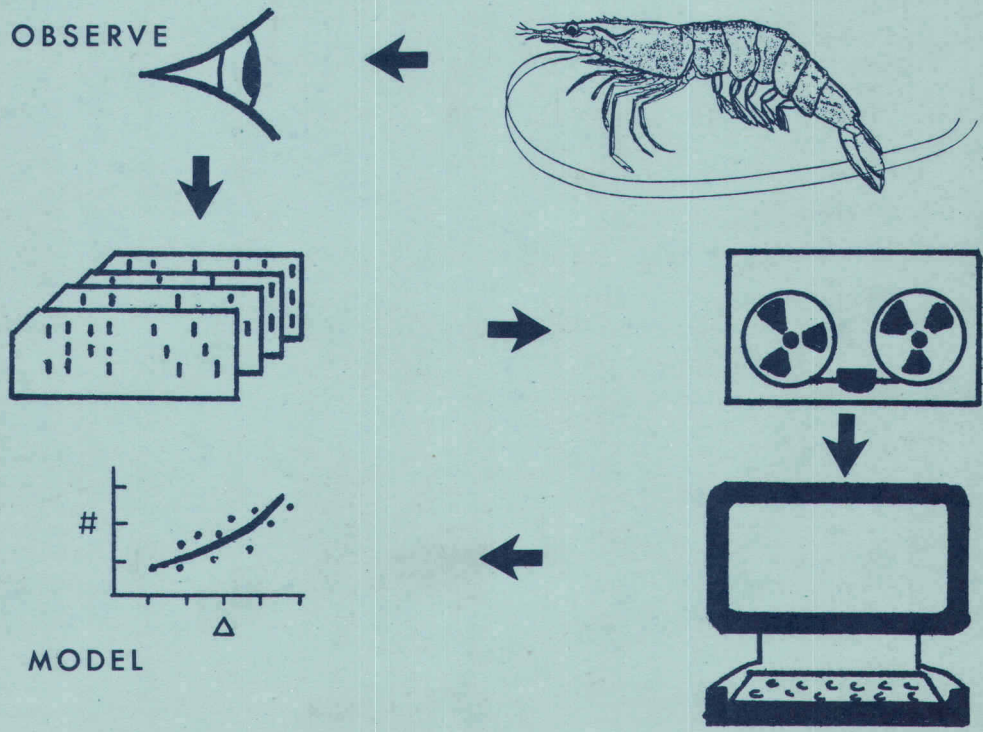
NOAA Technical Memorandum
NMFS-SEFC-140

A USERS GUIDE TO THE INSHORE SHRIMP AND HYDROGRAPHIC DATA COLLECTED BY THE TEXAS PARKS AND WILDLIFE DEPARTMENT FROM 1963 THROUGH 1980.



SEPTEMBER 1984

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Southeast Fisheries Center
Galveston Laboratory
Galveston, Texas 77550

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A USERS GUIDE TO THE INSHORE SHRIMP AND HYDROGRAPHIC DATA COLLECTED BY THE TEXAS PARKS AND WILDLIFE DEPARTMENT FROM 1963 THROUGH 1980.

By

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U. S. DEPARTMENT OF COMMERCE
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A User's Guide to the Inshore Shrimp and Hydrographic Data Collected by the Texas Parks and Wildlife Department from 1963 through 1980.

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INTRODUCTION

A data set containing shrimp, fish, crab, hydrographic, and resource information, collected from 1963 through 1980 by the Texas Parks and Wildlife Department (TPWD), has been transcribed by the National Marine Fisheries Service (NMFS) into computer files, one file per year. This data set contains 18 years of biological and environmental data collected by TPWD biologists in the major bay systems in Texas. Although the core of the data set is length-frequency distributions for brown shrimp (Penaeus aztecus), pink shrimp (P. duorarum), and white shrimp (P. setiferus), the accompanying environmental data increases the categories of potential users from fisheries and population biologists to estuarine ecologist, hydrologists, and environmental engineers. Additionally, some data were recorded for blue crabs (Callinectes spadius), speckled trout (Cynoscion nebulosus), sand seatrout (C. arenarius), redfish (Sciaenops ocellatus), black drum (Pogonias cromis), sheepshead (Archosargus probatocephalus), and southern flounder (Paralichthys lethostigma).

NMFS put the data set in computer files to facilitate its use by persons assessing Texas shrimp population dynamics and estuarine ecological processes. By making more data available to a wide range of research teams, both NMFS and TPWD feel the time required to identify the essential factors controlling shrimp population dynamics will be shortened and a more accurate system for managing this valuable fishery can be initiated. In addition, the environmental data should be valuable baseline information needed in maintaining the productivity of Texas bays.

This guide was created 1) to increase researchers' awareness of a valuable data set, 2) to facilitate choice of data from the files by cataloging and evaluating the variables included, and 3) to facilitate actual use of the data files by giving specifications for the variables and for the structure of the data files. Anyone with an interest in shrimp populations in Texas

bays or in estuarine ecology of Texas bays is a potential user. The formalities required for obtaining a copy of the data set on magnetic tape are: 1) obtain permission from the TPWD in Austin, Texas and the NMFS in Galveston, Texas, and 2) coordinate transfer of the data set from the NOAA/NMFS/SEFC Fishery Information Management Division (FIMD) in Miami, Florida. Addresses for these offices are located in Appendix D.

SECTION A. Description and Evaluation of Variables.

Each variable name is capitalized and underlined at its first occurrence in the text. The frequency and clarity of each variable's use by the field collector is evaluated.

1) Record type 1, Sampling site and environment (Fig. 1).

Dates for each collection include YEAR, MONTH and DAY. These are available for every sample. The local time at each sample's collection is given by HOURS and MINUTES of the 24-hr clock. Special code values of 3300 and 4400 were used to denote "a.m." and "p.m." respectively, when only these were given. When no time was given, the two variables were left blank. Of the samples, 95% were collected between 0700 and 1900 hr.

Three variables are used to designate the location where each sample was collected. BAY identifies the major bay system, SUB-BAY designates a secondary bay or a portion of the major bay system, and SITE specifies the location within the sub-bay. The seven major bay systems along the Texas coast are included in the data set, and each has been divided into as many as 7 sub-bays (Appendices B and C). Sub-bay code 9 contains the few samples with unrecorded locations. Sites were located in areas where shrimp abundances and movements could best be monitored by TPWD biologists.

An accounting section has been included to keep track of the numbers of record types 2 (shrimp) and 3 (fish and crabs) that are associated with each record type 1. Two digits each are allowed for the number of type 2 records, ASSOC-2, and the number of type 3 records, ASSOC-3.

The GEAR variable incorporates the type and size of sampling net and a measure of the length of the tow. The length of the tow can be either a distance in feet or a length of time in minutes. Since gear codes have predefined length factors (Appendix B), only when the length of a sample differed from the

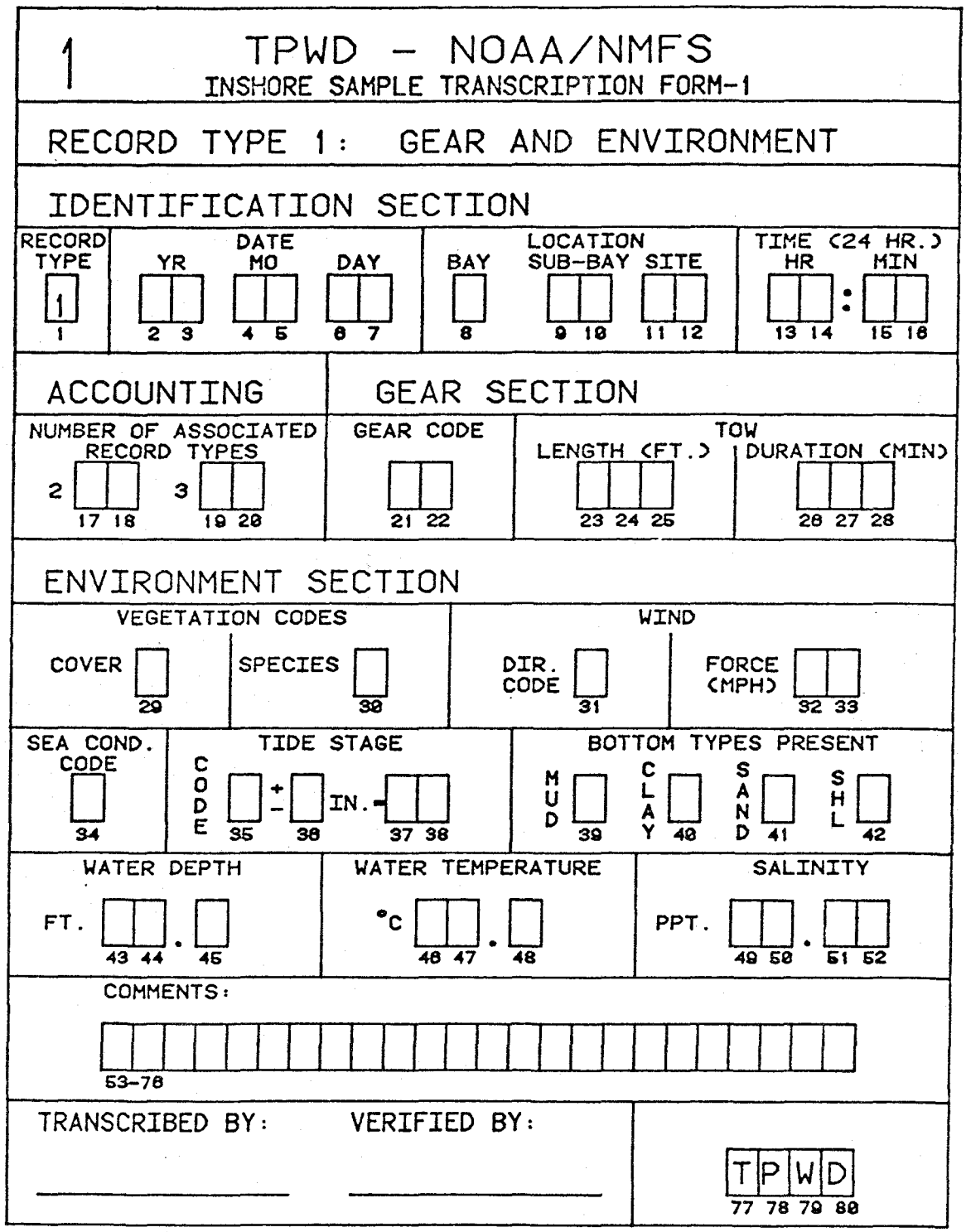

Figure 1. Data transcription form for Record Type 1 used in creating the data set.

standard was a LENGTH or DURATION variable specified. The exceptions to this are that length was specified for every bar-seine tow (in feet), and that occasionally a standard duration was also coded for other gear types. Ambiguities may arise in a few cases where samples taken with the 10-ft trawl were made longer than the standard 5-min tow and shorter than the standard 15-min tow. If the tow was closer to 5 minutes, a gear code 4 with appropriate duration notation was used, but if it was closer to 15 minutes, a gear code 7 was used with appropriate duration notation.

Submergent and emergent vegetation were coded as to the amount of bottom COVER, on a scale of 1 (min) to 4 (max), and the dominant SPECIES at the sampling site. The comments section at the end of record type 1 was used to name plants other than those provided with code numbers and plants of secondary importance. Vegetation information was quite incomplete. It was rarely noted by the field collector, and when noted, it often required a subjective interpretation by the transcriber to be coded, particularly in the case of the cover variable. The occurrence of Spartina along the shoreline at and near bar-seine sites was a major area of ambiguity in the original data. In the majority of these cases, "no vegetation" was coded for the site because bar-seines are not dragged over Spartina plants. Consultation with TPWD biologists may be helpful if more information about vegetation in an area is needed. See Appendix D for names, addresses, and telephone numbers of TPWD biologists assigned to particular bays.

Wind speed and direction were usually estimations by the field collectors rather than actual anemometer and compass readings. Wind DIRECTION was coded to one of 8 points of the compass and is considered reasonably accurate because field collectors were familiar with their localities. Considerable uncertainty surrounds their abilities to estimate wind VELOCITY. Data for these variables were available for about 70% of the samples.

Sea condition and tide data were frequently recorded. The CONDITION variable ranged from 1 (calm) to 4 (rough). This called for a subjective estimation by field collectors and often a later translation by the transcriber to fit these codes. This variable was only rarely completed by field collectors and is not recommended for use.

Tide formation is explained by three variables. STAGE denotes movement of the tide. The height of the water at the site was denoted by VARIATION with values of + or - for above or below an arbitrary site-specific height, and INCHES giving the number of inches the water was from the site-specific mark. These variables were given for about 50% of the samples. Their use should be limited to specific investigations at a particular site or to relative rather than specific changes of sea level.

Bottom types were characterized simply by MUD, CLAY, SAND and SHELL being present based on visual inspection. Information was given for about 90% of the samples. "Silty" was interpreted as mud and clay being present.

Water DEPTH at each site was measured in feet. Water TEMPERATURE and SALINITY were measured from surface waters at bar-seine sites and from bottom waters at trawl sites. They were recorded in degrees Celsius and in parts per thousand, respectively. These three variables were given for about 85% of the samples. No variable was established for turbidity, but when values were given, they were recorded as TURB ### in the comments section. Turbidity values were in parts per million unless Jackson Turbidity Units (JTU) were specified. Turbidity values were available for only about 25% of the samples.

2) Record type 2, Shrimp data (Fig. 2).

The shrimp data for a sample consist of a series of length measurements for each of the three species, brown shrimp (Penaeus aztecus), pink shrimp (P. duorarum), and white shrimp (P. setiferus). Length was measured in millimeters from tip of rostrum

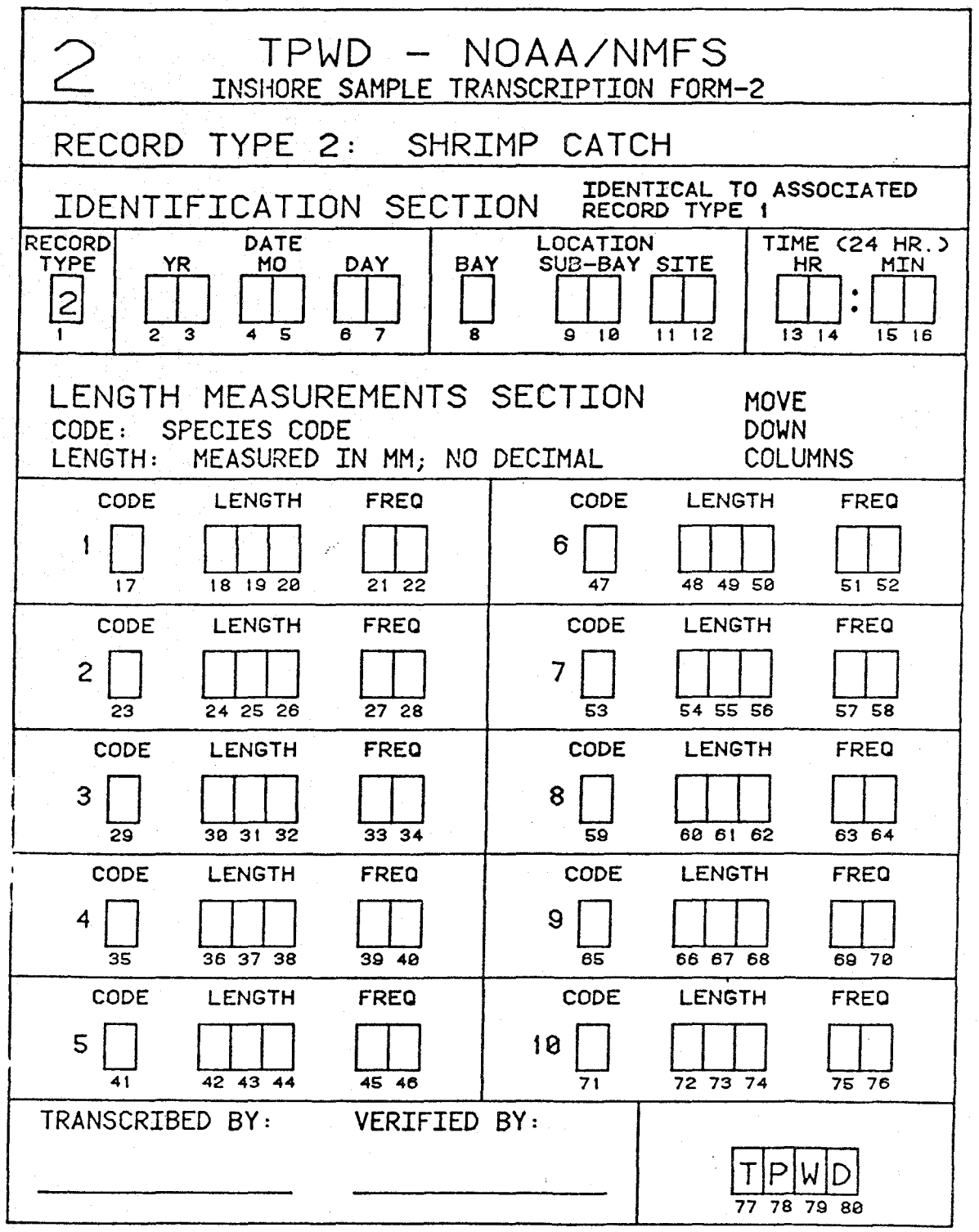

Figure 2. Data transcription from for Record Type 2 used in creating the data set.

to tip of telson. The measured shrimp were recorded by SPECIES, LENGTH and FREQUENCY variables. Additional unmeasured shrimp of each species were transcribed using the species and frequency variables until the sum of the frequencies equaled the total number of unmeasured shrimp for that species. All measured individuals of a species were recorded before beginning a new species. The unmeasured individuals of a species were usually recorded following the measured individuals of that species; however, occasionally all measured shrimp of all species preceded the recording of unmeasured individuals.

3) Record Type 3, Crab and fish data (Fig. 3).

Crab data are limited to width-frequencies of the blue crab (Callinectes sapidus). Crab width was measured in millimeters from tip of the left major lateral spine to the tip of the right one. Since fewer crabs were caught, each individual was identified by sex CODE and LENGTH (= width). Additionally, female crabs carrying a sponge, large mature females without eggs, and crabs parasitized by sacculinid barnacles were noted under the code variable (see Appendix B).

Each individual fish was identified by a species CODE and a standard LENGTH in millimeters. The six species transcribed were speckled trout, sand sea trout, redfish, black drum, sheepshead, and southern flounder. Fish data appeared to be incomplete in many samples.

Absence of record type 3, crab and fish data, however, cannot be taken as absence of crabs and fish from a sample with absolute certainty. Data for these species were not always recorded by the collectors.

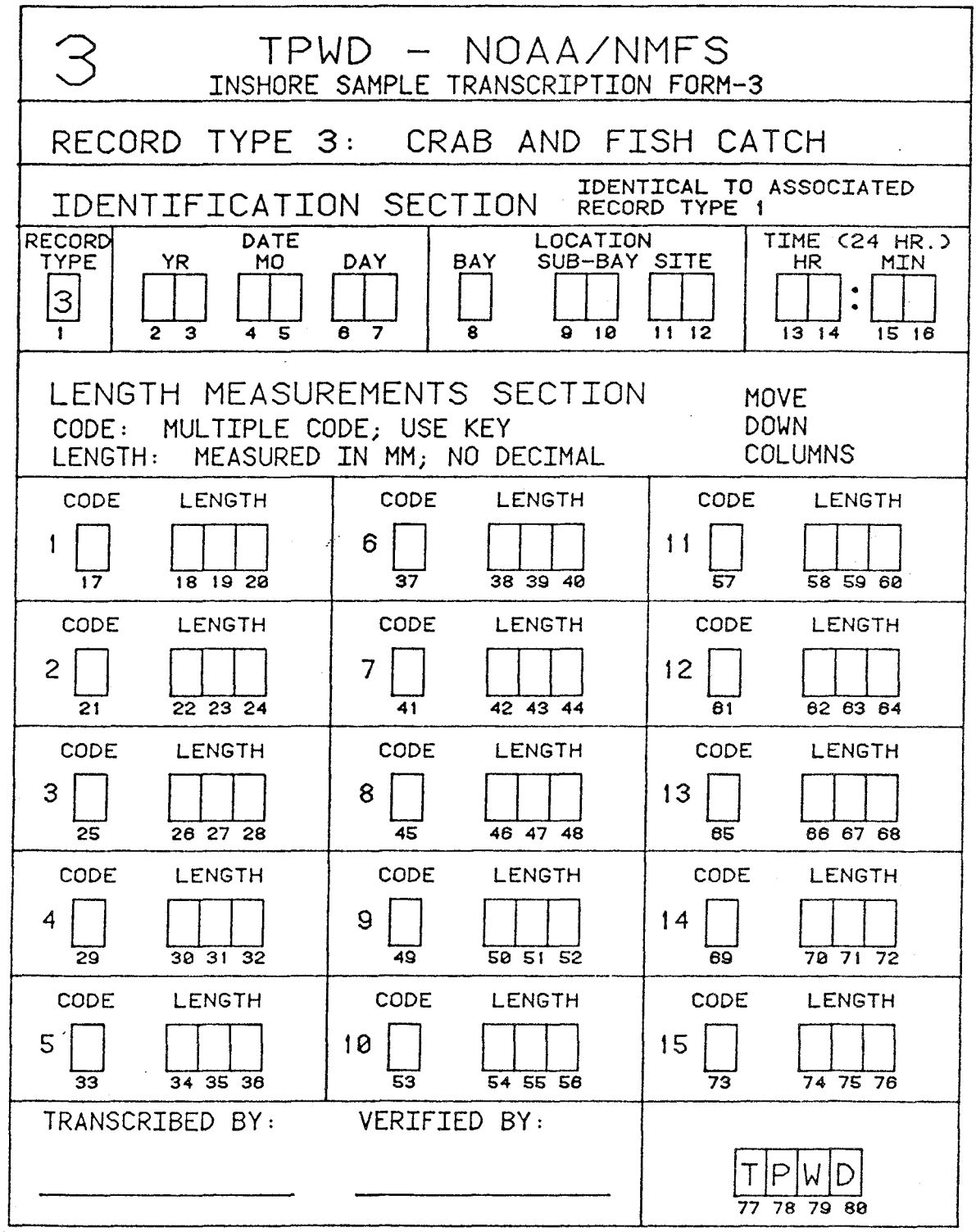

Figure 3. Data transcription form for Record Type 3 used in creating the data set.

SECTION B. File Description and Record Formating.

This data set is stored on computer media separately by annual files (see Table 1) which can be accessed individually. Each annual file contains data for all dates, locations, and times-of-day for which samples were collected during that year. A single Record Type 1 is required for each sample. Record Type 2 for shrimp data, and Record Type 3 for crab and fish data follow Record Type 1 and are optional. Each record fits a card image, i.e., 80 columns.

Once the data were physically stored in computer files, they were sorted within each data year in the following hierarchy:

Date: year, month, day
Location: bay, sub-bay, site
Time: hours, minutes
Record type: 1, 2, 3.

The data transcription form for record type 1 (Fig. 1) is divided into five sections: identification, accounting, gear, environment, and comments. The identification section covers date, location and time of the sample's collection. The accounting section notes the number of record types 2 and 3 associated with the record type 1. The gear section specifies the type of sampling net and the duration of the tow. The environment section provides data describing the sampling site's biological and physical character when the sample was collected. The comments section usually supplements the environmental section, and rarely supplements the gear section or even a record type 2 or 3. Specific format descriptions for each variable in each section are given in Table 2.

Table 1. Annual data files and their record counts contained in the data set.

