AKU-T-87-002

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COMMERCIAL FISHING INDUSTRY STUDY HOMER, ALASKA

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University of Alaska Marine Advisory Program

> Marine Advisory Bulletin # 33 November 1987

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Cover by Karen Stomberg Drawings by Jan Chapman

ACKNOWLEDGMENT

This publication is the result of work sponsored by the University of Alaska Sea Grant College Program. Alaska Sea Grant is cooperatively supported by the U.S. Department of Commerce NOAA Office of Sea Grant and Extramural Programs under grant number NA86AA-D-SG041, project numbers A/71-01 and A/75-01; and by the University of Alaska with funds appropriated by the state. Cover by Karen Stomberg. Drawings by Jan Chapman.

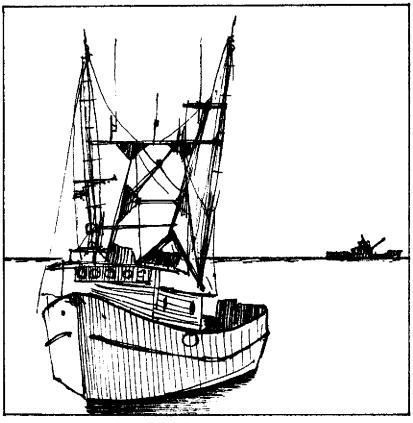
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ABSTRACT

Information from the Alaska Commercial Fisheries Entry Commission and two local surveys was used to estimate the impact of commercial fishing on the economy of the southern Kenai Peninsula. In 1985 there were 535 permit holders who fished 924 commercial permits. These fishermen landed over 43 million lb of fish and shellfish worth an estimated \$26,020,151. After applying several adjustments to this figure and adding in other fisheries related income it is estimated that the commercial fishing industry brought approximately \$28.5 million into the Homer area economy. Along with this income the industry is credited with providing the equivalent of 457 full-time jobs for the area economy.



INTRODUCTION

It is generally recognized that commercial fishing has been the backbone of the Homer area economy for the past 30 years. Even though diversification in the forms of tourism, commercial and government services, and a growing non-fishing population are changing the complexion of the area's economic base, commercial fishing still stands as the single most important industry. At a time when Alaska's oil-based economy is severely depressed, healthy fish stocks, relatively high prices and expanding domestic and world markets have made fishing one of the few bright spots in the state's and Homer's economic future.

Things are changing on the southern Kenai Peninsula. Decisions are being made about port and harbor rates, taxes and services that will have economic significance to all industries, businesses and people of the area. It is vitally important that an industry like commercial fishing state its case in the development of the southern Kenai Peninsula. While almost everyone agrees that commercial fishing is an important industry, there are almost no numbers or figures to document the extent of that importance. At the request of the North Pacific Fisherman's Association, this study was initiated in an attempt to provide some of the facts about the fishing industry in the Homer area.

METHODOLOGY

This study pieces together existing facts about this complex industry we call commercial fishing. In addition to sleuthing out existing information, two new sources of information were developed. One was a survey of commercial fishermen and the other was a survey of area businesses that depend on commercial fishermen for some or all of their business. The year 1985 was selected for study because it is the most recent year for which the Alaska Commercial Fisheries Entry Commission (CFEC) has complete statistics. CFEC data is an essential part of the study. The geographical coverage of the study is the southern Kenai Peninsula including the communities of Anchor Point, Nikolaevsk, Homer, Seldovia, Halibut Cove, Port Graham, and English Bay. For the sake of brevity, this area will be referred to throughout this report as the Homer area.

This study estimates the amount of gross income and number of jobs generated by the commercial fishing industry in the Homer area. There will also be some analysis of how this industry impacts local businesses and households.

THE INDUSTRY

For those readers who are not familiar with the commercial fishing industry in general and the Homer area industry in particular, a brief description is in order.

HARVESTING SECTOR

The largest segment of the industry is the harvesters or fishermen. In 1985, there were 525 people who held commercial fishing permits in the Homer area. Actually, there were 910 permits issued, putting the average number of permits per person at just under two. The most permits held by one individual was nine, and the least of course was one. Having six or seven permits was fairly common, especially among full-time fishermen.

