

## **APPENDIX C**

### **STOCK ASSESSMENT AND FISHERY EVALUATION REPORT FOR THE GROUND FISH FISHERIES OF THE GULF OF ALASKA AND BERING SEA/ALEUTIAN ISLAND AREA:**

#### **ECONOMIC STATUS OF THE GROUND FISH FISHERIES OFF ALASKA, 1999**

by

Terry Hiatt and Joe Terry

Socioeconomic Assessments Program  
Resource Ecology and Fisheries Management Division  
Alaska Fisheries Science Center  
National Marine Fisheries Service  
National Oceanic and Atmospheric Administration  
7600 Sand Point Way N.E., BIN C15700  
Seattle, Washington 98115-0070

November 10, 2000



## ABSTRACT

The domestic groundfish fishery off Alaska is an important segment of the U.S. fishing industry. This report presents data which summarize various aspects of the economic performance of the fishery. Generally, data are presented for the domestic groundfish fishery for 1995 through 1999. Limited catch and ex-vessel value data are reported for earlier years in order to depict the rapid development of the domestic groundfish fishery in the 1980s and to provide a more complete historical perspective on catch. Pacific halibut (*Hippoglossus stenolepis*) is not included in this report because for management purposes halibut is not part of the groundfish complex.

All but a small part of the commercial groundfish catch off Alaska occurs in the groundfish fisheries managed under the Fishery Management Plans (FMP) for the Gulf of Alaska (GOA) and the Bering Sea/Aleutian Islands area (BSAI). In 1999, other fisheries accounted for only 5,500 t of the total catch of the Alaska groundfish fisheries. With the exceptions of Tables 1 - 3 and Figures 1 - 4, the catch, ex-vessel value, and vessel data presented in this report are for those two FMP fisheries.

In addition to data from the groundfish fisheries, this report contains data on some of the external factors which, in part, determine the economic status of the fisheries. Such factors include foreign exchange rates, the prices and price indexes of products that compete with products from these fisheries, cold storage holdings, domestic per capita consumption of seafood products, and fishery imports.



## CONTENTS

|                           | Page |
|---------------------------|------|
| Abstract . . . . .        | iii  |
| List of Figures . . . . . | vii  |
| List of Tables . . . . .  | vii  |
| Introduction . . . . .    | 1    |
| Overview . . . . .        | 2    |
| Citations . . . . .       | 8    |
| Figures . . . . .         | 9    |
| Tables . . . . .          | 14   |



### List of Figures

1. Groundfish catch in the commercial fisheries off Alaska by species, 1984-99.
2. Groundfish catch in the domestic commercial fisheries off Alaska by species, 1984-99.
3. Ex-vessel value of the groundfish catch in the domestic commercial fisheries off Alaska by species, 1984-99.
4. Ex-vessel value of the domestic fish and shellfish catch off Alaska, 1984-99.
5. Number of vessels in the domestic groundfish fishery off Alaska by gear type, 1994-99.

### List of Tables

1. Groundfish catch in the commercial fisheries off Alaska by area and species, 1984-99.
2. Groundfish catch in the commercial fisheries off Alaska by area and fishery, 1981-91.
3. Ex-vessel value of the catch in the domestic commercial fisheries off Alaska by species group, 1984-99.
4. Groundfish catch off Alaska by area, catcher category, gear and species, 1995-99.
5. Discards and discard rate for groundfish catch off Alaska by area, gear, and species, 1995-99.
6. Gulf of Alaska groundfish catch by species, gear, and target fishery, 1998-99.
7. Bering Sea and Aleutian Islands groundfish catch by species, gear, and target fishery, 1998-99.
8. Gulf of Alaska groundfish discards by species, gear, and target fishery, 1998-99.
9. Bering Sea and Aleutian Islands groundfish discards by species, gear, and target fishery, 1998-99.
10. Gulf of Alaska groundfish discard rate by species, gear, and target fishery, 1998-99.