Year	File #	Record count
1963	1	2683
1964	2	2385
1965	3	2866
1966	4	2386
1967	5	5125
1968	6	4445
1969	7	1954
1970	8	974
1971	9	739
1972	10	1705
1973	11	1492
1974	12	1510
1975	13	1498
1976	14	2009
1977	15	3395
1978	16	5171
1979	17	5955
1980	18	6309
		=======
		52,601

Table 2. Data file format for Record Type 1 of the data set, including formats for the variables.

Record Type 1: Location, Gear and Environment				
Field Name[1]	Position[2]	Length[3]	Attributes[4]	Use and Meaning
Identification Section				
RECORD	1	1	I1	Constant: 1
YEAR	2	2	I2	Year of sample (19__)
MONTH	4	2	I2	Month of sample
DAY	6	2	I2	Day of sample
BAY	8	1	I1	Bay location code
SUB-BAY	9	2	I2	Sub-bay location code
SITE	11	2	I2	Site location code
HOURS	13	2	I2	Time of sample (hours)
MINUTES	15	2	I2	Time of sample (min)
Accounting Section				
ASSOC-2	17	2	I2	Number of associated records (type 2)
ASSOC-3	19	2	I2	Number of associated records (type 3)
Gear Section				
GEAR	21	2	I2	Gear type code
LENGTH	23	3	I3	Length of tow (feet)
DURATION	26	3	I3	Duration of tow (min)

Table 2. Continued

Record Type 1: Location, Gear and Environment

Field Name[1]	Position[2]	Length[3]	Attributes[4]	Use and Meaning
Environmental Section				
COVER	29	1	I1	Vegetation cover code
SPECIES	30	1	I1	Vegetation Species code
DIRECTION	31	1	I1	Wind direction code
FORCE	32	2	I2	Wind force (mph)
CONDITION	34	1	I1	Sea condition code
STAGE	35	1	I1	Tide stage code
VARIATION	36	1	A1	Plus (+) or minus (-) from STAGE
INCHES	37	2	I2	Value of VARIATION (inches)
MUD	39	1	I1	Mud bottom (=1 if present)
CLAY	40	1	I1	Clay bottom (=1 if present)
SAND	41	1	I1	Sand bottom (=1 if present)
SHELL	42	1	I1	Shell bottom (=1 if present)
DEPTH	43	3	F3.1 (implied)	Water depth (feet, measured to tenths)
TEMPERATURE	46	3	F3.1 (implied)	Water temp. (^{o}C, measured to tenths)

Table 2. Continued

Record Type 1: Location, Gear and Environment

Field Name[1]	Position[2]	Length[3]	Attributes[4]	Use and Meaning
	Environmental Section Continued			
SALINITY	49	4	F4.2 (implied)	Salinity (ppt, recorded to hundredths)
	Comments Section			
COMMENTS	53	24	6A4	Comments about sample
SEQUENCE	77	4	I4	Record sequence number

1/As referenced in text.

2/From 1, measured in bytes (8 bits).

3/In bytes.

4/Expressed in FORTRAN (i.e. I= integer data, F= real data, and A= character data).

Each record type 1 is followed by any number of record types 2 and 3 depending on what was caught. Record types 2 and 3 cannot occur without a corresponding record type 1. Record type 2 (Fig. 2) is strictly for Penaeus shrimp data, and contains an identification section and a data section. The identification section is identical to that of record type 1. The data section contains 10 groups of shrimp length and frequency measurements. Each group contains a species code, length, and frequency. The format descriptions for record type 2 are given in Table 3.

Record type 3 (Fig. 3) is for blue crab and sports fish data, and contains identification and data sections. Again the identification section is identical with that of record type 1. The data section contains 15 pairs of data about crabs and/or fish. Each pair describes an individual organism and contains a species code letter and a length value in millimeters. The format descriptions for record type 3 are given in Table 4.

A partial listing (50 records) of the 1979 data is provided in Figure 4 to illustrate the file structure.

Table 3. Data file format for Record Type 2 of the data set, including formats for the variables.

Record Type 2: Shrimp Catch				
Field Name[1]	Position[2]	Length[3]	Attributes[4]	Use and Meaning
Identification Section				
RECORD	1	1	I1	Constant: 2
YEAR	2	2	I2	Year of sample (19__)
MONTH	4	2	I2	Month of sample
DAY	6	2	I2	Day of sample
BAY	8	1	I1	Bay location code
SUB-BAY	9	2	I2	Sub-bay location code
SITE	11	2	I2	Site location code
HOURS	13	2	I2	Time of sample (hours)
MINUTES	15	2	I2	Time of sample (min)
Data Section				
CODE-1	17	1	A1	Species code
LENGTH-1	18	3	I3	Length (mm)
FREQ-1	21	2	I2	Frequency
CODE-2	23	1	A1	Species code
LENGTH-2	24	3	I3	Length (mm)
FREQ-2	27	2	I2	Frequency
CODE-3	29	1	A1	Species code
LENGTH-3	30	3	I3	Length (mm)
FREQ-3	33	2	I2	Frequency
CODE-4	35	1	A1	Species code
LENGTH-4	36	3	I3	Length (mm)

Table 3. Continued

Record Type 2: Shrimp Catch

Field Name[1]	Position[2]	Length[3]	Attributes[4]	Use and Meaning
Data Section Continued				
FREQ-4	39	2	I2	Frequency
CODE-5	41	1	A1	Species code
LENGTH-5	42	3	I3	Length (mm)
FREQ-5	45	2	I2	Frequency
CODE-6	47	1	A1	Species code
LENGTH-6	48	3	I3	Length (mm)
FREQ-6	51	2	I2	Frequency
CODE-7	53	1	A1	Species code
LENGTH-7	54	3	I3	Length (mm)
FREQ-7	57	2	I2	Frequency
CODE-8	59	1	A1	Species code
LENGTH-8	60	3	I3	Length (mm)
FREQ-8	63	2	I2	Frequency
CODE-9	65	1	A1	Species code
LENGTH-9	66	3	I3	Length (mm)
FREQ-9	69	2	I2	Frequency
CODE-10	71	1	A1	Species code
LENGTH-10	72	3	I3	Length (mm)
FREQ-10	75	2	I2	Frequency
SEQUENCE	77	4	I4	Record sequence number

1/As referenced in text.

2/From 1, measured in bytes (8 bits).

3/In bytes.

4/Expressed in FORTRAN (i.e. I= integer data and A= character data).

Table 4. Data file format for Record Type 3 of the data set, including formats for the variables.

Record Type 3: Crab and Fish Catch				
Field Name[1]	Position[2]	Length[3]	Attributes[4]	Use and Meaning
	Identification Section			
RECORD	1	1	I1	Constant: 3
YEAR	2	2	I2	Year of sample (19__)
MONTH	4	2	I2	Month of sample
DAY	6	2	I2	Day of sample
BAY	8	1	I1	Bay location code
SUB-BAY	9	2	I2	Sub-bay location code
SITE	11	2	I2	Site location code
HOURS	13	2	I2	Time of sample (hours)
MINUTES	15	2	I2	Time of sample (min)
	Data Section			
CODE-1	17	1	A1	Species code
LENGTH-1	18	3	I3	Length[5] (mm)
CODE-2	21	1	A1	Species code
LENGTH-2	22	3	I3	Length (mm)
CODE-3	25	1	A1	Species code
LENGTH-3	26	3	I3	Length (mm)
CODE-4	29	1	A1	Species code
LENGTH-4	30	3	I3	Length (mm)
CODE-5	33	1	A1	Species code
LENGTH-5	34	3	I3	Length (mm)
CODE-6	37	1	A1	Species code
LENGTH-6	38	3	I3	Length (mm)

Table 4. Continued

Record Type 3: Crab and Fish Catch

Field Name[1]	Position[2]	Length[3]	Attributes[4]	Use and Meaning
	Data Section continued			
CODE-7	41	1	A1	Species code
LENGTH-7	42	3	I3	Length (mm)
CODE-8	45	1	A1	Species code
LENGTH-8	46	3	I3	Length (mm)
CODE-9	49	1	A1	Species code
LENGTH-9	50	3	I3	Length (mm)
CODE-10	53	1	A1	Species code
LENGTH-10	54	3	I3	Length (mm)
CODE-11	57	1	A1	Species code
LENGTH-11	58	3	I3	Length (mm)
CODE-12	61	1	A1	Species code
LENGTH-12	62	3	I3	Length (mm)
CODE-13	65	1	A1	Species code
LENGTH-13	66	3	I3	Length (mm)
CODE-14	69	1	A1	Species code
LENGTH-14	70	3	I3	Length (mm)
CODE-15	73	1	A1	Species code
LENGTH-15	74	3	I3	Length (mm)
SEQUENCE	77	4	I4	Record sequence number

1/As referenced in text.

2/From 1, measured in bytes (8 bits).

3/In bytes.

4/Expressed in FORTRAN (i.e. I= integer data, and A= character data).