Homer area fishermen participate in 48 different fisheries from Norton Sound to Southeastern Alaska. Keep in mind that the Alaska Department of Fish and Game issues permits based not only on the target species, but also on the gear type and location. Thus, there are 13 different salmon permits and five different herring permits being fished by area fishermen. As you might expect, the species that make up the bulk of the fishermen's catches are the same species that make up the bulk of catches across the state: salmon, halibut, herring, shrimp, and crab. More recently, black cod (sablefish) has become a high value species hotly pursued by a few area boats.

Almost every type of gear and boat, from 18 ft skiffs to 100 ft or longer catcher/processors, can be found in the Homer harbor. Onboard you can find fishermen working their longlines, gillnets, seines, pots, trawls, dredges, and hand troll gear. If one thing characterizes the Homer fishing fleet, it is diversity: the willingness and ability of fishermen to go where the fish are and use whatever it takes to catch them.

PROCESSING SECTOR

Processing is the second largest segment of the commercial fishing industry. There are two major processors in the Homer area, with permanent facilities (one in Homer and one in Seldovia), several processors who buy in the Homer area from time to time and, finally, a number of smaller independent processing operators who have developed their own special niche in the industry.

The largest local processor is Seward Fisheries, a branch of Icicle Seafoods. This company participates heavily in all local fisheries (salmon, halibut, crab, shrimp, and herring) and is usually willing to help fishermen seek markets for other fisheries as they develop. In addition to processing locally caught fish, they occasionally handle overflow catches from other parts of Alaska. Processing at their facility takes many forms, including fresh, frozen and cooked, all in a variety of styles and packs. These products are then marketed throughout the world. In 1987, one other major processor, Dragnet Fisheries, established a permanent facility in Homer and may become a major player in the processing sector for the area.

Other major Alaskan processors, primarily from around the peninsula, purchase fish in the Homer area, especially during the salmon and halibut seasons. Homer is growing in importance as a halibut landing port. In 1985, approximately 3.6 million lb were landed through Homer. In 1986, that number jumped to 6.7 million lb, making Homer second only to Kodiak in halibut landed in West Coast ports. Most out-of-the-area companies that buy fish in Homer have no permanent facilities and do not contribute to the local economy. Even the raw fish tax collected for fish bought in Homer goes to the community where the company is based.

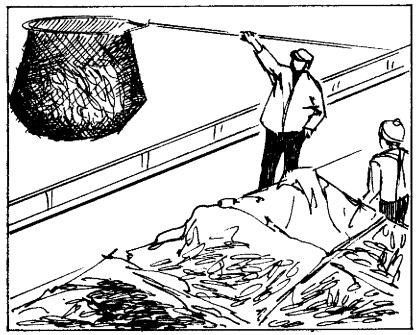
In addition to major processors, several small independent companies (Lobo Seafoods, Katch Canning, and others) have established themselves as specialty processors. These independent operators produce a variety of products, such as smoked fish and gourmet items. Their services range from retail sales to custom processing.

MANAGEMENT/REGULATORY SECTOR

Another significant piece in the commercial fishing complex around Homer is state and federal management. These government agencies exist principally and in some cases exclusively because of the fishing industry. Consequently, the income and jobs brought into the area are directly related to commercial fishing. The agencies in this sector are: the Alaska Department of Fish and Game (Commercial Fisheries and Fisheries Rehabilitation, Enhancement and Development divisions) and the U.S. Coast Guard. Although the Coast Guard has a significant impact on the Homer area, it is difficult to determine what portion of their budget can be attributed to the local fishing industry.

TENDERING AND OTHER VESSEL OPERATIONS

While most Homer area-based fishing vessels are involved in the harvesting sector, some vessels are involved part of the time in other activities associated with the fishing industry. Receiving fish from harvesting vessels and transporting them to a processor is known as tendering. A number of Homer area vessels are used for this purpose, especially in the salmon and herring fisheries. Local boats are also leased to other fishermen when not being used by their owners. Other leasing or charter arrangements are also possible. An attempt will be made to include these activities in the economic impact section of this report.



MARINE BUSINESS

An indirect yet very important part of the commercial fishing industry in the Homer area is the businesses that exist wholly or in part to provide goods and services to the maritime industry. A special marine business, the Port of Homer, will be examined separately because it is such an integral part of the fishing industry. While not all port activities are fishing related, it's clear that the beginnings of the Port of Homer and a significant portion of its operating budget are a result of commercial fishing.

