 (55) | 317 (5) | 29 (0) | 149 | |
| 16 | POL | 6804 | 212 | 42 | 4 (2) | 95 (45) | 81 (38) | 21 (10) | 11 (5) | 60 (1) | 2637 (39) | 3729 (55) | 338 (5) | 40 (1) | 526 | |
| 17 | NEP | 8562 | 1758 | 169 | 53 (3) | 967 (55) | 668 (38) | 70 (4) | 0 (0) | 113 (1) | 3604 (42) | 4397 (51) | 408 (5) | 40 (0) | 3507 | |
| 18 | TZR | 8815 | 253 | 51 | 0 (0) | 84 (33) | 134 (53) | 25 (10) | 10 (4) | 113 (1) | 3688 (42) | 4531 (51) | 433 (5) | 50 (1) | 1018 | |
| 18 | L-K | 8925 | 110 | 22 | 0 (0) | 44 (40) | 56 (51) | 5 (5) | 5 (5) | 113 (1) | 3732 (42) | 4587 (51) | 438 (5) | 55 (1) | 259 | |
| 19 | ZAP | 10643 | 1718 | 173 | 17 (1) | 911 (53) | 721 (42) | 69 (4) | 0 (0) | 130 (1) | 4643 (44) | 5308 (50) | 507 (5) | 55 (1) | 3692 | |
| 20 | REF | 11452 | 809 | 151 | 24 (3) | 397 (49) | 340 (42) | 40 (5) | 4 (1) | 154 (1) | 5040 (44) | 5648 (49) | 547 (5) | 63 (1) | 16724 | |
| 20 | L-K | 11539 | 87 | 23 | 0 (0) | 42 (48) | 45 (52) | 0 (0) | 0 (0) | 154 (1) | 5082 (44) | 5693 (49) | 547 (5) | 63 (1) | 3464 | |
| 21 | POL | 11906 | 367 | 71 | 0 (0) | 154 (42) | 180 (49) | 33 (9) | 0 (0) | 154 (1) | 5236 (44) | 5873 (49) | 580 (5) | 63 (1) | 893 | |
| 22 | NEP | 13551 | 1645 | 320 | 82 (5) | 938 (57) | 592 (36) | 33 (2) | 0 (0) | 236 (2) | 6174 (46) | 6465 (48) | 613 (5) | 63 (0) | 4 51524 | |
| 23 | TZR | 14089 | 538 | 105 | 16 (3) | 264 (49) | 210 (39) | 48 (9) | 0 (0) | 252 (2) | 6438 (46) | 6675 (47) | 661 (5) | 63 (0) | 1556 | |
| 23 | L-K | 14226 | 137 | 25 | 0 (0) | 93 (68) | 39 (28) | 5 (4) | 0 (0) | 252 (2) | 6531 (46) | 6714 (47) | 666 (5) | 63 (0) | 4 483 | |
| 24 | ZAP | 15922 | 1696 | 337 | 85 (5) | 950 (56) | 627 (37) | 34 (2) | 0 (0) | 337 (2) | 7481 (47) | 7341 (46) | 700 (4) | 63 (0) | 5388 | |
| 25 | REF | 16931 | 1009 | 200 | 40 (4) | 636 (63) | 313 (31) | 20 (2) | 0 (0) | 377 (2) | 8117 (48) | 7654 (45) | 720 (4) | 63 (0) | 2681 | |
| 25 | L-K | 17092 | 161 | 32 | 14 (9) | 97 (60) | 45 (28) | 5 (3) | 0 (0) | 391 (2) | 8214 (48) | 7699 (45) | 725 (4) | 63 (0) | 4 644 | |
| 26 | POL | 17519 | 427 | 86 | 8 (2) | 222 (52) | 184 (43) | 13 (3) | 0 (0) | 399 (2) | 8436 (48) | 7883 (45) | 738 (4) | 63 (0) | 1320 | |
| 27 | NEP | 18795 | 2276 | 415 | 91 (4) | 1593 (70) | 546 (24) | 46 (2) | 0 (0) | 490 (2) | 10029 (51) | 8429 (43) | 784 (4) | 63 (0) | 7428 | |
| 28 | TZL | 20389 | 574 | 100 | 6 (1) | 275 (48) | 258 (45) | 29 (5) | 6 (1) | 496 (2) | 10304 (51) | 8687 (43) | 813 (4) | 69 (0) | 4 5744 | |
| 29 | ZAP | 22037 | 1668 | 326 | 17 (1) | 984 (59) | 617 (37) | 50 (3) | 0 (0) | 513 (2) | 11288 (51) | 9304 (42) | 863 (4) | 69 (0) | 7056 | |
| 30 | RLK | 23040 | 1003 | 200 | 40 (4) | 552 (55) | 371 (37) | 40 (4) | 0 (0) | 553 (2) | 11840 (51) | 9675 (42) | 903 (4) | 69 (0) | 17814 | |
| 31 | POL | 23551 | 511 | 97 | 31 (6) | 286 (56) | 163 (32) | 31 (6) | 0 (0) | 584 (2) | 12126 (51) | 9638 (42) | 934 (4) | 69 (0) | 1831 | |
| AUG 1 | NEP | 24746 | 1195 | 269 | 72 (6) | 824 (69) | 275 (23) | 24 (2) | 0 (0) | 656 (3) | 12950 (52) | 10113 (41) | 958 (4) | 69 (0) | 8623 | |
| 2 | TZR | 25218 | 472 | 104 | 19 (4) | 264 (56) | 165 (35) | 24 (5) | 0 (0) | 675 (3) | 13214 (52) | 10278 (41) | 982 (4) | 69 (0) | 2028 | |
| 3 | ZAP | 26515 | 1297 | 279 | 39 (3) | 843 (65) | 363 (28) | 52 (4) | 0 (0) | 714 (3) | 14057 (53) | 10641 (40) | 1034 (4) | 69 (0) | 8353 | |
| 4 | RLK | 27494 | 979 | 228 | 49 (5) | 597 (61) | 294 (30) | 39 (4) | 0 (0) | 763 (3) | 14654 (53) | 10935 (40) | 1073 (4) | 69 (0) | 2760 | |
| 5 | POL | 27899 | 405 | 93 | 4 (1) | 251 (62) | 118 (29) | 28 (7) | 4 (1) | 767 (3) | 14905 (53) | 11053 (40) | 1101 (4) | 73 (0) | 22364 | |
| 5 | TZR | 28342 | 443 | 94 | 31 (7) | 341 (77) | 62 (14) | 9 (2) | 0 (0) | 798 (3) | 15246 (54) | 11115 (39) | 1110 (4) | 73 (0) | 2471 | |
| 6 | NEP | 30503 | 2161 | 598 | 216 (10) | 1599 (74) | 281 (13) | 65 (3) | 0 (0) | 1014 (3) | 16845 (55) | 11396 (37) | 1175 (4) | 73 (0) | 10784 | |
| 7 | TZR | 31484 | 981 | 218 | 49 (5) | 706 (72) | 206 (21) | 20 (2) | 0 (0) | 1063 (3) | 17551 (56) | 11602 (37) | 1195 (4) | 73 (0) | 3452 | |
| 8 | REF | 32295 | 811 | 224 | 41 (5) | 495 (61) | 243 (30) | 32 (4) | 0 (0) | 1104 (3) | 18046 (56) | 11845 (37) | 1227 (4) | 73 (0) | 3492 | |
| 9 | NEP | 33632 | 1337 | 368 | 160 (12) | 963 (72) | 201 (15) | 13 (1) | 0 (0) | 1264 (4) | 19009 (57) | 12046 (36) | 1240 (4) | 73 (0) | 12121 | |
| | COM | 34966 | 1334 | 0 | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 1264 (4) | 19009 (54) | 12046 (34) | 1240 (4) | 73 (0) | 1334 | |

*NEP=NORTHEAST POINT (MORJOVI AND VOSTOCHNI); TZR=TOLSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, 4 AND LITTLE POLOVINA; ZAP=ZAPADNI; REF=REEF, GORBATCH, AND ARDIGUEN; L-K=LUKANIN AND KITOVI; RLK=REEF, GORBATCH, ARDIGUEN, 4 LUKANIN, AND KITOVI; TZL=TOLSTOI, ZAPADNI, LUKANIN, AND KITOVI; COM=COMBINED ROOKERY 4

TABLE 47B - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. GEORGE ISLAND, 1965.

| DATE | ROOK-ERY# | NUMBER KILLED | | NO. IN TOOTH SAMPLE | DAILY KILL | | | | | CUMULATIVE KILL | | | | | BY AREA, ALL AGES | |
|------|-----------|---------------|-------|---------------------|---|-------|---------|---------|--------|---|--------|----------|----------|--------|-------------------|------|
| | | TO DATE | DAILY | | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | | |
| | | | | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | | |
| JULY | 7 | NOR | 288 | 288 | 29 | 0(0) | 61(21) | 207(72) | 20(7) | 0(0) | 0(0) | 61(21) | 207(72) | 20(7) | 0(0) | 288 |
| | 7 | E-E | 621 | 333 | 34 | 0(0) | 146(44) | 157(47) | 30(9) | 0(0) | 0(0) | 207(33) | 364(59) | 50(8) | 0(0) | 333 |
| | 8 | ZPG | 935 | 314 | 31 | 0(0) | 141(45) | 173(55) | 0(0) | 0(0) | 0(0) | 348(37) | 537(57) | 50(5) | 0(0) | 314 |
| | 12 | E-E | 1157 | 222 | 42 | 4(2) | 107(48) | 91(41) | 4(2) | 16(7) | 4(0) | 455(39) | 628(54) | 54(5) | 16(1) | 555 |
| | 12 | NOR | 1259 | 102 | 22 | 0(0) | 42(41) | 51(50) | 9(9) | 0(0) | 4(0) | 497(39) | 679(54) | 63(5) | 16(1) | 390 |
| | 14 | ZPG | 1380 | 121 | 37 | 0(0) | 33(27) | 79(65) | 6(5) | 3(2) | 4(0) | 530(38) | 758(55) | 89(5) | 19(1) | 435 |
| | 14 | NOR | 1427 | 47 | 15 | 0(0) | 22(47) | 22(47) | 3(6) | 0(0) | 4(0) | 552(39) | 780(55) | 72(5) | 19(1) | 437 |
| | 16 | NOR | 1715 | 288 | 30 | 0(0) | 164(57) | 115(40) | 9(3) | 0(0) | 4(0) | 716(42) | 895(52) | 81(5) | 19(1) | 725 |
| | 16 | E-E | 2041 | 326 | 31 | 0(0) | 127(39) | 199(61) | 0(0) | 0(0) | 4(0) | 843(41) | 1094(54) | 81(4) | 19(1) | 881 |
| | 19 | NOR | 2105 | 64 | 18 | 0(0) | 32(50) | 28(44) | 0(0) | 4(6) | 4(0) | 875(42) | 1122(53) | 81(4) | 23(1) | 789 |
| | 19 | STA | 2201 | 96 | 26 | 0(0) | 56(58) | 32(33) | 4(4) | 4(4) | 4(0) | 931(42) | 1154(52) | 85(4) | 27(1) | 96 |
| | 19 | ZPG | 2375 | 174 | 17 | 0(0) | 31(18) | 101(58) | 11(6) | 31(18) | 4(0) | 962(41) | 1255(53) | 96(4) | 59(2) | 609 |
| | 21 | E-E | 2654 | 279 | 56 | 14(5) | 120(43) | 140(50) | 5(2) | 0(0) | 18(1) | 1082(41) | 1395(53) | 101(4) | 58(2) | 1160 |
| | 21 | NOR | 2838 | 184 | 36 | 0(0) | 103(56) | 81(44) | 0(0) | 0(0) | 18(1) | 1185(42) | 1476(52) | 101(4) | 58(2) | 973 |
| | 23 | NOR | 3149 | 311 | 31 | 9(3) | 199(64) | 103(33) | 0(0) | 0(0) | 27(1) | 1384(44) | 1579(50) | 101(3) | 58(2) | 1284 |
| | 23 | ZPG | 3303 | 154 | 31 | 0(0) | 65(42) | 85(55) | 0(0) | 4(3) | 27(1) | 1449(44) | 1664(50) | 101(3) | 62(2) | 763 |
| | 26 | E-E | 3894 | 591 | 59 | 30(5) | 378(64) | 183(31) | 0(0) | 0(0) | 57(1) | 1827(47) | 1847(47) | 101(3) | 62(2) | 1751 |
| | 28 | NOR | 4711 | 817 | 80 | 65(8) | 539(66) | 172(21) | 41(5) | 0(0) | 122(3) | 2366(50) | 2019(43) | 142(3) | 62(1) | 2101 |
| | 28 | ZPG | 4885 | 174 | 51 | 0(0) | 86(55) | 61(35) | 17(10) | 0(0) | 122(2) | 2462(50) | 2080(43) | 159(3) | 62(1) | 937 |
| | 30 | E-E | 5175 | 290 | 55 | 6(2) | 162(56) | 116(40) | 6(2) | 0(0) | 128(2) | 2624(51) | 2196(42) | 165(3) | 62(1) | 2041 |
| AUG | 2 | ZPG | 5414 | 239 | 47 | 0(0) | 148(62) | 86(36) | 5(2) | 0(0) | 128(2) | 2772(51) | 2282(42) | 170(3) | 62(1) | 1176 |
| | 2 | NOR | 5616 | 202 | 42 | 0(0) | 160(79) | 42(21) | 0(0) | 0(0) | 128(2) | 2932(52) | 2324(41) | 170(3) | 62(1) | 2303 |
| | 4 | STA | 5756 | 140 | 65 | 3(2) | 81(58) | 48(34) | 8(6) | 0(0) | 131(2) | 3013(52) | 2372(41) | 178(3) | 62(1) | 236 |
| | 4 | E-E | 6061 | 305 | 30 | 9(3) | 204(67) | 92(30) | 0(0) | 0(0) | 140(2) | 3217(53) | 2464(41) | 178(3) | 62(1) | 2346 |
| | | COM | 6482 | 421 | 0 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 140(2) | 3217(50) | 2464(38) | 178(3) | 62(1) | 421 |
| AUG | 6 | NOR | 7156 | 674 | 74 | 27(4) | 519(77) | 128(19) | 0(0) | 0(0) | 167(2) | 3736(52) | 2592(36) | 178(2) | 62(1) | 2977 |

*ZPG=ZAPADNI (ST. GEORGE); NOR=NORTH; E-E=EAST REEF AND EAST CLIFFS; STA=STARAYA ARTIL.

TABLE 48A - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1966.2

| DATE | ROOK-ERY* | DAILY KILL | | | | | | | | | CUMULATIVE KILL | | | | | |
|------|-----------|-----------------------|---------------------|---------------------|---|---------|-----------|----------|--------|-------|---|-----------|-----------|----------|-------|-------|
| | | NUMBER KILLED TO DATE | NUMBER KILLED DAILY | NO. IN TOOTH SAMPLE | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | |
| | | | | 2 | 3 | 4 | 5 | 6 | | 2 | 3 | 4 | 5 | 6 | | |
| JULY | 7 | NEP | 1806 | 1806 | 301 | 46(3)2 | 1032(57) | 677(37) | 51(3) | 0(0) | 46(3) | 1032(57) | 677(37) | 51(3) | 0(0) | 1806 |
| | 8 | TZR | 3861 | 2155 | 480 | 32(1) | 1136(53)2 | 916(43) | 71(3) | 0(0) | 78(2) | 2168(55) | 1593(40) | 122(3) | 0(0) | 2155 |
| | 9 | POL | 4630 | 669 | 159 | 9(1) | 244(36) | 366(55) | 50(7) | 0(0) | 87(2) | 2412(52) | 1959(42) | 172(4) | 0(0) | 669 |
| | 10 | ZAP | 5796 | 1166 | 211 | 28(2) | 569(49) | 541(46) | 28(2) | 0(0) | 115(2) | 2981(51) | 2500(43) | 200(3) | 0(0) | 1166 |
| | 11 | REF | 6873 | 1077 | 191 | 17(2) | 496(46) | 513(48) | 51(5) | 0(0) | 132(2) | 3477(51) | 3013(44) | 251(4) | 0(0) | 1077 |
| | 11 | L-K | 7526 | 653 | 113 | 40(6) | 353(54) | 248(38) | 12(2)2 | 0(0) | 172(2) | 3830(51) | 3261(43) | 263(3) | 0(0) | 653 |
| | 12 | NEP | 8956 | 1430 | 253 | 68(5) | 889(62) | 457(32) | 16(1) | 0(0)2 | 240(3) | 4719(53) | 3718(42) | 279(3) | 0(0) | 3236 |
| | 13 | TZR | 9873 | 917 | 168 | 22(2) | 458(50) | 409(45) | 28(3)2 | 0(0) | 262(3) | 5177(52) | 4127(42) | 307(3) | 0(0) | 3072 |
| | 14 | ZAP | 11918 | 2045 | 325 | 94(5) | 1127(55) | 742(36) | 82(4)2 | 0(0) | 356(3) | 6304(53) | 4869(41) | 389(3) | 0(0) | 3211 |
| | 15 | REF | 12384 | 466 | 77 | 0(0) | 218(47) | 206(44) | 42(9) | 0(0) | 356(3) | 6522(53) | 5075(41) | 431(3) | 0(0) | 1543 |
| | 15 | L-K | 12633 | 249 | 28 | 18(7) | 160(64) | 62(25) | 9(4)2 | 0(0) | 374(3) | 6682(53) | 5137(41) | 440(3) | 0(0) | 902 |
| | 16 | POL | 13017 | 384 | 56 | 7(2) | 233(61) | 130(34)2 | 14(4)2 | 0(0) | 381(3) | 6915(53) | 5267(40) | 454(3) | 0(0) | 1053 |
| | 17 | NEP | 14721 | 1704 | 315 | 112(7) | 1005(59) | 537(32) | 50(3) | 0(0) | 493(3) | 7920(54)2 | 5804(39) | 504(3) | 0(0) | 4940 |
| | 18 | TZR | 15287 | 566 | 125 | 9(2) | 285(50) | 258(46) | 14(2)2 | 0(0) | 502(3) | 8205(54) | 6062(40) | 518(3) | 0(0)2 | 3638 |
| | 19 | ZAP | 17990 | 2703 | 578 | 116(4) | 1717(64) | 800(30) | 70(3) | 0(0) | 618(3) | 9922(55) | 6862(38) | 588(3) | 0(0) | 5914 |
| | 20 | L-K | 18904 | 914 | 182 | 115(13) | 593(65) | 181(20)2 | 25(3)2 | 0(0) | 733(4) | 10515(56) | 7043(37) | 613(3) | 0(0) | 1816 |
| | 20 | REF | 19871 | 967 | 196 | 35(4) | 528(55) | 345(36) | 59(6)2 | 0(0) | 768(4)2 | 11043(56) | 7388(37) | 672(3) | 0(0) | 2510 |
| | 21 | POL | 20453 | 582 | 105 | 28(5) | 388(67) | 150(26) | 16(3) | 0(0) | 796(4) | 11431(56) | 7538(37) | 688(3) | 0(0) | 1635 |
| | 22 | NEP | 21825 | 1372 | 274 | 115(8) | 896(65) | 341(25) | 20(1) | 0(0) | 911(4) | 12327(56) | 7879(36) | 708(3) | 0(0) | 6312 |
| | 23 | TZR | 23332 | 1507 | 301 | 90(6) | 872(58) | 491(33) | 54(4)2 | 0(0) | 1001(4) | 13199(57) | 8370(36) | 762(3) | 0(0) | 5145 |
| | 24 | ZAP | 24483 | 1151 | 229 | 100(9) | 613(53) | 372(32) | 66(6)2 | 0(0) | 1101(4) | 13812(56) | 8742(36) | 828(3) | 0(0) | 7065 |
| | 25 | REF | 26832 | 2349 | 467 | 352(15) | 1450(62) | 493(21)2 | 54(2) | 0(0) | 1453(5)2 | 15262(57) | 9235(34) | 882(3) | 0(0) | 4859 |
| | 26 | POL | 27244 | 412 | 82 | 65(16) | 246(60) | 71(17) | 30(7) | 0(0)2 | 1518(6) | 15508(57) | 9306(34) | 912(3) | 0(0) | 2047 |
| | 26 | L-K | 27922 | 678 | 145 | 70(10) | 477(70) | 79(12)2 | 52(8) | 0(0) | 1588(6) | 15985(57) | 9385(34) | 964(3) | 0(0) | 2494 |
| | 27 | NEP | 30001 | 2079 | 411 | 264(13) | 1457(70) | 338(16) | 20(1) | 0(0) | 1852(6) | 17442(58) | 9723(32) | 984(3) | 0(0) | 8391 |
| | 28 | TZR | 31501 | 1500 | 300 | 165(11) | 960(64) | 345(23) | 30(2) | 0(0) | 2017(6) | 18402(58) | 10068(32) | 1014(3) | 0(0) | 6645 |
| | 29 | ZAP | 33469 | 1968 | 395 | 175(9) | 1400(71) | 358(18)2 | 35(2) | 0(0) | 2192(7) | 19802(59) | 10426(31) | 1049(3) | 0(0) | 9033 |
| | 30 | REF | 34507 | 1038 | 205 | 106(10) | 582(56) | 304(29) | 46(4) | 0(0) | 2298(7) | 20384(59) | 10730(31) | 1095(3) | 0(0) | 5897 |
| | 31 | POL | 35118 | 611 | 122 | 120(20) | 386(63) | 85(14) | 20(3) | 0(0) | 2418(7) | 20770(59) | 10815(31) | 1115(3) | 0(0) | 2658 |
| | 31 | L-K | 36049 | 931 | 183 | 188(20) | 586(63) | 132(14) | 25(3) | 0(0) | 2606(7) | 21356(59) | 10947(30) | 1140(3) | 0(0) | 3425 |
| AUG | 1 | NEP | 37451 | 1402 | 282 | 216(15) | 954(68) | 227(16) | 5(0) | 0(0) | 2822(8) | 22310(60) | 11174(30) | 1145(3) | 0(0) | 9793 |
| | 2 | TZR | 38658 | 1207 | 244 | 74(6) | 890(74) | 213(18) | 30(2) | 0(0) | 2896(7) | 23200(60) | 11387(29) | 1175(3) | 0(0) | 7852 |
| | 3 | ZAP | 40481 | 1823 | 364 | 140(8) | 1161(64) | 476(28) | 46(3) | 0(0) | 3036(7) | 24361(60) | 11863(29) | 1221(3) | 0(0) | 10856 |
| | 4 | REF | 41041 | 560 | 113 | 35(6) | 372(66) | 124(22) | 29(5) | 0(0)2 | 3071(7) | 24733(60) | 11987(29) | 1250(3) | 0(0) | 6457 |
| | 4 | L-K2 | 41447 | 406 | 80 | 61(15) | 304(75) | 41(10) | 0(0) | 0(0) | 3132(8) | 25037(60) | 12028(29) | 1250(3) | 0(0) | 3831 |
| | 5 | POL2 | 42104 | 657 | 128 | 11(2) | 498(76) | 128(19) | 20(3) | 0(0) | 3143(7) | 25535(61) | 12156(29) | 1270(3)2 | 0(0) | 3315 |

*NEP=NORTHEAST POINT (MORJOVI AND VOSTOCHNI); TZR=TOLSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; POL=POLOVINA, POLOVINA2 CLIFFS, AND LITTLE POLOVINA; ZAP=ZAPADNI; REF=REEF, GORBATCH, AND ARDIQUEN; L-K=LUKANIN AND KITOVI.2

TABLE 48B - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. GEORGE ISLAND, 1966.

| DATE | ROCK- ERY# | DAILY KILL | | | | | | CUMULATIVE KILL | | | | | | BY AREA, ALL AGES | | |
|------|---------------|--------------------------|------------------------|--|-----|--------|---------|--|--------|------|--------|----------|----------|----------------------|-------|------|
| | | NUMBER KILLED TO DATE | NO. IN DAILY SAMPLE | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | | | | |
| | | | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | | | |
| JULY | 6 | ZPG | 593 | 593 | 123 | 24(4) | 193(33) | 314(53) | 53(9) | 9(2) | 24(4) | 193(33) | 314(53) | 53(9) | 9(2) | 593 |
| | 8 | E-E | 1697 | 1104 | 220 | 25(2) | 446(40) | 562(51) | 71(6) | 0(0) | 49(3) | 639(38) | 876(52) | 124(7) | 9(1) | 1104 |
| | 11 | NOR | 2525 | 828 | 165 | 10(1) | 321(39) | 441(53) | 51(8) | 5(1) | 59(2) | 960(38) | 1317(52) | 175(7) | 14(1) | 828 |
| | 13 | STA | 2843 | 318 | 127 | 2(1) | 143(45) | 148(47) | 23(7) | 2(1) | 61(2) | 1103(39) | 1465(52) | 198(7) | 16(1) | 318 |
| | 13 | ZPG | 3210 | 367 | 72 | 10(3) | 133(36) | 199(54) | 20(5) | 5(1) | 71(2) | 1236(39) | 1664(52) | 218(7) | 21(1) | 960 |
| | 15 | NOR | 3407 | 197 | 79 | 3(2) | 120(61) | 62(31) | 12(6) | 0(0) | 74(2) | 1356(40) | 1726(51) | 230(7) | 21(1) | 1025 |
| | 15 | E-E | 3877 | 470 | 94 | 5(1) | 155(33) | 280(60) | 25(5) | 5(1) | 79(2) | 1511(39) | 2006(52) | 255(7) | 26(1) | 1574 |
| | 18 | NOR | 4533 | 656 | 130 | 35(5) | 384(59) | 207(32) | 30(5) | 0(0) | 114(3) | 1895(42) | 2213(49) | 285(6) | 26(1) | 1681 |
| | 18 | ZPG | 4809 | 276 | 112 | 0(0) | 116(42) | 121(44) | 39(14) | 0(0) | 114(2) | 2011(42) | 2334(49) | 324(7) | 26(1) | 1236 |
| | 20 | E-E | 5588 | 779 | 159 | 24(3) | 514(66) | 211(27) | 30(4) | 0(0) | 138(2) | 2525(45) | 2545(46) | 354(6) | 26(0) | 2353 |
| | 22 | ZPG | 6084 | 496 | 99 | 30(6) | 281(57) | 175(35) | 5(1) | 5(1) | 168(3) | 2806(46) | 2720(45) | 359(6) | 31(1) | 1732 |
| | 22 | NOR | 6268 | 184 | 75 | 5(3) | 88(48) | 86(47) | 5(3) | 0(0) | 173(3) | 2894(46) | 2806(45) | 364(6) | 31(0) | 1865 |
| | 25 | E-E | 6832 | 564 | 115 | 24(4) | 329(58) | 191(34) | 20(4) | 0(0) | 197(3) | 3223(47) | 2997(44) | 384(6) | 31(0) | 2917 |
| | 25 | NOR | 7105 | 273 | 56 | 39(14) | 185(68) | 44(16) | 5(2) | 0(0) | 236(3) | 3408(48) | 3041(43) | 389(5) | 31(0) | 2138 |
| | 27 | ZPG | 7620 | 515 | 100 | 21(4) | 340(66) | 129(25) | 25(5) | 0(0) | 257(3) | 3748(49) | 3170(42) | 414(5) | 31(0) | 2247 |
| | 27 | STA | 7857 | 237 | 94 | 3(1) | 126(53) | 86(36) | 22(9) | 0(0) | 260(3) | 3874(49) | 3256(41) | 436(6) | 31(0) | 555 |
| | 29 | NOR | 8688 | 831 | 170 | 15(2) | 562(68) | 234(28) | 20(2) | 0(0) | 275(3) | 4436(51) | 3490(40) | 456(5) | 31(0) | 2969 |
| AUG | 1 | E-E | 9452 | 764 | 162 | 61(8) | 514(67) | 165(22) | 24(3) | 0(0) | 336(4) | 4950(52) | 3655(39) | 480(5) | 31(0) | 3681 |
| | 3 | ZPG | 9697 | 245 | 98 | 10(4) | 143(58) | 75(31) | 15(6) | 2(1) | 346(4) | 5093(53) | 3730(38) | 495(5) | 33(0) | 2492 |
| | 3 | STA | 9764 | 87 | 44 | 6(7) | 51(59) | 28(32) | 2(2) | 0(0) | 352(4) | 5144(53) | 3758(38) | 497(5) | 33(0) | 642 |
| | 5 | NOR | 10393 | 609 | 124 | 39(6) | 442(73) | 123(20) | 5(1) | 0(0) | 391(4) | 5586(54) | 3881(37) | 502(5) | 33(0) | 3578 |

#ZPG=ZAPADNI (ST. GEORGE); NOR=NORTH; E-E=EAST REEF AND EAST CLIFFS; STA=STARAYA ARTIL.

TABLE 49A - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1967.1

| DATE | ROOK-1 ERY# | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | | |
|------|----------------|---------------|-------|---------------------------|--|---------|----------|----------|--------|--|----------|-----------|-----------|----------|----------------------|-------|
| | | NUMBER KILLED | | NO. (N TOOTH SAMPLE | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | BY AREA, ALL AGES | |
| | | TO DATE | DAILY | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | | |
| JUNE | 27 | TZR | 828 | 828 | 152 | 6(1) | 348(42) | 425(51) | 43(5) | 6(1) | 6(1) | 348(42) | 425(51) | 43(5) | 6(1) | 828 |
| | 28 | ZAP | 1674 | 846 | 185 | 5(1) | 448(63) | 307(36) | 82(10) | 6(1) | 11(1) | 794(47) | 732(44) | 125(7) | 12(1) | 846 |
| | 29 | REF | 2473 | 799 | 152 | 16(2) | 320(40) | 416(32) | 42(5) | 5(1) | 27(1) | 1114(45) | 1148(48) | 167(7) | 17(1) | 799 |
| | 30 | NEP | 3845 | 1172 | 227 | 30(3) | 510(44) | 601(51) | 26(2) | 5(0) | 57(2) | 1624(45) | 1749(48) | 193(5) | 22(1) | 1172 |
| JULY | 1 | POL | 4115 | 470 | 92 | 10(2) | 239(50) | 195(41) | 25(5) | 5(1) | 67(2) | 1659(45) | 1944(47) | 218(5) | 27(1) | 470 |
| | 1 | L-K | 4421 | 306 | 53 | 0(0) | 121(40) | 156(51) | 29(9) | 0(0) | 87(2) | 1980(45) | 2100(48) | 247(6) | 27(1) | 306 |
| | 5 | ZAP | 5661 | 1240 | 228 | 11(1) | 690(60) | 348(28) | 21(2) | 0(0) | 78(1) | 2840(50) | 2448(43) | 266(5) | 27(0) | 2086 |
| | 6 | POL | 6109 | 448 | 85 | 5(1) | 269(60) | 158(36) | 18(4) | 0(0) | 83(1) | 3109(51) | 2608(43) | 284(5) | 27(0) | 918 |
| | 6 | TZR | 6539 | 430 | 77 | 0(0) | 234(54) | 168(39) | 28(7) | 0(0) | 93(1) | 3343(51) | 2774(42) | 312(5) | 27(0) | 1258 |
| | 7 | NEP | 7944 | 1405 | 266 | 42(3) | 809(58) | 523(37) | 31(2) | 0(0) | 125(2) | 4152(52) | 3297(42) | 343(4) | 27(0) | 2577 |
| | 8 | L-K1 | 8460 | 516 | 103 | 15(3) | 326(63) | 160(31) | 10(2) | 5(1) | 140(2) | 4478(53) | 3457(41) | 353(4) | 32(0) | 822 |
| | 8 | REF1 | 8848 | 386 | 71 | 5(1) | 232(58) | 138(36) | 22(6) | 0(0) | 145(2) | 4701(53) | 3593(41) | 375(4) | 32(0) | 11661 |
| | 10 | ZAP | 10274 | 1428 | 276 | 41(3) | 937(66) | 430(30) | 20(1) | 0(0) | 166(2) | 5638(55) | 4023(39) | 395(4) | 32(0) | 3514 |
| | 11 | TZR1 | 10554 | 280 | 56 | 10(4) | 155(55) | 110(39) | 5(2) | 0(0) | 196(2) | 5793(55) | 4163(39) | 400(4) | 32(0) | 1538 |
| | 11 | POL1 | 11129 | 575 | 110 | 15(3) | 304(53) | 235(41) | 21(4) | 0(0) | 211(2) | 6097(55) | 4698(38) | 421(4) | 32(0) | 1493 |
| | 12 | NEP | 12475 | 1346 | 253 | 63(5) | 965(72) | 281(21) | 37(3) | 0(0) | 274(2) | 7062(57) | 4649(37) | 458(4) | 32(0) | 3823 |
| | 13 | REF1 | 13494 | 1019 | 180 | 17(2) | 663(66) | 311(31) | 28(3) | 0(0) | 291(2) | 7725(57) | 4680(37) | 486(4) | 32(0) | 2204 |
| | 14 | ZAP | 14515 | 1021 | 206 | 36(3) | 535(52) | 418(41) | 30(3) | 5(0) | 326(2) | 8260(57) | 5376(37) | 518(4) | 37(0) | 4535 |
| | 15 | TZR | 15254 | 739 | 142 | 57(8) | 427(58) | 224(30) | 31(4) | 0(0) | 383(3) | 8687(57) | 5600(37) | 547(4) | 37(0) | 2277 |
| | 15 | POL | 15572 | 318 | 60 | 10(3) | 170(53) | 128(40) | 10(3) | 0(0) | 393(3) | 8857(57) | 5728(37) | 557(4) | 37(0) | 1811 |
| | 17 | NEP | 17172 | 1600 | 296 | 118(7) | 1032(66) | 401(25) | 49(3) | 0(0) | 511(3) | 9899(63) | 6129(36) | 606(4) | 37(0) | 5523 |
| | 18 | REF | 18007 | 836 | 154 | 5(1) | 469(60) | 304(36) | 22(3) | 5(1) | 516(3) | 10398(58) | 6433(36) | 626(3) | 42(0) | 3039 |
| | 18 | L-K | 19058 | 1049 | 219 | 52(5) | 695(66) | 274(28) | 28(3) | 0(0) | 568(3) | 11063(58) | 6707(36) | 856(3) | 42(0) | 1871 |
| | 19 | ZAP | 21954 | 2860 | 501 | 145(5) | 1759(61) | 901(31) | 93(3) | 0(0) | 713(3) | 12842(58) | 7608(35) | 749(3) | 42(0) | 7433 |
| | 20 | POL | 22329 | 375 | 82 | 4(1) | 252(67) | 106(28) | 4(1) | 9(2) | 717(3) | 13094(59) | 7714(35) | 753(3) | 51(0) | 2186 |
| | 20 | TZR | 22407 | 78 | 17 | 0(0) | 28(36) | 37(47) | 13(17) | 0(0) | 717(3) | 13122(59) | 7751(36) | 766(3) | 51(0) | 2355 |
| | 21 | NEP | 23782 | 1375 | 308 | 50(4) | 698(70) | 322(23) | 31(2) | 4(0) | 767(3) | 14090(59) | 8073(34) | 797(3) | 55(0) | 6698 |
| | 22 | L-K | 24125 | 343 | 102 | 7(2) | 222(85) | 101(29) | 13(4) | 0(0) | 774(3) | 14312(59) | 8174(34) | 810(3) | 55(0) | 2214 |
| | 22 | REF | 24859 | 734 | 128 | 40(5) | 463(62) | 189(26) | 46(6) | 6(1) | 814(3) | 14765(59) | 8363(34) | 856(3) | 81(0) | 3773 |
| | 24 | ZAP | 26374 | 1515 | 304 | 80(5) | 1087(70) | 329(22) | 39(3) | 0(0) | 894(3) | 15632(60) | 8692(33) | 895(3) | 81(0) | 8948 |
| | 25 | TZR | 26800 | 426 | 71 | 6(1) | 312(73) | 102(24) | 6(1) | 0(0) | 900(3) | 16144(60) | 8794(33) | 901(3) | 81(0) | 2781 |
| | 25 | POL | 27714 | 914 | 154 | 24(3) | 564(62) | 309(34) | 17(2) | 0(0) | 924(3) | 16708(60) | 9103(33) | 918(3) | 81(0) | 3100 |
| | 26 | NEP | 29948 | 2232 | 451 | 266(13) | 1429(64) | 478(21) | 40(2) | 0(0) | 1209(4) | 18137(61) | 9581(32) | 958(3) | 81(0) | 9130 |
| | 27 | REF | 31189 | 1243 | 250 | 40(3) | 880(71) | 278(22) | 35(3) | 10(1) | 1249(4) | 19017(81) | 9859(32) | 993(3) | 71(0) | 5016 |
| | 27 | L-K | 31633 | 444 | 91 | 34(8) | 322(73) | 83(19) | 5(1) | 0(0) | 1283(4) | 19338(61) | 9942(31) | 998(3) | 71(0) | 2658 |
| | 28 | ZAP | 33072 | 1439 | 442 | 85(6) | 970(87) | 335(23) | 46(3) | 3(0) | 1368(4) | 20309(61) | 10277(31) | 1044(3) | 74(0) | 10387 |
| | 29 | POL | 33938 | 780 | 160 | 43(6) | 551(72) | 160(21) | 8(1) | 4(1) | 1411(4) | 20860(62) | 10437(31) | 1052(3) | 78(0) | 3866 |
| | 29 | TZR | 34613 | 775 | 160 | 33(4) | 480(62) | 226(29) | 36(5) | 0(0) | 1444(4) | 21340(62) | 10653(31) | 1088(3) | 78(0) | 3556 |
| | 31 | NEP | 35818 | 1203 | 320 | 170(14) | 827(66) | 199(16) | 8(1) | 0(0) | 1614(5) | 22187(62) | 10861(30) | 1099(3) | 78(0) | 10333 |
| AUG | 1 | L-K | 36337 | 521 | 82 | 57(11) | 375(72) | 77(15) | 12(2) | 0(0) | 1671(5) | 22542(62) | 10938(30) | 1108(3) | 78(0) | 3179 |
| | 1 | REF | 37553 | 1218 | 371 | 95(8) | 895(74) | 184(15) | 42(3) | 0(0) | 1766(5) | 23437(62) | 11122(30) | 1150(3) | 78(0) | 6232 |
| | 2 | ZAP | 38455 | 902 | 280 | 51(6) | 687(76) | 127(14) | 27(3) | 10(1) | 1817(5) | 24124(63) | 11249(29) | 1177(3) | 88(0) | 11289 |
| | 3 | TZR | 38837 | 382 | 73 | 0(0) | 262(69) | 99(28) | 16(4) | 5(1) | 1817(5) | 24366(63) | 11348(29) | 1193(3) | 93(0) | 3938 |
| | 3 | POL | 39159 | 322 | 114 | 23(7) | 226(70) | 65(20) | 8(2) | 0(0) | 1840(5) | 24612(63) | 11413(29) | 1201(3) | 93(0) | 4188 |
| | 4 | NEP | 39592 | 433 | 140 | 68(16) | 306(71) | 55(13) | 4(1) | 0(0) | 1908(5) | 24918(63) | 11468(29) | 1205(3) | 93(0) | 10766 |
| | 4 | POL | 40174 | 582 | 166 | 49(8) | 435(75) | 91(16) | 7(1) | 0(0) | 1957(5) | 25353(63) | 11559(29) | 1212(3) | 93(0) | 4770 |
| | 4 | NEP | 40524 | 350 | 92 | 34(10) | 240(69) | 65(19) | 11(3) | 0(0) | 1991(5) | 25593(63) | 11624(29) | 1223(3) | 93(0) | 11116 |

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*NEP=NORTHEAST POINT (MORJOV) AND VOSTOCHNI); TZR=TOLSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; ZAP=ZAPADNI; REF=REEF, GORBATCH, AND ARDIQUEN; L-K=LUKANIN AND KITOV; 1 COM=COMBINED ROOKERY.

TABLE 49A - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1967 (CONT.)

| DATE | ROOK- ERY* | NUMBER KILLED TO DATE | NO. IN TOOTH SAMPLE | DAILY KILL | | | | | | CUMULATIVE KILL | | | | | | BY AREA, ALL AGES |
|------|---------------|--------------------------|---------------------------|--|-----|--------|---------|--------|-------|--|---------|-----------|-----------|---------|-------|----------------------|
| | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | | |
| | | | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | | | |
| AUG | 5 | L-K | 40848 | 324 | 80 | 57(18) | 231(71) | 32(10) | 4(1) | 0(0) | 2048(5) | 25824(63) | 11656(29) | 1227(3) | 93(0) | 3503 |
| | 5 | REF | 41701 | 853 | 218 | 86(10) | 670(79) | 59(7) | 35(4) | 3(0) | 2134(5) | 26494(64) | 11715(28) | 1262(3) | 96(0) | 7085 |
| | 5 | ZAP | 42359 | 658 | 131 | 66(10) | 497(76) | 70(11) | 25(4) | 0(0) | 2200(5) | 26991(64) | 11785(28) | 1287(3) | 96(0) | 11947 |
| | | COM | 42727 | 368 | 0 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 2200(5) | 26991(63) | 11785(28) | 1287(3) | 96(0) | 368 |

*NEP=NORTHEAST POINT (MORJOVI AND VOSTOCHNI); TZR=TOLSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; ZAP=ZAPADNI; REF=REEF, GORBATCH, AND ARDIGUEN; L-K=LUKANIN AND KITOVI; COM=COMBINED ROOKERY.

TABLE 49B - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. GEORGE ISLAND, 1967.

| DATE | ROOK- ERY* | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | | BY AREA, ALL AGES |
|---------|---------------|---------------|-------|---------------------------|--|----------|----------|---------|--------|--|-----------|-----------|----------|--------|-------|----------------------|
| | | NUMBER KILLED | | NO. IN TOOTH SAMPLE | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | | |
| | | TO DATE | DAILY | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | | |
| JUNE 26 | ZPG | 419 | 419 | 86 | 5 (1) | 93 (22) | 248 (59) | 63 (15) | 10 (2) | 5 (1) | 93 (22) | 248 (59) | 63 (15) | 10 (2) | 419 | |
| 26 | NOR | 770 | 351 | 89 | 0 (0) | 127 (36) | 204 (58) | 20 (6) | 0 (0) | 5 (1) | 220 (29) | 452 (58) | 63 (11) | 10 (1) | 351 | |
| 28 | E-E | 1094 | 324 | 83 | 0 (0) | 144 (44) | 170 (52) | 10 (3) | 0 (0) | 5 (0) | 364 (33) | 622 (57) | 93 (9) | 10 (1) | 324 | |
| 30 | NOR | 1522 | 428 | 86 | 5 (1) | 169 (38) | 184 (43) | 60 (14) | 10 (2) | 10 (1) | 533 (35) | 806 (53) | 153 (10) | 20 (1) | 779 | |
| 30 | ZPG | 1640 | 118 | 24 | 0 (0) | 38 (33) | 69 (58) | 10 (8) | 0 (0) | 10 (1) | 572 (35) | 875 (53) | 163 (10) | 20 (1) | 637 | |
| JULY 5 | E-E | 2137 | 497 | 102 | 10 (2) | 263 (53) | 209 (42) | 10 (2) | 5 (1) | 20 (1) | 835 (39) | 1084 (51) | 173 (8) | 25 (1) | 821 | |
| 5 | STA | 2313 | 176 | 37 | 0 (0) | 81 (46) | 90 (51) | 5 (3) | 0 (0) | 20 (1) | 916 (40) | 1174 (51) | 178 (8) | 25 (1) | 176 | |
| 5 | NOR | 2468 | 150 | 30 | 0 (0) | 45 (30) | 85 (57) | 20 (13) | 0 (0) | 20 (1) | 961 (38) | 1259 (51) | 198 (8) | 25 (1) | 929 | |
| 7 | ZPG | 2603 | 140 | 28 | 0 (0) | 60 (43) | 50 (38) | 25 (18) | 5 (4) | 20 (1) | 1021 (38) | 1309 (50) | 223 (9) | 30 (1) | 677 | |
| 7 | NOR | 3009 | 406 | 80 | 10 (2) | 234 (58) | 152 (37) | 10 (2) | 0 (0) | 30 (1) | 1255 (42) | 1461 (49) | 233 (8) | 30 (1) | 1335 | |
| 10 | NOR | 3325 | 316 | 62 | 0 (0) | 174 (55) | 132 (42) | 10 (3) | 0 (0) | 30 (1) | 1429 (43) | 1593 (46) | 243 (7) | 30 (1) | 16510 | |
| 10 | E-E | 3790 | 465 | 96 | 5 (1) | 262 (56) | 164 (35) | 29 (6) | 5 (1) | 35 (1) | 1691 (45) | 1757 (46) | 272 (7) | 35 (1) | 1286 | |
| 12 | NOR | 4327 | 537 | 108 | 0 (0) | 343 (64) | 174 (32) | 20 (4) | 0 (0) | 35 (1) | 2034 (47) | 1931 (45) | 292 (7) | 35 (1) | 21680 | |
| 14 | E-E0 | 4622 | 295 | 60 | 0 (0) | 187 (63) | 103 (35) | 5 (2) | 0 (0) | 35 (1) | 2221 (46) | 2034 (44) | 297 (6) | 35 (1) | 15810 | |
| 14 | ZPG | 4930 | 308 | 64 | 5 (2) | 183 (59) | 120 (38) | 0 (0) | 0 (0) | 40 (1) | 2404 (49) | 2154 (44) | 297 (6) | 35 (1) | 985 | |
| 17 | NOR | 5610 | 680 | 132 | 31 (5) | 443 (85) | 196 (29) | 10 (1) | 0 (0) | 71 (1) | 2847 (51) | 2350 (42) | 307 (5) | 35 (1) | 28660 | |
| 19 | NOR | 5792 | 182 | 34 | 0 (0) | 86 (47) | 91 (50) | 5 (3) | 0 (0) | 71 (1) | 2933 (51) | 2441 (42) | 312 (5) | 35 (1) | 3050 | |
| 19 | E-E0 | 6554 | 762 | 149 | 40 (5) | 481 (83) | 236 (31) | 5 (1) | 0 (0) | 111 (2) | 3414 (52) | 2677 (41) | 317 (5) | 35 (1) | 23430 | |
| 21 | ZPG0 | 6615 | 261 | 52 | 15 (6) | 181 (69) | 55 (21) | 10 (4) | 0 (0) | 126 (2) | 3595 (53) | 2732 (40) | 327 (5) | 35 (1) | 1246 | |
| 21 | NOR | 7082 | 267 | 53 | 10 (4) | 212 (79) | 45 (17) | 0 (0) | 0 (0) | 138 (2) | 3807 (54) | 2777 (38) | 327 (5) | 35 (0) | 3317 | |
| 24 | E-E | 7462 | 380 | 73 | 10 (3) | 266 (70) | 78 (21) | 21 (6) | 5 (1) | 146 (2) | 4073 (55) | 2655 (38) | 348 (5) | 40 (1) | 27230 | |
| 24 | STA | 7739 | 277 | 64 | 13 (5) | 165 (60) | 99 (38) | 0 (0) | 0 (0) | 159 (2) | 4238 (55) | 2954 (38) | 348 (4) | 40 (1) | 453 | |
| 28 | NOR | 8772 | 1033 | 208 | 99 (10) | 725 (70) | 209 (20) | 0 (0) | 0 (0) | 258 (3) | 4963 (57) | 3163 (36) | 348 (4) | 40 (0) | 43500 | |
| 28 | ZPG | 9152 | 380 | 79 | 24 (06) | 264 (69) | 62 (22) | 10 (3) | 0 (0) | 282 (3) | 5227 (57) | 3245 (35) | 356 (4) | 40 (0) | 1626 | |
| 26 | NOR | 9761 | 609 | 120 | 56 (9) | 385 (63) | 163 (27) | 5 (1) | 0 (0) | 338 (3) | 5612 (57) | 3408 (35) | 383 (4) | 40 (0) | 49590 | |
| 31 | E-E | 10312 | 551 | 105 | 79 (14) | 420 (76) | 47 (9) | 5 (1) | 0 (0) | 417 (4) | 6032 (58) | 3455 (34) | 366 (4) | 40 (0) | 3274 | |
| 31 | NOR | 10605 | 293 | 55 | 27 (9) | 213 (73) | 53 (18) | 0 (0) | 0 (0) | 444 (4) | 6245 (59) | 3508 (33) | 368 (3) | 40 (0) | 5252 | |
| AUG 2 | ZPG | 10736 | 131 | 29 | 18 (14) | 86 (66) | 22 (17) | 5 (4) | 0 (0) | 462 (4) | 6331 (59) | 3530 (33) | 373 (3) | 40 (0) | 1757 | |
| 2 | NOR | 11346 | 610 | 123 | 99 (16) | 441 (72) | 65 (11) | 5 (1) | 0 (0) | 561 (5) | 6772 (60) | 3595 (32) | 376 (3) | 40 (0) | 5862 | |
| 4 | E-E | 11652 | 306 | 65 | 33 (11) | 231 (75) | 38 (12) | 4 (1) | 0 (0) | 594 (5) | 7003 (60) | 3833 (31) | 382 (3) | 40 (0) | 3580 | |
| 4 | NOR | 12532 | 680 | 175 | 146 (17) | 619 (70) | 105 (12) | 10 (1) | 0 (0) | 740 (6) | 7622 (61) | 3738 (30) | 392 (3) | 40 (0) | 67420 | |
| | COM | 12993 | 461 | 0 | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 0 (0) | 740 (6) | 7622 (59) | 3738 (29) | 392 (3) | 40 (0) | 461 | |

*ZPG=ZAPADNI (ST. GEORGE); NOR=NORTH; E-E=EAST REEF AND EAST CLIFFS; STA=STARAYA ARTIL; COM=COMBINED ROOKERY 0

TABLE 50A - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1968.

| DATE | ROOK-1 ERY# | DAILY KILL | | | | CUMULATIVE KILL | | | | | | | | | |
|---------|----------------|---------------|-------|---------------------------|--|-----------------|----------|---------|--------|--|-----------|-----------|----------|--------|----------------------|
| | | NUMBER KILLED | | NO. IN TOOTH SAMPLE | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | BY AREA, ALL AGES |
| | | TO DATE | DAILY | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | |
| JUNE 26 | TZR | 996 | 996 | 186 | 5(1) | 273(27) | 643(65) | 70(7) | 5(1) | 5(1) | 273(27) | 643(65) | 70(7) | 5(1) | 996 |
| 27 | NEP | 1822 | 826 | 148 | 11(1) | 165(20) | 482(58) | 158(19) | 10(1) | 16(1) | 438(24) | 1125(62) | 228(13) | 15(1) | 826 |
| 27 | POL | 2211 | 389 | 79 | 0(0) | 74(19) | 281(72) | 29(7) | 5(1) | 16(1) | 512(23) | 1406(64) | 257(12) | 20(1) | 389 |
| 28 | REF | 3232 | 1021 | 177 | 0(0) | 196(19) | 675(66) | 144(14) | 6(1) | 16(0) | 708(22) | 2081(64) | 401(12) | 26(1) | 1021 |
| 28 | L-K | 3382 | 150 | 29 | 0(0) | 26(17) | 104(69) | 20(13) | 0(0) | 16(0) | 734(22) | 2185(65) | 421(12) | 26(1) | 150 |
| JULY 1 | POL | 3542 | 160 | 33 | 0(0) | 58(36) | 82(51) | 20(13) | 0(0) | 16(0) | 792(22) | 2267(64) | 441(12) | 26(1) | 549 |
| 1 | ZAP | 4274 | 732 | 140 | 0(0) | 214(29) | 455(62) | 52(7) | 11(2) | 16(0) | 1006(24) | 2722(64) | 493(12) | 37(1) | 732 |
| 2 | NEP | 4682 | 408 | 80 | 5(1) | 138(34) | 224(55) | 41(10) | 0(0) | 21(0) | 1144(24) | 2946(63) | 534(11) | 37(1) | 1234 |
| 2 | L-K | 4724 | 42 | 11 | 0(0) | 8(19) | 30(71) | 4(10) | 0(0) | 21(0) | 1152(24) | 2976(63) | 538(11) | 37(1) | 192 |
| 2 | NEP | 5083 | 359 | 61 | 0(0) | 112(31) | 218(61) | 29(8) | 0(0) | 21(0) | 1264(25) | 3194(63) | 567(11) | 37(1) | 1593 |
| 3 | TZR | 5753 | 670 | 91 | 7(1) | 222(33) | 390(58) | 44(7) | 7(1) | 28(0) | 1486(26) | 3584(62) | 611(11) | 44(1) | 1666 |
| 3 | REF | 6195 | 442 | 123 | 0(0) | 158(36) | 230(52) | 50(11) | 4(1) | 28(0) | 1644(27) | 3814(62) | 661(11) | 48(1) | 1463 |
| 5 | POL | 6309 | 114 | 22 | 0(0) | 31(27) | 73(64) | 10(9) | 0(0) | 28(0) | 1675(27) | 3887(62) | 671(11) | 48(1) | 663 |
| 5 | ZAP | 6585 | 276 | 55 | 10(4) | 95(34) | 151(55) | 20(7) | 0(0) | 38(1) | 1770(27) | 4038(61) | 691(10) | 48(1) | 1008 |
| 6 | NEP | 7411 | 826 | 167 | 15(2) | 389(47) | 377(46) | 40(5) | 5(1) | 53(1) | 2159(29) | 4415(60) | 731(10) | 53(1) | 2419 |
| 8 | TZR | 8795 | 1384 | 257 | 37(3) | 755(55) | 538(38) | 54(4) | 0(0) | 90(1) | 2914(33) | 4953(56) | 785(9) | 53(1) | 3050 |
| 9 | POL | 9076 | 281 | 52 | 0(0) | 60(21) | 211(75) | 5(2) | 5(2) | 90(1) | 2974(33) | 5164(57) | 790(9) | 58(1) | 944 |
| 9 | REF1 | 9498 | 422 | 84 | 0(0) | 196(46) | 206(49) | 20(5) | 0(0) | 90(1) | 3170(33) | 5370(57) | 810(9) | 58(1) | 1885 |
| 10 | ZAP | 10486 | 998 | 194 | 15(2) | 463(47) | 459(46) | 51(5) | 0(0) | 105(1) | 3633(35) | 5829(56) | 861(8) | 58(1) | 1996 |
| 10 | L-K | 10625 | 139 | 28 | 0(0) | 49(35) | 85(61) | 5(4) | 0(0) | 105(1) | 3882(35) | 5914(56) | 866(8) | 58(1) | 331 |
| 11 | NEP | 11226 | 601 | 133 | 13(2) | 308(51) | 253(42) | 23(4) | 4(1) | 118(1) | 3890(36) | 6167(55) | 889(8) | 62(1) | 3020 |
| 12 | REF | 11584 | 358 | 70 | 5(1) | 179(50) | 149(42) | 25(7) | 0(0) | 123(1) | 4169(36) | 6316(55) | 914(8) | 62(1) | 2243 |
| 12 | TZR | 11723 | 139 | 28 | 0(0) | 70(50) | 59(42) | 10(7) | 0(0) | 123(1) | 4239(36) | 6375(54) | 924(8) | 62(1) | 3189 |
| 13 | TZR | 12617 | 894 | 207 | 9(1) | 496(55) | 342(38) | 47(5) | 0(0) | 132(1) | 4735(38) | 6717(53) | 971(8) | 62(0) | 4083 |
| 15 | ZAP | 14844 | 2227 | 439 | 56(3) | 1290(58) | 797(36) | 80(4) | 4(0) | 188(1) | 6025(41) | 7514(51) | 1051(7) | 66(0) | 4223 |
| 16 | NEP | 14974 | 130 | 22 | 0(0) | 77(59) | 47(36) | 6(5) | 0(0) | 188(1) | 6102(41) | 7561(50) | 1057(7) | 66(0) | 3150 |
| 16 | POL | 15683 | 709 | 171 | 13(2) | 406(57) | 265(37) | 25(4) | 0(0) | 201(1) | 6508(41) | 7826(50) | 1082(7) | 66(0) | 1653 |
| 17 | NEP | 16457 | 774 | 141 | 39(5) | 467(60) | 247(32) | 21(3) | 0(0) | 240(1) | 8975(42) | 8073(49) | 1103(7) | 66(0) | 3924 |
| 17 | TZR | 16822 | 365 | 71 | 5(1) | 252(69) | 98(27) | 5(1) | 5(1) | 245(1) | 7227(43) | 8171(49) | 1108(7) | 71(0) | 4448 |
| 18 | REF | 18071 | 1249 | 287 | 47(4) | 757(61) | 422(34) | 23(2) | 0(0) | 292(2) | 7984(44) | 8593(48) | 1131(6) | 71(0) | 3492 |
| 18 | L-K | 18928 | 857 | 184 | 33(4) | 587(68) | 233(27) | 4(0) | 0(0) | 325(2) | 8571(45) | 8826(47) | 1135(6) | 71(0) | 1188 |
| 19 | TZR | 19246 | 318 | 65 | 5(2) | 225(71) | 78(25) | 10(3) | 0(0) | 330(2) | 8796(46) | 8904(46) | 1145(6) | 71(0) | 4766 |
| 19 | ZAP | 19849 | 603 | 104 | 6(1) | 295(49) | 267(44) | 35(6) | 0(0) | 336(2) | 9091(46) | 9171(46) | 1180(6) | 71(0) | 4826 |
| 20 | TZR | 20303 | 454 | 85 | 11(2) | 235(52) | 176(39) | 21(5) | 11(2) | 347(2) | 9326(46) | 9347(46) | 1201(6) | 82(0) | 5220 |
| 20 | POL | 20434 | 131 | 14 | 0(0) | 38(29) | 84(64) | 9(7) | 0(0) | 347(2) | 9364(46) | 9431(46) | 1210(6) | 82(0) | 1784 |
| 22 | NEP | 22217 | 1783 | 273 | 82(5) | 1154(65) | 508(28) | 39(2) | 0(0) | 429(2) | 10518(47) | 9939(45) | 1249(6) | 82(0) | 5707 |
| 23 | REF | 23472 | 1255 | 252 | 104(8) | 757(60) | 379(30) | 15(1) | 0(0) | 533(2) | 11275(48) | 10318(44) | 1264(5) | 82(0) | 4747 |
| 23 | L-K | 23882 | 410 | 79 | 47(11) | 244(60) | 114(28) | 5(1) | 0(0) | 580(2) | 11519(48) | 10432(44) | 1269(5) | 82(0) | 1598 |
| 24 | ZAP | 24638 | 756 | 151 | 40(5) | 435(58) | 271(36) | 10(1) | 0(0) | 620(3) | 11954(49) | 10703(43) | 1279(5) | 82(0) | 5582 |
| 25 | TZR | 26081 | 1443 | 288 | 14(1) | 902(63) | 452(31) | 71(5) | 4(0) | 634(2) | 12856(49) | 11155(43) | 1350(5) | 86(0) | 6663 |
| 26 | NEP | 26924 | 843 | 171 | 94(11) | 547(65) | 182(22) | 20(2) | 0(0) | 728(3) | 13403(50) | 11337(42) | 1370(5) | 86(0) | 6550 |
| 27 | POL | 27213 | 289 | 54 | 16(6) | 166(57) | 102(35) | 5(2) | 0(0) | 744(3) | 13569(50) | 11439(42) | 1375(5) | 86(0) | 2073 |
| 27 | L-K1 | 27628 | 415 | 77 | 43(10) | 232(56) | 129(31) | 11(3) | 0(0) | 787(3) | 13801(50) | 11568(42) | 1386(5) | 86(0) | 2013 |
| 29 | REF | 29098 | 1470 | 268 | 66(4) | 926(63) | 428(29) | 44(3) | 6(0) | 853(3) | 14727(51) | 11996(41) | 1430(5) | 92(0) | 6217 |
| 30 | TZR1 | 30763 | 1665 | 282 | 148(9) | 1139(68) | 331(20) | 47(3) | 0(0) | 1001(3) | 15866(52) | 12327(40) | 1477(5) | 92(0) | 6328 |
| 31 | POL1 | 31030 | 267 | 48 | 0(0) | 200(75) | 61(23) | 6(2) | 0(0) | 1001(3) | 16066(52) | 12388(40) | 1483(5) | 92(0) | 2340 |
| 31 | ZAP | 31950 | 920 | 176 | 152(17) | 559(61) | 199(22) | 10(1) | 0(0) | 1153(4) | 16625(52) | 12587(39) | 1493(5) | 92(0) | 6502 |
| AUG 1 | NEP | 33503 | 1553 | 286 | 130(8) | 988(64) | 413(27) | 22(1) | 0(0) | 1283(4) | 17613(53) | 13000(39) | 1515(5) | 92(0) | 8103 |
| 2 | REF1 | 35292 | 1789 | 326 | 390(22) | 1093(61) | 279(16) | 27(2) | 0(0) | 1673(5) | 18706(53) | 13279(38) | 1542(4) | 92(0) | 8006 |
| | COM | 36349 | 1057 | 0 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 1673(5) | 18706(51) | 13279(37) | 1542(4) | 92(0) | 1057 |

*NEP=NORTHEAST POINT (MORJOVI AND VOSTOCHNI); TZR=TOLSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; ZAP=ZAPADNI; REF=REEF, GORBATCH, AND ARDIGUEN; L-K=LUKANIN AND KITOVI; COM=COMBINED ROOKERY.1

TABLE 508 - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. GEORGE ISLAND, 1968.0

| DATE | ROOK-ERY# | NUMBER KILLED | | NO. IN TOOTH SAMPLE | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | BY AREA, ALL AGES | |
|------|-----------|---------------|-------|---------------------|---|--------|---------|---------|--------|---|--------|----------|----------|--------|-------------------|------|
| | | TO DATE | DAILY | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | | |
| JUNE | 26 | ZPG | 394 | 394 | 75 | 0(0) | 92(23) | 271(69) | 31(8) | 0(0) | 0(0) | 92(23) | 271(69) | 31(8) | 0(0) | 394 |
| | 28 | NOR | 648 | 254 | 51 | 0(0) | 35(14) | 189(74) | 30(12) | 0(0) | 0(0) | 127(20) | 460(71) | 61(9) | 0(0) | 254 |
| JULY | 1 | E-E | 935 | 287 | 52 | 0(0) | 77(27) | 204(71) | 6(2) | 0(0) | 0(0) | 204(22) | 664(71) | 67(7) | 0(0) | 287 |
| | 1 | NOR | 1036 | 101 | 20 | 0(0) | 30(30) | 61(60) | 10(10) | 0(0) | 0(0) | 234(23) | 725(70) | 77(7) | 0(0) | 355 |
| | 3 | ZPG | 1511 | 475 | 92 | 10(2) | 192(40) | 263(55) | 10(2) | 0(0) | 10(1) | 426(28) | 988(65) | 87(6) | 0(0) | 869 |
| | 5 | E-E | 1594 | 83 | 17 | 0(0) | 24(29) | 49(59) | 10(12) | 0(0) | 10(1) | 450(28) | 1037(65) | 97(6) | 0(0) | 370 |
| | 5 | NOR | 1989 | 395 | 79 | 10(3) | 140(35) | 220(56) | 25(6) | 0(0) | 20(1) | 590(30) | 1257(63) | 122(6) | 0(0) | 750 |
| | 8 | NOR | 2102 | 113 | 23 | 0(0) | 69(61) | 44(39) | 0(0) | 0(0) | 20(1) | 659(31) | 1301(62) | 122(6) | 0(0) | 863 |
| | 8 | ZPG | 2384 | 282 | 56 | 10(4) | 86(30) | 166(59) | 15(5) | 5(2) | 30(1) | 745(31) | 1467(62) | 137(6) | 5(0) | 1151 |
| | 10 | NOR | 2612 | 228 | 46 | 0(0) | 74(32) | 154(68) | 0(0) | 0(0) | 30(1) | 819(31) | 1621(62) | 137(5) | 5(0) | 1091 |
| | 10 | E-E | 2742 | 130 | 26 | 0(0) | 45(35) | 80(62) | 5(4) | 0(0) | 30(1) | 864(32) | 1701(62) | 142(5) | 5(0) | 500 |
| | 12 | ZPG | 2992 | 250 | 50 | 0(0) | 90(36) | 155(62) | 5(2) | 0(0) | 30(1) | 954(32) | 1856(62) | 147(5) | 5(0) | 1401 |
| | 15 | E-E | 3341 | 349 | 69 | 5(1) | 177(51) | 142(41) | 20(6) | 5(1) | 35(1) | 1131(34) | 1998(60) | 167(5) | 10(0) | 849 |
| | 17 | STA | 3493 | 152 | 34 | 0(0) | 76(50) | 71(47) | 5(3) | 0(0) | 35(1) | 1207(35) | 2069(59) | 172(5) | 10(0) | 152 |
| | 17 | NOR | 3912 | 419 | 83 | 10(2) | 242(58) | 152(36) | 15(4) | 0(0) | 45(1) | 1449(37) | 2221(57) | 187(5) | 10(0) | 1510 |
| | 19 | NOR | 4354 | 442 | 90 | 10(2) | 280(63) | 137(31) | 15(3) | 0(0) | 55(1) | 1729(40) | 2358(54) | 202(5) | 10(0) | 1952 |
| | 19 | ZPG | 4708 | 354 | 70 | 15(4) | 137(39) | 182(51) | 20(6) | 0(0) | 70(1) | 1866(40) | 2540(54) | 222(5) | 10(0) | 1755 |
| | 22 | E-E | 4995 | 287 | 56 | 10(3) | 159(55) | 97(34) | 21(7) | 0(0) | 80(2) | 2025(41) | 2637(53) | 243(5) | 10(0) | 1136 |
| | 22 | NOR | 5678 | 683 | 134 | 46(7) | 377(55) | 229(34) | 31(5) | 0(0) | 126(2) | 2402(42) | 2866(50) | 274(5) | 10(0) | 2635 |
| | 24 | ZPG | 6061 | 383 | 79 | 44(11) | 170(44) | 155(40) | 9(2) | 5(1) | 170(3) | 2572(42) | 3021(50) | 283(5) | 15(0) | 2138 |
| | 24 | NOR | 6195 | 134 | 28 | 0(0) | 86(64) | 48(36) | 0(0) | 0(0) | 170(3) | 2658(43) | 3069(50) | 283(5) | 15(0) | 2769 |
| | 26 | NOR | 6373 | 178 | 36 | 10(6) | 123(69) | 30(17) | 15(8) | 0(0) | 180(3) | 2781(44) | 3089(49) | 298(5) | 15(0) | 2947 |
| | 26 | E-E | 6472 | 99 | 21 | 5(5) | 56(57) | 28(28) | 5(5) | 5(5) | 185(3) | 2837(44) | 3127(48) | 303(5) | 20(0) | 1235 |
| | 29 | NOR | 6909 | 437 | 89 | 39(9) | 275(63) | 108(25) | 15(3) | 0(0) | 224(3) | 3112(45) | 3235(47) | 318(5) | 20(0) | 3384 |
| | 29 | ZPG | 7353 | 444 | 91 | 24(5) | 293(66) | 107(24) | 20(5) | 0(0) | 248(3) | 3405(46) | 3342(45) | 338(5) | 20(0) | 2582 |
| | 29 | STA | 7622 | 269 | 58 | 37(14) | 144(54) | 56(21) | 28(10) | 4(1) | 285(4) | 3549(47) | 3398(45) | 366(5) | 24(0) | 421 |
| | 31 | NOR | 7823 | 201 | 41 | 0(0) | 152(76) | 39(19) | 5(2) | 5(2) | 285(4) | 3701(47) | 3437(44) | 371(5) | 29(0) | 3585 |
| | 31 | E-E | 8086 | 273 | 60 | 18(7) | 200(73) | 50(18) | 5(2) | 0(0) | 303(4) | 3901(48) | 3487(43) | 376(5) | 29(0) | 1508 |
| AUG | 2 | STA | 8192 | 96 | 27 | 7(7) | 54(56) | 28(29) | 7(7) | 0(0) | 310(4) | 3955(48) | 3515(43) | 383(5) | 29(0) | 517 |
| | 2 | NOR | 8303 | 111 | 23 | 5(5) | 82(74) | 19(17) | 5(5) | 0(0) | 315(4) | 4037(49) | 3534(43) | 388(5) | 29(0) | 3696 |
| | 2 | E-E | 8694 | 391 | 83 | 52(13) | 235(60) | 99(25) | 5(1) | 0(0) | 367(4) | 4272(49) | 3633(42) | 393(5) | 29(0) | 1899 |
| | 5 | ZPG | 8927 | 133 | 27 | 39(29) | 84(63) | 10(8) | 0(0) | 0(0) | 406(5) | 4356(49) | 3643(41) | 393(4) | 29(0) | 2715 |
| | 5 | NOR | 8925 | 98 | 20 | 5(5) | 54(55) | 29(30) | 5(5) | 5(5) | 411(5) | 4410(49) | 3672(41) | 398(4) | 34(0) | 3794 |
| | 5 | STA | 9000 | 75 | 20 | 22(29) | 33(44) | 8(11) | 8(11) | 4(5) | 433(5) | 4443(49) | 3680(41) | 406(5) | 38(0) | 592 |
| | | COM | 9276 | 276 | 0 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 433(5) | 4443(48) | 3680(40) | 406(4) | 38(0) | 276 |

*ZPG=ZAPADNI (ST. GEORGE); NOR=NORTH; E-E=EAST REEF AND EAST CLIFFS; STA=STARAYA ARTIL; COM=COMBINED ROOKERY.0

TABLE 51A - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1969.0

| DATE | ROOK-ERY* | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | | BY AREA, ALL AGES |
|---------|-----------|----------------------|-------|--|---------|----------|----------|---------|--------|--|-----------|-----------|----------|---------|-------|-------------------|
| | | NUMBER KILLED NO. IN | | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | | |
| | | TO DATE | DAILY | TOOTH SAMPLE | 2 | 3 | 4 | 5 | 6 | 20 | 3 | 4 | 5 | 6 | | |
| JUNE 25 | NEP | 663 | 663 | 133 | 15(2) | 143(22) | 286(43) | 183(28) | 36(5) | 15(2) | 143(22) | 286(43) | 183(28) | 36(5) | 663 | |
| 26 | ZAP | 1183 | 520 | 93 | 0(0) | 184(35) | 235(45) | 84(16) | 17(3) | 15(1) | 327(28) | 521(44) | 267(23) | 53(4) | 520 | |
| 27 | REF | 1987 | 804 | 142 | 6(1) | 267(33) | 351(44) | 158(20) | 22(3) | 21(1) | 594(30) | 872(44) | 425(21) | 75(4) | 804 | |
| 28 | POL | 2294 | 307 | 58 | 0(0) | 85(28) | 148(48) | 74(24) | 0(0) | 21(1) | 679(30) | 1020(44) | 499(22) | 75(3) | 307 | |
| 28 | L-K | 2395 | 101 | 21 | 0(0) | 9(9) | 58(57) | 34(34) | 0(0) | 21(1) | 688(29) | 1078(45) | 533(22) | 75(3) | 101 | |
| 28 | TZR | 2552 | 157 | 28 | 0(0) | 39(25) | 90(57) | 28(18) | 0(0) | 21(1) | 727(28) | 1168(46) | 561(22) | 75(3) | 157 | |
| 30 | NEP | 3165 | 613 | 124 | 10(2) | 177(29) | 312(51) | 109(18) | 5(1) | 31(1) | 904(29) | 1480(47) | 670(21) | 80(3) | 1276 | |
| JULY 1 | ZAP | 3381 | 216 | 41 | 0(0) | 79(37) | 111(51) | 26(12) | 0(0) | 31(1) | 983(29) | 1591(47) | 696(21) | 80(2) | 736 | |
| 2 | L-K | 3436 | 55 | 11 | 0(0) | 20(36) | 25(45) | 10(18) | 0(0) | 31(1) | 1003(29) | 1616(47) | 706(21) | 80(2) | 156 | |
| 2 | REF | 3754 | 318 | 63 | 5(2) | 96(30) | 167(53) | 35(11) | 15(5) | 36(1) | 1099(29) | 1783(47) | 741(20) | 95(3) | 1122 | |
| 3 | POL | 3877 | 123 | 22 | 0(0) | 34(28) | 67(54) | 22(18) | 0(0) | 36(1) | 1133(29) | 1850(48) | 763(20) | 95(2) | 430 | |
| 3 | TZR | 4712 | 835 | 162 | 16(2) | 407(49) | 361(43) | 41(5) | 10(1) | 52(1) | 1540(33) | 2211(47) | 804(17) | 105(2) | 992 | |
| 5 | NEP | 5531 | 819 | 154 | 32(4) | 271(33) | 420(51) | 90(11) | 6(1) | 84(2) | 1811(33) | 2631(48) | 894(16) | 111(2) | 2095 | |
| 7 | ZAP | 6475 | 944 | 188 | 25(3) | 517(55) | 372(39) | 30(3) | 0(0) | 109(2) | 2328(36) | 3003(46) | 924(14) | 111(2) | 1680 | |
| 7 | NEP | 6743 | 268 | 49 | 5(2) | 121(45) | 131(49) | 11(4) | 0(0) | 114(2) | 2449(36) | 3134(46) | 935(14) | 111(2) | 2363 | |
| 8 | REF | 7680 | 937 | 185 | 46(5) | 511(55) | 360(36) | 20(2) | 0(0) | 160(2) | 2960(39) | 3494(45) | 955(12) | 111(1) | 2059 | |
| 9 | TZR | 8098 | 418 | 83 | 15(4) | 227(54) | 166(40) | 10(2) | 0(0) | 175(2) | 3187(39) | 3660(45) | 965(12) | 111(1) | 1410 | |
| 9 | L-K | 8269 | 171 | 32 | 0(0) | 102(60) | 69(40) | 0(0) | 0(0) | 175(2) | 3289(40) | 3729(45) | 965(12) | 111(1) | 327 | |
| 9 | POL | 8774 | 505 | 87 | 18(4) | 203(40) | 261(52) | 23(5) | 0(0) | 193(2) | 3492(40) | 3990(45) | 988(11) | 111(1) | 935 | |
| 10 | NEP | 9369 | 595 | 118 | 10(2) | 298(50) | 267(45) | 20(3) | 0(0) | 203(2) | 3790(40) | 4257(45) | 1008(11) | 111(1) | 2958 | |
| 11 | ZAP | 9992 | 623 | 116 | 11(2) | 349(56) | 247(40) | 16(3) | 0(0) | 214(2) | 4139(41) | 4504(45) | 1024(10) | 111(1) | 23030 | |
| 12 | REF | 10788 | 796 | 159 | 25(3) | 481(60) | 275(35) | 15(2) | 0(0) | 239(2) | 4620(43) | 4779(44) | 1039(10) | 111(1) | 2855 | |
| 14 | POL | 10975 | 187 | 36 | 0(0) | 83(44) | 104(56) | 0(0) | 0(0) | 239(2) | 4703(43) | 4883(44) | 1039(9) | 111(1) | 11220 | |
| 14 | TZR | 11826 | 851 | 167 | 25(3) | 515(61) | 275(32) | 36(4) | 0(0) | 264(2) | 5218(44) | 5158(44) | 1075(9) | 111(1) | 22610 | |
| 15 | NEP | 12786 | 960 | 178 | 39(4) | 631(66) | 283(29) | 7(1) | 0(0) | 303(2) | 5849(46) | 5441(43) | 1082(8) | 111(1) | 39180 | |
| 16 | ZAP | 14141 | 1355 | 260 | 68(5) | 829(61) | 432(32) | 26(2) | 0(0) | 371(3) | 6678(47) | 5873(42) | 1108(8) | 111(1) | 36580 | |
| 17 | L-K | 14334 | 193 | 31 | 6(3) | 75(39) | 99(51) | 13(7) | 0(0) | 377(3) | 6753(47) | 5972(42) | 1121(8) | 111(1) | 520 | |
| 17 | REF | 15135 | 801 | 145 | 82(10) | 509(64) | 188(23) | 22(3) | 0(0) | 459(3) | 7262(48) | 6160(41) | 1143(8) | 111(1) | 3656 | |
| 18 | NEP | 16468 | 1333 | 261 | 123(9) | 802(60) | 367(28) | 36(3) | 5(0) | 582(4) | 8064(49) | 6527(40) | 1179(7) | 116(1) | 5251 | |
| 19 | TZR | 16971 | 503 | 94 | 0(0) | 294(58) | 177(35) | 32(6) | 0(0) | 582(3) | 8358(49) | 6704(40) | 1211(7) | 116(1) | 2764 | |
| 19 | POL | 17259 | 288 | 45 | 19(7) | 77(27) | 166(58) | 26(9) | 0(0) | 601(3) | 8435(49) | 6870(40) | 1237(7) | 116(1) | 14100 | |
| 22 | ZAP | 18048 | 1789 | 347 | 184(10) | 1150(64) | 433(24) | 22(1) | 0(0) | 785(4) | 9585(50) | 7303(38) | 1259(7) | 116(1) | 5447 | |
| 23 | REF | 20247 | 1199 | 237 | 146(12) | 668(56) | 350(29) | 30(3) | 5(0) | 931(5) | 10253(51) | 7653(36) | 1289(6) | 121(1) | 4855 | |
| 23 | L-K | 20554 | 307 | 61 | 40(13) | 216(70) | 46(15) | 5(2) | 0(0) | 971(5) | 10469(51) | 7699(37) | 1294(6) | 121(1) | 827 | |
| 24 | TZR | 20775 | 221 | 43 | 5(2) | 134(61) | 77(35) | 5(2) | 0(0) | 976(5) | 10603(51) | 7776(37) | 1299(6) | 121(1) | 2985 | |
| 24 | POL | 21179 | 404 | 120 | 37(9) | 246(61) | 114(28) | 7(2) | 0(0) | 1013(5) | 10849(51) | 7890(37) | 1306(6) | 121(1) | 1814 | |
| 25 | NEP | 22728 | 1549 | 297 | 188(12) | 911(59) | 429(28) | 21(1) | 0(0) | 1201(5) | 11760(52) | 8319(37) | 1327(6) | 121(1) | 6800 | |
| 26 | ZAP | 24087 | 1359 | 239 | 159(12) | 813(60) | 364(27) | 23(2) | 0(0) | 1360(6) | 12573(52) | 8683(36) | 1350(6) | 121(1) | 6806 | |
| 28 | REF | 25688 | 1601 | 304 | 294(18) | 996(62) | 290(18) | 21(1) | 0(0) | 1654(6) | 13569(53) | 8973(35) | 1371(5) | 121(0) | 6456 | |
| 29 | POL | 27126 | 1438 | 255 | 129(9) | 823(57) | 446(31) | 40(3) | 0(0) | 1783(7) | 14392(53) | 9419(35) | 1411(5) | 121(0) | 3252 | |
| 29 | L-K | 27396 | 270 | 50 | 59(22) | 162(60) | 49(18) | 0(0) | 0(0) | 1842(7) | 14554(53) | 9468(35) | 1411(5) | 121(0) | 1097 | |
| 29 | TZRO | 27712 | 316 | 59 | 11(3) | 150(47) | 155(49) | 0(0) | 0(0) | 1853(7) | 14704(53) | 9623(35) | 1411(5) | 121(0) | 3301 | |
| 30 | NEP | 28752 | 1040 | 208 | 125(12) | 711(68) | 194(19) | 10(1) | 0(0) | 1978(7) | 15415(54) | 9817(34) | 1421(5) | 121(0) | 7840 | |
| 30 | TZR | 29315 | 563 | 97 | 52(9) | 418(74) | 93(17) | 0(0) | 0(0) | 2030(7) | 15833(54) | 9910(34) | 1421(5) | 121(0) | 3864 | |
| 31 | ZAP | 31131 | 1816 | 338 | 242(13) | 1101(61) | 457(25) | 16(1) | 0(0) | 2272(7) | 16934(54) | 10367(33) | 1437(5) | 121(0) | 8622 | |
| AUG 1 | L-K | 31593 | 462 | 88 | 69(15) | 294(64) | 94(20) | 5(1) | 0(0) | 2341(7) | 17228(55) | 10461(33) | 1442(5) | 121(0) | 1559 | |
| 1 | REF | 32621 | 1028 | 158 | 299(29) | 598(58) | 104(10) | 27(3) | 0(0) | 2640(8) | 17826(55) | 10565(32) | 1469(5) | 121(0) | 7484 | |