5/For crabs, substitute width for length (any length field).

```
17904195010509050201 5  0      412 3           24  9                                  811
27904195010509059W106 1P 81 1P 84 1P 85 1P 86 1P 87 1P 89 2P 92 1P 95 3P 96 1  812
27904195010509059P100 1P102 1                                                      813
37904195010509059A163Y 72Y110Y 44Y 40X 50X 60X 71X 76                              814
17904195021213110503 5  0      425 2+50        248 90                              815
27904195021213116022 1B 27 1B 28 1B 29 1B 31 48 32 38 33 28 34 38 35 08 36 2  816
27904195021213116037 48 38 28 39 48 40 48 41 58 42 48 43 38 44 38 45 48 46 4  817
27904195021213116047 46 48 1B 50 48 51 38 52 3C    1P 75 1P 81 1P 90 1P 94 1  818
27904195021213111P100 1P101 1P106 1P111 1P126 1W100 1W11C 1W114 1W126 1W131 2  819
27904195021213111W136 1W137 1                                                      820
37904195021213116130F189F 75F 50Y160Y 50Y161Y 62Y 46Y 84Y 69Y 79Y101Y 60Y 50  821
37904195021213111Y111Y 40Y 52X 52X 53M169X131X111X 88X 91X127X 61X 48X 64X 53  822
37904195021213110034X125X 39X 24P 51                                               823
17904195041708220302 5  0      412 3+48        24  9                              824
27904195041708228W118 1W136 1W121 1B 31 1B 33 1B 36 1B 4C 28 46 1B 49 1B 51 1  825
27904195041708228102 1P 76 1P 78 1P 82 1P 85 1P 87 1P 89 1P 92 1P 95 1P 96 2  826
27904195041708228P097 1P100 4P101 1P102 4P103 2P104 1P106 3P109 1P110 2P111 1  827
37904195041708228A156B139B109B127B130B103F198F187Y 50Y 24Y 34X 86X 45X 42X 62  828
37904195041708228X038X 53X 41P 46P 56                                              829
17904232013111020102 6500    1 803 5    1 1 0152350000                          830
27904232013111028B02601                                                            831
37904232013111028F030F046Y010Y014Y017Y023Y024Y028Y029Y032Y040Y059Y094Y011X006  832
37904232013111028U007X010X017X022X024X045X054                                      833
17904232023200000301 6500    1 405 3    1    0152350330                          834
27904232023200008B0110180150180170180180180200180220280230180240180250480260C  835
27904232023200008B0270580280280290480300380310380320980330780340480350280360S  836
27904232023200008B0370580380380390180400460420380430180450180470180500 1C   01  837
37904232023200008X032X017X014Y025Y009                                              838
17904232030808092001016500    1 805 5    1    0202200000                          839
27904232030808920B022                                                              840
37904232030808920X014X019X014X014X016X013X012Y042Y022Y016                          841
17904232061816300101 6500    1 305 3    1    0202150000                          842
27904232061816308B02502B02702                                                      843
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17904232072112210001 5  0    1 203 2    1  1060215                                845
37904232072112218F338                                                              846
17904232072213550001 5  0    1 203 2    1    070220                              847
37904232072213555E294                                                              848
17904232072313300101 5  0    1 9    2    1    080217     AQUADROCELOTTE 100MM     849
27904232072313308W13103W14601W14002W13601W13501                                    850
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17904232073315200202 6500    1 303 3    1    0152271170                          856
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27904232073315208033018034018036018037028038028040018042028043038044018050 01  858
37904232073315208F060F062Y012Y015Y016Y017Y019Y022Y027Y028Y041Y058Y058Y061Y012  859
37904232073315208X016X017X018X018X019X028X030X007                                 860
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Figure 4. A listing of 50 records from the 1979 file in the data set.

SECTION C. Sampling Gear and Methodology.

Marsh Net. This is a small sled-type device which has a 20.5 x 7.0-inch rectangular framed mouth from which a bag net is suspended. The bag is about 20 inches deep and is made of nylon material having 0.04-in bar mesh. The sampler was placed adjacent to the shoreline or marshgrass in a minimum of 1 ft of water. The individual using the sampler would then play out 100 ft of line, being careful not to wade in the area to be sampled, and then draw the sampler to him at a rate of about 3 ft per second over the 100-ft distance. Samples were usually collected in 1 to 1.5 ft of water in areas often characterized by soft bottoms, submergent vegetation, or adjacent marshgrass.

The marsh net was used each March to monitor the influx of postlarval brown shrimp in Galveston Bay and Aransas Bay. Samples were collected once a week at designated stations. It was also used twice per month during June-December in Galveston Bay, San Antonio Bay, and Aransas Bay to monitor influxes of postlarval white shrimp.

Bar-seine. The sampler consists of a 6-ft length of 1-in galvanized pipe with an attached bag net made of 0.5-in stretched mesh. The lower margin of the net is weighted to keep it on the bottom and the upper margin has floats to keep the mouth of the net open. The ends of the lead-line and the float-line are attached to the ends of the bar. A 15-ft bridle is also attached to the ends of the bar, and is used to tow the sampler across the bottom, usually covering a distance of about 500 ft. The bar-seine is pulled behind a person who wades through the shallow water.

Like the marsh net, the bar seine is used in water between 1 and 3 ft deep, rarely deeper than 4 ft. Sampling sites were selected along shorelines and Spartina marshes which are typical shrimp nursery areas. The bar-seine was towed beside the grass,

not over it. Samples were collected primarily during April and May to enumerate postlarval and juvenile brown shrimp.

Flat Otter Trawls. Two sizes of trawls were used. The small trawl had a 10-ft lead-line and was made of 1.25-in stretched mesh of 9-thread nylon twine. The cod end of this net was fitted with a liner made of 0.5-in stretched mesh. This trawl was towed by 0.4-in nylon lines and was spread by 12-x 24-in plywood doors with iron runners. The large trawl had a 20-ft lead-line and was made of 1.5-in stretched mesh of 9-thread nylon twine. No liner was used with this net. This trawl was towed by 3/8-in lines and was spread by 20-x 48-in wooden doors with iron runners. Both trawls were towed at about 3 mph.

The 10-ft trawl was used in a wide variety of habitats from creeks and bayous to open waters in secondary and primary bays. Standard towing times were 5 min for white shrimp surveys during June to December and 15 min for brown shrimp surveys during April and May. White shrimp surveys were conducted twice per month and brown shrimp surveys were conducted once per week.

The 20-ft trawl was used in nursery, secondary and primary bays. The standard towing time was 15 min. This trawl was used once per month from February through May and twice per month from June through December to survey white and brown shrimp.

APPENDIX A. Summary of the types of samples collected at each site for each year.

This table provides a rapid access to the number of samples collected with the major gear types at each site, in each sub-bay, and in each bay during a year's time. An annual summary total number of samples collected with each major gear type is also given at the end of each sub-bay and bay for each year.

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1963	1	1	6	0	1	0	0	11	0	12
1963	1	1	8	0	1	0	0	10	0	11
1963	1	1	9	0	1	0	0	11	0	12
1963	1	1	10	0	8	0	0	3	0	11
1963	1	1	12	0	5	0	0	5	0	10
1963	1	1		0	16	0	0	40	0	56
1963	1			0	16	0	0	40	0	56
1963	2	1	31	0	0	1	0	0	0	1
1963	2	1	44	0	0	4	0	0	0	4
1963	2	1	58	0	0	1	0	0	0	1
1963	2	1		0	0	6	0	0	0	6
1963	2	2	5	0	0	2	0	0	0	2
1963	2	2	28	0	0	0	0	18	0	18
1963	2	2	29	0	0	7	0	22	0	29
1963	2	2		0	0	9	0	40	0	49
1963	2	3	39	0	0	0	0	9	0	9
1963	2	3	73	0	1	0	0	0	0	1
1963	2	3	74	0	1	0	0	0	0	1
1963	2	3		0	2	0	0	9	0	11
1963	2	4	37	0	0	1	0	8	0	9
1963	2	4		0	0	1	0	8	0	9
1963	2	5	34	0	0	0	0	21	0	21
1963	2	5	64	0	0	0	19	0	0	19
1963	2	5	65	0	0	0	19	0	0	19
1963	2	5	75	0	0	0	1	0	0	1
1963	2	5		0	0	0	39	21	0	60
1963	2	7	22	0	0	0	0	1	0	1
1963	2	7	23	0	0	0	0	3	0	3
1963	2	7		0	0	0	0	4	0	4
1963	2			0	2	16	39	82	0	139
1963	3	1	2	0	0	0	0	17	0	17
1963	3	1	21	0	0	0	0	19	0	19
1963	3	1	27	0	0	0	0	19	0	19
1963	3	1	28	0	0	0	19	0	0	19
1963	3	1	46	0	0	0	1	0	0	

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1963	3	1		0	0	0	20	55	0	75
1963	3	2	18	0	0	0	19	0	0	19
1963	3	2	22	0	0	0	0	20	0	20
1963	3	2		0	0	0	19	20	0	39
1963	3	3	36	0	0	0	19	0	0	19
1963	3	3	45	0	0	0	12	0	0	12
1963	3	3		0	0	0	31	0	0	31
1963	3	4	16	0	0	0	20	2	0	22
1963	3	4		0	0	0	20	2	0	22
1963	3			0	0	0	90	77	0	167
1963	4	2	4	0	0	0	0	15	0	15
1963	4	2		0	0	0	0	15	0	15
1963	4	3	15	0	0	0	0	14	0	14
1963	4	3	19	0	0	0	0	1	0	1
1963	4	3	46	0	0	0	0	15	0	15
1963	4	3		0	0	0	0	30	0	30
1963	4	4	50	0	0	1	0	15	0	16
1963	4	4		0	0	1	0	15	0	16
1963	4	6	30	0	0	0	0	15	0	15
1963	4	6	51	0	0	0	0	14	0	14
1963	4	6		0	0	0	0	29	0	29
1963	4			0	0	1	0	89	0	90
1963	5	1	2	0	0	0	0	16	0	16
1963	5	1	4	0	0	0	0	16	0	16
1963	5	1	50	0	0	0	18	0	0	18
1963	5	1		0	0	0	18	32	0	50
1963	5	3	16	0	0	2	0	0	0	2
1963	5	3		0	0	2	0	0	0	2
1963	5	4	48	0	0	0	0	16	0	16
1963	5	4	49	0	0	2	0	16	0	18

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1963	5	4		0	0	2	0	32	0	34
1963	5	5	36	0	0	0	0	18	0	18
1963	5	5		0	0	0	0	18	0	18
1963	5			0	0	4	18	82	0	104
1963	6	1	1	0	0	0	0	18	0	18
1963	6	1	2	0	0	0	0	18	0	18
1963	6	1	6	0	0	0	0	17	0	17
1963	6	1	14	0	0	0	0	1	0	1
1963	6	1	16	0	0	0	1	0	0	1
1963	6	1		0	0	0	1	54	0	55
1963	6	2	7	0	0	0	0	16	0	16
1963	6	2	15	0	0	0	0	2	0	2
1963	6	2		0	0	0	0	18	0	18
1963	6			0	0	0	1	72	0	73
1963	7	1	7	0	0	0	0	3	5	8
1963	7	1	9	0	0	0	0	16	0	16
1963	7	1	19	0	0	0	0	0	7	7
1963	7	1	20	0	0	0	0	14	0	14
1963	7	1	21	0	0	0	0	2	0	2
1963	7	1	24	0	0	0	7	0	0	7
1963	7	1		0	0	0	7	35	12	54
1963	7	2	10	0	4	0	0	10	0	14
1963	7	2		0	4	0	0	10	0	14
1963	7	3	6	0	5	0	0	14	0	19
1963	7	3	13	0	0	0	13	1	0	14
1963	7	3		0	5	0	13	15	0	33
1963	7			0	9	0	20	60	12	101
1963				0	27	21	168	502	12	730
1964	1	1	1	0	0	0	2	0	0	2
1964	1	1	3	0	0	0	11	0	0	11
1964	1	1	6	0	0	0	0	11	1	12
1964	1	1	9	0	0	0	0	12	0	12
1964	1	1	10	0	9	0	0	1	0	10
1964	1	1	12	0	7	0	0	1	1	9

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1964	1	1	13	0	0	0	1	0	0	1
1964	1	1		0	16	0	14	25	2	57
1964	1			0	16	0	14	25	2	57
1964	2	1	31	0	0	0	17	0	0	17
1964	2	1	44	0	0	2	0	0	0	2
1964	2	1	68	0	0	4	0	0	0	4
1964	2	1	69	0	0	1	0	0	0	1
1964	2	1		0	0	7	17	0	0	24
1964	2	2	5	0	0	1	0	0	0	1
1964	2	2	28	0	0	0	0	15	0	15
1964	2	2	29	0	0	4	0	19	0	23
1964	2	2	32	0	0	0	19	0	0	19
1964	2	2		0	0	5	19	34	0	58
1964	2	3	8	0	0	0	17	0	0	17
1964	2	3	10	0	0	0	2	0	0	2
1964	2	3		0	0	0	19	0	0	19
1964	2	5	34	0	0	0	0	20	0	20
1964	2	5	64	0	0	0	21	0	0	21
1964	2	5	65	0	0	0	21	0	0	21
1964	2	5		0	0	0	42	20	0	62
1964	2	6	18	0	0	0	19	0	0	19
1964	2	6		0	0	0	19	0	0	19
1964	2	7	33	0	0	0	19	0	0	19
1964	2	7		0	0	0	19	0	0	19
1964	2			0	0	12	135	54	0	201
1964	3	1	2	0	0	0	0	19	0	19
1964	3	1	21	0	0	3	0	19	0	22
1964	3	1	27	0	0	0	0	18	0	18
1964	3	1	28	0	0	0	20	0	0	20
1964	3	1	43	0	0	1	0	0	0	1
1964	3	1		0	0	4	20	56	0	80
1964	3	2	9	0	0	0	0	1	0	1
1964	3	2	18	0	0	0	18	0	0	18
1964	3	2	22	0	0	1	0	19	0	20
1964	3	2	39	0	0	0	15	0	0	15

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1964	3	2	40	0	0	0	1	0	0	1
1964	3	2	42	0	0	1	0	0	0	1
1964	3	2		0	0	2	34	20	0	56
1964	3	3	36	0	0	0	19	0	0	19
1964	3	3		0	0	0	19	0	0	19
1964	3	4	16	0	0	0	19	0	0	19
1964	3	4		0	0	0	19	0	0	19
1964	3	6	41	0	0	1	0	0	0	1
1964	3	6		0	0	1	0	0	0	1
1964	3			0	0	7	92	76	0	175
1964	5	1	2	0	0	0	0	15	0	15
1964	5	1	4	0	0	0	3	16	0	19
1964	5	1	35	0	0	0	16	0	0	16
1964	5	1	45	0	0	0	15	0	0	15
1964	5	1	46	0	0	0	19	0	0	19
1964	5	1	50	0	0	0	14	0	0	14
1964	5	1		0	0	0	67	31	0	98
1964	5	2	47	0	0	0	19	0	0	19
1964	5	2		0	0	0	19	0	0	19
1964	5	4	19	0	0	1	0	0	0	1
1964	5	4	22	0	0	2	0	0	0	2
1964	5	4	27	0	0	3	0	0	0	3
1964	5	4	33	0	0	0	19	0	0	19
1964	5	4	34	0	0	0	17	0	0	17
1964	5	4	48	0	0	2	0	16	0	18
1964	5	4	49	0	0	0	0	15	0	15
1964	5	4		0	0	8	36	31	0	75
1964	5			0	0	8	122	62	0	192
1964	7	1	15	0	0	0	0	7	0	7
1964	7	1		0	0	0	0	7	0	7
1964	7	2	2	0	0	0	0	2	0	2
1964	7	2	10	0	0	0	0	7	0	7
1964	7	2	11	0	1	0	0	18	0	19
1964	7	2	16	0	0	0	0	4	0	4

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1964	7	2		0	1	0	0	31	0	32