Approximately 150 businesses in the Homer area received a marine business survey, and 52 answered. This number represents the majority of businesses that to one degree or another make their living from the fishing industry. Results of the survey will be presented later in this report.

GROSS ECONOMIC IMPACTS

HARVESTING SECTOR

The Commercial Fisheries Entry Commission, a division of the Alaska Department of Fish and Game, annually produces catch and gross earning statistics based on fish ticket landing records. Table 1 shows the 1985 catch data for all fishermen who used Homer, Anchor Point, Seldovia, Port Graham, or English Bay as their place of residence on any applications to the CFEC.

Census Area	Number of permit holders	Number of permits fished	Landings (lbs)	Est. Gross earnings (dollars)
Anchor Point	87	149	3,493,442	2,521,901
English Bay	7	7	84,585	50,913
Homer	353	627	32,801,547	18,923,908
Port Graham	19	25	1,418,905	515,064
Seldovia	69	116	5,299,596	4,008,365
Total	535	924	43,098,075	26,020,151

 Table 1. 1985 landings and earnings for fishermen residing in five Homer

 area communities based on ADF&G fish ticket statistics

From Table 1 you can see that Homer area (throughout this report the Homer area includes all the communities listed in Table 1) fishermen landed more than 43 million lb of raw fish (including shellfish) in 1985, worth an estimated \$26 million. This value will be examined in greater detail later.

To add a historical perspective to the 1985 catch data, the same information is listed in Table 2 for 1975, 1980, and 1984.

Year	Number of permit holders	Number of permits fished	Landings (lbs)	Est. Gross earnings (dollars)
1975	247	413	27,633,217	5,382,089
1980	563	932	46,108,091	23,937,245
1984	547	916	39,703,057	21,350,497

 Table 2. Catch and earnings for Homer area fishermen in 1975, 1980,

 and 1984 based on ADF&G fish ticket statistics

PROCESSING SECTOR

Only information from the Homer area's major processor, Seward Fisheries, will be presented in this section. Some of the contributions to the local economy by Seward Fisheries (Homer plant only) are listed in Table 3.

Seward Fisheries paid \$14,500 in sales tax to the Kenai Peninsula Borough in 1985. They also paid \$385,000 in raw fish tax to the State of Alaska. This tax represents approximately \$13 million in ex vessel revenue paid to fishermen. From the \$385,000, 50 percent goes to the state, 25 percent to the Kenai Borough and 25 percent to the City of Homer. For this study, all of Homer's share of this tax and 24 percent of the borough's share (the Homer area contains approximately 24 percent of the Kenai Borough population) was assumed to affect the Homer area, for a total of \$119,350. Certainly some of the state's share of this tax also has an impact in the study area, but it is impossible to guess how much.

Seward Fisheries also had a 1985 gross payroll of \$3.8 million. Many of the processing jobs are seasonal; however, the management at Seward Fisheries estimates it had the equivalent of 105 full-time positions in 1985.

The total contribution to the Homer area economy by Seward Fisheries equals \$6,205,350.

Local vendors	
Trucking	\$79,000
Homer Electric Association	259,000
Refuse	8,000
Groceries	51,000
Office supplies	6,000
Professional services	8,000
Automotive/marine parts and services	112,000
Fishermen supplies	140,000
Fuel	650,000
Hardware	68,000
Tendering (local boats only)	805,000
Total	\$2,186,000
City of Homer	100,000
port fees, utilities, etc.	

Table 3. Some contributions to the local economy by Seward Fisheries

MANAGEMENT/REGULATORY SECTOR

The Alaska Department of Fish and Game, Division of Commercial Fisheries and Fisheries Rehabilitation, Enhancement and Development division (FRED) are important contributors to the local economy.

The total budget for the Division of Commercial Fisheries during the 1986 fiscal year (July 1985 to June 1986) for shellfish, salmon, herring, groundfish, and the vessel *Pandalus* was \$764,000. This budget includes salaries, benefits, and operating budget. Commercial Fisheries Division personnel for this period included nine permanent full-time 12-month employees, one permanent full-time 6-month employee and five seasonal jobs.

The FRED budget for a similar period was \$558,700. In addition to personnel and general support, these funds include Homer sport fisheries, Leasure Lake stocking and fertilization, and the Tutka Hatchery. Jobs included four permanent full-time employees and 12 seasonal employees.