*NEP=NORTHEAST POINT (MORJOVI AND VOSTOCHNI); TZR=TOLSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; POL=POLOVINA, POLOVINAO CLIFFS, AND LITTLE POLOVINA; ZAP=ZAPADNI; REF=REEF, GORBATCII, AND ARDIGUEN; L-K=LUKANIN AND KITOVI.0

TABLE 51B - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. GEORGE ISLAND, 1969.

| DATE | ROOK-2 ERY# | NUMBER KILLED TO DATE | NO. IN TOOTH SAMPLE | DAILY KILL | | | | | | CUMULATIVE KILL | | | | | | BY AREA, ALL AGES |
|------|----------------|--------------------------|---------------------------|--|-----|--------|---------|---------|--------|--|--------|----------|----------|----------|---------|----------------------|
| | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | | |
| | | | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | | | |
| JUNE | 25 | NOR | 135 | 135 | 27 | 0(0) | 15(11) | 60(44) | 50(37) | 10(7) | 0(0) | 15(11) | 60(44) | 50(37) | 10(7) | 135 |
| | 27 | STA | 189 | 54 | 11 | 0(0) | 10(19) | 15(28) | 24(44) | 5(9)2 | 0(0)2 | 25(13) | 75(40) | 74(39) | 15(8) | 54 |
| | 27 | ZPG | 356 | 167 | 32 | 5(3) | 26(16) | 58(35) | 47(28) | 31(19)2 | 5(1) | 51(14) | 133(37) | 121(34) | 46(13) | 167 |
| | 30 | E-E | 419 | 63 | 13 | 5(8) | 0(0) | 43(68) | 10(16) | 5(8) | 10(2) | 51(12) | 176(42) | 131(31) | 51(12) | 63 |
| JULY | 2 | STA | 458 | 39 | 8 | 0(0) | 5(13) | 15(38) | 19(49) | 0(0) | 10(2) | 56(12) | 191(42) | 150(33) | 51(11) | 93 |
| | 2 | ZPG | 638 | 180 | 37 | 0(0) | 58(32) | 68(38) | 49(27) | 5(3) | 10(2) | 114(18) | 259(41) | 199(31) | 56(9) | 347 |
| | 3 | NOR | 727 | 89 | 18 | 0(0) | 35(39) | 39(44) | 15(17) | 0(0)2 | 10(1) | 149(20) | 298(41) | 214(29) | 58(8) | 224 |
| | 7 | ZPG | 935 | 108 | 22 | 0(0) | 34(31) | 54(50) | 20(19) | 0(0)2 | 10(1) | 183(22) | 352(42) | 234(28) | 56(7) | 455 |
| | 7 | STA | 917 | 82 | 16 | 0(0) | 5(6) | 57(70) | 15(18) | 5(6)2 | 10(1) | 188(21) | 409(45) | 249(27) | 61(7) | 175 |
| | 9 | NOR | 1171 | 254 | 51 | 5(2) | 65(26) | 154(61) | 30(12) | 0(0)2 | 15(1) | 253(22) | 563(48) | 279(24) | 61(5) | 478 |
| | 9 | E-E | 1289 | 118 | 24 | 5(4) | 49(42) | 49(42)2 | 15(13) | 0(0)2 | 20(2) | 302(23) | 612(47) | 294(23) | 61(5) | 181 |
| | 11 | ZPG | 1361 | 72 | 15 | 0(0) | 38(53) | 14(19) | 10(14) | 10(14)2 | 20(1) | 340(25) | 626(46) | 304(22) | 71(5) | 527 |
| | 11 | STA | 1408 | 47 | 9 | 0(0)2 | 5(11) | 31(66) | 11(23) | 0(0)2 | 20(1) | 345(25) | 657(47) | 315(22) | 71(5)2 | 222 |
| | 14 | NOR | 1692 | 284 | 57 | 5(2) | 70(25) | 169(60) | 30(11) | 10(4)2 | 25(1) | 415(25) | 826(49) | 345(20) | 81(5) | 762 |
| | 14 | E-E | 1952 | 260 | 52 | 5(2) | 130(50) | 105(40) | 20(8) | 0(0)2 | 30(2) | 545(28) | 931(48) | 365(19) | 81(4) | 441 |
| | 15 | ZPG | 2087 | 135 | 27 | 5(4)2 | 65(48) | 45(33) | 15(11) | 5(4) | 35(2) | 610(29) | 976(47) | 380(18) | 86(4) | 662 |
| | 15 | STA | 2232 | 145 | 24 | 0(0) | 54(37) | 67(46) | 18(12) | 6(4)2 | 35(2) | 664(30) | 1043(47) | 398(18) | 92(4) | 387 |
| | 18 | E-E | 2573 | 341 | 67 | 5(1) | 168(49) | 122(36) | 41(12) | 5(1) | 40(2) | 832(32) | 1165(45) | 439(17) | 97(4) | 782 |
| | 18 | NOR | 2842 | 269 | 53 | 10(4) | 127(47) | 102(38) | 25(9) | 5(2)2 | 50(2) | 959(34) | 1267(45) | 464(16)2 | 102(4) | 1031 |
| | 21 | STA | 2944 | 102 | 18 | 0(0)2 | 40(39) | 51(50) | 11(11) | 0(0) | 50(2) | 999(34) | 1318(45) | 475(16) | 102(3) | 469 |
| | 21 | ZPG | 3131 | 187 | 38 | 5(3) | 103(55) | 64(34) | 10(5) | 5(3)2 | 55(2) | 1102(35) | 1382(44) | 485(15) | 107(3) | 849 |
| | 23 | E-E | 3303 | 172 | 29 | 12(7)2 | 53(31) | 61(35) | 46(27) | 0(0) | 67(2) | 1155(35) | 1443(44) | 531(16) | 107(3) | 954 |
| | 23 | NOR | 3572 | 269 | 52 | 16(6) | 67(25) | 165(61) | 21(8) | 0(0) | 83(2) | 1222(34) | 1608(45) | 552(15) | 107(3) | 1300 |
| | 25 | ZPG | 3685 | 113 | 22 | 15(13) | 62(55) | 31(27) | 5(4) | 0(0) | 98(3) | 1284(35) | 1639(44) | 557(15) | 107(3) | 962 |
| | 25 | NOR | 3808 | 123 | 24 | 5(4)2 | 57(46) | 51(41) | 10(8) | 0(0) | 103(3) | 1341(35) | 1690(44) | 567(15) | 107(3) | 1423 |
| | 28 | E-E | 4258 | 450 | 87 | 73(16) | 253(56) | 78(17) | 46(10) | 0(0) | 176(4) | 1594(37) | 1768(42) | 613(14) | 107(3)2 | 1404 |
| | 28 | NOR | 4897 | 639 | 123 | 73(11) | 368(58) | 172(27) | 21(3) | 5(1) | 249(5) | 1962(40) | 1940(40) | 634(13) | 112(2)2 | 2062 |
| | 30 | STA | 5036 | 139 | 31 | 31(22) | 76(55) | 32(23) | 0(0) | 0(0) | 280(6) | 2038(40) | 1972(39) | 634(13) | 112(2)2 | 608 |
| | 30 | NOR | 5139 | 103 | 20 | 11(11) | 46(45) | 46(45) | 0(0) | 0(0) | 291(6) | 2084(41) | 2018(39) | 634(12) | 112(2) | 2165 |
| | 30 | ZPG | 5252 | 113 | 22 | 5(4) | 78(69) | 15(13) | 15(13) | 0(0) | 296(6) | 2162(41) | 2033(39) | 649(12) | 112(2) | 1075 |
| AUG | 1 | NOR | 5662 | 410 | 80 | 51(12) | 236(58) | 102(25) | 16(4) | 5(1) | 347(6) | 2398(42) | 2135(38) | 665(12) | 117(2) | 2575 |
| | 1 | E-E | 6057 | 395 | 80 | 64(16) | 247(63) | 69(17) | 15(4) | 0(0) | 411(7) | 2645(44) | 2204(36) | 680(11) | 117(2) | 1799 |

*ZPG=ZAPADNI (ST. GEORGE); NOR=NORTH; E-E=EAST REEF AND EAST CLIFFS; STA=STARAYA ARTIL.2

TABLE 52A - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1970.

| DATE | ROOK-ERY* | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | | | |
|---------|-----------|---------------|-------|---------------------|---|----------|---------|--------|------|-----------------|---|-----------|--------|-------|-------|--|-------------------|
| | | NUMBER KILLED | | NO. IN TOOTH SAMPLE | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | | BY AREA, ALL AGES |
| | | TO DATE | DAILY | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | | | |
| JUNE 24 | NEP | 741 | 741 | 141 | 0(0) | 158(21) | 507(68) | 76(10) | 0(0) | 0(0) | 158(21) | 507(68) | 76(10) | 0(0) | 741 | | |
| 25 | ZAP | 1349 | 608 | 121 | 12(2) | 213(35) | 335(55) | 42(7) | 6(1) | 12(1) | 371(28) | 842(62) | 118(9) | 6(0) | 608 | | |
| 26 | REF | 1890 | 541 | 107 | 0(0) | 200(37) | 309(57) | 27(5) | 5(1) | 12(1) | 571(30) | 1151(61) | 145(8) | 11(1) | 541 | | |
| 27 | TZR | 2269 | 379 | 72 | 0(0) | 106(28) | 246(65) | 27(7) | 0(0) | 12(1) | 677(30) | 1397(62) | 172(8) | 11(0) | 379 | | |
| 27 | POL | 2684 | 415 | 84 | 0(0) | 75(18) | 290(70) | 50(12) | 0(0) | 12(0) | 752(28) | 1667(63) | 222(8) | 11(0) | 415 | | |
| 27 | L-K | 2858 | 174 | 35 | 0(0) | 30(17) | 139(80) | 5(3) | 0(0) | 12(0) | 782(27) | 1826(64) | 227(8) | 11(0) | 174 | | |
| 29 | NEP | 3411 | 553 | 106 | 0(0) | 167(30) | 342(62) | 44(8) | 0(0) | 12(0) | 949(28) | 2168(64) | 271(8) | 11(0) | 1294 | | |
| 30 | ZAP | 4045 | 634 | 122 | 6(1) | 292(46) | 298(47) | 32(5) | 6(1) | 18(0) | 1241(31) | 2468(61) | 303(7) | 17(0) | 1242 | | |
| JULY 1 | REF | 4618 | 573 | 109 | 5(1) | 264(46) | 281(49) | 23(4) | 0(0) | 23(0) | 1505(33) | 2747(59) | 326(7) | 17(0) | 1114 | | |
| 2 | POL | 4935 | 317 | 60 | 0(0) | 130(41) | 165(52) | 22(7) | 0(0) | 23(0) | 1635(33) | 2912(59) | 348(7) | 17(0) | 732 | | |
| 2 | L-K | 5112 | 177 | 33 | 0(0) | 85(48) | 92(52) | 0(0) | 0(0) | 23(0) | 1720(34) | 3004(59) | 348(7) | 17(0) | 351 | | |
| 2 | TZR | 5275 | 163 | 30 | 0(0) | 60(37) | 93(57) | 10(6) | 0(0) | 23(0) | 1780(34) | 3097(59) | 358(7) | 17(0) | 542 | | |
| 3 | NEP | 5883 | 608 | 111 | 0(0) | 252(41) | 339(56) | 17(3) | 0(0) | 23(0) | 2032(35) | 3436(58) | 375(6) | 17(0) | 1902 | | |
| 6 | ZAP | 6967 | 1084 | 197 | 0(0) | 629(58) | 444(41) | 11(1) | 0(0) | 23(0) | 2661(38) | 3880(56) | 386(6) | 17(0) | 2326 | | |
| 7 | REF | 7610 | 643 | 127 | 6(1) | 315(49) | 309(48) | 13(2) | 0(0) | 29(0) | 2976(39) | 4189(55) | 399(5) | 17(0) | 1757 | | |
| 7 | TZR | 7786 | 176 | 36 | 0(0) | 63(47) | 88(50) | 5(3) | 0(0) | 29(0) | 3059(39) | 4277(55) | 404(5) | 17(0) | 718 | | |
| 8 | POL | 8290 | 504 | 95 | 5(1) | 242(48) | 237(47) | 20(4) | 0(0) | 34(0) | 3301(40) | 4514(54) | 424(5) | 17(0) | 1236 | | |
| 8 | NEP | 8651 | 361 | 73 | 0(0) | 256(71) | 101(28) | 4(1) | 0(0) | 34(0) | 3557(41) | 4615(53) | 428(5) | 17(0) | 2263 | | |
| 9 | NEP | 9595 | 944 | 188 | 28(3) | 557(59) | 349(37) | 10(1) | 0(0) | 62(1) | 4114(43) | 4964(52) | 438(5) | 17(0) | 3207 | | |
| 10 | L-K | 9807 | 212 | 41 | 4(2) | 104(49) | 100(47) | 4(2) | 0(0) | 66(1) | 4218(43) | 5064(52) | 442(5) | 17(0) | 563 | | |
| 10 | ZAP | 10730 | 923 | 185 | 19(2) | 655(71) | 249(27) | 0(0) | 0(0) | 85(1) | 4873(45) | 5313(50) | 442(4) | 17(0) | 3249 | | |
| 11 | TZR | 10888 | 158 | 30 | 5(3) | 90(57) | 58(37) | 5(3) | 0(0) | 90(1) | 4963(46) | 5371(49) | 447(4) | 17(0) | 876 | | |
| 11 | REF | 11374 | 486 | 89 | 5(1) | 316(65) | 165(34) | 0(0) | 0(0) | 95(1) | 5279(46) | 5636(49) | 447(4) | 17(0) | 2243 | | |
| 13 | TZR | 11620 | 246 | 44 | 0(0) | 140(57) | 96(38) | 10(4) | 0(0) | 95(1) | 5419(47) | 5632(48) | 457(4) | 17(0) | 1122 | | |
| 13 | POL | 12062 | 442 | 86 | 4(1) | 204(46) | 230(52) | 4(1) | 0(0) | 99(1) | 5623(47) | 5862(49) | 461(4) | 17(0) | 1678 | | |
| 14 | NEP | 13563 | 1501 | 294 | 83(6) | 931(62) | 465(31) | 22(1) | 0(0) | 182(1) | 6554(48) | 6327(47) | 483(4) | 17(0) | 4708 | | |
| 15 | ZAP | 16269 | 2706 | 497 | 135(5) | 1651(61) | 893(33) | 27(1) | 0(0) | 317(2) | 8205(50) | 7220(44) | 510(3) | 17(0) | 5955 | | |
| 16 | REF | 17572 | 1303 | 236 | 52(4) | 834(64) | 391(30) | 26(2) | 0(0) | 369(2) | 9039(51) | 7611(43) | 536(3) | 17(0) | 3546 | | |
| 17 | NEP | 18649 | 1077 | 190 | 28(3) | 750(70) | 285(26) | 14(1) | 0(0) | 397(2) | 9789(52) | 7896(42) | 550(3) | 17(0) | 5785 | | |
| 18 | L-K | 19107 | 458 | 97 | 5(1) | 311(68) | 142(31) | 0(0) | 0(0) | 402(2) | 10100(53) | 8038(42) | 550(3) | 17(0) | 1021 | | |
| 18 | TZR | 19360 | 253 | 73 | 8(3) | 149(59) | 94(37) | 2(1) | 0(0) | 410(2) | 10249(53) | 8132(42) | 552(3) | 17(0) | 1375 | | |
| 18 | POL | 20294 | 934 | 148 | 28(3) | 635(68) | 252(27) | 19(2) | 0(0) | 438(2) | 10884(54) | 8384(41) | 571(3) | 17(0) | 2612 | | |
| 20 | ZAP | 21871 | 1577 | 296 | 95(6) | 1041(66) | 441(28) | 0(0) | 0(0) | 533(2) | 11925(55) | 8825(40) | 571(3) | 17(0) | 7532 | | |
| 20 | TZR | 22005 | 134 | 30 | 0(0) | 76(57) | 58(43) | 0(0) | 0(0) | 533(2) | 12001(55) | 8883(40) | 571(3) | 17(0) | 1509 | | |
| 21 | REF | 23315 | 1310 | 234 | 92(7) | 930(71) | 275(21) | 13(1) | 0(0) | 625(3) | 12931(55) | 9158(39) | 584(3) | 17(0) | 4856 | | |
| 21 | L-K1 | 23640 | 325 | 71 | 10(3) | 214(66) | 98(30) | 3(1) | 0(0) | 635(3) | 13145(56) | 9256(39) | 587(2) | 17(0) | 1346 | | |
| 22 | NEP | 25317 | 1677 | 334 | 129(8) | 1145(68) | 364(22) | 39(2) | 0(0) | 764(3) | 14290(56) | 9620(38) | 626(2) | 17(0) | 7462 | | |
| 23 | POL1 | 25951 | 534 | 126 | 25(4) | 450(71) | 159(25) | 0(0) | 0(0) | 789(3) | 14740(57) | 9779(38) | 626(2) | 17(0) | 3246 | | |
| 23 | TZR1 | 26435 | 484 | 95 | 14(3) | 378(78) | 87(18) | 5(1) | 0(0) | 803(3) | 15118(57) | 9866(37) | 631(2) | 17(0) | 1993 | | |
| 24 | ZAP | 27736 | 1301 | 238 | 117(9) | 963(74) | 208(16) | 13(1) | 0(0) | 920(3) | 16081(58) | 10074(36) | 644(2) | 17(0) | 8833 | | |
| 24 | TZR | 28088 | 352 | 70 | 14(4) | 289(82) | 46(13) | 3(1) | 0(0) | 934(3) | 16370(58) | 10120(36) | 647(2) | 17(0) | 2345 | | |
| 25 | REF | 28643 | 555 | 110 | 55(10) | 389(70) | 100(18) | 11(2) | 0(0) | 989(3) | 16759(59) | 10220(36) | 658(2) | 17(0) | 5411 | | |
| 25 | L-K | 29092 | 449 | 73 | 49(11) | 301(67) | 99(22) | 0(0) | 0(0) | 1038(4) | 17060(59) | 10319(35) | 658(2) | 17(0) | 1795 | | |
| 27 | NEP | 30536 | 1444 | 278 | 147(10) | 1107(77) | 177(12) | 13(1) | 0(0) | 1185(4) | 18167(59) | 10496(34) | 671(2) | 17(0) | 8906 | | |
| 28 | POL | 30799 | 263 | 55 | 0(0) | 195(74) | 63(24) | 5(2) | 0(0) | 1185(4) | 18362(60) | 10559(34) | 676(2) | 17(0) | 3509 | | |
| 28 | TZR | 31658 | 859 | 162 | 69(8) | 636(74) | 146(17) | 8(1) | 0(0) | 1254(4) | 18998(60) | 10705(34) | 684(2) | 17(0) | 3204 | | |
| 29 | ZAP | 33009 | 1351 | 272 | 94(7) | 905(67) | 338(25) | 14(1) | 0(0) | 1348(4) | 19903(60) | 11043(33) | 698(2) | 17(0) | 10184 | | |

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*NEP=NORTHEAST POINT (MORJOVI AND VOSTOCHNI); TZR=TOLSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; ZAP=ZAPADNI; REF=REEF, GORBATCH, AND ARDIQUEN; L-K=LUKANIN AND KITOVI.1

TABLE 52A - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1970 (CONT.)

| DATE | ROOK- ERY* | NUMBER KILLED | | NO. IN TOOTH SAMPLE | DAILY KILL ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | CUMULATIVE KILL ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | BY AREA, ALL AGES |
|---------|---------------|---------------|-------|---------------------------|--|---------|---------|-------|------|---|-----------|-----------|--------|-------|----------------------|
| | | TO DATE | DAILY | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | |
| JULY 30 | L-K | 33547 | 538 | 87 | 54(10) | 393(73) | 86(16) | 5(1) | 0(0) | 1402(4) | 20296(61) | 11129(33) | 703(2) | 17(0) | 2333 |
| 30 | REF | 34617 | 1070 | 198 | 96(9) | 781(73) | 182(17) | 11(1) | 0(0) | 1498(4) | 21077(61) | 11311(33) | 714(2) | 17(0) | 6481 |
| 31 | NEP | 35970 | 1353 | 236 | 200(15) | 938(89) | 198(15) | 17(1) | 0(0) | 1698(5) | 22015(61) | 11509(32) | 731(2) | 17(0) | 10259 |
| 31 | POL | 36197 | 227 | 42 | 27(12) | 161(71) | 39(17) | 0(0) | 0(0) | 1725(5) | 22176(61) | 11548(32) | 731(2) | 17(0) | 3736 |

*NEP=NORTHEAST POINT (MORJOVI AND VOSTOCHNI); TZR=TOLSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; ZAP=ZAPADNI; REF=REEF, GORBATCH, AND ARDIGUEN; L-K=LUKANIN AND KITOVI.

TABLE 52B - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. GEORGE ISLAND, 1970.

| DATE | ROOK-0-ERY# | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | | BY AREA, ALL AGES |
|---------|-------------|-----------------------|---------------------|--|--------|---------|---------|--------|--------|--|----------|----------|---------|--------|------|-------------------|
| | | NUMBER KILLED TO DATE | NO. IN TOOTH SAMPLE | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | | |
| | | | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | | | |
| JUNE 24 | NOR | 290 | 290 | 51 | 0(0) | 74(26) | 142(49) | 40(14) | 34(12) | 0(0) | 74(26) | 142(49) | 40(14) | 34(12) | 290 | |
| 26 | STA | 358 | 68 | 10 | 0(0) | 20(29) | 41(60) | 7(10) | 0(0) | 0(0) | 94(26) | 183(51) | 47(13) | 34(9) | 68 | |
| 26 | E-E | 535 | 177 | 33 | 0(0) | 48(27) | 86(49) | 43(24) | 0(0) | 0(0) | 142(27) | 269(50) | 90(17) | 34(6) | 177 | |
| 29 | NOR | 675 | 140 | 29 | 0(0) | 19(14) | 92(66) | 29(21) | 0(0) | 0(0) | 161(24) | 361(53) | 119(18) | 34(5) | 430 | |
| 29 | ZPG | 837 | 162 | 31 | 0(0) | 63(39) | 78(48) | 21(13) | 0(0) | 0(0) | 224(27) | 439(52) | 140(17) | 34(4) | 162 | |
| JULY 1 | NOR | 969 | 132 | 25 | 0(0) | 37(28) | 79(60) | 11(8) | 5(4) | 0(0) | 261(27) | 518(53) | 151(16) | 39(4) | 562 | |
| 1 | E-E | 1091 | 122 | 26 | 0(0) | 33(27) | 66(54) | 23(19) | 0(0) | 0(0) | 294(27) | 584(54) | 174(16) | 39(4) | 299 | |
| 3 | ZPG | 1245 | 154 | 28 | 0(0) | 55(36) | 49(32) | 44(29) | 6(4) | 0(0) | 349(28) | 633(51) | 218(18) | 45(4) | 316 | |
| 3 | STA | 1317 | 72 | 13 | 0(0) | 17(24) | 44(61) | 11(15) | 0(0) | 0(0) | 366(28) | 677(51) | 229(17) | 45(3) | 140 | |
| 6 | E-E | 1461 | 144 | 29 | 0(0) | 50(35) | 64(44) | 25(17) | 5(3) | 0(0) | 416(28) | 741(51) | 254(17) | 50(3) | 443 | |
| 6 | NOR | 1718 | 257 | 52 | 5(2) | 113(44) | 124(48) | 15(6) | 0(0) | 5(0) | 529(31) | 865(50) | 269(16) | 50(3) | 819 | |
| 8 | NOR | 1822 | 104 | 20 | 0(0) | 68(65) | 31(30) | 5(5) | 0(0) | 5(0) | 597(33) | 896(49) | 274(15) | 50(3) | 923 | |
| 8 | ZPG | 1940 | 118 | 21 | 0(0) | 51(43) | 67(57) | 0(0) | 0(0) | 5(0) | 648(33) | 963(50) | 274(14) | 50(3) | 434 | |
| 8 | STA | 2006 | 66 | 13 | 0(0) | 30(45) | 36(55) | 0(0) | 0(0) | 5(0) | 678(34) | 999(50) | 274(14) | 50(2) | 206 | |
| 10 | E-E | 2106 | 100 | 20 | 0(0) | 55(55) | 40(40) | 5(5) | 0(0) | 5(0) | 733(35) | 1039(49) | 279(13) | 50(2) | 543 | |
| 10 | ZPG | 2182 | 76 | 16 | 0(0) | 38(50) | 33(43) | 5(7) | 0(0) | 5(0) | 771(35) | 1072(49) | 284(13) | 50(2) | 510 | |
| 13 | NOR | 2582 | 400 | 68 | 0(0) | 159(40) | 206(52) | 35(9) | 0(0) | 5(0) | 930(36) | 1278(49) | 319(12) | 50(2) | 1323 | |
| 13 | E-E | 2726 | 144 | 27 | 0(0) | 59(41) | 69(48) | 11(8) | 5(3) | 5(0) | 989(36) | 1347(49) | 330(12) | 55(2) | 687 | |
| 15 | STA | 2858 | 132 | 24 | 0(0) | 44(33) | 66(50) | 22(17) | 0(0) | 5(0) | 1033(36) | 1413(49) | 352(12) | 55(2) | 338 | |
| 15 | ZPG | 2937 | 79 | 15 | 0(0) | 42(53) | 37(47) | 0(0) | 0(0) | 5(0) | 1075(37) | 1450(49) | 352(12) | 55(2) | 589 | |
| 15 | NOR | 3121 | 184 | 34 | 0(0) | 81(44) | 70(38) | 27(15) | 6(3) | 5(0) | 1156(37) | 1520(49) | 379(12) | 61(2) | 1507 | |
| 17 | E-E | 3266 | 145 | 27 | 5(3) | 97(67) | 38(26) | 5(3) | 0(0) | 10(0) | 1253(38) | 1558(48) | 384(12) | 61(2) | 832 | |
| 17 | STA | 3365 | 99 | 20 | 0(0) | 84(85) | 15(15) | 0(0) | 0(0) | 10(0) | 1337(40) | 1573(47) | 384(11) | 61(2) | 437 | |
| 17 | NOR | 3638 | 273 | 54 | 10(4) | 116(42) | 111(41) | 36(13) | 0(0) | 20(1) | 1453(40) | 1684(46) | 420(12) | 61(2) | 1780 | |
| 20 | E-E0 | 3823 | 185 | 34 | 6(3) | 136(74) | 43(23) | 0(0) | 0(0) | 26(1) | 1589(42) | 1727(45) | 420(11) | 61(2) | 1017 | |
| 20 | STA | 3887 | 64 | 13 | 5(8) | 39(61) | 15(23) | 5(8) | 0(0) | 31(1) | 1628(42) | 1742(45) | 425(11) | 61(2) | 501 | |
| 20 | ZPG | 4063 | 176 | 35 | 0(0) | 106(60) | 55(31) | 15(9) | 0(0) | 31(1) | 1734(43) | 1797(44) | 440(11) | 61(2) | 765 | |
| 22 | NOR | 4510 | 447 | 87 | 26(6) | 282(63) | 113(25) | 21(5) | 5(1) | 57(1) | 2016(45) | 1910(42) | 461(10) | 66(1) | 2227 | |
| 22 | ZPG | 4568 | 58 | 12 | 10(17) | 19(33) | 24(41) | 5(9) | 0(0) | 67(1) | 2035(45) | 1934(42) | 466(10) | 66(1) | 823 | |
| 22 | STA | 4685 | 117 | 23 | 0(0) | 76(65) | 31(26) | 5(4) | 5(4) | 67(1) | 2111(45) | 1965(42) | 471(10) | 71(2) | 618 | |
| 24 | NOR | 4807 | 122 | 26 | 5(4) | 75(61) | 28(23) | 14(11) | 0(0) | 72(1) | 2186(45) | 1993(41) | 485(10) | 71(1) | 2349 | |
| 24 | E-E | 4968 | 161 | 36 | 0(0) | 98(61) | 54(34) | 9(6) | 0(0) | 72(1) | 2284(46) | 2047(41) | 494(10) | 71(1) | 1178 | |
| 24 | ZPG | 5072 | 104 | 21 | 0(0) | 69(66) | 35(34) | 0(0) | 0(0) | 72(1) | 2353(46) | 2082(41) | 494(10) | 71(1) | 927 | |
| 27 | NOR | 5306 | 234 | 42 | 11(5) | 128(55) | 73(31) | 22(9) | 0(0) | 83(2) | 2481(47) | 2155(41) | 516(10) | 71(1) | 2583 | |
| 27 | ZPG | 5372 | 66 | 12 | 0(0) | 33(50) | 23(35) | 5(8) | 5(8) | 83(2) | 2514(47) | 2178(41) | 521(10) | 76(1) | 993 | |
| 27 | STA | 5510 | 138 | 30 | 5(4) | 110(80) | 23(17) | 0(0) | 0(0) | 88(2) | 2624(48) | 2201(40) | 521(9) | 76(1) | 756 | |
| 29 | NOR | 5601 | 91 | 20 | 0(0) | 59(65) | 27(30) | 5(5) | 0(0) | 88(2) | 2683(48) | 2228(40) | 526(9) | 76(1) | 2674 | |
| 29 | E-E | 5691 | 90 | 17 | 5(6) | 59(66) | 21(23) | 5(6) | 0(0) | 93(2) | 2742(48) | 2249(40) | 531(9) | 76(1) | 1268 | |
| 31 | STA | 5791 | 100 | 20 | 0(0) | 90(90) | 5(5) | 5(5) | 0(0) | 93(2) | 2832(49) | 2254(39) | 536(9) | 76(1) | 856 | |
| 31 | NOR | 5869 | 78 | 14 | 0(0) | 55(71) | 11(14) | 6(8) | 6(8) | 93(2) | 2887(49) | 2265(39) | 542(9) | 82(1) | 2752 | |
| 31 | ZPG | 5892 | 23 | 6 | 0(0) | 12(52) | 4(17) | 0(0) | 7(30) | 93(2) | 2899(49) | 2269(39) | 542(9) | 82(2) | 1016 | |
| 31 | E-E0 | 5924 | 32 | 7 | 5(16) | 17(53) | 5(16) | 5(16) | 0(0) | 98(2) | 2916(49) | 2274(38) | 547(9) | 89(2) | 1300 | |

*ZPG=ZAPADNI (ST. GEORGE); NOR=NORTH; E-E=EAST REEF AND EAST CLIFFS; STA=STARAYA ARTIL.O

TABLE 53A - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1971.

| DATE | ROOK-ERY* | DAILY KILL | | | | | | | | | CUMULATIVE KILL | | | | | | |
|---------|-----------|---------------|-------|---------------------|---|----------|---------|---------|--------|--------|---|-----------|----------|--------|------|--|-------------------|
| | | NUMBER KILLED | | NO. IN TOOTH SAMPLE | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | | BY AREA, ALL AGES |
| | | TO DATE | DAILY | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | | | |
| JUNE 23 | REF | 284 | 284 | 56 | 0(0) | 25(9) | 198(70) | 56(20) | 5(2) | 0(0) | 25(9) | 198(70) | 56(20) | 5(2) | 284 | | |
| 23 | POL | 357 | 73 | 14 | 0(0) | 0(0) | 52(71) | 21(29) | 0(0) | 0(0) | 25(7) | 250(70) | 77(22) | 5(1) | 73 | | |
| 24 | NEP | 596 | 239 | 42 | 0(0) | 23(10) | 158(66) | 52(22) | 6(3) | 0(0) | 48(8) | 408(68) | 129(22) | 11(2) | 239 | | |
| 25 | ZAP | 939 | 343 | 64 | 0(0) | 70(20) | 161(47) | 102(30) | 10(3) | 0(0) | 118(13) | 569(61) | 231(25) | 21(2) | 343 | | |
| 26 | TZR | 1250 | 311 | 56 | 0(0) | 33(11) | 167(54) | 100(32) | 11(4) | 0(0) | 151(12) | 736(59) | 331(26) | 32(3) | 311 | | |
| 26 | REF | 1636 | 386 | 64 | 0(0) | 55(14) | 223(58) | 90(23) | 18(5) | 0(0) | 206(13) | 959(59) | 421(26) | 50(3) | 670 | | |
| 26 | L-K | 1745 | 109 | 18 | 0(0) | 18(17) | 49(45) | 42(39) | 0(0) | 0(0) | 224(13) | 1008(58) | 463(27) | 50(3) | 109 | | |
| 28 | NEP | 2150 | 405 | 76 | 0(0) | 43(11) | 288(71) | 74(18) | 0(0) | 0(0) | 267(12) | 1296(60) | 537(25) | 50(2) | 844 | | |
| 29 | ZAP | 2660 | 510 | 97 | 0(0) | 147(29) | 268(53) | 84(16) | 11(2) | 0(0) | 414(16) | 1564(59) | 621(23) | 61(2) | 853 | | |
| 29 | POL | 2858 | 198 | 39 | 0(0) | 25(13) | 86(43) | 56(28) | 31(16) | 0(0) | 439(15) | 1650(58) | 677(24) | 92(3) | 271 | | |
| 29 | TZR | 2931 | 73 | 14 | 0(0) | 11(15) | 31(42) | 31(42) | 0(0) | 0(0) | 450(15) | 1681(57) | 708(24) | 92(3) | 384 | | |
| 30 | L-K | 2981 | 50 | 11 | 0(0) | 5(10) | 35(70) | 5(10) | 5(10) | 0(0) | 455(15) | 1716(58) | 713(24) | 97(3) | 159 | | |
| 30 | REF | 3540 | 559 | 109 | 0(0) | 134(24) | 354(63) | 61(11) | 10(2) | 0(0) | 589(17) | 2070(58) | 774(22) | 107(3) | 1229 | | |
| 30 | TZR | 3576 | 36 | 7 | 0(0) | 0(0) | 36(100) | 0(0) | 0(0) | 0(0) | 589(16) | 2106(59) | 774(22) | 107(3) | 420 | | |
| JULY 1 | NEP | 3880 | 304 | 56 | 0(0) | 55(18) | 237(78) | 6(2) | 6(2) | 0(0) | 644(17) | 2343(60) | 780(20) | 113(3) | 948 | | |
| 2 | ZAP | 4328 | 448 | 77 | 0(0) | 87(19) | 273(61) | 76(17) | 12(3) | 0(0) | 731(17) | 2616(60) | 856(20) | 125(3) | 1301 | | |
| 3 | L-K | 4388 | 60 | 7 | 0(0) | 26(43) | 34(57) | 0(0) | 0(0) | 0(0) | 757(17) | 2650(60) | 856(20) | 125(3) | 219 | | |
| 3 | TZR | 4485 | 77 | 13 | 0(0) | 6(8) | 59(77) | 12(16) | 0(0) | 0(0) | 763(17) | 2709(61) | 868(19) | 125(3) | 497 | | |
| 3 | POL | 4650 | 185 | 35 | 0(0) | 21(11) | 122(66) | 37(20) | 5(3) | 0(0) | 784(17) | 2831(61) | 905(19) | 130(3) | 456 | | |
| 6 | REF | 4805 | 155 | 30 | 0(0) | 67(43) | 72(46) | 16(10) | 0(0) | 0(0) | 851(18) | 2903(60) | 921(19) | 130(3) | 1384 | | |
| 7 | ZAP | 5159 | 354 | 65 | 0(0) | 169(48) | 174(49) | 11(3) | 0(0) | 0(0) | 1020(20) | 3077(60) | 932(18) | 130(3) | 1655 | | |
| 8 | NEP | 5828 | 669 | 118 | 0(0) | 205(31) | 447(67) | 17(3) | 0(0) | 0(0) | 1225(21) | 3524(60) | 949(16) | 130(2) | 1617 | | |
| 9 | POL | 6028 | 200 | 34 | 0(0) | 35(18) | 153(77) | 12(6) | 0(0) | 0(0) | 1260(21) | 3677(61) | 961(16) | 130(2) | 656 | | |
| 9 | L-K | 6088 | 60 | 12 | 0(0) | 10(17) | 45(75) | 5(8) | 0(0) | 0(0) | 1270(21) | 3722(61) | 966(16) | 130(2) | 279 | | |
| 9 | TZR | 6495 | 407 | 67 | 0(0) | 207(51) | 194(48) | 6(1) | 0(0) | 0(0) | 1477(23) | 3916(60) | 972(15) | 130(2) | 904 | | |
| 10 | REF | 7489 | 994 | 170 | 6(1) | 503(51) | 468(47) | 11(1) | 6(1) | 6(0) | 1980(26) | 4384(59) | 983(13) | 136(2) | 2378 | | |
| 12 | ZAP | 8046 | 557 | 109 | 0(0) | 225(40) | 306(55) | 26(5) | 0(0) | 6(0) | 2205(27) | 4690(58) | 1009(13) | 136(2) | 2212 | | |
| 13 | NEP | 8816 | 770 | 150 | 5(1) | 353(46) | 397(52) | 15(2) | 0(0) | 11(0) | 2558(29) | 5087(58) | 1024(12) | 136(2) | 2387 | | |
| 14 | REF | 9776 | 960 | 175 | 10(1) | 489(51) | 455(47) | 6(1) | 0(0) | 21(0) | 3047(31) | 5542(57) | 1030(11) | 136(1) | 3338 | | |
| 15 | POL | 10066 | 290 | 56 | 0(0) | 62(21) | 222(77) | 6(2) | 0(0) | 21(0) | 3109(31) | 5764(57) | 1036(10) | 136(1) | 946 | | |
| 15 | L-K | 10379 | 313 | 56 | 0(0) | 151(48) | 145(46) | 17(5) | 0(0) | 21(0) | 3260(31) | 5909(57) | 1053(10) | 136(1) | 592 | | |
| 15 | TZR | 10730 | 351 | 66 | 0(0) | 133(38) | 202(58) | 11(3) | 5(1) | 21(0) | 3393(32) | 6111(57) | 1064(10) | 141(1) | 1255 | | |
| 16 | ZAP | 12066 | 1336 | 246 | 5(0) | 592(44) | 689(52) | 11(1) | 39(3) | 26(0) | 3985(33) | 6800(56) | 1075(9) | 180(1) | 3548 | | |
| 17 | NEP | 12856 | 790 | 141 | 5(1) | 393(50) | 376(48) | 16(2) | 0(0) | 31(0) | 4378(34) | 7176(56) | 1091(8) | 180(1) | 3177 | | |
| 19 | REF | 13714 | 858 | 141 | 7(1) | 492(57) | 341(40) | 18(2) | 0(0) | 38(0) | 4870(36) | 7517(55) | 1109(8) | 180(1) | 4196 | | |
| 20 | TZR | 14007 | 293 | 66 | 4(1) | 138(47) | 138(47) | 13(4) | 0(0) | 42(0) | 5008(36) | 7655(55) | 1122(8) | 180(1) | 1548 | | |
| 20 | POL | 14557 | 550 | 106 | 0(0) | 239(43) | 306(56) | 5(1) | 0(0) | 42(0) | 5247(36) | 7961(55) | 1127(8) | 180(1) | 1496 | | |
| 20 | L-K | 14883 | 326 | 60 | 0(0) | 152(47) | 169(52) | 5(2) | 0(0) | 42(0) | 5399(36) | 8130(55) | 1132(8) | 180(1) | 918 | | |
| 21 | ZAP | 15431 | 548 | 100 | 11(2) | 318(58) | 208(38) | 11(2) | 0(0) | 53(0) | 5717(37) | 8338(54) | 1143(7) | 180(1) | 4096 | | |
| 22 | NEP | 16099 | 668 | 162 | 28(4) | 384(57) | 252(38) | 4(1) | 0(0) | 81(1) | 6101(38) | 8590(53) | 1147(7) | 180(1) | 3845 | | |
| 23 | TZR | 16387 | 288 | 72 | 0(0) | 168(58) | 112(39) | 8(3) | 0(0) | 81(0) | 6269(38) | 8702(53) | 1155(7) | 180(1) | 1836 | | |
| 23 | REF | 17136 | 749 | 184 | 12(2) | 386(52) | 326(44) | 20(3) | 5(1) | 93(1) | 6655(39) | 9028(53) | 1175(7) | 185(1) | 4945 | | |
| 24 | L-K | 17311 | 175 | 42 | 4(2) | 96(55) | 67(38) | 8(5) | 0(0) | 97(1) | 6751(39) | 9095(53) | 1183(7) | 185(1) | 1093 | | |
| 24 | TZR | 17465 | 154 | 38 | 4(3) | 97(63) | 53(34) | 0(0) | 0(0) | 101(1) | 6848(39) | 9148(52) | 1183(7) | 185(1) | 1990 | | |
| 24 | POL | 17815 | 350 | 87 | 0(0) | 153(44) | 185(53) | 12(3) | 0(0) | 101(1) | 7001(39) | 9333(52) | 1195(7) | 185(1) | 1846 | | |
| 26 | ZAP | 20470 | 2655 | 655 | 56(2) | 1771(67) | 791(30) | 32(1) | 5(0) | 157(1) | 8772(43) | 10124(49) | 1227(6) | 190(1) | 6751 | | |
| 27 | NEP | 21726 | 1256 | 225 | 47(4) | 663(53) | 502(40) | 44(4) | 0(0) | 204(1) | 9435(43) | 10626(49) | 1271(6) | 190(1) | 5101 | | |
| 28 | TZR | 22023 | 297 | 45 | 6(2) | 185(62) | 106(36) | 0(0) | 0(0) | 210(1) | 9620(44) | 10732(49) | 1271(6) | 190(1) | 2287 | | |

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*NEP=NORTHEAST POINT (MORJOVI AND VOSTOCHNI); TZR=TOLSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; ZAP=ZAPADNI; REF=REEF, GORBATCH, AND ARDIQUEN; L-K=LUKANIN AND KITOVI.

TABLE 53A - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1971 (CONT.)

| DATE | ROOK- ERY* | DAILY KILL | | | | | | | | | CUMULATIVE KILL | | | | | | |
|---------|---------------|---------------|-------|---------------------------|--|----------|------------|----------|---------|---------|--|------------|------------|------------|-----------|------|----------------------|
| | | NUMBER KILLED | | NO. (N TOOTH SAMPLE | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | | BY AREA, ALL AGES |
| | | TO DATE | DAILY | | 2 | 3 | 4 (YR) | 5 | 6 | 2 | 3 | 4 (YR) | 5 | 6 | | | |
| JULY 28 | REF | 23284 | 1261 | 239 | 21 (2) | 807 (64) | 416 (33) | 17 (1) | 0 (0) | 0 (0) | 231 (1) | 10427 (45) | 11148 (48) | 1288 (6) | 190 (1) | 6206 | |
| 29 | TZR | 23790 | 506 | 76 | 26 (5) | 320 (63) | 160 (32) | 0 (0) | 0 (0) | 0 (0) | 257 (1) | 10747 (45) | 11308 (48) | 1288 (5) | 190 (1) | 2793 | |
| 29 | POL | 24346 | 558 | 87 | 0 (0) | 281 (51) | 269 (48) | 6 (1) | 0 (0) | 0 (0) | 257 (1) | 11028 (45) | 11577 (48) | 1294 (5) | 190 (1) | 2402 | |
| 29 | L-K | 24821 | 475 | 70 | 20 (4) | 217 (46) | 231 (49) | 7 (1) | 0 (0) | 0 (0) | 277 (1) | 11245 (45) | 11808 (48) | 1301 (5) | 190 (1) | 1568 | |
| 30 | ZAP | 25851 | 1030 | 167 | 12 (1) | 759 (74) | 234 (23) | 25 (2) | 0 (0) | 0 (0) | 289 (1) | 12004 (46) | 12042 (47) | 1326 (5) | 190 (1) | 7781 | |
| 30 | TZR | 26289 | 438 | 50 | 9 (2) | 245 (56) | 184 (42) | 0 (0) | 0 (0) | 0 (0) | 298 (1) | 12249 (47) | 12226 (47) | 1326 (5) | 190 (1) | 3231 | |
| 31 | NEP | 27242 | 953 | 136 | 25 (3) | 639 (67) | 277 (29) | 12 (1) | 0 (0) | 0 (0) | 323 (1) | 12888 (47) | 12503 (46) | 1338 (5) | 190 (1) | 6054 | |

*NEP=NORTHEAST POINT (MORJOVI AND VOSTOCHNI); TZR=TOLSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; ZAP=ZAPADNI; REF=REEF, GORBATCH, AND ARDIGUEN; L-K=LUKANIN AND KITOVI.

TABLE 53B - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. GEORGE ISLAND, 1971.

| DATE | ROOK-1 ERY# | DAILY KILL | | | | | | | | | CUMULATIVE KILL | | | | | BY AREA, ALL AGES |
|---------|----------------|---------------|-------|---------------------------|--|---------|---------|--------|--------|-------|--|----------|---------|--------|------|----------------------|
| | | NUMBER KILLED | | NO. IN TOOTH SAMPLE | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | |
| | | TO DATE | DAILY | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | | |
| JUNE 23 | NOR | 125 | 125 | 36 | 0(0) | 0(0) | 59(47) | 49(39) | 17(14) | 0(0) | 0(0) | 59(47) | 49(39) | 17(14) | 125 | |
| 23 | E-E | 223 | 98 | 32 | 0(0) | 9(9) | 71(72) | 15(15) | 3(3) | 0(0) | 9(4) | 130(58) | 64(29) | 20(9) | 98 | |
| 25 | ZPG | 422 | 199 | 39 | 0(0) | 21(11) | 107(54) | 86(33) | 5(3) | 0(0) | 30(7) | 237(56) | 130(31) | 25(6) | 199 | |
| 28 | E-E | 515 | 93 | 20 | 0(0) | 28(30) | 46(49) | 14(15) | 5(5) | 0(0) | 58(11) | 283(55) | 144(28) | 30(6) | 191 | |
| 28 | NOR | 587 | 72 | 14 | 0(0) | 10(14) | 57(79) | 5(7) | 0(0) | 0(0) | 68(12) | 340(58) | 149(25) | 30(5) | 197 | |
| 30 | ZPG | 632 | 45 | 11 | 0(0) | 4(9) | 16(36) | 25(56) | 0(0) | 0(0) | 72(11) | 356(56) | 174(28) | 30(5) | 244 | |
| 30 | NOR | 749 | 117 | 24 | 0(0) | 49(42) | 58(50) | 10(9) | 0(0) | 0(0) | 121(16) | 414(55) | 184(25) | 30(4) | 314 | |
| JULY 2 | ZPG | 767 | 18 | 4 | 0(0) | 9(50) | 91(50) | 0(0) | 0(0) | 0(0) | 130(17) | 423(55) | 184(24) | 30(4) | 262 | |
| 2 | E-E | 868 | 101 | 20 | 0(0) | 25(25) | 61(60) | 15(15) | 0(0) | 0(0) | 155(18) | 484(56) | 199(23) | 30(3) | 292 | |
| 6 | E-E | 926 | 58 | 10 | 0(0) | 0(0) | 41(71) | 12(21) | 5(9) | 0(0) | 155(17) | 525(57) | 211(23) | 35(4) | 350 | |
| 6 | NOR | 1076 | 150 | 28 | 0(0) | 37(25) | 91(61) | 22(15) | 0(0) | 0(0) | 192(18) | 616(57) | 233(22) | 35(3) | 464 | |
| 7 | STA | 1123 | 47 | 9 | 0(0) | 5(11) | 32(68) | 10(21) | 0(0) | 0(0) | 197(18) | 648(58) | 243(22) | 35(3) | 471 | |
| 7 | ZPG | 1219 | 96 | 19 | 0(0) | 25(26) | 71(74) | 0(0) | 0(0) | 0(0) | 222(18) | 719(59) | 243(20) | 35(3) | 3581 | |
| 9 | NOR | 1348 | 129 | 26 | 0(0) | 55(43) | 74(57) | 0(0) | 0(0) | 0(0) | 277(21) | 793(59) | 243(18) | 35(3) | 593 | |
| 9 | E-E1 | 1398 | 50 | 10 | 0(0) | 5(10) | 40(80) | 5(10) | 0(0) | 0(0) | 282(20) | 833(60) | 248(18) | 35(3) | 400 | |
| 12 | ZPG | 1463 | 65 | 13 | 0(0) | 15(23) | 50(77) | 0(0) | 0(0) | 0(0) | 297(20) | 883(60) | 248(17) | 35(2) | 423 | |
| 12 | STA | 1494 | 31 | 6 | 0(0) | 11(35) | 10(32) | 5(16) | 5(16) | 0(0) | 308(21) | 893(60) | 253(17) | 40(3) | 78 | |
| 12 | NOR | 1705 | 211 | 36 | 0(0) | 59(28) | 129(61) | 23(11) | 0(0) | 0(0) | 367(22) | 1022(60) | 276(16) | 40(2) | 804 | |
| 14 | NOR | 1827 | 122 | 24 | 0(0) | 20(16) | 92(75) | 10(8) | 0(0) | 0(0) | 387(21) | 1114(61) | 286(16) | 40(2) | 926 | |
| 14 | E-E1 | 1962 | 135 | 27 | 0(0) | 40(30) | 85(63) | 10(7) | 0(0) | 0(0) | 427(22) | 1199(61) | 296(15) | 40(2) | 535 | |
| 16 | NOR | 2069 | 107 | 20 | 5(5) | 38(36) | 59(55) | 5(5) | 0(0) | 5(0) | 465(22) | 1258(61) | 301(15) | 40(2) | 1033 | |
| 16 | E-E1 | 2154 | 85 | 17 | 0(0) | 15(18) | 50(59) | 20(24) | 0(0) | 5(0) | 480(22) | 1308(61) | 321(15) | 40(2) | 620 | |
| 19 | NOR1 | 2295 | 141 | 31 | 0(0) | 41(29) | 91(65) | 9(6) | 0(0) | 5(0) | 521(23) | 1399(61) | 330(14) | 40(2) | 1174 | |
| 19 | STA1 | 2344 | 49 | 10 | 5(10) | 24(49) | 15(31) | 5(10) | 0(0) | 10(0) | 545(23) | 1414(60) | 335(14) | 40(2) | 1271 | |
| 19 | ZPG | 2396 | 52 | 11 | 0(0) | 5(10) | 42(81) | 5(10) | 0(0) | 10(0) | 550(23) | 1456(61) | 340(14) | 40(2) | 475 | |
| 21 | NOR | 2543 | 147 | 29 | 0(0) | 92(63) | 50(34) | 5(3) | 0(0) | 10(0) | 642(25) | 1506(59) | 345(14) | 40(2) | 1321 | |
| 21 | E-E | 2571 | 28 | 6 | 0(0) | 5(18) | 18(64) | 5(18) | 0(0) | 10(0) | 647(25) | 1524(59) | 350(14) | 40(2) | 648 | |
| 23 | STA | 2646 | 75 | 15 | 0(0) | 30(40) | 45(60) | 0(0) | 0(0) | 10(0) | 677(26) | 1569(59) | 350(13) | 40(2) | 202 | |
| 23 | ZPG | 2757 | 111 | 22 | 5(5) | 46(41) | 35(32) | 25(23) | 0(0) | 15(1) | 723(26) | 1604(58) | 375(14) | 40(1) | 586 | |
| 23 | NOR | 3054 | 297 | 62 | 3(1) | 109(37) | 176(59) | 9(3) | 0(0) | 18(1) | 832(27) | 1780(58) | 384(13) | 40(1) | 1618 | |
| 26 | E-E | 3441 | 387 | 77 | 0(0) | 190(49) | 197(51) | 0(0) | 0(0) | 18(1) | 1022(30) | 1977(57) | 384(11) | 40(1) | 1035 | |
| 26 | NOR | 3813 | 372 | 75 | 0(0) | 153(41) | 193(52) | 0(0) | 26(7) | 18(0) | 1175(31) | 2170(57) | 384(10) | 66(2) | 1990 | |
| 28 | STA | 3935 | 122 | 23 | 0(0) | 11(9) | 48(39) | 63(52) | 0(0) | 18(0) | 1186(30) | 2218(56) | 447(11) | 66(2) | 324 | |
| 28 | ZPG | 4054 | 119 | 22 | 0(0) | 54(45) | 65(55) | 0(0) | 0(0) | 18(0) | 1240(31) | 2289(56) | 447(11) | 66(2) | 705 | |
| 28 | E-E | 4173 | 119 | 25 | 9(8) | 52(44) | 48(40) | 5(4) | 5(4) | 27(1) | 1292(31) | 2331(56) | 452(11) | 71(2) | 1154 | |
| 28 | NOR | 4276 | 103 | 21 | 0(0) | 24(23) | 69(67) | 10(10) | 0(0) | 27(1) | 1316(31) | 2400(56) | 462(11) | 71(2) | 2093 | |
| 30 | ZPG | 4424 | 148 | 25 | 0(0) | 83(56) | 65(44) | 0(0) | 0(0) | 27(1) | 1399(32) | 2465(56) | 462(10) | 71(2) | 853 | |
| 30 | NOR | 4534 | 110 | 22 | 5(5) | 50(45) | 40(36) | 5(5) | 10(9) | 32(1) | 1449(32) | 2505(55) | 467(10) | 81(2) | 2203 | |
| 30 | E-E | 4553 | 19 | 18 | 0(0) | 7(37) | 12(63) | 0(0) | 0(0) | 32(1) | 1456(32) | 2517(55) | 467(10) | 81(2) | 1173 | |

*ZPG=ZAPADNI (ST. GEORGE); NOR=NORTH; E-E=EAST REEF AND EAST CLIFFS; STA=STARAYA ARTIL.1

TABLE 54A - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1972.

| DATE | ROOK-2 ERYM# | NUMBER KILLED | | NO. IN TOOTH SAMPLE | DAILY KILL | | | | | | CUMULATIVE KILL | | | | | | BY AREA, ALL AGES ² |
|---------|-----------------|---------------|-------|---------------------------|--|----------|---------|---------|-------|--------|--|-----------|----------|-------|------|--|-----------------------------------|
| | | TO DATE | DAILY | | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | | |
| | | (YR) | (YR) | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | | | |
| JUNE 26 | REF | 937 | 937 | 171 | 6(1) | 137(15) | 554(59) | 229(24) | 11(1) | 6(1) | 137(15) | 554(59) | 229(24) | 11(1) | 937 | | |
| 27 | NEP | 1650 | 713 | 128 | 6(1) | 121(17) | 446(63) | 135(19) | 5(1) | 12(1) | 258(16) | 1000(61) | 364(22) | 16(1) | 713 | | |
| 28 | TZR | 1978 | 328 | 72 | 0(0) | 87(27) | 214(65) | 27(8) | 0(0) | 12(1) | 345(17) | 1214(61) | 391(20) | 16(1) | 328 | | |
| 28 | ZAP | 2883 | 905 | 157 | 0(0) | 231(26) | 547(60) | 127(14) | 0(0) | 12(0) | 576(20) | 1761(61) | 518(18) | 16(1) | 905 | | |
| 29 | TZR | 3113 | 230 | 45 | 0(0) | 26(11) | 148(64) | 51(22) | 5(2) | 12(0) | 602(19) | 1909(61) | 569(18) | 21(1) | 558 | | |
| 29 | POL | 3524 | 411 | 79 | 0(0) | 83(20) | 265(64) | 63(15) | 0(0) | 12(0) | 685(19) | 2174(62) | 632(18) | 21(1) | 411 | | |
| 30 | L-K | 3832 | 308 | 60 | 0(0) | 67(22) | 179(58) | 62(20) | 0(0) | 12(0) | 752(20) | 2353(61) | 694(18) | 21(1) | 3082 | | |
| 30 | REF | 4479 | 647 | 128 | 0(0) | 106(16) | 435(67) | 106(16) | 0(0) | 12(0) | 858(19) | 2788(62) | 800(18) | 21(0) | 1584 | | |
| JULY 1 | NEP | 4735 | 256 | 54 | 0(0) | 28(11) | 180(70) | 38(15) | 10(4) | 12(0) | 886(19) | 2968(63) | 838(18) | 31(1) | 969 | | |
| 3 | TZR | 4857 | 122 | 20 | 0(0) | 24(20) | 98(80) | 0(0) | 0(0) | 12(0) | 910(19) | 3066(63) | 838(17) | 31(1) | 680 | | |
| 3 | ZAP | 5423 | 566 | 103 | 0(0) | 159(28) | 341(60) | 66(12) | 0(0) | 12(0) | 1069(20) | 3407(63) | 904(17) | 31(1) | 1471 | | |
| 5 | L-K | 5619 | 196 | 42 | 0(0) | 51(26) | 103(53) | 42(21) | 0(0) | 12(0) | 1120(20) | 3510(62) | 946(17) | 31(1) | 5042 | | |
| 5 | REF | 6325 | 706 | 134 | 0(0) | 243(34) | 426(60) | 37(5) | 0(0) | 12(0) | 1363(22) | 3936(62) | 983(16) | 31(0) | 2290 | | |
| 6 | TZR | 7177 | 852 | 163 | 5(1) | 288(34) | 497(58) | 57(7) | 5(1) | 17(0) | 1651(23) | 4433(62) | 1040(14) | 36(1) | 1532 | | |
| 6 | POL | 7542 | 365 | 68 | 0(0) | 64(18) | 247(68) | 54(15) | 0(0) | 17(0) | 1715(23) | 4680(62) | 1094(15) | 36(0) | 776 | | |
| 7 | NEP | 8266 | 744 | 145 | 0(0) | 320(43) | 419(56) | 5(1) | 0(0) | 17(0) | 2035(25) | 5099(62) | 1099(13) | 36(0) | 1713 | | |
| 8 | TZR | 8474 | 188 | 30 | 6(3) | 82(44) | 100(53) | 0(0) | 0(0) | 23(0) | 2117(25) | 5199(61) | 1099(13) | 36(0) | 1720 | | |
| 8 | ZAP | 8846 | 372 | 80 | 4(1) | 130(35) | 191(51) | 43(12) | 4(1) | 27(0) | 2247(25) | 5390(61) | 1142(13) | 40(0) | 1843 | | |
| 10 | L-K | 9111 | 285 | 49 | 0(0) | 81(31) | 157(59) | 27(10) | 0(0) | 27(0) | 2328(26) | 5547(61) | 1169(13) | 40(0) | 769 | | |
| 10 | REF | 9799 | 688 | 131 | 5(1) | 263(38) | 399(58) | 21(3) | 0(0) | 32(0) | 2591(26) | 5946(61) | 1190(12) | 40(0) | 2978 | | |
| 11 | NEP | 10855 | 1056 | 210 | 15(1) | 402(38) | 599(57) | 40(4) | 0(0) | 47(0) | 2993(28) | 6545(60) | 1230(11) | 40(0) | 2769 | | |
| 12 | TZR | 11663 | 808 | 161 | 15(2) | 366(45) | 407(50) | 20(2) | 0(0) | 62(1) | 3359(29) | 6952(60) | 1250(11) | 40(0) | 2528 | | |
| 12 | POL | 12117 | 454 | 82 | 5(1) | 177(39) | 233(51) | 39(9) | 0(0) | 67(1) | 3536(29) | 7185(59) | 1289(11) | 40(0) | 1230 | | |
| 13 | TZR | 12334 | 217 | 18 | 0(0) | 133(61) | 84(39) | 0(0) | 0(0) | 67(1) | 3669(30) | 7269(59) | 1289(10) | 40(0) | 2745 | | |
| 13 | ZAP | 12988 | 654 | 159 | 12(2) | 260(43) | 317(48) | 45(7) | 0(0) | 79(1) | 3949(30) | 7586(58) | 1334(10) | 40(0) | 2497 | | |
| 14 | L-K | 13244 | 256 | 49 | 0(0) | 105(41) | 146(57) | 5(2) | 0(0) | 79(1) | 4054(31) | 7732(58) | 1339(10) | 40(0) | 1025 | | |
| 14 | REF | 14180 | 936 | 182 | 15(2) | 443(47) | 447(48) | 25(3) | 6(1) | 94(1) | 4497(32) | 8179(58) | 1364(10) | 46(0) | 3914 | | |
| 15 | NEP | 14753 | 573 | 117 | 17(3) | 349(61) | 207(36) | 0(0) | 0(0) | 111(1) | 4846(33) | 8386(57) | 1364(9) | 46(0) | 3342 | | |
| 17 | TZR | 15487 | 734 | 142 | 0(0) | 336(46) | 358(49) | 40(5) | 0(0) | 111(1) | 5182(33) | 8744(56) | 1404(9) | 46(0) | 3479 | | |
| 17 | POL | 15861 | 374 | 74 | 0(0) | 101(27) | 237(63) | 36(10) | 0(0) | 111(1) | 5283(33) | 8981(57) | 1440(9) | 46(0) | 1604 | | |
| 18 | TZR | 16235 | 374 | 77 | 5(1) | 189(51) | 156(42) | 24(6) | 0(0) | 116(1) | 5472(34) | 9137(56) | 1464(29) | 46(0) | 3853 | | |
| 18 | ZAP | 16870 | 635 | 124 | 10(2) | 354(56) | 256(40) | 15(2) | 0(0) | 126(1) | 5826(35) | 9393(56) | 1479(9) | 46(0) | 3132 | | |
| 19 | L-K | 17195 | 325 | 58 | 11(3) | 146(45) | 146(45) | 22(7) | 0(0) | 137(1) | 5972(35) | 9539(55) | 1501(9) | 46(0) | 1350 | | |
| 19 | REF | 17948 | 753 | 146 | 20(3) | 496(66) | 201(27) | 36(5) | 0(0) | 157(1) | 6468(36) | 9740(54) | 1537(9) | 46(0) | 4667 | | |
| 20 | NEP | 19239 | 1291 | 263 | 19(1) | 501(39) | 679(53) | 92(7) | 0(0) | 176(1) | 6969(36) | 10419(54) | 1629(8) | 46(0) | 4633 | | |
| 21 | TZR | 19642 | 403 | 77 | 0(0) | 173(43) | 220(55) | 10(2) | 0(0) | 176(1) | 7142(36) | 10639(54) | 1639(8) | 46(0) | 4256 | | |
| 21 | POL | 20001 | 359 | 72 | 0(0) | 125(35) | 184(51) | 50(14) | 0(0) | 176(1) | 7267(36) | 10823(54) | 1689(8) | 46(0) | 1963 | | |
| 22 | TZR | 20118 | 117 | 24 | 0(0) | 78(67) | 34(29) | 5(4) | 0(0) | 176(1) | 7345(37) | 10857(54) | 1694(8) | 46(0) | 4373 | | |
| 22 | ZAP | 21648 | 1530 | 296 | 63(4) | 852(56) | 522(34) | 93(6) | 0(0) | 239(1) | 8197(38) | 11379(53) | 1787(8) | 46(0) | 4662 | | |
| 24 | L-K | 22175 | 527 | 90 | 0(0) | 357(68) | 152(29) | 18(3) | 0(0) | 239(1) | 8554(39) | 11531(52) | 1805(8) | 46(0) | 1877 | | |
| 24 | REF | 23781 | 1606 | 306 | 95(6) | 976(61) | 504(31) | 31(2) | 0(0) | 334(1) | 9530(40) | 12035(51) | 1836(8) | 46(0) | 6273 | | |
| 25 | NEP | 25749 | 1968 | 297 | 84(4) | 1239(63) | 564(29) | 74(4) | 7(0) | 418(2) | 10769(42) | 12599(49) | 1910(7) | 53(0) | 6601 | | |
| 26 | TZR | 26100 | 351 | 77 | 4(1) | 178(51) | 160(46) | 9(3) | 0(0) | 422(2) | 10947(42) | 12759(49) | 1919(7) | 53(0) | 4724 | | |
| 26 | POL | 26831 | 731 | 128 | 23(3) | 366(50) | 325(44) | 17(2) | 0(0) | 445(2) | 11313(42) | 13084(49) | 1936(7) | 53(0) | 2694 | | |
| 27 | TZR | 27445 | 614 | 69 | 45(7) | 454(74) | 107(17) | 8(1) | 0(0) | 490(2) | 11767(43) | 13191(48) | 1944(7) | 53(0) | 5338 | | |
| 27 | ZAP | 29742 | 2297 | 421 | 19(8) | 1479(64) | 572(25) | 55(2) | 0(0) | 681(2) | 13246(45) | 13763(46) | 1999(7) | 53(0) | 6959 | | |
| 28 | L-K | 30114 | 372 | 52 | 7(2) | 193(52) | 143(38) | 29(8) | 0(0) | 688(2) | 13439(45) | 13906(46) | 2028(7) | 53(0) | 2249 | | |
| 28 | REF | 31030 | 916 | 178 | 72(8) | 474(52) | 344(38) | 26(3) | 0(0) | 760(2) | 13913(45) | 14250(46) | 2054(7) | 53(0) | 7189 | | |
| 28 | POL | 31321 | 291 | 56 | 16(5) | 114(39) | 156(54) | 5(2) | 0(0) | 776(2) | 14027(45) | 14406(46) | 2059(7) | 53(0) | 2985 | | |
| 29 | NEP | 33110 | 1789 | 368 | 140(8) | 997(56) | 526(29) | 126(7) | 0(0) | 916(3) | 15024(45) | 14932(45) | 2185(7) | 53(0) | 8390 | | |

*NEP=NORTHEAST POINT (MORJOVI AND VOSTOCHNI); TZR=TOLSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; POL=POLOVINA, POLOVINA² CLIFFS, AND LITTLE POLOVINA; ZAP=ZAPADNI; REF=REEF, GORBATCH, AND ARDIGUEN; L-K=LUKANIN AND KITOVI.²

TABLE 54B - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. GEORGE ISLAND, 1972.

| DATE | ROOK-ERY# | DAILY KILL | | | CUMULATIVE KILL | | | | | | | | | | | |
|------|-----------|-----------------------|---------------------|---------------------|---|-------|---------|---------|--------|---|-------|----------|----------|---------|-------------------|------|
| | | NUMBER KILLED TO DATE | NUMBER KILLED DAILY | NO. IN TOOTH SAMPLE | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | BY AREA, ALL AGES | |
| | | | | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | | |
| JUNE | 26 | E-E | 96 | 96 | 39 | 0(0) | 17(18) | 24(25) | 52(54) | 3(3) | 0(0) | 17(18) | 24(25) | 52(54) | 3(3) | 96 |
| | 26 | NOR | 311 | 215 | 40 | 0(0) | 38(18) | 129(60) | 43(20) | 5(2) | 0(0) | 55(18) | 153(49) | 95(31) | 8(3) | 215 |
| | 28 | ZPG | 472 | 161 | 33 | 0(0) | 20(12) | 102(63) | 39(24) | 0(0) | 0(0) | 75(16) | 255(54) | 134(28) | 8(2) | 161 |
| | 28 | NOR | 613 | 141 | 28 | 0(0) | 10(7) | 101(72) | 20(14) | 10(7) | 0(0) | 85(14) | 356(58) | 154(25) | 18(3) | 356 |
| | 30 | E-E | 789 | 176 | 37 | 0(0) | 38(22) | 114(65) | 24(14) | 0(0) | 0(0) | 123(16) | 470(60) | 178(23) | 18(2) | 272 |
| | 30 | ZPG | 827 | 38 | 35 | 0(0) | 2(5) | 24(83) | 11(29) | 1(3) | 0(0) | 125(15) | 494(60) | 189(23) | 19(2) | 199 |
| | 30 | NOR | 879 | 52 | 16 | 0(0) | 10(19) | 36(69) | 6(12) | 0(0) | 0(0) | 135(15) | 530(60) | 195(22) | 19(2) | 408 |
| JULY | 3 | STA | 955 | 76 | 23 | 0(0) | 23(30) | 40(53) | 13(17) | 0(0) | 0(0) | 158(17) | 570(60) | 208(22) | 19(2) | 76 |
| | 3 | NOR | 1055 | 100 | 30 | 0(0) | 27(27) | 53(53) | 20(20) | 0(0) | 0(0) | 185(18) | 623(59) | 228(22) | 19(2) | 508 |
| | 3 | E-E | 1118 | 63 | 19 | 0(0) | 10(16) | 23(37) | 30(48) | 0(0) | 0(0) | 195(17) | 646(58) | 258(23) | 19(2) | 335 |
| | 8 | E-E | 1176 | 58 | 18 | 0(0) | 10(17) | 35(60) | 13(22) | 0(0) | 0(0) | 205(17) | 681(58) | 271(23) | 19(2) | 393 |
| | 8 | NOR | 1341 | 165 | 34 | 0(0) | 49(30) | 97(59) | 19(12) | 0(0) | 0(0) | 254(19) | 778(58) | 290(22) | 19(1) | 673 |
| | 11 | STA | 1437 | 96 | 29 | 0(0) | 30(31) | 53(55) | 13(14) | 0(0) | 0(0) | 284(20) | 831(58) | 303(21) | 19(1) | 172 |
| | 11 | ZPG | 1579 | 142 | 29 | 0(0) | 25(18) | 88(62) | 29(20) | 0(0) | 0(0) | 309(20) | 919(58) | 332(21) | 19(1) | 341 |
| | 11 | NOR | 1661 | 82 | 25 | 0(0) | 20(24) | 39(48) | 23(28) | 0(0) | 0(0) | 329(20) | 958(58) | 355(21) | 19(1) | 755 |
| | 12 | ZPG | 1699 | 38 | 36 | 0(0) | 11(29) | 25(66) | 2(5) | 0(0) | 0(0) | 340(20) | 983(58) | 357(21) | 19(1) | 379 |
| | 12 | NOR | 1780 | 81 | 24 | 0(0) | 37(46) | 37(46) | 7(9) | 0(0) | 0(0) | 377(21) | 1020(57) | 364(20) | 19(1) | 836 |
| | 12 | E-E | 1791 | 11 | 10 | 0(0) | 1(9) | 9(82) | 1(9) | 0(0) | 0(0) | 378(21) | 1029(57) | 365(20) | 19(1) | 404 |
| | 14 | E-E | 1823 | 32 | 16 | 0(0) | 8(25) | 20(63) | 4(13) | 0(0) | 0(0) | 386(21) | 1049(58) | 369(20) | 19(1) | 436 |
| | 14 | NOR | 1977 | 154 | 32 | 0(0) | 53(34) | 91(59) | 10(6) | 0(0) | 0(0) | 439(22) | 1140(58) | 379(19) | 19(1) | 990 |
| | 17 | NOR | 2093 | 116 | 30 | 0(0) | 46(40) | 66(57) | 4(3) | 0(0) | 0(0) | 485(23) | 1206(58) | 383(18) | 19(1) | 1106 |
| | 19 | STA | 2208 | 115 | 27 | 0(0) | 21(18) | 73(63) | 21(18) | 0(0) | 0(0) | 506(23) | 1279(58) | 404(18) | 19(1) | 287 |
| | 19 | E-E | 2280 | 72 | 24 | 0(0) | 33(46) | 30(42) | 9(13) | 0(0) | 0(0) | 539(24) | 1309(57) | 413(18) | 19(1) | 508 |
| | 19 | NOR | 2633 | 353 | 75 | 0(0) | 193(55) | 155(44) | 5(1) | 0(0) | 0(0) | 732(28) | 1464(56) | 418(16) | 19(1) | 1459 |
| | 21 | E-E | 2677 | 44 | 24 | 2(5) | 13(30) | 24(55) | 5(11) | 0(0) | 2(0) | 745(28) | 1488(56) | 423(16) | 19(1) | 552 |
| | 21 | ZPG | 2797 | 120 | 35 | 3(3) | 48(40) | 55(46) | 14(12) | 0(0) | 5(0) | 793(28) | 1543(55) | 437(16) | 19(1) | 499 |
| | 21 | NOR | 2937 | 140 | 32 | 9(6) | 52(37) | 66(47) | 13(9) | 0(0) | 14(0) | 845(29) | 1609(55) | 450(15) | 19(1) | 1599 |
| | 24 | NOR | 3227 | 290 | 62 | 14(5) | 154(53) | 98(34) | 24(8) | 0(0) | 28(1) | 999(31) | 1707(53) | 474(15) | 19(1) | 1889 |
| | 24 | STA | 3295 | 68 | 37 | 4(6) | 38(56) | 24(35) | 2(3) | 0(0) | 32(1) | 1037(31) | 1731(53) | 476(14) | 19(1) | 355 |
| | 24 | E-E | 3465 | 170 | 23 | 0(0) | 52(31) | 111(65) | 7(4) | 0(0) | 32(1) | 1089(31) | 1842(53) | 483(14) | 19(1) | 722 |
| | 26 | E-E | 3579 | 114 | 29 | 0(0) | 51(45) | 55(48) | 8(7) | 0(0) | 32(1) | 1140(32) | 1897(53) | 491(14) | 19(1) | 836 |
| | 26 | ZPG | 3652 | 73 | 23 | 3(4) | 54(74) | 16(22) | 0(0) | 0(0) | 35(1) | 1194(33) | 1913(52) | 491(13) | 19(1) | 572 |
| | 26 | STA | 3742 | 90 | 28 | 3(3) | 42(47) | 42(47) | 3(3) | 0(0) | 38(1) | 1236(33) | 1955(52) | 494(13) | 19(1) | 445 |
| | 26 | NOR | 3978 | 236 | 51 | 13(6) | 93(39) | 93(39) | 37(16) | 0(0) | 51(1) | 1329(33) | 2048(51) | 531(13) | 19(0) | 2125 |
| | 28 | E-E | 4026 | 48 | 30 | 0(0) | 26(54) | 16(33) | 6(13) | 0(0) | 51(1) | 1355(34) | 2064(51) | 537(13) | 19(0) | 884 |
| | 28 | ZPG | 4159 | 133 | 43 | 6(5) | 71(53) | 43(32) | 13(10) | 0(0) | 57(1) | 1426(34) | 2107(51) | 550(13) | 19(0) | 705 |
| | 28 | NOR | 4204 | 45 | 20 | 0(0) | 16(36) | 18(40) | 9(20) | 2(4) | 57(1) | 1442(34) | 2125(51) | 559(13) | 21(0) | 2170 |

*ZPG=ZAPADNI (ST. GEORGE); NOR=NORTH; E-E=EAST REEF AND EAST CLIFFS; STA=STARAYA ARTIL.O

TABLE 55A - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1973.

| DATE | ROOK-1 ERY# | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | | BY AREA, ALL AGES ¹ | |
|---------|----------------|---------------|-------|---------------------------|--|-----------|----------|---------|--------|-----------------|--|------------|----------|---------|------|-----------------------------------|--|
| | | NUMBER KILLED | | NO. IN TOOTH SAMPLE | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | | |
| | | TO DATE | DAILY | | 2 | 3 | 4 | 5 | 6 | 21 | 3 | 4 | 5 | 6 | | | |
| JUNE 25 | NEP | 776 | 776 | 166 | 4 (1) | 190 (24) | 483 (62) | 94 (12) | 5 (1) | 4 (1) | 190 (24) | 483 (62) | 94 (12) | 5 (1) | 776 | | |
| 28 | POL | 1008 | 232 | 45 | 0 (0) | 82 (35) | 134 (58) | 16 (7) | 0 (0) | 4 (0) | 272 (27) | 617 (61) | 110 (11) | 5 (0) | 232 | | |
| 27 | TZR | 1488 | 480 | 104 | 14 (3) | 157 (33) | 286 (60) | 23 (5) | 0 (0) | 18 (1) | 429 (29) | 903 (61) | 133 (9) | 5 (0) | 480 | | |
| 28 | ZAP | 1791 | 303 | 55 | 0 (0) | 116 (38) | 165 (54) | 22 (7) | 0 (0) | 18 (1) | 545 (30) | 1068 (60) | 155 (9) | 5 (0) | 303 | | |
| 29 | REF | 3226 | 1435 | 288 | 14 (1) | 553 (39) | 818 (57) | 50 (3) | 0 (0) | 32 (1) | 1098 (34) | 1886 (58) | 205 (6) | 5 (0) | 1435 | | |
| 30 | L-K1 | 3394 | 168 | 39 | 0 (0) | 43 (26) | 103 (61) | 22 (13) | 0 (0) | 32 (1) | 1141 (34) | 1989 (59) | 227 (7) | 5 (0) | 168 | | |
| JULY 2 | NEP1 | 4141 | 747 | 146 | 5 (1) | 235 (31) | 465 (62) | 37 (5) | 5 (1) | 37 (1) | 1376 (33) | 2454 (59) | 264 (6) | 10 (0) | 1523 | | |
| 3 | TZR1 | 4935 | 794 | 148 | 0 (0) | 349 (44) | 408 (51) | 37 (5) | 0 (0) | 37 (1) | 1725 (35) | 2862 (58) | 301 (6) | 10 (0) | 1274 | | |
| 3 | POL1 | 5216 | 281 | 55 | 0 (0) | 102 (36) | 174 (62) | 5 (2) | 0 (0) | 37 (1) | 1827 (35) | 3036 (58) | 306 (6) | 10 (0) | 513 | | |
| 5 | ZAP | 5906 | 690 | 129 | 33 (5) | 321 (47) | 315 (46) | 21 (3) | 0 (0) | 70 (1) | 2148 (36) | 3351 (57) | 327 (6) | 10 (0) | 993 | | |
| 6 | REF | 7053 | 1147 | 226 | 10 (1) | 584 (51) | 522 (46) | 31 (3) | 0 (0) | 80 (1) | 2732 (39) | 3873 (55) | 358 (5) | 10 (0) | 2582 | | |
| 7 | L-K | 7328 | 275 | 45 | 6 (2) | 80 (29) | 177 (64) | 12 (4) | 0 (0) | 86 (1) | 2812 (38) | 4050 (55) | 370 (5) | 10 (0) | 443 | | |
| 9 | NEP | 8187 | 859 | 166 | 10 (1) | 420 (49) | 398 (46) | 31 (4) | 0 (0) | 96 (1) | 3232 (39) | 4448 (54) | 401 (5) | 10 (0) | 2382 | | |
| 10 | POL | 8805 | 618 | 123 | 15 (2) | 312 (50) | 286 (46) | 5 (1) | 0 (0) | 111 (1) | 3544 (40) | 4734 (54) | 406 (5) | 10 (0) | 1131 | | |
| 11 | TZR | 9956 | 1151 | 232 | 10 (1) | 700 (61) | 421 (37) | 20 (2) | 0 (0) | 121 (1) | 4244 (43) | 5155 (52) | 426 (4) | 10 (0) | 2425 | | |
| 12 | ZAP | 11468 | 1512 | 305 | 20 (1) | 987 (65) | 481 (32) | 24 (2) | 0 (0) | 141 (1) | 5231 (46) | 5636 (49) | 450 (4) | 10 (0) | 2505 | | |
| 13 | REF | 12648 | 1180 | 225 | 26 (2) | 751 (64) | 382 (32) | 21 (2) | 0 (0) | 167 (1) | 5982 (47) | 6018 (48) | 471 (4) | 10 (0) | 3762 | | |
| 14 | L-K | 13062 | 414 | 77 | 11 (3) | 204 (49) | 199 (48) | 0 (0) | 0 (0) | 178 (1) | 6186 (47) | 6217 (48) | 471 (4) | 10 (0) | 857 | | |
| 16 | NEP | 14845 | 1783 | 343 | 15 (1) | 1068 (60) | 669 (38) | 31 (2) | 0 (0) | 193 (1) | 7254 (49) | 6886 (46) | 502 (3) | 10 (0) | 4165 | | |
| 17 | POL | 15644 | 799 | 145 | 11 (1) | 391 (49) | 375 (47) | 22 (3) | 0 (0) | 204 (1) | 7645 (49) | 7261 (46) | 524 (3) | 10 (0) | 1930 | | |
| 18 | TZR | 16293 | 649 | 121 | 16 (2) | 301 (46) | 311 (48) | 21 (3) | 0 (0) | 220 (1) | 7946 (49) | 7572 (46) | 545 (3) | 10 (0) | 3074 | | |
| 19 | ZAP | 18337 | 2044 | 394 | 78 (4) | 1447 (71) | 482 (24) | 31 (2) | 6 (0) | 298 (2) | 9393 (51) | 8054 (44) | 576 (3) | 16 (0) | 4549 | | |
| 20 | REF | 19620 | 1283 | 231 | 50 (4) | 806 (63) | 422 (33) | 5 (0) | 0 (0) | 348 (12) | 10199 (52) | 8476 (43) | 581 (3) | 16 (0) | 5045 | | |
| 21 | L-K | 19958 | 338 | 53 | 13 (4) | 230 (68) | 83 (25) | 6 (2) | 6 (2) | 361 (2) | 10429 (52) | 8559 (43) | 587 (3) | 22 (0) | 1195 | | |
| 23 | NEP | 21880 | 1922 | 365 | 43 (2) | 1278 (66) | 574 (30) | 27 (1) | 0 (0) | 404 (2) | 11707 (54) | 9133 (42) | 614 (3) | 22 (0) | 6087 | | |
| 24 | POL | 22648 | 768 | 145 | 22 (3) | 455 (58) | 260 (34) | 31 (4) | 0 (0) | 426 (2) | 12162 (54) | 9393 (41) | 645 (3) | 22 (0) | 2698 | | |
| 25 | TZR | 23887 | 1239 | 236 | 21 (2) | 892 (72) | 315 (25) | 11 (1) | 0 (0) | 447 (2) | 13054 (55) | 9708 (41) | 656 (3) | 22 (0) | 4313 | | |
| 26 | ZAP | 25976 | 2089 | 362 | 81 (4) | 1471 (70) | 497 (24) | 40 (2) | 0 (0) | 528 (2) | 14525 (56) | 10205 (39) | 696 (3) | 22 (0) | 6638 | | |
| 27 | REF | 27810 | 1834 | 370 | 44 (2) | 1423 (78) | 352 (19) | 15 (1) | 0 (0) | 572 (2) | 15948 (57) | 10557 (38) | 711 (3) | 22 (0) | 6879 | | |
| 28 | L-K1 | 28457 | 647 | 133 | 5 (1) | 389 (60) | 243 (38) | 10 (2) | 0 (0) | 577 (2) | 16337 (57) | 10800 (38) | 721 (3) | 22 (0) | 1842 | | |

*NEP=NORTHEAST POINT (MORJOVI AND VOSTOCHNI); TZR=TOLSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; ZAP=ZAPADNI; REF=REEF, GORBATCH, AND ARDIQUEN; L-K=LUKANIN AND KITOVI.