1964	7	3	5	0	0	0	7	0	0	7
1964	7	3	6	0	1	0	0	6	0	7
1964	7	3	13	0	0	0	5	0	0	5
1964	7	3		0	1	0	12	6	0	19
1964	7	4	12	0	0	0	0	1	0	1
1964	7	4	14	0	1	0	1	2	0	4
1964	7	4	17	0	0	0	0	6	0	6
1964	7	4		0	1	0	1	9	0	11
1964	7			0	3	0	13	53	0	69
1964				0	19	27	376	270	2	694
1965	1	1	1	0	0	0	1	6	0	7
1965	1	1	2	0	1	0	0	0	0	1
1965	1	1	3	0	0	0	11	0	0	11
1965	1	1	6	0	1	0	0	14	0	15
1965	1	1	9	0	2	0	0	11	0	13
1965	1	1	10	0	16	0	0	1	0	17
1965	1	1	11	0	0	0	5	0	0	5
1965	1	1	12	0	2	0	0	0	0	2
1965	1	1		0	22	0	17	32	0	71
1965	1			0	22	0	17	32	0	71
1965	2	1	31	0	0	0	24	0	0	24
1965	2	1		0	0	0	24	0	0	24
1965	2	2	28	0	0	0	0	20	0	20
1965	2	2	29	0	0	0	0	20	0	20
1965	2	2	32	0	0	0	24	0	0	24
1965	2	2		0	0	0	24	40	0	64
1965	2	3	8	0	0	0	13	0	0	13
1965	2	3	10	0	0	0	11	0	0	11
1965	2	3		0	0	0	24	0	0	24
1965	2	5	34	0	0	0	0	22	0	22
1965	2	5	64	0	0	0	21	0	0	21
1965	2	5	65	0	0	0	21	0	0	21

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1965	2	5		0	0	0	42	22	0	64
1965	2	6	18	0	0	0	23	0	0	23
1965	2	6		0	0	0	23	0	0	23
1965	2	7	33	0	0	0	24	0	0	24
1965	2	7		0	0	0	24	0	0	24
1965	2			0	0	0	161	62	0	223
1965	3	1	2	0	0	0	0	19	0	19
1965	3	1	21	0	0	0	0	19	0	19
1965	3	1	27	0	0	0	0	18	0	18
1965	3	1	28	0	0	0	22	0	0	22
1965	3	1		0	0	0	22	56	0	78
1965	3	2	18	0	0	0	24	0	0	24
1965	3	2	22	0	0	0	0	19	0	19
1965	3	2	39	0	0	0	21	0	0	21
1965	3	2		0	0	0	45	19	0	64
1965	3	3	36	0	0	0	24	0	0	24
1965	3	3		0	0	0	24	0	0	24
1965	3	4	16	0	0	0	24	0	0	24
1965	3	4		0	0	0	24	0	0	24
1965	3			0	0	0	115	75	0	190
1965	4	4	34	0	0	0	1	0	0	1
1965	4	4		0	0	0	1	0	0	1
1965	4			0	0	0	1	0	0	1
1965	5	1	2	0	0	0	0	14	0	14
1965	5	1	4	0	0	0	3	14	0	17
1965	5	1	35	0	0	0	21	0	0	21
1965	5	1	45	0	0	0	10	0	0	10
1965	5	1	46	0	0	0	20	0	0	20
1965	5	1	50	0	0	0	12	0	0	12
1965	5	1	51	0	0	2	0	0	0	2
1965	5	1	52	0	0	1	0	0	0	1
1965	5	1		0	0	3	66	28	0	97
1965	5	2	47	0	0	0	20	0	0	20

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1965	5	2		0	0	0	20	0	0	20
1965	5	4	17	0	0	2	0	0	0	2
1965	5	4	20	0	0	1	0	0	0	1
1965	5	4	22	0	0	1	0	0	0	1
1965	5	4	27	0	0	1	0	0	0	1
1965	5	4	33	0	0	0	21	0	0	21
1965	5	4	34	0	0	0	19	0	0	19
1965	5	4	48	0	0	0	0	15	0	15
1965	5	4	49	0	0	0	0	15	0	15
1965	5	4		0	0	5	40	30	0	75
1965	5			0	0	8	126	58	0	192
1965	7	2	2	0	2	0	0	6	0	8
1965	7	2	10	0	1	0	0	7	0	8
1965	7	2	11	0	1	0	0	7	0	8
1965	7	2		0	4	0	0	20	0	24
1965	7	3	5	0	0	0	11	0	0	11
1965	7	3	6	0	2	0	0	8	0	10
1965	7	3	13	0	0	0	5	0	0	5
1965	7	3		0	2	0	16	8	0	26
1965	7	4	12	0	0	0	0	8	0	8
1965	7	4		0	0	0	0	8	0	8
1965	7			0	6	0	16	36	0	58
1965				0	28	8	436	263	0	735
**********										
1966	1	1	1	0	0	0	0	1	0	1
1966	1	1	2	0	0	0	0	1	0	1
1966	1	1	3	0	0	0	1	0	0	1
1966	1	1	6	0	0	0	0	1	0	1
1966	1	1	9	0	0	0	0	1	0	1
1966	1	1	10	0	1	0	0	0	0	1
1966	1	1		0	1	0	1	4	0	6
1966	1			0	1	0	1	4	0	6
1966	2	1	31	0	0	0	24	0	0	24
1966	2	1	45	0	0	0	1	0	0	1
1966	2	1		0	0	0	25	0	0	25
1966	2	2	28	0	0	0	0	17	0	17

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1966	2	2	29	0	0	0	0	22	0	22
1966	2	2	32	0	0	0	24	0	1	25
1966	2	2	73	0	0	0	0	1	0	1
1966	2	2		0	0	0	24	40	1	65
1966	2	3	10	0	0	0	24	1	0	25
1966	2	3	71	0	0	0	0	1	0	1
1966	2	3		0	0	0	24	2	0	26
1966	2	4	56	0	0	0	0	2	0	2
1966	2	4	70	0	0	0	0	1	0	1
1966	2	4	72	0	0	0	1	0	0	1
1966	2	4		0	0	0	1	3	0	4
1966	2	5	34	0	0	0	0	24	0	24
1966	2	5	64	0	0	0	18	0	0	18
1966	2	5	65	0	0	0	18	0	0	18
1966	2	5		0	0	0	36	24	0	60
1966	2	6	18	0	0	0	24	0	1	25
1966	2	6		0	0	0	24	0	1	25
1966	2	7	33	0	0	0	23	0	0	23
1966	2	7		0	0	0	23	0	0	23
1966	2			0	0	0	157	69	2	228
1966	3	1	2	0	0	0	0	18	0	18
1966	3	1	20	0	0	0	0	20	0	20
1966	3	1	21	0	0	0	0	21	0	21
1966	3	1	27	0	0	0	0	18	0	18
1966	3	1	28	0	0	0	21	0	0	21
1966	3	1	29	0	0	0	0	1	0	1
1966	3	1		0	0	0	21	78	0	99
1966	3	2	18	0	0	0	19	0	0	19
1966	3	2	22	0	0	0	0	21	0	21
1966	3	2	39	0	0	0	21	0	0	21
1966	3	2		0	0	0	40	21	0	61
1966	3	3	36	0	0	0	21	0	0	21
1966	3	3		0	0	0	21	0	0	21
1966	3	4	16	0	0	0	21	0	0	21
1966	3	4		0	0	0	21	0	0	21
1966	3			0	0	0	103	99	0	202
1966	5	1	4	0	0	0	1	11	0	12
1966	5	1	6	0	0	0	5	0	0	5
1966	5	1	9	0	0	0	0	10	0	10
1966	5	1	35	0	0	0	7	0	0	7
1966	5	1	46	0	0	0	13	0	0	13
1966	5	1		0	0	0	26	21	0	47
1966	5	2	47	0	0	0	11	0	0	11
1966	5	2		0	0	0	11	0	0	11
1966	5	4	17	0	0	0	14	0	0	14
1966	5	4	20	0	0	0	0	7	0	7
1966	5	4	22	0	0	0	0	5	0	5
1966	5	4	23	0	0	0	0	7	0	7
1966	5	4	27	0	0	0	0	1	0	1
1966	5	4	33	0	0	0	14	0	0	14
1966	5	4	34	0	0	0	11	0	0	11
1966	5	4		0	0	0	39	20	0	59
1966	5			0	0	0	76	41	0	117
1966	7	1	8	0	0	0	0	2	0	2
1966	7	1	9	0	2	0	0	0	0	2
1966	7	1	18	0	0	0	0	1	0	1
1966	7	1		0	2	0	0	3	0	5
1966	7	2	10	0	0	0	0	6	0	6
1966	7	2		0	0	0	0	6	0	6
1966	7	3	3	0	0	0	6	0	0	6
1966	7	3	4	0	0	0	0	6	0	6
1966	7	3	5	0	0	0	6	0	0	6
1966	7	3	6	0	0	0	0	6	0	6
1966	7	3	13	0	0	0	3	0	0	3
1966	7	3		0	0	0	15	12	0	27
1966	7			0	2	0	15	21	0	38
1966				0	3	0	352	234	2	591
1967	1	1	1	0	0	0	0	13	0	13

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1967	1	1	3	0	0	0	15	0	0	15
1967	1	1	6	0	0	0	0	17	0	17
1967	1	1	9	0	0	0	0	3	0	3
1967	1	1	10	0	17	0	0	0	0	17
1967	1	1		0	17	0	15	33	0	65
1967	1			0	17	0	15	33	0	65
1967	2	1	31	0	0	0	28	0	0	28
1967	2	1		0	0	0	28	0	0	28
1967	2	2	28	0	1	0	0	17	0	18
1967	2	2	29	0	1	0	0	22	0	23
1967	2	2	32	0	0	0	31	0	0	31
1967	2	2		0	2	0	31	39	0	72
1967	2	3	8	0	0	0	17	0	0	17
1967	2	3	10	0	0	0	9	0	0	9
1967	2	3		0	0	0	26	0	0	26
1967	2	5	17	0	1	0	0	0	0	1
1967	2	5	34	0	0	0	0	27	0	27
1967	2	5	64	0	0	0	20	0	0	20
1967	2	5	65	0	0	0	20	0	0	20
1967	2	5		0	1	0	40	27	0	68
1967	2	6	18	0	0	0	29	0	0	29
1967	2	6		0	0	0	29	0	0	29
1967	2	7	33	0	0	0	30	0	0	30
1967	2	7		0	0	0	30	0	0	30
1967	2			0	3	0	184	66	0	253
1967	3	1	2	0	0	0	0	18	0	18
1967	3	1	20	0	0	0	0	1	0	1
1967	3	1	21	0	0	0	0	17	0	17
1967	3	1	27	0	0	0	0	17	0	17
1967	3	1	28	0	0	0	19	0	0	19
1967	3	1		0	0	0	19	53	0	72
1967	3	2	18	0	0	0	18	0	0	18
1967	3	2	22	0	0	0	0	18	0	18
1967	3	2	39	0	0	0	19	0	0	19

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1967	3	2		0	0	0	37	18	0	55
1967	3	3	36	0	0	0	19	0	0	19
1967	3	3		0	0	0	19	0	0	19
1967	3	4	16	0	0	0	19	0	0	19
1967	3	4		0	0	0	19	0	0	19
1967	3			0	0	0	94	71	0	165
1967	4	1	43	0	0	0	0	21	0	21
1967	4	1		0	0	0	0	21	0	21
1967	4	2	2	0	0	0	0	1	0	1
1967	4	2	4	0	0	0	0	20	0	20
1967	4	2	49	0	0	0	11	1	0	12
1967	4	2		0	0	0	11	22	0	33
1967	4	3	13	0	0	0	1	0	0	1
1967	4	3	15	0	0	0	0	22	0	22
1967	4	3	16	0	0	0	11	0	0	11
1967	4	3	19	0	0	0	0	11	0	11
1967	4	3	44	0	0	0	12	0	0	12
1967	4	3	46	0	0	0	0	12	0	12
1967	4	3		0	0	0	24	45	0	69
1967	4	4	24	0	0	0	0	21	0	21
1967	4	4	41	0	0	0	0	23	0	23
1967	4	4	45	0	0	0	12	0	0	12
1967	4	4	47	0	0	0	12	0	0	12
1967	4	4	48	0	0	0	10	0	0	10
1967	4	4		0	0	0	34	44	0	78
1967	4			0	0	0	69	132	0	201
1967	5	1	4	0	0	0	0	13	0	13
1967	5	1	5	0	0	0	0	13	0	13
1967	5	1	6	0	0	0	12	0	0	12
1967	5	1	7	0	0	0	19	0	0	19
1967	5	1	31	0	0	0	20	0	0	20
1967	5	1	35	0	0	0	6	0	0	6
1967	5	1		0	0	0	57	26	0	83
1967	5	2	13	0	0	0	19	0	0	19
1967	5	2	47	0	0	0	4	0	0	4

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1967	5	2	53	0	0	0	4	0	0	4
1967	5	2	54	0	0	0	1	0	0	1
1967	5	2	55	0	0	0	1	0	0	1
1967	5	2	56	0	0	0	3	0	0	3
1967	5	2		0	0	0	32	0	0	32
1967	5	4	17	0	0	0	20	0	0	20
1967	5	4	20	0	1	0	0	12	0	13
1967	5	4	21	0	0	0	19	0	0	19
1967	5	4	23	0	0	0	0	13	0	13
1967	5	4	33	0	0	0	18	0	0	18
1967	5	4	34	0	0	0	19	0	0	19
1967	5	4		0	1	0	76	25	0	102
1967	5	5	24	0	0	0	0	1	0	1
1967	5	5	36	0	0	0	0	19	0	19
1967	5	5		0	0	0	0	20	0	20
1967	5			0	1	0	165	71	0	237
1967	6	1	1	0	0	0	0	20	0	20
1967	6	1	2	0	0	0	0	20	0	20
1967	6	1	3	0	0	0	0	13	0	13
1967	6	1	4	0	0	0	0	2	0	2
1967	6	1	5	0	0	0	0	20	0	20
1967	6	1	6	0	0	0	0	17	0	17
1967	6	1		0	0	0	0	92	0	92
1967	6	2	7	0	0	0	0	20	0	20
1967	6	2	8	0	0	0	0	20	0	20
1967	6	2	9	0	1	0	0	15	0	16
1967	6	2	10	0	0	0	0	2	0	2
1967	6	2	12	0	0	0	0	1	0	1
1967	6	2		0	1	0	0	58	0	59
1967	6			0	1	0	0	150	0	151
1967	7	1	7	0	3	0	0	8	9	20
1967	7	1	8	0	7	0	0	6	9	22
1967	7	1	9	0	9	0	0	4	9	22
1967	7	1	18	0	0	0	0	0	2	2
1967	7	1	19	0	0	0	0	0	2	2
1967	7	1	20	0	0	0	0	0	2	2
1967	7	1	21	0	0	0	0	0	2	2
1967	7	1	22	0	0	0	0	0	2	2
1967	7	1	23	0	0	0	0	0	2	2
1967	7	1	24	0	0	0	0	0	2	2

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1967	7	1		0	19	0	0	18	41	78
1967	7	2	1	0	0	0	12	0	0	12
1967	7	2	10	0	0	0	0	12	0	12
1967	7	2		0	0	0	12	12	0	24
1967	7	3	3	0	0	0	13	6	0	19
1967	7	3	4	0	0	0	1	11	0	12
1967	7	3	5	0	0	0	11	0	0	11
1967	7	3	6	0	0	0	1	13	0	14
1967	7	3	13	0	0	0	1	0	0	1
1967	7	3		0	0	0	27	30	0	57
1967	7			0	19	0	39	60	41	159
1967				0	41	0	566	583	41	1231
1968	1	1	1	0	1	0	0	12	0	13
1968	1	1	3	0	2	0	13	0	0	15
1968	1	1	5	0	3	0	0	1	0	4
1968	1	1	6	0	1	0	0	5	0	6
1968	1	1	7	0	0	0	0	3	0	3
1968	1	1	10	0	8	0	0	0	0	8
1968	1	1		0	15	0	13	21	0	49
1968	1			0	15	0	13	21	0	49
1968	2	1	31	0	0	0	25	0	0	25
1968	2	1		0	0	0	25	0	0	25
1968	2	2	28	0	0	0	0	13	0	13
1968	2	2	29	0	0	0	0	23	0	23
1968	2	2	32	0	0	0	25	0	0	25
1968	2	2	66	0	0	0	0	1	0	1
1968	2	2		0	0	0	25	37	0	62
1968	2	3	8	0	0	0	18	0	0	18
1968	2	3		0	0	0	18	0	0	18
1968	2	4	37	0	0	0	0	1	0	1
1968	2	4		0	0	0	0	1	0	1
1968	2	5	34	0	0	0	0	26	0	26
1968	2	5	64	0	0	0	18	0	0	18

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1968	2	5	65	0	0	0	18	0	0	18
1968	2	5		0	0	0	36	26	0	62
1968	2	6	18	0	0	0	26	0	0	26
1968	2	6		0	0	0	26	0	0	26
1968	2	7	33	0	0	0	24	0	0	24
1968	2	7	67	0	0	0	1	0	0	1
1968	2	7		0	0	0	25	0	0	25
1968	2			0	0	0	155	64	0	219
1968	3	1	2	0	0	0	0	17	0	17
1968	3	1	20	0	1	0	0	19	1	21
1968	3	1	21	0	0	0	0	21	0	21
1968	3	1	27	0	0	0	0	21	0	21
1968	3	1	28	0	0	0	22	0	0	22
1968	3	1		0	1	0	22	78	1	102
1968	3	2	4	0	0	0	1	0	0	1
1968	3	2	17	0	0	0	10	0	0	10
1968	3	2	18	0	0	0	18	0	0	18
1968	3	2	22	0	0	0	0	21	0	21
1968	3	2	39	0	0	0	12	0	0	12
1968	3	2		0	0	0	41	21	0	62
1968	3	3	11	0	0	0	1	0	0	1
1968	3	3	36	0	0	0	22	1	0	23
1968	3	3		0	0	0	23	1	0	24
1968	3	4	16	0	0	0	21	0	0	21
1968	3	4		0	0	0	21	0	0	21
1968	3			0	1	0	107	100	1	209
1968	5	1	4	0	1	0	0	17	0	18
1968	5	1	5	0	1	0	0	17	0	18
1968	5	1	6	0	0	0	12	0	0	12
1968	5	1	7	0	0	0	23	0	0	23
1968	5	1	31	0	0	0	23	0	0	23
1968	5	1	35	0	0	0	9	0	0	9
1968	5	1		0	2	0	67	34	0	103
1968	5	2	13	0	0	0	22	0	0	22

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1968	5	2		0	0	0	22	0	0	22
1968	5	4	17	0	0	0	23	0	0	23
1968	5	4	20	0	0	0	0	18	0	18
1968	5	4	21	0	0	0	23	0	0	23
1968	5	4	23	0	1	0	0	17	0	18
1968	5	4	33	0	0	1	22	0	0	23
1968	5	4	34	0	0	0	21	0	0	21
1968	5	4		0	1	1	89	35	0	126
1968	5	5	36	0	1	0	0	20	0	21
1968	5	5		0	1	0	0	20	0	21
1968	5			0	4	1	178	89	0	272
1968	6	1	1	0	0	1	0	16	0	17
1968	6	1	2	0	1	0	0	15	0	16
1968	6	1	3	0	0	0	0	1	0	1
1968	6	1	4	0	0	0	0	16	0	16
1968	6	1	5	0	1	0	0	18	0	19
1968	6	1	6	0	0	0	0	16	0	16
1968	6	1		0	2	1	0	82	0	85
1968	6	2	7	0	0	0	0	17	0	17
1968	6	2	8	0	0	0	0	17	0	17
1968	6	2	9	0	0	0	0	17	0	17
1968	6	2		0	0	0	0	51	0	51
1968	6			0	2	1	0	133	0	136
1968	7	1	7	0	8	0	0	7	14	29
1968	7	1	8	0	8	0	0	5	15	28
1968	7	1	9	0	14	0	1	2	13	30
1968	7	1		0	30	0	1	14	42	87
1968	7	2	1	0	0	0	8	0	0	8
1968	7	2	10	0	1	0	0	9	0	10
1968	7	2		0	1	0	8	9	0	18
1968	7	3	3	0	0	0	11	0	0	11
1968	7	3	4	0	0	0	0	16	0	16
1968	7	3	5	0	0	0	13	0	0	13
1968	7	3	6	0	3	0	0	12	0	15
1968	7	3		0	3	0	24	28	0	55

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1968	7			0	34	0	33	51	42	160
1968				0	56	2	486	458	43	1045
1969	1	1	1	0	0	0	0	3	0	3
1969	1	1	3	0	0	0	2	0	0	2
1969	1	1	5	0	4	0	0	0	0	4
1969	1	1	6	0	0	0	0	1	0	1
1969	1	1		0	4	0	2	4	0	10
1969	1			0	4	0	2	4	0	10
1969	2	1	31	0	0	0	6	0	0	6
1969	2	1		0	0	0	6	0	0	6
1969	2	2	28	0	0	0	0	6	0	6
1969	2	2	29	0	0	0	0	11	0	11
1969	2	2	32	0	0	0	11	0	0	11
1969	2	2		0	0	0	11	17	0	28
1969	2	3	8	0	0	0	4	0	0	4
1969	2	3		0	0	0	4	0	0	4
1969	2	5	34	0	0	0	0	11	0	11
1969	2	5	64	0	1	0	2	0	0	3
1969	2	5	65	0	1	0	2	0	0	3
1969	2	5		0	2	0	4	11	0	17
1969	2	6	18	0	0	0	11	0	0	11
1969	2	6		0	0	0	11	0	0	11
1969	2	7	33	0	0	0	10	0	0	10
1969	2	7		0	0	0	10	0	0	10
1969	2			0	2	0	46	28	0	76
1969	3	1	2	0	0	0	0	8	0	8
1969	3	1	20	0	0	0	0	9	0	9
1969	3	1	21	0	0	0	0	10	0	10
1969	3	1	27	0	0	0	0	10	0	10
1969	3	1	28	0	0	0	10	0	0	10
1969	3	1		0	0	0	10	37	0	47
1969	3	2	17	0	0	0	10	0	0	10

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1969	3	2	18	0	0	0	9	0	0	9
1969	3	2	22	0	0	0	0	10	0	10
1969	3	2		0	0	0	19	10	0	29
1969	3	3	12	0	0	0	0	1	0	1
1969	3	3	23	0	0	0	1	0	0	1
1969	3	3	36	0	0	0	9	1	0	10
1969	3	3		0	0	0	10	2	0	12
1969	3	4	16	0	0	0	9	0	0	9
1969	3	4		0	0	0	9	0	0	9
1969	3			0	0	0	48	49	0	97
1969	4	1	43	0	0	0	0	6	0	6
1969	4	1		0	0	0	0	6	0	6
1969	4	2	4	0	0	0	0	6	0	6
1969	4	2		0	0	0	0	6	0	6
1969	4	3	13	0	0	0	0	2	0	2
1969	4	3	15	0	0	0	0	8	0	8
1969	4	3	19	0	0	0	0	5	0	5
1969	4	3		0	0	0	0	15	0	15
1969	4	4	24	0	0	0	0	7	0	7
1969	4	4	27	0	0	0	0	1	0	1
1969	4	4	40	0	0	0	0	6	0	6
1969	4	4	41	0	0	0	0	7	0	7
1969	4	4	42	0	0	0	0	6	0	6
1969	4	4		0	0	0	0	27	0	27
1969	4			0	0	0	0	54	0	54
1969	5	1	4	0	0	0	0	9	0	9
1969	5	1	5	0	0	0	0	7	0	7
1969	5	1	7	0	0	0	9	0	0	9
1969	5	1	31	0	0	0	9	0	0	9
1969	5	1	35	0	0	0	9	0	0	9
1969	5	1		0	0	0	27	16	0	43