U.S. COAST GUARD

The U.S. Coast Guard's impact on the Homer area economy is significant. It consists of the 180 ft buoy tender Sedge, homeported in Homer, with a crew of six officers and 51 enlisted personnel. Annual salaries for fiscal year 1986 (Oct. 1, 1985 to Sept. 30, 1986) amounted to \$728,117. Additionally, the operating budget for the ship (FY87) stands at \$490,000 and includes fuel, housing, maintenance and aids to navigational equipment. The gross impact of the Coast Guard is about \$1,218,000. Two things complicate the picture when trying to relate this amount to commercial fisheries. First, not all of this gross amount is spent in the Homer area. Second, the Sedge is a buoy tender, a mission not directly related to the commercial fisheries. The Sedge and the Coast Guard do, however, perform search and rescue operations in the area and many of these do relate to commercial fisheries. For this reason this study assumed that about 10 percent of the Coast Guard's budget (\$121,800) could be attributed to the commercial fishing industry in the Homer area.

TENDERING AND OTHER VESSEL OPERATIONS

The fishing income presented in this section does not represent all of the income earned by Homer area vessels through tendering or other operations such as leasing. Tendering income is estimated at \$779,731 and income from vessel leasing at \$385,666. Only a portion of this income was accounted for through returned surveys and personal communications with fishermen. Some tendering income is also included in the processing sector accounts. No effort was made to assess the number of jobs provided by tendering and other vessel operation.

JOBS/EMPLOYMENT

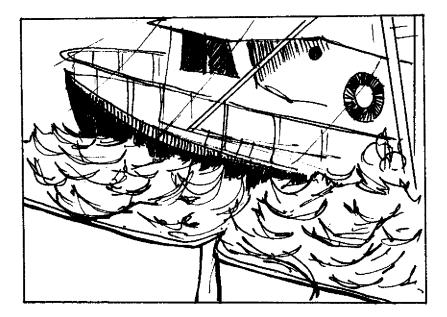
A good indicator of the economic impact of any industry is the number of jobs created. A difficulty with using this indicator is defining jobs in such a way that they can be meaningfully compared to jobs in other industries. When considering a seasonal industry like commercial fishing it is normal to convert the total number of jobs to a full-time equivalent number of jobs through some kind of hours per day or months per year conversion. While this approach is used in this study, a direct comparison between converted seasonal jobs and full-time jobs may not be appropriate. For instance, the average commercial fishing job lasts about three months, so it would normally take four of these seasonal jobs to equal one full-time job. The income earned in three months of fishing is in some cases enough to provide for annual living expenses and the fishing boat crew member or operator does not need or want to seek additional employment. For many fishermen, their seasonal job is equivalent to a full-time iob.

Another pitfall in analyzing jobs in the fishing industry is equating crew positions with jobs. It is easy to take the average number of crew positions in a fishery, multiply that by the number of permits fished and equate the total to the number of jobs in a fishery. The relationship between crew positions and jobs is not direct. In the Homer area fleet many captains employ the same crew member in more than one fishery. Therefore, one job may cut across several crew positions. I have attempted to compensate for this by multiplying the total number of crew positions by .7, a factor derived from information gathered in the commercial fisherman's survey. Fishermen responding to the survey were asked to report the number of crew positions for each fishery in which they participated. They were asked how many crew members they employed (jobs). This ratio, jobs : crew positions, averaged 0.7.

The following facts about jobs created by the harvesting sector of the Homer area commercial fishing industry were also derived from the survey:

- 1. There were 1,929 crew positions in all fisheries.
- 2. There were 1,320 seasonal jobs (1,929 x .7).
- 3. Each seasonal job averages 2.4 months. Therefore, the number of full-time equivalent jobs is 270 $(1,350 \times 2.4)$.
 - 12
- 4. Homer area residents were employed in 224 of these jobs, so about 83 percent of these jobs went to locals.
- 5. Salaries paid to residents ranged from a high of \$42,205 (for 5 months) to a low of \$600 (2 weeks) with the average being \$10,213.

Commercial fishing wages are so variable that it would be difficult to make any kind of economic impact projections based on the average income quoted. The number of jobs (seasonal and full-time equivalent) are, however, believed to be an indication of commercial fishing's impact in the Homer area. Keep in mind also that the job analysis presented in this section is for the harvesting sector only. Additional job impacts are mentioned in other sections of this report.