TABLE 56A - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1974.0

| DATE | ROOK-0 ERY# | NUMBER KILLED | | NO. IN TOOTH SAMPLE | DAILY KILL ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | CUMULATIVE KILL ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | BY AREA, ALL AGES | |
|------|----------------|---------------|-------|---------------------------|--|---------|----------|----------|---------|---|---------|-----------|-----------|----------|----------------------|------|
| | | TO DATE | DAILY | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | | |
| JUNE | 24 | NEP | 967 | 967 | 217 | 4(0) | 149(15) | 719(74) | 96(9) | 9(1) | 4(0) | 149(15) | 719(74) | 96(9) | 9(1) | 967 |
| | 25 | POL | 1470 | 503 | 131 | 0(0) | 50(10) | 349(69) | 100(20) | 4(1) | 4(0) | 199(14) | 1068(73) | 186(13) | 13(1) | 503 |
| | 26 | TZR | 2056 | 586 | 117 | 10(2) | 90(15) | 386(66) | 95(16) | 5(1) | 14(1) | 289(14) | 1454(71) | 281(14) | 18(1) | 586 |
| | 27 | ZAP | 3223 | 1167 | 250 | 0(0) | 299(26) | 705(60) | 149(13) | 14(1) | 14(0) | 588(18) | 2159(67) | 430(13) | 32(1) | 1167 |
| | 28 | REF | 4666 | 1443 | 309 | 4(0) | 276(19) | 898(62) | 257(18) | 8(1) | 18(0) | 864(19) | 3057(66) | 687(15) | 40(1) | 1443 |
| | 29 | L-K | 4975 | 309 | 64 | 5(2) | 63(20) | 164(53) | 68(22) | 9(3) | 23(0) | 927(19) | 3221(65) | 755(15) | 49(1) | 309 |
| JULY | 1 | NEP | 6133 | 1158 | 228 | 0(0) | 224(19) | 747(65) | 177(15) | 10(1) | 23(0) | 1151(19) | 3968(65) | 932(15) | 59(1) | 2125 |
| | 2 | POL | 6735 | 602 | 123 | 0(0) | 113(19) | 416(69) | 59(10) | 14(2) | 23(0) | 1264(19) | 4384(65) | 991(15) | 73(1) | 1105 |
| | 3 | ZAP | 7196 | 461 | 106 | 4(1) | 135(29) | 309(67) | 13(3) | 0(0) | 27(0) | 1399(19) | 4693(65) | 1004(14) | 73(1) | 1628 |
| | 3 | TZR | 7825 | 629 | 108 | 6(1) | 204(32) | 407(65) | 6(1) | 6(1) | 33(0) | 1603(20) | 5100(65) | 1010(13) | 79(1) | 1215 |
| | 5 | REF | 8107 | 282 | 55 | 10(4) | 113(40) | 154(55) | 5(2) | 0(0) | 43(1) | 1716(21) | 5254(65) | 1015(13) | 79(1) | 1725 |
| | 6 | L-K | 8384 | 277 | 60 | 5(2) | 78(28) | 184(66) | 5(2) | 5(2) | 48(1) | 1794(21) | 5438(65) | 1020(12) | 84(1) | 586 |
| | 8 | NEP | 10274 | 1890 | 373 | 37(2) | 644(34) | 1127(60) | 77(4) | 5(0) | 85(1) | 2438(24) | 6565(64) | 1097(11) | 89(1) | 4015 |
| | 9 | POLO | 10967 | 693 | 136 | 0(0) | 199(29) | 468(68) | 26(4) | 0(0) | 85(1) | 2637(24) | 7033(64) | 1123(10) | 89(1) | 1798 |
| | 10 | TZRO | 12226 | 1259 | 230 | 38(3) | 466(37) | 728(58) | 27(2) | 0(0) | 123(1) | 3103(25) | 7761(63) | 1150(9) | 89(1) | 2474 |
| | 11 | ZAPO | 13986 | 1760 | 331 | 21(1) | 803(46) | 905(51) | 21(1) | 10(1) | 144(1) | 3806(28) | 8666(62) | 1171(8) | 99(1) | 3388 |
| | 12 | REFO | 15186 | 1200 | 224 | 22(2) | 611(51) | 535(45) | 32(3) | 0(0) | 166(1) | 4517(30) | 9201(61) | 1203(8) | 99(1) | 2925 |
| | 13 | L-KO | 15802 | 616 | 117 | 0(0) | 289(47) | 306(50) | 21(3) | 0(0) | 166(1) | 4806(30) | 9507(60) | 1224(8) | 99(1) | 1202 |
| | 15 | NEP | 17885 | 2083 | 400 | 37(2) | 1027(49) | 956(46) | 52(2) | 11(1) | 203(1) | 5833(33) | 10463(59) | 1276(7) | 110(1) | 6098 |
| | 16 | POLO | 18820 | 935 | 182 | 26(3) | 581(62) | 303(32) | 15(2) | 10(1) | 229(1) | 6414(34) | 10766(57) | 1291(7) | 120(1) | 2733 |
| | 17 | TZRO | 20114 | 1294 | 227 | 12(1) | 582(45) | 660(51) | 40(3) | 0(0) | 241(1) | 6996(35) | 11426(57) | 1331(7) | 120(1) | 3768 |
| | 18 | ZAP | 20710 | 596 | 113 | 42(7) | 311(52) | 227(38) | 16(3) | 0(0) | 283(1) | 7307(35) | 11653(56) | 1347(7) | 120(1) | 3984 |
| | 19 | REFO | 22503 | 1793 | 323 | 66(4) | 983(55) | 683(38) | 61(3) | 0(0) | 349(2) | 8290(37) | 12336(55) | 1408(6) | 120(1) | 4718 |
| | 20 | L-KO | 23108 | 605 | 116 | 16(3) | 303(50) | 250(41) | 36(6) | 0(0) | 365(2) | 8593(37) | 12586(54) | 1444(6) | 120(1) | 1807 |
| | 22 | NEP | 25499 | 2391 | 424 | 154(6) | 1472(62) | 741(31) | 20(1) | 4(0) | 519(2) | 10065(39) | 13327(52) | 1464(6) | 124(0) | 8489 |
| | 23 | POLO | 26910 | 1411 | 259 | 32(2) | 790(56) | 562(40) | 27(2) | 0(0) | 551(2) | 10855(40) | 13889(52) | 1491(6) | 124(0) | 4144 |
| | 24 | TZRO | 28732 | 1822 | 315 | 69(4) | 1099(60) | 596(33) | 53(3) | 5(0) | 620(2) | 11954(42) | 14485(50) | 1544(5) | 129(0) | 5590 |
| | 25 | ZAPO | 30744 | 2012 | 389 | 181(9) | 1318(66) | 487(24) | 20(1) | 6(0) | 801(3) | 13272(43) | 14972(49) | 1564(5) | 135(0) | 5996 |
| | 26 | REF | 32336 | 1592 | 406 | 153(10) | 980(62) | 419(26) | 40(3) | 0(0) | 954(3) | 14252(44) | 15391(48) | 1604(5) | 135(0) | 6310 |
| | 27 | L-K | 32976 | 640 | 144 | 71(11) | 400(63) | 142(22) | 27(4) | 0(0) | 1025(3) | 14652(44) | 15533(47) | 1631(5) | 135(0) | 2447 |

*NEP=NORTHEAST POINT (MORJOVI AND VOSTOCHNI); TZR=TOLSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; POL=POLOVINA, POLOVINAO CLIFFS, AND LITTLE POLOVINA; ZAP=ZAPADNI; REF=REEF, GORBATCH, AND ARDIGUEN; L-K=LUKANIN AND KITOVI.0

TABLE 57A - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1975.

| DATE | ROOK-ERY# | DAILY KILL | | | | | | | | | CUMULATIVE KILL | | | | | | |
|------|-----------|------------------|-------|---------------------|---|---------|----------|---------|---------|-------|---|-----------|-----------|---------|-------|------|--------------------------------|
| | | NUMBER KILLED | | NO. IN TOOTH SAMPLE | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | | BY AREA, ALL AGES ¹ |
| | | TO DATE | DAILY | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | | | |
| JUNE | 30 | NEP | 1529 | 1529 | 283 | 0(0) | 410(27) | 945(62) | 169(11) | 5(0) | 0(0) | 410(27) | 945(62) | 169(11) | 5(0) | 1529 | |
| JULY | 1 | POL | 1847 | 318 | 57 | 0(0) | 73(23) | 172(54) | 73(23) | 0(0) | 0(0) | 483(26) | 1117(60) | 242(13) | 5(0) | 318 | |
| | 2 | TZR | 3326 | 1479 | 266 | 0(0) | 806(41) | 756(51) | 111(8) | 6(0) | 0(0) | 1089(33) | 1873(56) | 353(11) | 11(0) | 1479 | |
| | 3 | ZAP | 3903 | 577 | 121 | 0(0) | 143(25) | 353(61) | 76(13) | 5(1) | 0(0) | 1232(32) | 2226(57) | 429(11) | 16(0) | 577 | |
| | 5 | REF | 5089 | 1186 | 276 | 8(1) | 546(46) | 572(48) | 60(5) | 0(0) | 8(0) | 1778(35) | 2798(55) | 489(10) | 16(0) | 1186 | |
| | 5 | L-K | 5440 | 351 | 70 | 0(0) | 131(37) | 196(56) | 20(6) | 4(1) | 8(0) | 1909(35) | 2994(55) | 509(9) | 20(0) | 351 | |
| | 7 | NEP | 6696 | 1256 | 216 | 6(0) | 448(36) | 706(56) | 90(7) | 6(0) | 14(0) | 2357(35) | 3700(55) | 599(9) | 26(0) | 2785 | |
| | 8 | POL | 6947 | 251 | 45 | 0(0) | 95(38) | 111(44) | 45(18) | 0(0) | 14(0) | 2452(35) | 3811(55) | 644(9) | 26(0) | 569 | |
| | 9 | TZR | 8314 | 1367 | 260 | 26(2) | 774(57) | 499(37) | 68(5) | 0(0) | 40(0) | 3226(39) | 4310(52) | 712(9) | 26(0) | 2846 | |
| | 10 | ZAP | 8728 | 414 | 70 | 0(0) | 166(40) | 224(54) | 24(6) | 0(0) | 40(0) | 3392(39) | 4534(52) | 736(8) | 26(0) | 991 | |
| | 11 | REF | 9922 | 1194 | 193 | 37(3) | 687(58) | 414(35) | 56(5) | 0(0) | 77(1) | 4079(41) | 4948(50) | 792(8) | 26(0) | 2380 | |
| | 12 | L-K | 10076 | 154 | 31 | 15(10) | 64(42) | 70(45) | 5(3) | 0(0) | 92(1) | 4143(41) | 5018(50) | 797(8) | 26(0) | 505 | |
| | 14 | NEP | 12106 | 2030 | 354 | 196(10) | 1136(56) | 614(30) | 62(13) | 22(1) | 288(2) | 5279(44) | 5632(47) | 859(7) | 48(0) | 4815 | |
| | 15 | POL | 12367 | 261 | 59 | 0(0) | 53(20) | 155(59) | 44(17) | 9(3) | 288(2) | 5332(43) | 5787(47) | 903(7) | 57(0) | 830 | |
| | 16 | TZR | 14305 | 1938 | 354 | 111(6) | 1118(58) | 618(32) | 87(4) | 4(0) | 399(3) | 6450(45) | 6405(45) | 890(7) | 61(0) | 4784 | |
| | 17 | ZAP | 15239 | 934 | 146 | 33(4) | 422(45) | 390(42) | 77(8) | 12(1) | 432(3) | 6872(45) | 6795(45) | 1067(7) | 73(0) | 1925 | |
| | 18 | REF | 16118 | 879 | 153 | 68(8) | 500(57) | 293(33) | 18(2) | 0(0) | 500(3) | 7372(46) | 7088(44) | 1085(7) | 73(0) | 3259 | |
| | 19 | L-K ¹ | 16506 | 388 | 77 | 20(5) | 222(57) | 116(30) | 25(6) | 5(1) | 520(3) | 7594(46) | 7204(44) | 1110(7) | 78(0) | 893 | |
| | 21 | NEP | 17688 | 1182 | 201 | 119(10) | 719(61) | 314(27) | 24(2) | 6(1) | 639(4) | 8313(47) | 7518(43) | 1134(6) | 84(0) | 5997 | |
| | 22 | POL | 18246 | 558 | 103 | 22(4) | 330(59) | 190(34) | 16(3) | 0(0) | 661(4) | 8643(47) | 7708(42) | 1150(6) | 84(0) | 1388 | |
| | 23 | TZR | 19822 | 1576 | 280 | 80(6) | 1042(66) | 394(25) | 39(2) | 11(1) | 751(4) | 9685(49) | 8102(41) | 1189(6) | 95(0) | 6360 | |
| | 24 | ZAP | 20916 | 1094 | 136 | 105(10) | 579(53) | 402(37) | 8(1) | 0(0) | 856(4) | 10264(49) | 8504(41) | 1197(6) | 95(0) | 3019 | |
| | 25 | REF | 22349 | 1433 | 256 | 84(6) | 784(55) | 526(37) | 39(3) | 0(0) | 940(4) | 11048(49) | 9030(40) | 1236(6) | 95(0) | 4692 | |
| | 26 | L-K | 22836 | 487 | 94 | 21(4) | 269(55) | 176(36) | 21(4) | 0(0) | 961(4) | 11317(50) | 9206(40) | 1257(6) | 95(0) | 1380 | |
| | 28 | NEP | 24271 | 1435 | 230 | 184(13) | 843(59) | 384(27) | 24(2) | 0(0) | 1145(5) | 12160(50) | 9590(40) | 1281(5) | 95(0) | 7432 | |
| | 29 | POL | 24990 | 719 | 114 | 88(12) | 360(50) | 239(33) | 32(4) | 0(0) | 1233(5) | 12520(50) | 9829(39) | 1313(5) | 95(0) | 2107 | |
| | 30 | TZR | 26899 | 1909 | 341 | 234(12) | 1333(70) | 325(17) | 17(1) | 0(0) | 1467(5) | 13853(52) | 10154(38) | 1330(5) | 95(0) | 8269 | |
| | 31 | ZAP | 27977 | 1078 | 185 | 75(7) | 647(60) | 327(30) | 29(3) | 0(0) | 1542(6) | 14500(52) | 10481(37) | 1359(5) | 95(0) | 4097 | |
| AUG | 1 | REF | 28768 | 791 | 132 | 54(7) | 498(63) | 209(26) | 30(4) | 0(0) | 1596(6) | 14998(52) | 10690(37) | 1389(5) | 95(0) | 5483 | |
| | 2 | L-K | 29093 | 325 | 50 | 46(14) | 188(58) | 78(24) | 13(4) | 0(0) | 1642(6) | 15186(52) | 10768(37) | 1402(5) | 95(0) | 1705 | |

¹NEP=NORTHEAST POINT (MORJOVI AND VOSTOCHNI); TZR=TOLSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; ZAP=ZAPADNI; REF=REEF, GORBATCH, AND ARDIQUEN; L-K=LUKANIN AND KITOVI.

TABLE 50A - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1976.

| DATE | ROOK- ERY* | DAILY KILL | | | | | CUMULATIVE KILL | | | | | BY AREA, ALL AGES | | | |
|---------|---------------|--------------------------|---------------------------|-----------------|--|----------|-----------------|--------|--------|--|-----------|----------------------|---------|-------|-------|
| | | NUMBER KILLED TO DATE | NO. IN DAILY SAMPLE | NO. IN TOOTH | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | |
| | | | | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | |
| JUNE 28 | NEP | 609 | 609 | 109 | 0(0) | 188(31) | 363(60) | 58(10) | 0(0) | 0(0) | 188(31) | 363(60) | 58(10) | 0(0) | 609 |
| 29 | POL | 933 | 324 | 61 | 11(3) | 58(18) | 213(66) | 42(13) | 0(0) | 11(1) | 246(26) | 576(62) | 100(11) | 0(0) | 324 |
| 30 | TZR | 1470 | 537 | 111 | 10(2) | 145(27) | 314(58) | 63(12) | 5(1) | 21(1) | 391(27) | 890(61) | 163(11) | 5(0) | 537 |
| JULY 1 | ZAP | 2129 | 659 | 124 | 5(1) | 186(28) | 420(64) | 48(7) | 0(0) | 26(1) | 577(27) | 1310(62) | 211(10) | 5(0) | 659 |
| 2 | REF | 2614 | 485 | 70 | 0(0) | 238(49) | 243(50) | 4(1) | 0(0)2 | 26(1) | 815(31) | 1553(59) | 215(8) | 5(0) | 485 |
| 3 | L-K | 2817 | 203 | 34 | 0(0) | 102(50) | 90(44) | 11(5) | 0(0) | 26(1) | 917(33) | 1643(58) | 226(8) | 5(0) | 203 |
| 6 | NEP | 3666 | 849 | 148 | 20(2) | 466(55) | 346(41) | 17(2) | 0(0) | 46(1) | 1383(38) | 1989(54) | 243(7) | 5(0)2 | 1458 |
| 6 | POL | 4153 | 487 | 104 | 0(0) | 197(40) | 271(56) | 19(4) | 0(0) | 46(1) | 1580(38) | 2260(54) | 262(6) | 5(0) | 811 |
| 7 | TZR | 5318 | 1165 | 171 | 7(1) | 634(54) | 497(43) | 27(2) | 0(0)2 | 53(1) | 2214(42) | 2757(52) | 289(5) | 5(0) | 1702 |
| 8 | ZAP | 5847 | 529 | 84 | 13(2) | 321(61) | 195(37) | 0(0) | 0(0) | 66(1) | 2535(43) | 2952(50) | 289(5) | 5(0) | 1188 |
| 9 | REF | 6651 | 804 | 160 | 11(1) | 331(41) | 442(55) | 20(2)2 | 0(0)2 | 77(1) | 2866(43) | 3394(51) | 309(5) | 5(0) | 1289 |
| 10 | L-K2 | 6953 | 302 | 54 | 6(2) | 184(61) | 101(33) | 11(4) | 0(0)2 | 83(1) | 3050(44) | 3495(50) | 320(5) | 5(0) | 505 |
| 12 | NEP | 7902 | 949 | 130 | 52(5) | 585(62) | 281(30) | 31(3) | 0(0) | 135(2) | 3635(46) | 3776(48) | 351(4) | 5(0) | 2407 |
| 13 | POL2 | 8344 | 442 | 83 | 11(2) | 245(55) | 170(38) | 16(4) | 0(0)2 | 146(2) | 3880(47) | 3946(47) | 367(4) | 5(0)2 | 1253 |
| 14 | TZR2 | 9536 | 1192 | 193 | 31(3) | 803(67) | 321(27)2 | 37(3) | 0(0) | 177(2) | 4683(49) | 4267(45) | 404(4) | 5(0) | 2894 |
| 15 | ZAP | 10220 | 684 | 87 | 16(2) | 456(67) | 196(29) | 16(2) | 0(0) | 193(2) | 5139(50) | 4463(44) | 420(4) | 5(0) | 1872 |
| 16 | REF2 | 11138 | 918 | 152 | 42(5) | 550(60) | 308(34) | 18(2) | 0(0)2 | 235(2) | 5689(51) | 4771(43) | 438(4) | 5(0) | 2207 |
| 17 | L-K2 | 11469 | 331 | 57 | 0(0) | 215(65) | 93(28) | 23(7) | 0(0) | 235(2) | 5904(51) | 4864(42) | 461(4) | 5(0) | 836 |
| 19 | NEP | 12569 | 1100 | 154 | 85(8) | 760(69) | 252(23)2 | 3(0) | 0(0) | 320(3) | 6664(53) | 5116(41) | 464(4) | 5(0) | 3507 |
| 20 | POL | 13031 | 462 | 93 | 15(3) | 293(63) | 139(30) | 15(3) | 0(0) | 335(3) | 6957(53) | 5255(40) | 479(4) | 5(0) | 17152 |
| 21 | TZR | 13927 | 896 | 144 | 13(1) | 672(75) | 211(24) | 0(0) | 0(0) | 348(2) | 7629(55) | 5466(39) | 479(3) | 5(0) | 3790 |
| 22 | ZAP | 15098 | 1171 | 107 | 33(3) | 614(52) | 448(38) | 66(6) | 10(1)2 | 381(3) | 8243(55) | 5914(39) | 545(4) | 15(0) | 3043 |
| 23 | REF | 16387 | 1289 | 223 | 35(3) | 792(61) | 416(32) | 46(4) | 0(0) | 416(3) | 9035(55) | 6330(39) | 591(4) | 15(0) | 3496 |
| 24 | L-K | 16572 | 185 | 30 | 19(10) | 98(53) | 68(37) | 0(0) | 0(0) | 435(3) | 9133(55) | 6398(39) | 591(4) | 15(0) | 1021 |
| 26 | NEP | 18221 | 1649 | 276 | 89(5) | 1178(71) | 370(22) | 12(1) | 0(0) | 524(3) | 10311(57) | 6768(37) | 603(3) | 15(0) | 5156 |
| 27 | POL | 18732 | 511 | 58 | 17(3) | 238(47) | 229(45) | 27(5) | 0(0) | 541(3) | 10549(56) | 6997(37) | 630(3) | 15(0) | 2226 |
| 28 | TZR | 20596 | 1864 | 0 | 136(7) | 1242(67) | 449(24) | 35(2) | 2(0) | 677(3) | 11791(57) | 7446(36) | 665(3) | 17(0) | 5654 |
| 29 | ZAP | 21286 | 690 | 0 | 55(8) | 458(66) | 164(24) | 12(2) | 1(0) | 732(3)2 | 12249(58) | 7610(36) | 677(3) | 18(0) | 3739 |
| 30 | REF | 22515 | 1229 | 0 | 101(8) | 801(65) | 296(24) | 30(2) | 1(0) | 833(4) | 13050(58) | 7906(35) | 707(3) | 19(0) | 4725 |
| 31 | L-K | 23081 | 566 | 0 | 60(11) | 347(61) | 144(25) | 15(3) | 0(0) | 893(4) | 13397(58) | 8050(35) | 722(3) | 19(0) | 1587 |

*NEP=NORTHEAST POINT (MORJOVI AND VOSTOCHNI); TZR=TOLSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; POL=POLOVINA, 2 POLOVINA CLIFFS, AND LITTLE POLOVINA; ZAP=ZAPADNI; REF=REEF, GORBATCH, AND ARDIGUEN; L-K=LUKANIN AND KITOVI.2

TABLE 59A - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1977.

| DATE | ROOK-ERY* | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | | |
|---------|-----------|---------------|-------|---------------------|--|----------|---------|--------|------|-----------------|--|----------|---------|------|-------------------|--|
| | | NUMBER KILLED | | NO. IN TOOTH SAMPLE | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | |
| | | TO DATE | DAILY | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | BY AREA, ALL AGES | |
| JUNE 27 | NEP | 808 | 808 | 186 | 9(1) | 217(27) | 503(62) | 75(9) | 4(0) | 9(1) | 217(27) | 503(62) | 75(9) | 4(0) | 808 | |
| 28 | POL | 1089 | 281 | 132 | 2(1) | 75(27) | 166(59) | 38(14) | 0(0) | 11(1) | 292(27) | 669(61) | 113(10) | 4(0) | 281 | |
| 29 | TZR | 2021 | 932 | 167 | 6(1) | 401(43) | 469(50) | 56(6) | 0(0) | 17(1) | 693(34) | 1138(56) | 169(8) | 4(0) | 932 | |
| 30 | ZAP | 2198 | 177 | 37 | 0(0) | 81(46) | 77(44) | 19(11) | 0(0) | 17(1) | 774(35) | 1215(55) | 188(9) | 4(0) | 177 | |
| JULY 1 | REF | 3127 | 929 | 162 | 0(0) | 367(40) | 499(54) | 58(6) | 5(1) | 17(1) | 1141(36) | 1714(55) | 246(8) | 9(0) | 929 | |
| 1 | L-K | 3343 | 216 | 39 | 0(0) | 72(33) | 127(59) | 17(8) | 0(0) | 17(1) | 1213(36) | 1841(55) | 263(8) | 9(0) | 216 | |
| 5 | NEP | 4641 | 1298 | 302 | 38(3) | 448(35) | 731(56) | 81(6) | 0(0) | 55(1) | 1661(36) | 2572(55) | 344(7) | 9(0) | 2106 | |
| 5 | POL | 5093 | 452 | 48 | 0(0) | 132(29) | 292(65) | 28(6) | 0(0) | 55(1) | 1793(35) | 2864(56) | 372(7) | 9(0) | 733 | |
| 6 | TZR | 6459 | 1366 | 252 | 33(2) | 677(50) | 612(45) | 44(3) | 0(0) | 88(1) | 2470(38) | 3476(54) | 416(6) | 9(0) | 2298 | |
| 7 | ZAP | 7098 | 639 | 128 | 20(3) | 334(52) | 280(44) | 5(1) | 0(0) | 108(2) | 2804(40) | 3756(53) | 421(6) | 9(0) | 816 | |
| 8 | REF | 8532 | 1434 | 257 | 27(2) | 770(54) | 610(43) | 27(2) | 0(0) | 135(2) | 3574(42) | 4366(51) | 448(5) | 9(0) | 2363 | |
| 8 | L-K | 9022 | 490 | 105 | 9(2) | 215(44) | 257(52) | 9(2) | 0(0) | 144(2) | 3789(42) | 4623(51) | 457(5) | 9(0) | 706 | |
| 11 | NEP | 10169 | 1147 | 214 | 29(3) | 693(60) | 414(36) | 11(1) | 0(0) | 173(2) | 4482(44) | 5037(50) | 468(5) | 9(0) | 3253 | |
| 12 | POL | 10765 | 596 | 121 | 15(3) | 311(52) | 246(41) | 24(4) | 0(0) | 188(2) | 4793(45) | 5283(49) | 492(5) | 9(0) | 1329 | |
| 13 | TZR | 11791 | 1026 | 196 | 68(7) | 644(63) | 304(30) | 10(1) | 0(0) | 256(2) | 5437(46) | 5587(47) | 502(4) | 9(0) | 3324 | |
| 14 | ZAP | 13248 | 1457 | 173 | 76(5) | 876(60) | 488(33) | 17(1) | 0(0) | 332(3) | 6313(48) | 6075(46) | 519(4) | 9(0) | 2273 | |
| 15 | REF | 14632 | 1384 | 278 | 75(5) | 936(68) | 358(26) | 15(1) | 0(0) | 407(3) | 7249(50) | 6433(44) | 534(4) | 9(0) | 3747 | |
| 15 | L-K1 | 15183 | 551 | 113 | 44(8) | 380(69) | 122(22) | 5(1) | 0(0) | 451(3) | 7629(50) | 6555(43) | 539(4) | 9(0) | 1257 | |
| 18 | NEP | 16486 | 1303 | 231 | 67(5) | 743(57) | 448(34) | 45(3) | 0(0) | 518(3) | 8372(51) | 7003(42) | 584(4) | 9(0) | 4556 | |
| 19 | POL | 17208 | 722 | 139 | 42(6) | 493(68) | 166(23) | 21(3) | 0(0) | 560(3) | 8865(52) | 7169(42) | 605(4) | 9(0) | 2051 | |
| 20 | TZR | 18024 | 816 | 149 | 44(5) | 460(56) | 296(36) | 16(2) | 0(0) | 604(3) | 9325(52) | 7465(41) | 621(3) | 9(0) | 4140 | |
| 21 | ZAP | 19171 | 1147 | 203 | 85(7) | 802(70) | 254(22) | 6(1) | 0(0) | 689(4) | 10127(53) | 7719(40) | 627(3) | 9(0) | 3420 | |
| 22 | REF | 20689 | 1518 | 332 | 143(9) | 941(62) | 411(27) | 23(2) | 0(0) | 832(4) | 11068(53) | 8130(39) | 650(3) | 9(0) | 5265 | |
| 22 | L-K | 21144 | 455 | 97 | 52(11) | 314(69) | 89(20) | 0(0) | 0(0) | 894(4) | 11382(54) | 8218(39) | 650(3) | 9(0) | 17121 | |
| 25 | NEP | 22613 | 1469 | 240 | 86(6) | 1023(70) | 342(23) | 18(1) | 0(0) | 970(4) | 12405(55) | 8561(38) | 668(3) | 9(0) | 60251 | |
| 26 | POL | 22907 | 294 | 61 | 34(12) | 173(59) | 82(28) | 5(2) | 0(0) | 1004(4) | 12578(55) | 8643(38) | 673(3) | 9(0) | 2345 | |
| 27 | TZR | 25288 | 2381 | 486 | 338(14) | 1672(70) | 357(15) | 14(1) | 0(0) | 1342(5) | 14250(56) | 9000(36) | 687(3) | 9(0) | 6521 | |
| 28 | ZAP | 26327 | 1039 | 188 | 110(11) | 752(72) | 177(17) | 0(0) | 0(0) | 1452(6) | 15002(57) | 9177(35) | 687(3) | 9(0) | 4459 | |
| 29 | REF | 27646 | 1319 | 317 | 246(19) | 894(68) | 166(13) | 13(1) | 0(0) | 1698(6) | 15896(57) | 9343(34) | 700(3) | 9(0) | 6584 | |
| 29 | L-K | 28396 | 750 | 106 | 85(11) | 580(77) | 78(10) | 7(1) | 0(0) | 1783(6) | 16476(58) | 9421(33) | 707(2) | 9(0) | 2462 | |

*NEP=NORTHEAST POINT (MORJOVI AND VOSTOCHNI); TZR=TOLSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; ZAP=ZAPADNI; REF=REEF, GORBATCH, AND ARDIGUEN; L-K=LUKANIN AND KITOVI.

TABLE 60A - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1978.

| DATE | ROOK-ERY# | DAILY KILL | | | | | | | | | CUMULATIVE KILL | | | | | BY AREA, ALL AGES |
|---------|-----------|-----------------------|---------------------|---------------------|---|----------|----------|---------|--------|---|-----------------|----------|---------|--------|-------|-------------------|
| | | NUMBER KILLED TO DATE | NO. IN DAILY SAMPLE | NO. IN TOOTH SAMPLE | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE (YR) | | | | | | |
| | | | | | 2 | 3 | 4 | 5 | 6 | 2 | 3 | 4 | 5 | 6 | | |
| JUNE 26 | NEP | 720 | 720 | 172 | 16(2) | 222(31) | 452(63) | 30(4) | 0(0) | 16(2) | 222(31) | 452(63) | 30(4) | 0(0) | 720 | |
| 27 | POL | 966 | 246 | 58 | 0(0) | 55(22) | 170(69) | 21(9) | 0(0) | 16(2) | 277(29) | 622(64) | 51(5) | 0(0) | 246 | |
| 28 | TZR | 1319 | 353 | 86 | 4(1) | 99(28) | 238(67) | 12(3) | 0(0) | 20(2) | 376(29) | 860(65) | 63(5) | 0(0) | 353 | |
| 29 | ZAP | 1603 | 284 | 75 | 4(1) | 99(35) | 170(60) | 11(4) | 0(0) | 24(1) | 475(30) | 1030(64) | 74(5) | 0(0) | 284 | |
| 30 | REF | 2512 | 909 | 240 | 15(2) | 330(36) | 530(58) | 30(3) | 4(0) | 39(2) | 805(32) | 1560(62) | 104(4) | 4(0) | 909 | |
| 30 | L-K | 2747 | 235 | 54 | 4(2) | 83(35) | 131(56) | 17(7) | 0(0) | 43(2) | 888(32) | 1691(62) | 121(4) | 4(0) | 235 | |
| JULY 3 | NEP | 3535 | 788 | 150 | 11(1) | 356(45) | 400(51) | 21(3) | 0(0) | 54(2) | 1244(35) | 2091(59) | 142(4) | 4(0) | 1508 | |
| 5 | POL | 4013 | 478 | 81 | 0(0) | 171(36) | 295(62) | 12(3) | 0(0) | 54(1) | 1415(35) | 2386(59) | 154(4) | 4(0) | 724 | |
| 6 | TZR | 4976 | 963 | 206 | 23(2) | 519(54) | 393(41) | 28(3) | 0(0) | 77(2) | 1934(39) | 2779(56) | 182(4) | 4(0) | 1316 | |
| 7 | ZAP | 5386 | 410 | 98 | 4(1) | 234(57) | 159(39) | 13(4 3) | 4(0) | 81(2) | 2168(40) | 2938(55) | 195(4) | 4(0) | 694 | |
| 10 | REF | 6564 | 1178 | 227 | 41(3) | 660(56) | 457(39) | 15(1) | 5(0) | 122(2) | 2828(43) | 3395(52) | 210(3) | 9(0) | 2087 | |
| 11 | NEP | 7919 | 1355 | 275 | 15(1) | 820(61) | 504(37) | 10(1) | 6(0) | 137(2) | 3648(46) | 3899(49) | 220(3) | 15(0) | 2863 | |
| 12 | POL | 8438 | 519 | 95 | 0(0) | 224(43) | 290(56) | 5(1) | 0(0) | 137(2) | 3872(46) | 4189(50) | 225(3) | 15(0) | 1243 | |
| 12 | L-K | 8859 | 421 | 83 | 5(1) | 168(40) | 228(54) | 20(5) | 0(0) | 142(2) | 4040(46) | 4417(50) | 245(3) | 15(0) | 656 | |
| 13 | TZR4 | 9538 | 679 | 132 | 20(3) | 324(48) | 293(43) | 36(5) | 6(1) | 162(2) | 4364(46) | 4710(49) | 281(3) | 21(0) | 1995 | |
| 14 | ZAP | 10160 | 642 | 135 | 14(2) | 348(54) | 261(41) | 19(3) | 0(0) | 176(2) | 4712(46) | 4971(49) | 300(3) | 21(0) | 1336 | |
| 17 | REF | 11278 | 1096 | 235 | 46(4) | 583(53) | 434(40) | 33(3) | 0(0) | 222(2) | 5295(47) | 5405(48) | 333(3) | 21(0) | 3183 | |
| 18 | NEP | 12610 | 1334 | 243 | 33(2) | 838(83) | 391(29) | 66(5) | 6(0) | 255(2) | 6133(49) | 5796(46) | 399(3) | 27(0) | 4197 | |
| 19 | POL | 13243 | 633 | 113 | 50(8) | 370(58) | 213(34) | 0(0) | 0(0) | 305(2) | 6503(49) | 6009(45) | 399(3) | 27(0) | 1876 | |
| 19 | L-K4 | 13835 | 592 | 127 | 23(4) | 350(59) | 214(36) | 5(1) | 0(0) | 328(2) | 6853(50) | 8223(45) | 404(3) | 27(0) | 12484 | |
| 20 | TZR | 15399 | 1564 | 295 | 80(5) | 985(63) | 457(29) | 37(2) | 5(0) | 408(3) | 7838(51) | 6680(43) | 441(3) | 32(0) | 3559 | |
| 21 | ZAP | 16169 | 770 | 127 | 24(3) | 443(58) | 285(37) | 18(2) | 4(0) | 432(3) | 8281(51) | 6965(43) | 459(3) | 32(0) | 2106 | |
| 24 | REF | 17386 | 1217 | 180 | 27(2) | 744(61) | 405(33) | 41(3) | 0(0) | 459(3) | 9025(52) | 7370(42) | 500(3) | 32(0) | 4400 | |
| 25 | NEP | 18748 | 1362 | 207 | 156(11) | 873(64) | 300(22) | 33(2) | 0(0) | 615(3) | 9898(53) | 7670(41) | 533(3) | 32(0) | 5559 | |
| 26 | POL | 19729 | 981 | 122 | 96(10) | 571(58) | 289(29) | 25(3) | 0(0) | 711(4) | 10469(53) | 7959(40) | 558(3) | 32(0) | 2857 | |
| 26 | L-K | 20418 | 689 | 85 | 56(8) | 495(72) | 121(18) | 17(2) | 0(0) | 767(4) | 10964(54) | 8080(40) | 575(3) | 32(0) | 1937 | |
| 27 | TZR | 21844 | 1426 | 211 | 81(6) | 960(67) | 365(26) | 7(0) | 13(1) | 848(4) | 11924(55) | 8445(39) | 582(3) | 45(0) | 4985 | |
| 28 | ZAP | 22863 | 1019 | 171 | 132(13) | 613(60) | 274(27) | 0(0) | 0(0) | 980(4) | 12537(55) | 8719(38) | 582(3) | 45(0) | 3125 | |
| 31 | REF | 24829 | 1966 | 385 | 499(25) | 1215(62) | 236(12) | 16(1) | 0(0) | 1479(6) | 13752(55) | 8955(36) | 598(2) | 45(0) | 6366 | |

*NEP=NORTHEAST POINT (MORJOVI AND VOSTOCHNI); TZR=TOLSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; ZAP=ZAPADNI; REF=REEF, GORBATCH, AND ARDIQUEN; L-K=LUKANIN AND KITOVI.4

TABLE 61A - DAILY AND CUMULATIVE COMMERCIAL KILL OF MALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1979.

| DATE | ROOK-ERY# | DAILY KILL | | | | | | | | | CUMULATIVE KILL | | | | | |
|------|-----------|---------------|-------|---------------------|--|---------|----------|---------|-------|------|--|-----------|----------|--------|-------------------|-------|
| | | NUMBER KILLED | | NO. IN TOOTH SAMPLE | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE | | | | | |
| | | TO DATE | DAILY | | 2 | 3 | 4 | 5 | 6 | 22 | 3 | 4 | 5 | 6 | BY AREA, ALL AGES | |
| JUNE | 26 | NEP | 1045 | 1045 | 189 | 6(1) | 391(37) | 587(56) | 61(6) | 0(0) | 6(1) | 391(37) | 587(56) | 61(6) | 0(0) | 1045 |
| | 27 | POL | 1545 | 500 | 97 | 5(1) | 232(46) | 247(49) | 2(3) | 0(0) | 11(1) | 623(40) | 834(54) | 77(5) | 0(0) | 500 |
| | 27 | L-K | 1753 | 208 | 36 | 12(6) | 127(61) | 57(27) | 12(6) | 0(0) | 23(1) | 750(43) | 891(51) | 89(5) | 0(0) | 208 |
| | 28 | TZR | 2139 | 385 | 69 | 0(0) | 156(41) | 206(54) | 23(6) | 2(0) | 23(1) | 906(42) | 1097(51) | 112(5) | 0(0) | 385 |
| | 29 | ZAP | 2488 | 350 | 81 | 4(1) | 182(52) | 156(45) | 8(2) | 0(0) | 27(1) | 1088(44) | 1253(50) | 120(5) | 0(0) | 350 |
| JULY | 2 | REF | 3311 | 823 | 136 | 6(1) | 472(57) | 327(40) | 18(2) | 0(0) | 33(1) | 1560(47) | 1580(48) | 138(4) | 0(0) | 823 |
| | 3 | NEP | 4593 | 1282 | 323 | 35(3) | 772(60) | 443(35) | 32(2) | 0(0) | 68(1) | 2332(51) | 2023(44) | 170(4) | 0(0) | 2327 |
| | 5 | POL | 4968 | 375 | 110 | 7(2) | 164(44) | 194(52) | 10(3) | 0(0) | 75(2) | 2496(50) | 2217(45) | 180(4) | 0(0) | 875 |
| | 5 | L-K | 5210 | 242 | 64 | 8(3) | 94(39) | 132(55) | 4(2) | 4(2) | 83(2) | 2590(50) | 2349(45) | 184(4) | 4(0) | 450 |
| | 6 | TZR2 | 5543 | 333 | 93 | 14(4) | 215(65) | 104(31) | 0(0) | 0(0) | 97(2) | 2805(51) | 2453(44) | 184(3) | 4(0) | 718 |
| | 9 | ZAP | 6952 | 1409 | 390 | 88(6) | 917(65) | 386(27) | 18(1) | 0(0) | 185(3) | 3722(54) | 2839(41) | 202(3) | 4(0) | 1759 |
| | 10 | REF2 | 7963 | 1011 | 226 | 40(4) | 609(60) | 353(35) | 9(1) | 0(0) | 225(3) | 4331(54) | 3192(40) | 211(3) | 4(0) | 1834 |
| | 11 | NEP | 9355 | 1392 | 327 | 78(6) | 818(59) | 474(34) | 22(2) | 0(0) | 303(3) | 5149(55) | 3968(39) | 233(2) | 4(0) | 3719 |
| | 12 | POL2 | 10268 | 913 | 174 | 42(5) | 540(59) | 315(35) | 16(2) | 0(0) | 345(3) | 5689(55) | 3981(39) | 249(2) | 4(0) | 1788 |
| | 12 | L-K | 10729 | 461 | 88 | 16(3) | 241(52) | 194(42) | 10(2) | 0(0) | 361(3) | 5930(55) | 4175(39) | 259(2) | 4(0) | 911 |
| | 13 | TZR | 11161 | 432 | 100 | 0(0) | 182(42) | 233(54) | 17(4) | 0(0) | 361(3) | 6112(55) | 4408(39) | 276(2) | 4(0) | 1150 |
| | 16 | ZAP | 12290 | 1129 | 241 | 131(12) | 764(68) | 229(20) | 5(0) | 2(0) | 492(4) | 6876(56) | 4637(39) | 281(2) | 4(0) | 28882 |
| | 17 | REF | 13050 | 760 | 133 | 17(2) | 406(53) | 326(43) | 11(1) | 0(0) | 509(4) | 7282(56) | 4963(39) | 292(2) | 4(0) | 25942 |
| | 18 | NEP | 13693 | 643 | 116 | 31(5) | 461(72) | 145(23) | 6(1) | 0(0) | 540(4) | 7743(57) | 5108(37) | 298(2) | 4(0) | 4362 |
| | 19 | POL | 13903 | 210 | 44 | 0(0) | 105(50) | 100(48) | 5(2) | 0(0) | 540(4) | 7848(56) | 5208(37) | 303(2) | 4(0) | 1998 |
| | 19 | L-K | 14053 | 150 | 41 | 0(0) | 95(63) | 55(37) | 0(0) | 0(0) | 540(4) | 7943(57) | 5263(37) | 303(2) | 4(0) | 10612 |
| | 20 | TZR | 14468 | 415 | 97 | 13(3) | 227(55) | 171(41) | 4(1) | 0(0) | 553(4) | 8170(56) | 5434(38) | 307(2) | 4(0) | 15652 |
| | 23 | ZAP | 15946 | 1478 | 224 | 86(6) | 931(63) | 429(29) | 26(2) | 6(0) | 639(4) | 9101(57) | 5863(37) | 333(2) | 10(0) | 4366 |
| | 24 | REF | 17762 | 1816 | 427 | 209(12) | 1220(67) | 383(21) | 4(0) | 0(0) | 848(5) | 10321(58) | 6246(35) | 337(2) | 10(0) | 44102 |
| | 25 | NEP | 19664 | 1902 | 476 | 229(12) | 1266(67) | 379(20) | 28(1) | 0(0) | 1077(5) | 11587(59) | 6625(34) | 365(2) | 10(0) | 6264 |
| | 26 | POL | 20661 | 997 | 195 | 82(8) | 583(58) | 296(30) | 36(4) | 0(0) | 1159(6) | 12170(59) | 6821(33) | 401(2) | 10(0) | 2995 |
| | 26 | L-K | 21026 | 365 | 90 | 81(22) | 223(61) | 57(16) | 4(1) | 0(0) | 1240(6) | 12393(59) | 6978(33) | 405(2) | 10(0) | 1426 |
| | 27 | TZR | 21634 | 608 | 154 | 36(6) | 363(60) | 205(34) | 4(1) | 0(0) | 1276(6) | 12756(59) | 7183(33) | 409(2) | 10(0) | 21732 |
| | 30 | ZAP | 23614 | 1980 | 562 | 249(13) | 1234(62) | 461(23) | 36(2) | 0(0) | 1525(6) | 13990(59) | 7644(32) | 445(2) | 10(0) | 6346 |
| | 31 | REF | 25702 | 2088 | 488 | 526(25) | 1255(60) | 274(13) | 25(1) | 8(0) | 2051(8) | 15245(59) | 7918(31) | 470(2) | 18(0) | 6498 |

*NEP=NORTHEAST POINT (MORJOVI AND VOSTOCHNI); TZR=TOLSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; ZAP=ZAPADNI; REF=REEF, GORBATCH, AND ARDIGUEN; L-K=LUKANIN AND KITOVI.2

COMMERCIAL KILL OF FEMALES, 1956-68

Under Russian management of the Pribilof Islands, commercial kills of female fur seals were forbidden after 1834. Essentially no kill of females before 1954 on the Pribilof Islands was authorized under United States management of the resource since the purchase of Alaska in 1867, although excessive killing of females at sea nearly destroyed the herd before the 1911 Convention ended the practice. A few females on land were mistaken for males and accidentally harvested, and some were taken for research. In 1954 and 1955, all females driven with the males were taken for studies of reproduction. Beginning in 1956, however, a program of reducing herd size through removal of a calculated number of females was started under the theory that a smaller population would result in an even larger harvest (of females as well as males) by virtue of higher pregnancy rates and improved survival of the young as the animals strived to reach their natural population ceiling. Not having harvested females in large numbers before, managers had no guidelines to follow nor was there any ^{valid} information available to suggest how, when, or where the females should or could be taken. As a result, early harvests of females were largely experimental in this regard.

It was already known that few, if any, females arrive on the hauling grounds before late July. This and the fact that moult (the trade term is "staginess") of the skins reduces their value and interferes with traditional skin processing methods prompted managers to ask

"When would be the best time to harvest females and would it be possible to take males concurrently?" Considering all known factors, managers decided to take all females found on the hauling grounds during the usual harvest of males in 1956. They also made plans to carry out an experimental harvest of females in September and October of that year to measure their availability on the hauling grounds and to determine the onset of staginess. Onset of staginess was also measured between the two major harvesting periods ("summer" and "fall") by taking 20 females at 3- to 5-day intervals; still others were removed from the sand beach of Polovina Rookery in July of 1956 and 1957 to test the availability of animals from this source. These "harem raids" netted 2,983 females from eight "drives" and exterminated that portion of Polovina Rookery, on which no harems have reappeared to this date. Additional females were also removed from portions of Reef and Northeast Point Rookeries in 1957, but the numbers were too few to have any observable effect.

Exceptional survival of the 1952 and 1953 year classes caused managers to extend the harvest of males in 1956 from a traditional late July termination date to 15 August, during which period all available females on the hauling grounds were also taken. A 5-day harvest of females 4-8 September in that year yielded 4,807 animals, but because 603 or 12 percent of these were rejected as stagey, plans for additional kills as late as into October were abandoned. From the results of experimental harvests in 1956 and 1957 and

subsequent developments in the processing and marketing of female skins, managers learned that 1) it is impractical and dangerous to conduct "harem raids;" 2) females become increasingly available on the hauling grounds and on the rookery fringes as the season progresses; 3) it is necessary to harvest most females in August and September because it is not until then that they are available from sources other than "harem raids;" 4) staginess becomes a problem with the skins of animals taken as late as in early September as long as they are to be traditionally subjected to the DDMF process (dressed, dyed, and machine finished); 5) males become stagey before females; and 6) the younger animals of both sexes become stagey before the older animals, as early as mid-August.

As the herd reduction program progressed, it became increasingly apparent to managers that the skins of females were "different" and that a market for them should have been developed in advance of large scale harvesting of this element of the herd. There was no particular problem with skins from the younger females, i.e., ages 3 and 4 years, because they had not yet entered the formal breeding structure. The hair of an older female, worn thin at the flanks from one or more seasons of crawling over the rookery rocks and scarred from the bites of the adult males, was generally unsuitable for processing under the current demand for a soft luxury fur. Other problems arose because the rather large kills of females, together with the normal harvests of males, severely taxed the labor force,

processing, and storage facilities both on the Pribilof Islands and at the Fouke Fur Company's plant in St. Louis, Mo. It soon became economically impractical to care for skins that were unwanted for lack of a suitable processing method and a market for the finished fur. A new method of processing the skins of females by close shearing of fur and guard hair, eventually to be developed under the trade name of "Lakoda," overcame problems associated with staginess and scarring, but not in time to prevent the loss of several thousands of skins from harvested females. These animals were taken in order to comply with the mandate of herd reduction, but destroyed because a market had not yet been developed for them.

Managers devised many schemes during several years of the herd reduction program on both islands to prevent "commercialization" of unwanted female skins while at the same time completing the planned herd reduction. The actual take of older females in 1958 and 1959 was minimized to some extent by imposing an upper body length limit of 46 in (117 cm). Larger animals were to be taken in those years only as necessary to complete established quotas. In 1960, lack of males in expected numbers caused managers to discontinue harvesting females on purpose after mid-July except for 350 per day following cessation of male killing. During each of the next 3 years, from 1961 to 1963, it was decided to take as many females as possible by 20 August and complete the quota during an autumn kill to begin in late August or early September. Managers were to take or keep only those skins of females that had dark whiskers, a decision that essentially prevented the commercialization of all animals age 6 and

older (females through age 4 have black whiskers, age 5 a mixture of black and white, and age 6 and older, white). In 1961, the skins of females with dark whiskers were kept and those of females with white whiskers were discarded as unfit for processing. Managers altered their plans in 1962 to selectively kill for young females in July and August and for older females in September of that year to demonstrate an ability to take these animals by age. Most of the skins from the older females taken in 1962 were not processed. In 1963, the last of the herd reduction years, all except a few hundred of the skins taken were kept, regardless of age.

Females harvested from 1964 through 1968 were taken as the "surplus" needed to maintain herd size at the level achieved by 1963. During this period, an estimated 45,000 females were needed annually to replace natural deaths in the breeding stock. All above this number, usually between 9,000 and 18,000, were considered surplus. In 1964, most of the old females appearing in the drives were allowed to escape because the need to reduce the total number of females had ended. In general, only those females having black or a mixture of black and white whiskers were killed, which essentially restricted the kill of this sex in 1964 to those of ages 2-5 years. In 1965, the kill of females on St. Paul Island was characterized by a harvest selective for black or a mixture of black and white whiskers, whereas all available on St. George Island were taken, regardless of whisker color. In 1966, there was essentially no

commercial harvest of females; a few were taken for research and some were killed accidentally. In 1967 and 1968, females were again harvested as excess to the number needed to maintain the population at the level in existence at that time. All taken were harvested without regard for age or size, and the relative size of each rookery was used as a guide in killing most of the animals. A special effort was made not to exceed the quotas set for Reef and Polovina Rookeries on St. Paul Island and for Staraya Artil Rookery on St. George Island. Because of the extreme accessibility of females here, these areas were overharvested during the period of herd reduction. As a result, the fur seal populations on these rookeries are still relatively low compared to those of the other rookeries.

The following table summarizes information on annual quotas and on the source of females killed:

| <u>Year</u> | <u>Source</u> | <u>Quota</u> | <u>Remarks</u> |
|-------------|---|---------------|---|
| 1954 | Hauling ground | All available | For research |
| 1955 | Hauling ground | All available | For research |
| 1956 | Hauling ground Rookery fringe Rookery | 30,000 | Took all greater than 41 in (104 cm) |
| 1957 | Hauling ground | 50,000 | Took all greater than 41 in (104 cm) |
| 1958 | Hauling ground | 30,000 | Took all less than 46 in (117 cm) |
| 1959 | Hauling ground | 50,000 | Took all less than 46 in (117 cm) |
| 1960 | Hauling ground | 17,500 | Commercial harvest discontinued mid-July; research kills only after that date |

| <u>Year</u> | <u>Source</u> | <u>Quota</u> | <u>Remarks</u> |
|-------------|---|--------------|--|
| 1961 | Hauling ground Rookery fringe | 43,750 | Kept skins only from young, dark whiskered females |
| 1962 | Hauling ground Rookery fringe | 43,750 | Selective for young females July and August - most from hauling grounds; took older females in autumn from the rookery fringes and hauling grounds; kept females with dark whiskers only |
| 1963 | Hauling ground Rookery fringe | 43,750 | Kept all females except 976 |
| 1964 | Hauling ground Rookery fringe | 9,000-18,000 | Kept all females - Lakoda process becoming valuable |
| 1965 | Hauling ground | 9,000-18,000 | Kept all females except a few |
| 1966 | Hauling ground | None | A few taken for research |
| 1967 | St. Paul - hauling ground St. George - hauling ground and rookery fringe | 10,000 | Kept most females harvested |
| 1968 | Hauling ground | 13,000 | Kept most females harvested |

Explanation of Data Tables

Tables 62-73 which follow are basically the same as Tables 38-61 (male harvest by age). More age groups of females were harvested, and York and Hartley^{2/} evaluated the effects in terms of pup production. Our annual reports and the computer tapes from which Tables 62-73 were compiled contain more age detail than given here. The next-to-last column heading of 7+ means "over age 7 yr" or "age 8 yr and older," a convention adopted many years ago by NPFSC.

^{2/} York, A. E., and J. R. Hartley. 1980. The effect of a female fur seal harvest on pup production. Unpubl. Manuscr., 19 p. National Marine Mammal Laboratory, Northwest and Alaska Fisheries Center, National Marine Fisheries Service, NOAA, 7600 Sand Point Way N.E., Seattle, WA 98115.

TABLE 62A- DAILY AND CUMULATIVE COMMERCIAL KILL OF FEMALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1956.

| DATE | ROOK- ERY# | NUMBER KILLED | NO. IN TOOTH SAMPLE | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | | | CUM. KILL BY AREA ALL AGES | |
|------|---------------|------------------|------------------------------|-------------------|-------|---------------------|--------|--------|---|-----|-----|-----------------|-------|--------|--------|---------|----------|---------|----------------------------------|------|
| | | | | CUMUL. TO DATE | DAILY | ESTIMATED NUMBER | BY AGE | IN YRS | ESTIMATED NUMBER AND PERCENTAGE BY AGE IN YEARS | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | | | | |
| JUNE | 27 | NEP | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0(0) | 0(0) | 0(0) | 1(99) | 0(0) | 0(0) | 0(0) | 1 | |
| | 28 | TLK | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 1(50) | 0(0) | 0(0) | 0(0) | 1 | |
| | 29 | ZAP | 4 | 2 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0(0) | 0(0) | 0(0) | 1(25) | 1(25) | 0(0) | 1(25) | 2 | |
| | 30 | REF | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 1(25) | 1(25) | 0(0) | 1(25) | 0 | |
| JULY | 1 | POL | 187 | 183 | 107 | 0 | 0 | 5 | 44 | 62 | 33 | 38 | 0(0) | 0(0) | 5(3) | 45(24) | 63(34) | 33(18) | 40(21) | 183 |
| | 2 | NEP | 189 | 2 | 2 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0(0) | 0(0) | 5(3) | 46(24) | 64(34) | 33(17) | 40(21) | 3 |
| | 3 | TLK | 194 | 5 | 5 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0(0) | 0(0) | 6(3) | 47(24) | 85(34) | 34(18) | 41(21) | 8 |
| | 4 | ZAP | 195 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0(0) | 0(0) | 8(3) | 47(24) | 86(34) | 34(17) | 41(21) | 3 |
| | 5 | REF | 195 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 8(3) | 47(24) | 66(34) | 34(17) | 41(21) | 0 |
| | 6 | POL | 825 | 630 | 158 | 0 | 0 | 13 | 101 | 94 | 183 | 239 | 0(0)0 | 0(0)0 | 19(2)0 | 148(18) | 180(19)0 | 217(26) | 280(34) | 613 |
| | 7 | NEP | 841 | 16 | 16 | 0 | 0 | 0 | 7 | 8 | 1 | 0 | 0(0)0 | 0(0)0 | 19(2)0 | 155(18) | 168(20)0 | 218(26) | 280(33) | 19 |
| | 8 | TLK | 847 | 8 | 6 | 0 | 0 | 0 | 1 | 2 | 1 | 2 | 0(0) | 0(0) | 19(2) | 158(18) | 170(20) | 219(26) | 282(33) | 12 |
| | 9 | ZAP | 861 | 14 | 14 | 0 | 0 | 1 | 3 | 3 | 3 | 4 | 0(0) | 0(0)0 | 20(2)0 | 159(18) | 173(20) | 222(26) | 286(33) | 17 |
| | 10 | REF | 861 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0)0 | 20(2) | 159(18) | 173(20) | 222(26) | 286(33) | 0 |
| | 11 | POL | 865 | 4 | 3 | 0 | 0 | 1 | 2 | 1 | 0 | 0 | 0(0) | 0(0) | 21(2) | 161(19) | 174(20) | 222(26) | 286(33) | 817 |
| | 12 | NEP | 882 | 17 | 13 | 0 | 0 | 0 | 8 | 7 | 1 | 1 | 0(0) | 0(0) | 21(2) | 169(19) | 181(21) | 223(25) | 287(33) | 36 |
| | 13 | TLK | 886 | 4 | 4 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0(0) | 0(0) | 21(2) | 169(19) | 185(21) | 223(25) | 287(32) | 16 |
| | 14 | ZAPO | 918 | 32 | 28 | 0 | 0 | 1 | 6 | 12 | 4 | 9 | 0(0) | 0(0) | 22(2) | 175(19) | 197(21) | 227(25) | 296(32) | 49 |
| | 15 | REF | 919 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0(0) | 0(0)0 | 23(3) | 175(19) | 197(21) | 227(25) | 296(32) | 1 |
| | 16 | POL | 928 | 7 | 7 | 0 | 0 | 0 | 2 | 2 | 1 | 2 | 0(0)0 | 0(0)0 | 23(2) | 177(19) | 199(21) | 228(25) | 298(32) | 624 |
| | 17 | NEP | 943 | 17 | 17 | 0 | 0 | 0 | 5 | 8 | 20 | 4 | 0(0)0 | 0(0)0 | 23(2) | 182(19) | 205(22) | 230(24) | 302(32) | 53 |
| | 18 | TLK | 953 | 10 | 10 | 0 | 0 | 0 | 1 | 4 | 2 | 3 | 0(0)0 | 0(0)0 | 23(2) | 183(19) | 209(22) | 232(24) | 305(32) | 26 |
| | 19 | ZAP | 961 | 8 | 8 | 0 | 0 | 2 | 0 | 3 | 2 | 1 | 0(0) | 0(0) | 25(3) | 183(19) | 212(22) | 234(24) | 306(32) | 57 |
| | 20 | REF | 967 | 6 | 6 | 0 | 0 | 1 | 2 | 1 | 0 | 2 | 0(0) | 0(0) | 26(3) | 185(19) | 213(22) | 234(24) | 308(32) | 7 |
| | 21 | POL | 991 | 24 | 210 | 0 | 0 | 2 | 12 | 4 | 4 | 2 | 0(0) | 0(0) | 28(3) | 197(20) | 217(22) | 238(24) | 310(31) | 848 |
| | 22 | NEP | 1049 | 58 | 48 | 0 | 0 | 7 | 20 | 13 | 9 | 9 | 0(0)0 | 0(0) | 35(3) | 217(21) | 230(22) | 247(24) | 319(30) | 111 |
| | 23 | TLK | 1058 | 9 | 9 | 0 | 0 | 1 | 2 | 4 | 1 | 1 | 0(0) | 0(0)0 | 38(3) | 219(21) | 234(22) | 248(23) | 320(30) | 35 |
| | 24 | ZAP | 1148 | 90 | 83 | 0 | 0 | 7 | 18 | 9 | 110 | 45 | 0(0)0 | 0(0)0 | 43(4) | 237(21) | 243(21) | 259(23) | 385(32) | 147 |
| | 25 | REF | 1151 | 3 | 3 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0(0) | 0(0) | 43(4) | 238(21) | 243(21) | 259(23) | 386(32) | 10 |
| | 26 | POL | 1159 | 8 | 8 | 0 | 0 | 2 | 2 | 0 | 3 | 1 | 0(0) | 0(0) | 45(4) | 241(21) | 243(21) | 262(23) | 387(32) | 856 |
| | 27 | NEP | 1315 | 156 | 76 | 0 | 5 | 19 | 33 | 22 | 6 | 71 | 0(0) | 5(1) | 64(5) | 274(21) | 265(20) | 268(20) | 438(33) | 287 |
| | 28 | TLK | 1350 | 35 | 35 | 0 | 0 | 4 | 6 | 10 | 5 | 10 | 0(0) | 5(1) | 68(5) | 280(21) | 275(20) | 273(20) | 448(33) | 70 |
| | 29 | ZAP | 1486 | 136 | 820 | 0 | 3 | 7 | 14 | 26 | 5 | 81 | 0(0) | 8(1) | 75(5) | 294(20) | 301(20) | 278(19) | 529(36) | 283 |
| | 30 | REF | 1700 | 214 | 102 | 0 | 0 | 19 | 28 | 28 | 15 | 124 | 0(0) | 8(1) | 94(6) | 322(19) | 329(19) | 293(17) | 653(38) | 224 |
| | 31 | POL | 1746 | 46 | 43 | 0 | 2 | 13 | 10 | 6 | 1 | 14 | 0(0)0 | 10(1) | 107(6) | 332(19) | 335(19) | 294(17) | 667(38) | 902 |
| AUG | 1 | NEP | 2105 | 359 | 81 | 0 | 7 | 11 | 90 | 40 | 36 | 75 | 0(0)0 | 17(1) | 110 | 422(20) | 375(18) | 330(16) | 742(35) | 626 |
| | 2 | TLK | 2146 | 41 | 40 | 0 | 3 | 9 | 8 | 5 | 1 | 15 | 0(0) | 20(1) | 110 | 430(20) | 380(18) | 331(15) | 757(35) | 111 |
| | 3 | ZAP | 2638 | 492 | 96 | 0 | 5 | 44 | 54 | 89 | 39 | 261 | 0(0) | 25(1) | 110 | 484(18) | 469(18) | 370(14) | 1018(38) | 775 |
| | 4 | REF | 3575 | 937 | 115 | 0 | 19 | 94 | 159 | 150 | 28 | 487 | 0(0)0 | 44(1) | 110 | 643(18) | 619(17) | 398(11) | 1505(42) | 1161 |
| | 5 | POL | 3701 | 126 | 82 | 0 | 5 | 40 | 33 | 8 | 8 | 32 | 0(0)0 | 49(1) | 110 | 676(18) | 627(17) | 406(11) | 1537(42) | 1028 |
| | 6 | NEP | 4555 | 854 | 184 | 0 | 34 | 145 | 86 | 77 | 68 | 444 | 0(0)0 | 83(2) | 110 | 782(17) | 704(15) | 474(10) | 1981(43) | 1480 |
| | 7 | TLK | 5198 | 643 | 115 | 0 | 19 | 148 | 96 | 71 | 32 | 277 | 0(0)0 | 102(2) | 110 | 858(17) | 775(15) | 506(10) | 2258(43) | 754 |
| | 8 | ZAP | 6108 | 910 | 165 | 0 | 46 | 200 | 155 | 73 | 64 | 372 | 0(0)0 | 148(2) | 110 | 898(15) | 1013(17) | 570(9) | 2630(43) | 1685 |

TABLE 62A- DAILY AND CUMULATIVE COMMERCIAL KILL OF FEMALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1956---CONTINUED.

| DATE | ROOK-ERY# | NUMBER KILLED | NO. IN TOOTH SAMPLE | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | | | CUM. KILL BY AREA ALL AGES |
|------|-----------|---------------|---------------------|------------|----------------------|-----|------|-----|-----|-----|-----|---|---------|-----------|-----------|-----------|---------|----------|----------------------------|
| | | | | ESTIMATED | NUMBER BY AGE IN YRS | | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE IN YEARS | | | | | | | |
| | | TO DATE | | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | | |
| 9 | REF | 7015 | 907 | 111 | 0 | 54 | 136 | 118 | 163 | 27 | 409 | 0(0)A | 202(3) | 1034(15)A | 1131(16)A | 1011(14) | 597(9) | 3039(43) | 2068 |
| 10 | POL | 7714 | 699 | 137 | 0 | 77 | 189 | 98 | 91 | 49 | 195 | 0(0) | 279(4) | 1223(16) | 1229(16) | 1102(14)A | 646(8) | 3234(42) | 1727 |
| 11 | NEP | 10474 | 2760 | 232 | 0 | 276 | 828 | 552 | 221 | 221 | 662 | 0(0) | 555(5)A | 2051(20) | 1781(17) | 1323(13) | 867(8)A | 3896(37) | 4240 |
| 12 | TLK | 11254 | 780 | 131 | 0 | 78 | 179 | 140 | 86 | 62 | 235 | 0(0) | 633(6) | 2230(20) | 1921(17) | 1409(13) | 929(8)A | 4131(37) | 1534 |
| 13 | ZAP | 12453 | 1199 | 121 | 0 | 156 | 204 | 288 | 120 | 72 | 359 | 0(0) | 789(6) | 2434(20) | 2209(18) | 1529(12) | 1001(8) | 4490(36) | 2884 |
| 14 | REF | 15572 | 3119 | 199 | 0 | 468 | 873 | 530 | 249 | 218 | 781 | 0(0) | 1257(8) | 3307(21) | 2739(18) | 1778(11) | 1219(8) | 5271(34) | 5187 |
| 15 | POL | 18434 | 2862 | 278 | 0 | 344 | 1488 | 372 | 143 | 229 | 286 | 0(0)A | 1601(9) | 4795(26) | 3111(17) | 1921(10) | 1448(8) | 5557(30) | 4589A |

*POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; TZR=TOLOSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; ZAP=ZAPADNI I-ST. PAUL I. ONLY; A REF=REEF, GORBACH, AND ARDIGUON; L-K=LUKANIN, AND KITOVI; ZPG=ZAPADNI II-ST. GEORGE I.; NOR=NORTH; E-E=EAST REEF, AND EAST CLIFF; A STA=STARAYA ATRIL; TLK=TOLSTOI, LUKANIN, AND KITOVI; NEP=NORTHEAST POINT MORJOVI, AND VOSTOCHNI; LZP=LITTLE ZAPADNI, AND POLOVINA; A RLK=REEF, LUKANIN, AND KITOVI; COM=COMBINED ROOKERY; UNS=UNSPECIFIED; COMB 88=COMBINED KILL DATE

TABLE 62B- DAILY AND CUMULATIVE COMMERCIAL KILL OF FEMALE FUR SEALS BY AREA ON ST. GEORGE ISLAND, 1956.

| DATE | ROOK- ERY# | NUMBER KILLED | NO. IN TOOTH SAMPLE | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | | | | CUM. KILL BY AREA ALL AGES |
|------|---------------|---------------|------------------------------|-------------------|-------|---|----|----|----|----|----|-----------------|------|-------|---------|---------|---------|---------|----------|----------------------------------|
| | | | | CUMUL. TO DATE | DAILY | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | |
| JUNE | 27 | ZPG | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 1 | 1 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 1(50) | 1(50) | 2 | |
| | 28 | NOR | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 1(50) | 1(50) | 0 | |
| | 29 | E-E | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 1(50) | 1(50) | 0 | |
| | 30 | STA | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 1(50) | 1(50) | 0 | |
| JULY | 1 | NOR | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 1(50) | 1(50) | 0 | |
| | 2 | ZPG | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 1(50) | 1(50) | 2 | |
| | 3 | NOR | 231 | 229 | 33 | 0 | 0 | 14 | 27 | 21 | 64 | 103 | 0(0) | 0(0) | 14(6) | 27(12) | 21(9) | 65(28) | 104(45) | 229 |
| | 4 | E-E | 231 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 14(6) | 27(12) | 21(9) | 65(28) | 104(45) | 0 |
| | 5 | STA | 254 | 23 | 11 | 0 | 0 | 0 | 4 | 7 | 2 | 10 | 0(0) | 0(0) | 14(6) | 31(12) | 28(11) | 67(26) | 114(45) | 23 |
| | 6 | NOR | 255 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 15(6) | 31(12) | 28(11) | 67(26) | 114(45) | 230 |
| | 7 | ZPG | 256 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 16(6) | 31(12) | 28(11) | 67(26) | 114(45) | 3 |
| | 8 | NOR | 417 | 161 | 16 | 0 | 0 | 0 | 31 | 50 | 40 | 40 | 0(0) | 0(0) | 16(4) | 62(15) | 78(19) | 107(26) | 154(37) | 391 |
| | 9 | E-E | 417 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 16(4) | 62(15) | 78(19) | 107(26) | 154(37) | 0 |
| | 10 | STA | 418 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0(0) | 0(0) | 16(4) | 63(15) | 78(19) | 107(26) | 154(37) | 24 |
| | 11 | NOR | 423 | 5 | 5 | 0 | 0 | 0 | 1 | 2 | 1 | 1 | 0(0) | 0(0) | 16(4) | 64(15) | 80(19) | 108(26) | 155(37) | 396 |
| | 12 | ZPG | 425 | 2 | 2 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0(0) | 0(0) | 17(4) | 64(15) | 81(19) | 108(25) | 155(36) | 5 |
| | 13 | NOR | 426 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0(0) | 0(0) | 17(4) | 64(15) | 82(19) | 108(25) | 155(36) | 397 |
| | 14 | E-E | 435 | 9 | 9 | 0 | 0 | 0 | 2 | 3 | 0 | 4 | 0(0) | 0(0) | 17(4) | 66(15) | 85(20) | 108(25) | 159(37) | 9 |
| | 15 | STA | 436 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0(0) | 0(0) | 17(4) | 66(15) | 85(19) | 108(25) | 160(37) | 25 |
| | 16 | NOR | 637 | 201 | 22 | 0 | 0 | 10 | 36 | 55 | 18 | 82 | 0(0) | 0(0) | 27(4) | 102(16) | 140(22) | 126(20) | 242(38) | 598 |
| | 17 | ZPG | 638 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0(0) | 0(0) | 27(4) | 103(16) | 140(22) | 126(20) | 242(38) | 6 |
| | 18 | NOR | 642 | 4 | 4 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 0(0) | 0(0) | 27(4) | 103(16) | 141(22) | 127(20) | 244(38) | 602 |
| | 19 | E-E | 647 | 5 | 5 | 0 | 0 | 1 | 0 | 0 | 2 | 2 | 0(0) | 0(0) | 28(4) | 103(16) | 141(22) | 129(20) | 246(38) | 14 |
| | 20 | STA | 670 | 23 | 19 | 0 | 0 | 1 | 8 | 1 | 3 | 10 | 0(0) | 0(0) | 29(4) | 111(17) | 142(21) | 132(20) | 256(38) | 48 |
| | 21 | NOR | 671 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0(0) | 0(0) | 29(4) | 111(17) | 143(21) | 132(20) | 256(38) | 603 |
| | 22 | ZPG | 675 | 4 | 4 | 0 | 0 | 0 | 2 | 0 | 1 | 1 | 0(0) | 0(0) | 29(4) | 113(17) | 143(21) | 133(20) | 257(38) | 10 |
| | 23 | NOR | 677 | 2 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0(0) | 0(0) | 29(4) | 115(17) | 143(21) | 133(20) | 257(38) | 605 |
| | 24 | E-E | 694 | 17 | 17 | 0 | 0 | 3 | 5 | 1 | 2 | 6 | 0(0) | 0(0) | 32(5) | 120(17) | 144(21) | 135(19) | 263(38) | 31 |
| | 25 | STA | 695 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0(0) | 0(0) | 32(5) | 120(17) | 145(21) | 135(19) | 263(38) | 49 |
| | 26 | NOR | 708 | 13 | 9 | 0 | 0 | 1 | 0 | 1 | 3 | 8 | 0(0) | 0(0) | 33(5) | 120(17) | 146(21) | 138(19) | 271(38) | 618 |
| | 27 | ZPG | 769 | 61 | 22 | 0 | 0 | 0 | 6 | 0 | 8 | 47 | 0(0) | 0(0) | 33(4) | 126(16) | 146(19) | 146(19) | 318(41) | 71 |
| | 28 | NOR | 807 | 38 | 28 | 0 | 0 | 7 | 4 | 5 | 4 | 18 | 0(0) | 0(0) | 40(5) | 130(16) | 151(19) | 150(19) | 336(42) | 656 |
| | 29 | E-E | 880 | 73 | 30 | 0 | 0 | 0 | 10 | 10 | 2 | 51 | 0(0) | 0(0) | 40(5) | 140(16) | 161(18) | 152(17) | 387(44) | 104 |
| | 30 | STA | 989 | 109 | 26 | 0 | 0 | 13 | 9 | 4 | 13 | 70 | 0(0) | 0(0) | 53(5) | 149(15) | 165(17) | 165(17) | 457(46) | 158 |
| | 31 | NOR | 1158 | 169 | 28 | 0 | 0 | 0 | 19 | 24 | 0 | 126 | 0(0) | 0(0) | 53(5) | 168(15) | 189(16) | 165(14) | 583(50) | 825 |
| AUG | 1 | ZPG | 1238 | 80 | 25 | 0 | 0 | 6 | 10 | 10 | 3 | 51 | 0(0) | 0(0) | 59(5) | 178(14) | 199(16) | 168(14) | 634(51) | 151 |
| | 2 | NOR | 1265 | 27 | 26 | 0 | 0 | 7 | 5 | 1 | 2 | 12 | 0(0) | 0(0) | 66(5) | 183(14) | 200(16) | 170(13) | 646(51) | 852 |
| | 3 | E-E | 1413 | 148 | 53 | 0 | 0 | 12 | 6 | 19 | 6 | 105 | 0(0) | 0(0) | 78(6) | 189(13) | 219(15) | 176(12) | 751(53) | 252 |
| | 4 | STA | 1560 | 167 | 28 | 0 | 0 | 30 | 23 | 18 | 7 | 89 | 0(0) | 0(0) | 108(7) | 212(13) | 237(15) | 183(12) | 840(53) | 325 |
| | 5 | NOR | 1692 | 112 | 28 | 0 | 4 | 30 | 20 | 20 | 8 | 30 | 0(0) | 4(1) | 138(8) | 232(14) | 257(15) | 191(11) | 870(51) | 964 |
| | 6 | ZPG | 1742 | 50 | 19 | 0 | 2 | 0 | 8 | 11 | 5 | 24 | 0(0) | 6(1) | 138(8) | 240(14) | 268(15) | 196(11) | 894(51) | 201 |
| | 7 | NOR | 1961 | 219 | 30 | 0 | 9 | 50 | 50 | 22 | 0 | 89 | 0(0) | 15(1) | 188(10) | 290(15) | 290(15) | 196(10) | 982(50) | 1183 |
| | 8 | E-E | 2227 | 266 | 32 | 0 | 24 | 85 | 53 | 24 | 16 | 64 | 0(0) | 39(2) | 273(12) | 343(15) | 314(14) | 212(10) | 1046(47) | 518 |