1969	5	2	13	0	0	0	9	0	0	9
1969	5	2		0	0	0	9	0	0	9
1969	5	4	17	0	0	0	9	0	0	9

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1969	5	4	20	0	0	0	0	8	0	8
1969	5	4	21	0	0	0	9	0	0	9
1969	5	4	23	0	0	0	0	8	0	8
1969	5	4	33	0	0	0	10	0	0	10
1969	5	4	34	0	0	0	8	0	0	8
1969	5	4		0	0	0	36	16	0	52
1969	5	5	36	0	0	0	0	10	0	10
1969	5	5		0	0	0	0	10	0	10
1969	5			0	0	0	72	42	0	114
1969	6	1	1	0	0	0	0	10	0	10
1969	6	1	2	0	0	0	0	9	0	9
1969	6	1	3	0	0	0	0	2	0	2
1969	6	1	4	0	0	0	0	10	0	10
1969	6	1	5	0	0	0	0	10	0	10
1969	6	1	6	0	0	0	0	9	0	9
1969	6	1		0	0	0	0	50	0	50
1969	6	2	7	0	0	0	0	9	0	9
1969	6	2	8	0	0	0	0	9	0	9
1969	6	2	9	0	0	0	0	9	0	9
1969	6	2		0	0	0	0	27	0	27
1969	6			0	0	0	0	77	0	77
1969	7	1	7	0	1	0	0	4	4	9
1969	7	1	8	3	2	0	0	5	5	15
1969	7	1	9	0	8	0	0	0	3	11
1969	7	1		3	11	0	0	9	12	35
1969	7	2	1	0	0	0	7	0	0	7
1969	7	2	10	0	0	0	0	7	0	7
1969	7	2		0	0	0	7	7	0	14
1969	7	3	3	0	0	0	7	0	0	7
1969	7	3	4	0	0	0	0	7	0	7
1969	7	3	5	0	0	0	9	0	0	9
1969	7	3	6	0	0	0	0	7	0	7
1969	7	3		0	0	0	16	14	0	30
1969	7			3	11	0	23	30	12	79
1969				3	17	0	191	284	12	507
1970	1	1	1	0	2	0	0	0	0	2
1970	1	1	5	0	2	0	0	0	0	2
1970	1	1		0	6	0	0	0	0	6
1970	1			0	6	0	0	0	0	6
1970	2	1	31	0	0	0	4	0	0	4
1970	2	1		0	0	0	4	0	0	4
1970	2	2	28	0	0	0	0	4	0	4
1970	2	2	29	0	0	0	0	8	0	8
1970	2	2	32	0	0	0	8	0	0	8
1970	2	2		0	0	0	8	12	0	20
1970	2	3	8	0	0	0	5	0	0	5
1970	2	3		0	0	0	5	0	0	5
1970	2	5	17	0	1	0	0	0	0	1
1970	2	5	34	0	0	0	0	7	0	7
1970	2	5	64	0	0	0	1	0	0	1
1970	2	5	65	0	0	0	1	0	0	1
1970	2	5		0	1	0	2	7	0	10
1970	2	6	18	0	0	0	8	0	0	8
1970	2	6		0	0	0	8	0	0	8
1970	2	7	33	0	0	0	8	0	0	8
1970	2	7		0	0	0	8	0	0	8
1970	2			0	1	0	35	19	0	55
1970	3	1	2	0	0	0	0	7	0	7
1970	3	1	20	0	0	0	0	7	0	7
1970	3	1	21	0	0	0	0	7	0	7
1970	3	1	27	0	0	0	0	7	0	7
1970	3	1	28	0	0	0	8	0	0	8
1970	3	1		0	0	0	8	28	0	36
1970	3	2	5	0	0	0	1	0	0	1
1970	3	2	17	0	0	0	8	0	0	8
1970	3	2	18	0	0	0	7	0	0	7
1970	3	2	22	0	0	0	0	7	0	7
1970	3	2		0	0	0	16	7	0	23
1970	3	3	23	0	0	0	1	0	0	1

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1970	3	3	36	0	0	0	7	0	0	7
1970	3	3		0	0	0	8	0	0	8
1970	3	4	16	0	0	0	8	0	0	8
1970	3	4		0	0	0	8	0	0	8
1970	3			0	0	0	40	35	0	75
1970	5	1	4	0	0	0	0	4	0	4
1970	5	1	5	0	0	0	0	4	0	4
1970	5	1	7	0	0	0	4	0	0	4
1970	5	1	31	0	0	0	4	0	0	4
1970	5	1	35	0	0	0	4	0	0	4
1970	5	1		0	0	0	12	8	0	20
1970	5	2	13	0	0	0	4	0	0	4
1970	5	2		0	0	0	4	0	0	4
1970	5	4	17	0	0	0	4	0	0	4
1970	5	4	20	0	0	0	0	2	0	2
1970	5	4	21	0	0	0	4	0	0	4
1970	5	4	22	0	0	0	0	2	0	2
1970	5	4	23	0	0	0	0	4	0	4
1970	5	4	33	0	0	0	3	0	0	3
1970	5	4	34	0	0	0	5	0	0	5
1970	5	4		0	0	0	16	8	0	24
1970	5			0	0	0	32	16	0	48
1970	7	2	1	0	0	0	11	0	0	11
1970	7	2	2	0	0	0	0	10	0	10
1970	7	2		0	0	0	11	10	0	21
1970	7	3	3	0	0	0	11	0	0	11
1970	7	3	4	0	1	0	0	10	0	11
1970	7	3	5	0	0	0	11	0	0	11
1970	7	3	6	0	0	0	0	10	0	10
1970	7	3		0	1	0	22	20	0	43
1970	7			0	1	0	33	30	0	64
1970				0	8	0	140	100	0	248
1971	1	1	1	0	1	0	0	0	0	1
1971	1	1	3	0	0	0	1	0	0	1

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1971	1	1	5	0	2	0	0	0	0	2
1971	1	1	6	0	2	0	0	0	0	2
1971	1	1		0	5	0	1	0	0	6
1971	1			0	5	0	1	0	0	6
1971	2	1	31	0	0	0	2	0	0	2
1971	2	1		0	0	0	2	0	0	2
1971	2	2	28	0	0	0	0	6	0	6
1971	2	2	29	0	0	0	0	8	0	8
1971	2	2	32	0	0	0	8	0	0	8
1971	2	2		0	0	0	8	14	0	22
1971	2	3	8	0	0	0	3	0	0	3
1971	2	3		0	0	0	3	0	0	3
1971	2	5	34	0	1	0	0	7	0	8
1971	2	5		0	1	0	0	7	0	8
1971	2	6	18	0	0	0	8	0	0	8
1971	2	6		0	0	0	8	0	0	8
1971	2	7	33	0	0	0	8	0	0	8
1971	2	7		0	0	0	8	0	0	8
1971	2			0	1	0	29	21	0	51
1971	3	1	2	0	0	0	0	6	0	6
1971	3	1	20	0	0	0	0	8	0	8
1971	3	1	21	0	0	0	0	8	0	8
1971	3	1	27	0	0	0	0	7	0	7
1971	3	1	28	0	0	0	8	0	0	8
1971	3	1		0	0	0	8	29	0	37
1971	3	2	17	0	0	0	7	0	0	7
1971	3	2	18	0	0	0	8	0	0	8
1971	3	2	22	0	0	0	0	8	0	8
1971	3	2		0	0	0	15	8	0	23
1971	3	3	10	0	0	0	1	0	0	1
1971	3	3	36	0	0	0	7	0	0	7

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1971	3	3		0	0	0	8	0	0	8
1971	3	4	16	0	0	0	8	0	0	8
1971	3	4		0	0	0	8	0	0	8
1971	3			0	0	0	39	37	0	76
1971	5	1	4	0	0	0	0	4	0	4
1971	5	1	5	0	0	0	0	4	0	4
1971	5	1	6	0	0	0	4	0	0	4
1971	5	1	7	0	0	0	4	0	0	4
1971	5	1	31	0	0	0	4	0	0	4
1971	5	1		0	0	0	12	8	0	20
1971	5	2	13	0	0	0	4	0	0	4
1971	5	2		0	0	0	4	0	0	4
1971	5	4	17	0	0	0	4	0	0	4
1971	5	4	20	0	0	0	0	3	0	3
1971	5	4	21	0	0	0	4	0	0	4
1971	5	4	22	0	0	0	0	1	0	1
1971	5	4	23	0	0	0	0	4	0	4
1971	5	4	33	0	0	0	4	0	0	4
1971	5	4	34	0	0	0	4	0	0	4
1971	5	4		0	0	0	16	8	0	24
1971	5			0	0	0	32	16	0	48
1971	7	2	1	0	0	0	4	0	0	4
1971	7	2	2	0	1	0	0	3	0	4
1971	7	2		0	1	0	4	3	0	8
1971	7	3	3	0	0	0	4	0	0	4
1971	7	3	4	0	1	0	0	3	0	4
1971	7	3	5	0	0	0	4	0	0	4
1971	7	3	6	0	2	0	0	2	0	4
1971	7	3		0	3	0	8	5	0	16
1971	7			0	4	0	12	8	0	24
1971				0	10	0	113	82	0	205
1972	1	1	1	0	2	0	0	0	0	2
1972	1	1	2	0	2	0	0	0	0	2
1972	1	1	3	0	0	0	2	0	0	2

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1972	1	1	6	0	1	0	0	0	0	1
1972	1	1		0	5	0	2	0	0	7
1972	1			0	5	0	2	0	0	7
1972	2	1	2	0	2	9	0	0	0	11
1972	2	1	31	0	0	0	4	0	0	4
1972	2	1	36	0	6	11	0	0	0	17
1972	2	1	43	0	5	7	0	0	0	12
1972	2	1	49	0	1	0	0	0	0	1
1972	2	1	55	0	4	4	0	0	0	8
1972	2	1	57	0	1	3	0	0	0	4
1972	2	1	58	0	1	0	0	0	0	1
1972	2	1	59	0	1	0	0	0	0	1
1972	2	1	62	0	0	1	0	0	0	1
1972	2	1		0	21	35	4	0	0	60
1972	2	2	5	0	0	1	0	0	0	1
1972	2	2	7	0	1	4	0	0	0	5
1972	2	2	28	0	1	2	0	7	0	10
1972	2	2	29	0	0	0	0	7	0	7
1972	2	2	32	0	7	0	8	1	0	16
1972	2	2	61	0	0	1	0	0	0	1
1972	2	2	63	0	0	1	0	0	0	1
1972	2	2		0	9	9	8	15	0	41
1972	2	3	8	0	0	0	7	0	0	7
1972	2	3	9	0	1	4	0	0	0	5
1972	2	3	10	0	0	1	0	0	0	1
1972	2	3	11	0	0	2	0	0	0	2
1972	2	3	12	0	0	1	0	0	0	1
1972	2	3	38	0	1	6	0	0	0	7
1972	2	3	40	0	3	6	0	0	0	9
1972	2	3	41	0	0	5	0	0	0	5
1972	2	3		0	5	25	7	0	0	37
1972	2	4	42	0	0	1	0	0	0	1
1972	2	4	56	0	3	5	0	0	0	8
1972	2	4		0	3	6	0	0	0	9
1972	2	5	17	0	1	0	0	0	0	1
1972	2	5	34	0	7	0	0	9	0	16
1972	2	5		0	8	0	0	9	0	17
1972	2	6	18	0	0	0	8	0	0	8
1972	2	6	19	0	1	0	0	0	0	1
1972	2	6	20	0	6	0	0	0	0	6

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1972	2	6		0	7	0	8	0	0	15
1972	2	7	21	0	5	0	0	0	0	5
1972	2	7	23	0	7	1	0	0	0	8
1972	2	7	24	0	7	0	1	0	0	8
1972	2	7	33	0	6	0	8	0	0	14
1972	2	7	35	0	0	0	1	0	0	1
1972	2	7	46	0	4	0	0	0	0	4
1972	2	7	47	0	0	0	2	0	0	2
1972	2	7		0	29	1	12	0	0	42
1972	2			0	82	76	39	24	0	221
1972	3	1	2	0	3	2	0	5	0	10
1972	3	1	20	0	3	3	0	8	0	14
1972	3	1	21	0	0	0	0	7	0	7
1972	3	1	27	0	0	0	0	9	0	9
1972	3	1	28	0	6	0	8	0	0	14
1972	3	1	34	0	5	0	0	0	0	5
1972	3	1	37	0	1	0	0	0	0	1
1972	3	1		0	18	5	8	29	0	60
1972	3	2	8	0	6	0	0	0	0	6
1972	3	2	17	0	0	0	8	0	0	8
1972	3	2	18	0	0	0	8	0	0	8
1972	3	2	22	0	6	0	0	8	0	14
1972	3	2	32	0	3	3	0	0	0	6
1972	3	2		0	15	3	16	8	0	42
1972	3	3	10	0	0	0	2	0	0	2
1972	3	3	11	0	6	0	0	0	0	6
1972	3	3	12	0	0	1	0	3	0	4
1972	3	3	36	0	0	0	6	0	0	6
1972	3	3		0	6	1	8	3	0	18
1972	3	4	16	0	0	0	7	0	0	7
1972	3	4	19	0	4	3	0	0	0	7
1972	3	4	24	0	5	0	0	0	0	5
1972	3	4	33	0	6	0	0	0	0	6
1972	3	4		0	15	3	7	0	0	25
1972	3			0	54	12	39	40	0	145
1972	5	1	4	0	0	0	0	2	0	2
1972	5	1	5	0	0	0	0	2	1	3
1972	5	1	7	0	0	0	4	0	0	4
1972	5	1	31	0	0	0	4	0	0	4

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1972	5	1	32	0	0	0	0	4	6	10
1972	5	1		0	0	0	8	8	7	23
1972	5	2	13	0	0	0	4	0	0	4
1972	5	2		0	0	0	4	0	0	4
1972	5	4	17	0	0	0	0	0	2	2
1972	5	4	21	0	0	0	4	0	0	4
1972	5	4	22	0	0	0	0	2	1	3
1972	5	4	23	0	0	0	0	2	1	3
1972	5	4	27	0	0	0	0	0	1	1
1972	5	4	33	0	0	0	0	0	1	1
1972	5	4		0	0	0	4	4	6	14
1972	5	9	41	0	7	2	0	0	4	13
1972	5	9	42	0	8	2	0	0	5	15
1972	5	9	43	0	7	2	0	0	4	13
1972	5	9	44	0	7	2	0	0	4	13
1972	5	9		0	29	8	0	0	17	54
1972	5			0	29	8	16	12	30	95
1972	7	2	1	0	0	0	4	0	0	4
1972	7	2	2	0	4	0	0	0	0	4
1972	7	2		0	4	0	4	0	0	8
1972	7	3	3	0	0	0	4	0	0	4
1972	7	3	4	0	4	0	0	0	0	4
1972	7	3	5	0	0	0	4	0	0	4
1972	7	3	6	0	4	0	0	0	0	4
1972	7	3		0	8	0	8	0	0	16
1972	7			0	12	0	12	0	0	24
1972				0	182	96	108	76	30	492
1973	1	1	1	0	1	1	0	0	0	2
1973	1	1	2	0	1	0	0	0	0	1
1973	1	1	6	0	0	1	0	0	0	1
1973	1	1	7	0	1	0	0	0	0	1
1973	1	1	8	0	0	0	1	0	0	1
1973	1	1	9	0	0	1	0	0	0	1
1973	1	1		0	3	3	1	0	0	7

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1973	1			0	3	3	1	0	0	7
1973	2	1	1	0	0	1	0	0	0	1
1973	2	1	2	0	0	5	0	0	0	5
1973	2	1	36	0	0	9	0	0	0	9
1973	2	1	43	0	0	8	0	0	0	8
1973	2	1	49	0	0	1	0	0	0	1
1973	2	1		0	0	24	0	0	0	24
1973	2	2	7	0	0	3	0	1	0	4
1973	2	2	28	0	1	0	0	5	0	6
1973	2	2	29	0	2	6	0	6	0	14
1973	2	2	32	0	8	2	9	1	0	20
1973	2	2		0	11	11	9	13	0	44
1973	2	3	8	0	0	0	5	0	0	5
1973	2	3	10	0	0	2	0	0	0	2
1973	2	3	11	0	0	1	0	0	0	1
1973	2	3	12	0	0	1	0	0	0	1
1973	2	3	38	0	0	9	0	0	0	9
1973	2	3	39	0	0	2	0	0	0	2
1973	2	3	40	0	0	1	0	0	0	1
1973	2	3	41	0	0	5	0	0	0	5
1973	2	3		0	0	21	5	0	0	26
1973	2	4	42	0	0	8	0	0	0	8
1973	2	4		0	0	8	0	0	0	8
1973	2	5	17	0	7	0	0	7	0	14
1973	2	5		0	7	0	0	7	0	14
1973	2	6	18	0	0	0	7	0	0	7
1973	2	6	19	0	4	0	0	0	0	4
1973	2	6	20	0	2	0	0	0	0	2
1973	2	6		0	6	0	7	0	0	13
1973	2	7	21	0	2	0	0	0	0	2
1973	2	7	22	0	5	0	0	0	0	5
1973	2	7	23	0	9	0	0	0	0	9
1973	2	7	24	0	8	0	2	3	0	13
1973	2	7	25	0	0	0	0	1	0	1
1973	2	7	33	0	8	0	10	0	0	18
1973	2	7	46	0	1	0	0	0	0	1
1973	2	7	52	0	1	0	0	0	0	1
1973	2	7	53	0	0	1	0	0	0	1
1973	2	7	54	0	0	0	2	0	0	2

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1973	2	7		0	34	1	14	4	0	53
1973	2			0	58	65	35	24	0	182
1973	3	1	2	0	0	0	0	5	0	5
1973	3	1	20	0	1	1	0	8	0	10
1973	3	1	21	0	0	0	0	7	0	7
1973	3	1	27	0	0	0	0	7	0	7
1973	3	1	28	0	8	0	9	0	0	17
1973	3	1	30	0	0	1	0	2	0	3
1973	3	1	31	0	0	0	0	1	0	1
1973	3	1	34	0	1	0	0	0	0	1
1973	3	1	38	0	0	0	0	2	0	2
1973	3	1		0	10	2	9	32	0	53
1973	3	2	6	0	8	0	0	0	0	8
1973	3	2	17	0	0	0	9	0	0	9
1973	3	2	18	0	0	0	9	0	0	9
1973	3	2	22	0	0	0	0	8	0	8
1973	3	2		0	8	0	18	8	0	34
1973	3	3	10	0	0	0	9	0	0	9
1973	3	3	11	0	8	0	0	0	0	8
1973	3	3	12	0	0	0	0	4	0	4
1973	3	3		0	8	0	9	4	0	21
1973	3	4	16	0	0	0	8	0	0	8
1973	3	4	24	0	9	0	0	0	0	9
1973	3	4	33	0	6	0	0	0	0	6
1973	3	4		0	15	0	8	0	0	23
1973	3	5	26	0	5	0	0	0	0	5
1973	3	5		0	5	0	0	0	0	5
1973	3			0	46	2	44	44	0	136
1973	5	1	4	0	6	1	0	5	0	12
1973	5	1	5	0	6	1	0	5	0	12
1973	5	1	7	0	0	0	5	0	0	5
1973	5	1	31	0	0	0	5	0	0	5
1973	5	1		0	12	2	10	10	0	34
1973	5	2	13	0	0	0	5	0	0	5
1973	5	2		0	0	0	5	0	0	5
1973	5	4	17	0	0	8	0	0	0	8

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1973	5	4	19	0	0	8	0	1	0	9
1973	5	4	20	0	0	8	0	0	0	8
1973	5	4	21	0	0	0	5	0	0	5
1973	5	4	22	0	0	0	0	5	0	5
1973	5	4	23	0	0	0	0	5	0	5
1973	5	4	27	0	0	8	0	0	0	8
1973	5	4		0	0	32	5	11	0	48
1973	5			0	12	34	20	21	0	87
1973	7	2	1	0	0	0	4	0	0	4
1973	7	2	2	0	0	0	0	4	0	4
1973	7	2		0	0	0	4	4	0	8
1973	7	3	3	0	0	0	4	0	0	4
1973	7	3	4	0	0	0	0	4	0	4
1973	7	3	5	0	0	0	4	0	0	4
1973	7	3	6	0	0	0	0	4	0	4
1973	7	3		0	0	0	8	8	0	16
1973	7			0	0	0	12	12	0	24
1973				0	119	104	112	101	0	436
1974	1	1	1	0	2	0	0	0	0	2
1974	1	1	2	0	1	1	0	0	0	2
1974	1	1	3	0	1	0	1	0	0	2
1974	1	1	4	0	1	0	0	0	0	1
1974	1	1		0	5	1	1	0	0	7
1974	1			0	5	1	1	0	0	7
1974	2	1	1	0	0	1	0	0	0	1
1974	2	1	2	0	2	7	0	0	0	9
1974	2	1	31	0	0	0	4	0	0	4
1974	2	1	36	0	1	6	0	0	0	7
1974	2	1	43	0	2	8	0	0	0	10
1974	2	1	45	0	0	7	0	0	0	7
1974	2	1		0	5	29	4	0	0	38
1974	2	2	5	0	0	1	0	0	0	1
1974	2	2	28	0	1	3	0	5	0	9
1974	2	2	29	0	2	7	0	4	0	13
1974	2	2	32	0	7	0	12	0	0	19
1974	2	2		0	10	11	12	9	0	42
1974	2	3	8	0	0	0	2	0	0	2

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1974	2	3	9	0	1	0	2	0	0	3
1974	2	3	10	0	0	5	1	0	0	6
1974	2	3	11	0	0	1	0	0	0	1
1974	2	3	12	0	0	0	0	1	0	1
1974	2	3	38	0	1	8	0	0	0	9
1974	2	3	40	0	1	6	0	0	0	7
1974	2	3	41	0	1	1	0	0	0	2
1974	2	3		0	4	21	5	1	0	31
1974	2	4	42	0	0	7	0	0	0	7
1974	2	4	56	0	0	0	0	1	0	1
1974	2	4		0	0	7	0	1	0	8
1974	2	5	17	0	7	3	0	2	0	12
1974	2	5	34	0	0	0	0	5	0	5
1974	2	5		0	7	3	0	7	0	17
1974	2	6	18	0	0	0	11	0	0	11
1974	2	6	19	0	4	0	0	0	0	4
1974	2	6	20	0	4	0	0	0	0	4
1974	2	6		0	8	0	11	0	0	19
1974	2	7	22	0	4	0	0	0	0	4
1974	2	7	23	0	8	0	0	0	0	8
1974	2	7	24	0	10	0	0	3	0	13
1974	2	7	33	0	7	0	11	1	0	19
1974	2	7	35	0	0	0	3	1	0	4
1974	2	7		0	29	0	14	5	0	48
1974	2			0	63	71	46	23	0	203
1974	3	1	20	0	0	6	2	4	0	12
1974	3	1	21	0	0	0	2	4	0	6
1974	3	1	27	0	0	0	1	2	0	3
1974	3	1	28	0	0	0	9	0	0	9
1974	3	1	30	0	0	4	0	0	0	4
1974	3	1		0	0	10	14	10	0	34
1974	3	2	7	0	8	0	0	0	0	8
1974	3	2	17	0	0	0	9	0	0	9
1974	3	2	18	0	0	0	8	0	0	8
1974	3	2	22	0	0	0	1	4	0	5
1974	3	2	32	0	0	3	0	0	0	3
1974	3	2		0	8	3	18	4	0	33
1974	3	3	10	0	0	0	10	2	0	12

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1974	3	3	11	0	8	0	0	0	0	8
1974	3	3	12	0	0	1	0	0	0	1
1974	3	3		0	8	1	10	2	0	21
1974	3	4	13	0	2	4	0	0	0	6
1974	3	4	14	0	0	1	0	0	0	1
1974	3	4	16	0	0	0	9	0	0	9
1974	3	4	24	0	6	0	0	0	0	6
1974	3	4		0	8	5	9	0	0	22
1974	3	5	26	0	8	0	0	0	0	8
1974	3	5		0	8	0	0	0	0	8
1974	3			0	32	19	51	16	0	118
1974	5	1	4	0	5	0	0	6	0	11
1974	5	1	5	0	5	1	0	7	0	13
1974	5	1	7	0	0	0	9	1	0	10
1974	5	1	31	0	0	0	9	0	0	9
1974	5	1		0	10	1	18	14	0	43
1974	5	2	13	0	0	0	9	0	0	9
1974	5	2		0	0	0	9	0	0	9
1974	5	4	17	0	0	5	0	0	0	5
1974	5	4	19	0	0	6	0	0	0	6
1974	5	4	20	0	0	6	0	0	0	6
1974	5	4	21	0	0	0	9	0	0	9
1974	5	4	22	0	0	0	0	7	0	7