BUSINESS COMMUNITY SURVEY

As a part of this study, an effort was made to survey local firms that do business with the commercial fishing industry. Fifty-two businesses responded to the survey. They represented all sectors of commerce in the Homer area including professionals, parts and repair operations, transportation companies, suppliers, electronics sales and service and so on. A summary of the type of businesses responding to the survey is listed in Table 4.

The focus of this survey was to see how local businesses perceived their interaction with the fishing industry. The key word here is perceived. Many businesses have no way of knowing when they are doing business with someone from the fishing industry, so the most that could be hoped for was to get their impressions of their fishing-related business.

Туре	Number
Marine engine sales and service	5
Automotive repairs and parts	5
Boat storage hauling, launching	4
Medical services	4
Miscellaneous boating services	4
Electronics sales and service	4
Insurance	3
Electrical contracting	3
Legal services	3
Accounting services	3
Fishing gear and hardware	3
Welding fabrication and repair	2
Seafood processing	2
Building materials	2
Transportation (air and land)	2
Fuel oil	1
Groceries	1
Printing	1

Table 4. Businesses responding to the survey

The cover letter for this survey provided an estimate of the number of households in the Homer area in 1985 that probably earned some of their gross income from commercial fishing (Table 5).

Area	Total 1985 fishing hou se holds	1985 Commercial permit holders
Homer	2,505	353
Anchor Point	828	87
Seldovia	271	95

Table 5. Estimates of households in the Homer area with income from commercial fishing

The survey itself contained only four questions. The first asked businessmen to estimate the percent of their customers that are commercial fishermen. Four percent of the responding businesses felt that 90 to 100 percent of their customers were fishermen, and 16 percent felt that 80 percent or more were commercial fishing-related. On the other end of the scale, 16 percent felt that fishermen made up less than 10 percent of their customers and 54 percent perceived that fewer than 30 percent of their customers were fishing commercially.

The second question asked local businesses to choose the income range that best approximated their gross income from commercial fishermen. Most of the estimates were in the lower range of the scale. Sixteen percent said that less than \$5,000 of their gross income was from fishermen, 42 percent felt it was less than \$40,000, and 64 percent estimated less than \$80,000. On the other end, 4 percent of the responding businesses grossed more than \$1 million from the fishing industry, 12 percent earned more than \$600,000 and 30 percent said more than \$100,000 of their revenue comes from commercial fishermen. See Appendix A for a complete table of these results.

Answers to Questions 1 and 2 of the survey suggest that local businesses do a significant trade with the fishing industry. We hoped to make a comparison between the business community's perception of its interaction with commercial fishermen and the actual interaction based on information from the fishermen's survey. Some comparisons are possible, but not to the extent originally hoped (see commercial fishermen's survey).

The last two questions on the business survey dealt with jobs and how they would be affected if the commercial fishing industry were suddenly to disappear from the Homer area (Table 6).

Based on the information in Table 6, it would appear that approximately 50 full-time equivalent jobs in the Homer area are directly dependent on the fishing industry. This estimate is derived by dividing the permanent part-time jobs by two

Job category	Total jobs reported ¹	Jobs lost if no fishing	Percent of total
Full-time	151	32	21
Permanent part-time	42	16	38
Part-time	32.5	17	52
Seasonal	37.5	26	69

 Table 6. The effect on employment in the Homer area if commercial fishing were discontinued in those communities

¹These jobs are from businesses that support the commercial fishing industry.

(assuming half time employment) and dividing the part-time and seasonal jobs by four (assuming three month employment). Remember that this estimate (50 jobs) relates only to those businesses that responded to the survey.

PORT OF HOMER

The Port of Homer is a local business with ties to the fishing industry that are so strong that it deserves special consideration. Table 7 shows a breakdown of the revenue collected by the port for fiscal years 1985 by various categories. It also shows the percent and the amount contributed by commercial fishermen in each category.

Table 7 shows that the commercial fishing industry accounted for almost 64 percent of the Port of Homer's revenue for fiscal year 1985. Employment provided by the Port of Homer during the same time period is given in Table 8.