TABLE 62B- DAILY AND CUMULATIVE COMMERCIAL KILL OF FEMALE FUR SEALS BY AREA ON ST. GEORGE ISLAND, 1956---CONTINUED.

| DATE | ROOK-ERY* | NUMBER KILLED | NO. IN TOOTH SAMPLE | DAILY KILL | | | | | | | CUMULATIVE KILL | | | | | | | CUM. KILL BY AREA ALL AGES |
|------|-----------|----------------|---------------------|------------------|---------------|-----|-----|----|----|-----|---|---------|---------|---------|---------|---------|----------|----------------------------|
| | | | | ESTIMATED NUMBER | BY AGE IN YRS | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE IN YEARS | | | | | | | |
| | | CUMUL. TO DATE | | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | |
| 9 | STA | 2277 | 50 26 | 0 | 2 | 17 | 15 | 2 | 2 | 12 | 0(0) | 41(2) | 290(13) | 358(16) | 316(14) | 214(9) | 1058(46) | 375 |
| 10 | NOR | 2468 | 191 31 | 0 | 11 | 33 | 58 | 11 | 11 | 67 | 0(0) | 52(2) | 323(13) | 416(17) | 327(13) | 225(9) | 1125(46) | 1374 |
| 11 | ZPG | 2645 | 177 30 | 0 | 5 | 35 | 35 | 18 | 5 | 79 | 0(0) | 57(2) | 358(14) | 451(17) | 345(13) | 230(9) | 1204(46) | 378 |
| 12 | NOR | 2853 | 208 22 | 0 | 0 | 75 | 27 | 19 | 10 | 77 | 0(0) | 57(2) | 433(15) | 478(17) | 364(13) | 240(8) | 1281(45) | 1582 |
| 13 | E-E | 3386 | 533 32 | 0 | 32 | 165 | 123 | 32 | 16 | 165 | 0(0) | 89(3) | 598(18) | 601(18) | 396(12) | 256(8) | 1446(43) | 1051 |
| 14 | STA | 3570 | 184 25 | 0 | 0 | 67 | 22 | 15 | 0 | 80 | 0(0) | 89(2) | 665(19) | 623(17) | 411(12) | 256(7) | 1526(43) | 559 |
| 15 | NOR | 4247 | 677 30 | 0 | 47 | 224 | 88 | 68 | 47 | 203 | 0(0) | 136(3) | 889(21) | 711(17) | 479(11) | 303(7) | 1729(41) | 2259 |

*POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; TZR=TOLOSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; ZAP=ZAPADNI I-ST. PAUL I. ONLY; REF=REEF, GORBACH, AND ARDIQUON; L-K=LUKANIN, AND KITOVI; ZPG=ZAPADNI II-ST. GEORGE I.; NOR=NORTH; E-E=EAST REEF, AND EAST CLIFF; STA=STARAYA ATRIL; TLK=TOLSTOI, LUKANIN, AND KITOVI; NEP=NORTHEAST POINT MORJOVI, AND VOSTOCHNI; LZP=LITTLE ZAPADNI, AND POLOVINA; RLK=REEF, LUKANIN, AND KITOVI; COM=COMBINED ROOKERY; UNS=UNSPECIFIED; COMB 88=COMBINED KILL DATE

TABLE 63A- DAILY AND CUMULATIVE COMMERCIAL KILL OF FEMALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1957.

| DATE | ROOK- ERY# | NUMBER KILLED NO. | | | DAILY KILL | | | | | | | CUMULATIVE KILL | | | | | | | CUM. KILL BY AREA ALL AGES | |
|------|---------------|-------------------|-------|-----------------|------------|---|----|-----|-----|-----|-----|-----------------|-----------|--------|----------|----------|----------|----------|----------------------------------|------|
| | | CUMUL. TO DATE | DAILY | TOOTH SAMPLE | ESTIMATED | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | ESTIMATED | 2 | 3 | 4 | 5 | 6 | | 7 |
| JUNE | 27 | NEP | 5 | 5 | 5 | 0 | 0 | 0 | 1 | 2 | 1 | 1 | 0(0) | 0(0) | 0(0) | 1(20) | 2(40) | 1(20) | 1(20) | 5 |
| | 28 | TLK | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 1(20) | 2(40) | 1(20) | 1(20) | 0 |
| | 29 | ZAP | 7 | 2 | 2 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0(0) | 0(0) | 0(0) | 2(29) | 3(43) | 1(14) | 1(14) | 2 |
| | 30 | REF | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 2(29) | 3(43) | 1(14) | 1(14) | 0 |
| JULY | 1 | POL | 162 | 155 | 104 | 0 | 0 | 3 | 31 | 36 | 34 | 51 | 0(0) | 0(0) | 3(2) | 33(20) | 39(24) | 35(22) | 52(32) | 155 |
| | 2 | NEP | 169 | 7 | 7 | 0 | 0 | 0 | 1 | 5 | 1 | 0 | 0(0) | 0(0) | 3(2) | 34(20) | 44(26) | 36(21) | 52(31) | 12 |
| | 3 | TLK | 172 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0(0) | 0(0) | 3(2) | 34(20) | 44(26) | 36(21) | 55(32) | 3 |
| | 4 | ZAP | 179 | 7 | 7 | 0 | 0 | 0 | 3 | 1 | 1 | 2 | 0(0) | 0(0) | 3(2) | 37(21) | 45(25) | 37(21) | 57(32) | 9 |
| | 5 | REF | 179 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 3(2) | 37(21) | 45(25) | 37(21) | 57(32) | 0 |
| | 6 | POL | 428 | 249 | 117 | 0 | 0 | 5 | 35 | 62 | 55 | 92 | 0(0) | 0(0) | 8(2) | 72(17) | 107(25) | 92(21) | 149(35) | 404 |
| | 7 | NEP | 441 | 13 | 12 | 0 | 0 | 0 | 4 | 6 | 0 | 3 | 0(0) | 0(0) | 8(2) | 76(17) | 113(26) | 92(21) | 152(34) | 25 |
| | 8 | TLK | 445 | 4 | 4 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 0(0) | 0(0) | 8(2) | 76(17) | 114(26) | 92(21) | 155(35) | 7 |
| | 9 | ZAP | 446 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0(0) | 0(0) | 8(2) | 76(17) | 114(26) | 92(21) | 156(35) | 10 |
| | 10 | REF | 446 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 8(2) | 76(17) | 114(26) | 92(21) | 156(35) | 0 |
| | 11 | POL | 1038 | 592 | 198 | 0 | 0 | 0 | 112 | 148 | 142 | 190 | 0(0) | 0(0) | 8(1) | 188(18) | 262(25) | 234(23) | 346(33) | 996 |
| | 12 | NEP | 1118 | 80 | 41 | 0 | 0 | 2 | 22 | 22 | 23 | 11 | 0(0) | 0(0) | 10(1) | 210(19) | 284(25) | 257(23) | 357(32) | 105 |
| | 13 | TLK | 1119 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0(0) | 0(0) | 10(1) | 211(19) | 284(25) | 257(23) | 357(32) | 8 |
| | 14 | ZAP | 1125 | 6 | 6 | 0 | 0 | 0 | 0 | 1 | 1 | 4 | 0(0) | 0(0) | 10(1) | 211(19) | 285(25) | 258(23) | 361(32) | 16 |
| | 15 | REF | 1125 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 10(1) | 211(19) | 285(25) | 258(23) | 361(32) | 0 |
| | 16 | POL | 1522 | 397 | 149 | 0 | 0 | 4 | 44 | 44 | 99 | 206 | 0(0) | 0(0) | 14(1) | 255(17) | 329(22) | 357(23) | 567(37) | 1393 |
| | 17 | NEP | 1628 | 106 | 92 | 0 | 0 | 0 | 13 | 42 | 34 | 17 | 0(0) | 0(0) | 14(1) | 268(16) | 371(23) | 391(24) | 584(36) | 211 |
| | 18 | TLK | 1665 | 37 | 32 | 0 | 0 | 1 | 7 | 5 | 5 | 19 | 0(0) | 0(0) | 15(1) | 275(17) | 376(23) | 396(24) | 603(36) | 45 |
| | 19 | ZAP | 1708 | 43 | 38 | 0 | 0 | 5 | 7 | 8 | 2 | 21 | 0(0) | 0(0) | 20(1) | 282(17) | 384(22) | 398(23) | 624(37) | 59 |
| | 20 | REF | 1709 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0(0) | 0(0) | 20(1) | 282(17) | 384(22) | 398(23) | 625(37) | 1 |
| | 21 | POL | 2042 | 333 | 178 | 0 | 0 | 10 | 70 | 77 | 63 | 113 | 0(0) | 0(0) | 30(1) | 352(17) | 461(23) | 461(23) | 738(36) | 1726 |
| | 22 | NEP | 2130 | 88 | 79 | 0 | 0 | 2 | 33 | 25 | 10 | 18 | 0(0) | 0(0) | 32(2) | 385(18) | 486(23) | 471(22) | 756(35) | 299 |
| | 23 | TLK | 2194 | 64 | 51 | 0 | 0 | 0 | 12 | 15 | 10 | 27 | 0(0) | 0(0) | 32(1) | 397(18) | 501(23) | 481(22) | 783(36) | 109 |
| | 24 | ZAP | 2250 | 56 | 54 | 0 | 1 | 4 | 5 | 11 | 6 | 29 | 0(0) | 1(1) | 36(2) | 402(18) | 512(23) | 487(22) | 812(36) | 115 |
| | 25 | REF | 2438 | 188 | 89 | 0 | 1 | 13 | 34 | 51 | 17 | 72 | 0(0) | 2(1) | 49(2) | 436(18) | 563(23) | 504(21) | 884(36) | 189 |
| | 26 | POL | 2882 | 444 | 180 | 0 | 0 | 13 | 120 | 102 | 88 | 121 | 0(0) | 2(1) | 62(2) | 556(19) | 665(23) | 592(21) | 1005(35) | 2170 |
| | 27 | NEP | 3044 | 162 | 119 | 0 | 4 | 14 | 50 | 23 | 15 | 56 | 0(0) | 6(1) | 76(2) | 606(20) | 688(23) | 607(20) | 1061(35) | 461 |
| | 28 | TLK | 3106 | 62 | 45 | 0 | 1 | 1 | 15 | 4 | 7 | 34 | 0(0) | 7(1) | 77(2) | 621(20) | 692(22) | 614(20) | 1095(35) | 171 |
| | 29 | ZAP | 3355 | 249 | 125 | 0 | 6 | 20 | 52 | 24 | 6 | 141 | 0(0) | 13(1) | 97(3) | 673(20) | 716(21) | 620(18) | 1236(37) | 364 |
| | 30 | REF | 3879 | 524 | 248 | 0 | 5 | 26 | 110 | 94 | 63 | 226 | 0(0) | 18(1) | 123(3) | 783(20) | 810(21) | 683(18) | 1462(38) | 713 |
| | 31 | POL | 4466 | 587 | 290 | 0 | 6 | 18 | 117 | 112 | 82 | 252 | 0(0) | 24(1) | 141(3) | 900(20) | 922(21) | 765(17) | 1714(38) | 2757 |
| AUG | 1 | NEP | 5077 | 611 | 161 | 0 | 6 | 61 | 135 | 104 | 73 | 232 | 0(0) | 30(1) | 202(4) | 1035(20) | 1026(20) | 838(17) | 1946(38) | 1072 |
| | 2 | TLK | 5396 | 319 | 108 | 0 | 0 | 22 | 45 | 57 | 21 | 174 | 0(0) | 30(1) | 224(4) | 1080(20) | 1083(20) | 859(16) | 2120(39) | 490 |
| | 3 | ZAP | 5811 | 415 | 113 | 0 | 15 | 37 | 62 | 37 | 37 | 223 | 0(0) | 45(1) | 261(4) | 1142(20) | 1120(19) | 896(15) | 2343(40) | 779 |
| | 4 | REF | 7745 | 1934 | 309 | 0 | 78 | 174 | 445 | 290 | 193 | 746 | 0(0) | 123(2) | 435(6) | 1587(20) | 1410(18) | 1089(14) | 3089(40) | 2647 |
| | 5 | POL | 9442 | 1697 | 300 | 0 | 34 | 119 | 356 | 237 | 85 | 866 | 0(0) | 157(2) | 554(6) | 1943(21) | 1647(17) | 1174(12) | 3955(42) | 4454 |
| | 6 | NEP | 12352 | 2910 | 398 | 0 | 87 | 349 | 699 | 378 | 233 | 1164 | 0(0) | 244(2) | 903(7) | 2642(21) | 2025(16) | 1407(11) | 5119(41) | 3982 |
| | 7 | TLK | 13179 | 827 | 148 | 0 | 6 | 106 | 212 | 106 | 55 | 336 | 0(0) | 250(2) | 1009(8) | 2854(22) | 2131(16) | 1462(11) | 5455(41) | 1317 |
| | 8 | ZAP | 13739 | 560 | 143 | 0 | 6 | 90 | 90 | 22 | 47 | 305 | 0(0) | 256(2) | 1099(8) | 2944(21) | 2153(16) | 1509(11) | 5760(42) | 1339 |
| | 9 | REF | 15315 | 1576 | 209 | 0 | 16 | 173 | 347 | 94 | 158 | 788 | 0(0) | 272(2) | 1272(8) | 3291(21) | 2247(15) | 1667(11) | 6548(43) | 4223 |
| | 10 | POL | 17420 | 2105 | 296 | 0 | 42 | 219 | 575 | 257 | 147 | 865 | 0(0) | 314(2) | 1491(9) | 3866(22) | 2504(14) | 1814(10) | 7413(43) | 6559 |
| | 11 | NEP | 20402 | 2982 | 332 | 0 | 45 | 298 | 674 | 394 | 242 | 1329 | 0(0) | 359(2) | 1789(9) | 4540(22) | 2898(14) | 2056(10) | 8742(43) | 6964 |
| | 12 | TLK | 22176 | 1774 | 202 | 0 | 71 | 289 | 429 | 124 | 142 | 719 | 0(0) | 430(2) | 2078(9) | 4969(22) | 3022(14) | 2198(10) | 9461(43) | 3091 |
| | 13 | ZAP | 24138 | 1962 | 220 | 0 | 98 | 257 | 412 | 249 | 151 | 795 | 0(0) | 528(2) | 2335(10) | 5381(22) | 3271(14) | 2349(10) | 10256(42) | 3301 |

TABLE 63A- DAILY AND CUMULATIVE COMMERCIAL KILL OF FEMALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1957---CONTINUED.

| DATE | ROOK- ERY* | NUMBER KILLED NO. | | | DAILY KILL | | | | | | | CUMULATIVE KILL | | | | | | | CUM. KILL BY AREA ALL AGES |
|------|---------------|-------------------|-------|-----------------------|---------------------|---------------|-----|-----|-----|-----|------|---|---------|----------|----------|----------|-----------|-----------|----------------------------------|
| | | CUMUL. TO DATE | DAILY | TOOTH IN SAMPLE | ESTIMATED NUMBER | BY AGE IN YRS | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE IN YEARS | | | | | | | |
| | | | | | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | |
| 14 | REF | 26629 | 2491 | 294 | 0 | 87 | 364 | 730 | 229 | 219 | 875 | 0(0)A | 595(2) | 2699(10) | 6111(23) | 3500(13) | 2568(10) | 11131(42) | 6714A |
| 15 | POL | 29145 | 2516 | 266 | 0 | 75 | 350 | 662 | 216 | 123 | 1070 | 0(0)A | 670(2) | 3049(10) | 6773(23) | 3716(13) | 2691(9) | 12201(42) | 9075A |
| 16 | NEP | 31853 | 2708 | 219 | 0 | 81 | 298 | 596 | 406 | 163 | 1164 | 0(0) | 751(2) | 3347(11) | 7369(23) | 4122(13) | 2854(9)A | 13365(42) | 9672 |
| 17 | TLK | 32837 | 984 | 112 | 0 | 30 | 187 | 266 | 128 | 78 | 295 | 0(0) | 781(2) | 3534(11) | 7635(23) | 4250(13) | 2932(9) | 13660(42) | 4075 |
| 18 | ZAP | 34238 | 1401 | 129 | 0 | 84 | 379 | 350 | 154 | 84 | 350 | 0(0)A | 865(3) | 3913(11) | 7985(23) | 4404(13) | 3016(9) | 14010(41) | 4702A |
| 19 | REF | 35787 | 1549 | 180 | 0 | 70 | 380 | 434 | 201 | 139 | 325 | 0(0) | 935(3) | 4293(12) | 8419(24) | 4605(13) | 3155(9)A | 14335(40) | 8263 |
| 20 | POL | 37554 | 1767 | 192 | 0 | 18 | 258 | 954 | 142 | 46 | 349 | 0(0) | 953(3) | 4551(12) | 9373(25) | 4747(13) | 3201(9)A | 14684(39) | 10842 |

*POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; TZR=TOLOSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; ZAP=ZAPADNI I-ST. PAUL I. ONLY;
 REF=REEF, GORBACH, AND ARDIGUON; L-K=LUKANIN, AND KITOVI; ZPG=ZAPADNI II-ST. GEORGE I.; NOR=NORTH; E-E=EAST REEF, AND EAST CLIFF;
 STA=STARAYA ATRIL; TLK=TOLSTOI, LUKANIN, AND KITOVI; NEP=NORTHEAST POINT MORJOVI, AND VOSTOCHNI; LZP=LITTLE ZAPADNI, AND POLOVINA;
 RLK=REEF, LUKANIN, AND KITOVI; COM=COMBINED ROOKERY; UNS=UNSPECIFIED; COMB 88=COMBINED KILL DATE

TABLE 63B- DAILY AND CUMULATIVE COMMERCIAL KILL OF FEMALE FUR SEALS BY AREA ON ST. GEORGE ISLAND, 1957.

| DATE | ROOKERY# | NUMBER KILLED | NO. IN SAMPLE | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | | | CUM. KILL BY AREA ALL AGES | | | | |
|------|----------|---------------|---------------|----------------|-------|-------|-----------|----------------------|-----|-----|----|-----------------|-------|---------|-----------|---------------------------------------|-----------|---------|----------------------------|-------|------|---|----|
| | | | | CUMUL. TO DATE | DAILY | TOOTH | ESTIMATED | NUMBER BY AGE IN YRS | | | | | | | ESTIMATED | NUMBER AND PERCENTAGE BY AGE IN YEARS | | | | | | | |
| | | | | | | | | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | | 2 | 3 | 4 | | 5 | 6 | 7 | 7+ |
| JULY | 10 | STA | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0(0) | 1(99) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 1 | | |
| | 11 | NOR | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 1(99) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0 | | |
| | 12 | ZPG | 3 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0(0) | 1(33) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 2(67) | 2 | | |
| | 13 | NOR | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 1(33) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 2(67) | 0 | | |
| | 14 | E-E | 7 | 4 | 4 | 0 | 0 | 0 | 1 | 0 | 2 | 0(0) | 1(14) | 0(0) | 1(14) | 0(0) | 1(14) | 0(0) | 1(14) | 4(57) | 4 | | |
| | 15 | STA | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 1(14) | 0(0) | 1(14) | 0(0) | 1(14) | 0(0) | 1(14) | 4(57) | 1 | | |
| | 16 | NOR | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 1(14) | 0(0) | 1(14) | 0(0) | 1(14) | 0(0) | 1(14) | 4(57) | 0 | | |
| | 17 | ZPG | 8 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0(0) | 1(13) | 0(0) | 1(13) | 0(0) | 1(13) | 0(0) | 1(13) | 5(63) | 3 | | |
| | 18 | NOR | 11 | 3 | 3 | 0 | 0 | 0 | 1 | 0 | 2 | 0(0) | 1(9) | 0(0) | 1(9) | 1(9) | 1(9) | 1(9) | 1(9) | 7(64) | 3 | | |
| | 19 | E-E | 18 | 7 | 7 | 0 | 0 | 0 | 1 | 0 | 4 | 2 | 0(0) | 1(6) | 0(0) | 2(11) | 1(6) | 5(28) | 9(50) | 11 | 11 | | |
| | 20 | STA | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 1(6) | 0(0) | 2(11) | 1(6) | 5(28) | 9(50) | 9(50) | 1 | 1 | | |
| | 21 | NOR | 24 | 6 | 6 | 0 | 0 | 1 | 3 | 0 | 0 | 2 | 0(0)1 | 1(4)1 | 1(4) | 5(21) | 1(4) | 5(21) | 11(46) | 9 | 9 | | |
| | 22 | ZPG | 27 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0(0) | 1(4) | 1(4) | 5(19) | 1(4) | 6(22) | 13(48) | 6 | 6 | | |
| | 23 | NOR | 30 | 3 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0(0) | 1(3) | 1(3) | 7(23) | 1(3) | 6(20) | 14(47) | 12 | 12 | | |
| | 24 | E-E | 36 | 6 | 6 | 0 | 0 | 1 | 1 | 0 | 1 | 3 | 0(0)1 | 1(3)1 | 2(6) | 8(22) | 1(3) | 7(19) | 17(47) | 17 | 17 | | |
| | 25 | STA | 36 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 1(3) | 2(6) | 8(22) | 1(3) | 7(19) | 17(47) | 1 | 1 | | |
| | 26 | NOR | 44 | 8 | 8 | 0 | 0 | 0 | 3 | 2 | 1 | 2 | 0(0) | 1(2) | 2(5) | 11(25) | 3(7) | 8(18) | 19(43) | 20 | 20 | | |
| | 27 | ZPG | 56 | 12 | 12 | 0 | 0 | 0 | 2 | 0 | 0 | 10 | 0(0) | 1(2) | 2(4) | 13(23) | 3(5) | 8(14) | 29(52) | 18 | 18 | | |
| | 28 | NOR | 65 | 9 | 8 | 0 | 0 | 0 | 0 | 4 | 0 | 5 | 0(0)1 | 1(2)1 | 2(3) | 13(20) | 7(11) | 8(12) | 34(52) | 29 | 29 | | |
| | 29 | E-E | 74 | 9 | 9 | 0 | 0 | 3 | 0 | 1 | 0 | 5 | 0(0)1 | 1(1) | 5(7) | 13(18) | 8(11) | 8(11) | 39(53) | 26 | 26 | | |
| | 30 | STA | 83 | 9 | 8 | 0 | 0 | 0 | 0 | 1 | 0 | 8 | 0(0) | 1(1) | 5(6) | 13(16) | 9(11) | 8(10) | 47(57) | 10 | 10 | | |
| | 31 | NOR | 108 | 25 | 20 | 0 | 0 | 5 | 11 | 4 | 1 | 4 | 0(0) | 1(1) | 10(9)1 | 24(22) | 13(12) | 9(8) | 51(47) | 54 | 54 | | |
| AUG | 1 | ZPG | 220 | 112 | 511 | 0 | 0 | 7 | 4 | 4 | 14 | 83 | 0(0) | 1(1) | 17(8) | 28(13) | 17(8) | 23(10) | 134(61) | 130 | 130 | | |
| | 2 | NOR | 294 | 74 | 29 | 0 | 0 | 16 | 21 | 12 | 2 | 23 | 0(0) | 1(1) | 33(11) | 49(17) | 29(10) | 25(9) | 157(53) | 128 | 128 | | |
| | 3 | E-E | 407 | 113 | 411 | 0 | 2 | 11 | 17 | 23 | 2 | 58 | 0(0) | 3(1) | 44(11) | 66(16) | 52(13) | 27(7) | 215(53) | 139 | 139 | | |
| | 4 | STA | 547 | 140 | 46 | 0 | 0 | 10 | 25 | 21 | 15 | 69 | 0(0) | 3(1) | 54(10) | 91(17) | 73(13) | 42(8) | 284(52) | 150 | 150 | | |
| | 5 | NOR | 1073 | 526 | 110 | 0 | 10 | 105 | 84 | 74 | 47 | 206 | 0(0) | 13(1) | 159(15) | 175(16)1 | 147(14) | 89(8) | 490(46) | 654 | 654 | | |
| | 6 | ZPG1 | 1308 | 235 | 120 | 0 | 7 | 42 | 42 | 28 | 17 | 99 | 0(0) | 20(2) | 201(15) | 217(17) | 175(13) | 106(8) | 589(45) | 365 | 365 | | |
| | 7 | NOR | 1860 | 552 | 126 | 0 | 6 | 72 | 105 | 88 | 61 | 220 | 0(0) | 26(1) | 273(15) | 322(17) | 263(14) | 167(9) | 809(43) | 1206 | 1206 | | |
| | 8 | E-E | 2201 | 341 | 75 | 0 | 17 | 65 | 99 | 58 | 27 | 75 | 0(0) | 43(2) | 338(15) | 421(19) | 321(15) | 194(9) | 884(40) | 480 | 480 | | |
| | 9 | STA1 | 2340 | 139 | 48 | 0 | 0 | 11 | 15 | 29 | 26 | 58 | 0(0) | 43(2) | 349(15) | 436(19) | 350(15) | 220(9) | 942(40) | 289 | 289 | | |
| | 10 | NOR | 2898 | 558 | 111 | 0 | 11 | 117 | 106 | 73 | 45 | 200 | 0(0) | 54(2) | 466(16) | 542(19) | 423(15) | 265(9) | 1142(39) | 1764 | 1764 | | |
| | 11 | ZPG | 3454 | 556 | 104 | 0 | 11 | 72 | 134 | 83 | 67 | 189 | 0(0) | 65(2) | 538(16)1 | 676(20) | 506(15) | 332(10) | 1331(39) | 921 | 921 | | |
| | 12 | NOR | 4547 | 1093 | 138 | 0 | 11 | 66 | 251 | 142 | 87 | 536 | 0(0) | 76(2) | 604(13)1 | 927(20) | 648(14) | 419(9) | 1867(41) | 2857 | 2857 | | |
| | 13 | E-E | 5151 | 604 | 125 | 0 | 6 | 55 | 169 | 139 | 48 | 187 | 0(0) | 82(2)1 | 659(13) | 1096(21)1 | 787(15) | 467(9) | 2054(40) | 1084 | 1084 | | |
| | 14 | STA | 5761 | 610 | 129 | 0 | 18 | 55 | 147 | 140 | 49 | 201 | 0(0)1 | 100(2)1 | 714(12) | 1243(22) | 927(16) | 516(9) | 2255(39) | 899 | 899 | | |
| | 15 | NOR | 6526 | 765 | 154 | 0 | 0 | 38 | 176 | 115 | 69 | 367 | 0(0)1 | 100(2)1 | 752(12) | 1419(22) | 1042(16) | 585(9) | 2622(40) | 3622 | 3622 | | |
| | 16 | ZPG | 7099 | 573 | 117 | 0 | 23 | 74 | 126 | 92 | 46 | 212 | 0(0) | 123(2) | 826(12) | 1545(22) | 1134(16) | 631(9) | 2834(40)1 | 1494 | 1494 | | |
| | 17 | NOR | 7840 | 741 | 66 | 0 | 0 | 44 | 134 | 148 | 44 | 371 | 0(0) | 123(2) | 870(11) | 1679(21) | 1282(16) | 675(9) | 3205(41) | 4363 | 4363 | | |
| | 18 | E-E | 8524 | 684 | 143 | 0 | 14 | 116 | 137 | 103 | 68 | 246 | 0(0)1 | 137(2) | 986(12) | 1816(21) | 1385(16) | 743(9) | 3451(40)1 | 1768 | 1768 | | |
| | 19 | STA | 9142 | 618 | 129 | 0 | 31 | 105 | 161 | 111 | 44 | 160 | 0(0) | 168(2) | 1091(12) | 1977(22) | 1496(16) | 787(9) | 3611(39) | 1517 | 1517 | | |
| | 20 | NOR | 9860 | 718 | 50 | 0 | 29 | 158 | 115 | 100 | 43 | 273 | 0(0)1 | 197(2) | 1249(13) | 2092(21) | 1596(16)1 | 830(8) | 3884(39) | 5081 | 5081 | | |
| COMB | 88 | COM | 9860 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 197(2) | 1249(13) | 2092(21) | 1596(16) | 830(8) | 3884(39) | 0 | 0 | | |

*POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; TZR=TOLOSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; ZAP=ZAPADNI I-ST. PAUL I. ONLY; 1 REF=REEF, GORBACH, AND ARDIGUON; L-K=LUKANIN, AND KITOVI; ZPG=ZAPADNI II-ST. GEORGE I.; NOR=NORTH; E-E=EAST REEF, AND EAST CLIFF; 1 STA=STARAYA ATRIL; TLK=TOLSTOI, LUKANIN, AND KITOVI; NEP=NORTHEAST POINT MORJOVI, AND VOSTOCHNI; LZP=LITTLE ZAPADNI, AND POLOVINA; 1 RLK=REEF, LUKANIN, AND KITOVI; COM=COMBINED ROOKERY; UNS=UNSPECIFIED; COMB 88=COMBINED KILL DATE

TABLE 64A- DAILY AND CUMULATIVE COMMERCIAL KILL OF FEMALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1958.

| DATE | ROOK-ERY* | NUMBER KILLED | NO. IN | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | | | CUM. KILL BY AREA ALL AGES |
|---------|-----------|---------------|--------|----------------|--------------------|-----|-----|-----|-----|-----|-----|-----------------|----------|----------|----------|----------|--------|--------|----------------------------|
| | | | | CUMUL. TO DATE | DAILY TOOTH SAMPLE | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | 2 | 3 | 4 | 5 | 6 | 7 | |
| JUNE 27 | NEP | 3 | 3 | 3 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0(0) | 0(0) | 0(0) | 1(33) | 2(67) | 0(0) | 0(0) | 3 |
| 28 | TLK | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 1(33) | 2(67) | 0(0) | 0(0) | 0 |
| 29 | ZAP | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0(0) | 0(0) | 0(0) | 1(25) | 2(50) | 0(0) | 1(25) | 1 |
| 30 | REF | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 1(25) | 2(50) | 0(0) | 1(25) | 0 |
| JULY 1 | POL | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 1(25) | 2(50) | 0(0) | 1(25) | 0 |
| 2 | NEP | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 1(25) | 2(50) | 0(0) | 1(25) | 0 |
| 3 | TLK | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0(0) | 0(0) | 0(0) | 1(20) | 3(60) | 0(0) | 1(20) | 1 |
| 4 | ZAP | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 1(20) | 3(60) | 0(0) | 1(20) | 0 |
| 5 | REF | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 1(20) | 3(60) | 0(0) | 1(20) | 0 |
| 6 | POL | 6 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 2(33) | 3(50) | 0(0) | 1(17) | 1 |
| 7 | NEP | 19 | 13 | 13 | 0 | 0 | 2 | 3 | 5 | 1 | 2 | 0(0) | 0(0) | 2(11) | 5(26) | 8(42) | 1(5) | 3(16) | 16 |
| 8 | TLK | 30 | 11 | 10 | 0 | 0 | 0 | 2 | 8 | 0 | 1 | 0(0) | 0(0) | 2(7) | 7(23) | 16(53) | 1(3) | 4(13) | 12 |
| 9 | ZAP | 32 | 2 | 2 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0(0) | 0(0) | 2(6) | 8(25) | 17(53) | 1(3) | 4(13) | 3 |
| 10 | REF | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 2(6) | 8(25) | 17(53) | 1(3) | 4(13) | 0 |
| 11 | POL | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 2(6) | 8(25) | 17(53) | 1(3) | 4(13) | 0 |
| 12 | NEP | 49 | 17 | 14 | 0 | 0 | 1 | 9 | 5 | 1 | 1 | 0(0) | 0(0) | 3(6) | 17(35) | 22(45) | 2(4) | 5(10) | 33 |
| 13 | TLK | 53 | 4 | 4 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 0(0) | 0(0) | 3(6) | 17(32) | 23(43) | 3(6) | 7(13) | 16 |
| 14 | ZAP | 63 | 10 | 7 | 0 | 0 | 1 | 6 | 1 | 1 | 1 | 0(0) | 0(0) | 4(6) | 23(37) | 24(38) | 4(6) | 8(13) | 13 |
| 15 | REF | 63 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 4(6) | 23(37) | 24(38) | 4(6) | 8(13) | 0 |
| 16 | POL | 65 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0(0) | 0(0) | 4(6) | 23(35) | 26(40) | 4(6) | 8(12) | 3 |
| 17 | NEP | 79 | 14 | 13 | 0 | 0 | 2 | 3 | 6 | 2 | 1 | 0(0) | 0(0) | 6(8) | 26(33) | 32(41) | 6(8) | 9(11) | 47 |
| 18 | TLK | 84 | 5 | 4 | 0 | 0 | 0 | 3 | 1 | 1 | 0 | 0(0) | 0(0) | 6(7) | 29(35) | 33(39) | 7(8) | 9(11) | 21 |
| 19 | ZAP | 106 | 22 | 1 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 6(6) | 51(48) | 33(31) | 7(7) | 9(8) | 35 |
| 20 | REF | 106 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 6(6) | 51(48) | 33(31) | 7(7) | 9(8) | 0 |
| 21 | POL | 109 | 3 | 3 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0(0) | 0(0) | 7(6) | 53(49) | 33(30) | 7(6) | 9(8) | 6 |
| 22 | NEP | 153 | 44 | 38 | 0 | 5 | 4 | 16 | 11 | 1 | 7 | 0(0) | 5(3) | 11(7) | 69(45) | 44(29) | 8(5) | 16(10) | 91 |
| 23 | TLK | 169 | 16 | 16 | 0 | 0 | 2 | 6 | 7 | 1 | 0 | 0(0) | 5(3) | 13(8) | 75(44) | 51(30) | 9(5) | 16(9) | 37 |
| 24 | ZAP | 196 | 27 | 25 | 0 | 1 | 16 | 3 | 6 | 1 | 0 | 0(0) | 6(3) | 29(15) | 78(40) | 57(29) | 10(5) | 16(8) | 62 |
| 25 | REF | 197 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0(0) | 6(3) | 30(15) | 78(40) | 57(29) | 10(5) | 16(8) | 1 |
| 26 | POL | 205 | 8 | 8 | 0 | 0 | 3 | 1 | 2 | 0 | 2 | 0(0) | 6(3) | 33(16) | 79(39) | 59(29) | 10(5) | 18(9) | 14 |
| 27 | NEP | 336 | 131 | 113 | 0 | 8 | 43 | 31 | 28 | 8 | 13 | 0(0) | 14(4) | 76(23) | 110(33) | 87(26) | 18(5) | 31(9) | 222 |
| 28 | TLK | 399 | 63 | 55 | 0 | 0 | 17 | 13 | 17 | 9 | 7 | 0(0) | 14(4) | 93(23) | 123(31) | 104(26) | 27(7) | 38(10) | 100 |
| 29 | ZAP | 495 | 96 | 84 | 0 | 29 | 26 | 18 | 11 | 1 | 11 | 0(0) | 43(9) | 119(24) | 141(28) | 115(23) | 28(6) | 49(10) | 158 |
| 30 | REF | 556 | 61 | 36 | 0 | 4 | 20 | 20 | 4 | 4 | 9 | 0(0) | 47(8) | 139(25) | 161(29) | 119(21) | 32(6) | 58(10) | 62 |
| 31 | POL | 639 | 83 | 62 | 0 | 4 | 42 | 22 | 9 | 2 | 4 | 0(0) | 51(8) | 181(28) | 183(29) | 128(20) | 34(5) | 62(10) | 97 |
| AUG 1 | NEP | 726 | 87 | 23 | 0 | 11 | 31 | 19 | 11 | 11 | 4 | 0(0) | 62(9) | 212(29) | 202(28) | 139(19) | 45(6) | 66(9) | 309 |
| 2 | TLK | 890 | 164 | 30 | 0 | 12 | 49 | 28 | 49 | 16 | 10 | 0(0) | 74(8) | 261(29) | 230(26) | 188(21) | 61(7) | 76(9) | 264 |
| 3 | ZAP | 1197 | 307 | 69 | 0 | 61 | 114 | 55 | 49 | 19 | 9 | 0(0) | 135(11) | 375(31) | 285(24) | 237(20) | 80(7) | 85(7) | 465 |
| 4 | REF | 1515 | 318 | 68 | 0 | 67 | 86 | 76 | 51 | 22 | 16 | 0(0) | 202(13) | 461(30) | 361(24) | 288(19) | 102(7) | 101(7) | 380 |
| 5 | POL | 2664 | 1149 | 189 | 0 | 241 | 356 | 172 | 218 | 81 | 81 | 0(0) | 443(17) | 817(31) | 533(20) | 506(19) | 183(7) | 182(7) | 1246 |
| 6 | NEP | 3969 | 1305 | 159 | 13 | 392 | 509 | 183 | 117 | 26 | 65 | 13(1) | 835(21) | 1326(33) | 716(18) | 623(16) | 209(5) | 247(6) | 1614 |
| 7 | TLK | 4365 | 396 | 87 | 0 | 48 | 150 | 95 | 67 | 24 | 12 | 13(1) | 883(20) | 1476(34) | 811(19) | 690(16) | 233(5) | 259(6) | 660 |
| 8 | ZAP | 6080 | 1715 | 231 | 17 | 412 | 566 | 275 | 189 | 120 | 136 | 30(1) | 1295(21) | 2042(34) | 1086(18) | 879(14) | 353(6) | 395(6) | 2180 |
| 9 | REF | 7500 | 1420 | 216 | 14 | 511 | 511 | 171 | 114 | 43 | 56 | 44(1) | 1806(24) | 2553(34) | 1257(17) | 993(13) | 396(5) | 451(6) | 1800 |
| 10 | POL | 9335 | 1835 | 233 | 18 | 716 | 367 | 220 | 312 | 18 | 184 | 62(1) | 2522(27) | 2920(31) | 1477(16) | 1305(14) | 414(4) | 635(7) | 3081 |
| 11 | NEP | 10702 | 1367 | 235 | 27 | 643 | 384 | 137 | 137 | 0 | 39 | 89(1) | 3165(30) | 3304(31) | 1614(15) | 1442(13) | 414(4) | 674(6) | 2981 |
| 12 | TLK | 11496 | 794 | 164 | 16 | 341 | 246 | 127 | 40 | 8 | 16 | 105(1) | 3506(30) | 3550(31) | 1741(15) | 1482(13) | 422(4) | 690(6) | 1454 |
| 13 | ZAP | 13202 | 1706 | 235 | 17 | 870 | 546 | 119 | 86 | 17 | 51 | 122(1) | 4376(33) | 4096(31) | 1860(14) | 1568(12) | 439(3) | 741(6) | 3886 |

TABLE 64A- DAILY AND CUMULATIVE COMMERCIAL KILL OF FEMALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1958---CONTINUED.

| DATE | ROOK- ERY# | NUMBER KILLED | NO. IN | DAILY KILL | | | | | | | | | CUMULATIVE KILL | | | | | | | CUM. KILL BY AREA ALL AGES |
|------|---------------|------------------|-----------|-------------------|--------------------------|--------------------------------|-----|-----|-----|----|-----|--------|-----------------|----------|---|----------|--------|---------|------|----------------------------------|
| | | | | CUMUL. TO DATE | DAILY TOOTH SAMPLE | ESTIMATED NUMBER BY AGE IN YRS | | | | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE IN YEARS | | | | | |
| | | | | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | | | |
| 14 | REF | 14286 | 1084 | 202 | 11 | 639 | 238 | 76 | 76 | 11 | 33 | 133(1) | 5015(35) | 4334(30) | 1936(14) | 1644(12) | 450(3) | 774(5) | 2884 | |
| 15 | POL | 16084 | 1798 | 235 | 54 | 1043 | 287 | 162 | 108 | 54 | 90 | 187(1) | 6058(38) | 4621(29) | 2098(13) | 1752(11) | 504(3) | 864(5) | 4879 | |
| 16 | NEP | 18071 | 1987 | 273 | 80 | 1152 | 437 | 159 | 99 | 20 | 40 | 287(1) | 7210(40) | 5058(28) | 2257(12) | 1851(10) | 524(3) | 904(5) | 4968 | |
| 17 | TLK | 18917 | 846 | 1482 | 26 | 347 | 288 | 119 | 42 | 0 | 24 | 293(2) | 7557(40) | 5346(28) | 2376(13) | 1893(10) | 524(3) | 928(5) | 2300 | |
| 18 | ZAP | 21151 | 2234 | 287 | 90 | 1073 | 715 | 179 | 67 | 22 | 88 | 383(2) | 8630(41) | 6061(29) | 2555(12) | 1960(9) | 546(3) | 1016(5) | 6120 | |
| 19 | REF | 22023 | 872 | 156 | 17 | 358 | 288 | 87 | 78 | 26 | 18 | 400(2) | 8988(41) | 6349(29) | 2642(12) | 2038(9) | 572(3) | 1034(5) | 3756 | |
| 20 | POL | 23858 | 1935 | 254 | 77 | 774 | 387 | 77 | 349 | 77 | 194 | 477(2) | 9762(41) | 6736(28) | 2719(11) | 2387(10) | 649(3) | 1228(5) | 6814 | |

*POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; TZR=TOLOSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; ZAP=ZAPADNI I-ST. PAUL I. ONLY; 2
 REF=REEF, GORBACH, AND ARDIGUON; L-K=LUKANIN, AND KITOVI; ZPG=ZAPADNI II-ST. GEORGE I.; NOR=NORTH; E-E=EAST REEF, AND EAST CLIFF; 2
 STA=STARAYA ATRIL; TLK=TOLSTOI, LUKANIN, AND KITOVI; NEP=NORTHEAST POINT MORJOVI, AND VOSTOCHNI; LZP=LITTLE ZAPADNI, AND POLOVINA; 2
 RLK=REEF, LUKANIN, AND KITOVI; COM=COMBINED ROOKERY; UNS=UNSPECIFIED; COMB 88=COMBINED KILL DATE 2

TABLE 648- DAILY AND CUMULATIVE COMMERCIAL KILL OF FEMALE FUR SEALS BY AREA ON ST. GEORGE ISLAND, 1958.

| DATE | ROOKERY* | NUMBER KILLED | NO. IN SAMPLE | DAILY KILL | | | | | | | CUMULATIVE KILL | | | | | | | CUM. KILL BY AREA ALL AGES | | |
|---------|----------|---------------|---------------|--------------------------|-------|--------------------------------|-----|-----|----|----|-----------------|----------|---|----------|----------|---------|----------|----------------------------|---|----|
| | | | | ESTIMATED CUMUL. TO DATE | DAILY | ESTIMATED NUMBER BY AGE IN YRS | | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE IN YEARS | | | | | | | |
| | | | | | | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | 2 | 3 | 4 | 5 | 6 | | 7 | 7+ |
| JUNE 27 | ZPG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | | |
| 28 | NOR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | | |
| 29 | E-E | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | | |
| 30 | STA | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0(0) | 0(0) | 0(0) | 1(99) | 0(0) | 0(0) | 0(0) | 1 | | |
| JULY 1 | NOR | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 1(99) | 0(0) | 0(0) | 0(0) | 0 | | |
| 12 | ZPG | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 1(99) | 0(0) | 0(0) | 0(0) | 0 | | |
| 13 | NOR | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 1(99)0 | 0(0)0 | 0(0) | 0(0) | 0 | | |
| 14 | E-E | 9 | 8 | 8 | 0 | 0 | 3 | 0 | 3 | 1 | 0(0) | 0(0)0 | 3(33) | 1(11) | 3(33) | 1(11) | 1(11) | 8 | | |
| 15 | STA | 10 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0)0 | 0(0)0 | 3(30) | 1(10) | 3(30) | 1(10) | 2(20) | 2 | | |
| 16 | NOR | 11 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0(0) | 0(0) | 4(36) | 1(9) | 3(27) | 1(9) | 2(18) | 1 | | |
| 17 | ZPG | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 4(36) | 1(9) | 3(27) | 1(9) | 2(18) | 0 | | |
| 18 | NOR | 12 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0(0)0 | 0(0)0 | 5(42) | 1(8) | 3(25) | 1(8) | 2(17) | 2 | | |
| 19 | E-E | 17 | 5 | 5 | 0 | 0 | 0 | 2 | 2 | 0 | 0(0)0 | 0(0)0 | 5(29) | 3(18) | 5(29) | 1(6) | 3(18) | 13 | | |
| 20 | STA | 18 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0(0) | 0(0)0 | 5(28) | 3(17) | 6(33) | 1(6) | 3(17) | 3 | | |
| 21 | NOR | 24 | 6 | 6 | 0 | 0 | 1 | 0 | 1 | 1 | 0(0) | 0(0) | 6(25) | 3(13) | 7(29) | 2(8) | 6(25) | 8 | | |
| 22 | ZPG | 27 | 3 | 3 | 0 | 1 | 0 | 1 | 0 | 1 | 0(0) | 1(4) | 6(22) | 4(15) | 7(26) | 3(11) | 6(22) | 3 | | |
| 23 | NOR | 32 | 5 | 5 | 0 | 0 | 0 | 0 | 1 | 0 | 0(0)0 | 1(3)0 | 6(19) | 4(13) | 8(25) | 3(9) | 10(31) | 13 | | |
| 24 | E-E0 | 52 | 20 | 19 | 0 | 0 | 4 | 4 | 2 | 2 | 0(0) | 1(2)0 | 10(19) | 8(15) | 10(19) | 5(10) | 18(35) | 33 | | |
| 25 | STA | 55 | 3 | 3 | 0 | 0 | 1 | 1 | 0 | 0 | 0(0)0 | 1(2)0 | 11(20) | 9(16) | 10(18) | 5(9) | 19(35) | 6 | | |
| 26 | NOR | 77 | 22 | 22 | 0 | 1 | 4 | 3 | 3 | 3 | 0(0) | 2(3) | 15(19) | 12(16) | 13(17) | 8(10) | 27(35) | 35 | | |
| 27 | ZPG | 108 | 31 | 29 | 0 | 0 | 1 | 2 | 2 | 6 | 0(0) | 2(2) | 16(15) | 14(13) | 15(14) | 14(13) | 47(44) | 34 | | |
| 28 | NOR | 243 | 135 | 57 | 0 | 3 | 14 | 19 | 34 | 12 | 0(0) | 5(2) | 30(12) | 33(14) | 49(20) | 26(11) | 100(41) | 170 | | |
| 29 | E-E | 382 | 139 | 82 | 0 | 7 | 15 | 31 | 22 | 24 | 0(0)0 | 12(3) | 45(12) | 64(17) | 71(19) | 50(13) | 140(37) | 172 | | |
| 30 | STA | 467 | 85 | 36 | 0 | 3 | 16 | 14 | 19 | 9 | 0(0) | 15(3) | 61(13) | 78(17) | 90(19) | 59(13) | 164(35) | 91 | | |
| 31 | NOR | 607 | 140 | 60 | 0 | 13 | 35 | 25 | 25 | 17 | 0(0)0 | 28(5)0 | 96(16) | 103(17) | 115(19) | 76(13) | 189(31) | 310 | | |
| AUG 1 | ZPG | 688 | 91 | 25 | 0 | 4 | 22 | 14 | 7 | 7 | 0(0) | 32(5) | 118(17) | 117(17) | 122(17) | 83(12) | 226(32) | 125 | | |
| 2 | NOR | 952 | 254 | 58 | 0 | 61 | 58 | 43 | 41 | 25 | 0(0)0 | 93(10)0 | 176(18) | 160(17) | 163(17) | 108(11) | 252(26) | 564 | | |
| 3 | E-E | 1044 | 92 | 65 | 2 | 11 | 16 | 20 | 16 | 14 | 2(1) | 104(10) | 192(18) | 180(17) | 179(17) | 122(12) | 265(25) | 264 | | |
| 4 | STA | 1357 | 313 | 74 | 0 | 34 | 88 | 63 | 37 | 38 | 2(1)0 | 138(10)0 | 280(21) | 243(18) | 216(16) | 160(12) | 318(23) | 404 | | |
| 5 | NOR | 1930 | 573 | 138 | 0 | 63 | 126 | 115 | 86 | 52 | 2(1) | 201(10) | 406(21) | 358(19) | 302(16) | 212(11) | 449(23) | 1137 | | |
| 6 | ZPG | 2037 | 107 | 28 | 0 | 15 | 19 | 7 | 13 | 7 | 2(1)0 | 216(11)0 | 425(21) | 365(18) | 315(15) | 219(11) | 495(24) | 232 | | |
| 7 | NOR | 2325 | 288 | 73 | 0 | 43 | 55 | 63 | 31 | 49 | 2(1) | 259(11) | 480(21) | 428(18) | 346(15) | 268(12) | 542(23) | 1425 | | |
| 8 | E-E | 2556 | 231 | 57 | 0 | 28 | 42 | 48 | 48 | 28 | 2(1) | 287(11) | 522(20) | 476(19) | 394(15) | 296(12) | 579(23) | 495 | | |
| 9 | STA | 3056 | 500 | 118 | 0 | 115 | 145 | 70 | 65 | 30 | 2(1) | 402(13) | 667(22) | 546(18) | 459(15) | 326(11) | 654(21) | 904 | | |
| 10 | NOR | 3419 | 363 | 82 | 7 | 109 | 65 | 65 | 55 | 15 | 9(1) | 511(15) | 732(21) | 611(18) | 514(15) | 341(10) | 701(21) | 1788 | | |
| 11 | ZPG | 3788 | 369 | 83 | 4 | 89 | 103 | 55 | 44 | 40 | 13(1) | 600(16) | 835(22) | 666(18) | 558(15) | 381(10) | 735(19) | 601 | | |
| 12 | NOR | 4319 | 531 | 122 | 11 | 159 | 101 | 90 | 64 | 37 | 24(1) | 759(18) | 936(22) | 756(18) | 622(14) | 418(10) | 804(19) | 2319 | | |
| 13 | E-E0 | 4747 | 428 | 99 | 9 | 1970 | 94 | 51 | 38 | 17 | 33(1) | 956(20) | 1030(22) | 807(17) | 660(14) | 435(9) | 826(17) | 923 | | |
| 14 | STA | 5193 | 446 | 120 | 18 | 125 | 147 | 58 | 41 | 13 | 51(1) | 1081(21) | 1177(23) | 865(17) | 701(13)0 | 448(9) | 870(17) | 1350 | | |
| 15 | NOR | 5420 | 227 | 50 | 5 | 77 | 27 | 68 | 23 | 18 | 56(1) | 1158(21) | 1204(22) | 933(17) | 724(13) | 466(9) | 879(16) | 2546 | | |
| 16 | ZPG | 5913 | 493 | 104 | 15 | 123 | 158 | 104 | 34 | 20 | 71(1) | 1281(22) | 1362(23) | 1037(18) | 758(13) | 466(8) | 918(16) | 1094 | | |
| 17 | NOR | 6260 | 347 | 83 | 3 | 122 | 95 | 59 | 17 | 14 | 74(1) | 1403(22) | 1457(23) | 1096(18) | 775(12) | 500(8) | 955(15) | 2893 | | |
| 18 | E-E | 6589 | 329 | 78 | 13 | 86 | 73 | 79 | 30 | 26 | 87(1) | 1489(23) | 1530(23) | 1175(18) | 805(12) | 526(8) | 977(15) | 1252 | | |
| 19 | STA | 6841 | 252 | 57 | 8 | 66 | 75 | 22 | 40 | 13 | 95(1) | 1555(23) | 1605(23) | 1197(17) | 845(12) | 539(8) | 1005(15) | 1602 | | |
| 20 | NOR | 7144 | 303 | 68 | 0 | 76 | 79 | 45 | 55 | 12 | 95(1) | 1631(23) | 1684(24) | 1242(17) | 900(13) | 551(8) | 1041(15) | 3196 | | |
| COMB 88 | COM | 7144 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 95(1) | 1631(23) | 1684(24) | 1242(17) | 900(13) | 551(8) | 1041(15) | 0 | | |

*POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; TZR=TOLOSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; ZAP=ZAPADNI I-ST. PAUL I. ONLY; 0 REF=REEF, GORBACH, AND ARDIGUON; L-K=LUKANIN, AND KITOVI; ZPG=ZAPADNI II-ST. GEORGE I.; NOR=NORTH; E-E=EAST REEF, AND EAST CLIFF; 0 STA=STARAYA ATRIL; TLK=TOLSTOI, LUKANIN, AND KITOVI; NEP=NORTHEAST POINT MORJOVI, AND VOSTOCHNI; LZP=LITTLE ZAPADNI, AND POLOVINA; 0 RLK=REEF, LUKANIN, AND KITOVI; COM=COMBINED ROOKERY; UNS=UNSPECIFIED; COMB 88=COMBINED KILL DATE

TABLE 65A- DAILY AND CUMULATIVE COMMERCIAL KILL OF FEMALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1959.

| DATE | ROOK- ERY# | NUMBER KILLED NO. | | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | | | CUM. KILL BY AREA ALL AGES | |
|------|---------------|-------------------|-----------------|-------------|--------------------------------|----|-----|-----|-----|-----|-----|-----------------|---|--------|----------|----------|----------|----------|----------------------------------|------|
| | | CUMUL. TO DATE | DAILY SAMPLE | TOOTH IN | ESTIMATED NUMBER BY AGE IN YRS | | | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE IN YEARS | | | | | | | |
| | | | | | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | | |
| JUNE | 27 | NEP | 9 | 9 | 9 | 0 | 0 | 1 | 2 | 3 | 3 | 0 | 0(0) | 0(0) | 1(11) | 2(22) | 3(33) | 3(33) | 0(0) | 9 |
| | 28 | TLK | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 1(11) | 2(22) | 3(33) | 3(33) | 0(0) | 0 |
| | 29 | ZAP | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 1(11) | 2(22) | 3(33) | 3(33) | 0(0) | 0 |
| | 30 | REF | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 1(11) | 2(22) | 3(33) | 3(33) | 0(0) | 0 |
| JULY | 1 | POL | 10 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0(0) | 0(0) | 1(10) | 2(20) | 3(30) | 4(40) | 0(0) | 1 |
| | 2 | NEP | 15 | 5 | 5 | 0 | 0 | 0 | 1 | 0 | 3 | 1 | 0(0) | 0(0) | 1(7) | 3(20) | 3(20) | 7(47) | 1(7) | 14 |
| | 3 | TLK | 19 | 4 | 4 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 0(0) | 0(0) | 1(5) | 3(16) | 5(26) | 8(42) | 2(11) | 4 |
| | 4 | ZAP | 23 | 4 | 4 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0(0) | 0(0) | 2(9) | 4(17) | 6(26) | 9(39) | 2(9) | 4 |
| | 5 | REF | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 2(9) | 4(17) | 6(26) | 9(39) | 2(9) | 0 |
| | 6 | POL | 27 | 4 | 4 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 0(0) | 0(0) | 2(7) | 4(15) | 7(26) | 10(37) | 4(15) | 5 |
| | 7 | NEP | 35 | 8 | 8 | 0 | 0 | 2 | 1 | 1 | 1 | 3 | 0(0) | 0(0) | 4(11) | 5(14) | 8(23) | 11(31) | 7(20) | 22 |
| | 8 | TLK | 37 | 2 | 2 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0(0) | 0(0) | 4(11) | 6(16) | 9(24) | 11(30) | 7(19) | 6 |
| | 9 | ZAP | 39 | 2 | 2 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0(0) | 0(0) | 4(10) | 8(15) | 10(26) | 12(31) | 7(18) | 6 |
| | 10 | REF | 40 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0(0) | 0(0) | 4(10) | 6(15) | 10(25) | 13(32) | 7(18) | 1 |
| | 11 | POL | 44 | 4 | 3 | 0 | 0 | 0 | 1 | 1 | 2 | 0 | 0(0) | 0(0) | 4(9) | 7(16) | 11(25) | 15(34) | 7(16) | 9 |
| | 12 | NEP | 57 | 13 | 13 | 0 | 0 | 0 | 4 | 5 | 1 | 3 | 0(0) | 0(0) | 4(7) | 11(19) | 16(28) | 16(28) | 10(18) | 35 |
| | 13 | TLK | 59 | 2 | 2 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0(0) | 0(0) | 4(7) | 12(20) | 16(27) | 17(29) | 10(17) | 8 |
| | 14 | ZAP | 77 | 18 | 18 | 0 | 0 | 2 | 1 | 5 | 3 | 7 | 0(0) | 0(0) | 6(8) | 13(17) | 21(27) | 20(26) | 17(22) | 24 |
| | 15 | REF | 77 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 6(8) | 13(17) | 21(27) | 20(26) | 17(22) | 1 |
| | 16 | POL | 92 | 15 | 0 | 0 | 0 | 2 | 1 | 4 | 2 | 6 | 0(0) | 0(0) | 8(9) | 14(15) | 25(27) | 22(24) | 23(25) | 24 |
| | 17 | NEP | 109 | 17 | 14 | 0 | 0 | 1 | 1 | 3 | 2 | 10 | 0(0) | 0(0) | 9(8) | 15(14) | 28(26) | 24(22) | 33(30) | 52 |
| | 18 | TLK | 123 | 14 | 14 | 0 | 0 | 0 | 2 | 2 | 3 | 7 | 0(0) | 0(0) | 9(7) | 17(14) | 30(24) | 27(22) | 40(33) | 22 |
| | 19 | ZAP | 170 | 47 | 44 | 0 | 0 | 0 | 7 | 9 | 4 | 27 | 0(0) | 0(0) | 9(5) | 24(14) | 39(23) | 31(18) | 67(39) | 71 |
| | 20 | REF | 172 | 2 | 2 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0(0) | 0(0) | 9(5) | 25(15) | 39(23) | 32(19) | 67(39) | 3 |
| | 21 | POL | 180 | 8 | 8 | 0 | 0 | 1 | 1 | 3 | 1 | 2 | 0(0) | 0(0) | 10(6) | 26(14) | 42(23) | 33(18) | 69(38) | 32 |
| | 22 | NEP | 214 | 34 | 28 | 0 | 0 | 1 | 8 | 10 | 6 | 9 | 0(0) | 0(0) | 11(5) | 34(16) | 52(24) | 39(18) | 78(36) | 86 |
| | 23 | TLK | 226 | 12 | 12 | 0 | 0 | 1 | 3 | 2 | 2 | 4 | 0(0) | 0(0) | 12(5) | 37(16) | 54(24) | 41(18) | 82(36) | 34 |
| | 24 | ZAP | 296 | 70 | 61 | 0 | 0 | 6 | 14 | 8 | 4 | 38 | 0(0) | 0(0) | 18(6) | 51(17) | 62(21) | 45(15) | 120(41) | 141 |
| | 25 | REF | 297 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0(0) | 0(0) | 18(6) | 51(17) | 62(21) | 45(15) | 121(41) | 4 |
| | 26 | POL | 316 | 19 | 18 | 0 | 0 | 5 | 8 | 4 | 2 | 0 | 0(0) | 0(0) | 23(7) | 59(19) | 66(21) | 47(15) | 121(38) | 51 |
| | 27 | NEP | 335 | 19 | 14 | 0 | 0 | 6 | 4 | 3 | 1 | 5 | 0(0) | 0(0) | 29(9) | 63(19) | 69(21) | 48(14) | 126(38) | 105 |
| | 28 | TLK | 529 | 194 | 98 | 0 | 2 | 12 | 44 | 17 | 31 | 88 | 0(0) | 2(1) | 41(8) | 107(20) | 86(16) | 79(15) | 214(40) | 228 |
| | 29 | ZAP | 562 | 33 | 29 | 0 | 1 | 9 | 5 | 1 | 1 | 16 | 0(0) | 3(1) | 50(9) | 112(20) | 87(15) | 80(14) | 230(41) | 174 |
| | 30 | REF | 564 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0(0) | 3(1) | 50(9) | 112(20) | 87(15) | 80(14) | 232(41) | 6 |
| | 31 | POL | 598 | 34 | 31 | 0 | 0 | 8 | 10 | 3 | 4 | 9 | 0(0) | 3(1) | 58(10) | 122(20) | 90(15) | 84(14) | 241(40) | 85 |
| AUG | 1 | NEP | 891 | 293 | 77 | 0 | 0 | 38 | 35 | 38 | 64 | 118 | 0(0) | 3(1) | 96(11) | 157(18) | 128(14) | 148(17) | 359(40) | 398 |
| | 2 | TLK | 1087 | 196 | 45 | 0 | 0 | 31 | 35 | 47 | 8 | 75 | 0(0) | 3(1) | 127(12) | 192(18) | 175(16) | 156(14) | 434(40) | 424 |
| | 3 | ZAP | 1684 | 597 | 128 | 0 | 12 | 137 | 89 | 84 | 54 | 221 | 0(0) | 15(1) | 264(16) | 281(17) | 259(15) | 210(12) | 655(39) | 771 |
| | 4 | REF | 1784 | 100 | 23 | 0 | 0 | 25 | 9 | 9 | 9 | 48 | 0(0) | 15(1) | 289(16) | 290(16) | 268(15) | 219(12) | 703(39) | 106 |
| | 5 | POL | 2053 | 269 | 70 | 0 | 3 | 56 | 46 | 24 | 30 | 110 | 0(0) | 18(1) | 345(17) | 336(16) | 292(14) | 249(12) | 813(40) | 354 |
| | 6 | NEP | 3556 | 1503 | 203 | 0 | 30 | 316 | 195 | 150 | 301 | 511 | 0(0) | 48(1) | 661(19) | 531(15) | 442(12) | 550(15) | 1324(37) | 1901 |
| | 7 | TLK | 4268 | 712 | 164 | 0 | 21 | 157 | 128 | 85 | 85 | 236 | 0(0) | 69(2) | 818(19) | 659(15) | 527(12) | 635(15) | 1560(37) | 1136 |
| | 8 | ZAP | 5431 | 1163 | 261 | 0 | 58 | 338 | 256 | 116 | 105 | 290 | 0(0) | 127(2) | 1156(21) | 915(17) | 643(12) | 740(14) | 1850(34) | 1934 |
| | 9 | REF | 5657 | 226 | 65 | 0 | 11 | 41 | 11 | 11 | 34 | 118 | 0(0) | 138(2) | 1197(21) | 926(16) | 654(12) | 774(14) | 1968(35) | 332 |
| | 10 | POL | 6440 | 783 | 165 | 8 | 39 | 172 | 86 | 102 | 94 | 282 | 8(1) | 177(3) | 1369(21) | 1012(16) | 756(12) | 868(13) | 2250(35) | 1137 |
| | 11 | NEP | 10104 | 3664 | 402 | 0 | 183 | 476 | 330 | 440 | 513 | 1722 | 8(1) | 360(4) | 1845(18) | 1342(13) | 1196(12) | 1381(14) | 3972(39) | 5565 |
| | 12 | TLK | 10583 | 479 | 100 | 0 | 57 | 172 | 62 | 38 | 62 | 88 | 8(1) | 417(4) | 2017(19) | 1404(13) | 1234(12) | 1443(14) | 4060(38) | 1615 |
| | 13 | ZAP | 12777 | 2194 | 267 | 44 | 307 | 856 | 263 | 241 | 110 | 373 | 52(1) | 724(6) | 2873(22) | 1667(13) | 1475(12) | 1553(12) | 4433(35) | 4128 |

TABLE 65A- DAILY AND CUMULATIVE COMMERCIAL KILL OF FEMALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1959---CONTINUED.

| DATE | ROOK- ERY* | NUMBER KILLED | NO. IN TOOTH SAMPLE | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | | | CUM. KILL BY AREA ALL AGES |
|------|---------------|------------------|------------------------------|---------------------|--------|--------|-----|-----|-----|-----|-----|-----------------|---|----------|----------|----------|----------|----------|----------------------------------|
| | | | | ESTIMATED NUMBER | BY AGE | IN YRS | | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE IN YEARS | | | | | | |
| | | | | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | | |
| 14 | REF | 13736 | 959 | 184 | 10 | 48 | 326 | 134 | 134 | 86 | 221 | 62(1) | 772(6) | 3199(23) | 1801(13) | 1609(12) | 1639(12) | 4654(34) | 1291 |
| 15 | POL | 16373 | 2637 | 281 | 26 | 185 | 686 | 290 | 158 | 448 | 844 | 88(1) | 957(6) | 3885(24) | 2091(13) | 1767(11) | 2087(13) | 5498(34) | 3774 |
| 16 | NEP | 18623 | 2250 | 302 | 45 | 248 | 765 | 360 | 180 | 248 | 404 | 133(1) | 1205(6) | 4650(25) | 2451(13) | 1947(10) | 2335(13) | 5902(32) | 7815 |
| 17 | TLK | 20100 | 1477 | 193 | 0 | 148 | 443 | 207 | 133 | 148 | 398 | 133(1) | 1353(7) | 5093(25) | 2658(13) | 2080(10) | 2483(12) | 6300(31) | 3092 |
| 18 | ZAP | 20703 | 603 | 138 | 12 | 42 | 164 | 66 | 42 | 36 | 241 | 145(1) | 1395(7) | 5257(25) | 2724(13) | 2122(10) | 2519(12) | 6541(32) | 4731 |
| 19 | REF | 21867 | 1164 | 234 | 0 | 140 | 326 | 116 | 128 | 70 | 384 | 145(1) | 1535(7) | 5583(26) | 2840(13) | 2250(10) | 2589(12) | 6925(32) | 2455 |
| 20 | POL | 24209 | 2342 | 230 | 70 | 234 | 796 | 258 | 164 | 258 | 562 | 215(1) | 1769(7) | 6379(26) | 3098(13) | 2414(10) | 2847(12) | 7487(31) | 6116 |

*POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; TZR=TOLOSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; ZAP=ZAPADNI I-ST. PAUL I. ONLY;
 REF=REEF, GORBACH, AND ARDIGUON; L-K=LUKANIN, AND KITOVI; ZPG=ZAPADNI II-ST. GEORGE I.; NOR=NORTH; E-E=EAST REEF, AND EAST CLIFF;
 STA=STARAYA ATRIL; TLK=TOLSTOI, LUKANIN, AND KITOVI; NEP=NORTHEAST POINT MORJOVI, AND VOSTOCHNI; LZP=LITTLE ZAPADNI, AND POLOVINA;
 RLK=REEF, LUKANIN, AND KITOVI; COM=COMBINED ROOKERY; UNS=UNSPECIFIED; COMB 88=COMBINED KILL DATE

TABLE 65B- DAILY AND CUMULATIVE COMMERCIAL KILL OF FEMALE FUR SEALS BY AREA ON ST. GEORGE ISLAND, 1959.

| DATE | ROOKERY* | NUMBER KILLED | NO. IN TOOTH SAMPLE | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | | | CUM. KILL BY AREA ALL AGES | | |
|------|----------|---------------|---------------------|--------------------------|--------------------------------|---|----|-----|-----|----|-----|---|--------|---------|---------|---------|---------|------|----------------------------|----------|------|
| | | | | ESTIMATED NUMBER TO DATE | ESTIMATED NUMBER BY AGE IN YRS | | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE IN YEARS | | | | | | | | | |
| | | | | | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | | | |
| JULY | 12 | ZPG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0 |
| | 13 | NOR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0 |
| | 14 | E-E | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 1(99) | 1 |
| | 15 | STA | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 1(99) | 0 |
| | 16 | NOR | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 1(99) | 0 |
| | 17 | ZPG | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 1(99) | 0 |
| | 18 | NOR | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 2(99) | 1 |
| | 19 | E-E | 5 | 3 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 0(0) | 0(0)0 | 0(0) | 0(0) | 1(20) | 0(0) | 0(0) | 0(0) | 4(80) | 4 |
| | 20 | STA | 8 | 3 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 0(0) | 0(0)0 | 0(0) | 0(0) | 2(25) | 0(0) | 0(0) | 0(0) | 6(75) | 3 |
| | 21 | NOR | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0)0 | 0(0) | 0(0) | 2(25) | 0(0) | 0(0) | 0(0) | 6(75) | 1 |
| | 22 | ZPG | 9 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0(0) | 0(0)0 | 1(11) | 0(0) | 2(22) | 0(0)0 | 0(0) | 0(0) | 6(67) | 1 |
| | 23 | NOR | 9 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0)0 | 1(11) | 0(0) | 2(22) | 0(0) | 0(0) | 0(0) | 6(67) | 1 |
| | 24 | E-E | 13 | 4 | 4 | 0 | 0 | 0 | 1 | 1 | 0 | 0(0) | 0(0)0 | 1(8) | 3(23) | 1(8) | 0(0) | 0(0) | 0(0) | 8(62) | 8 |
| | 25 | STA | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0)0 | 1(8) | 3(23) | 1(8) | 0(0) | 0(0) | 0(0) | 8(62) | 3 |
| | 26 | NOR | 16 | 3 | 3 | 0 | 0 | 0 | 0 | 1 | 0 | 0(0)0 | 0(0) | 1(6) | 3(19) | 2(13) | 0(0) | 0(0) | 0(0) | 10(63) | 4 |
| | 27 | ZPG | 18 | 2 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0(0) | 0(0)0 | 1(6) | 3(17) | 3(17) | 0(0) | 0(0) | 0(0) | 11(61) | 3 |
| | 28 | NOR | 24 | 60 | 6 | 0 | 0 | 1 | 2 | 0 | 1 | 0(0) | 0(0)0 | 2(8) | 5(21) | 3(13) | 1(4) | 0(0) | 0(0) | 13(54) | 10 |
| | 29 | E-E | 29 | 4 | 4 | 0 | 0 | 0 | 0 | 1 | 1 | 0(0) | 0(0)0 | 2(7) | 5(18)0 | 4(14) | 2(7) | 0(0) | 0(0) | 15(54) | 12 |
| | 30 | STA | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0)0 | 2(7) | 5(18) | 4(14) | 2(7) | 0(0) | 0(0) | 15(54) | 3 |
| | 31 | NOR | 39 | 110 | 11 | 0 | 0 | 3 | 0 | 2 | 1 | 0(0) | 0(0) | 5(13) | 5(13) | 6(15) | 3(8) | 0(0) | 0(0) | 20(51) | 21 |
| AUG | 1 | ZPG | 130 | 910 | 42 | 0 | 0 | 11 | 6 | 8 | 110 | 0(0) | 0(0) | 16(12) | 11(8) | 14(11) | 14(11) | 0(0) | 0(0) | 75(58) | 94 |
| | 2 | NOR | 227 | 970 | 37 | 0 | 0 | 23 | 15 | 5 | 3 | 0(0) | 0(0) | 39(17) | 26(11) | 19(8)0 | 17(7)0 | 0(0) | 0(0) | 126(56) | 118 |
| | 3 | E-E | 283 | 56 | 29 | 0 | 0 | 4 | 4 | 9 | 16 | 0(0)0 | 0(0)0 | 43(15) | 30(11) | 28(10) | 33(12) | 0(0) | 0(0) | 149(53) | 68 |
| | 4 | STA | 463 | 180 | 69 | 0 | 11 | 36 | 25 | 13 | 16 | 0(0) | 11(2)0 | 79(17) | 55(12) | 41(9) | 49(11)0 | 0(0) | 0(0) | 228(49) | 183 |
| | 5 | NOR | 559 | 96 | 37 | 0 | 3 | 12 | 12 | 11 | 13 | 0(0) | 14(3) | 91(16) | 67(12) | 52(9) | 62(11)0 | 0(0) | 0(0) | 273(49) | 214 |
| | 6 | ZPG | 839 | 280 | 58 | 0 | 11 | 28 | 53 | 34 | 39 | 0(0) | 25(3) | 119(14) | 120(14) | 86(10) | 101(12) | 0(0) | 0(0) | 388(46) | 374 |
| | 7 | NOR | 891 | 52 | 23 | 0 | 0 | 9 | 00 | 7 | 13 | 0(0) | 25(3) | 128(14) | 120(13) | 93(10) | 114(13) | 0(0) | 0(0) | 411(46) | 266 |
| | 8 | E-E | 1086 | 195 | 78 | 0 | 10 | 35 | 23 | 31 | 23 | 0(0) | 35(3) | 163(15) | 143(13) | 124(11) | 137(13) | 0(0) | 0(0) | 484(45) | 263 |
| | 9 | STAO | 1351 | 265 | 97 | 0 | 11 | 50 | 35 | 29 | 42 | 0(0) | 46(3) | 213(16) | 178(13) | 153(11) | 179(13) | 0(0) | 0(0) | 582(43) | 448 |
| | 10 | NOR | 1467 | 116 | 43 | 0 | 4 | 10 | 8 | 16 | 19 | 0(0) | 50(3) | 223(15) | 186(13) | 169(12) | 198(13) | 0(0) | 0(0) | 641(44) | 382 |
| | 11 | ZPG | 2058 | 591 | 100 | 0 | 71 | 100 | 100 | 41 | 77 | 0(0) | 121(8) | 323(16) | 286(14) | 210(10) | 275(13) | 0(0) | 0(0) | 843(41) | 965 |
| | 12 | NOR | 2256 | 198 | 44 | 0 | 10 | 57 | 10 | 14 | 14 | 0(0) | 131(6) | 380(17) | 296(13) | 224(10) | 289(13) | 0(0) | 0(0) | 936(41) | 580 |
| | 13 | E-E | 2561 | 305 | 65 | 0 | 18 | 79 | 28 | 28 | 43 | 0(0) | 149(8) | 459(18) | 324(13) | 252(10) | 332(13) | 0(0) | 0(0) | 1045(41) | 568 |
| | 14 | STA | 2678 | 117 | 21 | 0 | 6 | 56 | 16 | 0 | 0 | 0(0) | 155(6) | 515(19) | 340(13) | 252(9) | 332(12) | 0(0) | 0(0) | 1084(40) | 565 |
| | 15 | NOR | 2829 | 151 | 61 | 0 | 8 | 26 | 39 | 15 | 20 | 0(0) | 163(6) | 541(19) | 379(13) | 267(9) | 352(12) | 0(0) | 0(0) | 1127(40) | 731 |
| | 16 | ZPG | 3195 | 366 | 75 | 0 | 26 | 580 | 62 | 47 | 44 | 0(0) | 189(6) | 599(19) | 441(14) | 314(10) | 396(12) | 0(0) | 0(0) | 1256(39) | 1331 |
| | 17 | NOR | 3338 | 143 | 55 | 0 | 7 | 41 | 26 | 16 | 21 | 0(0) | 196(6) | 640(19) | 467(14) | 330(10) | 417(12) | 0(0) | 0(0) | 1288(39) | 874 |
| | 18 | E-E | 3491 | 153 | 62 | 0 | 5 | 37 | 12 | 20 | 20 | 0(0) | 201(6) | 677(19) | 479(14) | 350(10) | 437(13) | 0(0) | 0(0) | 1347(39) | 721 |
| | 19 | STA | 3721 | 230 | 92 | 0 | 30 | 67 | 32 | 19 | 32 | 0(0) | 231(8) | 744(20) | 511(14) | 369(10) | 469(13) | 0(0) | 0(0) | 1397(38) | 795 |
| | 20 | NOR | 3855 | 134 | 55 | 3 | 16 | 44 | 21 | 15 | 7 | 3(1) | 247(6) | 788(20) | 532(14) | 384(10) | 476(12) | 0(0) | 0(0) | 1425(37) | 1008 |
| COMB | 88 | COM | 3855 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3(1) | 247(6) | 788(20) | 532(14) | 384(10) | 476(12) | 0(0) | 0(0) | 1425(37) | 0 |

*POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; TZR=TOLOSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; ZAP=ZAPADNI I-ST. PAUL I. ONLY; 0 REF=REEF, GORBACH, AND ARDIGUON; L-K=LUKANIN, AND KITOVI; ZPG=ZAPADNI II-ST. GEORGE I.; NOR=NORTH; E-E=EAST REEF, AND EAST CLIFF; 0 STA=STARAYA ATRIL; TLK=TOLSTOI, LUKANIN, AND KITOVI; NEP=NORTHEAST POINT MORJOVI, AND VOSTOCHNI; LZP=LITTLE ZAPADNI, AND POLOVINA; RLK=REEF, LUKANIN, AND KITOVI; COM=COMBINED ROOKERY; UNS=UNSPECIFIED; COMB 88=COMBINED KILL DATE