1974	5	4	23	0	0	0	0	7	0	7
1974	5	4	27	0	0	6	0	0	0	6
1974	5	4		0	0	23	9	14	0	46
1974	5			0	10	24	36	28	0	98
1974	7	2	1	0	0	0	5	0	0	5
1974	7	2	2	0	0	0	0	5	0	5
1974	7	2		0	0	0	5	5	0	10
1974	7	3	3	0	0	0	4	0	0	4
1974	7	3	4	0	0	0	0	4	0	4
1974	7	3	5	0	0	0	5	0	0	5
1974	7	3	6	0	0	0	0	6	0	6
1974	7	3		0	0	0	9	10	0	19
1974	7			0	0	110	115	148	82	0	455
1975	1	1	1	0	1	0	0	2	0	3
1975	1	1	2	0	1	0	0	1	0	2
1975	1	1	3	0	0	0	2	0	0	2
1975	1	1	4	0	0	0	0	1	0	1
1975	1	1	5	0	0	0	0	1	0	1
1975	1	1		0	2	0	2	5	0	9
1975	1			0	2	0	2	5	0	9
1975	2	1	2	0	0	9	0	0	0	9
1975	2	1	31	0	0	1	8	0	0	9
1975	2	1	36	0	0	6	0	0	0	6
1975	2	1	43	0	0	6	0	0	0	6
1975	2	1	44	0	0	1	0	0	0	1
1975	2	1	45	0	0	1	0	0	0	1
1975	2	1		0	0	24	8	0	0	32
1975	2	2	28	0	2	5	0	5	0	12
1975	2	2	29	0	0	7	0	7	0	14
1975	2	2	32	4	6	0	9	0	0	19
1975	2	2		4	8	12	9	12	0	45
1975	2	3	8	0	0	0	8	0	0	8
1975	2	3	10	0	0	6	0	0	0	6
1975	2	3	11	0	0	1	0	0	0	1
1975	2	3	38	0	0	7	0	0	0	7
1975	2	3	39	0	0	1	0	0	0	1
1975	2	3	40	0	0	3	0	0	0	3
1975	2	3	41	0	0	3	0	0	0	3
1975	2	3		0	0	21	8	0	0	29
1975	2	4	13	0	1	5	0	1	0	7
1975	2	4	37	0	0	1	0	0	0	1
1975	2	4		0	1	6	0	1	0	8
1975	2	5	16	0	1	0	0	0	0	1
1975	2	5	17	0	9	0	0	0	0	9
1975	2	5	34	0	0	0	0	8	0	8
1975	2	5		0	10	0	0	8	0	18
1975	2	6	18	5	0	0	9	0	0	14
1975	2	6	19	0	6	0	0	0	0	6

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1975	2	6	20	0	4	0	0	0	0	4
1975	2	6		5	10	0	9	0	0	24
1975	2	7	21	0	1	0	0	0	0	1
1975	2	7	22	0	5	0	0	0	0	5
1975	2	7	23	0	8	0	0	0	0	8
1975	2	7	24	0	11	0	1	0	0	12
1975	2	7	33	5	7	0	9	0	0	21
1975	2	7	35	0	0	0	2	0	0	2
1975	2	7		5	32	0	12	0	0	49
1975	2			14	61	63	46	21	0	205
1975	3	1	2	0	0	6	0	4	0	10
1975	3	1	3	0	0	3	0	0	0	3
1975	3	1	20	0	0	6	0	5	0	11
1975	3	1	21	0	0	1	0	5	0	6
1975	3	1	27	0	0	0	0	3	0	3
1975	3	1	28	0	0	0	8	0	0	8
1975	3	1	30	0	0	4	0	0	0	4
1975	3	1		0	0	20	8	17	0	45
1975	3	2	7	0	7	0	0	0	0	7
1975	3	2	8	0	0	3	0	0	0	3
1975	3	2	9	0	0	1	0	0	0	1
1975	3	2	17	0	0	0	8	0	0	8
1975	3	2	18	0	0	0	8	0	0	8
1975	3	2	22	0	0	3	0	5	0	8
1975	3	2		0	7	7	16	5	0	35
1975	3	3	10	0	0	0	7	0	0	7
1975	3	3	12	0	7	0	1	0	0	8
1975	3	3	23	0	1	0	0	0	0	1
1975	3	3		0	8	0	8	0	0	16
1975	3	4	16	0	0	0	8	0	0	8
1975	3	4	24	0	8	0	0	0	0	8
1975	3	4		0	8	0	8	0	0	16
1975	3	5	26	0	8	0	0	0	0	8
1975	3	5		0	8	0	0	0	0	8
1975	3			0	31	27	40	22	0	120
1975	5	1	4	0	10	0	0	7	0	17
1975	5	1	5	0	10	0	0	7	0	17

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1975	5	1	7	0	0	0	9	0	0	9
1975	5	1	31	0	0	0	8	0	0	8
1975	5	1		0	20	0	17	14	0	51
1975	5	2	13	0	0	0	9	0	0	9
1975	5	2		0	0	0	9	0	0	9
1975	5	4	17	0	0	9	0	0	0	9
1975	5	4	19	0	0	9	0	0	0	9
1975	5	4	20	0	0	9	0	0	0	9
1975	5	4	21	0	0	0	9	0	0	9
1975	5	4	22	0	0	0	0	8	0	8
1975	5	4	23	0	0	0	0	8	0	8
1975	5	4	27	0	0	9	0	0	0	9
1975	5	4		0	0	36	9	16	0	61
1975	5			0	20	36	35	30	0	121
1975	7	2	1	0	0	0	5	0	0	5
1975	7	2	2	0	0	0	0	5	0	5
1975	7	2		0	0	0	5	5	0	10
1975	7	3	3	0	0	0	5	0	0	5
1975	7	3	4	0	4	0	0	1	0	5
1975	7	3	5	0	0	0	5	0	0	5
1975	7	3	6	0	3	0	0	2	0	5
1975	7	3		0	7	0	10	3	0	20
1975	7			0	7	0	15	8	0	30
1975				14	121	126	138	86	0	485
1976	2	1	1	0	0	1	0	0	0	1
1976	2	1	2	0	0	10	0	0	0	10
1976	2	1	31	0	0	0	9	0	0	9
1976	2	1	36	0	0	8	0	0	0	8
1976	2	1	43	0	0	9	0	0	0	9
1976	2	1		0	0	28	9	0	0	37
1976	2	2	28	0	0	10	0	8	0	18
1976	2	2	29	0	0	10	0	9	0	19
1976	2	2	32	5	12	0	9	0	0	26
1976	2	2		5	12	20	9	17	0	63
1976	2	3	8	1	0	0	9	0	0	10

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1976	2	3	10	0	0	9	0	0	0	9
1976	2	3	38	0	0	9	0	0	0	9
1976	2	3	40	0	0	6	0	0	0	6
1976	2	3	41	0	0	3	0	0	0	3
1976	2	3		1	0	27	9	0	0	37
1976	2	4	42	0	0	9	0	0	0	9
1976	2	4		0	0	9	0	0	0	9
1976	2	5	16	0	9	0	0	0	0	9
1976	2	5	34	0	0	0	0	9	0	9
1976	2	5		0	9	0	0	9	0	18
1976	2	6	18	5	0	0	8	0	0	13
1976	2	6	19	0	10	0	0	0	0	10
1976	2	6		5	10	0	8	0	0	23
1976	2	7	21	0	8	0	0	0	0	8
1976	2	7	22	0	1	0	0	0	0	1
1976	2	7	23	0	9	0	0	0	0	9
1976	2	7	24	0	9	0	0	0	0	9
1976	2	7	33	5	9	0	9	0	0	23
1976	2	7		5	36	0	9	0	0	50
1976	2			16	67	84	44	26	0	237
1976	3	1	2	0	0	9	0	0	0	9
1976	3	1	20	0	0	9	0	8	0	17
1976	3	1	21	0	0	8	0	9	0	17
1976	3	1	22	0	0	0	0	2	0	2
1976	3	1	27	0	0	0	0	5	0	5
1976	3	1	28	0	0	0	9	0	0	9
1976	3	1	29	0	1	0	0	0	0	1
1976	3	1	30	0	0	10	0	0	0	10
1976	3	1	31	0	0	8	0	0	0	8
1976	3	1		0	1	44	9	24	0	78
1976	3	2	5	0	0	0	2	0	0	2
1976	3	2	7	0	9	0	0	0	0	9
1976	3	2	9	0	0	0	0	4	0	4
1976	3	2	17	0	0	0	9	0	0	9
1976	3	2	18	0	0	0	7	0	0	7
1976	3	2	22	0	0	0	0	1	0	1
1976	3	2		0	9	0	18	5	0	32
1976	3	3	10	0	0	0	4	0	0	4

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1976	3	3	12	0	2	0	0	9	0	11
1976	3	3	23	0	7	0	5	0	0	12
1976	3	3		0	9	0	9	9	0	27
1976	3	4	16	0	0	0	9	0	0	9
1976	3	4	24	0	9	0	0	0	0	9
1976	3	4		0	9	0	9	0	0	18
1976	3	5	26	0	9	0	0	0	0	9
1976	3	5		0	9	0	0	0	0	9
1976	3			0	37	44	45	38	0	164
1976	5	1	4	0	6	0	0	8	0	14
1976	5	1	5	0	6	0	0	8	0	14
1976	5	1	7	0	0	0	9	0	0	9
1976	5	1	21	0	0	1	0	0	0	1
1976	5	1	31	0	0	0	9	0	0	9
1976	5	1		0	12	1	18	16	0	47
1976	5	2	13	0	0	0	9	0	0	9
1976	5	2		0	0	0	9	0	0	9
1976	5	4	17	0	0	6	0	0	0	6
1976	5	4	19	0	0	6	0	0	0	6
1976	5	4	20	0	0	6	0	0	0	6
1976	5	4	21	0	0	0	9	0	0	9
1976	5	4	22	0	0	0	0	8	0	8
1976	5	4	23	0	0	0	0	8	0	8
1976	5	4	27	0	0	6	0	0	0	6
1976	5	4		0	0	24	9	16	0	49
1976	5			0	12	25	36	32	0	105
1976	7	2	1	0	0	0	6	0	0	6
1976	7	2	2	0	0	0	0	6	0	6
1976	7	2		0	0	0	6	6	0	12
1976	7	3	3	0	0	0	6	0	0	6
1976	7	3	4	0	0	0	0	6	0	6
1976	7	3	5	0	0	0	5	1	0	6
1976	7	3	6	0	0	0	1	5	0	6
1976	7	3		0	0	0	12	12	0	24

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1976	7			0	0	0	18	18	0	36
1976				16	116	153	143	114	0	542
1977	2	1	1	0	0	14	0	0	0	14
1977	2	1	2	0	0	7	0	0	0	7
1977	2	1	31	0	0	0	9	0	0	9
1977	2	1		0	0	21	9	0	0	30
1977	2	2	5	0	0	14	0	0	0	14
1977	2	2	6	0	0	7	0	0	0	7
1977	2	2	28	0	0	0	0	8	0	8
1977	2	2	29	0	0	0	0	8	0	8
1977	2	2	32	5	0	0	9	0	0	14
1977	2	2		5	0	21	9	16	0	51
1977	2	3	8	14	0	0	9	0	0	23
1977	2	3	9	0	14	0	0	0	0	14
1977	2	3	10	0	0	14	0	0	0	14
1977	2	3	11	0	0	14	0	0	0	14
1977	2	3	12	0	0	8	0	0	0	8
1977	2	3		14	14	36	9	0	0	73
1977	2	4	13	0	0	8	0	0	0	8
1977	2	4	14	0	0	7	0	0	0	7
1977	2	4		0	0	15	0	0	0	15
1977	2	5	15	14	0	0	0	0	0	14
1977	2	5	16	0	14	0	0	0	0	14
1977	2	5	17	0	0	14	0	0	0	14
1977	2	5	34	0	0	0	0	8	0	8
1977	2	5		14	14	14	0	8	0	50
1977	2	6	18	19	0	0	9	0	0	28
1977	2	6	19	0	14	0	0	0	0	14
1977	2	6	20	0	0	14	0	0	0	14
1977	2	6		19	14	14	9	0	0	56
1977	2	7	21	0	0	6	0	0	0	6
1977	2	7	22	0	0	6	0	0	0	6
1977	2	7	23	0	0	6	0	0	0	6
1977	2	7	24	0	0	6	0	0	0	6
1977	2	7	33	5	0	0	9	0	0	14
1977	2	7		5	0	24	9	0	0	38

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1977	2			57	42	145	45	24	0	313
1977	3	1	1	0	0	4	0	0	0	4
1977	3	1	2	0	0	4	0	0	0	4
1977	3	1	3	0	0	3	0	0	0	3
1977	3	1	20	0	7	0	0	0	0	7
1977	3	1	21	0	7	0	0	0	0	7
1977	3	1		0	14	11	0	0	0	25
1977	3	2	4	10	0	0	0	0	0	10
1977	3	2	5	10	0	0	0	0	0	10
1977	3	2	6	0	13	0	0	0	0	13
1977	3	2	7	0	17	0	0	0	0	17
1977	3	2	8	0	0	10	0	0	0	10
1977	3	2	9	0	0	10	0	0	0	10
1977	3	2	17	0	4	0	8	0	0	12
1977	3	2	18	0	0	0	8	0	0	8
1977	3	2		20	34	20	16	0	0	90
1977	3	3	10	10	0	0	1	0	0	11
1977	3	3	11	0	9	0	0	0	0	9
1977	3	3	12	0	0	9	0	0	0	9
1977	3	3	23	0	0	0	7	0	0	7
1977	3	3		10	9	9	8	0	0	36
1977	3	4	13	1	0	3	0	0	0	4
1977	3	4	14	0	0	4	0	0	0	4
1977	3	4	15	0	0	4	0	0	0	4
1977	3	4	16	0	0	0	8	0	0	8
1977	3	4		1	0	11	8	0	0	20
1977	3			31	57	51	32	0	0	171
1977	4	1	7	8	8	8	0	0	0	24
1977	4	1		8	8	8	0	0	0	24
1977	4	2	1	9	1	0	0	0	0	10
1977	4	2	3	0	7	8	0	0	0	15
1977	4	2	17	8	8	8	0	0	0	24
1977	4	2		17	16	16	0	0	0	49
1977	4	3	13	1	0	8	0	0	0	9
1977	4	3	14	0	0	8	0	0	0	8
1977	4	3	15	0	0	8	0	0	0	8
1977	4	3		1	0	24	0	0	0	25
1977	4	4	22	0	0	8	0	0	0	8

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1977	4	4	23	0	0	8	0	0	0	8
1977	4	4	24	0	0	8	0	0	0	8
1977	4	4		0	0	24	0	0	0	24
1977	4	7	39	0	0	8	0	0	0	8
1977	4	7		0	0	8	0	0	0	8
1977	4			26	24	80	0	0	0	130
1977	5	1	1	14	0	0	0	0	0	14
1977	5	1	2	0	13	0	0	0	0	13
1977	5	1	3	0	0	9	0	7	0	16
1977	5	1	4	0	0	8	0	6	0	14
1977	5	1	5	0	0	8	0	7	0	15
1977	5	1	7	0	0	0	8	0	0	8
1977	5	1	31	0	0	0	8	0	0	8
1977	5	1		14	13	25	16	20	0	88
1977	5	2	10	14	0	0	0	0	0	14
1977	5	2	11	0	13	0	0	1	0	14
1977	5	2	12	0	0	9	0	0	0	9
1977	5	2	13	0	0	0	8	0	0	8
1977	5	2	30	0	0	0	0	5	0	5
1977	5	2		14	13	9	8	6	0	50
1977	5	3	14	9	0	0	0	0	0	9
1977	5	3	15	0	8	0	0	0	0	8
1977	5	3		9	8	0	0	0	0	17
1977	5	4	17	0	0	7	0	0	0	7
1977	5	4	18	0	0	8	0	0	0	8
1977	5	4	19	0	0	8	0	0	0	8
1977	5	4	20	0	0	6	0	1	0	7
1977	5	4	21	0	0	0	8	0	0	8
1977	5	4	22	0	0	0	0	7	0	7
1977	5	4	23	0	0	0	0	7	0	7
1977	5	4		0	0	29	8	15	0	52
1977	5			37	34	63	32	41	0	207
1977	7	2	1	0	0	0	6	0	0	6
1977	7	2	2	0	0	0	0	6	0	6
1977	7	2		0	0	0	6	6	0	12
1977	7	3	3	0	0	0	6	0	0	6
1977	7	3	4	0	0	0	0	6	0	6
1977	7	3	5	0	0	0	6	0	0	6
1977	7	3	6	0	0	0	0	6	0	6
1977	7	3		0	0	0	12	12	0	24
1977	7			0	0	0	18	18	0	36
1977				151	157	339	127	83	0	857
1978	2	1	1	0	0	18	0	0	0	18
1978	2	1	2	0	0	18	0	0	0	18
1978	2	1	31	0	0	0	10	0	0	10
1978	2	1		0	0	36	10	0	0	46
1978	2	2	5	0	0	17	0	0	0	17
1978	2	2	6	0	0	17	0	0	0	17
1978	2	2	28	0	0	0	0	9	0	9
1978	2	2	29	0	0	0	0	9	0	9
1978	2	2	32	5	0	0	10	0	0	15
1978	2	2		5	0	34	10	18	0	67
1978	2	3	8	14	0	0	10	0	0	24
1978	2	3	9	0	14	0	0	0	0	14
1978	2	3	10	0	0	18	0	0	0	18
1978	2	3	11	0	0	18	0	0	0	18
1978	2	3	12	0	0	18	0	0	0	18
1978	2	3		14	14	54	10	0	0	92
1978	2	4	13	0	0	17	0	0	0	17
1978	2	4	14	0	0	17	0	0	0	17
1978	2	4		0	0	34	0	0	0	34
1978	2	5	15	15	0	0	0	0	0	15
1978	2	5	16	0	16	0	0	0	0	16
1978	2	5	17	0	0	18	0	0	0	18
1978	2	5	34	0	0	0	0	9	0	9
1978	2	5		15	16	18	0	9	0	58
1978	2	6	18	19	0	0	10	0	0	29
1978	2	6	19	0	17	0	0	0	0	17
1978	2	6	20	0	0	17	0	0	0	17
1978	2	6		19	17	17	10	0	0	63
1978	2	7	21	0	0	18	0	0	0	18
1978	2	7	22	0	0	18	0	0	0	18
1978	2	7	23	0	0	18	0	0	0	18

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1978	2	7	24	0	0	18	0	0	0	18
1978	2	7	33	5	0	0	10	0	0	15
1978	2	7		5	0	72	10	0	0	87
1978	2			58	47	265	50	27	0	447
1978	3	1	1	0	0	9	0	0	0	9
1978	3	1	2	0	0	9	0	0	0	9
1978	3	1	3	0	0	8	0	0	0	8
1978	3	1		0	0	26	0	0	0	26
1978	3	2	4	7	0	0	0	0	0	7
1978	3	2	5	7	0	0	0	0	0	7
1978	3	2	6	0	10	0	0	0	0	10
1978	3	2	7	0	7	0	0	0	0	7
1978	3	2	8	0	0	9	0	8	0	17
1978	3	2	9	0	0	9	0	8	0	17
1978	3	2	17	0	0	0	10	0	0	10
1978	3	2	18	0	0	0	9	0	0	9
1978	3	2		14	17	18	19	16	0	84
1978	3	3	10	7	0	0	10	0	0	17
1978	3	3	11	0	7	0	0	0	0	7
1978	3	3	12	0	0	9	0	8	0	17
1978	3	3		7	7	9	10	8	0	41
1978	3	4	13	0	0	9	0	0	0	9
1978	3	4	14	0	0	9	0	0	0	9
1978	3	4	15	0	0	9	0	0	0	9
1978	3	4	16	0	0	0	10	0	0	10
1978	3	4	24	0	0	0	0	8	0	8
1978	3	4		0	0	27	10	8	0	45
1978	3			21	24	80	39	32	0	196
1978	4	1	7	8	8	17	0	0	0	33
1978	4	1	8	1	1	0	0	0	0	2
1978	4	1		9	9	17	0	0	0	35
1978	4	2	1	12	0	12	0	0	0	24
1978	4	2	2	0	0	0	10	8	0	18
1978	4	2	3	0	12	0	0	0	0	12
1978	4	2	5	0	0	5	0	0	0	5
1978	4	2	6	0	0	5	0	0	0	5
1978	4	2	17	12	12	12	0	0	0	36

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1978	4	2		24	24	34	10	8	0	100
1978	4	3	10	0	0	0	10	0	0	10
1978	4	3	11	0	1	0	0	7	0	8
1978	4	3	12	0	0	0	0	8	0	8
1978	4	3	13	0	0	17	0	0	0	17
1978	4	3	14	0	0	17	0	0	0	17
1978	4	3	15	0	0	17	0	0	0	17
1978	4	3	16	0	0	0	10	0	0	10
1978	4	3	18	0	0	0	10	0	0	10
1978	4	3	19	0	0	0	0	8	0	8
1978	4	3		0	1	51	30	23	0	105
1978	4	4	20	0	0	1	0	0	0	1
1978	4	4	22	0	0	17	0	0	0	17
1978	4	4	23	0	0	17	0	0	0	17
1978	4	4	24	0	0	17	0	0	0	17
1978	4	4		0	0	52	0	0	0	52
1978	4	7	34	0	0	5	0	0	0	5
1978	4	7	39	0	0	12	0	0	0	12
1978	4	7		0	0	17	0	0	0	17
1978	4			33	34	171	40	31	0	309
1978	5	1	1	14	0	0	0	0	0	14
1978	5	1	2	0	14	0	0	0	0	14
1978	5	1	3	0	0	17	0	0	0	17
1978	5	1	4	0	0	17	0	9	0	26
1978	5	1	5	0	0	18	0	9	0	27
1978	5	1	6	0	0	6	0	0	0	6
1978	5	1	7	0	0	0	11	0	0	11
1978	5	1	31	0	0	0	11	0	*0	11
1978	5	1		14	14	58	22	18	0	126
1978	5	2	10	14	0	0	0	0	0	14
1978	5	2	11	0	14	0	0	0	0	14
1978	5	2	12	0	0	18	0	0	0	18
1978	5	2	13	0	0	0	11	0	0	11
1978	5	2		14	14	18	11	0	0	57
1978	5	3	14	14	0	0	0	0	0	14
1978	5	3	15	0	14	0	0	0	0	14
1978	5	3	16	0	0	6	0	0	0	6
1978	5	3		14	14	6	0	0	0	34
1978	5	4	17	0	0	18	0	0	0	18

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1978	5	4	18	0	0	18	0	0	0	18
1978	5	4	19	0	0	18	0	0	0	18
1978	5	4	20	0	0	17	0	9	0	26
1978	5	4	21	0	0	0	11	0	0	11
1978	5	4	23	0	0	0	0	9	0	9
1978	5	4		0	0	71	11	18	0	100
1978	5	5	24	6	0	0	0	0	0	6
1978	5	5	25	0	0	6	0	0	0	6
1978	5	5		6	0	6	0	0	0	12
1978	5			48	42	159	44	36	0	329
1978	7	2	1	0	0	0	6	0	0	6
1978	7	2	2	0	0	0	0	6	0	6
1978	7	2		0	0	0	6	6	0	12
1978	7	3	3	0	0	0	6	0	0	6
1978	7	3	4	0	0	0	0	6	0	6
1978	7	3	5	0	0	0	6	0	0	6
1978	7	3	6	0	0	0	0	5	0	5
1978	7	3		0	0	0	12	11	0	23
1978	7			0	0	0	18	17	0	35
1978				160	147	675	191	143	0	1316
1979	2	1	1	0	0	18	0	0	0	18
1979	2	1	2	0	0	18	0	0	0	18
1979	2	1	3	0	0	5	0	0	0	5
1979	2	1	31	0	0	0	9	0	0	9
1979	2	1		0	0	41	9	0	0	50
1979	2	2	5	0	0	18	0	0	0	18
1979	2	2	6	0	0	18	0	0	0	18
1979	2	2	7	0	0	5	0	0	0	5
1979	2	2	28	0	0	0	0	9	0	9
1979	2	2	29	0	0	0	0	9	0	9
1979	2	2	32	5	0	0	9	0	0	14
1979	2	2		5	0	41	9	18	0	73
1979	2	3	8	14	0	0	8	0	0	22
1979	2	3	9	0	14	0	0	0	0	14