11. Bering Sea and Aleutian Islands groundfish discard rate by species, gear, and target fishery, 1998-99.
12. Prohibited species bycatch by species, area and gear, 1996-99.
13. Prohibited species bycatch in the Gulf of Alaska by species, gear, and groundfish target fishery, 1998-99.
14. Prohibited species bycatch in the Bering Sea and Aleutian Islands by species, gear, and groundfish target fishery, 1998-99.
15. Prohibited species bycatch rates in the Gulf of Alaska by species, gear, and groundfish target fishery, 1998-99.
16. Prohibited species bycatch rates in the Bering Sea and Aleutian Islands by species, gear, and groundfish target fishery, 1998-99.
17. Groundfish catch off Alaska by area, residency, and species, 1995-99.
18. Ex-vessel prices in the groundfish fisheries off Alaska by area, gear, and species, 1995-99.
19. Ex-vessel value of the groundfish catch off Alaska by area, catcher category, gear, and species, 1995-99.
20. Ex-vessel value of Alaska groundfish delivered on shore by area, gear and catcher vessel length, 1993-99.
21. Ex-vessel value of the groundfish catch off Alaska by area, residency, and species, 1995-99.
22. Groundfish ex-vessel value by port of landing, 1993-99.
23. Product value of Alaska groundfish by area and processing mode, 1994-99.
24. Product value of Alaska groundfish processed by catcher-processors by area, gear, and vessel length, 1994-99.
25. Groundfish product value by port, 1994-99.
26. Number and total registered net tons of vessels that caught groundfish off Alaska by area and gear, 1993-99.



27. Number of vessels that caught groundfish off Alaska by area, vessel category, target, and gear, 1995-99.
28. Numbers of vessels (excluding catcher-processors), mean length and mean net tonnage for vessels that caught groundfish off Alaska by area, vessel length class (feet), and gear, 1995-99.
29. Numbers of vessels, mean length and mean net tonnage for vessels that caught and processed groundfish off Alaska by area, vessel length class (feet), and gear, 1995-99.
30. Number of vessels that caught groundfish off Alaska by area, tonnage caught, and gear, 1993-99.
31. Number of vessels that caught groundfish off Alaska by area, residency, target, and gear, 1995-99.
32. Number of vessels that caught groundfish off Alaska by month, area, vessel type, and gear, 1995-99.
33. Catcher vessel (excluding catcher-processors) weeks of fishing groundfish off Alaska by area, vessel length class (feet), gear, and target, 1995-99.
34. Catcher-processor vessel weeks of fishing groundfish off Alaska by area, vessel length class (feet), gear, and target, 1995-99.
35. Total at-sea processor crew weeks in groundfish fisheries off Alaska by month and area, 1995-99.
36. Production and value of groundfish products in the fisheries off Alaska by species, 1995-99.
37. Production of groundfish products in the fisheries off Alaska by species, product and area, 1995-99.
38. Production of groundfish products in the fisheries off Alaska by species, product and processing mode, 1995-99.
39. Monthly Japanese landing market price of selected groundfish by species, 1987-99, in yen/kilogram.
40. Monthly Tokyo wholesale prices of selected products, 1987-99, in yen/kilogram.

41. U.S. imports of groundfish fillets, steaks, and blocks, 1976-99, quantity in million lb., product weight and value in million dollars.
42. U.S. per capita consumption of fish and shellfish, 1970-99, population in millions and consumption in pounds, edible weight.
43. U.S. consumption of all fillets and steaks, and fish sticks and portions, total in 1,000 lb. and per capita in pounds, product weight, 1980-99.
44. Annual U.S. economic indicators: Selected producer and consumer price indexes, 1976-99.
45. Monthly U.S. economic indicators: Selected producer and consumer price indexes, 1997-99.
46. Annual foreign exchange rates for selected countries, 1976-99, in national currency units per U.S. dollar.
47. Monthly foreign exchange rates for selected countries, 1997-99, in national currency units per U.S. dollar.
48. Monthly U.S. cold storage holdings of selected groundfish blocks, 1997-99, in 1,000 lb. (end of month).
49. Monthly U.S. cold storage holdings of selected groundfish fillets, 1997-99, in 1,000 lb. (end of month).