TABLE 66A- DAILY AND CUMULATIVE COMMERCIAL KILL OF FEMALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1960.

| DATE | ROOKERY* | NUMBER KILLED | NO. IN TOOTH SAMPLE | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | | | CUM. KILL BY AREA ALL AGES | | | |
|------|----------|---------------|---------------------|------------------|---------------|----|----|----|----|----|----|------------------|--------------------------------|--------|---------|---------|---------|---------|----------------------------|----------|----------|-----|
| | | | | ESTIMATED NUMBER | BY AGE IN YRS | | | | | | | ESTIMATED NUMBER | AND PERCENTAGE BY AGE IN YEARS | | | | | | | | | |
| | | | | | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | | 2 | 3 | 4 | 5 | 6 | 7 | | 7+ | | |
| JULY | 2 | NEP | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 1(99) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 1 |
| | 3 | TLK | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 1(99) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0 |
| | 4 | ZAP | 2 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 1(50) | 1(50) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 1 |
| | 5 | REF | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 1(50) | 1(50) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0 |
| | 6 | POL | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 1(50) | 1(50) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0 |
| | 7 | NEP | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 1(50) | 1(50) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 1 |
| | 8 | TLK | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 1(50) | 1(50) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0 |
| | 9 | ZAP | 5 | 3 | 2 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 0(0) | 0(0) | 3(60) | 1(20) | 1(20) | 0(0) | 0(0) | 0(0) | 0(0) | 4 |
| | 10 | REF | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 3(60) | 1(20) | 1(20) | 0(0) | 0(0) | 0(0) | 0(0) | 0 |
| | 11 | POL | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 3(50) | 1(17) | 1(17) | 0(0) | 0(0) | 0(0) | 0(0) | 1 |
| | 12 | NEP | 8 | 20 | 2 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0(0) | 0(0) | 4(50) | 2(25) | 1(13) | 0(0) | 0(0) | 0(0) | 0(0) | 30 |
| | 13 | TLK | 10 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 4(40) | 2(20) | 1(10) | 0(0) | 0(0) | 0(0) | 0(0) | 20 |
| | 14 | ZAP | 11 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0(0) | 0(0) | 4(36) | 3(27) | 1(9) | 0(0) | 0(0) | 0(0) | 0(0) | 50 |
| | 15 | REF | 14 | 3 | 3 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0(0) | 0(0) | 4(29) | 4(29) | 2(14) | 1(7) | 0(0) | 0(0) | 0(0) | 30 |
| | 16 | POL | 16 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0(0) | 0(0) | 4(25) | 4(25) | 2(13) | 1(6) | 2(13) | 2(13) | 2(13) | 30 |
| | 17 | NEP | 26 | 10 | 9 | 0 | 0 | 1 | 6 | 0 | 0 | 3 | 0(0) | 0(0) | 5(19) | 10(38) | 2(8) | 1(4) | 5(19) | 5(19) | 5(19) | 13 |
| | 18 | TLK | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 5(19) | 10(38) | 2(8) | 1(4) | 5(19) | 5(19) | 5(19) | 2 |
| | 19 | ZAP | 32 | 6 | 6 | 0 | 0 | 1 | 0 | 2 | 0 | 3 | 0(0) | 0(0) | 6(19) | 10(31) | 4(13) | 1(3) | 8(25) | 8(25) | 8(25) | 11 |
| | 20 | REF | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 6(19) | 10(31) | 4(13) | 1(3) | 8(25) | 8(25) | 8(25) | 3 |
| | 21 | POL | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 6(19) | 10(31) | 4(13) | 1(3) | 8(25) | 8(25) | 8(25) | 3 |
| | 22 | NEP | 46 | 14 | 8 | 0 | 0 | 1 | 4 | 4 | 4 | 1 | 0(0) | 0(0) | 7(15) | 14(30) | 8(17) | 5(11) | 9(20) | 9(20) | 9(20) | 27 |
| | 23 | TLK | 75 | 29 | 24 | 0 | 0 | 0 | 4 | 5 | 2 | 18 | 0(0) | 0(0) | 7(9) | 18(24) | 13(17) | 7(9) | 27(36) | 27(36) | 27(36) | 31 |
| | 24 | ZAP | 84 | 9 | 6 | 0 | 0 | 2 | 3 | 0 | 0 | 4 | 0(0) | 0(0) | 9(11) | 21(25) | 13(15) | 7(8) | 31(37) | 31(37) | 31(37) | 20 |
| | 25 | REF | 86 | 2 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0(0) | 0(0) | 9(10) | 21(24) | 14(16) | 7(8) | 32(37) | 32(37) | 32(37) | 5 |
| | 26 | POL | 88 | 2 | 2 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0(0) | 0(0) | 10(11) | 22(25) | 14(16) | 7(8) | 32(36) | 32(36) | 32(36) | 5 |
| | 27 | NEP | 107 | 19 | 16 | 0 | 1 | 1 | 1 | 4 | 0 | 12 | 0(0) | 1(1) | 11(10) | 23(21) | 18(17) | 7(7) | 44(41) | 44(41) | 44(41) | 46 |
| | 28 | TLK | 119 | 12 | 12 | 0 | 0 | 2 | 1 | 1 | 3 | 5 | 0(0) | 1(1) | 13(11) | 24(20) | 19(16) | 10(8) | 49(41) | 49(41) | 49(41) | 43 |
| | 29 | ZAP | 142 | 23 | 22 | 0 | 1 | 1 | 6 | 1 | 2 | 12 | 0(0) | 2(1) | 14(10) | 30(21) | 20(14) | 12(8) | 61(43) | 61(43) | 61(43) | 43 |
| | 30 | REF | 153 | 11 | 11 | 0 | 0 | 0 | 2 | 2 | 0 | 7 | 0(0) | 2(1) | 14(9) | 32(21) | 22(14) | 12(8) | 68(44) | 68(44) | 68(44) | 16 |
| | 31 | POL | 165 | 12 | 10 | 0 | 0 | 2 | 2 | 2 | 2 | 4 | 0(0) | 2(1) | 16(10) | 34(21) | 24(15) | 14(8) | 72(44) | 72(44) | 72(44) | 17 |
| AUG | 1 | NEP | 295 | 130 | 120 | 0 | 3 | 10 | 29 | 18 | 13 | 57 | 0(0) | 5(2) | 26(9) | 63(21) | 42(14) | 27(9) | 129(44) | 129(44) | 129(44) | 176 |
| | 2 | TLK | 379 | 84 | 68 | 0 | 2 | 5 | 21 | 13 | 10 | 33 | 0(0) | 7(2) | 31(8) | 84(22) | 55(15) | 37(10) | 162(43) | 162(43) | 162(43) | 127 |
| | 3 | ZAP | 506 | 127 | 92 | 0 | 5 | 8 | 34 | 25 | 13 | 42 | 0(0) | 12(2) | 39(8) | 118(23) | 80(16) | 50(10) | 204(40) | 204(40) | 204(40) | 170 |
| | 4 | REF | 679 | 173 | 126 | 0 | 5 | 26 | 42 | 29 | 10 | 61 | 0(0) | 17(3) | 65(10) | 160(24) | 109(16) | 60(9) | 265(39) | 265(39) | 265(39) | 189 |
| | 5 | POL | 929 | 250 | 187 | 0 | 0 | 25 | 68 | 42 | 30 | 85 | 0(0) | 17(2) | 90(10) | 228(25) | 151(16) | 90(10) | 350(38) | 350(38) | 350(38) | 267 |
| | 6 | NEP | 1181 | 252 | 148 | 0 | 8 | 38 | 63 | 55 | 20 | 68 | 0(0) | 25(2) | 128(11) | 291(25) | 206(17) | 110(9) | 418(35) | 418(35) | 418(35) | 428 |
| | 7 | TLK | 1376 | 195 | 165 | 0 | 0 | 20 | 29 | 25 | 23 | 98 | 0(0) | 25(2) | 148(11) | 320(23) | 231(17) | 133(10) | 516(38) | 516(38) | 516(38) | 322 |
| | 8 | ZAP | 1528 | 152 | 152 | 1 | 9 | 15 | 41 | 29 | 11 | 46 | 1(1) | 34(2) | 163(11) | 361(24) | 260(17) | 144(9) | 562(37) | 562(37) | 562(37) | 322 |
| | 9 | REF | 1791 | 263 | 262 | 0 | 18 | 27 | 51 | 51 | 21 | 95 | 1(1) | 52(3) | 190(11) | 412(23) | 311(17) | 165(9) | 657(37) | 657(37) | 657(37) | 452 |
| | 10 | POL | 2044 | 253 | 252 | 1 | 38 | 43 | 60 | 37 | 21 | 53 | 2(1) | 90(4) | 233(11) | 472(23) | 348(17) | 186(9) | 710(35) | 710(35) | 710(35) | 520 |
| | 11 | NEP | 2294 | 250 | 249 | 1 | 27 | 38 | 68 | 35 | 25 | 56 | 3(1) | 117(5) | 271(12) | 540(24) | 383(17) | 211(9) | 766(33) | 766(33) | 766(33) | 678 |
| | 12 | TLK | 2546 | 252 | 248 | 1 | 17 | 68 | 60 | 25 | 20 | 61 | 4(1) | 134(5) | 339(13) | 600(24) | 408(16) | 231(9) | 827(32) | 827(32) | 827(32) | 574 |
| | 13 | ZAP | 2796 | 250 | 246 | 1 | 30 | 37 | 57 | 28 | 17 | 80 | 5(1) | 164(6) | 376(13) | 657(23) | 436(16) | 248(9) | 907(32) | 907(32) | 907(32) | 572 |
| | 14 | REF | 3049 | 253 | 247 | 13 | 35 | 38 | 43 | 25 | 23 | 76 | 18(1) | 199(7) | 414(14) | 700(23) | 461(15) | 271(9) | 983(32) | 983(32) | 983(32) | 705 |
| | 15 | POL | 3297 | 248 | 242 | 1 | 54 | 52 | 60 | 17 | 25 | 39 | 19(1) | 253(8) | 466(14) | 760(23) | 478(14) | 296(9) | 1022(31) | 1022(31) | 1022(31) | 768 |
| COMB | 88 | COM | 3297 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19(1) | 253(8) | 466(14) | 760(23) | 478(14) | 296(9) | 1022(31) | 1022(31) | 1022(31) | 0 |

*POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; TZR=TOLOSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; ZAP=ZAPADNI I-ST. PAUL I. ONLY; REF=REEF, GORBACH, AND ARDIGUON; L-K=LUKANIN, AND KITOVI; ZPG=ZAPADNI II-ST. GEORGE I.; NOR=NORTH; E-E=EAST REEF, AND EAST CLIFF; STA=STARAYA ATRIL; TLK=TOLSTOI, LUKANIN, AND KITOVI; NEP=NORTHEAST POINT MORJOVI, AND VOSTOCHNI; LZP=LITTLE ZAPADNI, AND POLOVINA; 0 RLK=REEF, LUKANIN, AND KITOVI; COM=COMBINED ROOKERY; UNS=UNSPECIFIED; COMB 88=COMBINED KILL DATE

TABLE 66B- DAILY AND CUMULATIVE COMMERCIAL KILL OF FEMALE FUR SEALS BY AREA ON ST. GEORGE ISLAND, 1960.

| DATE | ROOK- ERY* | NUMBER KILLED | NO. IN SAMPLE | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | | | CUM. KILL BY AREA ALL AGES |
|------|---------------|------------------|---------------------|--------------------------------|-----|---|---|----|----|----|----|-----------------|-------|-------|---------|---------|--------|---------|----------------------------------|
| | | | | ESTIMATED NUMBER TO DATE | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | |
| JULY | 17 | ZPG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0 |
| | 18 | NOR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0 |
| | 19 | E-E | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 1(99) | 1 |
| | 20 | STA | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 1(99) | 0 |
| | 21 | NOR | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 1(99) | 0 |
| | 22 | ZPG | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 1(99) | 0 |
| | 23 | NOR | 4 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 3 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 4(99) | 3 |
| | 24 | E-E | 7 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 3 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 7(99) | 4 |
| | 25 | STA | 9 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 9(99) | 2 |
| | 26 | NOR | 12 | 3 | 3 | 0 | 0 | 1 | 0 | 0 | 2 | 0(0) | 0(0) | 0(0) | 1(8) | 0(0) | 0(0) | 11(92) | 6 |
| | 27 | ZPG | 13 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0(0) | 0(0) | 0(0) | 1(8) | 0(0) | 1(8) | 11(85) | 1 |
| | 28 | NOR | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 1(8) | 0(0) | 1(8) | 11(85) | 6 |
| | 29 | E-E | 20 | 7 | 7 | 0 | 0 | 0 | 1 | 0 | 6 | 0(0) | 0(0) | 0(0) | 1(5) | 1(5) | 1(5) | 17(85) | 11 |
| | 30 | STA | 23 | 3 | 3 | 0 | 0 | 0 | 1 | 0 | 2 | 0(0) | 0(0) | 0(0) | 1(4) | 2(9) | 1(4) | 19(63) | 5 |
| | 31 | NOR | 35 | 12 | 12 | 0 | 0 | 1 | 3 | 0 | 1 | 0(0) | 0(0) | 1(3) | 4(11) | 2(6) | 2(6) | 26(74) | 18 |
| AUG | 1 | ZPG | 51 | 16 | 16 | 0 | 0 | 1 | 1 | 2 | 0 | 0(0) | 0(0) | 2(4) | 5(10) | 4(8) | 2(4) | 39(75) | 17 |
| | 2 | NOR | 61 | 10 | 10 | 0 | 0 | 0 | 2 | 1 | 1 | 0(0) | 0(0) | 2(3) | 7(11) | 5(8) | 3(5) | 44(72) | 28 |
| | 3 | E-E | 98 | 37 | 37 | 0 | 1 | 1 | 3 | 5 | 2 | 0(0) | 1(1) | 3(3) | 10(10) | 10(10) | 5(5) | 69(70) | 48 |
| | 4 | STA | 100 | 2 | 2 | 0 | 0 | 1 | 1 | 0 | 0 | 0(0) | 1(1) | 4(4) | 11(11) | 10(10) | 5(5) | 69(69) | 7 |
| | 5 | NOR | 121 | 21 | 21 | 0 | 0 | 1 | 5 | 3 | 1 | 0(0) | 1(1) | 5(4) | 16(13) | 13(11) | 6(5) | 80(66) | 49 |
| | 6 | ZPG | 126 | 5 | 5 | 0 | 0 | 1 | 0 | 0 | 0 | 0(0) | 1(1) | 6(5) | 16(13) | 13(10) | 6(5) | 84(67) | 22 |
| | 7 | NOR | 224 | 98 | 98 | 0 | 1 | 11 | 24 | 7 | 13 | 0(0) | 2(1) | 17(8) | 40(18) | 20(9) | 19(8) | 126(56) | 147 |
| | 8 | E-E | 332 | 108 | 100 | 0 | 2 | 6 | 11 | 14 | 16 | 0(0) | 4(1) | 23(7) | 51(15) | 34(10) | 35(11) | 185(56) | 156 |
| | 9 | STA | 437 | 105 | 100 | 0 | 3 | 12 | 15 | 17 | 14 | 0(0) | 7(2) | 35(8) | 66(15) | 51(12) | 49(11) | 229(52) | 112 |
| | 10 | NOR | 517 | 80 | 77 | 0 | 2 | 13 | 17 | 10 | 4 | 0(0) | 9(2) | 48(9) | 83(16) | 61(12) | 53(10) | 263(51) | 227 |
| | 11 | ZPG | 617 | 100 | 100 | 0 | 3 | 10 | 21 | 14 | 10 | 0(0) | 12(2) | 58(9) | 104(17) | 75(12) | 63(10) | 305(49) | 122 |
| | 12 | NOR | 718 | 101 | 100 | 0 | 4 | 9 | 27 | 15 | 3 | 0(0) | 16(2) | 67(9) | 131(18) | 90(13) | 66(9) | 348(48) | 328 |
| | 13 | E-E | 818 | 100 | 100 | 0 | 4 | 5 | 22 | 11 | 7 | 0(0) | 20(2) | 72(9) | 153(18) | 101(12) | 73(9) | 399(49) | 256 |
| | 14 | STA | 918 | 100 | 100 | 0 | 4 | 8 | 25 | 8 | 10 | 0(0) | 24(3) | 80(9) | 178(19) | 109(12) | 83(9) | 444(48) | 212 |
| | 15 | NOR | 1018 | 100 | 99 | 0 | 4 | 16 | 23 | 13 | 2 | 0(0) | 28(3) | 96(9) | 201(20) | 122(12) | 85(8) | 486(48) | 428 |
| COMB | 88 | COM | 1018 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 28(3) | 96(9) | 201(20) | 122(12) | 85(8) | 486(48) | 0 |

*POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; TZR=TOLOSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; ZAP=ZAPADNI I-ST. PAUL I. ONLY;
 REF=REEF, GORBACH, AND ARDIGUON; L-K=LUKANIN, AND KITOVI; ZPG=ZAPADNI II-ST. GEORGE I.; NOR=NORTH; E-E=EAST REEF, AND EAST CLIFF;
 STA=STARAYA ATRIL; TLK=TOLSTOI, LUKANIN, AND KITOVI; NEP=NORTHEAST POINT MORJOVI, AND VOSTOCHNI; LZP=LITTLE ZAPADNI, AND POLOVINA;
 RLK=REEF, LUKANIN, AND KITOVI; COM=COMBINED ROOKERY; UNS=UNSPECIFIED; COMB 88=COMBINED KILL DATE

TABLE 67A- DAILY AND CUMULATIVE COMMERCIAL KILL OF FEMALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1961.

| DATE | ROOK-ERY# | NUMBER KILLED | NO. IN TOOTH SAMPLE | DAILY KILL | | | | | | | CUMULATIVE KILL | | | | | | | CUM. KILL BY AREA ALL AGES | | |
|------|-----------|---------------|---------------------|----------------|-------|--------------------------------|-----|-----|-----|-----|-----------------|------|--------|---|----------|----------|----------|----------------------------|----------|------|
| | | | | CUMUL. TO DATE | DAILY | ESTIMATED NUMBER BY AGE IN YRS | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | ESTIMATED NUMBER AND PERCENTAGE BY AGE IN YEARS | 2 | 3 | 4 | | 5 | 6 |
| JULY | 2 | NEP | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 1(50) | 1(50) | 2 |
| | 4 | ZAP | 7 | 5 | 5 | 0 | 0 | 0 | 1 | 2 | 0 | 2 | 0(0) | 0(0) | 0(0) | 1(14) | 2(29) | 1(14) | 3(43) | 5 |
| | 6 | POL | 9 | 2 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0(0) | 0(0) | 0(0) | 1(11) | 4(44) | 1(11) | 3(33) | 2 |
| | 9 | ZAP | 13 | 4 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0(0) | 0(0) | 0(0) | 1(8) | 6(46) | 1(8) | 5(38) | 9 |
| | 11 | POL | 15 | 2 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0(0) | 0(0) | 0(0) | 1(7) | 7(47) | 1(7) | 6(40) | 4 |
| | 12 | NEP | 17 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0(0) | 0(0) | 0(0) | 1(6) | 7(41) | 3(18) | 6(35) | 4 |
| | 13 | TZR | 18 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 2(11) | 7(39) | 3(17) | 6(33) | 1 |
| | 14 | ZAP | 22 | 4 | 4 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 0(0) | 0(0) | 0(0) | 3(14) | 8(36) | 3(14) | 8(36) | 13 |
| | 16 | POL | 30 | 8 | 7 | 0 | 0 | 0 | 2 | 2 | 1 | 3 | 0(0) | 0(0) | 0(0) | 5(17) | 10(33) | 4(13) | 11(37) | 12 |
| | 17 | NEP | 41 | 11 | 11 | 0 | 0 | 0 | 0 | 2 | 4 | 5 | 0(0) | 0(0) | 0(0) | 5(12) | 12(29) | 8(20) | 16(39) | 15 |
| | 18 | TZR | 44 | 3 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0(0) | 0(0) | 0(0) | 6(14) | 12(27) | 8(18) | 18(41) | 4 |
| | 19 | ZAP | 56 | 12 | 10 | 0 | 0 | 2 | 0 | 2 | 0 | 8 | 0(0) | 0(0) | 2(4) | 6(11) | 14(25) | 8(14) | 26(46) | 25 |
| | 21 | POL | 68 | 12 | 12 | 0 | 0 | 0 | 3 | 4 | 2 | 3 | 0(0) | 0(0) | 2(3) | 9(13) | 18(26) | 10(15) | 29(43) | 24 |
| | 22 | NEP | 92 | 24 | 23 | 0 | 0 | 5 | 3 | 3 | 1 | 12 | 0(0) | 0(0) | 7(8) | 12(13) | 21(23) | 11(12) | 41(45) | 39 |
| | 23 | TZR | 131 | 39 | 39 | 0 | 0 | 2 | 2 | 5 | 3 | 27 | 0(0) | 0(0) | 9(7) | 14(11) | 26(20) | 14(11) | 68(52) | 43 |
| | 24 | ZAP | 152 | 21 | 21 | 0 | 1 | 3 | 1 | 3 | 1 | 12 | 0(0) | 1(1) | 12(8) | 15(10) | 29(19) | 15(10) | 80(53) | 46 |
| | 25 | REF | 157 | 5 | 4 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 0(0) | 1(1) | 12(8) | 15(10) | 29(18) | 16(10) | 84(54) | 5 |
| | 26 | POL | 162 | 5 | 4 | 0 | 0 | 1 | 2 | 0 | 2 | 0 | 0(0) | 1(1) | 13(8) | 17(10) | 29(18) | 18(11) | 84(52) | 29 |
| | 27 | NEP | 207 | 45 | 45 | 0 | 0 | 2 | 5 | 5 | 5 | 28 | 0(0) | 1(1) | 15(7) | 22(11) | 34(16) | 23(11) | 112(54) | 84 |
| | 28 | TZR | 224 | 17 | 16 | 0 | 0 | 1 | 2 | 3 | 3 | 8 | 0(0) | 1(1) | 16(7) | 24(11) | 37(17) | 26(12) | 120(54) | 60 |
| | 29 | ZAP | 242 | 18 | 17 | 0 | 0 | 2 | 3 | 1 | 0 | 12 | 0(0) | 1(1) | 18(7) | 27(11) | 38(16) | 26(11) | 132(55) | 64 |
| | 30 | REF | 248 | 6 | 6 | 0 | 0 | 0 | 1 | 1 | 0 | 4 | 0(0) | 1(1) | 18(7) | 28(11) | 39(16) | 26(10) | 136(55) | 11 |
| | 31 | POL | 331 | 83 | 56 | 0 | 4 | 9 | 7 | 10 | 3 | 50 | 0(0) | 5(2) | 27(8) | 35(11) | 49(15) | 29(9) | 186(56) | 112 |
| AUG | 1 | NEP | 845 | 514 | 121 | 0 | 8 | 42 | 30 | 34 | 34 | 366 | 0(0) | 13(2) | 69(8) | 65(8) | 83(10) | 63(7) | 552(65) | 598 |
| | 2 | TZR | 959 | 114 | 70 | 0 | 5 | 5 | 12 | 2 | 8 | 82 | 0(0) | 18(2) | 74(8) | 77(8) | 85(9) | 71(7) | 634(66) | 174 |
| | 3 | ZAP | 1252 | 293 | 152 | 0 | 15 | 33 | 23 | 23 | 14 | 185 | 0(0) | 33(3) | 107(9) | 100(8) | 108(9) | 85(7) | 819(65) | 357 |
| | 4 | REF | 1348 | 96 | 59 | 0 | 13 | 14 | 3 | 6 | 5 | 55 | 0(0) | 46(3) | 121(9) | 103(8) | 114(8) | 90(7) | 874(65) | 107 |
| | 5 | POL | 1547 | 199 | 79 | 0 | 5 | 28 | 10 | 30 | 15 | 111 | 0(0) | 51(3) | 149(10) | 113(7) | 144(9) | 105(7) | 985(64) | 311 |
| | 6 | NEP | 1705 | 158 | 71 | 2 | 4 | 36 | 13 | 13 | 13 | 77 | 2(1) | 55(3) | 185(11) | 126(7) | 157(9) | 118(7) | 1062(62) | 756 |
| | 7 | TZR | 2149 | 444 | 99 | 0 | 31 | 31 | 23 | 49 | 31 | 282 | 2(1) | 86(4) | 216(10) | 149(7) | 206(10) | 149(7) | 1344(63) | 618 |
| | 8 | ZAP | 3344 | 1195 | 346 | 0 | 152 | 245 | 114 | 131 | 59 | 494 | 2(1) | 238(7) | 461(14) | 263(8) | 337(10) | 208(6) | 1838(55) | 1552 |
| | 9 | REF | 3559 | 215 | 50 | 0 | 34 | 43 | 0 | 17 | 9 | 112 | 2(1) | 272(8) | 504(14) | 263(7) | 354(10) | 217(6) | 1950(55) | 322 |
| | 10 | POL | 4566 | 1007 | 195 | 0 | 165 | 253 | 124 | 88 | 21 | 356 | 2(1) | 437(10) | 757(17) | 387(8) | 442(10) | 238(5) | 2306(51) | 1318 |
| | 11 | NEP | 5985 | 1419 | 253 | 0 | 114 | 241 | 142 | 170 | 99 | 653 | 2(1) | 551(9) | 998(17) | 529(9) | 612(10) | 337(6) | 2959(49) | 2175 |
| | 12 | TZR | 6999 | 1014 | 175 | 0 | 75 | 156 | 128 | 133 | 87 | 435 | 2(1) | 626(9) | 1154(16) | 657(9) | 745(11) | 424(6) | 3394(48) | 1632 |
| | 13 | ZAP | 7900 | 901 | 208 | 13 | 160 | 173 | 104 | 91 | 56 | 304 | 15(1) | 786(10) | 1327(17) | 781(10) | 836(11) | 480(8) | 3698(47) | 2453 |
| | 14 | REF | 8286 | 386 | 50 | 0 | 69 | 100 | 23 | 77 | 16 | 101 | 15(1) | 855(10) | 1427(17) | 784(9) | 913(11) | 496(6) | 3799(46) | 708 |
| | 15 | POL | 10499 | 2213 | 218 | 20 | 264 | 579 | 284 | 254 | 81 | 731 | 35(1) | 1119(11) | 2006(19) | 1068(10) | 1167(11) | 577(5) | 4530(43) | 3531 |
| | 31 | ZAP | 12021 | 1522 | 191 | 46 | 426 | 319 | 122 | 183 | 91 | 335 | 81(1) | 1545(13) | 2325(19) | 1190(10) | 1350(11) | 668(6) | 4865(40) | 3975 |
| | 1 | ZAP | 13939 | 1918 | 209 | 19 | 153 | 288 | 230 | 269 | 153 | 806 | 100(1) | 1698(12) | 2613(19) | 1420(10) | 1619(12) | 821(6) | 5671(41) | 5893 |
| | 5 | POL | 15969 | 2030 | 201 | 20 | 122 | 345 | 162 | 224 | 183 | 974 | 120(1) | 1820(11) | 2958(19) | 1582(10) | 1843(12) | 1004(6) | 6645(42) | 5561 |
| | 6 | POL | 18443 | 2474 | 242 | 0 | 173 | 223 | 247 | 124 | 99 | 1608 | 120(1) | 1993(11) | 3181(17) | 1829(10) | 1967(11) | 1103(6) | 8253(45) | 8035 |
| | 7 | NEP | 21558 | 3115 | 314 | 31 | 187 | 467 | 249 | 405 | 218 | 1558 | 151(1) | 2180(10) | 3648(17) | 2078(10) | 2372(11) | 1321(6) | 9811(46) | 5290 |

TABLE 67A- DAILY AND CUMULATIVE COMMERCIAL KILL OF FEMALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1961---CONTINUED.

| DATE | ROOK- ERY# | NUMBER KILLED | NO. IN TOOTH SAMPLE | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | | | CUM. KILL BY AREA ALL AGES |
|------|---------------|-------------------|------------------------------|--------------------------------|----|-----|-----|-----|-----|-----|------|---|----------|----------|----------|----------|---------|-----------|----------------------------------|
| | | | | ESTIMATED NUMBER BY AGE IN YRS | | | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE IN YEARS | | | | | | | |
| | | CUMUL. TO DATE | | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | | |
| 8 | NEP | 24068 | 2510 | 242 | 25 | 226 | 301 | 301 | 352 | 201 | 1104 | 176(1) | 2406(10) | 3949(16) | 2379(10) | 2724(11) | 1522(6) | 10915(45) | 7800 |
| 11 | TZR | 27047 | 2979 | 288 | 60 | 328 | 387 | 298 | 328 | 208 | 1370 | 236(1) | 2734(10) | 4336(16) | 2677(10) | 3052(11) | 1730(6) | 12285(45) | 4611 |
| 12 | ZAP | 29435 | 2388 | 239 | 47 | 406 | 358 | 239 | 215 | 96 | 1027 | 293(1) | 3140(11) | 4694(16) | 2916(10) | 3267(11) | 1826(6) | 13312(45) | 8281 |
| 13 | POL | 29826 | 391 | 38 | 12 | 55 | 55 | 23 | 43 | 31 | 172 | 295(1) | 3195(11) | 4749(16) | 2939(10) | 3310(11) | 1857(6) | 13484(45) | 8426 |
| 13 | ZAP | 30457 | 631 | 60 | 19 | 19 | 114 | 88 | 51 | 63 | 277 | 314(1) | 3214(11) | 4863(16) | 3027(10) | 3361(11) | 1920(6) | 13761(45) | 8912 |
| 13 | NEP | 31321 | 864 | 82 | 0 | 9 | 78 | 104 | 78 | 43 | 552 | 314(1) | 3223(10) | 4941(16) | 3131(10) | 3439(11) | 1963(6) | 14313(46) | 8664 |
| 14 | NEP | 35086 | 3765 | 363 | 38 | 376 | 527 | 414 | 414 | 339 | 1657 | 352(1) | 3599(10) | 5468(16) | 3545(10) | 3853(11) | 2302(7) | 15970(46) | 12429 |

NPOL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; TZR=TOLOSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; ZAP=ZAPADNI I-ST. PAUL I. ONLY;
 REF=REEF, GORBACH, AND ARDIGUON; L-K=LUKANIN, AND KITOVI; ZPG=ZAPADNI II-ST. GEORGE I.; NOR=NORTH; E-E=EAST REEF, AND EAST CLIFF;
 STA=STARAYA ATRIL; TLK=TOLSTOI, LUKANIN, AND KITOVI; NEP=NORTHEAST POINT MORJOVI, AND VOSTOCHNI; LZP=LITTLE ZAPADNI, AND POLOVINA;
 RLK=REEF, LUKANIN, AND KITOVI; COM=COMBINED ROOKERY; UNS=UNSPECIFIED; COMB 88=COMBINED KILL DATE

TABLE 67B- DAILY AND CUMULATIVE COMMERCIAL KILL OF FEMALE FUR SEALS BY AREA ON ST. GEORGE ISLAND, 1961.0

| DATE | ROOKERY* | NUMBER KILLED | NO. IN TOOTH SAMPLE | DAILY KILL | | | | | | | CUMULATIVE KILL | | | | | | | CUM. KILL BY AREA ALL AGES | | | |
|------|----------|---------------|---------------------|----------------|-------|--------------------------------|-----|-----|-----|-----|-----------------|-------|---------|---|---------|---------|--------|----------------------------|--------|----------|------|
| | | | | CUMUL. TO DATE | DAILY | ESTIMATED NUMBER BY AGE IN YRS | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | ESTIMATED NUMBER AND PERCENTAGE BY AGE IN YEARS | 2 | 3 | 4 | | 5 | 6 | 7 |
| JULY | 2 | ZPG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0 |
| | 3 | NOR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0 |
| | 4 | E-E | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 1(99) | 1 |
| | 5 | STA | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 1(99) | 0 |
| | 6 | NOR | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 1(99) | 0 |
| | 17 | ZPG | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 1(99) | 0 |
| | 18 | NOR | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 0(0) | 1(99) | 0 |
| | 19 | E-E | 3 | 2 | 2 | 0 | 0 | 1 | 0 | 0 | 1 | 0(0) | 0(0) | 0(0) | 1(33) | 0(0) | 0(0) | 0(0) | 0(0) | 2(67) | 3 |
| | 20 | STA | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 1(33) | 0(0) | 0(0) | 0(0) | 0(0) | 2(67) | 0 |
| | 21 | NOR | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0(0) | 0(0) | 0(0) | 1(25) | 0(0) | 0(0) | 0(0) | 0(0) | 3(75) | 1 |
| | 22 | ZPG | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 0(0) | 0(0) | 1(25) | 0(0) | 0(0) | 0(0) | 0(0) | 3(75) | 0 |
| | 23 | NOR | 10 | 6 | 3 | 0 | 2 | 0 | 0 | 2 | 0 | 0(0) | 2(20) | 0(0) | 1(10) | 2(20) | 0(0) | 0(0) | 0(0) | 5(50) | 7 |
| | 24 | E-E | 17 | 7 | 7 | 0 | 0 | 0 | 0 | 0 | 7 | 0(0) | 2(12) | 0(0) | 1(6) | 2(12) | 0(0) | 0(0) | 0(0) | 12(71) | 10 |
| | 25 | STA | 23 | 6 | 6 | 0 | 0 | 0 | 2 | 2 | 0 | 0(0) | 2(9) | 0(0) | 3(13) | 4(17) | 0(0) | 0(0) | 0(0) | 14(61) | 6 |
| | 26 | NOR | 31 | 8 | 8 | 0 | 0 | 2 | 1 | 1 | 1 | 0(0) | 2(6) | 2(6) | 4(13) | 5(16) | 1(3) | 1(3) | 1(3) | 17(55) | 15 |
| | 27 | ZPG | 32 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0(0) | 2(6) | 2(6) | 4(13) | 5(16) | 1(3) | 1(3) | 1(3) | 18(56) | 1 |
| | 28 | NOR | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0(0) | 2(6) | 2(6) | 4(13) | 5(16) | 1(3) | 1(3) | 1(3) | 18(56) | 15 |
| | 29 | E-E | 51 | 19 | 18 | 0 | 0 | 2 | 0 | 3 | 0 | 0(0) | 2(4) | 4(8) | 4(8) | 8(16) | 1(2) | 1(2) | 1(2) | 32(63) | 29 |
| | 30 | STA | 177 | 126 | 93 | 0 | 1 | 5 | 9 | 21 | 16 | 0(0) | 3(2) | 9(5) | 13(7) | 29(16) | 17(10) | 10(6) | 10(6) | 106(60) | 132 |
| | 31 | NOR | 210 | 33 | 32 | 0 | 0 | 6 | 4 | 6 | 0 | 0(0) | 3(1) | 15(7) | 17(8) | 35(17) | 17(8) | 17(8) | 17(8) | 123(59) | 48 |
| AUG | 1 | ZPG | 296 | 86 | 81 | 0 | 3 | 3 | 4 | 16 | 5 | 0(0) | 6(2) | 18(6) | 21(7) | 51(17) | 22(7) | 22(7) | 22(7) | 178(60) | 87 |
| | 2 | NOR | 360 | 64 | 64 | 0 | 6 | 15 | 6 | 7 | 5 | 0(0) | 12(3) | 33(9) | 27(7) | 58(16) | 27(7) | 27(7) | 27(7) | 203(56) | 112 |
| | 3 | E-E | 463 | 103 | 91 | 0 | 14 | 18 | 12 | 10 | 3 | 0(0) | 26(6) | 51(11) | 39(8) | 68(15) | 30(6) | 30(6) | 30(6) | 249(54) | 132 |
| | 4 | STA | 556 | 93 | 87 | 0 | 6 | 14 | 9 | 12 | 12 | 0(0) | 32(6) | 65(12) | 48(9) | 80(14) | 42(8) | 42(8) | 42(8) | 289(52) | 225 |
| | 5 | NOR | 676 | 120 | 95 | 0 | 12 | 23 | 20 | 12 | 8 | 0(0) | 44(7) | 88(13) | 58(10) | 92(14) | 50(7) | 50(7) | 50(7) | 334(49) | 232 |
| | 6 | ZPG | 727 | 51 | 50 | 0 | 0 | 4 | 4 | 2 | 7 | 0(0) | 44(6) | 92(13) | 72(10) | 94(13) | 57(8) | 57(8) | 57(8) | 368(51) | 138 |
| | 7 | NOR | 795 | 68 | 65 | 0 | 5 | 15 | 7 | 11 | 6 | 0(0) | 49(6) | 107(13) | 79(10) | 105(13) | 63(8) | 63(8) | 63(8) | 392(49) | 300 |
| | 8 | E-E | 901 | 106 | 92 | 0 | 2 | 6 | 10 | 19 | 70 | 0(0) | 51(6) | 113(13) | 89(10) | 124(14) | 70(8) | 70(8) | 70(8) | 454(50) | 238 |
| | 9 | STA | 1363 | 462 | 93 | 0 | 18 | 60 | 18 | 51 | 18 | 0(0) | 69(5) | 173(13) | 107(8) | 175(13) | 88(6) | 88(6) | 88(6) | 751(55) | 687 |
| | 10 | NOR | 1598 | 235 | 100 | 2 | 59 | 50 | 21 | 35 | 5 | 2(1) | 128(8) | 223(14) | 128(8) | 210(13) | 93(6) | 93(6) | 93(6) | 814(51) | 535 |
| | 11 | ZPG | 2142 | 544 | 100 | 0 | 21 | 87 | 60 | 33 | 33 | 2(1) | 149(7) | 310(14) | 188(9) | 243(11) | 126(6) | 126(6) | 126(6) | 1124(52) | 682 |
| | 12 | NOR | 2455 | 313 | 100 | 0 | 31 | 50 | 31 | 28 | 31 | 2(1) | 180(7) | 360(15) | 219(9) | 271(11) | 157(6) | 157(6) | 157(6) | 1266(52) | 848 |
| | 13 | E-E | 2648 | 193 | 100 | 0 | 15 | 52 | 27 | 13 | 21 | 2(1) | 195(7) | 412(16) | 246(9) | 284(11) | 178(7) | 178(7) | 178(7) | 1331(50) | 431 |
| | 14 | STA | 3284 | 636 | 108 | 6 | 51 | 114 | 76 | 64 | 57 | 8(1) | 246(7) | 526(16) | 322(10) | 348(11) | 235(7) | 235(7) | 235(7) | 1599(49) | 1323 |
| | 15 | NOR | 3623 | 339 | 102 | 0 | 51 | 61 | 51 | 27 | 7 | 8(1) | 297(8) | 587(16) | 373(10) | 375(10) | 242(7) | 242(7) | 242(7) | 1741(48) | 1187 |
| | 31 | ZPG | 4884 | 1261 | 122 | 25 | 139 | 100 | 139 | 139 | 88 | 33(1) | 436(9) | 687(14) | 512(10) | 514(11) | 280(6) | 280(6) | 280(6) | 2422(50) | 1943 |
| | 1 | STA | 6483 | 1599 | 165 | 0 | 256 | 336 | 128 | 143 | 112 | 33(1) | 692(11) | 1023(16) | 640(10) | 657(10) | 392(6) | 392(6) | 392(6) | 3046(47) | 2922 |
| | 6 | NOR | 8137 | 1654 | 166 | 33 | 149 | 182 | 182 | 182 | 165 | 66(1) | 841(10) | 1205(15) | 822(10) | 839(10) | 557(7) | 557(7) | 557(7) | 3807(47) | 2841 |
| | 7 | E-E | 8763 | 526 | 65 | 31 | 69 | 125 | 69 | 31 | 69 | 97(1) | 910(10) | 1330(15) | 891(10) | 870(10) | 626(7) | 626(7) | 626(7) | 4039(46) | 1057 |
| COMB | 88 | COM | 8763 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 97(1) | 910(10) | 1330(15) | 891(10) | 870(10) | 626(7) | 626(7) | 626(7) | 4039(46) | 0 |

*POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; TZR=TOLOSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; ZAP=ZAPADNI I-ST. PAUL I. ONLY; REF=REEF, GORBACH, AND ARDIGUON; L-K=LUKANIN, AND KITOVI; ZPG=ZAPADNI II-ST. GEORGE I.; NOR=NORTH; E-E=EAST REEF, AND EAST CLIFF; STA=STARAYA ATRIL; TLK=TOLSTOI, LUKANIN, AND KITOVI; NEP=NORTHEAST POINT MORJOVI, AND VOSTOCHNI; LZP=LITTLE ZAPADNI, AND POLOVINA; 0 RLK=REEF, LUKANIN, AND KITOVI; COM=COMBINED ROOKERY; UNS=UNSPECIFIED; COMB 88=COMBINED KILL DATE

TABLE 88A- DAILY AND CUMULATIVE COMMERCIAL KILL OF FEMALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1962.

| DATE | ROOKERY | NUMBER KILLED | NO. INO | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | | | CUM. KILL BY AREA ALL AGES | | | |
|------|---------|---------------|---------|----------------|--------------|-------|--------------------------------|-----|-----|-----|-----|-----------------|--------|----------|---|----------|---------|---------|----------------------------|-------|----|--|
| | | | | CUMUL. TO DATE | DAILY SAMPLE | TOOTH | ESTIMATED NUMBER BY AGE IN YRS | | | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE IN YEARS | | | | | | | |
| | | | | | | | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | 2 | 3 | 4 | 5 | 6 | | 7 | 7+ | |
| JULY | 28 | TZR | 17 | 17 | 8 | 0 | 0 | 0 | 0 | 2 | 4 | 11 | 0(0) | 0(0) | 0(0) | 0(0) | 2(12) | 4(24) | 11(65) | 17 | | |
| | 29 | ZAP | 20 | 3 | 3 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0(0) | 0(0) | 0(0) | 0(0) | 3(15) | 4(20) | 13(65) | 3 | | |
| | 30 | RLK | 99 | 79 | 50 | 0 | 0 | 11 | 4 | 2 | 3 | 59 | 0(0) | 0(0) | 11(11) | 4(4) | 5(5) | 7(7) | 72(73) | 79 | | |
| | 31 | POL | 113 | 14 | 7 | 0 | 0 | 4 | 4 | 0 | 0 | 6 | 0(0) | 0(0) | 15(13) | 8(7) | 5(4) | 7(6) | 78(69) | 14 | | |
| AUG | 1 | NEP | 333 | 220 | 89 | 0 | 0 | 59 | 44 | 20 | 9 | 88 | 0(0) | 0(0) | 74(22) | 52(16) | 25(8) | 16(5) | 166(50) | 220 | | |
| | 2 | TZR | 594 | 261 | 83 | 0 | 13 | 58 | 65 | 26 | 13 | 86 | 0(0) | 13(2) | 132(22) | 117(20) | 51(9) | 29(5) | 252(42) | 278 | | |
| | 3 | ZAP | 776 | 182 | 62 | 0 | 5 | 27 | 18 | 11 | 11 | 110 | 0(0) | 18(2) | 159(20) | 135(17) | 62(8) | 40(5) | 362(47) | 185 | | |
| | 4 | REF | 1298 | 522 | 169 | 5 | 41 | 172 | 84 | 21 | 28 | 173 | 5(1) | 59(5) | 331(26) | 219(17) | 83(6) | 66(5) | 535(41) | 522 | | |
| | 5 | POL | 1581 | 283 | 80 | 0 | 20 | 113 | 54 | 14 | 11 | 71 | 5(1) | 79(5) | 444(28) | 273(17) | 97(6) | 77(5) | 606(38) | 297 | | |
| | 13 | NEP | 3297 | 1716 | 363 | 17 | 172 | 480 | 206 | 172 | 120 | 549 | 22(1) | 251(8) | 924(28) | 479(15) | 269(8) | 197(6) | 1155(35) | 1936 | | |
| | 14 | NEP | 5158 | 1861 | 417 | 0 | 260 | 614 | 261 | 112 | 56 | 558 | 22(1) | 511(10) | 1538(30) | 740(14) | 381(7) | 259(5) | 1713(33) | 37970 | | |
| | 15 | TZR | 7637 | 2479 | 558 | 0 | 248 | 496 | 446 | 174 | 149 | 966 | 22(1) | 759(10) | 2034(27) | 1186(16) | 555(7) | 402(5) | 2679(35) | 27570 | | |
| | 16 | ZAP | 9103 | 1466 | 350 | 0 | 234 | 381 | 191 | 103 | 103 | 454 | 22(1) | 993(11) | 2415(27) | 1377(15) | 658(7) | 505(6) | 3133(34) | 1651 | | |
| | 17 | REF | 11187 | 2084 | 217 | 21 | 480 | 500 | 333 | 104 | 104 | 542 | 43(1) | 1473(13) | 2915(26) | 1710(15) | 762(7) | 609(5) | 3675(33) | 26080 | | |
| | 20 | POL | 12447 | 1260 | 141 | 13 | 151 | 365 | 265 | 76 | 76 | 314 | 56(1) | 1624(13) | 3280(26) | 1975(16) | 838(7) | 685(6) | 3989(32) | 1557 | | |
| | 21 | NEP | 14240 | 1793 | 183 | 36 | 305 | 448 | 215 | 143 | 125 | 521 | 92(1) | 1929(14) | 3728(28) | 2190(15) | 981(7) | 810(6) | 4510(32) | 5590 | | |
| | 22 | TZR | 15707 | 1467 | 150 | 64 | 378 | 360 | 193 | 42 | 43 | 387 | 156(1) | 2307(15) | 4088(26) | 2383(15) | 1023(7) | 853(5) | 4897(31) | 4224 | | |
| | 22 | TZR | 16695 | 988 | 98 | 0 | 169 | 298 | 159 | 82 | 19 | 281 | 156(1) | 2476(15) | 4386(26) | 2542(15) | 1085(6) | 872(5) | 5178(31) | 52120 | | |
| | 23 | ZAP | 16917 | 222 | 25 | 27 | 44 | 44 | 36 | 0 | 0 | 71 | 183(1) | 2520(15) | 4430(26) | 2578(15) | 1085(6) | 872(5) | 5249(31) | 18730 | | |
| | 23 | TZR | 18475 | 1558 | 164 | 93 | 499 | 374 | 172 | 31 | 31 | 358 | 276(1) | 3019(16) | 4804(26) | 2750(15) | 1116(6) | 903(5) | 5607(30) | 87700 | | |
| | 24 | POL | 18827 | 352 | 35 | 0 | 10 | 91 | 39 | 11 | 11 | 190 | 276(1) | 3029(16) | 4895(26) | 2789(15) | 1127(6) | 914(5) | 5797(31) | 1909 | | |
| | 24 | REF | 19188 | 359 | 34 | 11 | 82 | 65 | 54 | 32 | 0 | 115 | 287(1) | 3111(16) | 4980(26) | 2843(15) | 1159(8) | 914(5) | 5912(31) | 2965 | | |
| | 6 | NEP | 21170 | 1984 | 288 | 20 | 40 | 239 | 258 | 218 | 177 | 1032 | 307(1) | 3151(15) | 5199(25) | 3101(15) | 1377(7) | 1091(5) | 6944(33) | 7574 | | |
| | 7 | ZAP | 21283 | 113 | 23 | 00 | 0 | 10 | 10 | 10 | 10 | 73 | 307(1) | 3151(15) | 5209(24) | 3111(15) | 1387(7) | 1101(5) | 7017(33) | 1986 | | |
| | 7 | TZR | 21703 | 420 | 81 | 00 | 4 | 21 | 67 | 29 | 29 | 270 | 307(1) | 3155(15) | 5230(24) | 3178(15) | 1416(7) | 1130(5) | 7287(34) | 71900 | | |
| | 11 | TZR | 22048 | 345 | 33 | 00 | 0 | 10 | 21 | 53 | 10 | 251 | 307(1) | 3155(14) | 5240(24) | 3199(15) | 1469(7) | 1140(5) | 7538(34) | 7535 | | |
| | 11 | POL | 22341 | 293 | 30 | 00 | 0 | 9 | 100 | 31 | 9 | 144 | 307(1) | 3155(14) | 5249(23) | 3299(15) | 1500(7) | 1149(5) | 7682(34) | 22020 | | |
| | 11 | ZAP | 23113 | 772 | 75 | 0 | 69 | 93 | 116 | 54 | 100 | 340 | 307(1) | 3224(14) | 5342(23) | 3415(15) | 1554(7) | 1249(5) | 8022(35) | 2758 | | |
| | 12 | NEP | 23613 | 500 | 48 | 00 | 0 | 65 | 30 | 50 | 50 | 305 | 307(1) | 3224(14) | 5407(23) | 3445(15) | 1604(7) | 1299(6) | 8327(35) | 8074 | | |
| | 13 | REF | 24694 | 1081 | 108 | 00 | 22 | 141 | 151 | 97 | 130 | 540 | 307(1) | 3246(13) | 5548(22) | 3598(15) | 1701(7) | 1429(8) | 8867(36) | 4046 | | |
| | 13 | TZR | 24770 | 76 | 7 | 00 | 0 | 0 | 22 | 0 | 11 | 43 | 307(1) | 3246(13) | 5548(22) | 3618(15) | 1701(7) | 1440(6) | 8910(36) | 76110 | | |
| | 13 | ZAP | 25938 | 1068 | 95 | 11 | 22 | 44 | 129 | 65 | 75 | 722 | 318(1) | 3268(13) | 5592(22) | 3747(15) | 1766(7) | 1515(6) | 9632(37) | 3828 | | |
| | 14 | POL | 25904 | 66 | 7 | 00 | 0 | 19 | 29 | 9 | 9 | 0 | 318(1) | 3268(13) | 5611(22) | 3776(15) | 1775(7) | 1524(6) | 9632(37) | 2268 | | |
| | 14 | NEP | 27347 | 1443 | 146 | 0 | 14 | 203 | 245 | 173 | 115 | 693 | 318(1) | 3282(12) | 5814(21) | 4021(15) | 1948(7) | 1839(6) | 10325(38) | 9517 | | |
| | 17 | REF | 28431 | 1084 | 105 | 00 | 33 | 98 | 152 | 108 | 98 | 595 | 318(1) | 3315(12) | 5912(21) | 4173(15) | 2056(7) | 1737(6) | 10920(38) | 5130 | | |
| | 17 | TZR | 29856 | 1425 | 130 | 00 | 0 | 114 | 185 | 214 | 185 | 727 | 318(1) | 3315(11) | 6026(20) | 4358(15) | 2270(8) | 1922(6) | 11647(39) | 9036 | | |
| | 18 | REF | 31515 | 1659 | 155 | 0 | 17 | 34 | 150 | 99 | 150 | 1209 | 318(1) | 3332(11) | 6060(19) | 4508(14) | 2369(8) | 2072(7) | 12856(41) | 6789 | | |
| | 18 | POL | 32959 | 1444 | 137 | 00 | 14 | 173 | 231 | 101 | 101 | 824 | 318(1) | 3346(10) | 6233(19) | 4739(14) | 2470(7) | 2173(7) | 13680(42) | 3712 | | |
| | 19 | ZAP | 34825 | 1866 | 170 | 00 | 75 | 168 | 187 | 205 | 131 | 1100 | 318(1) | 3421(10) | 6401(18) | 4926(14) | 2675(8) | 2304(7) | 14780(42) | 5692 | | |
| COMB | 88 | COM | 35003 | 178 | 0 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 318(1) | 3421(10) | 6401(18) | 4926(14) | 2675(8) | 2304(7) | 14780(42) | 178 | | |

*POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; TZR=TOLOSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; ZAP=ZAPADNI I-ST. PAUL I. ONLY; REF=REEF, GORBACH, AND ARDIGUON; L-K=LUKANIN, AND KITOVI; ZPG=ZAPADNI II-ST. GEORGE I.; NOR=NORTH; E-E=EAST REEF, AND EAST CLIFF; 0 STA=STARAYA ATRIL; TLK=TOLSTOI, LUKANIN, AND KITOVI; NEP=NORTHEAST POINT MORJOVI, AND VOSTOCHNI; LZP=LITTLE ZAPADNI, AND POLOVINA; 0 RLK=REEF, LUKANIN, AND KITOVI; COM=COMBINED ROOKERY; UNS=UNSPECIFIED; COMB 88=COMBINED KILL DATE

TABLE 68B- DAILY AND CUMULATIVE COMMERCIAL KILL OF FEMALE FUR SEALS BY AREA ON ST. GEORGE ISLAND, 1962.

| DATE | ROOKERY# | NUMBER KILLED | NO. IN SAMPLE | DAILY TOOTH | DAILY KILL | | | | | | | CUMULATIVE KILL | | | | | | | CUM. KILL BY AREA ALL AGES | |
|------|----------|---------------|---------------|-------------|------------------|----|-----|-----|-----|-----|-----|-----------------|---|----------|----------|----------|---------|--------|----------------------------|------|
| | | | | | ESTIMATED NUMBER | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | ESTIMATED NUMBER AND PERCENTAGE BY AGE IN YEARS | 2 | 3 | 4 | 5 | 6 | | 7 |
| JULY | 31 | NOR | 19 | 19 | 17 | 0 | 0 | 4 | 1 | 1 | 1 | 12 | 0(0) | 0(0) | 4(21) | 1(5) | 1(5) | 1(5) | 12(63) | 19 |
| AUG | 1 | ZPG | 203 | 184 | 25 | 0 | 7 | 7 | 22 | 15 | 15 | 118 | 0(0) | 7(3) | 11(5) | 23(11) | 16(8) | 16(8) | 130(64) | 184 |
| | 2 | NOR | 454 | 251 | 29 | 0 | 8 | 70 | 53 | 35 | 0 | 85 | 0(0) | 15(3) | 81(18) | 76(17) | 51(11) | 16(4) | 215(47) | 270 |
| | 3 | E-E | 652 | 198 | 48 | 0 | 8 | 24 | 34 | 24 | 8 | 100 | 0(0) | 23(4) | 105(16) | 110(17) | 75(12) | 24(4) | 315(48) | 198 |
| | 4 | STA | 861 | 209 | 62 | 0 | 0 | 48 | 17 | 21 | 6 | 117 | 0(0) | 23(3) | 153(18) | 127(15) | 96(11) | 30(3) | 432(50) | 209 |
| | 5 | NOR | 988 | 127 | 47 | 0 | 2 | 36 | 26 | 5 | 8 | 50 | 0(0) | 25(3) | 189(19) | 153(15) | 101(10) | 38(4) | 482(49) | 397 |
| | 13 | ZPG | 1518 | 530 | 84 | 0 | 11 | 106 | 73 | 32 | 21 | 287 | 0(0) | 36(2) | 295(19) | 226(15) | 133(9) | 59(4) | 769(51) | 714 |
| | 14 | NOR | 2208 | 690 | 129 | 0 | 41 | 138 | 118 | 55 | 69 | 269 | 0(0) | 77(3) | 433(20) | 344(16) | 188(9) | 128(6) | 1038(47) | 1087 |
| | 15 | E-E | 2625 | 417 | 104 | 0 | 13 | 67 | 71 | 62 | 25 | 179 | 0(0) | 90(3) | 500(19) | 415(16) | 250(10) | 153(6) | 1217(46) | 615 |
| | 16 | STA | 3519 | 894 | 162 | 0 | 80 | 268 | 116 | 72 | 36 | 322 | 0(0) | 170(5) | 768(22) | 531(15) | 322(9) | 189(5) | 1539(44) | 1103 |
| | 17 | NOR | 4202 | 683 | 68 | 0 | 68 | 164 | 137 | 89 | 41 | 184 | 0(0) | 238(6) | 932(22) | 668(16) | 411(10) | 230(5) | 1723(41) | 1770 |
| | 20 | ZPG | 5669 | 1467 | 160 | 0 | 264 | 337 | 161 | 59 | 59 | 587 | 0(0) | 502(9) | 1269(22) | 829(15) | 470(8) | 289(5) | 2310(41) | 2181 |
| | 21 | NOR | 7570 | 1901 | 199 | 38 | 323 | 495 | 228 | 152 | 114 | 551 | 38(1) | 825(11) | 1764(23) | 1057(14) | 622(8) | 403(5) | 2861(38) | 3671 |
| | 22 | E-E | 8315 | 745 | 82 | 30 | 134 | 186 | 52 | 15 | 37 | 291 | 68(1) | 959(12) | 1950(23) | 1109(13) | 637(8) | 440(5) | 3152(38) | 1360 |
| | 23 | STA | 8732 | 417 | 52 | 8 | 71 | 150 | 104 | 42 | 8 | 34 | 76(1) | 1030(12) | 2100(24) | 1213(14) | 679(8) | 448(5) | 3186(36) | 1520 |
| COMB | 88 | COM | 8757 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 76(1) | 1030(12) | 2100(24) | 1213(14) | 679(8) | 448(5) | 3186(36) | 25 |

*POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; TZR=TOLOSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; ZAP=ZAPADNI I-ST. PAUL I. ONLY; REF=REEF, GORBACH, AND ARDIGUON; L-K=LUKANIN, AND KITOVI; ZPG=ZAPADNI II-ST. GEORGE I.; NOR=NORTH; E-E=EAST REEF, AND EAST CLIFF; STA=STARAYA ATRIL; TLK=TOLSTOI, LUKANIN, AND KITOVI; NEP=NORTHEAST POINT MORJOVI, AND VOSTOCHNI; LZP=LITTLE ZAPADNI, AND POLOVINA; RLK=REEF, LUKANIN, AND KITOVI; COM=COMBINED ROOKERY; UNS=UNSPECIFIED; COMB 88=COMBINED KILL DATE.

TABLE 69A- DAILY AND CUMULATIVE COMMERCIAL KILL OF FEMALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1963.

| DATE | ROOK- ERY# | NUMBER | KILLED | NO. IN | DAILY KILL | | | | | | | CUMULATIVE KILL | | | | | | | CUM. KILL BY AREA ALL AGES | | | |
|------|---------------|--------|--------|-----------|-------------------|-----------------|-------|--------------------------------|-----|-----|----|-----------------|--------|---------|---|----------|----------|---------|----------------------------------|-------|---|----|
| | | | | | CUMUL. TO DATE | DAILY SAMPLE | TOOTH | ESTIMATED NUMBER BY AGE IN YRS | | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE IN YEARS | | | | | | | |
| | | | | | | | | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | 2 | 3 | 4 | 5 | | 6 | 7 | 7+ |
| AUG | 1 | NEP | 41 | 41 | 21 | 0 | 0 | 0 | 6 | 8 | 4 | 23 | 0(0) | 0(0) | 0(0) | 6(15) | 8(20) | 4(10) | 23(56) | 41 | | |
| | 2 | TZR | 62 | 21 | 14 | 0 | 0 | 2 | 0 | 4 | 0 | 15 | 0(0) | 0(0) | 2(3) | 6(10) | 12(19) | 4(6) | 38(61) | 21 | | |
| | 3 | ZAP | 176 | 114 | 65 | 0 | 0 | 13 | 22 | 17 | 10 | 52 | 0(0) | 0(0) | 15(9) | 28(16) | 29(16) | 14(8) | 90(51) | 114 | | |
| | 4 | REF | 396 | 220 | 121 | 0 | 0 | 15 | 20 | 18 | 13 | 154 | 0(0) | 0(0) | 30(8) | 48(12) | 47(12) | 27(7) | 244(62) | 220 | | |
| | 5 | POL | 447 | 51 | 21 | 0 | 2 | 0 | 10 | 10 | 5 | 24 | 0(0) | 2(1) | 30(7) | 58(13) | 57(13) | 32(7) | 268(60) | 51 | | |
| | 13 | NEP | 882 | 435 | 108 | 0 | 0 | 61 | 87 | 35 | 17 | 235 | 0(0) | 2(1) | 91(10) | 145(16) | 92(10) | 49(6) | 503(57) | 476 | | |
| | 13 | POL | 1650 | 768 | 167 | 0 | 0 | 107 | 192 | 123 | 23 | 323 | 0(0) | 2(1) | 198(12) | 337(20) | 215(13) | 72(4) | 826(50) | 819 | | |
| | 14 | ZAP | 3261 | 1611 | 343 | 0 | 32 | 225 | 338 | 146 | 80 | 790 | 0(0) | 34(1) | 423(13) | 675(21) | 361(11) | 152(5) | 1616(50) | 1725 | | |
| | 15 | TZR | 3526 | 265 | 63 | 0 | 8 | 66 | 66 | 27 | 8 | 90 | 0(0) | 42(1) | 489(14) | 741(21) | 388(11) | 160(5) | 1706(48) | 286 | | |
| | 15 | REF | 3837 | 311 | 71 | 0 | 19 | 65 | 84 | 34 | 3 | 106 | 0(0) | 61(2) | 554(14) | 825(22) | 422(11) | 163(4) | 1812(47) | 531 | | |
| | 15 | POL | 4148 | 311 | 70 | 0 | 3 | 28 | 71 | 50 | 22 | 137 | 0(0) | 64(2) | 582(14) | 896(22) | 472(11) | 185(4) | 1949(47) | 1130 | | |
| | 16 | ZAP | 5113 | 965 | 189 | 0 | 19 | 116 | 193 | 77 | 48 | 512 | 0(0) | 83(2) | 698(14) | 1089(21) | 549(11) | 233(5) | 2461(48) | 2690 | | |
| | 16 | TZR | 6243 | 1130 | 217 | 0 | 45 | 181 | 147 | 91 | 56 | 610 | 0(0) | 128(2) | 879(14) | 1236(20) | 640(10) | 289(5) | 3071(49) | 1416 | | |
| | 19 | NEP | 8305 | 2062 | 419 | 20 | 165 | 392 | 433 | 186 | 82 | 784 | 20(1) | 293(4) | 1271(15) | 1669(20) | 826(10) | 371(4) | 3855(46) | 2538 | | |
| | 20 | NEP | 10377 | 2072 | 431 | 21 | 145 | 518 | 0 | 207 | 83 | 600 | 41(1) | 438(4) | 1789(17) | 1669(16) | 1033(10) | 454(4) | 4455(43) | 4610 | | |
| | 21 | REF | 11667 | 1290 | 256 | 0 | 13 | 142 | 193 | 168 | 52 | 722 | 41(1) | 451(4) | 1931(17) | 1862(16) | 1201(10) | 506(4) | 5177(44) | 1821 | | |
| | 21 | REF | 12177 | 510 | 108 | 0 | 25 | 97 | 143 | 41 | 20 | 184 | 41(1) | 476(4) | 2028(17) | 2005(16) | 1242(10) | 526(4) | 5361(44) | 2331 | | |
| | 22 | ZAP | 12622 | 445 | 84 | 0 | 4 | 45 | 116 | 62 | 22 | 196 | 41(1) | 480(4) | 2073(16) | 2121(17) | 1304(10) | 548(4) | 5557(44) | 3135 | | |
| | 22 | TZR | 13704 | 1082 | 211 | 0 | 76 | 227 | 162 | 98 | 32 | 487 | 41(1) | 556(4) | 2300(17) | 2283(17) | 1402(10) | 580(4) | 6044(44) | 2498 | | |
| | 22 | TZR | 13978 | 274 | 55 | 0 | 25 | 68 | 66 | 30 | 0 | 85 | 41(1) | 581(4) | 2368(17) | 2349(17) | 1432(10) | 580(4) | 6129(44) | 2772 | | |
| | 23 | POL | 15377 | 1399 | 285 | 14 | 126 | 377 | 308 | 154 | 42 | 378 | 55(1) | 707(5) | 2745(18) | 2657(17) | 1586(10) | 622(4) | 6507(42) | 2529 | | |
| | 23 | POL | 15852 | 475 | 96 | 0 | 19 | 66 | 105 | 47 | 24 | 214 | 55(1) | 726(5) | 2811(18) | 2762(17) | 1633(10) | 646(4) | 6721(42) | 3004 | | |
| | 26 | NEP | 17955 | 2103 | 405 | 21 | 168 | 463 | 547 | 189 | 42 | 673 | 76(1) | 894(5) | 3274(18) | 3309(18) | 1822(10) | 688(4) | 7394(41) | 6713 | | |
| | 27 | NEP | 18275 | 320 | 68 | 0 | 0 | 3 | 48 | 13 | 19 | 237 | 76(1) | 894(5) | 3277(18) | 3357(18) | 1835(10) | 707(4) | 7631(42) | 7033 | | |
| | 27 | NEP | 20067 | 1792 | 358 | 0 | 107 | 430 | 484 | 215 | 36 | 520 | 76(1) | 1001(5) | 3707(18) | 3841(19) | 2050(10) | 743(4) | 8151(41) | 8825 | | |
| | 28 | REF | 22265 | 2198 | 438 | 22 | 131 | 396 | 418 | 154 | 44 | 1033 | 98(1) | 1132(5) | 4103(18) | 4259(19) | 2204(10) | 787(4) | 9184(41) | 4529 | | |
| | 30 | REF | 23378 | 1113 | 224 | 56 | 101 | 189 | 189 | 78 | 33 | 467 | 154(1) | 1233(5) | 4292(18) | 4448(19) | 2282(10) | 820(4) | 9651(41) | 5642 | | |
| | 30 | REF | 24688 | 1310 | 261 | 39 | 118 | 210 | 301 | 65 | 66 | 511 | 193(1) | 1351(5) | 4502(18) | 4749(19) | 2347(10) | 886(4) | 10162(41) | 6952 | | |
| | 3 | TZR | 25827 | 1139 | 227 | 11 | 68 | 103 | 194 | 79 | 80 | 604 | 204(1) | 1419(5) | 4605(18) | 4943(19) | 2426(19) | 966(4) | 10766(42) | 3911 | | |
| | 4 | TZR | 26651 | 824 | 149 | 33 | 58 | 148 | 124 | 66 | 41 | 354 | 237(1) | 1477(6) | 4753(18) | 5067(19) | 2492(19) | 1007(4) | 11120(42) | 4735 | | |
| | 5 | POL | 27534 | 883 | 173 | 26 | 79 | 159 | 221 | 106 | 18 | 274 | 263(1) | 1556(6) | 4912(18) | 5288(19) | 2598(9) | 1025(4) | 11394(41) | 3887 | | |
| | 5 | POL | 28050 | 516 | 106 | 10 | 31 | 139 | 129 | 52 | 26 | 129 | 273(1) | 1587(6) | 5051(18) | 5417(19) | 2650(9) | 1051(4) | 11523(41) | 4403 | | |
| | 5 | TZR | 28662 | 612 | 120 | 18 | 49 | 49 | 67 | 49 | 31 | 349 | 291(1) | 1636(6) | 5100(18) | 5484(19) | 2699(9) | 1082(4) | 11872(41) | 5347 | | |
| | 6 | TZR | 29648 | 986 | 197 | 0 | 89 | 69 | 98 | 89 | 69 | 572 | 291(1) | 1725(6) | 5169(17) | 5582(19) | 2788(9) | 1151(4) | 12444(42) | 6333 | | |
| | 7 | REF | 30729 | 1081 | 214 | 76 | 76 | 195 | 195 | 86 | 43 | 410 | 367(1) | 1801(6) | 5364(17) | 5777(19) | 2874(9) | 1194(4) | 12854(42) | 8033 | | |
| | 9 | REF | 32124 | 1395 | 286 | 70 | 126 | 139 | 167 | 98 | 56 | 739 | 437(1) | 1927(6) | 5503(17) | 5944(19) | 2972(9) | 1250(4) | 13593(42) | 9428 | | |
| | 9 | TZR | 32254 | 130 | 28 | 0 | 0 | 5 | 13 | 5 | 5 | 102 | 437(1) | 1927(6) | 5508(17) | 5957(18) | 2977(9) | 1255(4) | 13695(42) | 6463 | | |
| | 10 | NEP | 32943 | 689 | 129 | 14 | 27 | 138 | 145 | 21 | 62 | 282 | 451(1) | 1954(6) | 5646(17) | 6102(19) | 2998(9) | 1317(4) | 13977(42) | 9514 | | |
| | 10 | NEP | 33873 | 930 | 203 | 28 | 93 | 214 | 270 | 102 | 19 | 204 | 479(1) | 2047(6) | 5860(17) | 6372(19) | 3100(9) | 1336(4) | 14181(42) | 10444 | | |
| | 12 | REF | 34875 | 1002 | 202 | 20 | 30 | 50 | 80 | 50 | 70 | 702 | 499(1) | 2077(6) | 5910(17) | 6452(19) | 3150(9) | 1406(4) | 14883(43) | 10430 | | |
| COMB | 88 | COM | 35093 | 218 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 499(1) | 2077(6) | 5910(17) | 6452(18) | 3150(9) | 1406(4) | 14883(42) | 218 | | |

*POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; TZR=TOLOSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; ZAP=ZAPADNI I-ST. PAUL I. ONLY; REF=REEF, GORBACH, AND ARDIGUON; L-K=LUKANIN, AND KITOVI; ZPG=ZAPADNI II-ST. GEORGE I.; NOR=NORTH; E-E=EAST REEF, AND EAST CLIFF; STA=STARAYA ATRIL; TLK=TOLSTOI, LUKANIN, AND KITOVI; NEP=NORTHEAST POINT MORJOVI, AND VOSTOCHNI; LZZ=LITTLE ZAPADNI, AND POLOVINA; I RLK=REEF, LUKANIN, AND KITOVI; COM=COMBINED ROOKERY; UNS=UNSPECIFIED; COMB 88=COMBINED KILL DATE I

TABLE 69B- DAILY AND CUMULATIVE COMMERCIAL KILL OF FEMALE FUR SEALS BY AREA ON ST. GEORGE ISLAND, 1963.

| DATE | ROOK- ERY# | NUMBER KILLED | NO. IN TOOTH SAMPLE | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | | | CUM. KILL BY AREA ALL AGES | |
|------|---------------|------------------|------------------------------|---------------------|-----|----|-----|-----|-----|-----|----|---|--------|---------|----------|----------|---------|--------|----------------------------------|------|
| | | | | ESTIMATED NUMBER | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | ESTIMATED NUMBER AND PERCENTAGE BY AGE IN YEARS | 2 | 3 | 4 | 5 | 6 | 7 | | 7+ |
| AUG | 2 | STA | 21 | 21 | 20 | 0 | 0 | 3 | 2 | 1 | 0 | 15 | 0(0) | 0(0) | 3(14) | 2(10) | 1(5) | 0(0) | 15(71) | 21 |
| | 2 | E-E | 43 | 22 | 19 | 0 | 0 | 5 | 2 | 4 | 2 | 9 | 0(0) | 0(0) | 8(19) | 4(9) | 5(12) | 2(5) | 24(56) | 22 |
| | 5 | ZPG | 90 | 47 | 20 | 0 | 2 | 8 | 51 | 5 | 2 | 24 | 0(0) | 2(2) | 17(19) | 9(10) | 10(11) | 4(4) | 48(53) | 47 |
| | 5 | NOR | 148 | 58 | 27 | 0 | 2 | 13 | 11 | 10 | 0 | 22 | 0(0) | 4(3) | 30(20) | 20(14) | 20(14) | 4(3) | 70(47) | 58 |
| | 13 | STA | 563 | 415 | 135 | 0 | 10 | 49 | 79 | 37 | 22 | 218 | 0(0) | 14(2) | 79(14) | 99(18) | 57(10) | 26(5) | 288(51) | 436 |
| | 14 | NOR | 1632 | 1069 | 174 | 0 | 54 | 235 | 214 | 150 | 53 | 363 | 0(0) | 68(4) | 314(19) | 313(19) | 207(13) | 79(5) | 651(40) | 1127 |
| | 16 | NOR | 2642 | 1010 | 144 | 0 | 91 | 182 | 192 | 81 | 40 | 424 | 0(0) | 159(6) | 496(19) | 505(19) | 288(11) | 119(5) | 1075(41) | 2137 |
| | 16 | E-E | 2732 | 90 | 26 | 4 | 4 | 17 | 24 | 7 | 6 | 28 | 4(1) | 163(6) | 513(19) | 529(19) | 295(11) | 125(5) | 1103(40) | 112 |
| | 19 | STA | 3262 | 530 | 75 | 0 | 37 | 122 | 101 | 32 | 26 | 212 | 4(1) | 200(6) | 635(19) | 630(19) | 327(10) | 151(5) | 1315(40) | 966 |
| | 21 | ZPG | 4159 | 897 | 110 | 9 | 36 | 233 | 99 | 90 | 36 | 394 | 13(1) | 236(6) | 868(21) | 729(18) | 417(10) | 187(4) | 1709(41) | 944 |
| | 23 | NOR | 4768 | 609 | 69 | 37 | 61 | 183 | 116 | 36 | 24 | 152 | 50(1) | 297(6) | 1051(22) | 845(18) | 453(10) | 211(4) | 1861(39) | 2746 |
| | 23 | E-E | 5228 | 460 | 60 | 32 | 69 | 115 | 60 | 46 | 37 | 101 | 82(2) | 366(7) | 1166(22) | 905(17) | 499(10) | 248(5) | 1962(38) | 572 |
| | 26 | ZPG | 6231 | 1003 | 124 | 20 | 141 | 331 | 130 | 110 | 20 | 251 | 102(2) | 507(8) | 1497(24) | 1035(17) | 609(10) | 268(4) | 2213(36) | 1947 |
| | 28 | STA | 7474 | 1243 | 159 | 12 | 137 | 224 | 298 | 100 | 62 | 410 | 114(2) | 644(9) | 1721(23) | 1333(18) | 709(9) | 330(4) | 2623(35) | 2209 |
| | 30 | NOR | 8708 | 1234 | 116 | 86 | 197 | 284 | 235 | 111 | 37 | 284 | 200(2) | 841(10) | 2005(23) | 1568(18) | 820(9) | 367(4) | 2907(33) | 3980 |
| COMB | 88 | COM | 8767 | 59 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 200(2) | 841(10) | 2005(23) | 1568(18) | 820(9) | 367(4) | 2907(33) | 59 |

*POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; TZR=TOLOSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; ZAP=ZAPADNI I-ST. PAUL I. ONLY; REF=REEF, GORBACH, AND ARDIGUON; L-K=LUKANIN, AND KITOVI; ZPG=ZAPADNI II-ST. GEORGE I.; NOR=NORTH; E-E=EAST REEF, AND EAST CLIFF; STA=STARAYA ATRIL; TLK=TOLSTOI, LUKANIN, AND KITOVI; NEP=NORTHEAST POINT MORJOVI, AND VOSTOCHNI; LZP=LITTLE ZAPADNI, AND POLOVINA; RLK=REEF, LUKANIN, AND KITOVI; COM=COMBINED ROOKERY; UNS=UNSPECIFIED; COMB 88=COMBINED KILL DATE 1

TABLE 70A- DAILY AND CUMULATIVE COMMERCIAL KILL OF FEMALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1964.

| DATE | ROOK-ERY# | NUMBER KILLED | NO. IN | DAILY KILL | | | | | | | | | CUMULATIVE KILL | | | | | | | CUM. KILL BY AREA ALL AGES | |
|------|-----------|---------------|--------|----------------|--------------|-------|--------------------------------|-----|-----|-----|----|-----|-----------------|---|----------|----------|----------|--------|----------|----------------------------|----|
| | | | | CUMUL. TO DATE | DAILY SAMPLE | TOOTH | ESTIMATED NUMBER BY AGE IN YRS | | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE IN YEARS | | | | | | | |
| | | | | | | | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | 2 | 3 | 4 | 5 | 6 | 7 | | 7+ |
| AUG | 17 | NEP | 1030 | 1030 | 211 | 21 | 185 | 227 | 196 | 175 | 41 | 185 | 21(2) | 185(18) | 227(22) | 196(19) | 175(17) | 41(4) | 185(18) | 1030 | |
| | 18 | NEP | 2497 | 1467 | 310 | 29 | 264 | 264 | 367 | 220 | 73 | 250 | 50(2) | 449(18) | 491(20) | 563(23) | 395(16) | 114(5) | 435(17) | 2497 | |
| | 19 | REF | 3683 | 1186 | 244 | 36 | 213 | 261 | 308 | 166 | 36 | 166 | 86(2) | 662(18) | 752(20) | 871(24) | 561(15) | 150(4) | 601(16) | 1186 | |
| | 20 | TZR | 3950 | 267 | 36 | 8 | 67 | 83 | 51 | 21 | 0 | 37 | 94(2) | 729(18) | 835(21) | 922(23) | 582(15) | 150(4) | 638(16) | 267 | |
| | 20 | TZR | 4820 | 870 | 196 | 17 | 165 | 218 | 157 | 87 | 43 | 183 | 111(2) | 894(19) | 1053(22) | 1079(22) | 669(14) | 193(4) | 821(17) | 1137 | |
| | 21 | POL | 4959 | 139 | 15 | 0 | 0 | 10 | 18 | 28 | 28 | 55 | 111(2) | 894(18) | 1063(21) | 1097(22) | 697(14) | 221(4) | 876(18) | 139 | |
| | 21 | POL | 5327 | 368 | 87 | 4 | 59 | 62 | 129 | 74 | 7 | 33 | 115(2) | 953(18) | 1125(21) | 1226(23) | 771(14) | 228(4) | 909(17) | 507 | |
| | 21 | NEP | 5493 | 166 | 34 | 5 | 20 | 43 | 25 | 43 | 10 | 20 | 120(2) | 973(18) | 1168(21) | 1251(23) | 814(15) | 238(4) | 929(17) | 2663 | |
| | 24 | REF | 5748 | 255 | 61 | 8 | 61 | 71 | 51 | 26 | 0 | 38 | 128(2) | 1034(18) | 1239(22) | 1302(23) | 840(15) | 238(4) | 967(17) | 1441 | |
| | 24 | NEP | 6357 | 609 | 119 | 6 | 128 | 165 | 152 | 91 | 18 | 49 | 134(2) | 1162(18) | 1404(22) | 1454(23) | 931(15) | 258(4) | 1016(16) | 3272 | |
| | 24 | NEP | 6641 | 284 | 62 | 14 | 31 | 54 | 82 | 51 | 9 | 43 | 148(2) | 1193(18) | 1458(22) | 1536(23) | 982(15) | 265(4) | 1059(16) | 3556 | |
| | 25 | POL | 6726 | 85 | 20 | 4 | 9 | 9 | 25 | 34 | 4 | 0 | 152(2) | 1202(18) | 1467(22) | 1561(23) | 1016(15) | 269(4) | 1059(16) | 592 | |
| | 25 | L-K | 6895 | 169 | 32 | 0 | 37 | 37 | 27 | 42 | 5 | 21 | 152(2) | 1239(18) | 1504(22) | 1588(23) | 1058(15) | 274(4) | 1080(16) | 169 | |
| | 25 | TZR | 7596 | 701 | 140 | 35 | 204 | 133 | 119 | 63 | 28 | 119 | 187(2) | 1443(19) | 1637(22) | 1707(22) | 1121(15) | 302(4) | 1199(16) | 1838 | |
| | 25 | POL | 7655 | 59 | 19 | 3 | 22 | 9 | 3 | 7 | 3 | 12 | 190(2) | 1465(19) | 1646(22) | 1710(22) | 1128(15) | 305(4) | 1211(16) | 651 | |
| | 26 | TZR | 7948 | 293 | 67 | 35 | 88 | 62 | 53 | 29 | 0 | 26 | 225(3) | 1553(20) | 1708(21) | 1763(22) | 1157(15) | 305(4) | 1237(16) | 2131 | |
| | 26 | NEP | 8604 | 656 | 142 | 7 | 138 | 164 | 197 | 65 | 20 | 65 | 232(3) | 1691(20) | 1872(22) | 1960(23) | 1222(14) | 325(4) | 1302(15) | 4212 | |
| | 27 | ZAP | 10100 | 1496 | 311 | 15 | 359 | 359 | 359 | 165 | 74 | 165 | 247(2) | 2050(20) | 2231(22) | 2319(23) | 1387(14) | 399(4) | 1467(15) | 1496 | |
| | 28 | ZAP | 10751 | 651 | 144 | 19 | 189 | 156 | 143 | 59 | 33 | 52 | 266(2) | 2239(21) | 2387(22) | 2462(23) | 1446(13) | 432(4) | 1519(14) | 2147 | |
| COMB | 88 | COM | 12034 | 1283 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 266(2) | 2239(19) | 2387(20) | 2462(20) | 1446(12) | 432(4) | 1519(13) | 1283 | |

*POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; TZR=TOLOSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; ZAP=ZAPADNI I-ST. PAUL I. ONLY; REF=REEF, GORBACH, AND ARDIGUON; L-K=LUKANIN, AND KITOVI; ZPG=ZAPADNI II-ST. GEORGE I.; NOR=NORTH; E-E=EAST REEF, AND EAST CLIFF; STA=STARAYA ATRIL; TLK=TOLSTOI, LUKANIN, AND KITOVI; NEP=NORTHEAST POINT MORJOVI, AND VOSTOCHNI; LZR=LITTLE ZAPADNI, AND POLOVINA; RLK=REEF, LUKANIN, AND KITOVI; COM=COMBINED ROOKERY; UNS=UNSPECIFIED; COMB 88=COMBINED KILL DATE

TABLE 708- DAILY AND CUMULATIVE COMMERCIAL KILL OF FEMALE FUR SEALS BY AREA ON ST. GEORGE ISLAND, 1964.

| DATE | ROOK- ERY# | NUMBER KILLED | NO. IN TOOTH SAMPLE | DAILY KILL | | | | | | | | | CUMULATIVE KILL | | | | | | | CUM. KILL BY AREA ALL AGES |
|------|---------------|------------------|------------------------------|---------------------|-----------|-----------|-----|-----|-----|----|----|----|-----------------|---------------------|-------------------|-----------|-------------|-------|--------|----------------------------------|
| | | | | ESTIMATED NUMBER | BY AGE | IN YRS | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | ESTIMATED NUMBER | AND PERCENTAGE | BY AGE | IN YEARS | 2 | 3 | |
| AUG | 14 | STA | 286 | 286 | 39 | 9 | 57 | 74 | 66 | 43 | 9 | 28 | 9(3) | 57(20) | 74(26) | 66(23) | 43(15) | 9(3) | 28(10) | 286 |
| | 17 | ZPG | 783 | 497 | 81 | 0 | 124 | 79 | 194 | 50 | 25 | 25 | 9(1) | 181(23) | 153(20) | 260(33) | 93(12) | 34(4) | 53(7) | 497 |
| | 19 | NOR | 1511 | 728 | 164 | 7 | 233 | 167 | 182 | 73 | 15 | 51 | 16(1) | 414(27) | 320(21) | 442(29) | 166(11) | 49(3) | 104(7) | 728 |
| | 21 | STA | 1801 | 290 | 62 | 3 | 113 | 67 | 67 | 32 | 0 | 8 | 19(1) | 527(29) | 387(21) | 509(28) | 198(11) | 49(3) | 112(6) | 576 |
| | 21 | E-EA | 2288 | 487 | 116 | 15 | 131 | 151 | 136 | 34 | 5 | 15 | 34(1) | 658(29) | 538(24) | 645(28) | 232(10) | 54(2) | 127(6) | 487 |
| | 24 | ZPG | 3059 | 771 | 169 | 31 | 208 | 201 | 216 | 85 | 15 | 15 | 65(2) | 866(28) | 739(24) | 861(28) | 317(10) | 69(2) | 142(5) | 1268 |
| | 26 | STA | 3488 | 429 | 98 | 4 | 129 | 94 | 133 | 34 | 13 | 22 | 69(2) | 995(29) | 833(24) | 994(28) | 351(10) | 82(2) | 164(5) | 1005 |
| | 26 | NOR | 3851 | 363 | 75 | 11 | 120 | 105 | 87 | 25 | 4 | 11 | 80(2) | 1115(29) | 938(24) | 1081(28) | 376(10) | 86(2) | 175(5) | 1091 |
| COMB | 88 | COM | 4418 | 567 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 80(2) | 1115(25) | 938(21) | 1081(24) | 376(9) | 86(2) | 175(4) | 567 |

*POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; TZR=TOLOSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; ZAP=ZAPADNI I-ST. PAUL I. ONLY; A
 REF=REEF, GORBACH, AND ARDIGUON; L-K=LUKANIN, AND KITOVI; ZPG=ZAPADNI II-ST. GEORGE I.; NOR=NORTH; E-E=EAST REEF, AND EAST CLIFF; A
 STA=STARAYA ATRIL; TLK=TOLSTOI, LUKANIN, AND KITOVI; NEP=NORTHEAST POINT MORJOVI, AND VOSTOCHNI; LZP=LITTLE ZAPADNI, AND POLOVINA; A
 RLK=REEF, LUKANIN, AND KITOVI; COM=COMBINED ROOKERY; UNS=UNSPECIFIED; COMB 88=COMBINED KILL DATEA

TABLE 71A- DAILY AND CUMULATIVE COMMERCIAL KILL OF FEMALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1965.

| DATE | ROOK- ERY# | NUMBER KILLED | NO. IN | DAILY KILL | | | | | | | | | CUMULATIVE KILL | | | | | | | CUM. KILL BY AREA ALL AGES |
|---------|---------------|---------------|-----------|-------------------|-----------------|------------|-----|-----|----|----|----|--------|-----------------|----------|---------|--------|--------|--------|------|----------------------------------|
| | | | | CUMUL. TO DATE | DAILY SAMPLE | TOOTH 2 | 3 | 4 | 5 | 6 | 7 | 7+ | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | |
| AUG 23 | NEP | 677 | 677 | 120 | 27 | 237 | 257 | 81 | 41 | 20 | 14 | 27(4) | 237(35) | 257(38) | 81(12) | 41(6) | 20(3) | 14(2) | 677 | |
| 24 | NEP | 1721 | 1044 | 222 | 21 | 177 | 532 | 178 | 52 | 42 | 42 | 48(3) | 414(24) | 789(46) | 259(15) | 93(5) | 62(4) | 56(3) | 1721 | |
| 25 | REF | 2434 | 713 | 142 | 43 | 200 | 278 | 135 | 21 | 29 | 7 | 91(4) | 614(25) | 1067(44) | 394(16) | 114(5) | 91(4) | 63(3) | 713 | |
| 25 | TZR | 2526 | 92 | 24 | 0 | 31 | 31 | 12 | 8 | 8 | 2 | 91(4) | 645(26) | 1098(43) | 406(16) | 122(5) | 99(4) | 65(3) | 92 | |
| 26 | LZP | 3300 | 774 | 189 | 15 | 209 | 372 | 108 | 31 | 8 | 31 | 106(3) | 854(26) | 1470(45) | 514(16) | 153(5) | 107(3) | 96(3) | 774 | |
| 27 | NEP | 3891 | 591 | 109 | 41 | 112 | 249 | 89 | 47 | 41 | 12 | 147(4) | 966(25) | 1719(44) | 603(15) | 200(5) | 148(4) | 108(3) | 2312 | |
| COMB 88 | COM | 7530 | 3639 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 147(2) | 966(13) | 1719(23) | 603(8) | 200(3) | 148(2) | 108(1) | 3639 | |

*POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; TZR=TOLOSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; ZAP=ZAPADNI I-ST. PAUL I. ONLY;
 REF=REEF, GORBACH, AND ARDIQUON; L-K=LUKANIN, AND KITOVI; ZPG=ZAPADNI II-ST. GEORGE I.; NOR=NORTH; E-E=EAST REEF, AND EAST CLIFF;
 STA=STARAYA ATRIL; TLK=TOLSTOI, LUKANIN, AND KITOVI; NEP=NORTHEAST POINT MORJOVI, AND VOSTOCHNI; LZP=LITTLE ZAPADNI, AND POLOVINA;
 RLK=REEF, LUKANIN, AND KITOVI; COM=COMBINED ROOKERY; UNS=UNSPECIFIED; COMB 88=COMBINED KILL DATE

TABLE 71B- DAILY AND CUMULATIVE COMMERCIAL KILL OF FEMALE FUR SEALS BY AREA ON ST. GEORGE ISLAND, 1965.

| DATE | ROOK- ERY# | NUMBER KILLED | NO. IN TOOTH SAMPLE | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | | | CUM. KILL BY AREA ALL AGES |
|---------|---------------|---------------|---------------------------|-------------------|----|-----|-----|-----|----|----|-----|-----------------|---------|---------|---------|---------|--------|---------|----------------------------------|
| | | | | CUMUL. TO DATE | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | |
| AUG 16 | ZPG | 432 | 432 | 77 | 0 | 78 | 130 | 69 | 69 | 30 | 56 | 0(0) | 78(18) | 130(30) | 69(16) | 69(16) | 30(7) | 56(13) | 432 |
| 18 | NOR | 848 | 416 | 128 | 0 | 42 | 146 | 83 | 71 | 37 | 37 | 0(0) | 120(14) | 276(33) | 152(18) | 140(17) | 67(8) | 93(11) | 416 |
| 20 | STA | 1433 | 585 | 159 | 0 | 47 | 223 | 117 | 64 | 64 | 70 | 0(0) | 167(12) | 499(35) | 269(19) | 204(14) | 131(9) | 163(11) | 585 |
| 23 | ZPG | 1891 | 458 | 88 | 4 | 133 | 151 | 64 | 46 | 14 | 46 | 4(1) | 300(16) | 650(34) | 333(18) | 250(13) | 145(8) | 209(11) | 890 |
| 25 | STA | 2288 | 397 | 107 | 0 | 28 | 87 | 64 | 67 | 32 | 119 | 4(1) | 328(14) | 737(32) | 397(17) | 317(14) | 177(8) | 328(14) | 982 |
| 27 | ZPG | 2673 | 385 | 80 | 11 | 42 | 100 | 89 | 62 | 23 | 58 | 15(1) | 370(14) | 837(31) | 486(18) | 379(14) | 200(7) | 386(14) | 1275 |
| COMB 88 | COM | 2902 | 229 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15(1) | 370(13) | 837(29) | 486(17) | 379(13) | 200(7) | 386(13) | 229 |

*POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; TZR=TOLOSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; ZAP=ZAPADNI I-ST. PAUL I. ONLY;
 REF=REEF, GORBACH, AND ARDIGUON; L-K=LUKANIN, AND KITOVI; ZPG=ZAPADNI II-ST. GEORGE I.; NOR=NORTH; E-E=EAST REEF, AND EAST CLIFF;
 STA=STARAYA ATRIL; TLK=TOLSTOI, LUKANIN, AND KITOVI; NEP=NORTHEAST POINT MORJOVI, AND VOSTOCHNI; LZP=LITTLE ZAPADNI, AND POLOVINA;
 RLK=REEF, LUKANIN, AND KITOVI; COM=COMBINED ROOKERY; UNS=UNSPECIFIED; COMB 88=COMBINED KILL DATE

TABLE 72A- DAILY AND CUMULATIVE COMMERCIAL KILL OF FEMALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1967.

| DATE | ROOKERY# | NUMBER KILLED | NO. IN | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | | | CUM. KILL BY AREA ALL AGES | | |
|------|----------|---------------|--------|----------------|--------------|-------|--------------------------------|-----|-----|-----|----|-----------------|-------|---|----------|----------|---------|---------|----------------------------|------|----|
| | | | | CUMUL. TO DATE | DAILY SAMPLE | TOOTH | ESTIMATED NUMBER BY AGE IN YRS | | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE IN YEARS | | | | | | | |
| | | | | | | | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | 2 | 3 | 4 | 5 | 6 | | 7 | 7+ |
| JULY | 28 | ZAP | 107 | 107 | 28 | 0 | 0 | 0 | 4 | 11 | 0 | 92 | 0(0) | 0(0) | 0(0) | 4(4) | 11(10) | 0(0) | 92(86) | 107 | |
| | 29 | POL | 164 | 57 | 16 | 0 | 0 | 4 | 10 | 0 | 43 | 0(0) | 0(0) | 4(2) | 14(9) | 11(7) | 0(0) | 135(82) | 57 | | |
| | 31 | NEP | 250 | 86 | 6 | 0 | 0 | 0 | 14 | 0 | 72 | 0(0) | 0(0) | 4(2) | 28(11) | 11(4) | 0(0) | 207(83) | 86 | | |
| | 31 | NEP | 495 | 245 | 78 | 0 | 6 | 6 | 35 | 28 | 0 | 170 | 0(0) | 6(1) | 10(2) | 63(13) | 39(8) | 0(0) | 377(76) | 331 | |
| AUG | 1 | L-K1 | 545 | 50 | 17 | 0 | 0 | 3 | 6 | 0 | 41 | 0(0) | 6(1) | 13(2) | 69(13) | 39(7) | 0(0) | 418(77) | 50 | | |
| | 1 | REF | 920 | 375 | 155 | 0 | 5 | 39 | 39 | 29 | 0 | 263 | 0(0) | 11(1) | 52(6) | 108(12) | 68(7) | 0(0) | 681(74) | 375 | |
| | 2 | ZAP | 1083 | 163 | 68 | 0 | 2 | 24 | 22 | 12 | 0 | 103 | 0(0) | 13(1) | 76(7) | 130(12) | 80(7) | 0(0) | 784(72) | 270 | |
| | 3 | TZR | 1120 | 37 | 20 | 0 | 0 | 0 | 4 | 2 | 0 | 31 | 0(0) | 13(1) | 76(7) | 134(12) | 82(7) | 0(0) | 815(73) | 37 | |
| | 3 | POL | 1353 | 233 | 101 | 0 | 9 | 30 | 28 | 1 | 0 | 127 | 0(0) | 22(2) | 106(8) | 162(12) | 121(9) | 0(0) | 942(70) | 290 | |
| | 4 | POL | 1488 | 135 | 65 | 0 | 14 | 31 | 27 | 17 | 0 | 46 | 0(0) | 36(2) | 137(9) | 189(13) | 138(9) | 0(0) | 988(66) | 425 | |
| | 4 | NEP | 1725 | 237 | 117 | 0 | 3 | 47 | 24 | 32 | 0 | 126 | 0(0) | 44(3) | 184(11) | 213(12) | 170(10) | 0(0) | 1114(65) | 568 | |
| | 4 | NEP | 1957 | 232 | 96 | 0 | 5 | 22 | 24 | 14 | 0 | 167 | 0(0) | 49(3) | 206(11) | 237(12) | 184(9) | 0(0) | 1281(65) | 800 | |
| | 5 | L-K | 1983 | 26 | 19 | 0 | 0 | 3 | 3 | 4 | 0 | 16 | 0(0) | 49(2) | 209(11) | 240(12) | 188(9) | 0(0) | 1297(65) | 76 | |
| | 5 | REF | 2474 | 491 | 192 | 0 | 18 | 64 | 69 | 69 | 0 | 271 | 0(0) | 67(3) | 273(11) | 309(12) | 257(10) | 0(0) | 1568(63) | 866 | |
| | 5 | ZAP | 2549 | 75 | 24 | 0 | 3 | 9 | 3 | 13 | 0 | 47 | 0(0) | 70(3) | 282(11) | 312(12) | 270(11) | 0(0) | 1615(63) | 345 | |
| | 8 | NEP | 2828 | 279 | 41 | 0 | 27 | 48 | 34 | 61 | 0 | 109 | 0(0) | 97(3) | 330(12) | 346(12) | 331(12) | 0(0) | 1724(61) | 1079 | |
| | 8 | NEP | 3472 | 644 | 205 | 0 | 50 | 104 | 117 | 94 | 0 | 279 | 0(0) | 147(4) | 434(13) | 463(13) | 425(12) | 0(0) | 2003(58) | 1723 | |
| | 9 | REF | 4030 | 558 | 153 | 0 | 69 | 76 | 73 | 84 | 0 | 256 | 0(0) | 216(5) | 510(13) | 536(13) | 509(13) | 0(0) | 2259(56) | 1424 | |
| | 9 | POL1 | 4487 | 457 | 112 | 0 | 12 | 57 | 98 | 114 | 0 | 176 | 0(0) | 228(5) | 567(13) | 634(14) | 623(14) | 0(0) | 2435(54) | 882 | |
| | 10 | ZAP | 5453 | 966 | 255 | 4 | 71 | 163 | 209 | 72 | 0 | 447 | 4(1) | 299(5) | 730(13) | 843(15) | 695(13) | 0(0) | 2882(53) | 1311 | |
| | 11 | TZR | 6248 | 795 | 229 | 3 | 142 | 142 | 132 | 74 | 0 | 302 | 7(1) | 441(7) | 872(14) | 975(16) | 769(12) | 0(0) | 3184(51) | 832 | |
| | 14 | NEP | 6376 | 128 | 33 | 0 | 16 | 31 | 19 | 23 | 0 | 39 | 7(1) | 457(7) | 903(14) | 994(16) | 792(12) | 0(0) | 3223(51) | 1851 | |
| | 14 | POL | 7094 | 718 | 190 | 4 | 91 | 162 | 136 | 102 | 0 | 223 | 11(1) | 548(8) | 1065(15) | 1130(16) | 894(13) | 0(0) | 3446(49) | 1600 | |
| | 15 | POL | 7327 | 233 | 66 | 7 | 10 | 18 | 46 | 39 | 0 | 113 | 18(1) | 558(8) | 1083(15) | 1176(16) | 933(13) | 0(0) | 3559(49) | 1833 | |
| COMB | 88 | COM | 7500 | 173 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18(1) | 558(7) | 1083(14) | 1176(16) | 933(12) | 0(0) | 3559(47) | 173 | |

NPOL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; TZR=TOLOSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; ZAP=ZAPADNI I-ST. PAUL I. ONLY; REF=REEF, GORBACH, AND ARDIGUON; L-K=LUKANIN, AND KITOVI; ZPG=ZAPADNI II-ST. GEORGE I.; NOR=NORTH; E-E=EAST REEF, AND EAST CLIFF; STA=STARAYA ATRIL; TLK=TOLSTOI, LUKANIN, AND KITOVI; NEP=NORTHEAST POINT MORJOVI, AND VOSTOCHNI; LZP=LITTLE ZAPADNI, AND POLOVINA; RLK=REEF, LUKANIN, AND KITOVI; COM=COMBINED ROOKERY; UNS=UNSPECIFIED; COMB 88=COMBINED KILL DATE

TABLE 72B- DAILY AND CUMULATIVE COMMERCIAL KILL OF FEMALE FUR SEALS BY AREA ON ST. GEORGE ISLAND, 1967.

| DATE | ROOK-ERY# | NUMBER KILLED | NO. IN | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | | | CUM. KILL BY AREA ALL AGES | |
|------|-----------|---------------|--------|----------------|--------------------|--------------------------------|-----|-----|-----|----|---|-----------------|------|---|---------|---------|---------|------|----------------------------|------|
| | | | | CUMUL. TO DATE | DAILY TOOTH SAMPLE | ESTIMATED NUMBER BY AGE IN YRS | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | ESTIMATED NUMBER AND PERCENTAGE BY AGE IN YEARS | 2 | 3 | 4 | 5 | | 6 |
| AUG | 7 | STA | 281 | 281 | 100 | 0 | 28 | 59 | 42 | 39 | 0 | 113 | 0(0) | 28(10) | 59(21) | 42(15) | 39(14) | 0(0) | 113(40) | 281 |
| | 9 | ZPG | 828 | 547 | 184 | 0 | 36 | 71 | 98 | 54 | 0 | 288 | 0(0) | 64(8) | 130(16) | 140(17) | 93(11) | 0(0) | 401(48) | 547 |
| | 15 | NOR | 1429 | 601 | 177 | 0 | 95 | 82 | 126 | 88 | 0 | 210 | 0(0) | 159(11) | 212(15) | 266(19) | 181(13) | 0(0) | 611(43) | 601 |
| | 17 | STA | 2392 | 963 | 315 | 3 | 218 | 284 | 110 | 52 | 0 | 296 | 3(1) | 377(16) | 496(21) | 376(16) | 233(10) | 0(0) | 907(38) | 1244 |
| COMB | 88 | COM | 2594 | 202 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3(1) | 377(15) | 496(19) | 376(14) | 233(9) | 0(0) | 907(35) | 202 |

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TABLE 73A- DAILY AND CUMULATIVE COMMERCIAL KILL OF FEMALE FUR SEALS BY AREA ON ST. PAUL ISLAND, 1968.

| DATE | ROOKERY# | NUMBER KILLED | NO. IN SAMPLE | DAILY KILL | | | | | | | CUMULATIVE KILL | | | | | | | CUM. KILL BY AREA ALL AGES | | | |
|------|----------|---------------|---------------|----------------|-------|-------|-----------|----------------------|-----|-----|-----------------|-------|--------|-----------|---------------------------------------|----------|---------|----------------------------|------|---|---|
| | | | | CUMUL. TO DATE | DAILY | TOOTH | ESTIMATED | NUMBER BY AGE IN YRS | | | | | | ESTIMATED | NUMBER AND PERCENTAGE BY AGE IN YEARS | | | | | | |
| | | | | | | | | 2 | 3 | 4 | 5 | 6 | 7 | | 7+ | 2 | 3 | | 4 | 5 | 6 |
| JULY | 24 | ZAP | 9 | 9 | 3 | 0 | 0 | 0 | 0 | 6 | 0 | 0(0) | 0(0) | 0(0) | 0(0) | 6(67) | 0(0) | 0(0) | 0(0) | 9 | |
| | 25 | TZR | 29 | 20 | 15 | 0 | 0 | 4 | 4 | 7 | 1 | 0(0) | 0(0) | 4(14) | 4(14) | 13(45) | 1(3) | 2(7) | 20 | | |
| | 26 | NEP | 51 | 22 | 15 | 0 | 0 | 0 | 1 | 4 | 0 | 0(0) | 0(0) | 4(8) | 5(10) | 17(33) | 1(2) | 109(#2) | 22 | | |
| | 27 | L-K | 57 | 6 | 6 | 0 | 0 | 0 | 0 | 1 | 2 | 0(0) | 0(0) | 4(7) | 5(9) | 18(32) | 3(5) | 112(#1) | 6 | | |
| | 27 | POL | 88 | 31 | 25 | 0 | 0 | 0 | 5 | 2 | 6 | 0(0) | 0(0) | 4(5) | 10(11) | 20(23) | 9(10) | 249(#2) | 31 | | |
| | 29 | REF | 152 | 64 | 45 | 0 | 0 | 8 | 6 | 9 | 3 | 0(0) | 0(0) | 12(8) | 16(11) | 29(19) | 12(8) | 510(#3) | 64 | | |
| | 30 | TZR | 333 | 181 | 163 | 0 | 1 | 16 | 21 | 29 | 9 | 0(0) | 1(1) | 28(8) | 37(11) | 58(17) | 21(6) | 928(#2) | 201 | | |
| | 31 | ZAP | 450 | 117 | 99 | 0 | 0 | 14 | 8 | 13 | 4 | 0(0) | 1(1) | 42(9) | 45(10) | 71(16) | 25(6) | 1332(#2) | 126 | | |
| | 31 | POL | 460 | 10 | 8 | 0 | 0 | 5 | 1 | 1 | 1 | 0(0) | 1(1) | 47(10) | 46(10) | 72(16) | 26(6) | 1343(#2) | 41 | | |
| AUG | 1 | NEP | 521 | 61 | 58 | 0 | 2 | 3 | 4 | 3 | 2 | 0(0) | 3(1) | 50(10) | 50(10) | 75(14) | 28(5) | 1688(#3) | 83 | | |
| | 1 | NEP | 730 | 209 | 186 | 0 | 0 | 13 | 25 | 24 | 17 | 0(0) | 3(1) | 63(9) | 75(10) | 99(14) | 45(6) | 2027(#2) | 292 | | |
| | 2 | REF | 1152 | 422 | 136 | 0 | 12 | 50 | 46 | 68 | 28 | 0(0) | 15(1) | 113(10) | 121(11) | 167(14) | 73(6) | 2648(#2) | 486 | | |
| | 3 | TZR | 1306 | 154 | 39 | 0 | 4 | 23 | 20 | 23 | 0 | 0(0) | 19(1) | 136(10) | 141(11) | 190(15) | 73(6) | 3038(#2) | 355 | | |
| | 3 | L-K | 1369 | 63 | 25 | 0 | 0 | 3 | 12 | 12 | 3 | 0(0) | 19(1) | 139(10) | 153(11) | 202(15) | 76(6) | 3271(#2) | 69 | | |
| | 5 | ZAP | 1825 | 456 | 163 | 3 | 9 | 42 | 50 | 53 | 42 | 3(1) | 28(2) | 181(10) | 203(11) | 255(14) | 118(6) | 3907(#2) | 582 | | |
| | 6 | NEP | 2125 | 300 | 76 | 0 | 27 | 67 | 36 | 31 | 16 | 3(1) | 55(3) | 248(12) | 239(11) | 286(13) | 134(6) | 4350(#2) | 592 | | |
| | 6 | NEP | 2367 | 242 | 87 | 0 | 14 | 33 | 22 | 30 | 6 | 3(1) | 69(3) | 281(12) | 261(11) | 316(13) | 140(6) | 4864(#2) | 834 | | |
| | 7 | POL | 2445 | 78 | 69 | 0 | 8 | 17 | 16 | 12 | 5 | 3(1) | 77(3) | 298(12) | 277(11) | 328(13) | 145(6) | 4982(#2) | 119 | | |
| | 7 | NEP | 3099 | 654 | 206 | 0 | 15 | 92 | 102 | 38 | 26 | 3(1) | 92(3) | 390(13) | 379(12) | 366(12) | 171(6) | 5598(#1) | 1488 | | |
| | 8 | POL | 3757 | 658 | 219 | 0 | 6 | 121 | 84 | 84 | 51 | 3(1) | 98(3) | 511(14) | 463(12) | 450(12) | 222(6) | 6192(#1) | 777 | | |
| | 9 | ZAP | 4135 | 378 | 112 | 0 | 14 | 98 | 64 | 44 | 37 | 3(1) | 112(3) | 609(15) | 527(13) | 494(12) | 259(8) | 6475(#1) | 960 | | |
| | 9 | REF | 4535 | 400 | 128 | 0 | 44 | 153 | 53 | 34 | 16 | 3(1) | 156(3) | 762(17) | 580(13) | 528(12) | 275(6) | 6903(#1) | 886 | | |
| | 12 | NEP | 4826 | 291 | 73 | 0 | 8 | 63 | 44 | 28 | 20 | 3(1) | 164(3) | 825(17) | 624(13) | 556(12) | 295(6) | 7315(#1) | 1779 | | |
| | 12 | NEP | 5743 | 917 | 307 | 0 | 83 | 212 | 152 | 104 | 87 | 3(1) | 247(4) | 1037(18) | 776(14) | 660(11) | 382(17) | 7981(#1) | 2696 | | |
| | 13 | TZR | 6289 | 546 | 229 | 0 | 50 | 110 | 96 | 72 | 36 | 3(1) | 297(5) | 1147(18) | 872(14) | 732(12) | 418(7) | 8513(#1) | 901 | | |
| | 13 | REF | 6710 | 421 | 161 | 0 | 21 | 212 | 47 | 31 | 28 | 3(1) | 318(5) | 1359(20) | 919(14) | 763(11) | 446(7) | 8869(#1) | 1307 | | |
| | 14 | ZAP | 8013 | 1303 | 395 | 6 | 106 | 293 | 198 | 151 | 119 | 9(1) | 424(5) | 1652(21) | 1117(14) | 914(11) | 565(7) | 9776(#1) | 2263 | | |
| | 15 | REF | 8609 | 596 | 185 | 0 | 64 | 151 | 77 | 74 | 45 | 9(1) | 488(6) | 1803(21) | 1194(14) | 988(11) | 610(7) | 10421(#1) | 1903 | | |
| | 15 | POL | 8801 | 192 | 57 | 0 | 17 | 37 | 27 | 24 | 14 | 9(1) | 505(6) | 1840(21) | 1221(14) | 1012(11) | 624(7) | 10692(#1) | 969 | | |
| | 15 | L-K | 9330 | 529 | 172 | 9 | 52 | 114 | 65 | 68 | 19 | 18(1) | 557(6) | 1954(21) | 1286(14) | 1080(12) | 643(7) | 11131(#1) | 598 | | |
| | 16 | NEP | 9755 | 425 | 128 | 7 | 13 | 67 | 64 | 46 | 43 | 25(1) | 570(6) | 2021(21) | 1350(14) | 1126(12) | 686(7) | 11496(#1) | 3121 | | |
| | 16 | TZR | 10017 | 262 | 78 | 7 | 17 | 50 | 37 | 27 | 27 | 32(1) | 587(6) | 2071(21) | 1387(14) | 1153(12) | 713(7) | 11788(#1) | 1163 | | |
| | 16 | POL | 10463 | 446 | 134 | 0 | 33 | 70 | 60 | 47 | 37 | 32(1) | 620(6) | 2141(20) | 1447(14) | 1200(11) | 750(7) | 12253(#1) | 1415 | | |
| COMB | 88 | COM | 10544 | 81 | 50 | 0 | 0 | 2 | 10 | 11 | 15 | 32(1) | 620(6) | 2143(20) | 1457(14) | 1211(11) | 765(7) | 12561(#1) | 81 | | |

*POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; TZR=TOLOSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; ZAP=ZAPADNI I-ST. PAUL I. ONLY; REF=REEF, GORBACH, AND ARDIGUON; L-K=LUKANIN, AND KITOVI; ZPG=ZAPADNI II-ST. GEORGE I.; NOR=NORTH; E=EAST REEF, AND EAST CLIFF; STA=STARAYA ATRIL; TLK=TOLSTOI, LUKANIN, AND KITOVI; NEP=NORTHEAST POINT MORJOVI, AND VOSTOCHNI; LZP=LITTLE ZAPADNI, AND POLOVINA; RLK=REEF, LUKANIN, AND KITOVI; COM=COMBINED ROOKERY; UNS=UNSPECIFIED; COMB 88=COMBINED KILL DATE

TABLE 73B- DAILY AND CUMULATIVE COMMERCIAL KILL OF FEMALE FUR SEALS BY AREA ON ST. GEORGE ISLAND, 1968.1

| DATE | ROOK- ERY* | NUMBER KILLED | NO. IN | DAILY KILL | | | | | | | | CUMULATIVE KILL | | | | | | | CUM. KILL BY AREA ALL AGES | |
|------|---------------|---------------|-----------|-------------------|-----------------|------------|--------------------------------|-----|-----|-----|----|-----------------|------|---|---------|---------|---------|--------|----------------------------------|------|
| | | | | CUMUL. TO DATE | DAILY SAMPLE | TOOTH 2 | ESTIMATED NUMBER BY AGE IN YRS | | | | | | | ESTIMATED NUMBER AND PERCENTAGE BY AGE IN YEARS | | | | | | |
| | | | | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | 2 | 3 | 4 | 5 | 6 | 7 | 7+ | | | |
| JULY | 29 | NOR | 7 | 7 | 7 | 0 | 0 | 0 | 1 | 0 | 0 | 24 | 0(0) | 0(0) | 0(0) | 1(14) | 0(0) | 0(0) | 24(*3) | 7 |
| | 29 | STA | 29 | 22 | 18 | 0 | 0 | 1 | 5 | 0 | 4 | 100 | 0(0) | 0(0) | 1(3) | 6(21) | 0(0) | 4(14) | 124(*4) | 22 |
| AUG | 2 | STA | 87 | 58 | 17 | 0 | 0 | 10 | 10 | 0 | 0 | 143 | 0(0) | 0(0) | 11(13) | 16(18) | 0(0) | 4(5) | 267(*3) | 80 |
| | 5 | STA | 121 | 34 | 31 | 0 | 0 | 8 | 5 | 4 | 2 | 115 | 0(0) | 0(0) | 19(16) | 21(17) | 4(3) | 6(5) | 382(*3) | 114 |
| | 5 | ZPG | 135 | 14 | 12 | 0 | 1 | 0 | 1 | 0 | 0 | 45 | 0(0) | 1(1) | 19(14) | 22(16) | 4(3) | 6(4) | 427(*3) | 14 |
| | 7 | ZPG | 989 | 854 | 267 | 3 | 26 | 154 | 114 | 105 | 61 | 877 | 3(1) | 27(3) | 173(17) | 136(14) | 109(11) | 67(7) | 1304(*1) | 868 |
| | 9 | NOR | 1459 | 470 | 116 | 0 | 16 | 102 | 69 | 73 | 57 | 506 | 3(1) | 43(3) | 275(19) | 205(14) | 182(12) | 124(8) | 1810(*1) | 477 |
| | 9 | E-E | 1972 | 513 | 195 | 0 | 11 | 87 | 63 | 92 | 42 | 518 | 3(1) | 54(3) | 362(18) | 268(14) | 274(14) | 166(8) | 2328(*1) | 513 |
| | 12 | NOR | 2534 | 562 | 165 | 0 | 14 | 72 | 68 | 65 | 68 | 541 | 3(1) | 68(3) | 434(17) | 336(13) | 339(13) | 234(9) | 2869(*1) | 1039 |
| | 12 | STA | 2753 | 219 | 71 | 0 | 16 | 53 | 43 | 31 | 19 | 264 | 3(1) | 84(3) | 487(18) | 379(14) | 370(13) | 253(9) | 3133(*1) | 333 |
| COMB | 88 | COM | 2791 | 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3(1) | 84(3) | 487(17) | 379(14) | 370(13) | 253(9) | 3133(*1) | 38 |

*POL=POLOVINA, POLOVINA CLIFFS, AND LITTLE POLOVINA; TZR=TOLOSTOI, ZAPADNI REEF, AND LITTLE ZAPADNI; ZAP=ZAPADNI I-ST. PAUL I. ONLY; REF=REEF, GORBACH, AND ARDIGUON; L-K=LUKANIN, AND KITOVI; ZPG=ZAPADNI II-ST. GEORGE I.; NOR=NORTH; E-E=EAST REEF, AND EAST CLIFF; STA=STARAYA ATRIL; TLK=TOLOSTOI, LUKANIN, AND KITOVI; NEP=NORTHEAST POINT MORJOVI, AND VOSTOCHNI; LZP=LITTLE ZAPADNI, AND POLOVINA;1
 RLK=REEF, LUKANIN, AND KITOVI; COM=COMBINED ROOKERY; UNS=UNSPECIFIED; COMB 88=COMBINED KILL DATE

COUNTS OF ADULT MALES, 1911-79

The counts of adult males began in 1911 and have been continued since then as a way to measure recruitment of young males into the breeding stock. The counts have traditionally been made in mid-July when most of the females have arrived and given birth to their pups. Beginning in 1967, counts were also made in late June before the arrival of many females to lessen disturbance of the animals.

Two classes of males, harem and idle, have been recorded each year since 1911. By definition, a harem male is one that is defending a territory containing one or more females. The idle males are estimated to be age 7 yr and older and may or may not have territories (idle males were separated into several classifications beginning in 1966).

The adult males were not counted on either of the Pribilof Islands in 1942 because of the Second World War (1941-45) and evacuation of the people to southeastern Alaska, nor on St. George Island in 1956 because of a lack of interisland transportation.

From 1911 through 1958, the counts were made by a succession of managers associated with what is now called the Pribilof Islands Program. As a result of a decision made in Washington, D.C., in 1956, a federal predecessor group of the National Marine Mammal Laboratory assumed responsibility for the counts beginning in 1959, following an understudy period of 2 yr in 1957 and 1958. Alton Roppel

gained experience with Clarence Olson during those 2 years and has censused the adult males in mid-July on St. Paul Island annually from 1959 to the present, except in 1961 when Carl Abegglen made the count and in 1972 and 1974 when Patrick Kozloff assumed responsibility for the task. Alton Roppel and Patrick Kozloff also made some of the counts on St. George Island, but because interisland transportation has not always been available, most of the counts since 1959 have by necessity been made by a succession of researchers stationed on St. George Island during the summer.

Beginning in 1966 and continuing through 1974, Alton Roppel expanded the classifications to include four kinds of idle males and one corresponding to harem males as follows.

Idle Males

Class 1: Shoreline--Full-grown males without females but apparently with established territories at the high tide mark. Most of these animals are age 10 yr and older.

Class 2: Territorial without females--Full-grown males without females but with established territories on the rookery. Most of these animals are age 10 yr and older.

Class 4: Back fringe--Males without females and territories that are found along the inland fringe of the rookery. Most of these animals are partly grown at estimated ages of 7, 8, and 9 yr.

Class 5: Hauling ground--Males without females and territories that are found on traditional hauling grounds. Most of these males are partly grown at estimated ages of 7, 8, and 9 yr.

Harem Males

Class 3: Territorial with females--Full-grown males with one or more females and established territories in the rookery. Most of these animals are age 10 yr and older.

Since 1975, classes 1 and 4 were combined with class 5 into a single count because it was found that although animals belonging to classes 1 and 4 could be identified readily enough, no useful application of the results was evident. Classes 2 and 3 were continued so that we now have classes 2, 3, and 5.

The following summarizes the adult male classification from 1911 to the present.

1911-65--2 classifications, harem and idle

- a. Harem = territorial with one or more females
- b. Idle = territorial without females and all nonterritorial estimated to be age 7 and older

1966-74--5 classifications as listed above (1, 2, 3, 4, and 5)

- a. Class 3 = harem male classification used from 1911 to 1965
- b. Classes 1, 2, 4, and 5 = idle male classification used from 1911 to 1965

1975 to present--3 classifications (2, 3, and 5)

- a. Class 3 = harem male classification used from
1911 to 1965
- b. Classes 2 and 5 = idle male classification used
from 1911 to 1965

One more aspect of the counts of adult males was changed beginning in 1966 when each rookery (except Ardiquen on St. Paul Island and East Reef on St. George Island) was divided into numbered sections containing approximately 100 harem (Class 3) males (less than 100 in certain places where prominent natural boundaries existed). Since that year, the counts for each rookery have been recorded by section number and the results used to more randomly distribute marking effort when carrying out the shearing and sampling program for estimating the number of pups born. From 1911 through 1965, only the total rookery counts of the adult males were recorded, but the actual counts were made using convenient natural and artificial markers.

which follows

Table 74 gives rookery-specific counts of harem and idle bulls in mid-July for St. Paul Island and St. George Island. The few counts for Sea Lion Rock (Sivutch Rookery) are in Table 75. It includes the data for Lagoon Rookery of St. Paul Island which became extinct in 1941. Therefore, the totals for St. Paul Island in Table 74 are based on the same 14 rookeries in all years.

Except for the harvest data, the counts of adult males were the only data collected from which the growth of the herd could be followed until its stabilization by about 1940. Counts made during June, by numbered rookery sections, and by different classes of males since 1966-67, are in our annual reports and on the computer tapes but the detail was not included in Tables 74-75. The mid-July counts of the conspicuous harem bulls are considered to be the most accurate data available outside the commercial harvest.

TABLE 74. MID-JULY COUNTS OF ADULT MALES BY ROOKERY ON ST. PAUL ISLAND AND ST. GEORGE ISLAND, 1911 - 1979.

| ISLAND AND ROOKERY | 1911 | | | 1912 | | | 1913 | | | 1914 | | | 1915 | | |
|----------------------------|----------------|------------|-------------|-------------|------------|-------------|-------------|------------|-------------|-------------|------------|-------------|-------------|------------|-------------|
| | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH |
| ST. PAUL ISLAND | | | | | | | | | | | | | | | |
| LUKANIN | 31 | 5 | 36 | 38 | 6 | 44 | 33 | 3 | 36 | 39 | 1 | 40 | 46 | 18 | 64 |
| KITОВI | 61 | 7 | 68 | 53 | 2 | 55 | 44 | 7 | 51 | 58 | 5 | 63 | 67 | 24 | 91 |
| REEF | 215 | 38 | 254 | 179 | 12 | 191 | 171 | 17 | 188 | 193 | 26 | 219 | 294 | 59 | 353 |
| GORBATCH | 110 | 10 | 120 | 109 | 9 | 118 | 106 | 3 | 109 | 112 | 9 | 121 | 152 | 35 | 187 |
| ARDIQUEN | 11 | 1 | 12 | 11 | 0 | 11 | 11 | 1 | 12 | 15 | 0 | 15 | 25 | 6 | 31 |
| MORJOVI | WITH VOSTOCHNI | DATA | | 37 | 4 | 41 | 40 | 3 | 43 | 43 | 4 | 47 | 51 | 21 | 72 |
| VOSTOCHNI | 257 | 38 | 295 | 237 | 26 | 263 | 293 | 18 | 311 | 291 | 20 | 311 | 396 | 135 | 531 |
| LITTLE POLOVINA | 42 | 10 | 52 | 11 | 0 | 11 | 21 | 0 | 21 | 18 | 0 | 18 | 70 | 31 | 101 |
| POLOVINA CLIFFS | 23 | 4 | 27 | 21 | 1 | 22 | 19 | 0 | 19 | 22 | 6 | 28 | 33 | 11 | 44 |
| POLOVINA | 10 | 3 | 13 | 44 | 4 | 48 | 44 | 2 | 46 | 58 | 3 | 61 | 21 | 9 | 30 |
| TOLSTOI | 98 | 14 | 112 | 103 | 10 | 113 | 120 | 9 | 129 | 161 | 38 | 199 | 237 | 46 | 283 |
| ZAPADNI REEF | 4 | 0 | 4 | 3 | 0 | 3 | 3 | 0 | 3 | 3 | 1 | 4 | 7 | 6 | 13 |
| LITTLE ZAPADNI | 60 | 6 | 66 | 61 | 5 | 66 | 58 | 7 | 65 | 90 | 10 | 100 | 106 | 26 | 132 |
| ZAPADNI | 113 | 17 | 130 | 105 | 9 | 114 | 106 | 6 | 112 | 114 | 24 | 138 | 173 | 92 | 265 |
| ISLAND TOTAL | 1035 | 154 | 1189 | 1012 | 88 | 1100 | 1069 | 76 | 1145 | 1217 | 147 | 1364 | 1678 | 519 | 2197 |
| ST. GEORGE ISLAND | | | | | | | | | | | | | | | |
| SOUTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 |
| NORTH | 105 | 21 | 126 | 117 | 7 | 124 | 104 | 5 | 109 | 94 | 4 | 98 | 141 | 53 | 194 |
| EAST REEF | 21 | 6 | 27 | 24 | 6 | 30 | 19 | 6 | 25 | 15 | 3 | 18 | 30 | 18 | 48 |
| EAST CLIFFS | 57 | 15 | 72 | 56 | 1 | 57 | 58 | 10 | 68 | 57 | 2 | 59 | 76 | 15 | 91 |
| STARAYA ARTIL | 36 | 12 | 48 | 52 | 4 | 56 | 59 | 3 | 62 | 63 | 4 | 67 | 89 | 31 | 120 |
| ZAPADNI | 47 | 17 | 64 | 32 | 2 | 34 | 21 | 1 | 22 | 14 | 0 | 14 | 23 | 10 | 33 |
| ISLAND TOTAL | 266 | 71 | 337 | 281 | 20 | 301 | 261 | 25 | 286 | 243 | 13 | 256 | 362 | 127 | 489 |
| BOTH ISLANDS, TOTAL | 1301 | 225 | 1526 | 1293 | 108 | 1401 | 1330 | 101 | 1431 | 1460 | 160 | 1620 | 2040 | 646 | 2686 |

TABLE 74. MID-JULY COUNTS OF ADULT MALES BY ROOKERY ON ST. PAUL ISLAND AND ST. GEORGE ISLAND, 1911 - 1979 (CONTINUED).

| ISLAND AND ROOKERY | 1916 | | | 1917 | | | 1918 | | | 1919 | | | 1920 | | |
|----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH |
| ST. PAUL ISLAND | | | | | | | | | | | | | | | |
| LUKANIN | 64 | 45 | 109 | 100 | 54 | 154 | 100 | 49 | 149 | 110 | 80 | 190 | 95 | 28 | 123 |
| KITОВI | 95 | 44 | 139 | 126 | 56 | 182 | 127 | 82 | 209 | 155 | 75 | 230 | 132 | 57 | 189 |
| REEF | 490 | 269 | 759 | 613 | 237 | 850 | 688 | 307 | 995 | 720 | 162 | 882 | 528 | 70 | 598 |
| GORBATCH | 234 | 110 | 344 | 279 | 130 | 409 | 306 | 137 | 443 | 362 | 95 | 457 | 253 | 40 | 293 |
| ARDIGUEN | 33 | 9 | 42 | 33 | 28 | 61 | 36 | 13 | 49 | 46 | 18 | 64 | 40 | 8 | 48 |
| MORJOVI | 95 | 88 | 183 | 127 | 83 | 210 | 145 | 94 | 239 | 147 | 87 | 234 | 97 | 99 | 196 |
| VOSTOCHNI | 654 | 611 | 1265 | 1018 | 784 | 1802 | 1134 | 530 | 1664 | 1004 | 821 | 1825 | 725 | 333 | 1058 |
| LITTLE POLOVINA | 162 | 90 | 252 | 166 | 130 | 296 | 185 | 131 | 316 | 192 | 102 | 294 | 177 | 75 | 252 |
| POLOVINA CLIFFS | 59 | 47 | 106 | 87 | 31 | 118 | 93 | 59 | 152 | 96 | 48 | 144 | 86 | 24 | 110 |
| POLOVINA | 31 | 21 | 52 | 35 | 51 | 86 | 52 | 23 | 75 | 38 | 23 | 61 | 49 | 48 | 97 |
| TOLSTOI | 361 | 335 | 696 | 671 | 180 | 851 | 625 | 312 | 937 | 538 | 154 | 692 | 408 | 65 | 473 |
| ZAPADNI REEF | 8 | 1 | 9 | 22 | 13 | 35 | 27 | 8 | 35 | 28 | 6 | 34 | 28 | 5 | 33 |
| LITTLE ZAPADNI | 178 | 157 | 335 | 259 | 70 | 329 | 343 | 199 | 542 | 344 | 145 | 489 | 297 | 62 | 359 |
| ZAPADNI | 309 | 332 | 641 | 420 | 342 | 762 | 494 | 193 | 687 | 546 | 246 | 792 | 423 | 85 | 508 |
| ISLAND TOTAL | 2773 | 2159 | 4932 | 3956 | 2189 | 6145 | 4355 | 2137 | 6492 | 4326 | 2062 | 6388 | 3338 | 999 | 4337 |
| ST. GEORGE ISLAND | | | | | | | | | | | | | | | |
| SOUTH | 3 | 0 | 3 | 6 | 6 | 12 | 8 | 8 | 16 | 5 | 3 | 8 | 4 | 0 | 4 |
| NORTH | 200 | 103 | 303 | 266 | 114 | 380 | 262 | 64 | 326 | 225 | 21 | 246 | 199 | 17 | 216 |
| EAST REEF | 73 | 44 | 117 | 81 | 54 | 135 | 99 | 45 | 144 | 75 | 23 | 98 | 67 | 28 | 95 |
| EAST CLIFFS | 103 | 51 | 154 | 135 | 61 | 196 | 162 | 22 | 184 | 129 | 14 | 143 | 115 | 13 | 128 |
| STARAYA ARTIL | 142 | 109 | 251 | 163 | 113 | 276 | 160 | 40 | 200 | 124 | 14 | 138 | 112 | 20 | 132 |
| ZAPADNI | 31 | 47 | 78 | 33 | 17 | 50 | 43 | 20 | 63 | 27 | 6 | 33 | 27 | 5 | 32 |
| ISLAND TOTAL | 552 | 354 | 906 | 684 | 365 | 1049 | 734 | 199 | 933 | 585 | 81 | 666 | 524 | 83 | 607 |
| BOTH ISLANDS, TOTAL | 3325 | 2513 | 5838 | 4640 | 2554 | 7194 | 5089 | 2336 | 7425 | 4911 | 2143 | 7054 | 3862 | 1082 | 4944 |

TABLE 74. MID-JULY COUNTS OF ADULT MALES BY ROOKERY ON ST. PAUL ISLAND AND ST. GEORGE ISLAND, 1911 - 1979 (CONTINUED).

| ISLAND AND ROOKERY | 1921 | | | 1922 | | | 1923 | | | 1924 | | | 1925 | | |
|----------------------------|-------------|------------|-------------|-------------|------------|-------------|-------------|------------|-------------|-------------|------------|-------------|-------------|------------|-------------|
| | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH |
| ST. PAUL ISLAND | | | | | | | | | | | | | | | |
| LUKANIN | 100 | 23 | 123 | 96 | 12 | 108 | 85 | 2 | 87 | 82 | 3 | 85 | 84 | 7 | 91 |
| KITОВI | 161 | 32 | 193 | 158 | 10 | 168 | 127 | 13 | 140 | 135 | 27 | 162 | 159 | 17 | 176 |
| REEF | 521 | 66 | 587 | 425 | 40 | 465 | 400 | 41 | 441 | 429 | 59 | 488 | 507 | 63 | 570 |
| GORBATCH | 232 | 22 | 254 | 218 | 13 | 232 | 209 | 8 | 217 | 218 | 13 | 231 | 235 | 20 | 255 |
| ARDIGUEN | 32 | 2 | 34 | 24 | 3 | 27 | 23 | 3 | 26 | 32 | 2 | 34 | 39 | 1 | 40 |
| MORJOVI | 104 | 65 | 169 | 103 | 50 | 153 | 95 | 4 | 99 | 97 | 13 | 110 | 80 | 3 | 83 |
| VOSTOCHNI | 823 | 189 | 1012 | 803 | 169 | 972 | 841 | 51 | 892 | 856 | 77 | 933 | 675 | 47 | 722 |
| LITTLE POLOVINA | 161 | 46 | 207 | 174 | 52 | 226 | 181 | 69 | 250 | 172 | 63 | 235 | 164 | 24 | 188 |
| POLOVINA CLIFFS | 111 | 22 | 133 | 103 | 19 | 122 | 111 | 31 | 142 | 102 | 9 | 111 | 99 | 8 | 107 |
| POLOVINA | 48 | 24 | 72 | 43 | 17 | 60 | 52 | 11 | 63 | 48 | 10 | 58 | 42 | 0 | 42 |
| TOLSTOI | 328 | 58 | 386 | 365 | 22 | 387 | 302 | 28 | 330 | 308 | 30 | 338 | 327 | 28 | 355 |
| ZAPADNI REEF | 23 | 6 | 29 | 17 | 0 | 17 | 10 | 1 | 11 | 12 | 1 | 13 | 11 | 2 | 13 |
| LITTLE ZAPADNI | 213 | 50 | 263 | 169 | 29 | 198 | 155 | 10 | 165 | 162 | 12 | 174 | 169 | 13 | 182 |
| ZAPADNI | 380 | 46 | 426 | 306 | 30 | 336 | 294 | 15 | 309 | 297 | 33 | 330 | 317 | 23 | 340 |
| ISLAND TOTAL | 3237 | 651 | 3888 | 3005 | 466 | 3471 | 2885 | 287 | 3172 | 2950 | 352 | 3302 | 2908 | 256 | 3164 |
| ST. GEORGE ISLAND | | | | | | | | | | | | | | | |
| SOUTH | 6 | 2 | 8 | 4 | 5 | 9 | 5 | 2 | 7 | 9 | 0 | 9 | 9 | 2 | 11 |
| NORTH | 175 | 6 | 181 | 132 | 2 | 134 | 127 | 3 | 130 | 127 | 2 | 129 | 139 | 10 | 149 |
| EAST REEF | 53 | 13 | 66 | 49 | 2 | 51 | 35 | 0 | 35 | 35 | 4 | 39 | 45 | 4 | 49 |
| EAST CLIFFS | 108 | 5 | 113 | 89 | 1 | 90 | 77 | 0 | 77 | 91 | 3 | 94 | 102 | 3 | 105 |
| STARAYA ARTIL | 103 | 9 | 112 | 83 | 5 | 88 | 90 | 0 | 90 | 98 | 5 | 103 | 99 | 6 | 105 |
| ZAPADNI | 21 | 1 | 22 | 21 | 0 | 21 | 27 | 4 | 31 | 29 | 1 | 30 | 29 | 3 | 32 |
| ISLAND TOTAL | 466 | 36 | 502 | 378 | 15 | 393 | 361 | 9 | 370 | 389 | 15 | 404 | 423 | 28 | 451 |
| BOTH ISLANDS, TOTAL | 3703 | 687 | 4390 | 3383 | 481 | 3864 | 3246 | 296 | 3542 | 3339 | 367 | 3706 | 3331 | 284 | 3615 |

TABLE 74. MID-JULY COUNTS OF ADULT MALES BY ROOKERY ON ST. PAUL ISLAND AND ST. GEORGE ISLAND, 1911 - 1979 (CONTINUED).

| ISLAND AND ROOKERY | 1926 | | | 1927 | | | 1928 | | | 1929 | | | 1930 | | |
|----------------------------|-------------|------------|-------------|-------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH |
| ST. PAUL ISLAND | | | | | | | | | | | | | | | |
| LUKANIN | 94 | 3 | 97 | 89 | 10 | 99 | 81 | 16 | 97 | 104 | 11 | 115 | 109 | 33 | 142 |
| KITОВI | 212 | 37 | 249 | 232 | 48 | 280 | 198 | 39 | 237 | 260 | 51 | 311 | 302 | 56 | 358 |
| REEF | 605 | 82 | 687 | 712 | 156 | 868 | 1028 | 254 | 1282 | 1123 | 293 | 1416 | 1127 | 264 | 1391 |
| GORBATCH | 276 | 31 | 307 | 328 | 94 | 422 | 467 | 111 | 578 | 507 | 131 | 638 | 617 | 147 | 764 |
| ARDIGUEN | 38 | 3 | 41 | 41 | 6 | 47 | 57 | 5 | 62 | 48 | 14 | 62 | 77 | 17 | 94 |
| MORJOVI | 87 | 4 | 91 | 95 | 27 | 122 | 159 | 38 | 197 | 166 | 33 | 199 | 226 | 59 | 285 |
| VOSTOCHNI | 654 | 41 | 695 | 791 | 163 | 954 | 1181 | 293 | 1474 | 1471 | 319 | 1790 | 1557 | 343 | 1900 |
| LITTLE POLOVINA | 166 | 27 | 193 | 180 | 42 | 222 | 278 | 69 | 347 | 344 | 79 | 423 | 418 | 93 | 511 |
| POLOVINA CLIFFS | 118 | 11 | 129 | 129 | 20 | 149 | 147 | 38 | 185 | 189 | 44 | 233 | 204 | 61 | 265 |
| POLOVINA | 45 | 10 | 55 | 48 | 7 | 55 | 48 | 9 | 57 | 54 | 16 | 70 | 96 | 27 | 123 |
| TOLSTOI | 376 | 45 | 421 | 391 | 75 | 466 | 459 | 97 | 556 | 543 | 106 | 649 | 729 | 153 | 882 |
| ZAPADNI REEF | 18 | 0 | 18 | 18 | 6 | 24 | 23 | 7 | 30 | 27 | 7 | 34 | 29 | 7 | 36 |
| LITTLE ZAPADNI | 185 | 17 | 202 | 204 | 43 | 247 | 208 | 58 | 266 | 299 | 53 | 352 | 359 | 78 | 437 |
| ZAPADNI | 322 | 23 | 345 | 338 | 89 | 427 | 373 | 99 | 472 | 486 | 102 | 588 | 581 | 131 | 712 |
| ISLAND TOTAL | 3196 | 334 | 3530 | 3596 | 786 | 4382 | 4707 | 1133 | 5840 | 5621 | 1259 | 6880 | 6431 | 1469 | 7900 |
| ST. GEORGE ISLAND | | | | | | | | | | | | | | | |
| SOUTH | 15 | 0 | 15 | 19 | 6 | 25 | 30 | 17 | 47 | 48 | 16 | 64 | 86 | 18 | 104 |
| NORTH | 191 | 18 | 209 | 290 | 54 | 344 | 358 | 92 | 450 | 431 | 76 | 507 | 478 | 104 | 582 |
| EAST REEF | 47 | 4 | 51 | 57 | 8 | 65 | 89 | 19 | 108 | 98 | 26 | 124 | 134 | 31 | 165 |
| EAST CLIFFS | 125 | 17 | 142 | 148 | 20 | 168 | 179 | 37 | 216 | 197 | 52 | 249 | 293 | 56 | 349 |
| STARAYA ARTIL | 136 | 12 | 148 | 156 | 24 | 180 | 236 | 48 | 284 | 323 | 93 | 416 | 354 | 87 | 441 |
| ZAPADNI | 42 | 4 | 46 | 57 | 14 | 71 | 99 | 28 | 127 | 92 | 31 | 123 | 144 | 48 | 192 |
| ISLAND TOTAL | 556 | 55 | 611 | 727 | 126 | 853 | 991 | 241 | 1232 | 1189 | 294 | 1483 | 1489 | 344 | 1833 |
| BOTH ISLANDS, TOTAL | 3752 | 389 | 4141 | 4323 | 912 | 5235 | 5698 | 1374 | 7072 | 6810 | 1553 | 8363 | 7920 | 1813 | 9733 |

TABLE 74. MID-JULY COUNTS OF ADULT MALES BY ROOKERY ON ST. PAUL ISLAND AND ST. GEORGE ISLAND, 1911 - 1979 (CONTINUED).

| ISLAND AND ROOKERY | 1931 | | | 1932 | | | 1933 | | | 1934 | | | 1935 | | |
|----------------------------|-------------|-------------|--------------|-------------|-------------|--------------|-------------|-------------|--------------|--------------|-------------|--------------|--------------|-------------|--------------|
| | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH |
| ST. PAUL ISLAND | | | | | | | | | | | | | | | |
| LUKANIN | 129 | 37 | 166 | 145 | 39 | 184 | 148 | 44 | 192 | 177 | 21 | 198 | 189 | 26 | 215 |
| KITОВI | 344 | 61 | 405 | 353 | 69 | 422 | 376 | 71 | 447 | 389 | 86 | 475 | 407 | 82 | 489 |
| REEF | 1266 | 284 | 1550 | 1337 | 336 | 1673 | 1377 | 327 | 1704 | 1493 | 337 | 1830 | 1671 | 416 | 2087 |
| GORBATCH | 587 | 108 | 695 | 711 | 132 | 843 | 744 | 143 | 887 | 793 | 149 | 942 | 893 | 169 | 1062 |
| ARDIGUEN | 108 | 12 | 120 | 70 | 13 | 83 | 79 | 13 | 92 | 89 | 15 | 104 | 88 | 15 | 103 |
| MORJOVI | 255 | 71 | 326 | 287 | 79 | 366 | 303 | 78 | 381 | 309 | 69 | 378 | 317 | 72 | 389 |
| VOSTOCHNI | 1809 | 283 | 2092 | 2029 | 491 | 2520 | 1932 | 477 | 2409 | 1993 | 409 | 2402 | 2081 | 417 | 2498 |
| LITTLE POLOVINA | 353 | 81 | 434 | 371 | 89 | 460 | 329 | 102 | 431 | 372 | 98 | 470 | 382 | 99 | 481 |
| POLOVINA CLIFFS | 261 | 63 | 324 | 269 | 63 | 332 | 279 | 61 | 340 | 317 | 55 | 372 | 315 | 79 | 394 |
| POLOVINA | 108 | 12 | 120 | 119 | 19 | 138 | 123 | 27 | 150 | 103 | 37 | 140 | 107 | 38 | 145 |
| TOLSTOI | 831 | 194 | 1025 | 939 | 237 | 1176 | 951 | 223 | 1174 | 987 | 214 | 1211 | 1059 | 243 | 1302 |
| ZAPADNI REEF | 37 | 8 | 45 | 41 | 10 | 51 | 42 | 11 | 53 | 62 | 12 | 74 | 57 | 24 | 81 |
| LITTLE ZAPADNI | 413 | 84 | 497 | 433 | 96 | 529 | 453 | 93 | 546 | 478 | 71 | 549 | 507 | 84 | 591 |
| ZAPADNI | 657 | 141 | 798 | 759 | 181 | 940 | 793 | 177 | 970 | 866 | 201 | 1067 | 942 | 231 | 1173 |
| ISLAND TOTAL | 7158 | 1439 | 8597 | 7863 | 1854 | 9717 | 7929 | 1847 | 9776 | 8438 | 1774 | 10212 | 9015 | 1995 | 11010 |
| ST. GEORGE ISLAND | | | | | | | | | | | | | | | |
| SOUTH | 91 | 5 | 96 | 95 | 12 | 107 | 121 | 4 | 125 | 123 | 6 | 129 | 133 | 8 | 141 |
| NORTH | 599 | 121 | 720 | 653 | 141 | 794 | 683 | 151 | 834 | 691 | 164 | 855 | 717 | 87 | 804 |
| EAST REEF | 141 | 26 | 167 | 151 | 36 | 187 | 155 | 47 | 202 | 157 | 33 | 190 | 134 | 39 | 173 |
| EAST CLIFFS | 281 | 72 | 353 | 313 | 63 | 376 | 292 | 76 | 368 | 309 | 72 | 381 | 369 | 83 | 452 |
| STARAYA ARTIL | 433 | 92 | 525 | 459 | 99 | 558 | 467 | 79 | 546 | 478 | 92 | 570 | 567 | 179 | 746 |
| ZAPADNI | 131 | 53 | 184 | 149 | 58 | 207 | 161 | 51 | 212 | 171 | 55 | 226 | 183 | 57 | 240 |
| ISLAND TOTAL | 1676 | 369 | 2045 | 1820 | 409 | 2229 | 1879 | 408 | 2287 | 1929 | 422 | 2351 | 2103 | 453 | 2556 |
| BOTH ISLANDS, TOTAL | 8834 | 1808 | 10642 | 9683 | 2263 | 11946 | 9808 | 2255 | 12063 | 10367 | 2196 | 12563 | 11118 | 2448 | 13566 |

TABLE 74. MID-JULY COUNTS OF ADULT MALES BY ROOKERY ON ST. PAUL ISLAND AND ST. GEORGE ISLAND, 1911 - 1979 (CONTINUED).

| ISLAND AND ROOKERY | 1936 | | | 1937 | | | 1938 | | | 1939 | | | 1940 | | |
|----------------------------|--------------|-------------|--------------|--------------|-------------|--------------|--------------|-------------|--------------|--------------|-------------|--------------|--------------|-------------|--------------|
| | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH |
| ST. PAUL ISLAND | | | | | | | | | | | | | | | |
| LUKANIN | 193 | 32 | 225 | 217 | 41 | 258 | 183 | 32 | 215 | 166 | 38 | 204 | 172 | 85 | 257 |
| KITОВI | 427 | 83 | 510 | 470 | 92 | 562 | 414 | 51 | 465 | 458 | 79 | 537 | 481 | 196 | 677 |
| REEF | 1780 | 452 | 2232 | 1900 | 500 | 2400 | 2100 | 308 | 2408 | 1600 | 485 | 2085 | 1788 | 1304 | 3092 |
| GORBATCН | 961 | 187 | 1148 | 1000 | 250 | 1250 | 1050 | 211 | 1261 | 900 | 550 | 1450 | 910 | 736 | 1646 |
| ARDIGUEN | 93 | 13 | 106 | 107 | 12 | 119 | 96 | 17 | 113 | 103 | 20 | 123 | 101 | 27 | 128 |
| MORJOVI | 308 | 81 | 389 | 325 | 90 | 415 | 302 | 54 | 356 | 435 | 181 | 616 | 456 | 139 | 595 |
| VOSTOCHNI | 2185 | 429 | 2614 | 2300 | 475 | 2775 | 2300 | 364 | 2664 | 1800 | 261 | 2061 | 1838 | 249 | 2087 |
| LITTLE POLOVINA | 420 | 102 | 522 | 435 | 110 | 545 | 464 | 112 | 576 | 420 | 151 | 571 | 419 | 119 | 538 |
| POLOVINA CLIFFS | 320 | 87 | 407 | 350 | 90 | 440 | 369 | 88 | 457 | 355 | 141 | 496 | 331 | 67 | 398 |
| POLOVINA | 112 | 44 | 156 | 120 | 50 | 170 | 120 | 29 | 149 | 165 | 66 | 231 | 190 | 63 | 253 |
| TOLSTOI | 1165 | 287 | 1452 | 1200 | 300 | 1500 | 1200 | 163 | 1363 | 975 | 192 | 1167 | 1067 | 329 | 1396 |
| ZAPADNI REEF | 59 | 26 | 85 | 63 | 31 | 94 | 69 | 17 | 86 | 76 | 19 | 95 | 68 | 35 | 103 |
| LITTLE ZAPADNI | 546 | 87 | 633 | 600 | 90 | 690 | 576 | 103 | 679 | 482 | 118 | 600 | 527 | 118 | 645 |
| ZAPADNI | 1050 | 258 | 1308 | 1150 | 300 | 1450 | 1000 | 178 | 1178 | 786 | 250 | 1036 | 913 | 336 | 1249 |
| ISLAND TOTAL | 9619 | 2168 | 11787 | 10237 | 2431 | 12668 | 10243 | 1727 | 11970 | 8721 | 2551 | 11272 | 9261 | 3803 | 13064 |
| ST. GEORGE ISLAND | | | | | | | | | | | | | | | |
| SOUTH | 139 | 9 | 148 | 147 | 10 | 157 | 150 | 10 | 160 | 139 | 10 | 149 | 141 | 20 | 161 |
| NORTH | 790 | 86 | 876 | 820 | 90 | 910 | 800 | 73 | 873 | 640 | 77 | 717 | 694 | 98 | 792 |
| EAST REEF | 163 | 41 | 204 | 174 | 45 | 219 | 185 | 35 | 220 | 102 | 50 | 152 | 98 | 95 | 193 |
| EAST CLIFFS | 388 | 98 | 486 | 420 | 100 | 520 | 425 | 70 | 495 | 231 | 80 | 311 | 259 | 187 | 446 |
| STARAYA ARTIL | 600 | 185 | 785 | 650 | 200 | 850 | 650 | 100 | 750 | 534 | 68 | 602 | 558 | 110 | 668 |
| ZAPADNI | 186 | 61 | 247 | 200 | 70 | 270 | 230 | 50 | 280 | 212 | 72 | 284 | 236 | 61 | 299 |
| ISLAND TOTAL | 2266 | 480 | 2746 | 2411 | 515 | 2926 | 2440 | 338 | 2778 | 1858 | 357 | 2215 | 1988 | 571 | 2559 |
| BOTH ISLANDS, TOTAL | 11885 | 2648 | 14533 | 12648 | 2946 | 15594 | 12683 | 2065 | 14748 | 10579 | 2908 | 13487 | 11249 | 4374 | 15623 |

TABLE 74. MID-JULY COUNTS OF ADULT MALES BY ROOKERY ON ST. PAUL ISLAND AND ST. GEORGE ISLAND, 1911 - 1979 (CONTINUED).

| ISLAND AND ROOKERY | 1941 | | | 1942 | | | 1943 | | | 1944 | | | 1945 | | |
|----------------------------|--------------|-------------|--------------|--------------|-------------|--------------|--------------|-------------|--------------|--------------|-------------|--------------|--------------|-------------|--------------|
| | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH |
| ST. PAUL ISLAND | | | | | | | | | | | | | | | |
| LUKANIN | 190 | 110 | 300 | 197 | 102 | 299 | 205 | 93 | 298 | 211 | 41 | 252 | 214 | 66 | 280 |
| KITОВI | 471 | 90 | 561 | 499 | 104 | 603 | 527 | 119 | 646 | 517 | 87 | 604 | 516 | 143 | 659 |
| REEF | 1832 | 1409 | 3241 | 1932 | 1009 | 2941 | 2032 | 514 | 2546 | 2057 | 689 | 2746 | 2022 | 943 | 2965 |
| GORBATCH | 933 | 599 | 1532 | 976 | 474 | 1450 | 1020 | 348 | 1368 | 1041 | 350 | 1391 | 937 | 665 | 1602 |
| ARDIGUEN | 107 | 39 | 146 | 113 | 27 | 140 | 120 | 16 | 136 | 122 | 7 | 129 | 124 | 20 | 144 |
| MORJOVI | 508 | 220 | 728 | 533 | 209 | 742 | 558 | 198 | 756 | 570 | 81 | 651 | 537 | 161 | 698 |
| VOSTOCHNI | 2007 | 678 | 2685 | 2037 | 625 | 2662 | 2068 | 571 | 2639 | 2078 | 323 | 2401 | 1992 | 454 | 2446 |
| LITTLE POLOVINA | 426 | 205 | 631 | 439 | 192 | 631 | 452 | 178 | 630 | 325 | 94 | 419 | 310 | 145 | 455 |
| POLOVINA CLIFFS | 361 | 199 | 560 | 374 | 192 | 566 | 387 | 184 | 571 | 528 | 131 | 659 | 481 | 182 | 663 |
| POLOVINA | 153 | 29 | 182 | 175 | 33 | 208 | 198 | 37 | 235 | 232 | 21 | 253 | 228 | 32 | 260 |
| TOLSTOI | 1138 | 640 | 1778 | 1167 | 526 | 1693 | 1196 | 411 | 1607 | 1210 | 175 | 1385 | 1228 | 342 | 1570 |
| ZAPADNI REEF | 71 | 22 | 93 | 80 | 28 | 108 | 89 | 35 | 124 | 111 | 13 | 124 | 114 | 38 | 152 |
| LITTLE ZAPADNI | 526 | 198 | 724 | 566 | 221 | 787 | 607 | 244 | 851 | 678 | 148 | 826 | 645 | 171 | 816 |
| ZAPADNI | 966 | 456 | 1422 | 1027 | 433 | 1460 | 1089 | 410 | 1499 | 1000 | 214 | 1214 | 1002 | 528 | 1530 |
| ISLAND TOTAL | 9689 | 4894 | 14583 | 10115 | 4175 | 14290 | 10548 | 3358 | 13906 | 10680 | 2374 | 13054 | 10350 | 3890 | 14240 |
| ST. GEORGE ISLAND | | | | | | | | | | | | | | | |
| SOUTH | 148 | 37 | 185 | 138 | 28 | 166 | 128 | 18 | 146 | 176 | 47 | 223 | 186 | 57 | 243 |
| NORTH | 691 | 135 | 826 | 792 | 112 | 904 | 894 | 89 | 983 | 928 | 162 | 1090 | 949 | 247 | 1196 |
| EAST REEF | 99 | 4 | 103 | 106 | 23 | 129 | 114 | 42 | 156 | 126 | 30 | 156 | 131 | 71 | 202 |
| EAST CLIFFS | 218 | 59 | 277 | 200 | 55 | 255 | 182 | 50 | 232 | 232 | 69 | 301 | 278 | 108 | 386 |
| STARAYA ARTIL | 514 | 129 | 643 | 510 | 109 | 619 | 506 | 89 | 595 | 525 | 86 | 611 | 535 | 173 | 708 |
| ZAPADNI | 272 | 32 | 304 | 277 | 37 | 314 | 283 | 42 | 325 | 307 | 56 | 363 | 355 | 94 | 449 |
| ISLAND TOTAL | 1942 | 396 | 2338 | 2023 | 364 | 2387 | 2107 | 330 | 2437 | 2294 | 450 | 2744 | 2434 | 750 | 3184 |
| BOTH ISLANDS, TOTAL | 11631 | 5290 | 16921 | 12138 | 4539 | 16677 | 12655 | 3688 | 16343 | 12974 | 2824 | 15798 | 12784 | 4640 | 17424 |

TABLE 74. MID-JULY COUNTS OF ADULT MALES BY ROOKERY ON ST. PAUL ISLAND AND ST. GEORGE ISLAND, 1911 - 1979 (CONTINUED).

| ISLAND AND ROOKERY | 1946 | | | 1947 | | | 1948 | | | 1949 | | | 1950 | | |
|----------------------------|--------------|-------------|--------------|--------------|-------------|--------------|--------------|-------------|--------------|--------------|-------------|--------------|--------------|-------------|--------------|
| | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH |
| ST. PAUL ISLAND | | | | | | | | | | | | | | | |
| LUKANIN | 185 | 70 | 255 | 179 | 46 | 225 | 182 | 28 | 210 | 178 | 25 | 203 | 184 | 60 | 244 |
| KITОВI | 531 | 67 | 598 | 516 | 76 | 592 | 529 | 83 | 612 | 509 | 62 | 571 | 512 | 45 | 557 |
| REEF | 2063 | 960 | 3023 | 2036 | 982 | 3018 | 1990 | 973 | 2963 | 1808 | 835 | 2641 | 1587 | 701 | 2288 |
| GORBATCH | 953 | 694 | 1647 | 993 | 514 | 1507 | 979 | 484 | 1463 | 828 | 422 | 1250 | 845 | 525 | 1370 |
| ARDIGUEN | 120 | 15 | 135 | 115 | 2 | 117 | 104 | 12 | 116 | 114 | 14 | 128 | 105 | 10 | 115 |
| MORJOVI | 546 | 100 | 646 | 4750 | 152 | 4902 | 503 | 144 | 647 | 488 | 138 | 606 | 579 | 195 | 774 |
| VOSTOCHNI | 1800 | 322 | 2122 | 1558 | 405 | 1963 | 1645 | 410 | 2055 | 1572 | 358 | 1930 | 1510 | 494 | 2004 |
| LITTLE POLOVINA | 326 | 207 | 533 | 289 | 174 | 463 | 289 | 141 | 430 | 294 | 178 | 472 | 312 | 190 | 502 |
| POLOVINA CLIFFS | 509 | 156 | 665 | 527 | 101 | 628 | 578 | 151 | 729 | 512 | 112 | 624 | 649 | 93 | 742 |
| POLOVINA | 227 | 34 | 261 | 224 | 40 | 264 | 233 | 28 | 261 | 203 | 34 | 237 | 270 | 55 | 325 |
| TOLSTOI | 1188 | 315 | 1503 | 1114 | 248 | 1362 | 1194 | 223 | 1417 | 1050 | 204 | 1254 | 1055 | 276 | 1331 |
| ZAPADNI REEF | 117 | 7 | 124 | 152 | 20 | 172 | 156 | 35 | 191 | 142 | 50 | 192 | 158 | 60 | 218 |
| LITTLE ZAPADNI | 572 | 116 | 688 | 554 | 158 | 712 | 561 | 197 | 758 | 518 | 142 | 660 | 498 | 111 | 609 |
| ZAPADNI | 1029 | 377 | 1406 | 1028 | 248 | 1276 | 1043 | 326 | 1369 | 960 | 237 | 1197 | 1028 | 287 | 1315 |
| ISLAND TOTAL | 10166 | 3440 | 13606 | 14035 | 3166 | 17201 | 9986 | 3235 | 13221 | 9154 | 2811 | 11965 | 9292 | 3102 | 12394 |
| ST. GEORGE ISLAND | | | | | | | | | | | | | | | |
| SOUTH | 208 | 62 | 270 | 203 | 71 | 274 | 208 | 59 | 267 | 202 | 52 | 254 | 214 | 60 | 274 |
| NORTH | 922 | 186 | 1108 | 626 | 95 | 721 | 635 | 225 | 860 | 572 | 137 | 709 | 770 | 141 | 911 |
| EAST REEF | 120 | 33 | 153 | 114 | 33 | 147 | 112 | 56 | 168 | 113 | 35 | 148 | 110 | 35 | 145 |
| EAST CLIFFS | 320 | 76 | 396 | 224 | 135 | 359 | 217 | 111 | 328 | 222 | 95 | 317 | 217 | 90 | 307 |
| STARAYA ARTIL | 508 | 173 | 681 | 364 | 105 | 469 | 371 | 67 | 438 | 363 | 165 | 528 | 386 | 178 | 564 |
| ZAPADNI | 352 | 81 | 433 | 277 | 40 | 317 | 271 | 45 | 316 | 274 | 68 | 342 | 262 | 70 | 332 |
| ISLAND TOTAL | 2430 | 611 | 3041 | 1808 | 479 | 2287 | 1814 | 563 | 2377 | 1746 | 552 | 2298 | 1959 | 574 | 2533 |
| BOTH ISLANDS, TOTAL | 12596 | 4051 | 16647 | 15843 | 3645 | 19488 | 11800 | 3798 | 15598 | 10900 | 3363 | 14263 | 11251 | 3676 | 14927 |

TABLE 74. MID-JULY COUNTS OF ADULT MALES BY ROOKERY ON ST. PAUL ISLAND AND ST. GEORGE ISLAND, 1911 - 1979 (CONTINUED).