Item	Total (dollars)	Portion of total collected from commercial fishermen (percent)	Amount collected from fishermen (dollars) ¹
Taxes	40,000	40	16,000
Fish tax	85,000	100	85,000
Main dock	86,000	30	26,000
Storage	12,000	90	11,000
Impound fees	4,000	90	4,000
Ice	53,000	100	53,000
Buyer stations	25,000	100	25,000
Cold storage	2,000	100	2,000
Crane	73,000	90	66,000
Seafood wharfage	8,000	100	8,000
Stall rentals	179,000	70	125,000
Energy	73,000	80	58,000
Transient	302,000	40	121,000
Grid	28,000	90	25,000
Miscellaneous	21,000	25	5,000
Total	991,000		680,000

Table 7. Revenue collected by the Port of Homer in 1985

¹Amounts rounded to nearest thousand.

Table 8. Jobs provided by the Port of Homer in 1985

Full-time		
Harbor officers	6	
Harbormaster	1	
Clerks	2	
Ice plant manager	1	
Ice plant workers	3	
Port employees	2	
Seasonal (about 4 months each)		
Harbor	5	
Fish dock	1	

If we convert the six seasonal jobs to two full-time equivalents, there are 21 full-time employees. Since commercial fishing contributes 64 percent of the revenue to the Port of Homer, it seems reasonable to attribute 64 percent, or 13, of these fulltime positions to the industry.

COMMERCIAL FISHERMEN'S SURVEY

The purpose of surveying commercial fishermen directly was to get a better understanding of how and where they spend their fishing income in the Homer area. Because of the diverse nature of the Homer area fleet, it was obvious that some portion of their income was spent outside of the local area. It was necessary to get an estimate of this exported income and also to get a clear picture of fishermen's local spending patterns.

Approximately 170 surveys were distributed to Homer area fishermen on a selected basis. An advisory group of fishermen assisted in selecting permit holders to receive a survey. Selection was based on anticipated cooperation in providing the information requested. Consequently, the results from the survey are not random but are more representative of the full-time fishermen whose major income source is commercial fishing. Forty-one surveys returned were complete enough to use. This 25 percent return was not high (no surveyor is ever satisfied with the return rate) but it provided enough data to draw some conclusions about fishermen's average spending patterns.

The survey also requested information about jobs: how many, how much, and who got them. Because of the wide range in gross fishing incomes represented by the returned surveys it seemed advisable to divide them into three income groups: less than \$50,000 gross fishing income (GFI), greater than \$50,000 but less than \$100,000 GFI, and more than \$100,000 GFI. The bulk of the survey information is summarized in Appendix B.

COMPARISON WITH OTHER ALASKAN PORTS

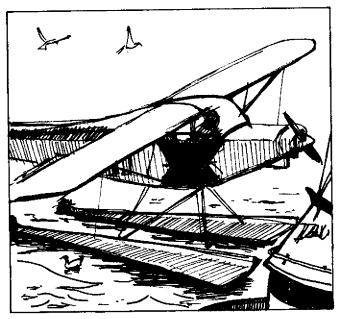
The focus of this study has been the impact of commercial fishing in the Homer area. To get a slightly broader perspective, it is worthwhile to compare landings of the Homer fishing fleet to those from other Alaskan ports. Table 9 shows the 1985 catch data provided by the Commercial Fisheries Entry Commission for eight Alaskan communities.

City	Number of permit holders	Number of permits fished	Landings (lbs)	Est. Gross earnings
Kodiak	706	1,232	86,529,888	57,681,149
Cordova	401	620	61,438,424	27,772,204
Homer area	535	924	43,098,075	26,020,151
Petersburg	364	700	47,550,261	24,998,184
Anchorage	783	920	32,189,261	22,002,655
Ketchikan	380	584	31,832,781	14,664,605
Sitka	412	728	20,906,639	13,661,404
Juneau ¹	404	638	19,555,617	12,061,645

Table 9. Data on participation and landings for commercial fishermen in eight Alaskan ports

¹Includes Auke Bay, Douglas and Juneau

Remember that Table 9 reflects only the landings and gross earning of the harvesting sector in each community. It tells nothing about the infrastructure that is an integral part of the industry and which has been detailed elsewhere in this report. In 1985, the Homer area ranked third in the state in estimated gross earnings and fourth in pounds landed.



SUMMARY

Direct economic impacts and job impacts discussed throughout this study are summarized in Table 10.