1979	2	3	10	0	0	18	0	0	0	18
1979	2	3	11	0	0	18	0	0	0	18
1979	2	3	12	0	0	18	0	0	0	18

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1979	2	3		14	14	54	8	0	0	90
1979	2	4	13	0	0	18	0	0	0	18
1979	2	4	14	0	0	18	0	0	0	18
1979	2	4		0	0	36	0	0	0	36
1979	2	5	15	14	0	0	0	0	0	14
1979	2	5	16	0	14	0	0	0	0	14
1979	2	5	17	0	0	18	0	0	0	18
1979	2	5	34	0	0	0	0	9	0	9
1979	2	5		14	14	18	0	9	0	55
1979	2	6	18	19	0	0	9	0	0	28
1979	2	6	19	0	13	1	0	0	0	14
1979	2	6	20	0	0	18	0	0	0	18
1979	2	6		19	13	19	9	0	0	60
1979	2	7	21	0	0	18	0	0	0	18
1979	2	7	22	0	0	18	0	0	0	18
1979	2	7	23	0	0	18	0	0	0	18
1979	2	7	24	0	0	18	0	0	0	18
1979	2	7	25	0	0	5	0	0	0	5
1979	2	7	33	5	0	0	9	0	0	14
1979	2	7		5	0	77	9	0	0	91
1979	2			57	41	286	44	27	0	455
1979	3	1	1	0	0	11	0	0	0	11
1979	3	1	2	0	0	11	0	0	0	11
1979	3	1	3	0	0	11	0	0	0	11
1979	3	1		0	0	33	0	0	0	33
1979	3	2	4	7	0	0	0	0	0	7
1979	3	2	5	7	0	0	0	0	0	7
1979	3	2	6	0	7	0	0	0	0	7
1979	3	2	7	0	7	0	0	0	0	7
1979	3	2	8	0	0	11	0	9	0	20
1979	3	2	9	0	0	11	0	9	0	20
1979	3	2	17	0	0	0	8	0	0	8
1979	3	2	18	0	0	0	10	0	0	10
1979	3	2		14	14	22	18	18	0	86
1979	3	3	10	7	0	0	9	0	0	16
1979	3	3	11	0	7	0	0	1	0	8
1979	3	3	12	0	0	11	0	8	0	19

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1979	3	3		7	7	11	9	9	0	43
1979	3	4	13	0	0	11	0	0	0	11
1979	3	4	14	0	0	11	0	0	0	11
1979	3	4	15	0	0	11	0	0	0	11
1979	3	4	16	0	0	0	9	0	0	9
1979	3	4	19	0	0	0	0	9	0	9
1979	3	4		0	0	33	9	9	0	51
1979	3			21	21	99	36	36	0	213
1979	4	1	7	6	6	15	0	0	0	27
1979	4	1	8	6	8	0	0	0	0	14
1979	4	1		12	14	15	0	0	0	41
1979	4	2	1	11	0	0	0	0	0	11
1979	4	2	2	6	0	0	9	0	0	15
1979	4	2	3	0	13	0	0	0	0	13
1979	4	2	4	0	6	0	0	9	0	15
1979	4	2	5	0	0	16	0	0	0	16
1979	4	2	6	0	0	16	0	0	0	16
1979	4	2	17	10	10	0	0	0	0	20
1979	4	2		27	29	32	9	9	0	106
1979	4	3	9	5	0	0	0	0	0	5
1979	4	3	10	6	0	0	0	0	0	6
1979	4	3	11	0	5	0	0	7	0	12
1979	4	3	12	0	6	1	0	6	0	13
1979	4	3	13	0	0	16	0	0	0	16
1979	4	3	14	0	0	15	0	0	0	15
1979	4	3	15	0	0	16	0	0	0	16
1979	4	3	16	2	0	0	9	0	0	11
1979	4	3	17	0	0	0	9	0	0	9
1979	4	3	18	1	1	0	9	1	0	12
1979	4	3	19	0	0	0	0	9	0	9
1979	4	3	20	0	0	0	0	3	0	3
1979	4	3	21	0	0	0	0	1	0	1
1979	4	3		14	12	48	27	27	0	128
1979	4	4	22	0	0	16	0	0	0	16
1979	4	4	23	0	0	16	0	0	0	16
1979	4	4	24	0	0	16	0	0	0	16
1979	4	4		0	0	48	0	0	0	48
1979	4	5	25	6	1	0	0	0	0	7
1979	4	5	26	0	5	0	0	0	0	5

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1979	4	5		6	6	0	0	0	0	12
1979	4	6	27	6	0	0	0	0	0	6
1979	4	6	28	6	0	0	0	0	0	6
1979	4	6	29	0	6	0	0	0	0	6
1979	4	6	30	0	6	0	0	0	0	6
1979	4	6		12	12	0	0	0	0	24
1979	4	7	31	6	0	0	0	0	0	6
1979	4	7	32	0	6	0	0	0	0	6
1979	4	7	33	0	0	6	0	0	0	6
1979	4	7	34	0	0	14	0	0	0	14
1979	4	7		6	6	20	0	0	0	32
1979	4			77	79	163	36	36	0	391
1979	5	1	1	24	0	0	0	0	0	24
1979	5	1	2	0	14	0	0	0	0	14
1979	5	1	3	0	0	19	0	0	0	19
1979	5	1	4	0	0	18	0	9	0	27
1979	5	1	5	0	0	17	0	9	0	26
1979	5	1	6	0	0	19	0	0	0	19
1979	5	1	7	0	0	0	9	0	0	9
1979	5	1	8	1	0	0	9	0	0	10
1979	5	1	9	0	0	0	0	9	0	9
1979	5	1	19	0	0	1	0	0	0	1
1979	5	1		25	14	74	18	27	0	158
1979	5	2	10	19	0	0	0	0	0	19
1979	5	2	11	0	14	0	0	0	0	14
1979	5	2	12	0	0	17	0	0	0	17
1979	5	2	13	0	0	0	9	0	0	9
1979	5	2		19	14	17	9	0	0	59
1979	5	3	14	14	0	0	0	0	0	14
1979	5	3	15	0	12	0	0	0	0	12
1979	5	3	16	0	0	16	0	0	0	16
1979	5	3		14	12	16	0	0	0	42
1979	5	4	17	0	0	19	0	0	0	19
1979	5	4	18	0	0	17	0	0	0	17
1979	5	4	19	0	0	18	0	0	0	18
1979	5	4	20	0	0	16	0	0	0	16
1979	5	4	21	5	0	0	9	0	0	14
1979	5	4	22	0	0	0	0	9	0	9
1979	5	4	23	0	0	0	0	9	0	9

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1979	5	4		5	0	70	9	18	0	102
1979	5	5	24	19	0	0	0	0	0	19
1979	5	5	25	0	0	17	0	0	0	17
1979	5	5	26	0	0	0	10	0	0	10
1979	5	5		19	0	17	10	0	0	46
1979	5			82	40	194	46	45	0	407
1979	7	2	1	0	0	0	4	0	0	4
1979	7	2	2	0	0	0	0	4	0	4
1979	7	2		0	0	0	4	4	0	8
1979	7	3	3	0	0	0	4	0	0	4
1979	7	3	4	0	0	0	0	4	0	4
1979	7	3	5	0	0	0	4	0	0	4
1979	7	3	6	0	0	0	0	4	0	4
1979	7	3		0	0	0	8	8	0	16
1979	7			0	0	0	12	12	0	24
1979				237	181	742	174	156	0	1490
1980	2	1	1	0	0	15	0	0	1	16
1980	2	1	2	0	0	16	0	0	0	16
1980	2	1	3	0	0	16	0	0	0	16
1980	2	1	31	0	0	0	9	0	0	9
1980	2	1		0	0	47	9	0	1	57
1980	2	2	5	0	0	17	0	0	0	17
1980	2	2	6	0	0	16	0	0	0	16
1980	2	2	7	0	0	16	0	0	0	16
1980	2	2	28	0	0	0	0	9	0	9
1980	2	2	29	0	0	0	0	9	0	9
1980	2	2	32	11	0	0	9	0	0	20
1980	2	2		11	0	49	9	18	0	87
1980	2	3	8	11	0	0	0	0	0	11
1980	2	3	9	0	12	0	0	0	0	12
1980	2	3	10	0	0	16	0	0	0	16
1980	2	3	11	0	0	16	0	0	0	16
1980	2	3	12	0	0	16	0	0	0	16
1980	2	3	76	6	0	0	9	0	0	15
1980	2	3		17	12	48	9	0	0	86
1980	2	4	13	0	0	16	0	0	0	16

YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1980	2	4	14	0	0	16	0	0	0	16
1980	2	4		0	0	32	0	0	0	32
1980	2	5	15	13	0	0	0	0	0	13
1980	2	5	16	0	13	0	0	0	0	13
1980	2	5	17	0	0	17	0	0	0	17
1980	2	5	34	0	0	0	0	9	0	9
1980	2	5		13	13	17	0	9	0	52
1980	2	6	18	17	0	0	9	0	0	26
1980	2	6	19	0	14	0	0	0	0	14
1980	2	6	20	0	0	19	0	0	0	19
1980	2	6		17	14	19	9	0	0	59
1980	2	7	21	0	0	18	0	0	0	18
1980	2	7	22	0	0	18	0	0	0	18
1980	2	7	23	0	0	18	0	0	0	18
1980	2	7	24	0	0	18	0	0	0	18
1980	2	7	25	0	0	18	0	0	0	18
1980	2	7	33	4	0	0	9	0	0	13
1980	2	7		4	0	90	9	0	0	103
1980	2			62	39	302	45	27	1	476
1980	3	1	1	0	0	11	0	0	0	11
1980	3	1	2	0	0	11	0	0	0	11
1980	3	1	3	0	0	11	0	0	0	11
1980	3	1	14	0	0	1	0	0	0	1
1980	3	1	20	0	0	0	0	2	0	2
1980	3	1	21	0	0	0	0	2	0	2
1980	3	1		0	0	34	0	4	0	38
1980	3	2	4	7	0	0	0	0	0	7
1980	3	2	5	8	0	0	9	0	0	17
1980	3	2	6	0	7	0	0	0	0	7
1980	3	2	7	0	7	0	0	0	0	7
1980	3	2	8	0	0	11	0	9	0	20
1980	3	2	9	0	0	11	0	9	0	20
1980	3	2	17	0	0	0	9	0	0	9
1980	3	2	22	0	0	0	0	2	0	2
1980	3	2		15	14	22	18	20	0	89
1980	3	3	10	7	0	0	9	0	0	16
1980	3	3	11	0	7	0	0	0	0	7
1980	3	3	12	0	0	11	0	11	0	22

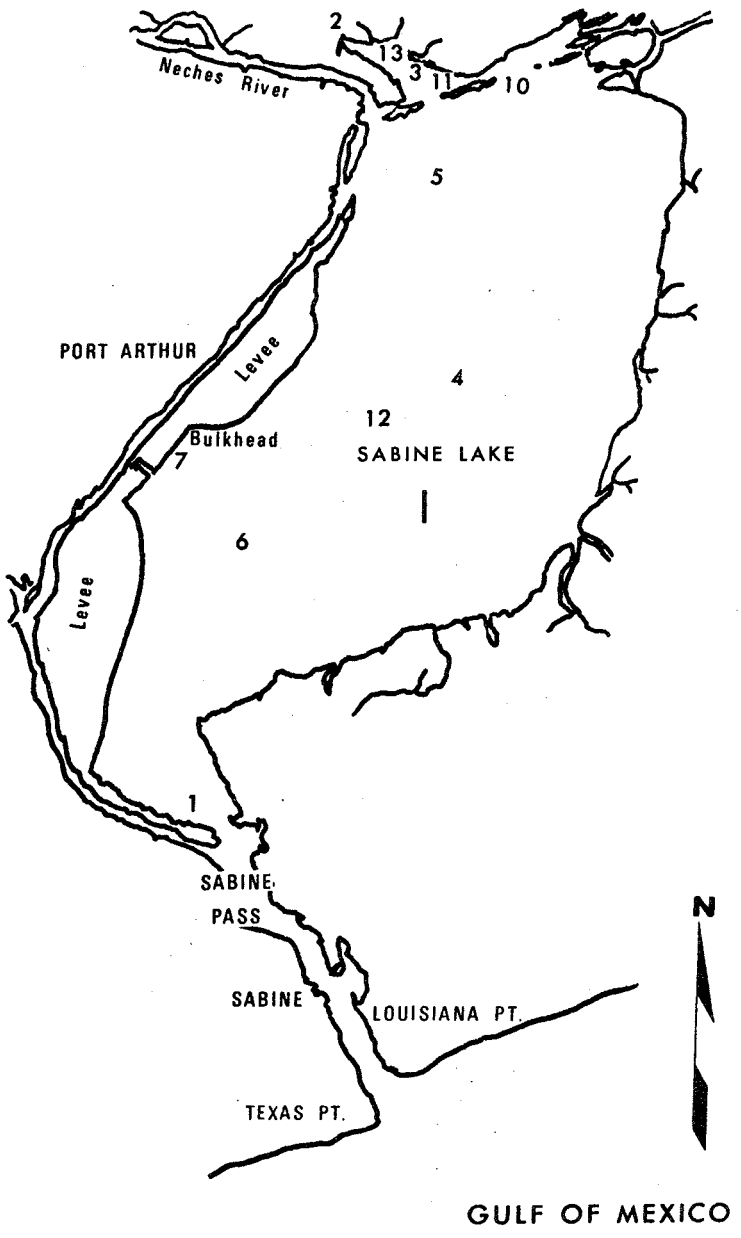
YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1980	3	3		7	7	11	9	11	0	45
1980	3	4	13	0	0	11	0	0	0	11
1980	3	4	14	0	0	10	0	0	0	10
1980	3	4	15	0	0	11	0	0	0	11
1980	3	4	16	0	0	0	9	0	0	9
1980	3	4	19	0	0	0	0	9	0	9
1980	3	4		0	0	32	9	9	0	50
1980	3			22	21	99	36	44	0	222
1980	4	1	5	0	0	1	0	0	0	1
1980	4	1	33	0	0	1	0	0	0	1
1980	4	1		0	0	2	0	0	0	2
1980	4	2	1	15	0	0	0	0	0	15
1980	4	2	2	23	0	0	9	0	0	32
1980	4	2	3	0	14	0	0	0	0	14
1980	4	2	4	0	14	0	0	9	0	23
1980	4	2	5	0	0	17	0	0	0	17
1980	4	2	6	0	0	18	0	0	0	18
1980	4	2	13	1	0	0	0	0	0	1
1980	4	2		39	28	35	9	9	0	120
1980	4	3	9	23	0	0	9	0	0	32
1980	4	3	10	22	1	0	9	0	0	32
1980	4	3	11	0	14	0	0	9	0	23
1980	4	3	12	0	13	0	0	9	0	22
1980	4	3	13	4	0	18	0	0	0	22
1980	4	3	14	1	0	18	0	0	0	19
1980	4	3	15	0	0	18	0	0	0	18
1980	4	3	16	3	0	0	9	0	0	12
1980	4	3	19	0	0	0	0	9	0	9
1980	4	3	38	0	0	18	0	0	0	18
1980	4	3		53	28	72	27	27	0	207
1980	4	4	22	0	0	18	0	0	0	18
1980	4	4	23	0	1	17	0	0	0	18
1980	4	4	24	0	0	18	0	0	0	18
1980	4	4		0	1	53	0	0	0	54
1980	4	5	25	12	0	0	0	0	0	12
1980	4	5	26	0	12	0	0	0	0	12
1980	4	5		12	12	0	0	0	0	24
1980	4	6	26	0	1	0	0	0	0	1

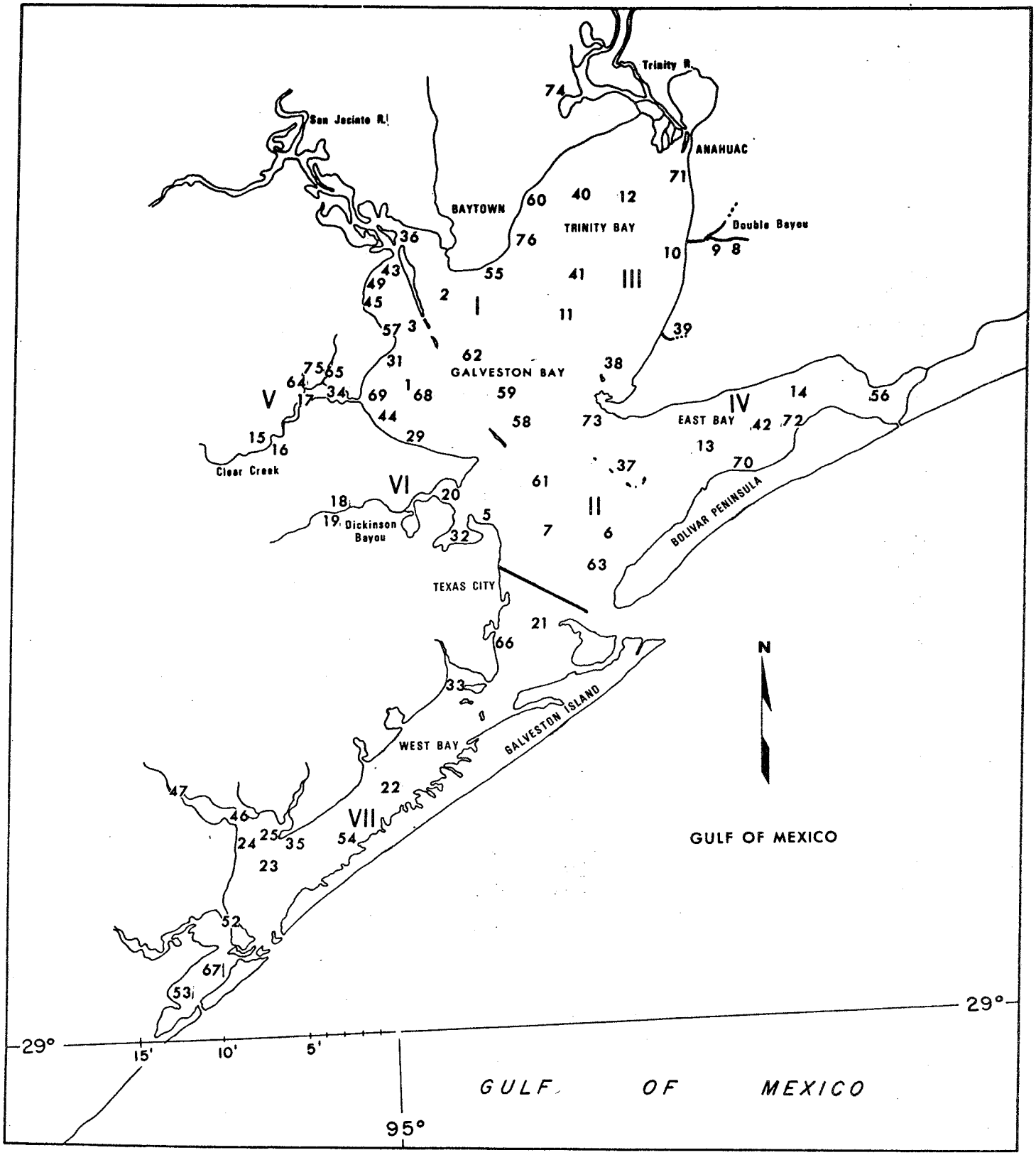
YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1980	4	6	27	15	0	0	0	0	0	15
1980	4	6	28	15	1	0	0	0	0	16
1980	4	6	29	0	14	0	0	0	0	14
1980	4	6	30	0	15	0	0	0	0	15
1980	4	6		30	31	0	0	0	0	61
1980	4	7	31	14	0	0	0	0	0	14
1980	4	7	32	0	14	0	0	0	0	14
1980	4	7	33	0	0	17	0	0	0	17
1980	4	7	34	0	0	18	0	0	0	18
1980	4	7		14	14	35	0	0	0	63
1980	4			148	114	197	36	36	0	531
1980	5	1	1	12	3	0	0	0	0	15
1980	5	1	2	0	10	0	0	0	0	10
1980	5	1	3	0	0	18	0	0	0	18
1980	5	1	4	0	0	16	0	9	0	25
1980	5	1	5	0	0	16	0	9	0	25
1980	5	1	6	0	0	33	0	2	0	35
1980	5	1	7	5	0	0	9	0	0	14
1980	5	1	8	5	0	0	9	0	0	14
1980	5	1	9	0	0	0	0	8	0	8
1980	5	1	12	0	0	1	0	0	0	1
1980	5	1	19	0	0	1	0	0	0	1
1980	5	1	35	0	0	2	0	0	0	2
1980	5	1		22	13	87	18	28	0	168
1980	5	2	10	14	3	0	0	0	0	17
1980	5	2	11	0	10	0	0	0	0	10
1980	5	2	12	0	0	17	0	0	0	17
1980	5	2	13	5	0	0	9	0	0	14
1980	5	2		19	13	17	9	0	0	58
1980	5	3	14	13	2	1	0	0	0	16
1980	5	3	15	0	11	0	0	0	0	11
1980	5	3	16	0	0	18	0	0	0	18
1980	5	3		13	13	19	0	0	0	45
1980	5	4	17	0	0	17	0	0	0	17
1980	5	4	18	0	0	17	0	0	0	17
1980	5	4	19	0	0	17	0	0	0	17
1980	5	4	20	0	0	18	0	0	0	18
1980	5	4	21	5	0	0	7	0	0	12
1980	5	4	22	0	0	0	1	9	0	10
1980	5	4	23	0	0	0	0	7	0	7
1980	5	4	27	0	0	0	0	1	0	1

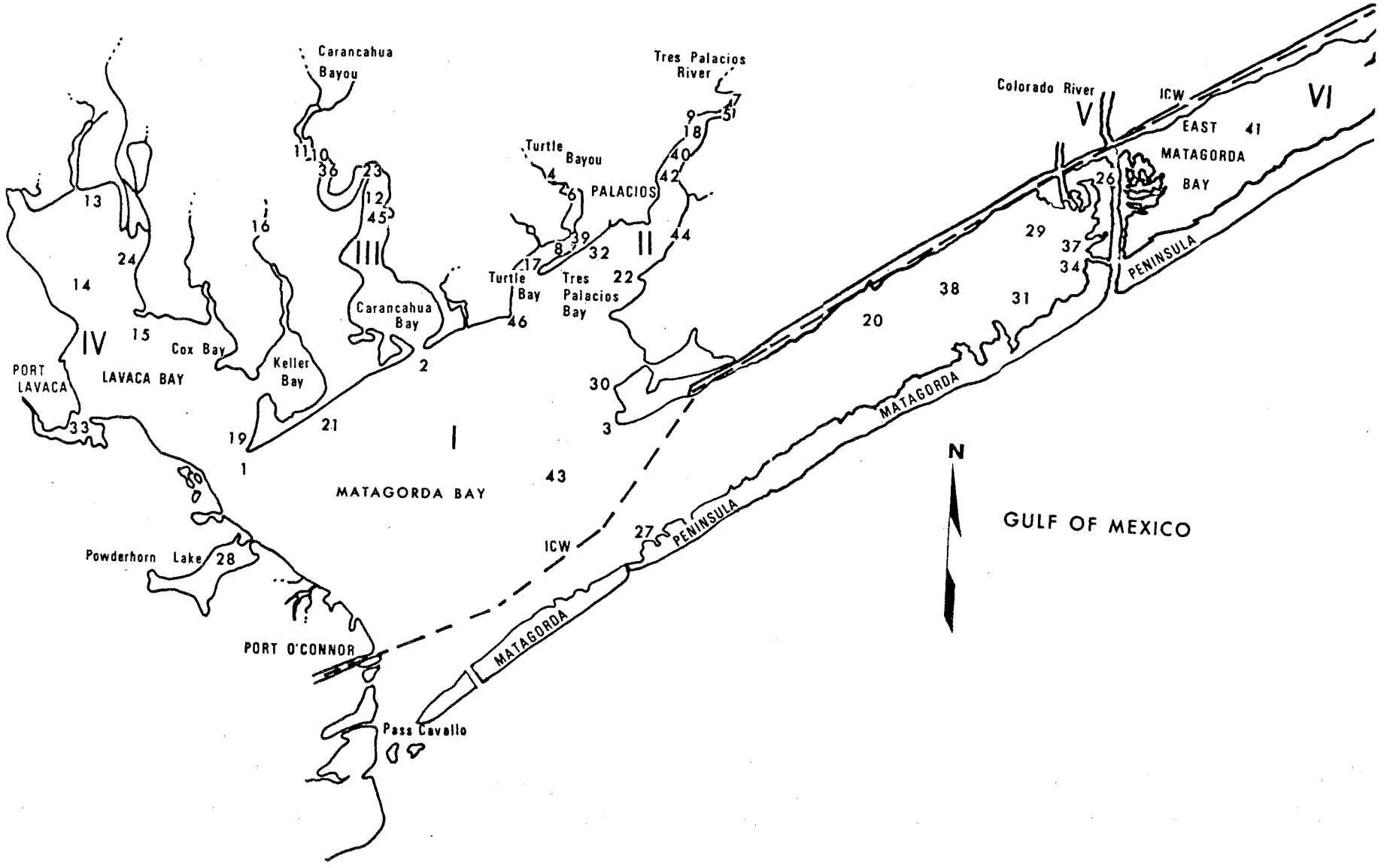
YEAR	BAY	SUB BAY	SITE	GEAR TYPES 3	4	5	6	7	OTHER	TOTAL
1980	5	4		5	0	69	8	17	0	99
1980	5	5	21	0	0	0	1	0	0	1
1980	5	5	24	18	0	0	0	0	0	18
1980	5	5	25	1	0	16	0	0	0	17
1980	5	5	26	0	0	0	9	0	0	9
1980	5	5		19	0	16	10	0	0	45
1980	5			78	39	208	45	45	0	415
1980	7	2	1	0	0	0	5	0	0	5
1980	7	2	2	0	0	0	0	5	0	5
1980	7	2		0	0	0	5	5	0	10
1980	7	3	3	0	0	0	5	0	0	5
1980	7	3	4	0	0	0	0	5	0	5
1980	7	3	5	0	0	0	5	0	0	5
1980	7	3	6	0	0	0	0	5	0	5
1980	7	3		0	0	0	10	10	0	20
1980	7			0	0	0	15	15	0	30
1980				310	213	806	177	167	1	1674

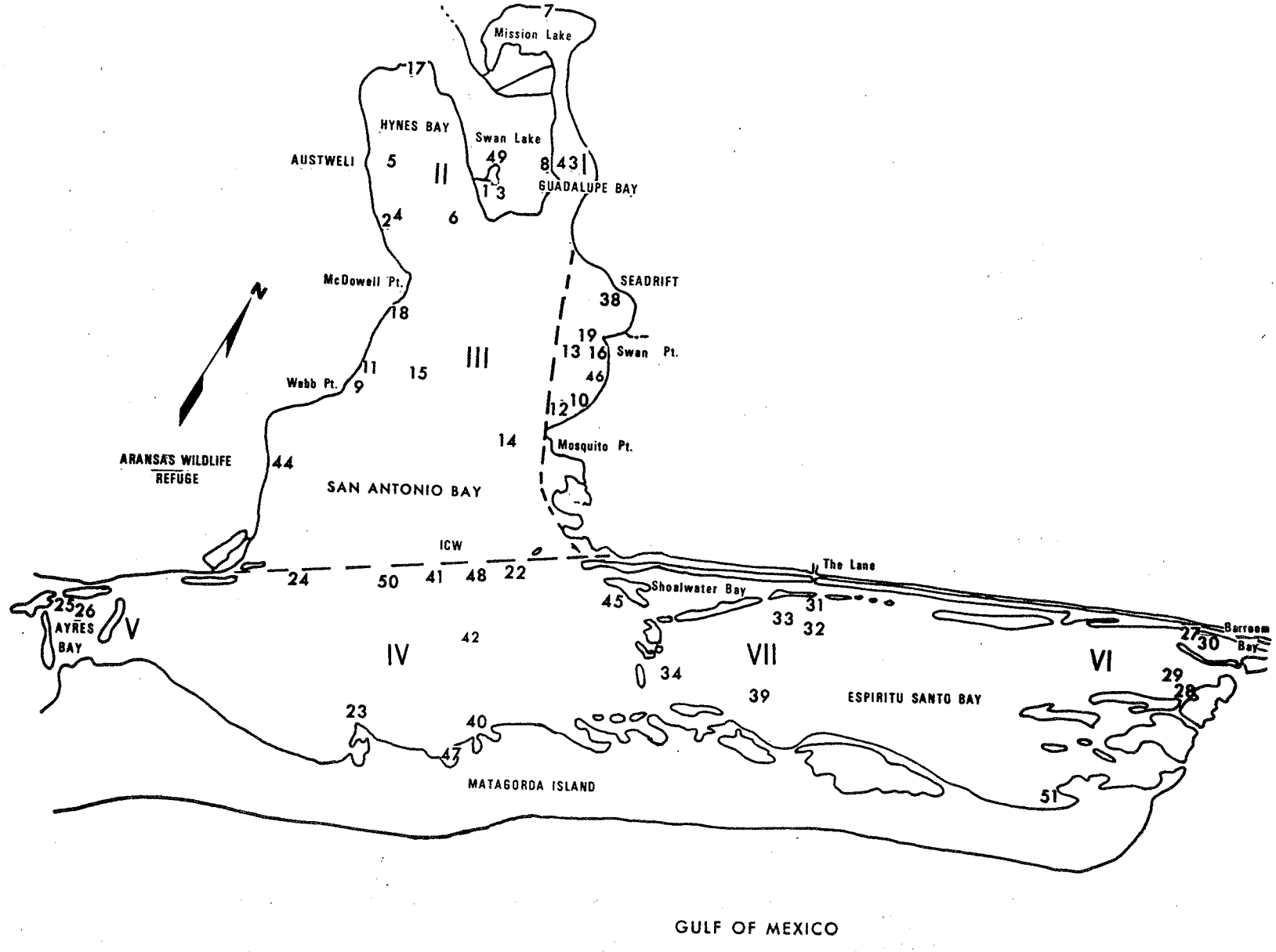
APPENDIX B. Locations of sampling sites used by the TPWD in the collection of data.

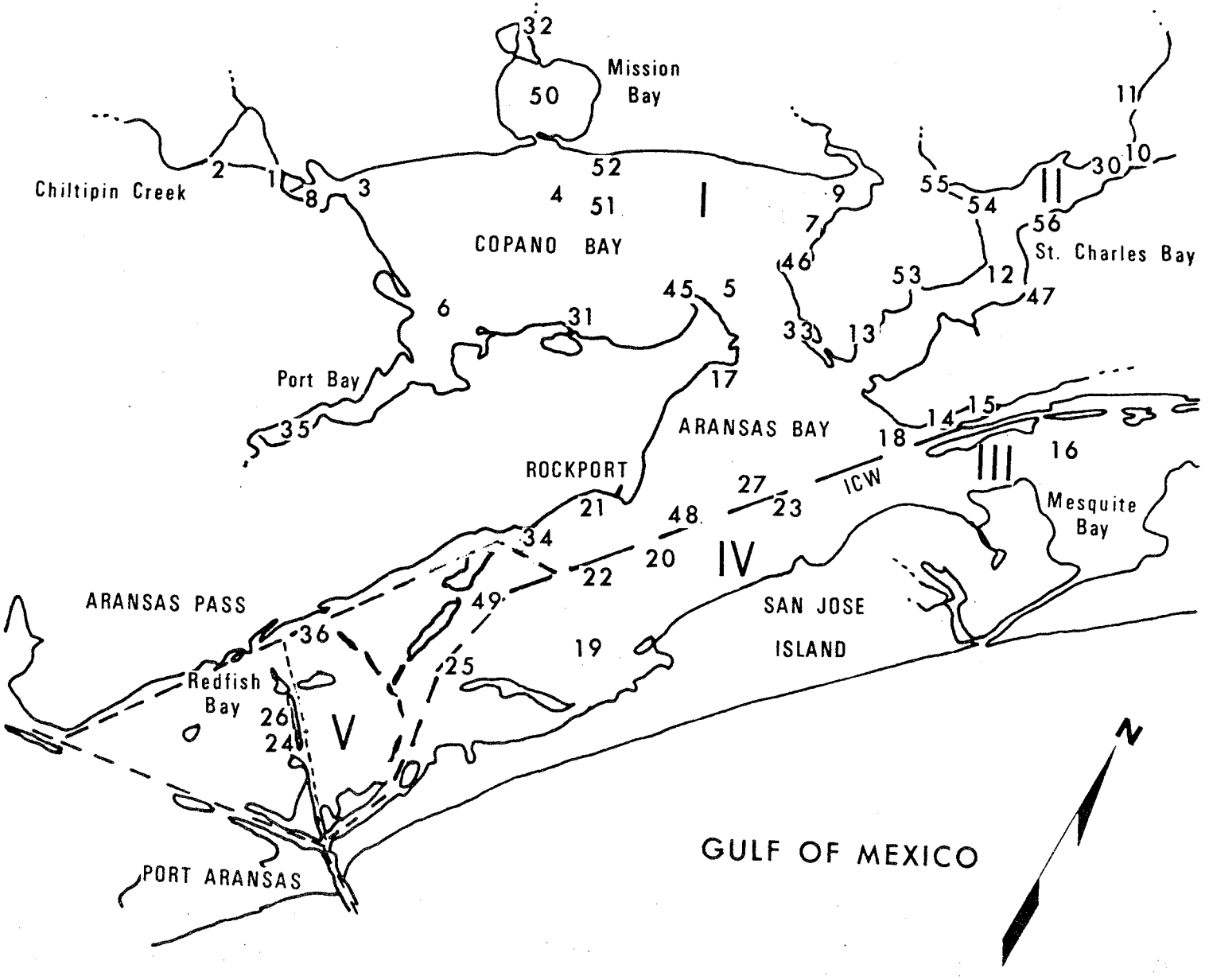
1. Sabine Lake
2. Galveston Bay
3. Matagorda Bay
4. San Antonio Bay
5. Aransas Bay
6. Corpus Christi Bay
7. Upper Laguna Madre
8. Lower Laguna Madre

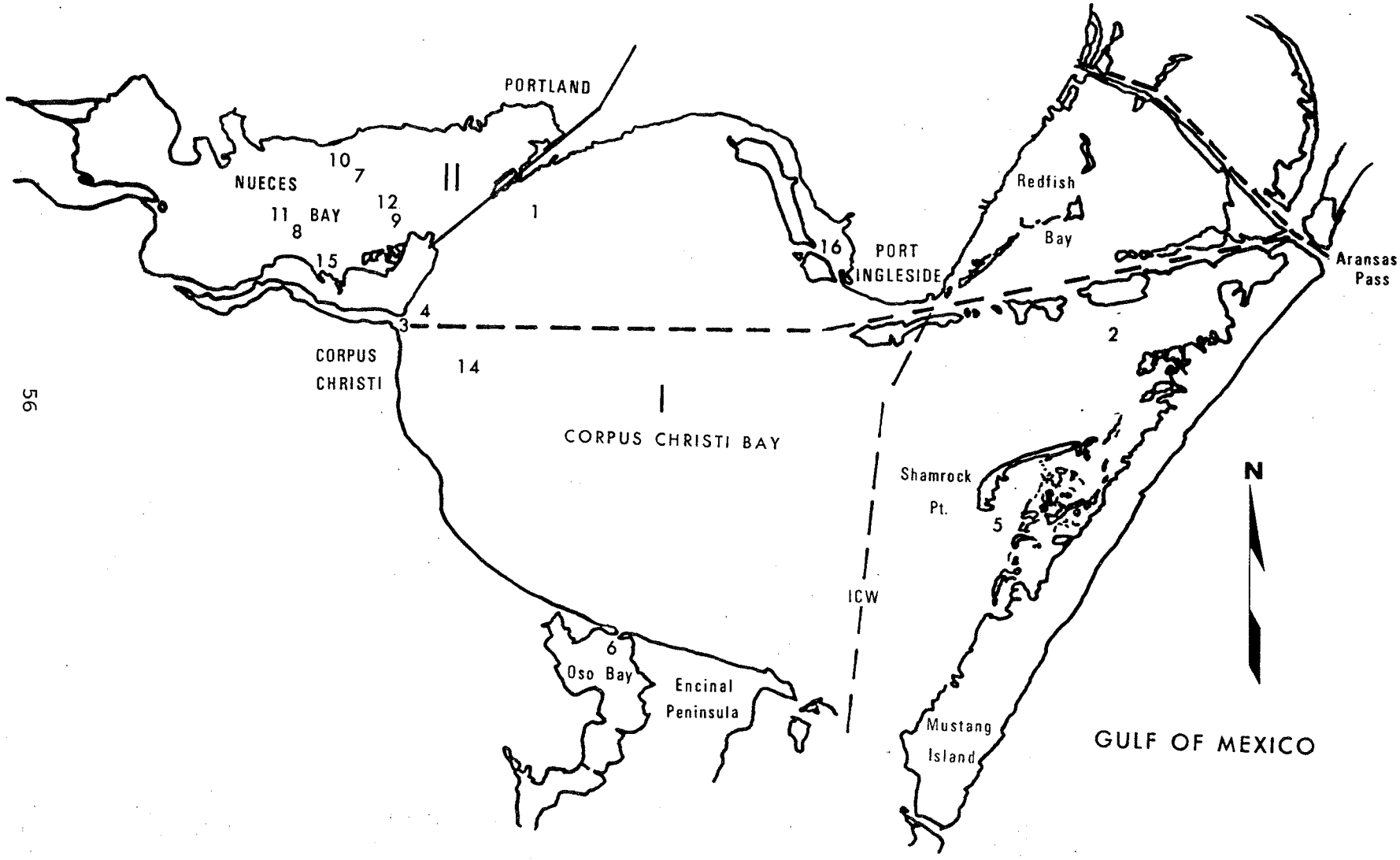

2
13
3
11
10
Neches River
5
PORT ARTHUR
Levee
4
12
Bulkhead
7
SABINE LAKE
6
Levee
1
SABINE
PASS
SABINE
LOUISIANA PT.
TEXAS PT.
N
GULF OF MEXICO

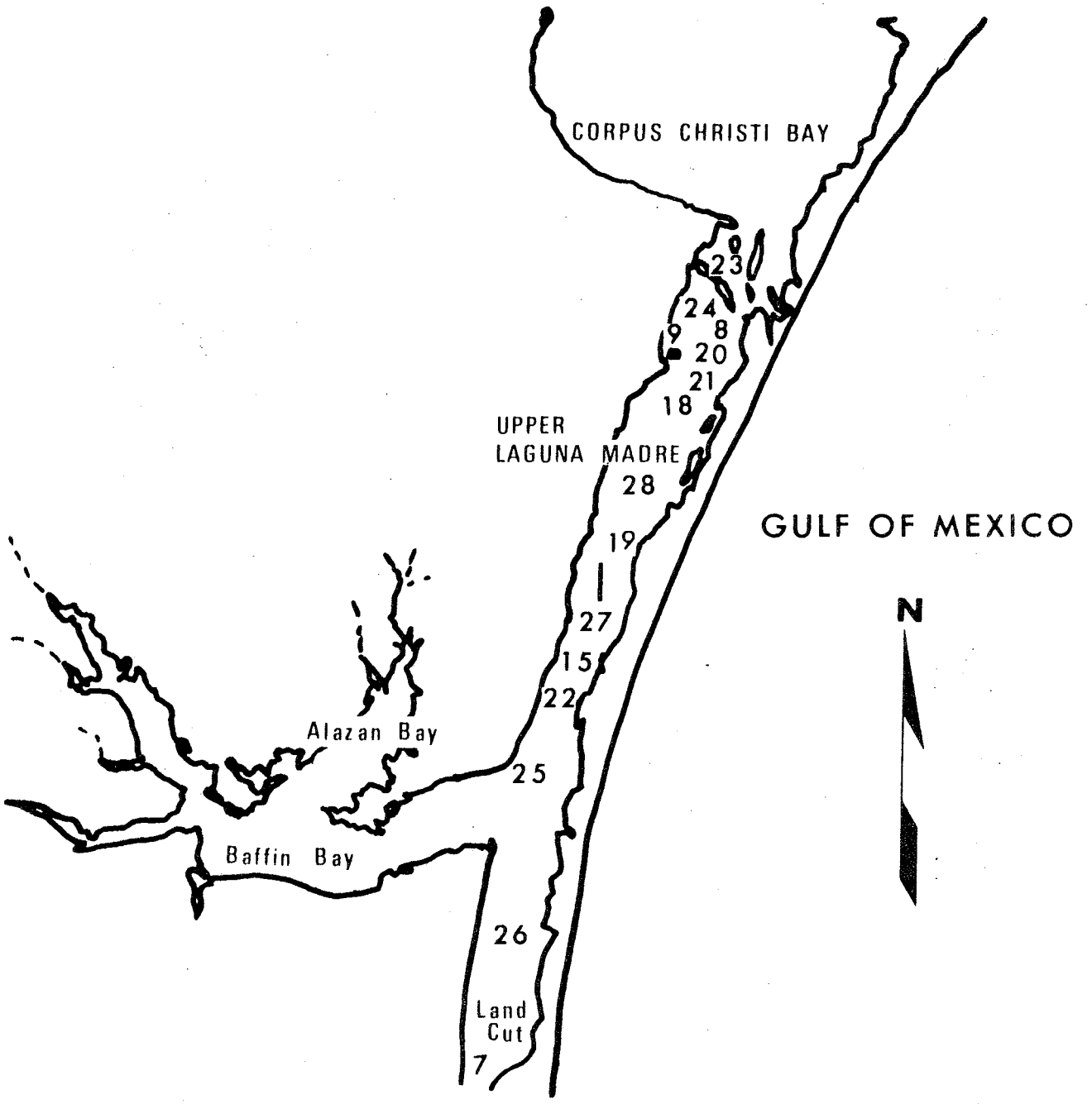

Trinity R.
San Jacinto R.
ANAHUAC
BAYTOWN
TRINITY BAY
Double Bayou
GALVESTON BAY
EAST BAY
Clear Creek
Dickinson Bayou
TEXAS CITY
BOLIVAR PENINSULA
WEST BAY
GALVESTON ISLAND
N
GULF OF MEXICO
29°
15'
10'
5'
GULF OF MEXICO
95°

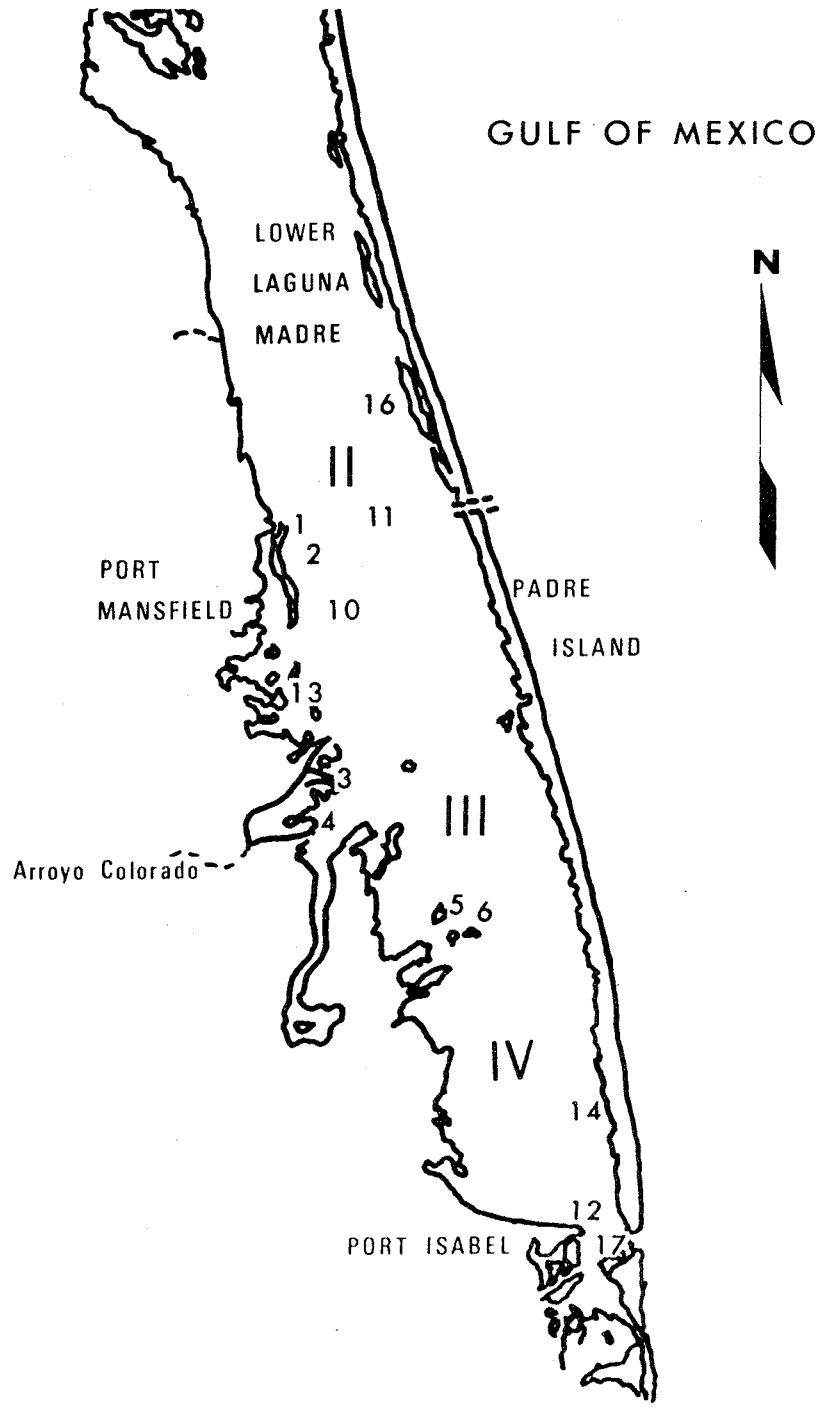

Carancahua Bayou
Tres Palacios River
Colorado River
ICW
Turtle Bayou
PALACIOS
EAST MATAGORDA BAY
PENINSULA
Turtle Bay
Tres Palacios Bay
Carancahua Bay
Cox Bay
Keller Bay
PORT LAVACA
LAVACA BAY
MATAGORDA BAY
Powderhorn Lake
PORT O'CONNOR
Pass Cavallo
MATAGORDA
PENINSULA
ICW
GULF OF MEXICO
N
I
II
III
IV
V
VI


Mission Lake
HYNES BAY
Swan Lake
AUSTWELI
GUADALUPE BAY
McDowell Pt.
SEADRIFT
Swan Pt.
Webb Pt.
ARANSAS WILDLIFE REFUGE
SAN ANTONIO BAY
Mosquito Pt.
ICW
The Lane
Shoalwater Bay
AYRES BAY
Barroom Bay
ESPIRITU SANTO BAY
MATAGORDA ISLAND
GULF OF MEXICO
I
II
III
IV
V
VI
VII


32
Mission
Bay
50
11
Chiltipin Creek
2
1
8
3
52
4
51
I
9
55
54
II
30
10
7
56
St. Charles Bay
COPANO BAY
46
53
12
45
5
47
6
31
33
13
Port Bay
17
35
ARANSAS BAY
14
15
18
16
III
ROCKPORT
27
ICW
21
48
23
Mesquite
Bay
34
20
IV
22
ARANSAS PASS
49
SAN JOSE
36
19
ISLAND
25
Redfish
Bay
26
24
V
N
GULF OF MEXICO
PORT ARANSAS


PORTLAND
NUECES
BAY
CORPUS
CHRISTI
CORPUS CHRISTI BAY
PORT
INGLESIDE
Redfish
Bay
Aransas
Pass
Shamrock
Pt.
ICW
Oso Bay
Encinal
Peninsula
Mustang
Island
GULF OF MEXICO
N
1
2
3
4
5
6
7
8
9
10
11
12
14
15
16


CORPUS CHRISTI BAY
23
24
9
8
20
21
18
UPPER
LAGUNA MADRE
28
GULF OF MEXICO
19
N
27
15
22
Alazan Bay
25
Baffin Bay
26
Land
Cut
7


GULF OF MEXICO
N
LOWER
LAGUNA
MADRE
16
II
11
1
2
PORT
MANSFIELD
10
PADRE
ISLAND
13
3
4
III
Arroyo Colorado
5
6
IV
14
12
PORT ISABEL
17

APPENDIX C. Coding dictionary used in creating the data set.

SECTION I.

Bay, Sub-bay, and Site Numbering.

SECTION II.

Gear, Environmental and Biological Codes.

BAY, SUB-BAY, AND SITE NUMBERING

Bay Code 1 = Sabine Lake

Sub-Bay 1	Site Code #
Cameron Causeway	1
Gulf States Utility Canal	2
Rob's Camp Road, Old River Cove	3
Mid-Lake	4
Utility Canal Station 5	5
Sabine Lake III	6
Bulkhead	7
Sabine I	8**
Sabine II	9**
Sabine Lake V (400*)	10
Old River Cove = Rob's Camp	11
Sabine Lake IV	12
Rob Bailey's Camp (600*)	13

Bay Code 2 = Galveston Bay

(Contact: Lynn Benefield, TPWD, 713-474-2811)

Sub-Bay 1 = Upper Galveston Bay	Site Code #
510 - Upper Galveston Bay	1
511 - 5 mile Pass & 5 mile Reef	2
522 - Bouy 76 in Houston Ship Channel	3
Surf Oaks (500*)	31
UGB (Cedar Bayou) & Morgan's Pt. & MK 21 & Station #2 & Marker 90 HSC	36
Sylvan Beach & Station #1	43
Seabrook Bouy (500)	44
Red Bluff	45
400 & 500 - Yacht Club	49
Station #3 & Dow Reef	55
Station #4 & El Jardin	57
400 - HSC Bouys 60-62 (& 500)	58
HSC Bouy 68	59
500 - Bouy 80 HSC	62
Halfway Reef (500)	68
Pipeline South of San Leon	69

*400, 500, 600 etc were used by TPWD in their site identification codes, and represented the type of net and tow generally used at the site.

**Locations within the lake are uncertain, and thus are not included in the figure.

Sub-Bay 2 = Lower Galveston Bay — Site Code #

514 - Lower Galveston Bay near Dickinson Bay & Dollar Reef.....5
515 - Siever's Cut.....6
523 - Bouy 44 in Houston Ship Channel & Lower Bay near Bolivar Roads & Staion #9 & Baffle Pt. & Bolivar.....7
Texas City Dike (700).....28
Humble Camp (700).....29
Moses Lake.....32
500 - Bouy 50 HSC.....61
500 - Bouy 36 HSC.....63
Swan Lake (700).....66
A-2 Separator, 1 mi. W of Smith Pt. (400)...73

Sub-Bay 3 = Trinity Bay — Site Code #

303 - Double Bayou & Anahuac (& 600).....8