| ISLAND AND ROOKERY | 1951 | | | 1952 | | | 1953 | | | 1954 | | | 1955 | | |
|----------------------------|--------------|-------------|--------------|--------------|-------------|--------------|--------------|-------------|--------------|--------------|-------------|--------------|--------------|--------------|--------------|
| | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH |
| ST. PAUL ISLAND | | | | | | | | | | | | | | | |
| LUKANIN | 179 | 36 | 215 | 196 | 85 | 281 | 219 | 110 | 329 | 207 | 130 | 337 | 198 | 192 | 390 |
| KITОВI | 500 | 79 | 579 | 566 | 66 | 632 | 558 | 135 | 693 | 539 | 170 | 709 | 520 | 188 | 708 |
| REEF | 1618 | 826 | 2444 | 1523 | 1267 | 2790 | 1585 | 674 | 2259 | 1630 | 747 | 2377 | 1404 | 937 | 2341 |
| GORBATCH | 802 | 598 | 1400 | 852 | 662 | 1514 | 860 | 742 | 1602 | 908 | 806 | 1714 | 804 | 923 | 1727 |
| ARDIGUEN | 102 | 12 | 114 | 95 | 20 | 115 | 96 | 80 | 176 | 102 | 40 | 142 | 117 | 70 | 187 |
| MORJOVI | 686 | 317 | 1003 | 644 | 297 | 941 | 594 | 762 | 1356 | 602 | 700 | 1302 | 550 | 1130 | 1680 |
| VOSTOCHNI | 1621 | 475 | 2096 | 1580 | 635 | 2215 | 1673 | 873 | 2546 | 1722 | 1172 | 2894 | 1460 | 1443 | 2903 |
| LITTLE POLOVINA | 324 | 275 | 599 | 343 | 375 | 718 | 309 | 470 | 779 | 280 | 620 | 900 | 334 | 810 | 1144 |
| POLOVINA CLIFFS | 788 | 187 | 975 | 545 | 210 | 755 | 623 | 313 | 936 | 563 | 375 | 938 | 240 | 246 | 486 |
| POLOVINA | 252 | 75 | 327 | 246 | 160 | 406 | 253 | 204 | 457 | 269 | 225 | 494 | 535 | 506 | 1041 |
| TOLSTOI | 943 | 273 | 1216 | 1041 | 384 | 1405 | 1160 | 514 | 1674 | 1123 | 705 | 1828 | 1099 | 645 | 1744 |
| ZAPADNI REEF | 142 | 40 | 182 | 163 | 55 | 218 | 206 | 80 | 286 | 224 | 132 | 356 | 213 | 150 | 363 |
| LITTLE ZAPADNI | 482 | 122 | 604 | 546 | 160 | 706 | 651 | 247 | 898 | 644 | 230 | 874 | 603 | 355 | 958 |
| ZAPADNI | 995 | 266 | 1261 | 978 | 361 | 1339 | 1061 | 708 | 1769 | 1093 | 795 | 1888 | 957 | 1055 | 2012 |
| ISLAND TOTAL | 9434 | 3581 | 13015 | 9318 | 4717 | 14035 | 9848 | 5912 | 15760 | 9906 | 6847 | 16753 | 9034 | 8650 | 17684 |
| ST. GEORGE ISLAND | | | | | | | | | | | | | | | |
| SOUTH | 206 | 40 | 246 | 191 | 35 | 226 | 260 | 253 | 513 | 252 | 160 | 412 | 234 | 175 | 409 |
| NORTH | 646 | 154 | 800 | 724 | 225 | 949 | 902 | 176 | 1078 | 821 | 238 | 1059 | 785 | 455 | 1240 |
| EAST REEF | 124 | 45 | 169 | 152 | 55 | 207 | 142 | 27 | 169 | 135 | 87 | 222 | 139 | 122 | 261 |
| EAST CLIFFS | 220 | 70 | 290 | 260 | 60 | 320 | 287 | 86 | 373 | 331 | 221 | 552 | 278 | 330 | 608 |
| STARAYA ARTIL | 372 | 195 | 567 | 382 | 160 | 542 | 408 | 148 | 556 | 396 | 290 | 686 | 390 | 440 | 830 |
| ZAPADNI | 257 | 45 | 302 | 274 | 70 | 344 | 286 | 136 | 422 | 293 | 315 | 608 | 304 | 380 | 684 |
| ISLAND TOTAL | 1825 | 549 | 2374 | 1983 | 605 | 2588 | 2285 | 826 | 3111 | 2228 | 1311 | 3539 | 2130 | 1902 | 4032 |
| BOTH ISLANDS, TOTAL | 11259 | 4130 | 15389 | 11301 | 5322 | 16623 | 12133 | 6738 | 18871 | 12134 | 8158 | 20292 | 11164 | 10552 | 21716 |

TABLE 74. MID-JULY COUNTS OF ADULT MALES BY ROOKERY ON ST. PAUL ISLAND AND ST. GEORGE ISLAND, 1911 - 1979 (CONTINUED).

| ISLAND AND ROOKERY | 1956 | | | 1957 | | | 1958 | | | 1959 | | | 1960 | | |
|----------------------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH |
| ST. PAUL ISLAND | | | | | | | | | | | | | | | |
| LUKANIN | 196 | 240 | 436 | 211 | 213 | 424 | 206 | 240 | 446 | 219 | 256 | 475 | 211 | 256 | 467 |
| KITОВI | 516 | 122 | 638 | 547 | 71 | 618 | 557 | 190 | 747 | 600 | 385 | 985 | 573 | 348 | 921 |
| REEF | 1558 | 1165 | 2723 | 1553 | 802 | 2355 | 1528 | 1018 | 2546 | 1663 | 1512 | 3175 | 1669 | 1225 | 2894 |
| GORBATCH | 854 | 903 | 1757 | 872 | 392 | 1264 | 817 | 702 | 1519 | 856 | 824 | 1680 | 881 | 820 | 1701 |
| ARDIGUEN | 112 | 60 | 172 | 131 | 70 | 201 | 112 | 60 | 172 | 119 | 50 | 169 | 141 | 98 | 239 |
| MORJOVI | 612 | 1220 | 1832 | 675 | 1687 | 2362 | 756 | 1415 | 2171 | 791 | 1468 | 2257 | 810 | 1595 | 2405 |
| VOSTOCHNI | 1512 | 1250 | 2762 | 1553 | 1957 | 3510 | 1653 | 1615 | 3268 | 1568 | 1793 | 3361 | 1587 | 1669 | 3256 |
| LITTLE POLOVINA | 390 | 880 | 1270 | 363 | 1282 | 1645 | 384 | 575 | 959 | 331 | 932 | 1263 | 351 | 1025 | 1376 |
| POLOVINA CLIFFS | 637 | 572 | 1209 | 619 | 651 | 1270 | 713 | 480 | 1193 | 740 | 655 | 1395 | 756 | 720 | 1476 |
| POLOVINA | 272 | 302 | 574 | 248 | 606 | 854 | 270 | 555 | 825 | 291 | 593 | 884 | 331 | 545 | 876 |
| TOLSTOI | 1096 | 687 | 1783 | 978 | 746 | 1724 | 1058 | 888 | 1946 | 973 | 895 | 1868 | 1038 | 961 | 1999 |
| ZAPADNI REEF | 132 | 255 | 387 | 239 | 406 | 645 | 247 | 485 | 732 | 258 | 325 | 583 | 292 | 311 | 603 |
| LITTLE ZAPADNI | 527 | 338 | 865 | 606 | 365 | 971 | 596 | 390 | 986 | 583 | 459 | 1042 | 570 | 315 | 885 |
| ZAPADNI | 970 | 1022 | 1992 | 987 | 812 | 1799 | 1073 | 897 | 1970 | 1011 | 1340 | 2351 | 1037 | 519 | 1556 |
| ISLAND TOTAL | 9384 | 9016 | 18400 | 9582 | 10060 | 19642 | 9970 | 9510 | 19480 | 10003 | 11485 | 21488 | 10247 | 10407 | 20654 |
| ST. GEORGE ISLAND | | | | | | | | | | | | | | | |
| SOUTH | - | - | - | 282 | 211 | 493 | 276 | 285 | 561 | 260 | 170 | 430 | 279 | 175 | 454 |
| NORTH | - | - | - | 881 | 759 | 1640 | 985 | 730 | 1715 | 984 | 812 | 1796 | 1062 | 915 | 1977 |
| EAST REEF | - | - | - | 192 | 316 | 508 | 212 | 340 | 552 | 190 | 302 | 492 | 186 | 250 | 436 |
| EAST CLIFFS | - | - | - | 322 | 416 | 738 | 350 | 490 | 840 | 332 | 325 | 657 | 350 | 241 | 591 |
| STARAYA ARTIL | - | - | - | 373 | 609 | 982 | 426 | 615 | 1041 | 388 | 540 | 928 | 328 | 448 | 776 |
| ZAPADNI | - | - | - | 373 | 382 | 755 | 370 | 570 | 940 | 373 | 550 | 923 | 347 | 601 | 948 |
| ISLAND TOTAL | - | - | - | 2423 | 2693 | 5116 | 2619 | 3030 | 5649 | 2527 | 2699 | 5226 | 2552 | 2630 | 5182 |
| BOTH ISLANDS, TOTAL | - | - | - | 12005 | 12753 | 24758 | 12589 | 12540 | 25129 | 12530 | 14184 | 26714 | 12799 | 13037 | 25836 |

TABLE 74. MID-JULY COUNTS OF ADULT MALES BY ROOKERY ON ST. PAUL ISLAND AND ST. GEORGE ISLAND, 1911 - 1979 (CONTINUED).

| ISLAND AND ROOKERY | 1961 | | | 1962 | | | 1963 | | | 1964 | | | 1965 | | |
|----------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|--------------|--------------|-------------|--------------|--------------|-------------|--------------|
| | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH |
| ST. PAUL ISLAND | | | | | | | | | | | | | | | |
| LUKANIN | 231 | 231 | 462 | 251 | 185 | 436 | 221 | 225 | 446 | 221 | 94 | 315 | 204 | 147 | 351 |
| KITОВI | 609 | 314 | 923 | 579 | 146 | 725 | 547 | 147 | 694 | 492 | 152 | 644 | 486 | 205 | 691 |
| REEF | 1825 | 1856 | 3681 | 1564 | 1205 | 2769 | 1310 | 1000 | 2310 | 1301 | 756 | 2057 | 1179 | 670 | 1849 |
| GORBATCН | 842 | 952 | 1794 | 862 | 743 | 1605 | 771 | 708 | 1479 | 764 | 561 | 1325 | 674 | 520 | 1194 |
| ARDIGUEN | 153 | 88 | 241 | 131 | 85 | 216 | 125 | 85 | 210 | 100 | 70 | 170 | 105 | 69 | 174 |
| MORJOVI | 878 | 1534 | 2412 | 870 | 1023 | 1893 | 724 | 935 | 1659 | 708 | 866 | 1574 | 739 | 403 | 1142 |
| VOSTOCHNI | 1898 | 1877 | 3775 | 1633 | 1255 | 2888 | 1591 | 1021 | 2612 | 1523 | 1232 | 2755 | 1434 | 835 | 2269 |
| LITTLE POLOVINA | 341 | 932 | 1273 | 273 | 592 | 865 | 239 | 563 | 802 | 244 | 455 | 699 | 220 | 406 | 626 |
| POLOVINA CLIFFS | 870 | 735 | 1605 | 779 | 641 | 1420 | 713 | 447 | 1160 | 727 | 482 | 1209 | 650 | 322 | 972 |
| POLOVINA | 356 | 742 | 1098 | 326 | 680 | 1006 | 281 | 395 | 676 | 275 | 339 | 614 | 236 | 360 | 596 |
| TOLSTOI | 1149 | 902 | 2051 | 1032 | 527 | 1559 | 893 | 728 | 1621 | 920 | 508 | 1428 | 876 | 394 | 1270 |
| ZAPADNI REEF | 277 | 285 | 562 | 278 | 175 | 453 | 248 | 237 | 485 | 212 | 170 | 382 | 221 | 195 | 416 |
| LITTLE ZAPADNI | 666 | 437 | 1103 | 639 | 350 | 989 | 565 | 409 | 974 | 559 | 349 | 908 | 551 | 182 | 733 |
| ZAPADNI | 1068 | 906 | 1974 | 1115 | 1502 | 2617 | 984 | 750 | 1734 | 1039 | 1061 | 2100 | 978 | 908 | 1886 |
| ISLAND TOTAL | 11163 | 11791 | 22954 | 10332 | 9109 | 19441 | 9212 | 7650 | 16862 | 9085 | 7095 | 16180 | 8553 | 5616 | 14169 |
| ST. GEORGE ISLAND | | | | | | | | | | | | | | | |
| SOUTH | 335 | 160 | 495 | 264 | 179 | 443 | 280 | 110 | 390 | 257 | 82 | 339 | 288 | 57 | 345 |
| NORTH | 1235 | 861 | 2096 | 973 | 1002 | 1975 | 781 | 600 | 1381 | 756 | 536 | 1292 | 687 | 466 | 1153 |
| EAST REEF | 169 | 408 | 577 | 160 | 330 | 490 | 152 | 303 | 455 | 150 | 133 | 283 | 139 | 42 | 181 |
| EAST CLIFFS | 366 | 46 | 412 | 319 | 253 | 572 | 245 | 125 | 370 | 225 | 82 | 307 | 233 | 43 | 276 |
| STARAYA ARTIL | 375 | 502 | 877 | 305 | 432 | 737 | 300 | 354 | 654 | 294 | 340 | 634 | 274 | 294 | 568 |
| ZAPADNI | 363 | 512 | 875 | 321 | 454 | 775 | 313 | 398 | 711 | 307 | 316 | 623 | 296 | 211 | 507 |
| ISLAND TOTAL | 2843 | 2489 | 5332 | 2342 | 2650 | 4992 | 2071 | 1890 | 3961 | 1989 | 1489 | 3478 | 1917 | 1113 | 3030 |
| BOTH ISLANDS, TOTAL | 14006 | 14280 | 28286 | 12674 | 11759 | 24433 | 11283 | 9540 | 20823 | 11074 | 8584 | 19658 | 10470 | 6729 | 17199 |

TABLE 74. MID-JULY COUNTS OF ADULT MALES BY ROOKERY ON ST. PAUL ISLAND AND ST. GEORGE ISLAND, 1911 - 1979 (CONTINUED).

| ISLAND AND ROOKERY | 1966 | | | 1967 | | | 1968 | | | 1969 | | | 1970 | | |
|----------------------------|-------------|-------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH |
| ST. PAUL ISLAND | | | | | | | | | | | | | | | |
| LUKANIN | 152 | 108 | 260 | 137 | 77 | 214 | - | - | - | 96 | 46 | 142 | 107 | 35 | 142 |
| KITОВI | 413 | 184 | 607 | 374 | 118 | 492 | - | - | - | 285 | 91 | 376 | 241 | 49 | 290 |
| REEF | 1021 | 770 | 1791 | 927 | 616 | 1543 | 843 | 514 | 1357 | 723 | 457 | 1180 | 716 | 414 | 1130 |
| GORBATCH | 607 | 521 | 1128 | - | - | - | - | - | - | 426 | 209 | 635 | 385 | 178 | 563 |
| ARDIGUEN | 92 | 97 | 189 | - | - | - | - | - | - | 118 | 90 | 208 | 108 | 77 | 185 |
| MORJOVI | 645 | 534 | 1179 | - | - | - | 505 | 191 | 696 | 423 | 121 | 544 | 352 | 80 | 432 |
| VOSTOCHNI | 1449 | 970 | 2419 | - | - | - | 1116 | 497 | 1613 | 913 | 366 | 1279 | 791 | 203 | 994 |
| LITTLE POLOVINA | 218 | 312 | 530 | - | - | - | - | - | - | 94 | 103 | 197 | 87 | 40 | 127 |
| POLOVINA CLIFFS | 619 | 295 | 914 | - | - | - | - | - | - | 463 | 126 | 589 | 390 | 74 | 464 |
| POLOVINA | 188 | 405 | 593 | - | - | - | - | - | - | 129 | 66 | 195 | 103 | 51 | 154 |
| TOLSTOI | 819 | 441 | 1260 | 791 | 283 | 1074 | - | - | - | 638 | 199 | 837 | 570 | 115 | 685 |
| ZAPADNI REEF | 203 | 210 | 413 | 180 | 146 | 326 | 144 | 68 | 212 | 115 | 42 | 157 | 106 | 29 | 135 |
| LITTLE ZAPADNI | 542 | 227 | 769 | - | - | - | - | - | - | 361 | 82 | 443 | 325 | 66 | 391 |
| ZAPADNI | 957 | 847 | 1804 | - | - | - | - | - | - | 683 | 210 | 893 | 664 | 255 | 919 |
| ISLAND TOTAL | 7925 | 5931 | 13856 | - | - | - | - | - | - | 5467 | 2208 | 7675 | 4945 | 1666 | 6611 |
| ST. GEORGE ISLAND | | | | | | | | | | | | | | | |
| SOUTH | 294 | 115 | 409 | 237 | 110 | 347 | 319 | 126 | 445 | 250 | 121 | 371 | 284 | 524 | 788 |
| NORTH | 762 | 278 | 1040 | 608 | 383 | 971 | 636 | 305 | 941 | 526 | 176 | 702 | 516 | 175 | 691 |
| EAST REEF | 139 | 139 | 278 | 114 | 165 | 279 | 116 | 30 | 146 | 100 | 39 | 139 | 102 | 55 | 157 |
| EAST CLIFFS | 252 | 82 | 334 | 225 | 69 | 294 | 237 | 200 | 437 | 215 | 44 | 259 | 168 | 65 | 231 |
| STARAYA ARTIL | 245 | 189 | 434 | 235 | 179 | 414 | 213 | 201 | 414 | 183 | 66 | 249 | 194 | 99 | 293 |
| ZAPADNI | 282 | 214 | 496 | 227 | 382 | 609 | 227 | 421 | 648 | 183 | 231 | 414 | 224 | 359 | 583 |
| ISLAND TOTAL | 1974 | 1017 | 2991 | 1646 | 1268 | 2914 | 1748 | 1283 | 3031 | 1457 | 677 | 2134 | 1466 | 1277 | 2743 |
| BOTH ISLANDS, TOTAL | 9899 | 6948 | 16847 | - | - | - | - | - | - | 6924 | 2885 | 9809 | 6411 | 2943 | 9354 |

TABLE 74. MID-JULY COUNTS OF ADULT MALES BY ROOKERY ON ST. PAUL ISLAND AND ST. GEORGE ISLAND, 1911 - 1979 (CONTINUED).

| ISLAND AND ROOKERY | 1971 | | | 1972 | | | 1973 | | | 1974 | | | 1975 | | |
|----------------------------|-------|------|------|-------|------|------|-------|------|------|-------|------|------|-------|------|-------|
| | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH |
| ST. PAUL ISLAND | | | | | | | | | | | | | | | |
| LUKANIN | - | - | - | - | - | - | - | - | - | - | - | - | 112 | 81 | 193 |
| KITОВI | - | - | - | - | - | - | - | - | - | - | - | - | 267 | 77 | 344 |
| REEF | 636 | 251 | 887 | - | - | - | - | - | - | 562 | 233 | 795 | 622 | 367 | 989 |
| GORBATCH | - | - | - | - | - | - | - | - | - | 354 | 132 | 486 | 387 | 286 | 673 |
| ARDIQUEN | - | - | - | - | - | - | - | - | - | 90 | 28 | 118 | 85 | 41 | 126 |
| MORJOVI | - | - | - | 256 | 152 | 408 | - | - | - | - | - | - | 376 | 383 | 759 |
| VOSTOCHNI | 581 | 302 | 883 | 608 | 253 | 861 | - | - | - | - | - | - | 799 | 445 | 1244 |
| LITTLE POLOVINA | - | - | - | - | - | - | - | - | - | - | - | - | 88 | 200 | 288 |
| POLOVINA CLIFFS | 333 | 115 | 448 | - | - | - | - | - | - | - | - | - | 461 | 194 | 655 |
| POLOVINA | - | - | - | - | - | - | - | - | - | - | - | - | 88 | 205 | 293 |
| TOLSTOI | - | - | - | - | - | - | 588 | 233 | 821 | - | - | - | 621 | 513 | 1134 |
| ZAPADNI REEF | 92 | 43 | 135 | - | - | - | 132 | 53 | 185 | - | - | - | 139 | 111 | 250 |
| LITTLE ZAPADNI | - | - | - | - | - | - | 311 | 77 | 388 | - | - | - | 363 | 185 | 548 |
| ZAPADNI | - | - | - | - | - | - | 558 | 463 | 1021 | - | - | - | 610 | 447 | 1057 |
| ISLAND TOTAL | - | - | - | - | - | - | - | - | - | - | - | - | 5018 | 3535 | 8553 |
| ST. GEORGE ISLAND | | | | | | | | | | | | | | | |
| SOUTH | 247 | 117 | 364 | 207 | 70 | 277 | 212 | 57 | 269 | 190 | 117 | 307 | 170 | 87 | 257 |
| NORTH | 414 | 98 | 512 | - | - | - | 272 | 87 | 358 | 256 | 157 | 413 | 327 | 513 | 840 |
| EAST REEF | 80 | 29 | 109 | - | - | - | 44 | 22 | 66 | 50 | 18 | 68 | 56 | 135 | 191 |
| EAST CLIFFS | 160 | 57 | 217 | - | - | - | 116 | 100 | 216 | 111 | 112 | 223 | 143 | 382 | 525 |
| STARAYA ARTIL | 145 | 117 | 262 | - | - | - | 98 | 33 | 131 | 105 | 60 | 165 | 90 | 64 | 154 |
| ZAPADNI | 189 | 116 | 305 | 200 | 73 | 273 | 133 | 76 | 209 | 110 | 17 | 127 | 91 | 246 | 337 |
| ISLAND TOTAL | 1235 | 534 | 1769 | - | - | - | 875 | 375 | 1250 | 822 | 481 | 1303 | 877 | 1427 | 2304 |
| BOTH ISLANDS, TOTAL | - | - | - | - | - | - | - | - | - | - | - | - | 5895 | 4962 | 10857 |

TABLE 74. MID-JULY COUNTS OF ADULT MALES BY ROOKERY ON ST. PAUL ISLAND AND ST. GEORGE ISLAND, 1911 - 1979 (CONTINUED).

| ISLAND AND ROOKERY | 1976 | | | 1977 | | | 1978 | | | 1979 | | |
|----------------------------|-------------|-------------|--------------|-------------|-------------|--------------|-------------|-------------|--------------|-------------|-------------|--------------|
| | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH | HAREM | IDLE | BOTH |
| ST. PAUL ISLAND | | | | | | | | | | | | |
| LUKANIN | 124 | 26 | 150 | 127 | 75 | 202 | 120 | 72 | 192 | 127 | 59 | 186 |
| KITОВI | 291 | 66 | 357 | 319 | 65 | 384 | 282 | 109 | 391 | 309 | 109 | 418 |
| REEF | 635 | 458 | 1093 | 778 | 559 | 1337 | 810 | 526 | 1336 | 785 | 647 | 1432 |
| GORBATCH | 360 | 276 | 636 | 440 | 421 | 861 | 455 | 320 | 775 | 436 | 364 | 800 |
| ARDIGUEN | 62 | 33 | 95 | 99 | 49 | 148 | 93 | 38 | 131 | 89 | 29 | 118 |
| MORJOVI | 434 | 312 | 746 | 529 | 218 | 747 | 518 | 275 | 793 | 498 | 392 | 890 |
| VOSTOCHNI | 905 | 722 | 1627 | 1012 | 463 | 1475 | 1093 | 612 | 1705 | 1040 | 571 | 1611 |
| LITTLE POLOVINA | 108 | 260 | 368 | 110 | 204 | 314 | 107 | 152 | 259 | 98 | 187 | 285 |
| POLOVINA CLIFFS | 447 | 201 | 648 | 587 | 159 | 746 | 569 | 143 | 712 | 544 | 146 | 690 |
| POLOVINA | 101 | 174 | 275 | 104 | 181 | 285 | 126 | 295 | 421 | 112 | 303 | 415 |
| TOLSTOI | 684 | 255 | 939 | 819 | 342 | 1161 | 719 | 365 | 1084 | 828 | 352 | 1180 |
| ZAPADNI REEF | 136 | 148 | 284 | 170 | 149 | 319 | 203 | 133 | 336 | 194 | 119 | 313 |
| LITTLE ZAPADNI | 385 | 271 | 656 | 489 | 241 | 730 | 519 | 271 | 790 | 433 | 304 | 737 |
| ZAPADNI | 652 | 839 | 1491 | 874 | 719 | 1593 | 882 | 597 | 1479 | 749 | 875 | 1624 |
| ISLAND TOTAL | 5324 | 4041 | 9365 | 6457 | 3845 | 10302 | 6496 | 3908 | 10404 | 6242 | 4457 | 10699 |
| ST. GEORGE ISLAND | | | | | | | | | | | | |
| SOUTH | 173 | 130 | 303 | 230 | 97 | 327 | 183 | 56 | 239 | 210 | 228 | 438 |
| NORTH | 416 | 258 | 674 | 664 | 261 | 925 | 786 | 600 | 1386 | 674 | 695 | 1369 |
| EAST REEF | 66 | 50 | 116 | 83 | 38 | 121 | 107 | 80 | 187 | 132 | 164 | 296 |
| EAST CLIFFS | 172 | 205 | 377 | 275 | 190 | 465 | 115 | 221 | 336 | 282 | 205 | 487 |
| STARAYA ARTIL | 122 | 122 | 244 | 265 | 158 | 423 | 212 | 201 | 413 | 236 | 434 | 670 |
| ZAPADNI | 144 | 231 | 375 | 93 | 155 | 248 | 187 | 62 | 249 | 182 | 216 | 398 |
| ISLAND TOTAL | 1093 | 996 | 2089 | 1610 | 889 | 2509 | 1590 | 1220 | 2810 | 1716 | 1942 | 3658 |
| BOTH ISLANDS, TOTAL | 6417 | 5037 | 11454 | 8067 | 4744 | 12811 | 8086 | 5128 | 13214 | 7958 | 6399 | 14357 |

TABLE 75.--Counts of adult males on Lagoon Rookery of St. Paul Island until its extinction in 1941 and on Sea Lion Rock (Sivutch Rookery) off St. Paul Island. Data sources are the same as given for the pup data in Table 77 .

| Year | Lagoon | | | Sea Lion Rock | | |
|------|--------|------|------|---------------|-------------------|------|
| | Harem | Idle | Both | Harem | Idle | Both |
| 1911 | 10 | 1 | 11 | - | - | - |
| 1912 | 8 | 0 | 8 | 57 | 5 | 62 |
| 1913 | 6 | 0 | 6 | 67 | 1 | 68 |
| 1914 | 8 | 2 | 10 | 91 | 10 | 101 |
| 1915 | 15 | 4 | 19 | 96 | 23 | 119 |
| 1916 | 13 | 8 | 21 | 162 | 111 | 273 |
| 1917 | 24 | 15 | 39 | 184 | 72 | 256 |
| 1918 | 25 | 18 | 43 | 230 | 90 | 320 |
| 1919 | 17 | 6 | 23 | - | - | - |
| 1920 | 14 | 3 | 17 | 190 | 60 | 250 |
| 1921 | 16 | 0 | 16 | - | - | - |
| 1922 | 8 | 0 | 8 | - | - | - |
| 1923 | 7 | 0 | 7 | 159 | 16 | 175 |
| 1924 | 6 | 0 | 6 | 171 | 23 | 194 |
| 1925 | 5 | 0 | 5 | 190 | 27 | 217 |
| 1926 | 3 | 0 | 3 | 279 | 34 | 313 |
| 1927 | 1 | 0 | 1 | 319 | 60 | 379 |
| 1928 | 2 | 0 | 2 | - | - | - |
| 1929 | 2 | 0 | 2 | - | - | - |
| 1930 | 2 | 1 | 3 | - | - | - |
| 1931 | 4 | 0 | 4 | - | - | - |
| 1932 | 5 | 1 | 6 | - | - | - |
| 1933 | 5 | 1 | 6 | - | - | - |
| 1934 | 3 | 1 | 4 | - | - | - |
| 1935 | 3 | 0 | 3 | 426 | 87 | 513 |
| 1936 | 1 | 0 | 1 | 435 | 85 | 520 |
| 1937 | 2 | 0 | 2 | 450 | 85 | 535 |
| 1938 | 2 | 0 | 2 | 475 | 60 | 535 |
| 1939 | 1 | 0 | 1 | 400 | 65 | 465 |
| 1940 | 1 | 0 | 1 | 400 | 165 | 565 |
| 1941 | 0 | 0 | 0 | - | - | - |
| 1968 | - | - | - | 166 | 511 ^{1/} | 677 |
| 1973 | - | - | - | 56 | 302 ^{1/} | 358 |
| 1976 | - | - | - | - | - | 375 |
| 1979 | - | - | - | 470 | 182 | 652 |

^{1/} Does not include territorial animals without females which normally are part of the idle male count.

APPROXIMATION OF PUP NUMBERS, 1912-79

Newborn pups are the only herd component which is completely accessible because many of the juvenile and adult animals (a usually unknown proportion) are always at sea. The deaths of pups on land occur before large numbers of the surviving pups begin their exploratory foraging at sea and before many of the carcasses of dead animals have disintegrated or disappeared. The life history sequence has been utilized in recent years to survey both the live and dead pups at appropriate times in August to estimate the numbers born.

Pups were counted each year from 1912 to 1916 on all rookeries of St. Paul Island and St. George Island. The counts in 1917 through 1921 were limited to a few rookeries. Complete counts were made again in 1922, no data were taken in 1923, and a few rookeries were surveyed again in 1924. Several of the rookery populations were too large to make counting practical and it was abandoned after 1924.

The pup population was assumed to continue its growth at the same rate, 8%/yr, as observed during 1912-24. Calculations made many years later indicated that the actual rate progressively diminished to less than 8%/yr after about 1930. Except for a tagging U.S. participation in program started in 1941 and interrupted by the Second World War (1941-45), no data from which to estimate pup abundance were taken from 1925 to 1946--the period of rapid increase and eventual stability which characterized the herd's full recovery after the Convention of 1911 ended pelagic sealing.

The interrupted tagging program was resumed in 1947. Metal tags and a notch or other identifying checkmark were applied to the flippers of thousands of male and female pups each year through 1968^{3/}. The numbers alive at the time of tagging each year were estimated from recoveries in the commercial kill, mainly of males 3 and 4 yr old. By the mid-1960s, however, it was demonstrated that tagging and recovery overestimated the pup populations even after corrections were made for tag loss (Chapman 1964; Roppel et al. 1963). Also by this time the more reliable technique of shearing and sampling was well developed (Chapman and Johnson 1968). Shearing a patch of black guard hair from the top of the head to expose the silvery underfur, then counting marked/unmarked ratios in later subsamples, gave data for estimating pup numbers in the year of birth instead of waiting 3-4 years for tag recoveries from the commercial kill.e

The shearing and sampling technique is used at present and is described more fully below.

Allocation of Marking Effort

Rookeries on the Pribilof Islands were subdivided during the mid-1960s into numbered sections, primarily to facilitate the counting of adult fur seals and the distribution of marks during shearing/

^{3/} Estimation of pup abundance was only one of several objectives. The tips of selected hind flipper digits were removed during 1969-75 instead of applying tags. Various uncertainties in abundance, survival, and intermixture estimates led to the suspension after 1975 of permanent marking of pups on a large scale. Tagging for survival and abundance estimates was also carried out during 1961-71 on several thousand yearling and older males.

sampling surveys (Chapman and Johnson 1968). The method of mark allocation is based on the assumption that the distribution of harem males in mid-July is indicative of that for pups in early August when actual shearing is done. The number of pups to be sheared within a particular rookery section is based on the mid-July count of territorial adult males with females (harem bulls) and is determined as follows:

$$\frac{\left[\begin{array}{l} \text{Number of harem males} \\ \text{counted in mid-July on} \\ \text{section } \underline{x} \text{ of rookery } X \end{array} \right]}{\left[\begin{array}{l} \text{Number of harem males} \\ \text{counted in mid-July on} \\ \text{all rookeries selected} \\ \text{for shearing-sampling} \\ \text{estimate} \end{array} \right]} \cdot \left[\begin{array}{l} \text{Number of pups} \\ \text{to be sheared} \\ \text{on all selected} \\ \text{rookeries} \end{array} \right] = \left[\begin{array}{l} \text{Number of pups} \\ \text{to be sheared} \\ \text{on section } \underline{x} \\ \text{of rookery } X \end{array} \right]$$

Pups are then sheared at random locations throughout a rookery. This helps to satisfy the assumptions of estimation. Because the marks are already at random, the procedure counteracts 1) the strong tendency of unmolted, nursing pups to cluster instead of moving about freely and mixing, and 2) the difficulty of randomly sampling the marked/unmarked ratio on rugged terrain.

Sampling for Marked/Unmarked Ratios

The pup population is sampled for marked to unmarked ratios approximately 5 and again 10 days after shearing. Several hundred groups of 25 pups each are randomly selected for counting marked pups throughout the rookeries. The rookery population is sampled

twice to determine if estimates from the two periods are consistent. Counting during the second sampling period is usually more difficult because many of the pups at the later date spend much more of their time playing and feeding in the water.

The procedure is for ^{two three} ^ or ^ samplers to begin at one end of a rookery and to proceed, more or less abreast and parallel to the shoreline, to the opposite end. The person making counts next to the water keeps at least 25 m ahead of the other counters so that pups near the shoreline are not driven into the water from above before a count can be obtained.

No count is made in areas more than 25 m in diameter which contain less than 25 pups. Where many pups (800-1,000) are congregated over a large area, a number of samples (8-10) is taken by distributing the counts throughout the group or large pod. It is often difficult, however, to determine which groups of 25 pups to sample when large numbers are present. Several methods of counting the animals in this situation are satisfactory, as long as the selection of pups is not based on the presence or absence of marked individuals. The method most often used to eliminate selection for marked or unmarked pups is to start each count at a fixed object such as a dead animal, a piece of kelp, log or rock, and then to count the nearest 25 pups.

The number of sheared pups in each subsample is first recorded on mechanical tallies, then transferred to record cards. The counters

clear their tallies between subsamples and do not discuss their results until after completion of the survey.

Direct Counts of Live Pups

The only proven method of checking the accuracy of estimates based on shearing and sampling is to actually count the total number of living pups. Such counts, however, can be satisfactorily made on only 3 or 4 of the Pribilof Islands' 21 fur seal rookeries. Six to 10 individuals are employed: 2 are primary counters, 2 keep the pups moving between the counters, and the rest prevent counted pups from moving toward and mixing with uncounted pups. In practice, the crew begins at one end of the rookery and proceeds to the other end, separating successive pods of 200-500 pups from the rookery population. Four to ^{five} individuals are stationed between the encircled pod of pups and the rest of the rookery population

to keep counted and uncounted animals separated and to count pups going into the water that obviously will not be counted by primary counters. The primary counters are stationed about 8-20 ft (2.44-6.10 m) apart, between the pod of pups and the shoreline.

The counters use bamboo poles as aids in slowing or increasing the rate at which the pups move toward the water and between the primary counters. Two counts (one from each primary counter) from each pod are recorded, and the tallies are reset to zero between counts of pods. The counts of pups on a rookery are completed without stopping to minimize the likelihood of intermixing between counted and uncounted pups.

Counts of Dead Pups

Early mortality studies of Pribilof Islands fur seals concentrated on complete or partial counts of pups that died on land. Dead pups were counted on some or all rookeries in 1896, 1906, 1908-09, 1912-24, 1941, and 1948-1979. Death rates calculated from complete counts of living and dead pups on all rookeries in 1916 and 1922 were the basis for estimating total numbers of dead pups on all rookeries during 1917-21 and 1923-24, respectively, when counts were made on sample rookeries assumed to be representative of the pup population's growth trend after pelagic sealing ended in 1911.

Dead pup surveys were not conducted during 1925-40, but annual values were calculated for each rookery using complete counts of dead and living pups on all rookeries in 1922 when the death rate was 1.73%. Based on complete or partial counts of live pups, production was estimated to have increased annually at the rate of 8% during 1912-24. The factor 1.73% was applied to these estimates of annual pup production to calculate annual numbers of dead pups during 1925-40. By 1940, however, researchers realized that the fur seal population was following a sigmoid growth curve rather than a straight line, that it was approaching its natural ceiling, and that earlier methods of computing various herd elements were no longer applicable.

The counts of dead pups were resumed on St. Paul Island in 1941 and during 1948-52, and on both St. Paul and St. George Islands from 1953-79, except in 1955 when no count was made on St. George Island.

In the early 1950s it was demonstrated that most of the pup mortality on land occurred by mid-August. Since that time, dead pups have been counted in mid- to late August, whereas the counts during the early 1900s were usually made in conjunction with living pup censuses during late July and early August. Therefore, past studies have tended to underestimate the true rate of mortality during 1912-24 when the population was relatively small.

In 1966, the rookeries were subdivided into numbered sections (see p. 146) to facilitate the June and July counts of adult males and the distribution of marks during August shearing-sampling surveys to estimate numbers of live pups. Since then, however, the dead pups have also been counted by rookery section in August to determine if a correlation exists between the density of harem males (or other characteristics) and pup mortality, and also to increase the accuracy of the pup mortality surveys. Details of the dead pup counts by rookery section are in our annual reports but are not included in Table 76.

The dead pups are counted beginning about August 20 by six to eight persons who proceed laterally and abreast through each rookery. Each dead pup observed and recorded is marked plainly with lime so that it will not be counted twice. The following are counted:

- a. Obviously a dead pup--recently dead and has full body form but most of the hair and fur may be gone; body has degenerated to little more than skin, skull, and flippers.

- b. Identification not obvious--bones and decomposed flesh; dried skin.

An unknown number of dead pups goes unnoticed each year during the count due to removal from the rookery by carrion feeders, such as foxes and gulls, removal by marine storms which may vary in intensity both during the count and between years, and advanced decomposition which makes identification difficult or impossible. On the basis of special observations in the early 1950s, the actual count has been increased by 5% in our annual reports to account for such losses. Any value not based on continuing special studies is questionable, of course, but the unknown error in the actual counts reported is almost certainly small. The following assumptions are made each year of counting:

1. Most of the pup mortality has occurred by the time dead pups are counted.
2. The same proportion of dead pups are overlooked and not counted.
3. The criteria for identifying a dead pup are constant both within and between years.

Explanation of Data Tables

which follows

The values in Table 76 are the most reliable ones now available and are documented in Table 77. The estimates for total births on St. Paul Island in 1967, 1972, 1974, and 1976 were calculated specifically for this report; as explained in Table 77, however, the same procedure gave results which were judged unacceptable for 1968 and 1973. Few pup data have been collected at Sivutch Rookery on Sea Lion Rock just off St. Paul Island (Figure 2), and Lagoon Rookery of that island became extinct in 1941. Values for these two rookeries are given separately in Table 78, not included with other St. Paul Island rookeries as in previous annual reports. Therefore, totals for St. Paul Island in Table 76 are all based on the same 14 rookeries to facilitate direct comparisons among years.

A common practice in the past has been to assume that St. Paul Island accounts for 80% of the pups born on the Pribilof Islands, and therefore to multiply a total for St. Paul Island by 1.25 to approximate the total births on the Pribilofs when data from St. George Island are missing. Pup data from all 21 rookeries were last taken in 1966 with the following results:

| <u>Location</u> | <u>Born</u> | <u>Live</u> | <u>Dead</u> | <u>Distribution</u> |
|-------------------|-------------|-------------|-------------|---------------------|
| St. Paul Island | 298,931 | 277,517 | 21,414 | 77% |
| St. George Island | 69,431 | 64,758 | 4,673 | 18% |
| Sea Lion Rock | 20,220 | 17,991 | 2,228 | 5% |
| <hr/> | | | | |
| All Pribilofs | 388,582 | 360,267 | 28,315 | 100% |

Apparently the extrapolation factor should be 1.30 (= $1/0.77$) instead of 1.25. The actual contribution of each island to total annual pup production on the Pribilofs may well be changing, however, since commercial sealing ended and St. George Island became a research sanctuary in 1973. To preserve the integrity of values in Table 76, estimates for one island are not extrapolated to totals for the Pribilofs.

Table 79 compiles the few direct counts made on some of the smaller areas in recent years to evaluate the accuracy of the shearing-sampling technique. Of the 14 estimates, 7 exceed the counts and 7 are below them, suggesting the technique is unbiased as noted by Chapman and Johnson (1968). The convergence of the pooled values in Table 79 to a deviation very near zero (actually 1%) is also suggestive, but it must be remembered that 1) in individual cases the apparent bias can exceed 20% and 2) evaluation by counting is necessarily restricted to small areas which may not represent the unknown situation on large rookeries.

Finally, abrupt changes in values from one year to the next in Table 76 must not be taken too literally because of uncertainty in the estimates. An example is the 1964-65-66 sequence for St. Paul Island of 284,000-254,000-299,000 pups born, which is attributable mainly to the estimates for Zapadni Rookery and Vostochni Rookery--large rookeries on which numbers appear to have been underestimated rather seriously in 1965. On the other hand, trends over a period

of years reflect reality (e.g., the increase during 1912-24 and the decrease during the 1960s).

TABLE 76--Pup counts and estimates by rookery for St. Paul Island and St. George Island, 1912-79. Totals not derived as the sum of rookery - specific numbers are in parentheses (), brackets [] identify rookeries from which basic data were combined. Table 77 summarizes the origin of annual values given here.

| Island and rookery | 1912 | | | 1913 | | | 1914 | | | 1915 | | | 1916 | | |
|----------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | Dead pups | Live pups | Pups born | Dead pups | Live pups | Pups born | Dead pups | Live pups | Pups born | Dead pups | Live pups | Pups born | Dead pups | Live pups | Pups born |
| St. Paul Island | | | | | | | | | | | | | | | |
| Vostochni | - | - | 14,979 | - | - | 19,459 | 499 | 19,210 | 19,709 | 577 | 20,404 | 20,981 | 904 | 23,483 | 24,387 |
| Morjovi | - | - | 2,400 | - | - | 2,812 | 44 | 2,268 | 2,312 | 38 | 2,357 | 2,395 | 44 | 2,717 | 2,761 |
| Little Polovina | - | - | 841 | - | - | 1,050 | 17 | 910 | 927 | 12 | 1,053 | 1,065 | 15 | 1,059 | 1,074 |
| Polovina Cliffs | - | - | 1,083 | - | - | 1,320 | 18 | 1,431 | 1,449 | 9 | 1,544 | 1,553 | 20 | 1,663 | 1,683 |
| Polovina | - | - | 2,736 | - | - | 3,680 | 71 | 3,484 | 3,555 | 72 | 4,089 | 4,161 | 113 | 4,631 | 4,744 |
| Lukainin | - | - | 1,787 | - | - | 1,661 | 73 | 1,761 | 1,834 | 28 | 1,926 | 1,954 | 86 | 2,055 | 2,141 |
| Nitovi | - | - | 1,975 | - | - | 1,855 | 47 | 2,072 | 2,119 | 46 | 2,429 | 2,475 | 27 | 2,445 | 2,472 |
| Reef | - | - | 13,014 | - | - | 13,984 | 206 | 13,353 | 13,559 | 244 | 14,506 | 14,750 | 183 | 16,148 | 16,331 |
| Ardiguen | - | - | 417 | - | - | 475 | 11 | 645 | 656 | 9 | 623 | 632 | 7 | 693 | 700 |
| Gorbatch | - | - | 6,435 | - | - | 6,368 | 85 | 6,067 | 6,152 | 96 | 6,882 | 6,978 | 252 | 8,612 | 8,864 |
| Tolstoi | - | - | 9,074 | - | - | 10,026 | 174 | 9,760 | 9,934 | 122 | 11,501 | 11,623 | 146 | 11,919 | 12,065 |
| Zapadni Reef | - | - | 186 | - | - | 197 | 3 | 203 | 206 | 3 | 216 | 219 | 4 | 262 | 266 |
| Little Zapadni | - | - | 4,436 | - | - | 4,596 | 79 | 4,840 | 4,919 | 96 | 5,586 | 5,682 | 150 | 6,127 | 6,277 |
| Zapadni | - | - | 7,364 | - | - | 7,953 | 126 | 7,499 | 7,625 | 192 | 8,548 | 8,740 | 147 | 9,535 | 9,682 |
| Island total | - | - | 66,727 | - | - | 75,436 | 1,453 | 73,503 | 74,956 | 1,544 | 81,664 | 83,208 | 2,098 | 91,349 | 93,447 |
| St. George Island | | | | | | | | | | | | | | | |
| Staraya Artil | - | - | 3,607 | - | - | 3,778 | 63 | 4,215 | 4,278 | 53 | 4,397 | 4,450 | 85 | - | 5,545 |
| North | - | - | 4,227 | - | - | 4,319 | 112 | 5,189 | 5,301 | 109 | 5,622 | 5,731 | 124 | - | 6,246 |
| East Reef | - | - | 562 | - | - | 469 | 6 | 601 | 581 | 3 | 1,044 | 1,047 | 17 | - | 1,585 |
| East Cliffs | - | - | 2,307 | - | - | 2,837 | 31 | 2,627 | 2,658 | 28 | 3,119 | 3,147 | 78 | - | 3,762 |
| South | - | - | - | - | - | - | - | - | - | - | 26 | - | - | 19 | - |
| Zapadni | - | - | 1,246 | - | - | 1,408 | 8 | 1,015 | 1,023 | 11 | 978 | 989 | 8 | - | 965 |
| Island total | - | - | 11,949 | - | - | 12,811 | 220 | 13,647 | 13,867 | (204) | 15,186 | 15,390 | (312) | - | 18,122 |
| Both islands, total | - | - | 78,676 | - | - | 88,247 | 1,673 | 87,150 | 88,823 | 1,740 | 96,850 | 98,598 | 2,410 | - | 111,569 |

TABLE 76--Pup counts and estimates by rookery for St. Paul Island and St. George Island, 1912-79. Totals not derived as the sum of rookery - specific numbers are in parentheses (); brackets [] identify rookeries from which basic data were combined. Table 77 summarizes the origin of annual values given here. --continued.

| Island and rookery | 1917 | | | 1918 | | | 1919 | | | 1920 | | | 1921 | | |
|--------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | Dead pups | Live pups | Pups born | Dead pups | Live pups | Pups born | Dead pups | Live pups | Pups born | Dead pups | Live pups | Pups born | Dead pups | Live pups | Pups born |
| St. Paul Island | | | | | | | | | | | | | | | |
| Vostochni | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Morjovi | - | - | - | - | - | - | 88 | 2,953 | 3,041 | 118 | 2,818 | 2,936 | 52 | 2,942 | 2,994 |
| Little Polovina | 15 | 1,245 | 1,260 | - | - | - | - | - | - | - | - | - | - | - | - |
| Polovina Cliffs | 54 | 1,707 | 1,761 | - | - | - | 61 | 2,148 | 2,209 | 62 | 2,511 | 2,573 | 68 | 2,717 | 2,785 |
| Polovina | 165 | 4,753 | 4,918 | 152 | 5,191 | 5,343 | 308 | 5,486 | 5,794 | 212 | 5,794 | 6,006 | 159 | 5,912 | 6,071 |
| Lukanin | 61 | 2,174 | 2,235 | - | - | - | - | - | - | - | - | - | - | - | - |
| Kitovi | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Reef | 457 | 16,985 | 17,442 | 508 | 18,890 | 19,398 | - | - | - | - | - | - | - | - | - |
| Ardiguen | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Gorbach | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Tolstoi | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Zapadni Reef | 10 | 348 | 358 | 517 | 19 | 536 | 23 | 581 | 604 | 7 | 525 | 532 | 16 | 486 | 502 |
| Little Zapadni | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Zapadni | 261 | 9,567 | 9,828 | - | - | - | - | - | - | - | - | - | - | - | - |
| Island total | - | - | (103,163) | - | - | (115,780) | - | - | (126,454) | - | - | (134,559) | - | - | (140,724) |
| St. George Island | | | | | | | | | | | | | | | |
| Staraya Artil | - | - | - | - | - | - | 164 | 5,582 | 5,746 | - | - | - | - | - | - |
| North | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| East Reef | 24 | 1,762 | 1,786 | - | - | 2,120 | 22 | 2,345 | 2,367 | 28 | 2,543 | 2,571 | 34 | 2,594 | 2,628 |
| East Cliffs | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| South | - | 24 | - | - | - | - | - | 68 | - | 1 | 98 | 99 | 3 | 184 | 187 |
| Zapadni | 17 | 1,033 | 1,050 | - | - | 806 | 11 | 846 | 857 | 13 | 894 | 907 | 11 | 884 | 895 |
| Island total | - | - | (19,335) | - | - | (20,298) | - | - | (23,258) | - | - | (24,252) | - | - | (26,790) |
| Both islands, total | - | - | (122,498) | - | - | (136,078) | - | - | (149,712) | - | - | (158,811) | - | - | (167,514) |

TABLE 76—Pup counts and estimates by rookery for St. Paul Island and St. George Island, 1912-79. Totals not derived as the sum of rookery - specific numbers are in parentheses (); brackets [] identify rookeries from which basic data were combined. Table 77 summarizes the origin of annual values given here. --Continued.

| Island and rookery | 1922 | | | 1924 | | | 1941 | | | 1948 | | | 1949 | | |
|---------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | Dead pups | Live pups | Pups born | Dead pups | Live pups | Pups born | Dead pups | Live pups | Pups born | Dead pups | Live pups | Pups born | Dead pups | Live pups | Pups born |
| St. Paul Island | | | | | | | | | | | | | | | |
| Vostochni | 777 | 36,531 | 37,308 | - | - | - | 7,708 | - | - | (20,600) | - | - | 12,966 | - | - |
| Morjovi | 79 | 3,839 | 3,918 | 69 | 3,156 | 3,225 | 933 | - | - | - | - | - | 2,600 | 13,200 | 15,800 |
| Little Polovina | 38 | 1,478 | 1,516 | - | - | - | 292 | - | - | - | - | - | 1,600 | 7,400 | 9,000 |
| Polovina Cliffs | 73 | 3,876 | 3,949 | 94 | 4,111 | 4,205 | [2,356] | - | - | - | - | - | - | - | - |
| Polovina | 134 | 8,636 | 8,770 | 205 | 7,319 | 7,524 | - | - | - | - | - | - | 1,779 | 19,221 | 21,000 |
| Lukanin | 77 | 3,467 | 3,544 | - | - | - | [404] | - | - | - | - | - | 635 | 4,165 | 4,800 |
| Kitovi | 87 | 5,847 | 5,934 | - | - | - | - | - | - | - | - | - | 800 | 6,300 | 9,100 |
| Reef | 372 | 25,080 | 25,452 | - | - | - | 2,269 | - | - | - | - | - | - | - | - |
| Ardivgen | 24 | 980 | 1,004 | - | - | - | 42 | - | - | - | - | - | - | - | - |
| Gorbatch | 121 | 13,996 | 14,117 | - | - | - | 896 | - | - | - | - | - | - | - | - |
| Tolstoi | 271 | 19,226 | 19,497 | - | - | - | 1,623 | - | - | - | - | - | - | - | - |
| Zapadni Reef | 4 | 493 | 497 | 13 | 412 | 425 | 171 | - | - | - | - | - | 575 | 6,325 | 6,900 |
| Little Zapadni | 221 | 8,625 | 8,846 | - | - | - | 372 | - | - | - | - | - | - | - | - |
| Zapadni | 277 | 15,823 | 16,100 | - | - | - | 1,284 | - | - | - | - | - | - | - | - |
| Island total | 2,555 | 147,897 | 150,452 | - | - | (162,238) | 18,350 | - | - | - | - | - | - | - | (413,531) |
| St. George Island | | | | | | | | | | | | | | | |
| Staraya Artil | 182 | 6,874 | 7,056 | - | - | - | - | - | - | - | - | - | - | - | - |
| North | 145 | 10,219 | 10,364 | - | - | - | - | - | - | - | - | - | - | - | - |
| East Reef | 36 | 2,344 | 2,380 | 32 | 2,893 | 2,525 | - | - | - | - | - | - | - | - | - |
| East Cliffs | 91 | 6,010 | 6,101 | - | - | - | - | - | - | - | - | - | - | - | - |
| South | 4 | 228 | 232 | - | 297 | - | - | - | - | - | - | - | - | - | - |
| Zapadni | 10 | 885 | 895 | 16 | 1,528 | 1,544 | - | - | - | - | - | - | - | - | - |
| Island total | 468 | 26,560 | 27,028 | - | - | (35,868) | - | - | - | - | - | - | - | - | (55,373) |
| Both islands, total | 3,023 | 174,457 | 177,480 | - | - | (198,196) | - | - | - | - | - | - | - | - | (468,904) |

TABLE 76--Pup counts and estimates by rookery for St. Paul Island and St. George Island, 1912-79. Totals not derived as the sum of rookery - specific numbers are in parentheses (); brackets [] identify rookeries from which basic data were combined. Table 77 summarizes the origin of annual values given here.--continued.

| Island and rookery | 1950 | | | 1951 | | | 1952 | | | 1953 | | | 1954 | | |
|--------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | Dead pups | Live pups | Pups born | Dead pups | Live pups | Pups born | Dead pups | Live pups | Pups born | Dead pups | Live pups | Pups born | Dead pups | Live pups | Pups born |
| St. Paul Island | | | | | | | | | | | | | | | |
| Vostochni | 13,120 | - | - | 18,450 | - | - | - | - | - | 19,503 | - | - | 25,233 | - | - |
| Morjovi | 3,000 | - | - | 3,592 | - | - | - | - | - | 3,764 | - | - | 8,049 | - | - |
| Little Polovina | 1,740 | - | - | 2,208 | - | - | - | - | - | 2,211 | - | - | 3,852 | - | - |
| Polovina Cliffs | 3,800 | - | - | 5,580 | - | - | 2,954 | - | - | 5,451 | - | - | 6,413 | - | - |
| Polovina | 5,660 | - | - | 6,402 | - | - | 3,200 | - | - | 5,036 | - | - | 6,459 | - | - |
| Lukanin | 770 | - | - | 712 | - | - | - | - | - | 1,086 | - | - | 1,129 | - | - |
| Kitovi | 1,160 | - | - | 1,517 | - | - | - | - | - | 1,695 | - | - | 1,669 | - | - |
| Reef | 9,520 | - | - | 11,007 | - | - | - | - | - | 13,661 | - | - | 12,959 | - | - |
| Ardiguen | 170 | - | - | 242 | - | - | - | - | - | 189 | - | - | 282 | - | - |
| Gorbatch | 2,810 | - | - | 3,559 | - | - | - | - | - | 3,679 | - | - | 4,900 | - | - |
| Tolstoi | 4,230 | - | - | 6,033 | - | - | - | - | - | 6,154 | - | - | 7,552 | - | - |
| Zapadni Reef | 660 | - | - | 353 | - | - | - | - | - | 1,116 | - | - | 2,278 | - | - |
| Little Zapadni | 2,120 | - | - | 2,804 | - | - | - | - | - | 2,446 | - | - | 4,979 | - | - |
| Zapadni | 4,660 | - | - | 8,204 | - | - | - | - | - | 12,221 | - | - | 10,424 | - | - |
| Island total | 53,420 | - | (451,000) | 70,663 | - | (447,000) | - | - | (438,000) | 78,212 | - | (445,000) | 96,178 | - | (450,000) |
| St. George Island | | | | | | | | | | | | | | | |
| Staraya Artil | - | - | - | - | - | - | - | - | - | 3,353 | - | - | 2,903 | - | - |
| North | - | - | - | - | - | - | - | - | - | 3,197 | - | - | 3,776 | - | - |
| East Reef | - | - | - | - | - | - | - | - | - | [846] | - | - | 370 | - | - |
| East Cliffs | - | - | - | - | - | - | - | - | - | - | - | - | 1,154 | - | - |
| South | - | - | - | - | - | - | - | - | - | 254 | - | - | 290 | - | - |
| Zapadni | - | - | - | - | - | - | - | - | - | 1,018 | - | - | 1,163 | - | - |
| Island total | - | - | - | - | - | - | - | - | - | 8,668 | - | - | 10,139 | - | - |
| Both islands, total | - | - | - | - | - | - | - | - | - | 86,880 | - | - | 106,317 | - | - |

TABLE 76--Pup counts and estimates by rookery for St. Paul Island and St. George Island, 1913-79. Totals not derived as the sum of rookery - specific numbers are in parentheses (); brackets [] identify rookeries from which basic data were combined. Table 77 summarizes the origin of annual values given here. --continued.

| Island and rookery | 1955 | | | 1956 | | | 1957 | | | 1958 | | | 1959 | | |
|--------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | Dead pups | Live pups | Pups born | Dead pups | Live Pups | Pups born | Dead pups | Live pups | Pups born | Dead pups | Live pups | Pups born | Dead pups | Live pups | Pups born |
| St. Paul Island | | | | | | | | | | | | | | | |
| Vostochni | 14,473 | - | - | 20,498 | - | - | 12,732 | - | - | 7,247 | - | - | 7,105 | - | - |
| Morjovi | 5,571 | - | - | 10,278 | - | - | 4,253 | - | - | 2,290 | - | - | 4,560 | - | - |
| Little Polovina | 2,782 | - | - | 4,443 | - | - | 1,695 | - | - | 975 | - | - | 1,597 | - | - |
| Polovina Cliffs | 5,964 | - | - | 8,637 | - | - | 4,425 | - | - | 1,826 | - | - | 2,586 | - | - |
| Polovina | 4,660 | - | - | 7,463 | - | - | 5,432 | - | - | 2,184 | - | - | 3,311 | - | - |
| Lukanin | 1,129 | - | - | 1,718 | - | - | 870 | - | - | 324 | - | - | 631 | - | - |
| Kitovi | 2,610 | - | - | 2,892 | - | - | 1,588 | - | - | 608 | - | - | 882 | - | - |
| Reef | 15,145 | - | - | 14,399 | - | - | 11,301 | - | - | 5,550 | - | - | 6,052 | - | - |
| Arduqven | 387 | - | - | 364 | - | - | 249 | - | - | 102 | - | - | 141 | - | - |
| Gorbatch | 4,789 | - | - | 6,291 | - | - | 3,801 | - | - | 1,655 | - | - | 2,100 | - | - |
| Tolstoi | 6,489 | - | - | 6,789 | - | - | 5,659 | - | - | 2,823 | - | - | 3,691 | - | - |
| Zapadni Reef | 1,303 | - | - | 1,674 | - | - | 917 | - | - | 246 | - | - | 608 | - | - |
| Little Zapadni | 3,555 | - | - | 4,611 | - | - | 2,325 | - | - | 1,312 | - | - | 1,691 | - | - |
| Zapadni | 6,607 | - | - | 8,650 | - | - | 6,415 | - | - | 4,045 | - | - | 5,089 | - | - |
| Island total | 75,544 | - | (461,000) | 98,707 | - | (453,000) | 61,662 | - | (420,000) | 31,187 | - | (387,000) | 39,964 | - | (335,000) |
| St. George Island | | | | | | | | | | | | | | | |
| Staraya Artil | - | - | - | 3,806 | - | - | 2,729 | - | - | 1,552 | - | - | 1,987 | - | - |
| North | - | - | - | 6,357 | - | - | 3,942 | - | - | 1,626 | - | - | 2,653 | - | - |
| East Reef | - | - | - | [2,203] | - | - | [1,064] | - | - | [616] | - | - | [664] | - | - |
| East Cliffs | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| South | - | - | - | [2,742] | - | - | [1,569] | - | - | 118 | - | - | [1,633] | - | - |
| Zapadni | - | - | - | - | - | - | - | - | - | 844 | - | - | - | - | - |
| Island total | - | - | - | 15,108 | - | - | 9,304 | - | - | 4,756 | - | - | 6,937 | - | - |
| Both islands, total | - | - | - | 113,815 | - | - | 70,966 | - | - | 35,943 | - | - | 46,901 | - | - |

TABLE 76--Pup counts and estimates by rookery for St. Paul Island and St. George Island, 1912-79. Totals not derived as the sum of rookery - specific numbers are in parentheses (); brackets [] identify rookeries from which basic data were combined. Table 77 summarizes the origin of annual values given here.--continued.

| Island and rookery | 1960 | | | 1961 | | | 1962 | | | 1963 | | | 1964 | | |
|---------------------|-----------|-----------|-----------|-----------|-------------------|-----------|-----------|-------------------|-----------|-----------|-------------------|-----------|-----------|-----------|-----------|
| | Dead pups | Live pups | Pups born | Dead pups | Live pups | Pups born | Dead pups | Live pups | Pups born | Dead pups | Live pups | Pups born | Dead pups | Live pups | Pups born |
| St. Paul Island | | | | | | | | | | | | | | | |
| Vostochni | 11,333 | - | - | 10,173 | 19,899 | 30,072 | 8,565 | [38,775] [52,221] | | 5,057 | 34,700 | 39,757 | 3,404 | 42,005 | 45,409 |
| Morjovi | 6,825 | - | - | 5,259 | 27,628 | 32,887 | 4,881 | | | 2,348 | 17,300 | 19,648 | 1,830 | 17,750 | 19,580 |
| Little Polovina | 2,427 | - | - | 2,415 | 8,794 | 11,209 | 2,121 | 5,865 | 7,986 | 923 | 6,500 | 7,423 | 631 | 8,385 | 9,016 |
| Polovina Cliffs | 3,462 | - | - | 4,576 | [21,663] [28,738] | | 2,957 | [23,020] [27,857] | | 2,160 | 19,600 | 21,760 | 1,097 | 22,265 | 23,362 |
| Polovina | 5,268 | - | - | 2,499 | | | 1,880 | | | 1,237 | 4,200 | 5,437 | 783 | 5,145 | 5,928 |
| Lukanin | 1,037 | - | - | 1,294 | | | 660 | | | 546 | 5,200 | 5,746 | 402 | 5,115 | 5,517 |
| Kitovi | 2,006 | - | - | 2,215 | [24,005] [27,514] | | 2,081 | [13,230] [15,971] | | 881 | 10,800 | 11,681 | 462 | 14,105 | 14,567 |
| Reef | 9,664 | - | - | 10,047 | | | 7,897 | | | 5,688 | 33,000 | 38,688 | 3,000 | 38,685 | 41,685 |
| Ardiguen | 331 | - | - | 411 | [69,246] [79,704] | | 225 | [73,795] [83,290] | | 141 | | | 102 | 2,815 | 2,917 |
| Gorbatch | 3,168 | - | - | 3,550 | 17,103 | 20,653 | 1,373 | | | 2,431 | [22,600] [25,172] | | 1,549 | 23,625 | 25,174 |
| Tolstoi | 5,237 | - | - | 4,761 | 34,885 | 39,646 | 3,004 | 21,545 | 24,549 | 3,274 | 23,600 | 26,874 | 2,614 | 25,450 | 28,064 |
| Zapadni Reef | 1,472 | - | - | 1,291 | 5,850 | 7,141 | 598 | | | 718 | 6,200 | 6,918 | 425 | 6,515 | 6,940 |
| Little Zapadni | 4,148 | - | - | 3,047 | 13,294 | 16,341 | 2,399 | [23,940] [26,937] | | 2,580 | 13,800 | 16,380 | 1,101 | 17,125 | 18,226 |
| Zapadni | 6,450 | - | - | 6,329 | 42,102 | 48,431 | 6,627 | 31,640 | 38,267 | 4,614 | 32,400 | 37,014 | 4,172 | 33,365 | 37,537 |
| Island total | 62,828 | | (320,000) | 57,867 | 284,469 | 342,336 | 45,268 | 231,810 | 277,078 | 32,598 | 229,900 | 262,498 | 21,572 | 262,350 | 283,922 |
| St. George Island | | | | | | | | | | | | | | | |
| Staraya Artil | 2,000 | - | - | 2,514 | - | - | 1,435 | - | - | 502 | - | - | 767 | - | - |
| North | 3,489 | - | - | 3,883 | - | - | 2,242 | - | - | 2,525 | - | - | 792 | - | - |
| East Reef | | - | - | | - | - | 164 | - | - | 105 | - | - | | - | - |
| East Cliffs | [1,112] | - | - | [1,347] | - | - | 340 | - | - | 397 | - | - | [272] | - | - |
| South | | - | - | 913 | - | - | | - | - | 162 | - | - | | - | - |
| Zapadni | [1,902] | - | - | 1,106 | - | - | [1,740] | - | - | 542 | - | - | [446] | - | - |
| Island total | 8,503 | - | - | 9,763 | - | - | 5,921 | - | - | 4,772 | - | - | 2,277 | - | - |
| Both islands, total | 71,331 | - | - | 67,630 | - | - | 51,189 | - | - | 37,370 | - | - | 23,849 | - | - |

TABLE 76--Pup counts and estimates by rookery for St. Paul Island and St. George Island, 1912-79. Totals not derived as the sum of rookery - specific numbers are in parentheses (); brackets [] identify rookeries from which basic data were combined. Table 77 summarizes the origin of annual values given here.--Continued.

| Island and rookery | 1965 | | | 1966 | | | 1967 | | | 1968 | | | 1969 | | |
|---------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | Dead pups | Live pups | Pups born | Dead pups | Live pups | Pups born | Dead pups | Live pups | Pups born | Dead pups | Live pups | Pups born | Dead pups | Live pups | Pups born |
| St. Paul Island | | | | | | | | | | | | | | | |
| Vostochni | 4,214 | 34,208 | 38,422 | 2,785 | 48,834 | 51,619 | 1,969 | - | - | 4,195 | 33,276 | 37,471 | 1,711 | 33,746 | 35,457 |
| Korjovi | 2,649 | 15,434 | 18,083 | 1,686 | 19,166 | 20,852 | 1,072 | - | - | 2,285 | 15,937 | 18,222 | 734 | 15,479 | 16,213 |
| Little Polovina | 1,132 | 6,118 | 7,250 | 449 | 8,698 | 9,147 | 233 | - | - | 509 | - | - | 200 | 5,091 | 5,291 |
| Polovina Cliffs | 2,856 | 18,548 | 21,404 | 809 | 23,266 | 24,075 | 825 | - | - | 1,616 | - | - | 836 | 18,164 | 19,000 |
| Polovina | 1,176 | 5,291 | 6,467 | 312 | 5,670 | 5,982 | 319 | - | - | 487 | - | - | 327 | 3,627 | 3,954 |
| Lukanin | 1,126 | 5,290 | 6,416 | 432 | 7,187 | 7,619 | 240 | - | - | 597 | - | - | 460 | 4,660 | 5,120 |
| Kitovi | 2,202 | 11,361 | 13,563 | 406 | 14,024 | 14,430 | 522 | - | - | 755 | - | - | 652 | 10,872 | 11,524 |
| Reef | 7,664 | 29,032 | 36,696 | 3,562 | 34,918 | 38,480 | 2,008 | 31,458 | 33,466 | 3,064 | 24,897 | 27,901 | 1,365 | 27,095 | 28,460 |
| Ardiguen | 459 | 2,680 | 3,139 | 160 | 2,776 | 2,936 | 90 | - | - | 118 | - | - | 112 | 3,579 | 3,691 |
| Gorbach | 3,123 | 16,929 | 20,052 | 1,593 | 20,808 | 22,401 | 874 | - | - | 1,446 | - | - | 823 | 17,681 | 18,504 |
| Tolatol | 3,955 | 25,122 | 29,077 | 3,425 | 27,008 | 30,433 | 2,251 | 33,484 | 35,735 | 3,315 | - | - | 2,778 | 26,729 | 29,507 |
| Zapadni Reef | 723 | 5,259 | 5,982 | 451 | 4,942 | 5,393 | 380 | - | - | 685 | 4,554 | 5,239 | 177 | 4,574 | 4,751 |
| Little Zapadni | 2,461 | 14,306 | 16,767 | 1,634 | 22,998 | 24,632 | 1,098 | - | - | 1,781 | - | - | 798 | 18,873 | 19,671 |
| Zapadni | 5,384 | 25,066 | 30,450 | 3,710 | 37,222 | 40,932 | 2,195 | - | - | 4,445 | - | - | 2,306 | 29,421 | 31,727 |
| Island total | 39,124 | 214,644 | 253,768 | 21,414 | 277,517 | 298,931 | 14,076 | - | (291,000) | 25,298 | - | - | 13,279 | 219,591 | 232,870 |
| St. George Island | | | | | | | | | | | | | | | |
| Staraya Artil | 1,186 | - | - | 1,152 | 8,854 | 10,006 | 770 | - | - | 1,055 | - | - | 640 | - | - |
| North | 1,854 | - | - | 1,561 | 26,507 | 28,068 | 971 | - | - | 1,567 | - | - | 444 | - | - |
| East Reef | [676] | - | - | 398 | 2,645 | 2,843 | 60 | - | - | [824] | - | - | 62 | - | - |
| East Cliffs | - | - | - | 566 | 10,208 | 10,774 | 141 | - | - | - | - | - | 125 | - | - |
| South | - | - | - | 445 | 7,574 | 8,019 | 168 | - | - | 359 | - | - | 80 | - | - |
| Zapadni | [1,263] | - | - | 751 | 8,970 | 9,721 | 410 | - | - | 838 | - | - | 260 | - | - |
| Island total | 4,979 | - | - | 4,673 | 64,758 | 69,431 | 2,520 | - | - | 4,643 | - | - | 1,531 | - | - |
| Both islands, total | 40,387 | - | - | 26,087 | 342,275 | 368,362 | 16,596 | - | - | 29,941 | - | - | 14,810 | - | - |

TABLE 76--Pup counts and estimates by rookery for St. Paul Island and St. George Island, 1912-79. Totals not derived as the sum of rookery - specific numbers are in parentheses (); brackets [] identify rookeries from which basic data were combined. Table 77 summarizes the origin of annual values given here. --continued.

| Island and rookery | 1975 | | | 1976 | | | 1977 | | | 1978 | | | 1979 | | |
|---------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | Dead pups | Live pups | Pups born | Dead pups | Live pups | Pups born | Dead pups | Live pups | Pups born | Dead pups | Live pups | Pups born | Dead pups | Live pups | Pups born |
| St. Paul Island | | | | | | | | | | | | | | | |
| Vostochni | 3,259 | 41,356 | 44,615 | 3,826 | 47,970 | 51,796 | 2,021 | - | - | 1,041 | - | - | 573 | 39,666 | 40,239 |
| Morjovi | 1,765 | 21,284 | 23,049 | 1,829 | - | - | 870 | - | - | 606 | - | - | 269 | 15,472 | 15,741 |
| Little Polovina | 252 | 3,415 | 3,667 | 316 | - | - | 103 | - | - | 90 | - | - | 28 | 3,409 | 3,437 |
| Polovina Cliffs | 1,529 | 24,870 | 26,399 | 1,862 | 21,516 | 23,378 | 733 | - | - | 761 | - | - | 493 | 20,292 | 20,725 |
| Polovina | 419 | 4,354 | 4,773 | 378 | - | - | 160 | - | - | 151 | - | - | 85 | 4,324 | 4,409 |
| Lukanin | 505 | 5,704 | 6,209 | 385 | - | - | 250 | - | - | 197 | - | - | 132 | 5,636 | 5,768 |
| Kitovi | 787 | 12,965 | 13,752 | 846 | - | - | 331 | - | - | 203 | - | - | 171 | 13,694 | 13,865 |
| Reef | 1,837 | 27,561 | 29,398 | 2,055 | - | - | 1,233 | - | - | 593 | - | - | 651 | 29,408 | 30,059 |
| Ardiguen | 142 | 2,774 | 2,916 | 212 | - | - | 112 | - | - | 15 | - | - | 31 | 2,694 | 2,725 |
| Gorbatch | 1,025 | 17,038 | 18,063 | 1,341 | - | - | 860 | - | - | 475 | - | - | 260 | 14,906 | 15,166 |
| Tolstoi | 4,141 | 31,308 | 35,249 | 4,241 | - | - | 3,291 | - | - | 1,488 | - | - | 1,645 | 33,284 | 34,929 |
| Zapadni Reef | 508 | 7,223 | 7,731 | 638 | 7,390 | 8,028 | 427 | - | - | 129 | - | - | 161 | 7,729 | 7,890 |
| Little Zapadni | 1,204 | 21,168 | 22,372 | 1,977 | - | - | 1,133 | - | - | 674 | - | - | 637 | 18,504 | 19,221 |
| Zapadni | 3,252 | 36,816 | 40,068 | 3,770 | - | - | 2,559 | - | - | 1,650 | - | - | 1,368 | 30,390 | 31,756 |
| Island total | 20,625 | 257,636 | 278,261 | 23,676 | - | (298,000) | 14,083 | - | - | 8,073 | - | - | 6,444 | 239,488 | 245,932 |
| St. George Island | | | | | | | | | | | | | | | |
| Staraya Artil | 709 | - | - | 454 | - | - | 410 | 5,447 | 5,857 | 590 | 5,832 | 6,422 | 565 | - | - |
| North | 1,230 | - | - | 791 | - | - | 408 | 16,438 | 18,846 | 1,068 | 16,354 | 17,422 | 774 | - | - |
| East Reef | 102 | - | - | 37 | - | - | 60 | 2,720 | 2,780 | 164 | 3,016 | 3,180 | 104 | - | - |
| East Cliffs | 434 | - | - | 354 | - | - | 140 | 5,835 | 5,975 | 292 | 6,772 | 7,064 | 285 | - | - |
| South | 344 | - | - | 280 | - | - | 98 | 5,943 | 6,041 | 225 | 6,642 | 6,867 | 186 | - | - |
| Zapadni | 470 | - | - | 373 | - | - | 1/92 | 5,816 | 1/5,908 | 1/1,799 | 6,114 | 1/6,273 | 277 1/2 | - | - |
| Island total | 3,289 | - | - | 2,289 | - | - | 1,208 | 42,199 | 43,407 | 2,518 | 44,730 | 47,248 | 2,191 | - | - |
| Both islands, total | 23,914 | - | - | 25,965 | - | - | 15,291 | - | - | 10,591 | - | - | 8,635 | - | - |

1/ Dead pups were counted on only part of the rookery area in order to minimize disturbance of adjoining behavioral studies; the uncounted dead pups were negligible proportions of island totals.