Table 10. Summary o	f economic and j	ob impacts	discussed in this stu	dy
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Industry sector	Dollars generated	Full-time jobs
Harvesting ¹	19,760,000	270
Processing ²	6,205,350	105
ADF&G ³	764,000	11
ADF&G ⁴	558,000	8
Coast Guard	121,000	N/A
Tendering/leasing	1,065,397	N/A
Business sector	Indirect	50
Port of Homer	Indirect	13
Total	28,473,747	457
-		

¹Fishermen

²Seward Fisheries employees ³Commercial Fisheries Division employees

⁴FRED Division employees

So how does the Homer area commercial fishing industry impact the local economy? The simple answer is that it contributes more than \$28 million and more than 450 full-time jobs. It would be negligent, however, to leave it at that because the real answer to this question is not easy.

Approximately 15 percent of the households in the Homer area earn all or part of their annual income from harvesting fish. As many as 1,600 jobs are created by this industry, More than 85 percent of these jobs go to local people. Even the 15 percent that don't go to local people benefit the local economy to some extent. They bring new people to the area, some decide to stay and all spend at least part of their income in Homer. Some of these jobs are seasonal, lasting only three to four months, but they are jobs. Many people prefer seasonal work in the fishing industry to working full-time at something else.

The estimated \$28 million provided to the Homer area by commercial fishing is multiplied as it works its way around the community. How much it is multiplied can only be guessed without further studies, but there is no question that those dollars reach into all corners of the business community. Businessmen should spend a few minutes looking at the information presented in Appendix B. Here one can get a good idea of how fishermen spend their money. An average of 76 percent of a fisherman's gross earning is spent locally. Closer to 100 percent of the income is spent locally for common expenses such as contractors, gear, bait, ice, parts, repairs, professional services, and so forth.

Knowing how much income commercial fishing brings into the Homer area is important. But what does it mean in terms of the total area economy? The only data available for direct comparison comes from the May 1986 edition of the Kenai Peninsula Borough Situations and Prospects. Numerous borough statistics are compiled in this document including gross sales receipts by place. In 1985, the combined gross sales receipts for Homer and Seldovia were \$141.5 million. Unfortunately, the gross sales outside of these two cities but still within the boundaries of the Homer area are not separately accounted for in Situations and Prospects. If, however, we use the \$141.5 million as a reasonable approximation of the total retail sales on the southern Kenai Peninsula, we can see that the commercial fishing income is 20 percent of the total gross sales. This should help put into perspective the total economic impact of this industry.

The infrastructure required to support this industry is substantial. Much of it has been detailed in this study but some has been missed and some of the details could be more complete. Also, the infrastructure is constantly changing. The recent expansion of the Homer boat harbor and the development of the fish dock and ice plant have opened the door for substantial changes in the fishing fleet. Important discussions are also underway as to how and if future development of the harbor and adjacent areas on the Homer Spit should take place. All of these things will impact the commercial fishing industry, and in turn the Homer area. Just how remains to be seen.

Commercial fishing is a complex industry that touches many parts of the local and state economy with national and international implications as well. This study was not intended to be a comprehensive analysis of the industry, but the results presented here are a realistic beginning.

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APPENDIX A RESULTS OF THE SURVEY OF LOCAL BUSINESSES

Question 1. What percent of your customers are commercial fishermen?

Range (percent)	Percent of those surveyed who responded
0-10	16
11-20	24
21-30	14
31-40	6
41-50	4
51-60	10
61-70	0
71-80	14
81-90	4
91-100	4

Question 2. How much of your gross annual business income came from commercial fishermen or was related to commercial fisheries?

Range (dollars)	Percent of those surveyed who responded	
< 5,000	16	
5,001-20,000	16	
20,001-40,000	10	
40,001-60,000	14	
60,001-80,000	10	
80,001-100,000	6	
100,001-200,000	8	
200,001-300,000	8	
300,001-400,000	2	
400,001-500,000	0	
500,001-600,000	0	
600,001-700,000	4	
700,001-800,000	2	
800,001-900,000	0	
00,001-1,000,000	2	
> 1,000,000	4	

APPENDIX B RESULTS OF SURVEY OF COMMERCIAL FISHERMEN

The information in Tables B-1 and B-2 was taken from the 41 surveys returned by commercial fishermen. The fishermen who participated in the survey earned most (an average of 87 percent) of their annual income from commercial fishing. Therefore, data in the table is typical for full-time fishermen but not all commercial fishermen. Table B-3 compiles the results of the job summary completed for this report.