## INTRODUCTION

The domestic groundfish fishery off Alaska is an important segment of the U.S. fishing industry. With a total catch of 1.7 million metric tons (t), a retained catch of 1.5 million t, and an ex-vessel value of \$483 million in 1999, it accounted for 39% of the weight and 14% of the ex-vessel value of total U.S. domestic landings as reported in Fisheries of the United States, 1999. The value of the 1999 catch after primary processing was approximately \$1.2 billion.

All but a small part of the commercial groundfish catch off Alaska occurs in the groundfish fisheries managed under the Fishery Management Plans (FMP) for the Gulf of Alaska (GOA) and the Bering Sea/Aleutian Islands area (BSAI). In 1999, other fisheries accounted for only 5,500 t of the catch reported above. With the exceptions of Tables 1 - 3 and Figures 1 - 4, the catch, ex-vessel value, and vessel data presented in this report are for those two FMP fisheries.

The fishery management and development policies for the BSAI and GOA groundfish fisheries have resulted in high levels of catch, ex-vessel value, processed product value, exports, employment, and other measures of economic activity. The cost data required to estimate the success of these policies with respect to net benefits to either the participants in these fisheries or the Nation are not available. However, the use of the race for fish as a principal mechanism for allocating the groundfish quotas and prohibited-species catch limits among competing fishing operations has adversely affected at least some aspects of the economic performance of the fisheries. The individual fishing quota (IFQ) program for the fixed gear sablefish fishery, the community development quota (CDQ) program for BSAI groundfish, and the American Fisheries Act (AFA) cooperatives for the BSAI pollock fishery have demonstrated that eliminating the race for fish as the allocation mechanism and replacing it with a market-based allocation mechanism can decrease harvesting and processing costs, increase the value of the groundfish catch, and, in some cases, decrease the cost of providing more protection for target species, non-target species, marine mammals, and seabirds. However, the distribution of net benefits and the magnitude of net benefits to the Nation resulting from such programs are difficult to measure. As with most any management program, there are winners and losers.

This report presents the economic status of groundfish fisheries off Alaska in terms of economic activity and outputs using estimates of catch, bycatch, ex-vessel prices and value, the size and level of activity of the groundfish fleet, and the weight and value of processed products. The catch, ex-vessel value, and fleet size and activity data are for the fishing industry activities that are reflected in Weekly Production Reports, Observer Reports, fish tickets, and the annual survey of groundfish processors. All catch data reported for 1991-99 are based on the blend estimates of total catch which are used by the National Marine Fisheries Service (NMFS) to monitor groundfish and prohibited species catch (PSC) quotas during each fishing year.

A variety of external factors influence the economic status of the fisheries. Information concerning the following external factors are included in this report: foreign exchange rates, the prices and price indexes of products that compete with products from these fisheries, U.S. cold storage holdings, and fishery imports. This report updates last year's report (Hiatt et al. 1999) and is intended to serve as a reference document for those involved in making decisions with respect to conservation, management, and use of these fishery resources.

The qualifications made in both the overview of the fisheries and the footnotes to the tables are critical to understanding the information contained in this report.

## OVERVIEW

The commercial groundfish catch off Alaska totaled 1.7 million t in 1999, compared to 1.9 million t in 1998 (Fig. 1 and Table 1). The ex-vessel value of the catch, excluding the value added by at-sea processing, increased from \$416 million in 1998 to \$483 million in 1999 (Fig. 3 and Table 3). The value of the 1999 catch after primary processing was approximately \$1.2 billion. The groundfish fisheries accounted for the largest share of the ex-vessel value of all commercial fisheries off Alaska in 1999 (39%), while the Pacific salmon (*Oncorhynchus* spp.) fishery was second with \$346 million or 28% of the total Alaska ex-vessel value (Fig. 4 and Table 3). The value of the shellfish catch amounted to \$271 million or 22% of the total for Alaska.

During the last 15 years, estimated total catch in the commercial groundfish fisheries off Alaska (including foreign and joint venture fisheries as well as the domestic fishery) varied between 1.7 and 2.4 million t (Fig. 1 and Table 1). The rapid displacement of the foreign fishery by the joint venture fishery and then of the joint venture fishery by the domestic fishery between 1981 and 1991 is documented by the data in Table 2.