TABLE 77.--Origin of annual pup numbers in Table 76. References are ordered chronologically from 1912 with some overlap to facilitate the documentation of dead pup counts starting in 1941. Unpublished documents are fully identified herein.

| Year | Item and explanation | Source document |
|---------|---|--------------------------------|
| 1912-14 | Dead pup counts are given by rookery for 1914 only, but Clark (1913, p. 896) counted 1,060 dead pups on all rookeries in 1912. His field notes could not be found. The reference at right (p. 32, p. 44) gives the counts of pups born on each rookery during each year. | Osgood et al. (1916) |
| 1915-16 | Counts were again made on all rookeries and are on p. 86 and p. 91, respectively, with dead pup numbers shown. | Bower & Aller (1917a, 1917b) |
| 1917-2 | Herd growth (since the 1911 Convention ended pelagic sealing) was rapidly making counts on all rookeries impractical. The counts (p. 103, 117, 109, and 104, respectively) were done on sample rookeries only, then the numbers of pups born per counted harem bull on these rookeries, along with the count of harem bulls on rookeries where pups were not counted, were used to estimate total pup numbers. | Hanna (1918, 1919, 1920, 1921) |
| 1922 | in 1921(p. 80) on sample rookeries and in 1922 Pups were counted (p. 113) on all rookeries for the last time. See Kenyon et al. (1954, p. 22) for later attempts (1940, 1949, 1951) to count on small rookeries and for a rapid field estimate (1951), as well as Chapman and Johnson (1968, Table 8) and Table 79 of the present report for modern counts on small rookeries to help evaluate the accuracy of the shearing-sampling technique of pup estimation. | Johnston (1922, 1923) |
| 1923 | No pup data were collected on any rookeries. | |
| 1924 | Counts (p. 165) were made on sample rookeries and, as in 1917-21, estimates were based on harem bull counts from all rookeries. Collection of all pup data ended in 1924 and was not resumed for many years; herd size computations were continued on the basis of the average rate of increase in pup production, 8%/yr, observed during 1912-24. These are detailed in the "Alaskan fisheries and fur fisheries" reports of the United States government from which the data for 1915-24 are cited above. | Johnston (1925) |

TABLE 77.--Origin of annual pup numbers in Table 76. References are ordered chronologically from 1912 with some overlap to facilitate the documentation of dead pup counts starting in 1941. Unpublished documents are fully identified herein.--continued

| Year | Item and explanation | Source document |
|------------------|---|---|
| 1941, 1948-67 | Dead pup counts by rookery (p. 63) are for several years from one cited document in order to facilitate the documentation, but original sources were checked first. In addition, one of us (Kozloff) searched the field records to provide slightly more detail for St. George Island in several years. As noted in the text (p. 164), tagging estimates of live pups are known to be too high (e.g., Chapman 1964) and are not repeated or documented in the present report. | Marine Mammal Biological Laboratory (MMBL), (1970a) |
| 1949 | Counts of live and dead pups on 6 sample rookeries (p. 27) were used with counts for harem bulls on all rookeries to estimate pup numbers on all rookeries. Trials of other methods as well as additional topics are explained in this important population document. | Kenyon et al. (1954) |
| 1950-60 | The estimates (p. 331) are for St. Paul Island as a whole and are based on the "cumulative" estimates of females of age 3 yr and older (Chapman 1964, p. 661 and Table 8), along with the assumption that 10% more females than males survive from birth to age 3 yr. For all year classes, the cumulative estimates themselves assume constant age-specific natural survival rates and, for males, constant escapement rates from the commercial harvest. The resulting estimates may err in being too high, but any overestimation is undoubtedly less than in the pup estimates based directly on tagging/recovery data. Rookery-specific estimates are not available ; the total estimates might be allocated to rookeries using harem bull counts (e.g., Kenyon et al. 1954, Table 12). | Chapman (1973) |
| 1961 | Live pup estimates (p. 268) for St. Paul Island are based on autumn marking and sampling during its first year of island-wide development, but are the best available and are believed to be quite reliable. Duplicate sampling of the marked/unmarked ratio on each rookery sampled began in 1962 (3 samples actually were taken on all rookeries in 1965); marking by shearing (instead of by flipper tagging) started in 1963; and the allocation of marks according to the distribution of harem bulls (to ensure randomness) commenced in 1965. Few changes in techniques have been made since. | Chapman & Johnson (1968) |

TABLE 77.--Origin of annual pup numbers in Table 76. References are ordered chronologically from 1912 with some overlap to facilitate the documentation of dead pup counts starting in 1941. Unpublished documents are fully identified herein.--continued

| Year | Item and explanation | Source document |
|---------|---|---|
| 1962-65 | Live pup estimates (p. 45, 28, 20, and 18, respectively) for these and later years are nearly always the means of estimates based on duplicate samplings of the marked/unmarked ratio on each rookery. Data were taken on all St. Paul Island rookeries. | Roppel et al. (1963, 1965a, 1965b, 1966) |
| 1966 | Data were again taken to make estimates (p. 22) for all rookeries of St. Paul Island, and additionally on St. George Island and Sea Lion Rock. | MMBL (1969) |
| 1967 | Shearing-sampling was done to make estimates (p. 17) for sample rookeries only on St. Paul Island. The number of pups born/harem bull was estimated by pooling the pup estimates and bull counts from the sample rookeries. Multiplying the resulting average by the total harem bull count on St. Paul Island then estimated the total number of pups there. | MMBL (1970a) |
| 1968 | As in 1967, live pup estimates (p. 19) were made for sample rookeries only. The pooled estimate of pups born/harem bull, however, gave an unrealistically low estimate of pups born on St. Paul Island (210,000) which is not shown in Table 76 of the present report. It seems likely that the rookeries sampled failed to represent the average of pups/bull on the whole island. | MMBL (1970b) |
| 1968-78 | A single document is cited for several years of dead pups counts (p. 65) as done above (for 1941, 1948-67); again, values were first checked with those in original sources. | Marine Mammal Division (MMD). 1979. Fur seal investigations, 1978. Northwest and Alaska Fisheries Center (NWAFC) processed rep. 79-1, 84 p. National Marine Mammal Laboratory (NMML), National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), 7600 Sand Point Way N.E., Bldg. 32, Seattle WA 98115. |

TABLE 77.--Origin of annual pup numbers in Table 76. References are ordered chronologically from 1912 with some overlap to facilitate the documentation of dead pup counts starting in 1941. Unpublished documents are fully identified herein.--continued.

| Year | Item and explanation | Source document |
|---------|--|---|
| 1969 | Data were collected for estimates (p. 16) on all rookeries of St. Paul Island. | MMBL (1971) |
| 1970 | Estimates (p. 35) were again from data taken on all rookeries of St. Paul Island, and additionally on St. George Island. | MMBL. 1971. Fur seal investigations, 1970. Unpubl. manusc., 155 p. NWFC, NMFS, NOAA, 2725 Montlake Blvd. E., Seattle WA 98112. |
| 1971 | No data for live pup estimates were taken on any rookeries. | |
| 1972-74 | Data for estimates (p. 20, 17, and 15, respectively) were taken on sample rookeries only of St. Paul Island in all years and on St. George Island in 1973 only on all rookeries. Total pups on St. Paul Island were estimated from pups/bull on sample rookeries and total harem bull counts as noted above for 1967. For 1973, however, the resulting estimate of pups born (338,000) was unreasonably high and is not reported in Table 76. As for 1968 above, the pups/bull on sample rookeries may have failed to represent all of St. Paul Island. | MMD. 1973, 1974, 1975. Fur seal investigations, 1972, 1973, 1974. Unpubl. manusc., 92 p., 96 p., 125 p. NWFC, NMFS, NOAA, 2725 Montlake Blvd. E., Seattle WA 98112. |
| 1975 | Data for estimates (p. 14) were taken on all rookeries of St. Paul and St. George Islands for the first time since 1966. An unreasonably high estimate for St. George Island (83,000) was probably due to inexperienced observers overlooking sheared pups during sampling; it is not included in Table 76. | MMD. 1976. Fur seal investigations, 1975. Unpubl. manusc., 115 p. NWFC, NMFS, NOAA, 2725 Montlake Blvd. E., Seattle WA 98112. |
| 1976 | Data were taken for estimates (p. 17) on sample rookeries of St. Paul Island only. | MMD. 1977. Fur seal investigations, 1976. NWFC Unpubl. manusc., 92 p. NWFC, NMFS, NOAA, 2725 Montlake Blvd. E., Seattle WA 98112. |

TABLE 77.--Origin of annual pup numbers in Table 76. References are ordered chronologically from 1912 with some overlap to facilitate the documentation of dead pup counts starting in 1941. Unpublished documents are fully identified herein.--continued.

| Year | Item and explanation | Source document |
|------|---|---|
| 1977 | Estimates (p. 13) are from data collected on all rookeries of St. George Island only. | MMD. 1978. Fur seal investigations, 1977. NWAFC Unpubl. manusc., 94 p. NWAFC, NMFS, NOAA, 2725 Montlake Blvd. E., Seattle WA 98112. |
| 1978 | Data for estimates (p. 13) were again collected on all rookeries of St. George Island only. | MMD. 1979. Fur seal investigations, 1978. NWAFC Unpubl. manusc., 84 p. NWAFC, NMFS, NOAA, 2725 Montlake Blvd. E., Seattle WA 98112. |
| 1979 | Dead pup counts and shearing-sampling data for estimates (Table 76, this report) were taken on all rookeries of St. Paul Island only. | Kozloff, P. (editor). Fur seal investigations, 1979. NWAFC Unpubl. manusc., 93 p. National Marine Mammal Laboratory, NWAFC, NMFS, NOAA, 7600 Sand Point Way NE, Bldg. 32, Seattle WA 98115. |

Table 78.--Fur seal pup data collected on Lagoon Rookery of St. Paul Island until its extinction in 1941 and on Sea Lion Rock (Sivutch Rookery) off St. Paul Island. Data sources are given in Table 77 except for 1941 (Johnston 1943). A dash (-) means no data were collected.

| | Lagoon | | | Sea Lion Rock | | |
|------|--------|------|------|---------------|--------|--------|
| | Dead | Live | Born | Dead | Live | Born |
| 1912 | - | - | 521 | - | - | 2,787 |
| 1913 | - | - | 527 | - | - | 3,495 |
| 1914 | 2 | 373 | 375 | 68 | 3,984 | 4,052 |
| 1915 | 7 | 387 | 394 | 56 | 4,479 | 4,535 |
| 1916 | 3 | 385 | 388 | 69 | 4,951 | 5,020 |
| 1917 | 5 | 461 | 466 | - | - | - |
| 1918 | 19 | 493 | 512 | - | - | - |
| 1919 | 15 | 430 | 445 | - | - | - |
| 1920 | 8 | 333 | 341 | - | - | - |
| 1921 | 1 | 286 | 287 | - | - | - |
| 1922 | 1 | 272 | 273 | 199 | 7,962 | 8,161 |
| 1924 | 3 | 175 | 178 | - | - | - |
| 1941 | - | 3 | 3 | - | - | - |
| 1966 | - | - | - | 2,228 | 17,922 | 20,220 |

Table 79.--Comparison between shearing-sampling estimates and direct counts of live pups; counts and estimates for 1964-66 were used by Chapman and Johnson (1968, Table 8).

| Year | Rookery | Count | Mean sampling estimate | Deviation of estimate from count (%) |
|-------|-----------------|---------|------------------------|--------------------------------------|
| 1963 | Little Polovina | 7,230 | 6,500 | -10 |
| 1964 | Kitovi (part) | 1,095 | 1,382 | 26 |
| | Little Polovina | 7,180 | 8,385 | 17 |
| | Morjovi (part) | 17,530 | 16,880 | -4 |
| | Zapadni Reef | 5,700 | 6,515 | 14 |
| 1965 | Kitovi (part) | 1,248 | 1,225 ^{1/} | -2 |
| | Little Polovina | 7,314 | 7,001 ^{1/} | -4 |
| | Morjovi (part) | 18,384 | 15,874 ^{1/} | -14 |
| | Zapadni Reef | 5,383 | 5,422 ^{1/} | 1 |
| 1966 | Little Polovina | 7,071 | 8,698 | 23 |
| | Morjovi (part) | 17,388 | 17,948 | 3 |
| | Zapadni Reef | 5,729 | 4,942 | -14 |
| 1968 | Zapadni Reef | 5,916 | 4,554 | -23 |
| 1976 | Zapadni Reef | 6,974 | 7,390 | 6 |
| Total | | 114,142 | 112,716 | 1 |

^{1/}Based on triplicate sampling with one set of 100-pup samples (Roppel et al. 1966, p. 20); the slightly different live pup estimates in Table 76 exclude the 100-pup samples, and are based on the usual duplicate 25-pup samples.

COLLECTION OF MORTALITY DATA FROM NEWBORN FUR SEALS

Mortality of fur seals from birth to 5 years of age probably ranges from at least 75% to perhaps 95% among different year classes. Most of this mortality probably occurs during the first year at sea. The period from birth to time of departure from the islands, however, affords an excellent opportunity to study the causes of death on land during the first critical weeks of life, and to provide information about the condition of the seals before they go to sea for the first time. Then by studying the survivors 2 to 4 years later, again on land, it may be possible to identify some of the causes of mortality factors that were encountered at sea.

The basic approach to studying mortality on land is to set aside study areas from which representative samples of the causes of land mortality among newborn fur seals can be obtained. The samples must cover the entire critical period which is from the earliest births in late June to near the end of births in mid-August.

Selection of Study Areas

The size of study areas was arbitrarily set at 2,000 yd² (1,672 m²) with the establishment in 1964 of Study Area 1 at Reef Rookery, St. Paul Island. This size of study area was retained because it provides a sample of convenient size for processing. Area 1 lies parallel to the shoreline and, from the standpoint of minimum disturbance of the harems during collection, is the best

arrangement. Approaching the harems from the back tends to stimulate movement of seals toward the water. Approaching harems from the water tends to keep the seals in place. Area 2 lies perpendicular to Area 1 and bisects it. The addition of Area 2 in 1967 increased the sample size and permitted the sampling of harems away from the shoreline.

Area 3 was also added in 1967. It is at Vostochni Rookery at the northeastern tip and opposite end of St. Paul Island; furthermore, Area 3 is rather sandy, whereas Areas 1 and 2 are rocky. Photographs of Areas 1, 2, and 3 are in our annual report for 1967 (pages 7 and 8). Area 4 was established in 1976 at Staraya Artil Rookery on St. George Island. It provides a basis for comparing the causes of mortality with those on St. Paul Island, and also for identifying any significant changes on St. George Island as the population there increases toward its primitive abundance without commercial sealing.

Methods and Equipment

Catwalks approximately 200 yd (183 m) long and 8-10 ft (2.44-3.05 m) high facilitated the collection of dead pups. They were picked up with a 16.5-ft (5.03 m) gaff pole which permitted a reach of 15 ft (4.57 m) on either side of the catwalk at ground level. The gaff was a standard halibut hook which was sharpened frequently. The resulting area sampled was 10 yd (3.05 m) wide and 200 yd (183 m) long; it passed through a relatively good concentration of harems. Rubber gloves, rain gear, a wheelbarrow, and a plankway from the catwalk to the truck were used also.

two
 We tried to limit collectors to two people to keep disturbance to a minimum. Collectors moved slowly and stopped whenever any seals acted startled because such behavior stimulates similar behavior in other seals. The best place to snag a dead pup is at the arm or bearing surface (volar) of the front flipper. A collector could carry two pups in each hand to the chute at the end of the catwalk. They were carried by the front flipper, to prevent milk in the stomach from leaking into the oral cavity, and slid down the chute to the ground, not dropped. Finally, they were washed at the landing before being transported to the post mortem room for necropsy.

Necropsy Procedure

A necropsy form is filled out for each pup. On this form are recorded the date of collection, the length, weight, and sex of the pup, and the degrees of freshness of the umbilicus and of eruption of the permanent canine teeth. At the end of the examination, a diagnosis is made based on gross observations. The causes of death are classified as primary, secondary, tertiary, and so on. A specific cause is designated as primary if it is the most serious, or if it evidently preceded and influenced critical changes that eventually led to death.

Presentation of necropsy data

Analysis of these data aid our understanding of mortality and population dynamics in several ways: they help to identify and explain causes of death and their pathogenesis (mechanism and sequence of factors producing disease

and death); they help us anticipate mortality by specific causes; they show seasonal variation and help explain cycles; and they show the relative importance of different causes of death.

Our annual reports tabulate the data for each study area on an annual or weekly basis. Table 80 is a summary for 1964-78 combined. As a matter of general interest, a few methods of presenting data (some of which are used in the annual reports) are mentioned below.

The data may be graphed to show when each major cause is important during the pupping and breeding season and how each major cause is related to postnatal age and other factors. One can then see, at a glance, how the major causes of death operate throughout the season. The association between daily mortality and weather throughout the season may be shown also. Bar graphs of primary causes for several consecutive years emphasize any cycles and show the relative importance of causes of death.

The ratio of length (cm) to weight (kg) of dead fur seal pups can be considered an index of condition. Frequencies of this index can be tabulated for different major causes of death. The resulting frequency distributions provide a useful aid to the diagnosis of difficult individual cases, especially to rule out certain diagnoses.

Secondary causes of death for each primary cause can be tabulated and may be helpful to explain the pathogenesis and identify important contributing mortality factors.

In connection with an outbreak of a new, undiagnosed disease, tabulation of the associated lesions and circumstances can aid in diagnosis and understanding the pathogenesis.

Finally, another useful graph would be line drawings--to show how well the counts of dead pups on study areas correlate with annual dead pup counts for the same islands and indicate how representative the mortality study areas are in reflecting total pup mortality. Table 81 gives annual pup deaths by sex as determined on the study areas during 1964-79.

TABLE 80.--Primary diagnoses for causes of death among fur seal pups on mortality study areas, Pribilof Islands, Alaska, 1964-78.

| Cause of death | St. Paul Island | | | | | | | | St. George Is. | | Total both islands | |
|----------------------------|-----------------|-------------|---------------|-------------|---------------|------------|--------------|-------------|-----------------------|------------|-----------------------|-------------|
| | Reef Rookery | | | | Vost. Rookery | | | | Staraya Artil Rookery | | | |
| | Area 1 (10 yr) | | Area 2 (8 yr) | | Area 3 (8 yr) | | Island total | | Area 4 (2 yr) | | No. | % |
| | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| Emaciation syndrome | 375 | 39.6 | 121 | 31.4 | 293 | 24.3 | 789 | 31.1 | 175 | 42.0 | 964 | 32.6 |
| Rookworm disease | 117 | 12.4 | 69 | 17.9 | 578 | 47.8 | 764 | 30.1 | 98 | 23.6 | 862 | 29.2 |
| Microbial infection | 116 | 12.2 | 66 | 17.1 | 123 | 10.2 | 305 | 12.0 | 49 | 11.8 | 354 | 12.0 |
| Leptospirosis | 47 | 5.0 | 33 | 8.6 | 57 | 4.7 | 137 | 5.4 | 36 | 8.7 | 173 | 5.9 |
| Navel infection | 31 | 3.3 | 10 | 2.6 | 12 | 1.0 | 53 | 2.1 | 0 | 0.0 | 53 | 1.8 |
| Enteritis | 16 | 1.7 | 6 | 1.6 | 24 | 1.9 | 46 | 1.8 | 3 | 0.7 | 49 | 1.7 |
| Peritonitis | 7 | 0.8 | 9 | 2.4 | 13 | 1.1 | 29 | 1.1 | 3 | 0.7 | 32 | 1.1 |
| Pleuritis | 5 | 0.5 | 6 | 1.6 | 13 | 1.1 | 24 | 0.9 | 3 | 0.7 | 27 | 0.9 |
| Abscessation | 6 | 0.6 | 1 | 0.2 | 2 | 0.2 | 9 | 0.4 | 2 | 0.5 | 11 | 0.4 |
| Cellulitis | 2 | 0.2 | 1 | 0.2 | 1 | 0.1 | 4 | 0.2 | 2 | 0.5 | 6 | 0.2 |
| Pneumonia | 2 | 0.2 | 0 | 0.0 | 1 | 0.1 | 3 | 0.1 | 0 | 0.0 | 3 | 0.1 |
| Trauma | 76 | 8.0 | 17 | 4.4 | 31 | 2.5 | 124 | 4.9 | 23 | 5.5 | 147 | 5.0 |
| Bite wounds | 43 | 4.5 | 11 | 2.9 | 15 | 1.2 | 69 | 2.8 | 6 | 1.4 | 72 | 2.4 |
| Skull fracture | 10 | 1.0 | 3 | 0.8 | 8 | 0.6 | 21 | 0.8 | 9 | 2.2 | 30 | 1.0 |
| Liver rupture | 13 | 1.4 | 2 | 0.5 | 6 | 0.5 | 21 | 0.8 | 6 | 1.4 | 27 | 0.9 |
| Contusions | 6 | 0.6 | 0 | 0.0 | 1 | 0.1 | 7 | 0.3 | 0 | 0.0 | 7 | 0.2 |
| Stomach rupture | 3 | 0.3 | 1 | 0.2 | 1 | 0.1 | 5 | 0.2 | 2 | 0.5 | 7 | 0.2 |
| Heart rupture | 1 | 0.1 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| Miscellaneous | 33 | 3.5 | 16 | 4.2 | 43 | 3.6 | 92 | 3.6 | 17 | 4.1 | 109 | 3.7 |
| Stillborn | 14 | 1.6 | 3 | 0.8 | 19 | 1.6 | 36 | 1.4 | 0 | 0.0 | 36 | 1.2 |
| Nonhookworm anemia | 7 | 0.8 | 3 | 0.8 | 5 | 0.4 | 15 | 0.6 | 1 | 0.2 | 16 | 0.5 |
| Retained meconium | 4 | 0.4 | 2 | 0.5 | 3 | 0.2 | 9 | 0.4 | 0 | 0.0 | 9 | 0.3 |
| Congenital anomaly | 3 | 0.3 | 1 | 0.2 | 4 | 0.3 | 8 | 0.3 | 5 | 1.2 | 13 | 0.4 |
| Hernia | 1 | 0.1 | 3 | 0.8 | 1 | 0.1 | 5 | 0.2 | 0 | 0.0 | 5 | 0.2 |
| Lung edema | 0 | 0.0 | 1 | 0.2 | 3 | 0.2 | 4 | 0.2 | 0 | 0.0 | 4 | 0.1 |
| Dystocia | 2 | 0.2 | 0 | 0.0 | 1 | 0.1 | 3 | 0.1 | 4 | 1.0 | 7 | 0.2 |
| Accidental asphyxia | 0 | 0.0 | 1 | 0.2 | 2 | 0.2 | 3 | 0.1 | 5 | 1.2 | 8 | 0.3 |
| Premature | 1 | 0.1 | 0 | 0.0 | 1 | 0.1 | 2 | 0.1 | 0 | 0.0 | 2 | 0.1 |
| Acute congestive heart | 0 | 0.0 | 0 | 0.0 | 1 | 0.1 | 1 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| Hemorrhagic gastritis | 1 | 0.1 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| Milk inhalation | 0 | 0.0 | 0 | 0.0 | 1 | 0.1 | 1 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| Hydrocephalus | 0 | 0.0 | 1 | 0.2 | 0 | 0.0 | 1 | 0.0 | 1 | 0.2 | 2 | 0.1 |
| Cleft palate | 0 | 0.0 | 0 | 0.0 | 1 | 0.1 | 1 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| Dwarfism | 0 | 0.0 | 1 | 0.2 | 0 | 0.0 | 1 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| Meningitis | 0 | 0.0 | 0 | 0.0 | 1 | 0.1 | 1 | 0.0 | 1 | 0.2 | 2 | 0.1 |
| Undetermined | 89 | 9.4 | 29 | 7.5 | 56 | 4.6 | 174 | 6.8 | 22 | 5.3 | 196 | 6.6 |
| Unsuitable for examination | <u>140</u> | <u>14.8</u> | <u>67</u> | <u>17.4</u> | <u>34</u> | <u>7.0</u> | <u>291</u> | <u>11.5</u> | <u>32</u> | <u>7.7</u> | <u>323</u> | <u>10.9</u> |
| Total | 946 | 100.0 | 385 | 100.0 | 1,208 | 100.0 | 2,539 | 100.0 | 416 | 100.0 | 2,955 | 100.0 |

Table 81. --Fur seal pup mortality, by sex, on four study areas¹ of the Pribilof Islands, 1964-79.

| Year | Area 1 | Area 2 | Area 3 | Area 4 | Totals |
|------|--|-----------------------------|------------------------------|------------------------------|--------------------------------|
| 1964 | 45 ♂ 48 ♀ 16 sex unk. ² | - | - | - | 45 ♂ 48 ♀ 16 sex unk. |
| 1965 | 337 sex unk. | - | - | - | 337 sex unk. |
| 1966 | 69 ♂ 83 ♀ 3 sex unk. | - | - | - | 69 ♂ 83 ♀ 3 sex unk. |
| 1967 | 30 ♂ 39 ♀ 12 sex unk. | 24 ♂ 18 ♀ 12 sex unk. | 52 ♂ 46 ♀ - | - | 106 ♂ 103 ♀ 24 sex unk. |
| 1968 | 61 ♂ 53 ♀ 18 sex unk. | 53 ♂ 28 ♀ 15 sex unk. | 83 ♂ 59 ♀ 8 sex unk. | - | 197 ♂ 140 ♀ 41 sex unk. |
| 1969 | 35 ♂ 28 ♀ 3 sex unk. | 19 ♂ 30 ♀ 1 sex unk. | 43 ♂ 44 ♀ 5 sex unk. | - | 97 ♂ 102 ♀ 9 sex unk. |
| 1970 | 31 ♂ 18 ♀ 1 sex unk. | 21 ♂ 14 ♀ - | 74 ♂ 71 ♀ - | - | 126 ♂ 103 ♀ 1 sex unk. |
| 1971 | 63 ♂ 58 ♀ 3 sex unk. | 38 ♂ 32 ♀ 3 sex unk. | 130 ♂ 154 ♀ 5 sex unk. | - | 231 ♂ 244 ♀ 11 sex unk. |
| 1972 | 73 sex unk. | 41 sex unk. | 171 sex unk. | - | 285 sex unk. |
| 1973 | 90 sex unk. | 36 sex unk. | 150 sex unk. | - | 276 sex unk. |
| 1974 | 26 ♂ 33 ♀ 5 sex unk. | 8 ♂ 14 ♀ 2 sex unk. | 56 ♂ 52 ♀ 5 sex unk. | - | 90 ♂ 99 ♀ 12 sex unk. |
| 1975 | 26 ♂ 24 ♀ 8 sex unk. | 11 ♂ 8 ♀ 5 sex unk. | 84 ♂ 67 ♀ 11 sex unk. | - | 121 ♂ 99 ♀ 24 sex unk. |
| 1976 | 32 ♂ 27 ♀ 7 sex unk. | 12 ♂ 13 ♀ 2 sex unk. | 70 ♂ 71 ♀ 8 sex unk. | - | 114 ♂ 111 ♀ 17 sex unk. |
| 1977 | - - 54 sex unk. | - - 13 sex unk. | - - 72 sex unk. | 100 ♂ 80 ♀ 24 sex unk. | 100 ♂ 80 ♀ 163 sex unk. |
| 1978 | - - 68 sex unk. | - - 16 sex unk. | - - 42 sex unk. | 106 ♂ 106 ♀ 6 sex unk. | 106 ♂ 106 ♀ 132 sex unk. |
| 1979 | - - 72 sex unk. | - - 5 sex unk. | - - 54 sex unk. | 106 ♂ 101 ♀ 6 sex unk. | 106 ♂ 101 ♀ 137 sex unk. |

1/ Study area 1 is located at Reef Rookery, St. Paul Island. Study area 2 is located perpendicular to Study area 1. Study area 3 is located at Vostochni Rookery, St. Paul Island. Study area 4 is located at Staraya Artil Rookery, St. George Island.

2/ Dead pups counted but not examined so sex is unknown.

FUR SEALS ENTANGLED IN FISHING DEBRIS AND OTHER MATERIALS

Increasing numbers of seals began returning to the Pribilof Islands during the 1960s with net fragments and other debris entangled around their necks. A program was started to collect data from these animals as they appeared in the commercial kill.

Females as well as males were taken commercially only during the first 2 years of collection, 1967 and 1968. All entangled females regardless of size or age, but only those entangled males that were within prescribed body length limits, were recorded and killed. Entangled males not within prescribed length limits were recorded, freed of the debris, and allowed to return to the sea. These seals are also included in Table 82 under the heading "Number of entangled seals observed on killing field." The commercial harvest was restricted to males from 1969 to 1979. All within the prescribed length limits were killed regardless of whether or not entangled. Entangled males not within prescribed length limits and all entangled females, however, were recorded only, freed of the debris, and allowed to return to the sea.

The pelts of many of the entangled seals harvested were severed around the neck by the debris and were rejected as not of commercial value. In addition, debris-scarred pelts, unnoticed on the killing field prior to removal of blubber, were detected in the skin processing plant. Consequently, a study was initiated in 1974 to make a numerical and critical comparison of observations of entanglements on the killing

field and in the processing plant. Results showed that plant observations were too variable to be useful as an indicator of the number of seals actually entangled. Table 82 lists the number of seals observed on the killing field with fishing debris and other materials during the commercial harvest.

After increasing each year from 1967 to 1975, the percentage of seals returning to the Pribilof Islands with debris entanglements decreased in 1976 and remained at a lower level through 1979, indicating that fur seals were encountering these materials at sea less frequently. The decrease may be due in part, to 1) the U.S. Fishery Conservation and Management Act of 1976 which established a 200-mile (320 km) limit for foreign fishing vessels, and 2) leaflets circulated by NPFSC member countries to their nationals in recent years which explained the entanglement problem and discouraged the discarding of fishing net scraps and other materials at sea.

TABLE 82--Fur seals entangled in fishing debris and other materials,
United States commercial harvest of fur seals, St. Paul Island,
Alaska, 1967-79.

| Year | Number of seals in commercial kill ^{1/} | Number of entangled seals observed on killing field ^{1/} | Rate of entanglement (%) |
|------|---|---|--------------------------------|
| 1967 | 50,229 | 75 | 0.15 |
| 1968 | 46,893 | 75 | 0.16 |
| 1969 | 32,817 | 67 | 0.20 |
| 1970 | 36,307 | 101 | 0.28 |
| 1971 | 27,338 | 113 | 0.41 |
| 1972 | 33,173 | 139 | 0.42 |
| 1973 | 28,482 | 135 | 0.47 |
| 1974 | 33,027 | 197 | 0.60 |
| 1975 | 29,148 | 211 | 0.72 |
| 1976 | 23,096 | 102 | 0.44 |
| 1977 | 28,444 | 99 | 0.35 |
| 1978 | 24,885 | 114 | 0.46 |
| 1979 | 25,762 | 110 | 0.43 |

^{1/} Includes both sexes.

REVIEW AND EXPLANATION OF DATA TRENDS

This section summarizes major events in the entire history of Alaska fur sealing. Some repetition is necessarily involved, and the interpretations of trends are based on data given in Riley (1967) as well as earlier in the present report. These interpretations are neither complete nor definitive. Future research will embrace existing and future data collections, and some of the present speculations and hypotheses are intended as a point of departure. Emphasis is placed on data collected on St. Paul Island since these data are more complete.

Figures 4a and 4b summarize the harvest of northern fur seals from the Pribilof Islands since their discovery in 1786 by Russia. Early exploitation was unregulated and excessive until 1799 when the Russian-American Company was put in control of the fur seal harvest. Despite various temporary bans on commercial killing, the fur seal harvest declined, and in 1834 the Russian-American Company severely restricted the land harvest of males and banned the killing of females altogether. At this time the fur seal herd was at its lowest level during the Russian tenure on the Pribilof Islands. The harvest restrictions and ban on taking females enabled the herd to recover and by 1867, when the United States purchased Alaska, several thousand males were taken each year.

An unregulated harvest by independent parties in the first 2 years of American occupation took nearly 250,000 fur seals. The U.S. government then set aside the Pribilof Islands as a special

reservation for the protection of fur seals and in 1870 began a series of leasing arrangements with private companies for the harvest rights which lasted until 1909. During this period the harvest on land was closely regulated through the leasing agreements but an uncontrolled pelagic harvest of fur seals (mostly females) by commercial sealers began shortly after the U.S. purchase of Alaska. From about 1868 until 1911 over 600,000 fur seal skins were taken pelagically and many more animals were undoubtedly killed and not recovered. Most of the pelagic harvest consisted of females of reproductive age and the effect on the Pribilof Island fur seal herd was devastating. By 1909 the herd had dwindled to about 300,000 animals.

In 1911 the North Pacific Fur Seal Convention was negotiated between the United States, Great Britain (for Canada), Japan, and Russia. Commercial pelagic sealing was forbidden by this Convention. Also, as noted earlier, no commercial harvest was permitted on land from 1912 until 1917. The 1911 Convention remained in effect until 1941 when Japan abrogated the treaty. During this time the herd grew rapidly as did the harvests which concentrated on 3-yr-old males. An interim agreement between the United States and Canada protected the herd until 1957 when a new North Pacific Fur Seal Convention was negotiated by the United States, Canada, Japan, and the Soviet Union. The harvest of males remained at a plateau through the 1940s and into the mid-1950s. In 1956 a female kill was instituted to reduce the herd size in hopes of enhancing productivity of the herd via increased pregnancy rates,

increased survival, and earlier age of reproduction for females. The herd reduction was continued until 1963, after which fewer females were taken until 1968. Fur seal productivity did not increase with the reduction in herd size and the harvest of males declined. At present it appears the herd's decline has ended. In 1973 the commercial harvest of seals was suspended on St. George Island, which was set aside as a research sanctuary to investigate the reasons for the herd's failure to increase its productivity as expected in the mid-1950s.

Figure 4b shows the decline in the harvest of male fur seals since the female harvest began in 1956. This decline indicates fewer subadults are available for harvest but differences in harvest effort, particularly in recent years, accentuate the harvest decline. The harvest moratorium on St. George Island in 1973 has certainly reduced ^{total} harvest effort for the Pribilofs. In addition, changes in season length, the length of the work week for harvest crews, the number of drives per round, and the length limits set for harvestable animals have combined to complicate the picture (Table 83).

Figure 5 compares the total harvest of subadult males on St. Paul Island since 1954 with the harvest of 3-yr-old males taken from mid- to late July. The latter index attempts to avoid some of the variable factors in harvest effort. By considering only 3-yr-olds, the effect of changing length limits is minimized. By considering only those animals taken from about July 7 to July 31, the influence of variable season length is effectively removed. Figure 5 demonstrates that the

decline in harvest has been at least partially due to a decline in effort; the rate of decline in 3-yr-old males taken during mid-to late July is less than the rate of decline for the total harvest of subadult males. Although 3-yr-olds taken during mid- to late July are a better index of subadult male abundance than is total harvest of all age classes, the difference in harvest effort due to a shorter work week or more frequent visits to rookeries is not accounted for. In particular, in recent years (since 1973) there have been fewer drives than formerly (Table 83), resulting in a longer interval between drives. This would tend to decrease harvest effort but it is difficult to estimate the amount. In any case, this reduction of harvest effort recently means the decline of harvestable males is probably even less than the rate of decline illustrated in Figure 5.

The counts of adult males of St. Paul Island since 1911 are shown in Figure 6. The harem and idle bull counts were roughly parallel in trend until the mid-1920s. The harem bull counts increased much more rapidly from 1925 to 1937 than did the idle bull counts, no doubt reflecting a rapid increase in the number of available females. (Again, harem bulls are sexually mature males defending a territory and having a harem of one to many females, while idle bulls are sexually mature males who may or may not have a territory but do not maintain a harem of females.) The harem bull counts fluctuated in the 1940s and 1950s but showed no sustained trend until after 1961. The idle bull counts increased at a lesser rate than the harem bull counts until the late

1940s. The idle counts began to increase rapidly in the early 1950s and surpassed the harem bull counts ^{four} times between 1957 and 1961. The rapid increase in the idle count was probably due to increased escapement from the harvest caused by a shorter harvest season in preceding years (Table 83). It is not surprising the idle count surpassed the harem bull count after 1956 as the number of females available to populate harems was being reduced by the female kill beginning in 1956. Both harem and idle bull counts began a decline after 1961 which lasted until the early 1970s. This sharp decline can be attributed to: the general herd reduction following the female kill, an increase in male harvest effort due to more drives per season beginning in 1956, and greater length limits beginning in 1961. The latter two factors tend to reduce escapement from the male harvest. The bull counts have been increasing since the early 1970s as the effects of the female kill have mainly passed through the population structure and the harvest effort has likely been lower since 1973.

Estimates of fur seal pups born on St. Paul Island since 1950 are shown in Figure 7. No estimates of St. Paul pup production are available for 1968, 1971, 1972, 1973, 1977 or 1978. The decline in pup production from the 1950-56 levels to the 1962-79 levels may be due primarily to the effects of the female harvest from 1956 to 1968. An analysis of the effects of the female kill by York and Hartley (see ^{two-thirds} Footnote 2) reveals that about ^{two-thirds} of the decline in estimated pup production is probably due to a loss of reproductive females. This

loss of reproductive females includes females directly removed in the harvest, those females which would have been born and survived to reproduce had the harvest not taken place, and the progeny of both groups. The remaining one-third of the decline in the pup estimates may be due to systematic bias in the estimating procedures. The cumulative estimation method of Chapman (1964), used through 1960, was based on tagging and harvest data; it may have systematically overestimated pup numbers. The shearing and sampling technique used since 1961 may underestimate pup production (Fowler^{4/}). The change in estimating procedures coincides with the decline in pup production estimates and thus is an attractive hypothesis for the otherwise unexplained portion of the decline. Further research and analysis are needed to test this hypothesis.

An alternative explanation for the portion of the decline in pup production which cannot be accounted for by the loss of reproductive females is that intensive commercial fisheries have reduced the

^{4/} C. Fowler, National Marine Mammal Laboratory, Northwest and Alaska Fisheries Center, National Marine Fisheries Service, NOAA, 7600 Sand Point Way NE, Seattle, WA 98115, pers. commun. March 1980. Shearing may be selective for small pups, and relatively more large than small pups may be playing and foraging in the water when mark sampling occurs 5-10 days later. The effect would be to overestimate the marked/unmarked ratio and underestimate the population size. Field tests of this hypothesis are in progress.

carrying capacity of the Bering Sea for fur seals. This hypothesis is popular and has been used to explain both the recent decline of the fur seal herd and the failure of the population to recover as rapidly as it did from the low point in 1911. However, the hypothesis of a reduced carrying capacity has not been proven. Reduced food availability, along with changes in pup enumeration techniques and increases in contaminant levels or net entanglement, remains only a possible factor contributing to the recent decline and slow recovery rather than the primary cause. At the present stage of research the female harvest and changes in the male harvest effort appear to be the best explanations for any declines in various segments of the population since the 1957 Convention came into force.

Table 83. Summary of fur seal data from the Pribilof Islands, Alaska, 1911-1979. First entry for each year is St. Paul Island data, second entry is St. George Island data.

| Year | Bull count | | Harvest | | Number ^{9/} of drives | Season ^{9/} | Length limits ^{9/} | | Live pup estimates |
|----------------------|------------|-------|---------|----------|-----------------------------------|----------------------|-----------------------------|--------|-----------------------|
| | Harem | Idle | Male | (Female) | | | Min | Max | |
| 1911 | 1,035 | 1,154 | | | | | | | |
| | 266 | 71 | | | | | | | |
| 1912 | 1,012 | 88 | | | | | | | 66,727 |
| | 281 | 20 | | | | | | | 11,949 |
| 1913 | 1,059 | 76 | | | | | | | 75,436 |
| | 261 | 25 | | | | | | | 12,811 |
| 1914 | 1,217 | 147 | | | | | | | 74,956 |
| | 243 | 13 | | | | | | | 13,867 |
| 1915 | 1,678 | 519 | | | | | | | 183,208 |
| | 362 | 127 | | | | | | | 15,390 |
| 1916 | 2,773 | 2,159 | | | | | | | 193,447 |
| | 552 | 354 | | | | | | | 18,122 |
| 1917 | 3,956 | 2,189 | | | | | | | 103,163 |
| | 684 | 365 | | | | | | | 19,335 |
| 1918 ^{1/3/} | 4,355 | 2,137 | 27,503 | | 75 | 1-14 12-18 | 41 | 45-3/4 | 115,780 |
| | 734 | 199 | 7,387 | | 43 | 6-3 11-19 | | | 20,298 |
| 1919 | 4,326 | 2,062 | 24,053 | | 67 | 4-5 12-18 | 41 | 45-3/4 | 126,454 |
| | 585 | 81 | 3,768 | | 43 | 6-3 11-7 | | | 23,258 |
| 1920 | 3,338 | 999 | 22,220 | | 52 | 1-22 11-29 | 41 | 45-3/4 | 134,559 |
| | 524 | 83 | 4,428 | | 35 | 5-31 11-19 | | | 24,252 |
| 1921 | 3,237 | 651 | 19,219 | | 48 | 5-30 12-6 | 41 | 45-3/4 | 140,724 |
| | 466 | 36 | 4,451 | | 35 | 6-8 11-19 | | | 26,790 |
| 1922 | 3,005 | 466 | 26,035 | | 85 | 2-4 11-1 | 41 | 45-3/4 | 150,452 |
| | 378 | 15 | 5,120 | | 34 | 6-8 11-9 | | | 27,028 |
| 1923 | 2,885 | 287 | 12,797 | | 65 | 2-13 11-22 | 41 | 45-3/4 | 162,238 |
| | 361 | 9 | 3,065 | | 22 | 6-15 11-1 | | | 35,868 |
| 1924 | 2,950 | 352 | 13,427 | | 55 | 5-22 11-26 | 41 | 45-3/4 | |
| | 389 | 15 | 3,762 | | 22 | 6-12 11-28 | | | |
| 1925 | 2,908 | 256 | 15,061 | | 38 | 5-8 10-24 | 41 | 45-3/4 | |
| | 423 | 28 | 4,778 | | 21 | 6-9 11-25 | | | |
| 1926 | 3,196 | 334 | 16,188 | | 39 | 5-21 10-28 | 41 | 45-3/4 | |
| | 556 | 55 | 5,900 | | 27 | 6-4 11-12 | | | |

Table 83. Summary of fur seal data from the Pribilof Islands, Alaska, 1911-1979. First entry for each year is St. Paul Island data, second entry is St. George Island data.--continued.

| Year | Bull count | | Harvest | | Number ^{9/} of drives | Season ^{9/} | Length limits ^{9/} | | Live pup estimates |
|--------------------|------------|--------|---------|----------|-----------------------------------|----------------------|-----------------------------|--------|-----------------------|
| | Harem | Idle | Male | (Female) | | | Min | Max | |
| 1943 | 10,548 | 3,358 | 95,342 | | 56 | 6-10 8-8 | 41 | 45-3/4 | |
| | 2,107 | 330 | 21,822 | | 60 | 6-8 8-9 | | | |
| 1944 | 10,680 | 2,374 | 39,846 | | 46 | 6-10 7-31 | 41 | 45-3/4 | |
| | 2,294 | 450 | 7,806 | | 39 | 6-13 7-31 | | | |
| 1945 | 10,350 | 3,890 | 58,676 | | 48 | 6-15 8-4 | 41 | 45-3/4 | |
| | 2,434 | 750 | 18,288 | | 45 | 6-13 8-4 | | | |
| 1946 | 10,166 | 3,440 | 52,439 | | 53 | 6-17 8-8 | 41 | 45-3/4 | |
| | 2,430 | 611 | 12,084 | | 49 | 6-12 8-8 | | | |
| 1947 | 9,760 | 3,166 | 49,780 | | 48 | 6-5 7-31 | 41 | 45-3/4 | |
| | 1,808 | 479 | 11,667 | | 43 | 6-10 7-31 | | | |
| 1948 | 9,986 | 3,235 | 58,280 | | 43 | 6-15 7-27 | 41 | 45-3/4 | |
| | 1,814 | 563 | 11,862 | | 40 | 6-8 7-27 | | | |
| 1949 | 9,154 | 2,811 | 57,545 | | 43 | 6-10 10-27 | 41 | 45-3/4 | 413,531 |
| | 1,746 | 552 | 13,445 | | 42 | 6-13 7-27 | | | 55,373 |
| 1950 | 9,292 | 3,102 | 48,799 | | 42 | 6-17 10-3 | 41 | 45-3/4 | 451,000 |
| | 1,959 | 574 | 11,394 | | 32 | 6-22 7-27 | | | |
| 1951 | 9,434 | 3,581 | 50,573 | | 38 | 6-20 7-29 | 41 | 45-3/4 | 447,000 |
| | 1,825 | 549 | 10,116 | | 38 | 6-22 7-29 | | | |
| 1952 | 9,318 | 4,717 | 51,612 | | 38 | 6-22 11-20 | 41 | 45-3/4 | 438,000 |
| | 1,983 | 605 | 12,310 | | 38 | 6-20 7-27 | | | |
| 1953 | 9,848 | 5,912 | 54,995 | | 38 | 6-22 7-29 | 41 | 45-3/4 | 445,000 |
| | 2,285 | 826 | 11,383 | | 31 | 6-27 7-27 | | | |
| 1954 | 9,906 | 6,847 | 50,239 | | 36 | 6-22 7-27 | 41 | 45-3/4 | 450,000 |
| | 2,228 | 1,311 | 13,643 | | 31 | 6-27 7-27 | | | |
| 1955 | 9,034 | 8,650 | 49,977 | | 40 | 6-22 7-31 | 41 | 45-3/4 | 461,000 |
| | 2,130 | 1,902 | 14,216 | | 35 | 6-26 7-30 | | | |
| 1956 | 9,384 | 9,016 | 75,736 | (18,434) | 50 | 6-27 8-15 | 41 | 45-3/4 | 453,000 |
| | | | 20,200 | (4,247) | 50 | 6-27 8-15 | | | |
| 1957 ^{8/} | 9,582 | 10,060 | 35,052 | (37,554) | 45 | 6-27 8-10 | 41 | 45-3/4 | 420,000 |
| | 2,423 | 2,693 | 11,196 | (9,860) | 45 | 6-27 8-10 | | | |
| 1958 ^{8/} | 9,970 | 9,510 | 34,401 | (23,958) | 45 | 6-27 8-10 | 41 | 45-3/4 | 387,000 |
| | 2,619 | 3,030 | 10,295 | (7,144) | 35 | 6-27 7-31 | | | |

Table 83. Summary of fur seal data from the Pribilof Islands, Alaska, 1911-1979. First entry for each year is St. Paul Island data, second entry is St. George Island data.--continued.

| Year | Bull count | | Harvest | | Number ^{9/} of drives | Season ^{9/} | Length limits ^{9/} | | Live pup estimates |
|----------------------|------------|--------|---------|----------|-----------------------------------|----------------------|-----------------------------|--------|-----------------------|
| | Harem | Idle | Male | (Female) | | | Min | Max | |
| 1959 ^{8/} | 10,003 | 11,485 | 24,495 | (24,409) | 55 | 6-27 8-20 | 41 | 45-3/4 | 335,000 |
| | 2,527 | 2,699 | 5,700 | (3,855) | 35 | 6-27 8-31 | | | |
| 1960 | 10,247 | 10,407 | 29,137 | (3,297) | 50 | 6-27 8-15 | 41 | 45-3/4 | 320,000 |
| | 2,552 | 2,630 | 7,183 | (1,018) | 50 | 6-27 8-15 | | | |
| 1961 | 11,163 | 11,791 | 67,169 | (35,086) | 45 | 7-2 8-15 | 41 | 47-3/4 | 342,336 |
| | 2,843 | 2,489 | 15,028 | (8,763) | 45 | 7-2 8-15 | | | |
| 1962 ^{2/8/} | 10,332 | 9,109 | 43,203 | (35,003) | 46 | 7-2 8-24 | 41 | 48-3/4 | 277,078 |
| | 2,342 | 2,650 | 10,477 | (8,757) | 44 | 7-2 8-23 | | | |
| 1963 ^{6/8/} | 9,212 | 7,650 | 31,881 | (35,093) | 35 | 7-2 8-5 | 41 | 48-3/4 | 262,498 |
| | 2,071 | 1,890 | 10,505 | (8,767) | 39 | 7-2 8-30 | | | |
| 1964 ^{6/8/} | 9,085 | 7,095 | 38,152 | (12,034) | 37 | 7-1 8-5 | 41 | 48-3/4 | 283,922 |
| | 1,989 | 1,489 | 11,191 | (4,418) | 41 | 7-1 8-26 | | | |
| 1965 ^{6/8/} | 8,553 | 5,616 | 34,966 | (7,530) | 41 | 7-7 8-9 | 41 | 48-3/4 | 253,768 |
| | 1,917 | 1,113 | 7,156 | (2,902) | 25 | 7-7 8-6 | | | |
| 1966 ^{6/} | 7,974 | 5,839 | 42,104 | | 36 | 7-7 8-5 | 41 | 48-3/4 | 298,931 |
| | 1,974 | 1,017 | 10,393 | | 21 | 7-6 8-5 | | | |
| 1967 ^{4/6/} | | | 42,727 | (7,500) | 50 | 6-27 8-5 | 41 | 48-3/4 | 291,000 |
| | 1,646 | 1,268 | 12,993 | (2,594) | 31 | 6-26 8-4 | | | |
| 1968 ^{6/} | | | 36,349 | (10,544) | 49 | 6-26 8-2 | 41 | 48-3/4 | |
| | 1,748 | 1,283 | 9,276 | (2,791) | 34 | 6-26 8-5 | | | |
| 1969 | 5,467 | 2,208 | 32,621 | | 47 | 6-25 8-1 | All without manes | | 232,870 |
| | 1,457 | 677 | 6,057 | | 32 | 6-25 8-1 | | | |
| 1970 | 4,945 | 1,666 | 36,197 | | 50 | 6-24 7-31 | All without manes | | 230,485 |
| | 1,466 | 1,277 | 5,924 | | 42 | 6-24 7-31 | | | |
| 1971 | | | 27,242 | | 55 | 6-23 7-31 | All without manes | | |
| | 1,235 | 534 | 4,553 | | 39 | 6-23 7-30 | | | |
| 1972 | | | 33,110 | | 50 | 6-26 7-29 | None | 49 | 269,000 |
| | | | 4,204 | | 37 | 6-26 7-28 | | | |
| 1973 | | | 28,457 | | 30 | 6-25 7-28 | None | 46 | |
| | 875 | 375 | | | | | | | |
| 1974 | | | 32,976 | | 30 | 6-24 7-27 | None | 46 | 266,000 |
| | 822 | 481 | | | | | | | |

Table 83. Summary of fur seal data from the Pribilof Islands, Alaska, 1911-1979. First entry for each year is St. Paul Island data, second entry is St. George Island data.--continued.

| Year | Bull count | | Harvest | | Number ^{9/} of drives | Season ^{9/} | Length limits ^{9/} | | Live pup estimates |
|--------------------|------------|-------|---------|----------|-----------------------------------|----------------------|-----------------------------|-------|-----------------------|
| | Harem | Idle | Male | (Female) | | | Min | Max | |
| 1975 | 5,018 | 3,535 | 29,093 | | 30 | 6-30 8-2 | None | 46 | 278,261 |
| | 877 | 1,427 | | | | | | | |
| 1976 | 5,324 | 4,041 | 23,081 | | 30 | 6-28 7-31 | None | 47 | 298,000 |
| | 1,093 | 996 | | | | | | | |
| 1977 ^{5/} | 6,457 | 3,845 | 28,396 | | 30 | 6-27 7-29 | None | 47 | |
| | 1,610 | 899 | | | | | | | 43,407 |
| 1978 ^{7/} | 6,496 | 3,908 | 24,829 | | 29 | 6-26 7-31 | None | 47/49 | |
| | 1,590 | 1,220 | | | | | | | 47,248 |
| 1979 | 6,242 | 4,457 | 25,702 | | 30 | 6-26 7-31 | None | 47 | 245,932 |
| | 1,716 | 1,942 | | | | | | | |

1/ Length determined from tip of nose to base of tail through 1961.

2/ Length determined from tip of nose to end of tail from 1962 to present (adds about 1 inch).

3/ 7 day work week through 1966.

4/ 6 day work week 1967 through 1976.

5/ 5 day work week 1977 to present.

6/ 48-3/4 inches to early July, thereafter all without manes.

7/ 47 inches or less through 10 July, 49 inches or less thereafter.

8/ Some males taken incidentally later during the female harvest.

9/ Refers to male harvest only.

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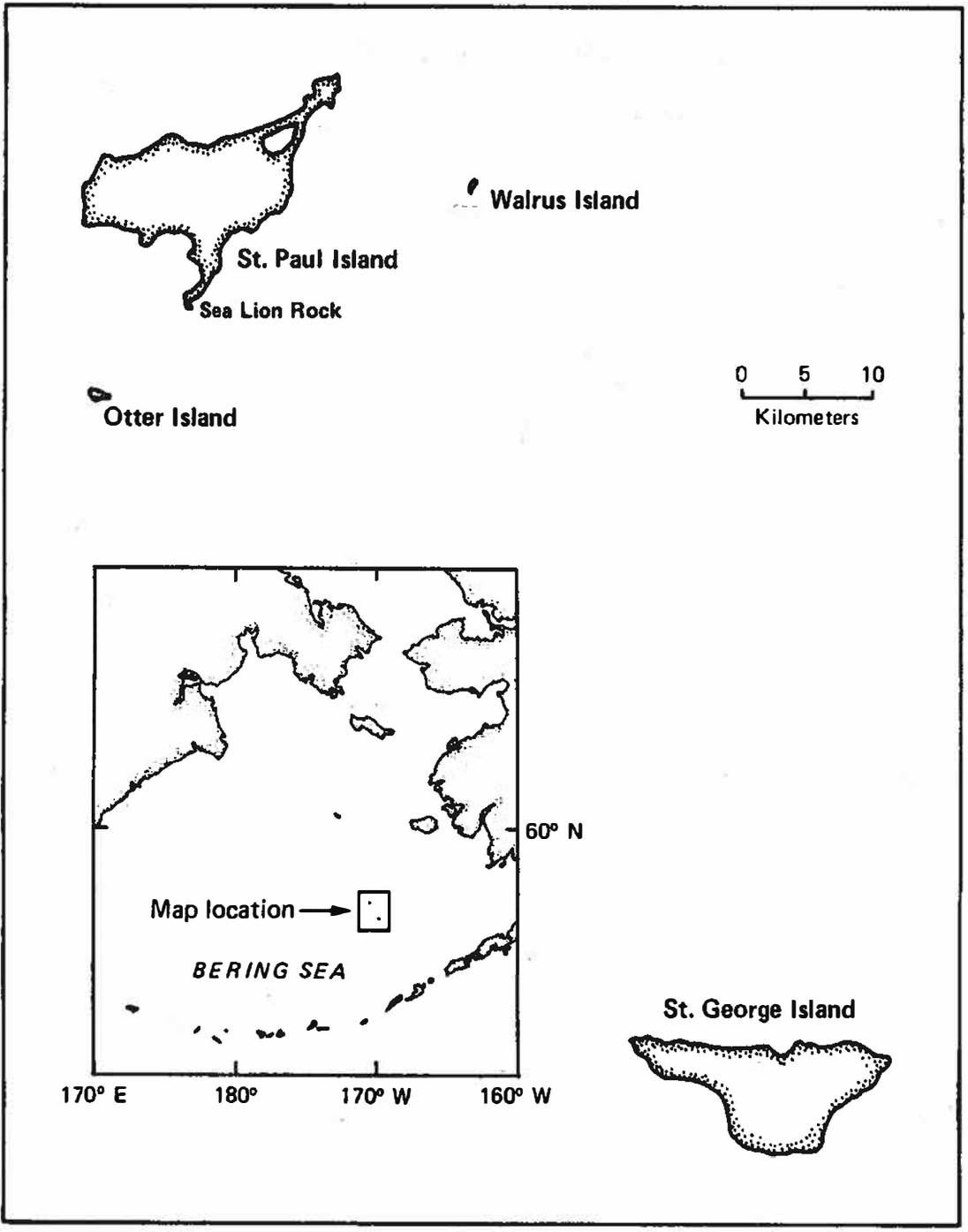
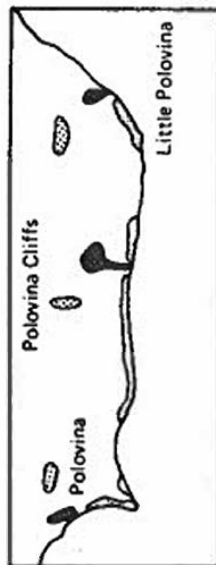
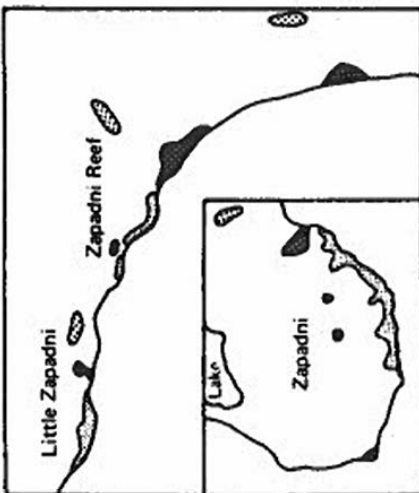
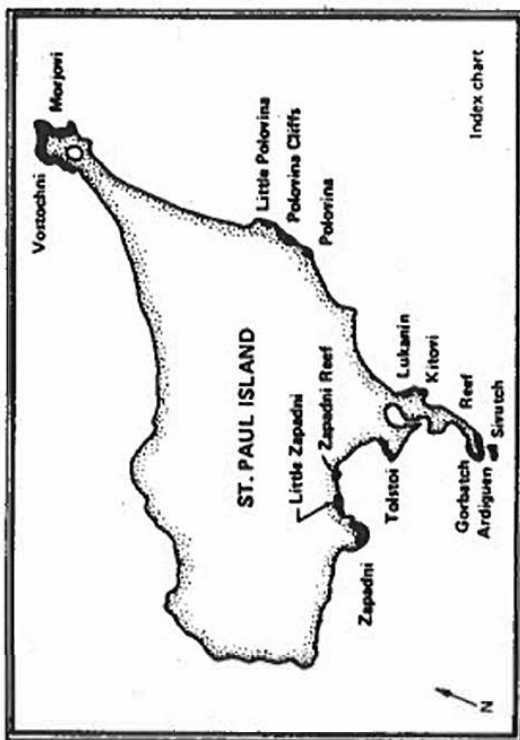
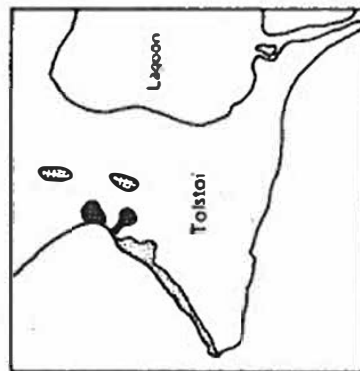
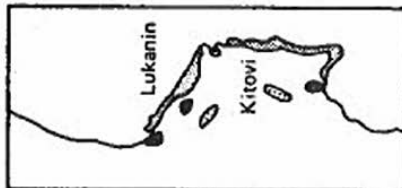
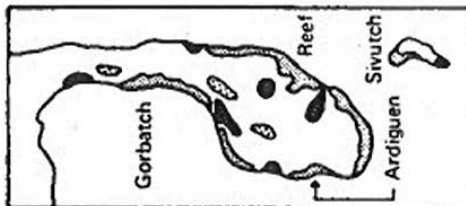
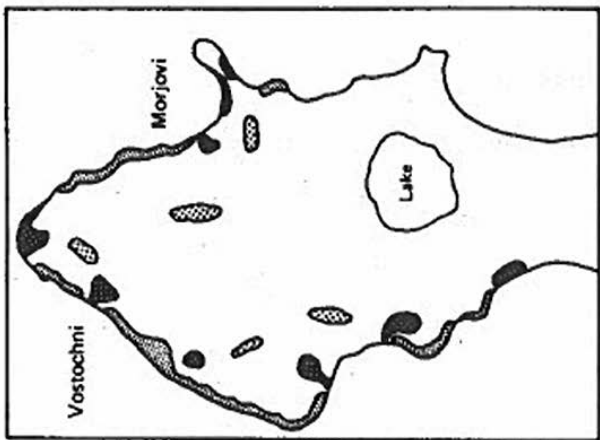
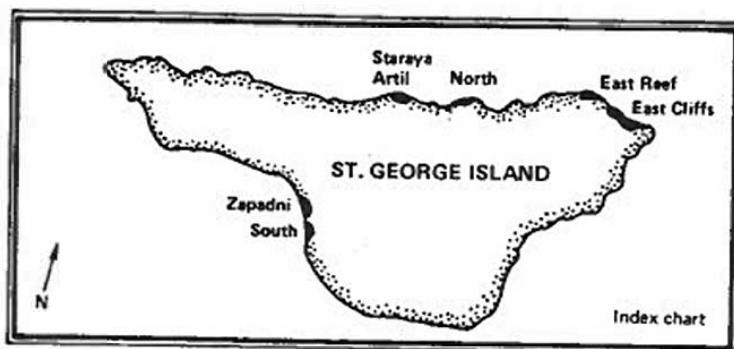
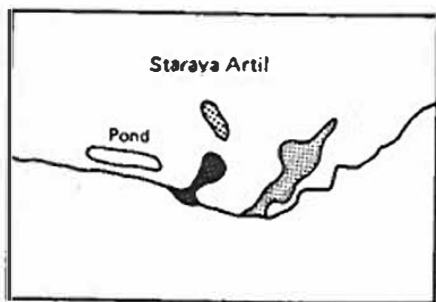


Figure 2. Locations of rookeries, hauling grounds, and harvesting sites on St. Paul Island, Pribilof Islands, Alaska.

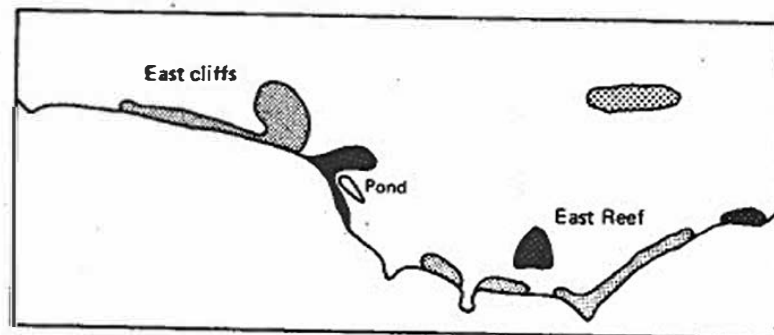
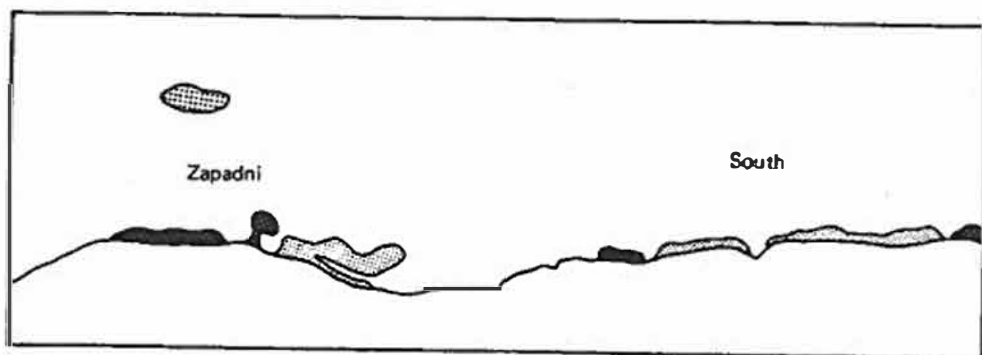


■ Killing field
 ■ Rookery
 ■ Hauling ground

Figure 3. Locations of rookeries, hauling grounds, and
harvesting sites on St. George Island, Pribilof
Islands, Alaska.



■ Rookery / Hauling Ground



▨ Killing Field
 □ Rookery
 ■ Hauling Ground

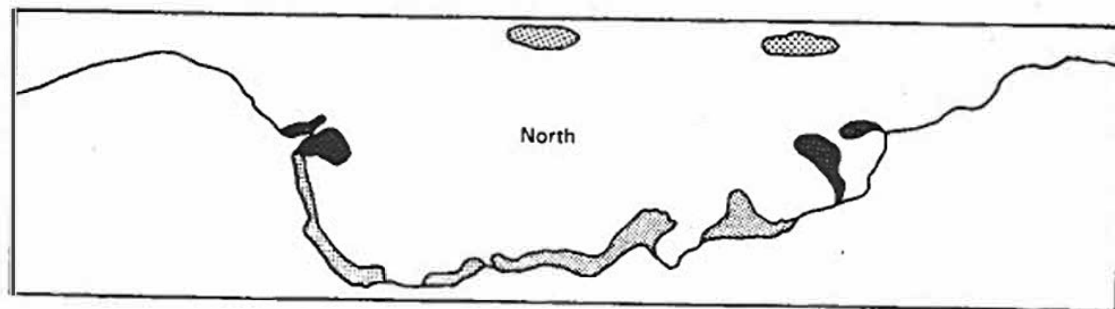


Figure 4a.-- History of fur seal exploitation, 1786-1885. Pribilof Islands, Alaska. (Data are 5 year averages.)

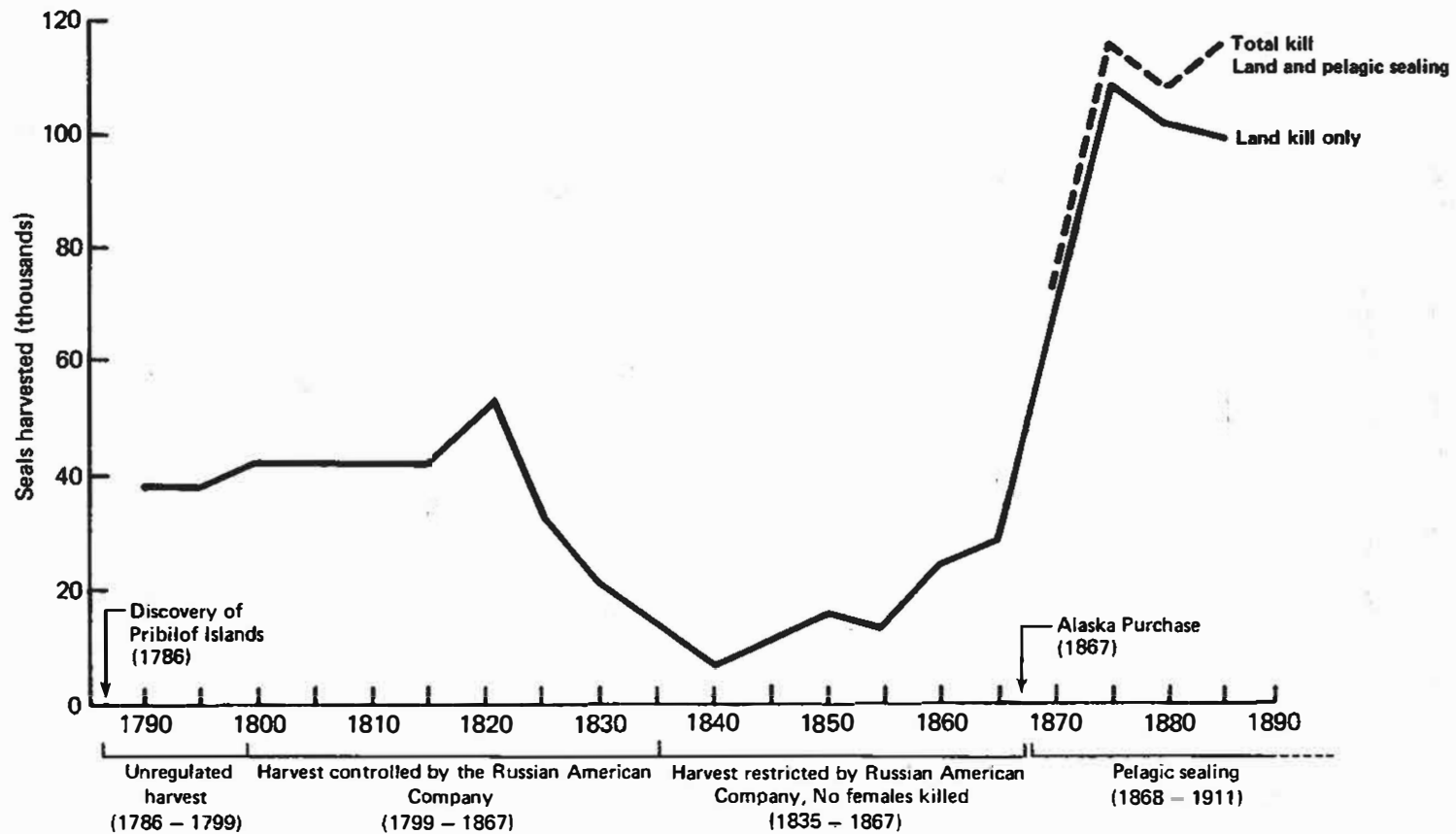
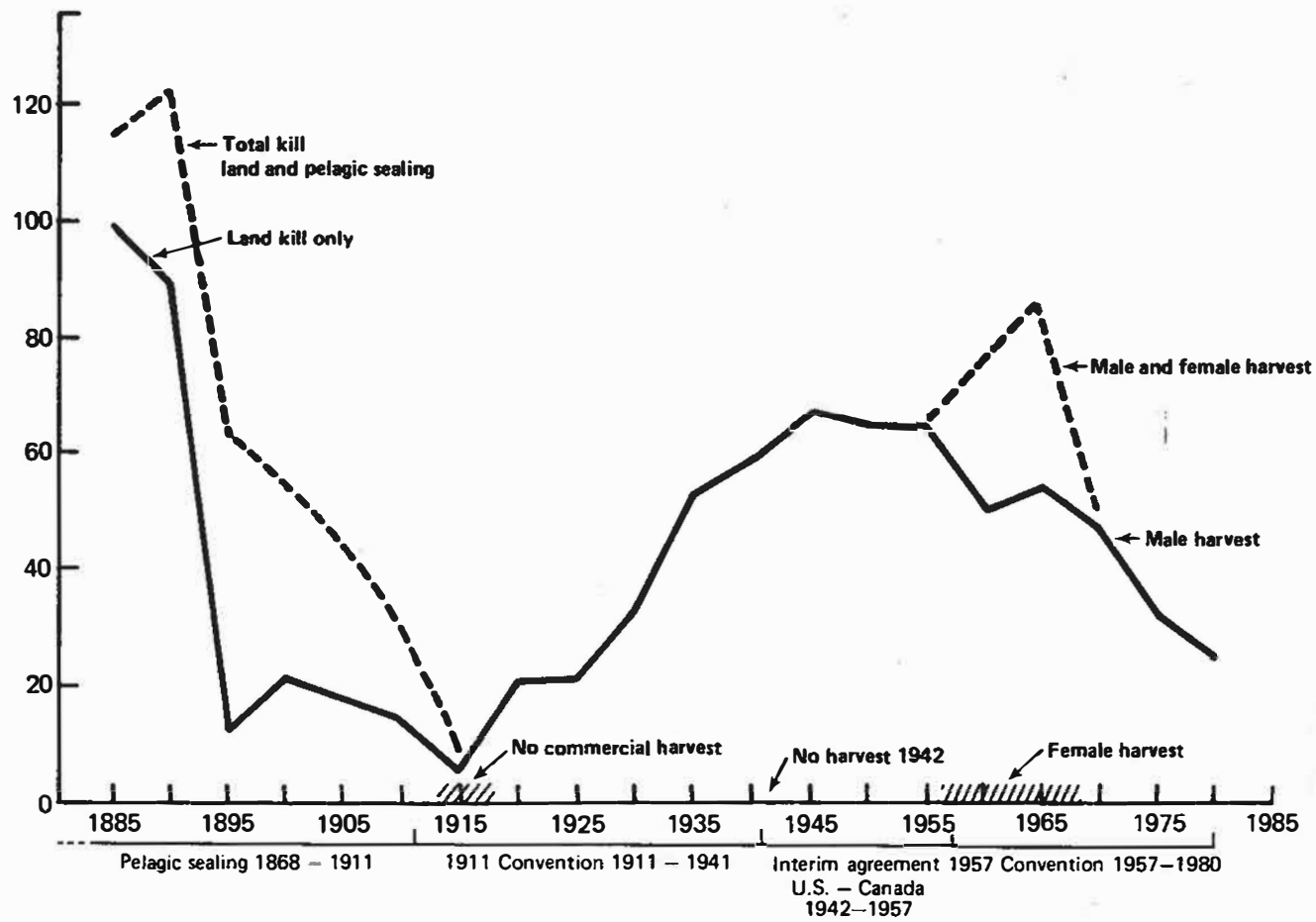
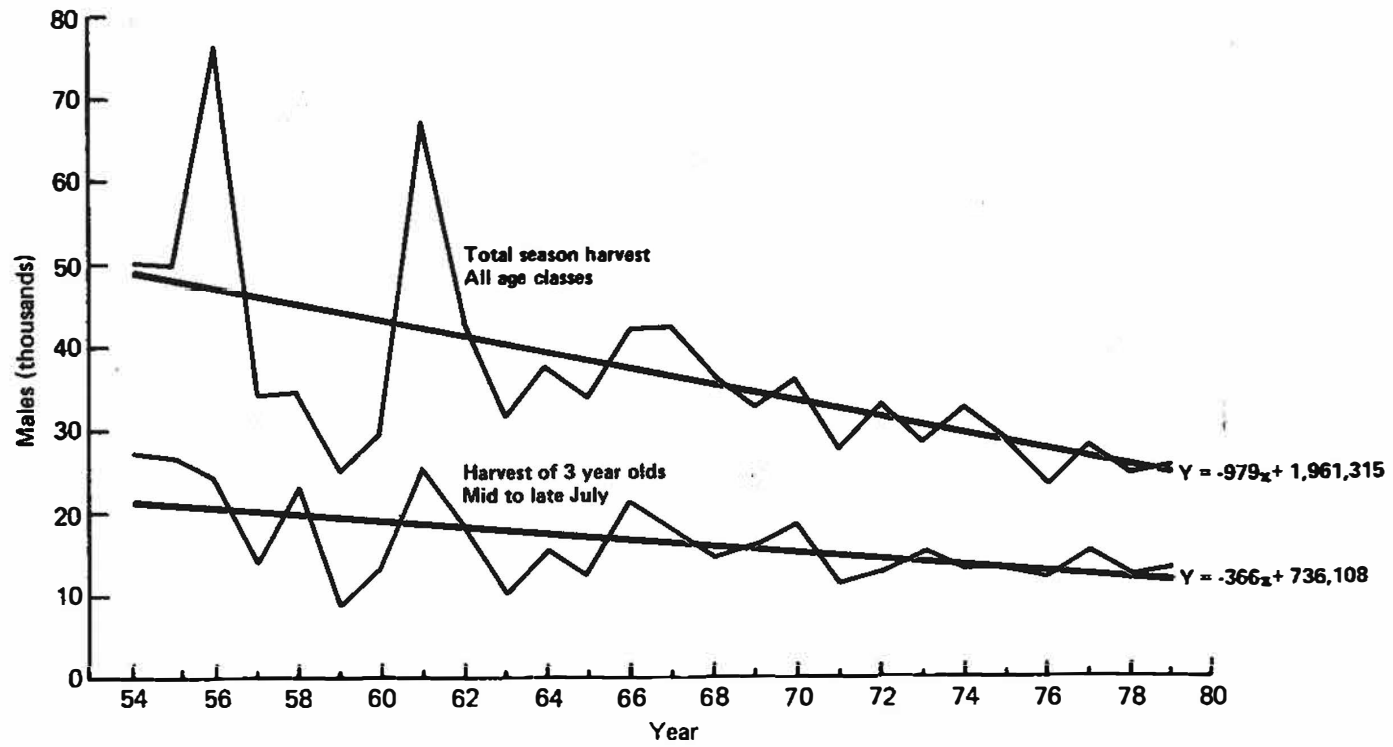


Figure 4b.-- History of fur seal exploitation, 1885-1979, Pribilof
Islands, Alaska. (Data are 5 year averages.)



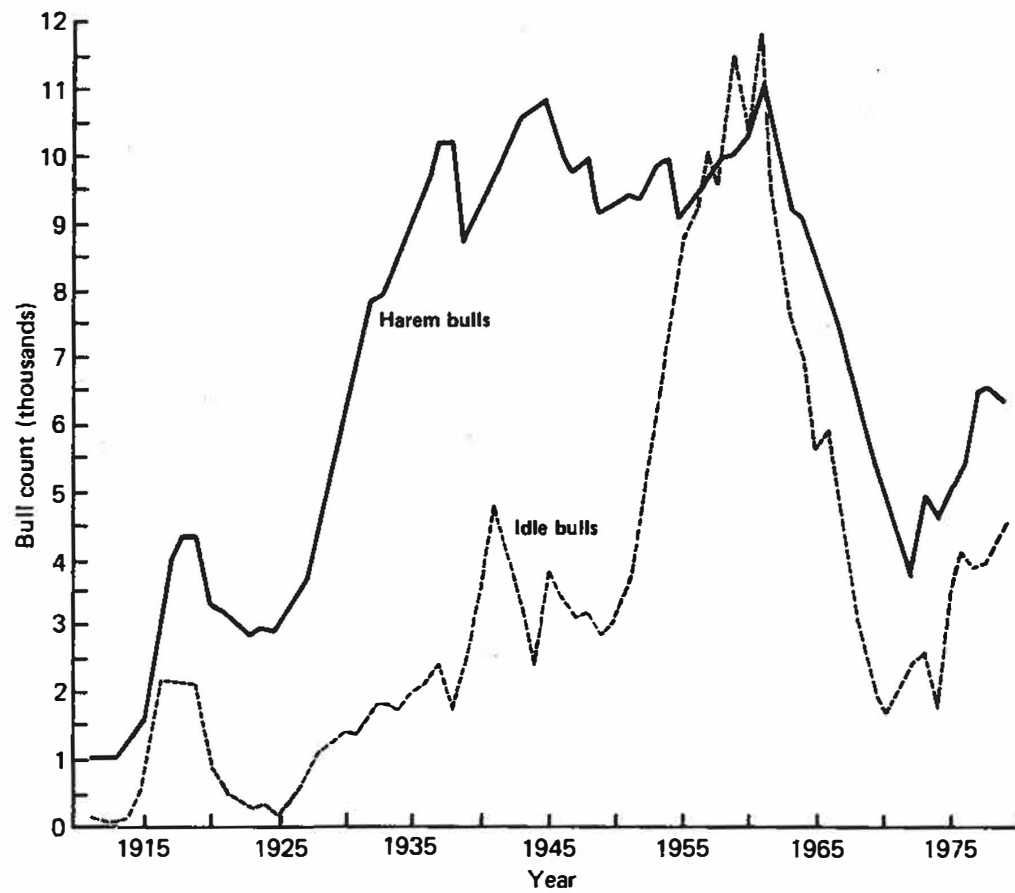
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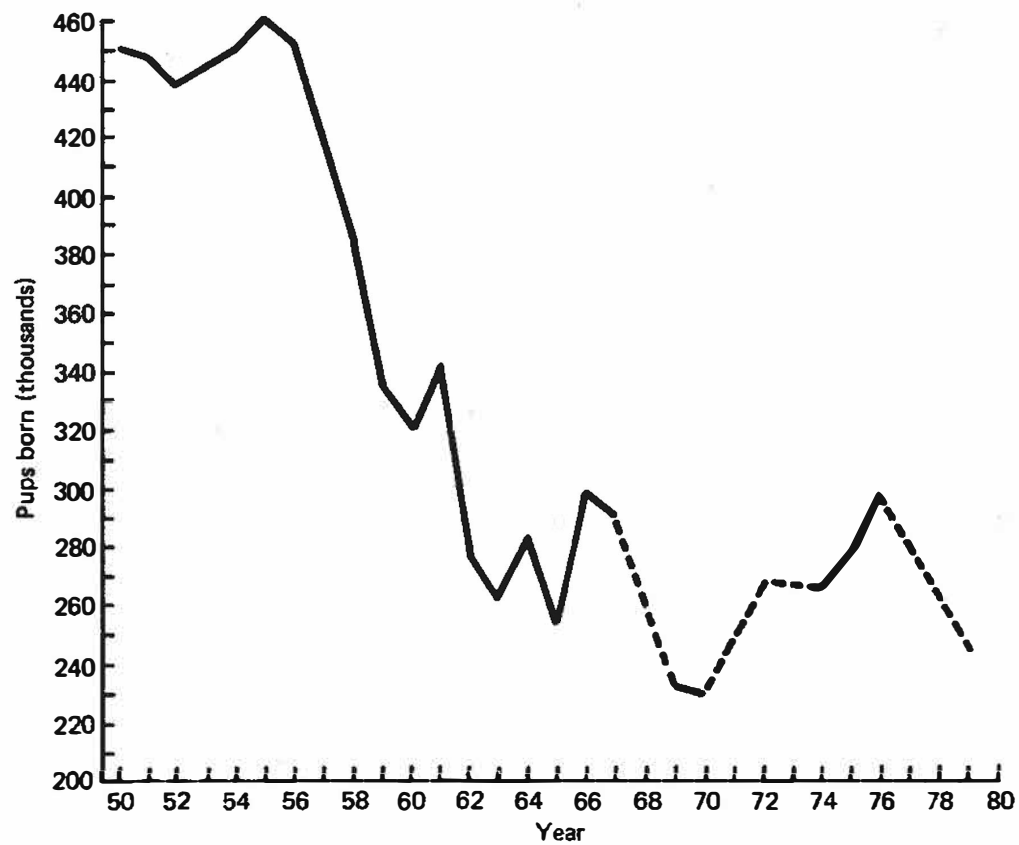
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