406 - Double Bayou & Station #6.....9
509 - Double Bayou.....10

512 - Trinity Bay nearest Sub-Bay 1.....11
513 - Upper Trinity Bay.....12
Vinget Reef (Van tun) (Vingtune Island) & Station #8 & VI-VII.....38
Lone Oak (700).....39
Trinity Reef & Station #5.....40
Fisher Reef (Shoal) Station # 7.....41
500 - Point Bardow.....60
1 mi. off Trinity River.....71
400 - Round Lake.....74
H.L.&P. outlet, Baytown & Trinity Bay.....76

Sub-Bay 4 = East Bay — Site Code #

516 - Lower East Bay.....13
517 - Upper East Bay.....14
Hanna's Reef (500 & 700).....37
East Bay (middle area = old site).....42
Station #10 near Rollover Pass & MOP.....56
Elmgrove Point.....70
Big Pasture Bayou.....72

Sub-Bay 5 = Clear Lake & Clear Creek Area — Site Code #

301 - Clear Creek.....15
404 - Clear Creek.....16
507 - Clear Lake.....17
Clear Lake (700).....34
Mud Lake (600).....64
Taylor Lake (600).....65
Middle Bayou (600).....75

Sub-Bay 6 = Dickinson Bay & Dickinson Bayou area — Site Code #

302 - Dickinson Bayou (+600).....18
405 - Dickinson Bayou & 700.....19
508 - Dickinson Bay.....20

Sub-Bay 7 = West Bay Area — Site Code #

518 - Upper West Bay (near Lower Galveston Bay)...21
519 - Middle West Bay & West Bay #2 (& 700).....22
520 - Lower West Bay (near Choc. Bay)=Tire Reef &
West Bay #1, & #13 (&.700).....23
521 - Chocolate Bay.....24
524 - Bouy 24 in ICW.....25
Jones Lake.....33
Nymph Point.....35
400 - Chocolate Bayou Channel.....46
600 - Chocolate Bayou.....47
400 - Rattlesnake Point - Christmas Bay.....52
ICW Christmas Bay.....53
Maggie's Pt.....54
Christmas Bay (600).....67

Bay Code 3 = Matagorda Bay System
(Contact: Jim Dailey, TPWD, 512-972-6011)

Sub-Bay 1 = Matagorda Bay — Site Code #

513 - Sand Point.....1
514 & 700 - Carancahua Pass.....2
515 - Palacios Point.....3

Sub-Bay 1 Matagorda Bay (continued)

Mad Island.....20
Cedars.....21
Cotton Bayou.....27
Powderhorn Lake.....28
Dog Island (reef).....29
Hotel Point.....30
Eyeball.....31
Tiger Cut & Tiger Island.....34
Parkers.....37
700 - Shell Island.....38
Halfmoon (500).....43
Well Point (600).....46

Sub-Bay 2 = Tres Palacios Bay area — Site Code #

302 - Turtle Bayou.....4
303 - Tres Palacios River (+600).....5
405 - Turtle Bayou.....6
406 - Tres Palacios Bayou.....7
508 - Turtle Bay (+700).....8
509 - Tres Palacios Bay (+700).....9
Turtle Bay (600).....17
Red Bluff (600).....18
Coon Island.....22
Palacios Channel Beacon 51 & 60.....32
West side in Turtle Bay, Jensen Pt.....39
Whiskey Flats (600).....40
College Port (500).....42
Fencepost Reef.....44

Sub-Bay 3 = Carancahua Bay area — Site Code #

301 - Carancahua Bayou (+600).....10
404 - " " and Bay.....11
507 - Carancahua Bay (+700).....12
Crescent V (600).....23
600 - Carancahua Causeway.....36
600 - 6-Mile Landing.....45

Sub-Bay 4 = Lavaca Bay area — Site Code #

510 - Upper Lavaca Bay.....13
511 - Lavaca Bay Causeway.....14
512 - Mitchell Point.....15
Keller Creek (600) - also "Olivia".....16
Lavaca Bay (700) & (500) near Sand Pt.....19
Catfish Cove (Catfish Bayou) (=Pt. Comfort)..24
Chocolate Bay #4.....33

Sub Bay 5 = Colorado River — Site Code #

Colorado River.....26

Sub Bay 6 = Eastern Matagorda Bay — Site Code #

Eastern Arm of Matagorda Bay (500).....41

Bay Code 4 = San Antonio Bay System

(Contact: Paul Hammerschmitt, TPWD, 512-785-3521)

Sub-Bay 1 = Guadalupe Bay — Site Code #

Hog Bayou.....7
Redfish Bayou.....8
Guadalupe Bay (700).....43

Sub-Bay 2 = Hynes Bay — Site Code #

303 - Swan Lake Bayou (+822).....1
304 - Hynes Bay (+601) - Austwell.....2
403 - Swan Lake Bayou.....3
404 - Hynes Bay (+701).....4
509 - Upper Hynes Bay.....5
510 - Lower Hynes Bay.....6
833 - Townsend Bayou.....17
Big Bayou.....49

Sub-Bay 3 = San Antonio Bay - Middle Section — Site Code #

Sub-Bay 4 = Lower San Antonio Bay area — Site Code #

Sub-Bay 5 = Ayres Bay — Site Code #

Sub-Bay 6 = East Espiritu Santo Bay — Site Code #

Sub-Bay 7 = West Espiritu Santo Bay — Site Code #

306 - The Lane.....31
406 - " " 32
504 - " " 33
505 - South Pass.....34
Espiritu Santo Bay.....39

Bay Code 5 = Aransas - Copano Bay System
(Contact: Bill Mercer, TPWD, 512-729-2328)

Sub-Bay 1 = Copano Bay area — Site Code #

301 - Chiltipin Creek.....1
404 - " " (mouth of Aransas River).....2
507 - Copano Bay at Bayside.....3
510 - Mouth of Mission Bay (+728) (Station 1).....4
511 - Copano Bay at West of LBJ Causeway (+727)....5
517 - Copano Bay at mouth of Port Bay (& 518).....6
621 - " " at Shell Point (Holiday Beach)....7
622 - " " at Bayside.....8
729 - " " at Turtle Pen.....9
600 - Copano Ridge.....31
700 - Mission River.....32
600 - Port Bay (Station 2).....35
Fish Pt. (= Redfish Pt.) 600, (Station 5)....45
Newcomb Bend or Point, 600, (Station 3).....46
Mission Bay 600.....50
Copano Reef.....51
Old Copano Village.....52

Sub-Bay 2 = St. Charles Bay area — Site Code #

302 - Twin Creek.....10
405 - " " 11
508 - St. Charles Bay.....12
620 - " " " at West shoreline (Big Tree).....13
Mouth of Twin Creek, St. Charles Bay area (700).....30
Little Devil Bayou (600) (Station 7).....47
Cowchip Slough.....53
Cavasso Creek.....54
Head of Cavasso Creek.....55
Lone Tree.....56

Sub-Bay 3 = Mesquite & Dunham's Bay — Site Code #

303 - Dunham's Bay.....14
406 - " " 15
516 - Mesquite Bay.....16

Sub-Bay 4 = Aransas Bay — Site Code #

512 - Aransas Bay at Live Oak Point (Fulton Beach).....17
509 - Dunham's Bay at mouth.....18
513 - Aransas Bay (Ranch House).....19
514 - " " at ICW Marker 43.....20
623 - " " at Rockport's Little Bay (+300).21
725 - " " at ICW Marker 49.....22
726 - " " at ICW Marker 19 & 21.....23
" " at ICW Markers 25-31.....27
600 - Mouth of St. Charles Bay near Goose Island (Station 6).....33
South Beach & 600 (Station 4).....34
ICW Marker 37 (700).....48
ICW " 60 (700).....49

Sub-Bay 5 = Redfish Bay & the Pass — Site Code #

330 - Redfish Bay.....24
515 - Aransas Bay at ICW Marker (Mud Island).....25
624 - Redfish Bay.....26
700 - Redfish Bay (500 and 400).....36

Sub-Bay 9 = Unknown locations — Site Code #

Area 1.....41
Area 2.....42
Area 3.....43
Area 4.....44

Bay Code 6 = Corpus Christi Bay

Sub-Bay 1 = Corpus Christi Bay and Oso Bay — Site Code #

700 - East of Causeway.....1
700 - East Flats.....2
700 - Harbor Bridge (ship channel).....3
700 - Marker 83.....4
700 - Shamrock (Cove).....5
700 - Oso Bay.....6
South of Marker 79.....14
Ingleside Cove (600).....16

Sub-Bay 2 = Nueces Bay

700 - Nueces Bay #1.....7
700 " " #2.....8
700 " " #3.....9
Nueces North side (Clay pit).....10
Nueces 2nd Power Line.....11
Nueces 1st Power Line.....12
Avery Point (700).....15

Bay Code 7 = Laguna Madre

(contact: Joe Brewer, TPWD,)
(512) 423-0124

Sub-Bay 1 = North Quarter of Laguna Madre — Site Code #

Land Cut.....7
ICW MK. 21.....8
Pita Island.....9
ICW MK. 79 (700).....15
ICW MK. 39.....18
Tropic Isle.....19
ICW MK. 23.....20
ICW MK. 25 (& 27).....21
Green Hill.....22

Sub-Bay 1 North Quarter of
Laguna Madre (continued) Site Code #

Humble Bridge.....23
Tyler's Point.....24
Pt. of Rocks (= STA 32).....25
ICW MK. 155.....26
ICW MK. 69.....27
ICW MK. 45.....28

Sub-Bay 2 = Port Mansfield Cut area Site Code #

601 - Port Mansfield Channel area.....1
700 & 404 - " " " " 2
- "Clothesline".....10
22A (700) or 22B or 22C.....11
5 mi N of Pt. Mansfield Pass (700).....16

Sub-Bay 3 = Arroyo Colorado & 3rd Quarter of Laguna Madre

602 - Arroyo Colorado & Old Arroyo.....3
700 & 405 - " " 4
603 - Three Islands area.....5
700 & 406 - " " " = S-1.....6
Mudhole.....13

Sub-Bay 4 = Port Isabel & 4th Quarter of Laguna Madre

Railroad Pier.....12
6 mile Cove (bayside of Padre Isl.) (600)...14
Railroad Bridge.....17

SECTION II.

GEAR TYPES

Code #		Description
1	=	6 ft trawl
2	=	12 ft trawl
3	=	Marsh net, 100 ft tow, (300, used in site id's)
4	=	10 ft trawl for 5 min, (400, by TPWD)
5	=	20 ft trawl for 15 min, (500, " " " ")
6	=	Bar-seine, 500 ft tow, (600, " " " ")
7	=	10 ft trawl for 15 min, (700, " " " ")
8	=	25 ft trawl, 15 min.
9	=	36 ft trawl,
10	=	60 ft seine, 0.1 acre
11	=	60 ft trawl
12	=	push net - 3½' x 5', ½" mesh webbing
13	=	12 ft surface beam trawl, ½" mesh webbing
15	=	7 ft trawl for 5 min.
16	=	5 ft trawl for 15 min.

VEGETATION

Code #		Cover description
1	=	No vegetation
2	=	Sparse
3	=	Moderate
4	=	Dense

Code #		Species
1	=	Dichtyota dichotoma
2	=	Ruppia maritima
3	=	Diplanthera = Halodule = shoal grass
4	=	Spartina
5	=	Unspecified algae
6	=	Thalassia testudinum
7	=	Alphillia
8	=	Halophila
9	=	Ectocarpus

WIND

Code #		Direction (degrees)
1	=	North (350-360 and 1-35)
2	=	Northeast (36-80)
3	=	East (81-125)
4	=	Southeast (126-170)
5	=	South (171-214)
6	=	Southwest (215-259)
7	=	West (260-304)
8	=	Northwest (305-349)
9	=	no direction specified

SEA CONDITION

Code #		Description
1	=	Calm
2	=	Moderate or "Good"
3	=	Choppy
4	=	Rough

TIDE MOVEMENT AND STAGE

Code #		Description
1	=	Slack, low tide not moving
2	=	Ebbing, out-flowing current
3	=	Flooding, in-coming current
4	=	Standing, high tide not moving
5	=	Uninterpretable

TIME

Code #		Description
3300	=	AM
4400	=	PM

SHRIMP CODING

Code		Description
B	=	Brown shrimp, Penaeus aztecus
C*	=	Brown shrimp, unmeasured
use as a group** D	=	Minimum length brown shrimp
use as a group** E	=	Maximum length brown shrimp
use as a group** F	=	Total number of brown shrimp caught; place total # in length box
use as a group** R	=	Minimum length white shrimp
use as a group** S	=	Maximum length white shrimp
use as a group** T	=	Total number of white shrimp caught; place total # in length box
P	=	Pink shrimp, P. duorarum
Q*	=	Pink shrimp, unmeasured
G	=	Grooved shrimp, unspecified pink or brown
H*	=	Grooved shrimp, unmeasured
W	=	White shrimp, P. setiferus
X*	=	White shrimp, unmeasured
Z	=	Unspecified Penaeus species

*= the length boxes are used to denote number of individuals.
**= use these 3 codes in three successive entries leaving the number boxes blank and entering the total number in the group in the length boxes of the third coded entry.

BLUE CRAB CODING

	Code #		Description
	U	=	Unsexed individual
	V*	=	Unsexed and unmeasured crab
	P	=	Parasitized crab
	P***	=	Parasitized w/o measurement indicates it was not measured
	Y	=	Male crab
	K*	=	Male crab, unmeasured
	X	=	Female w/o eggs
	J*	=	Female w/o eggs, unmeasured
	M	=	Mature female w/o eggs
	N*	=	Mature female w/o eggs, unmeasured
	G	=	Gravid female
	I*	=	Gravid female, unmeasured
use as a group**	S	=	Starting length for extra crabs, unmeasured
	T	=	Ending length " " " "
	W	=	Number in group unmeasured; put # in width box

FISH CODING

Code #		Description
A	=	Speckled trout, Cynoscion nebulosus
L*	=	" unmeasured
B	=	Sand seatrout, Cynoscion arenarius
H*	=	" unmeasured
C	=	Redfish, Sciaenops ocellatus
O*	=	" unmeasured
D	=	Black drum, Pogonias cromis
Q*	=	" unmeasured
E	=	Sheepshead, Archosargus probatocephalus
R*	=	" unmeasured
F	=	Southern flounder, Paralichthys lethostigma
Z*	=	" unmeasured

*= the length boxes are used to denote number of individuals.
**= use these 3 codes in three successive entries leaving the number boxes blank and the total number in the group in the length boxes of the third coded entry.
***= must make separate entry for each unmeasured individual.

APPENDIX D. Names, addresses, and telephone numbers related to the SHRIMPS data set.

I. To use the data set:

Director of Coastal Fisheries
Texas Parks and Wildlife Department
4200 Smith School Road
Austin, Texas 78744
512/479-4861, 4862 or 4863

Director of the Galveston Laboratory
NOAA/National Marine Fisheries Service
4700 Avenue U
Galveston, Texas 77550
409/766-3501 or 3502, FTS 527-6501

Data Manager
NOAA/NMFS/SEFC/FIMD
75 Virginia Beach Drive
Miami, Florida 33149
305/361-5761, FTS 350-1295

II. Area biologists for TPWD:

Sabine Lake and Galveston Bay:
Mr. Richard L. Benefield
Texas Parks and Wildlife Dept.
P. O. Box 8
Seabrook, Texas 77586
713/474-2811, 2812 or 2648

Matagorda Bay:
Mr. James A. Dailey or Mr. Michael G. Weixelman
Texas Parks and Wildlife Dept.
P. O. Box 385
Palacios, Texas 77465
512/972-5483

San Antonio Bay:
Mr. Paul C. Hammerschmidt
Texas Parks and Wildlife Dept.
Seadrift, Texas 77983
512/785-3521

Aransas Bay and Corpus Christi Bay:
Mr. William E. Mercer
TPWD Rockport Marine Lab
P. O. Box 1707
Rockport, Texas 78382
512/729-2328

Upper Laguna Madre:

Mr. Richard A. Harrington
TPWD Flour Bluff Station
4121 Laguna Shores Drive
Corpus Christi, Texas 78418
512/937-2931

Lower Laguna Madre:

Mr. Kenneth W. Rice
Texas Parks and Wildlife Dept.
Rt. 5, Box 214
Harlingen, Texas 78550
512/350-4490