· · · · · ·	Average	amount spen	t on expens	ies (dollars)
· · · · · · · · · · · · · · · · · · ·	All	50,000 ¹	100,000 ²	>100,000 ³
Gross fishing income	132,748	28,752	75,288	241,376
Capital Improvements	•			
Buildings	4,625	708	11,999	3,357
Contractors	1,799	0	390	3,881
Skiffs	1,990	1,439	3,530	1,533
Outboards	1,372	648	1,556	1,792
Vehicles	2,845	1,214	5,707	2,453
Other	10,768	0	10,560	18,661
Lending institutions	,			
Boat loans	15,789	7,308	12,599	23,707
Gear loans	1,563	1,930	700	1,778
Permit loans	5,210	3,862	9,400	3,856
Other	4,690	385	1,290	9,688
Insurance	6,115	1,002	4,779	10,551
Fuel	5,111	2,097	3,150	8,377
Crew Shares	42,474	5,632	18,598	82,346
Professional fees	•	,	•	•
Acc't./taxes	513	116	711	689
Legal fees	228	256	30	318
Medical	974	184	1,426	1,294
Other	1,980	0	1,378	3,744
Gear and supplies	-,		-,	
Fish gear	5,408	2,319	4,065	8,384
Electronics	1,166	365	600	2,059
Groceries	3,591	1,096	2,965	5,742
Bait	1,741	603	732	3 124
lce	47	46	82	28
Equipment	1,782	151	1,620	3,050
Other	63	0	260	, 0
Repair and maintenance		•		
Engine	1,506	559	1,620	2,126
Boat	1,743	209	1,062	3,228
Equipment	1,952	995	1,369	2,967
Parts	772	175	286	1,472
Vehicles	651	315	336	1,068
Other	839	34	33	1,867
Port/harbor	1,101	452	1,163	1,536
Taxes	1,093	439	1,411	1,388
Other	2,174	263	845	4,292
Viilei	4,117	200	0-20	71000
Total	133,691	34,802	106,254	220,353

Table B-1. Summary of information from 41 surveys returned by commercial fishermen

¹This column shows results from the 13 surveys that were returned by people who grossed \$50,000 or less annually from commercial fishing. ²This column shows results from the 10 surveys that were returned by

³This column shows results from the 10 surveys that were returned by ³This column shows results from the 18 surveys that were returned by

people who grossed more than \$100,000 annually from fishing.

	Av	erage percen services spe	tage of good ent in Home	
U.	A11	50,000,	100,000,	>100,000
GF Income	87	801	80*	96 ¹
Capital Improvements				
Buildings	90	100	77	100
Contractors	100	0	100	100
Skiffs	85	100	100	50
Outboards	94	100	100	89
Vehicles	49	60	16	62
Other	66	0	75	62
Lending institutions				
Boat loans	20	25	14	21
Gear loans	62	100	50	33
Permit loans	0	0	0	0
Other	35	50	25	40
Insurance	54	80	50	50
Fuel	72	79	72	66
Crew Shares	88	72	94	94
Professional fees				
Acc't./taxes	82	94	70	83
Legal fees	91	100	100	80
Medical	95	100	100	89
Other	89	0	97	86
Gear and supplies				
Fish gear	85	85	85	85
Electronics	93	100	100	86
Groceries	78	78	83	75
Bait	98	100	100	94
Ice	100	100	100	100
Equipment	79	100	86	60
Other	100	0	100	0
Repair and maintenance		-		-
Engine	79	54	100	90
Boat	89	67	97	90
Equipment	85	84	86	86
Parts	86	85	90	84
Vehicles	81	78	100	78
Other	83	100	100	76
Port/harbor	93	100	89	91
Taxes	51	45	40	61
Other	48	60	46	45
Total	76	82	7 9	74

Table B-2. Summary of information from 41 surveys returned by commercial fishermen

¹Average percent of gross annual income from commercial fishing.

	Total	Total Months	Compensation	A verage	Average	Average number of jobs per income class	obs per inc	ome class
	jobs		paid	com pensation	AII	50,000 100,000	100,000	100,000
N II	199				4.9	2.0	4.4	7.0
Homer	167	394	1,705,497	10,213	4.0	1.4	4.0	5.9
Alaska	19	61	375,221	19,748	0.6	0.2	0.2	0.7
Outside	13	24	114,133	8,779	0.3	0.1	0.1	0.4

Table B-3. Employment statistics