The peak catch occurred in 1991, in part, because blend estimates of catch and bycatch were not yet used to monitor most quotas. If they had been, several fisheries would have been closed earlier in the year. There are three reasons why the catch estimates for 1988 through 1990 have a significant downward bias compared to the estimates for the other years. First, the domestic fishery accounted for a large part of total catch in 1988 through 1990. Second, discards were not included in the reported estimates of domestic catch prior to 1991. Based on estimates of the discard rates for 1992 through 1995, discards would have been about 16% of total catch. Finally, the blend estimates of catch, excluding at-sea discards, tend to exceed the estimates based solely on industry reports and prior to 1991 only industry reports were used to estimate retained catch in the domestic fishery. Variations in the catch estimates also reflect changes in the total allowable catch (TAC), area closures, and bycatch restrictions.

Walleye (Alaska) pollock (*Theragra chalcogramma*) has been the dominant species in the commercial groundfish catch off Alaska. The 1999 pollock catch of 1.09 million t accounted for 66% of the total groundfish catch of 1.66 million t (Table 1). The pollock catch was down approximately 13% from 1998. The next major species, Pacific cod (*Gadus macrocephalus*), accounted for 242,500 t or almost 15% of the total 1999 groundfish catch. The Pacific cod catch was down about 6% from a year earlier. The 1999 catch of flatfish, which includes yellowfin sole (*Pleuronectes asper*), rock sole (*Pleuronectes bilineatus*), and arrowtooth flounder (*Atheresthes stomias*) was 186,400 t, down over 16% from 1998. Pollock, Pacific cod, and flatfish comprised over 91% of the total 1999 catch. Other important species are sablefish (*Anoplopoma fimbria*), rockfish (*Sebastes and Sebastolobus* spp.), and Atka mackerel (*Pleurogrammus monopterygius*). The contributions of the major groundfish species or species groups to the total catch in the domestic groundfish fisheries off Alaska are depicted in Fig. 2.

Trawl, hook and line (including longline and jigs), and pot gear account for virtually all the catch in the BSAI and GOA groundfish fisheries. There are catcher vessels and catcher processor vessels for each of these three gear groups. Table 4 presents catch data by area, gear, vessel type, and species. The catch data in Table 4 and the catch, ex-vessel value, and vessel information in the tables of the rest of this report are for the BSAI and GOA FMP fisheries.

In the last 5 years, the trawl catch averaged about 90% of the total catch, while the catch with hook and line gear accounted for 7.9%. Most species are harvested predominately by one type of gear, which typically accounts for 90% or more of the catch. The one exception is Pacific cod, where in 1999, 44% (105,000 t) was taken by trawls, 42% (101,000 t) by hook and line gear, and 15% (35,000 t) by pots. In the last five years for the BSAI and GOA as a whole, catcher vessels took 43% of the catch and catcher processor vessels took the other 57%. In 1999, catcher vessels took about 48% of the total. That increase is explained in part by the AFA which among other things increased the share of the BSAI pollock TAC allocated to catcher vessels delivering to inshore processors. The distribution of catch between catcher vessels and catcher processor vessels differed substantially by species and area.

The discards of groundfish in the groundfish fishery have received increased attention in recent years by NMFS, the Council, Congress, and the public at large. Table 5 presents the blend estimates of the discarded groundfish catch and discard rates by gear, area, and species. The discard rate is the percent of total catch that is discarded.

Although these are the best available estimates of discards and are used for several management purposes, these estimates are not necessarily accurate. The groundfish TACs are established and monitored in terms of total catch, not retained catch; this means that both retained catch and discarded catch are counted against the TACs. Therefore, the estimation methods used by at-sea observers focus on providing good estimates of total catch by species, not on the disposition of that catch. Observers on vessels sample randomly chosen catches for species composition. For each sampled haul, they also make a rough visual approximation of the weight of the non-prohibited species in their samples that are being retained by the vessel. This is expressed as

a percent of that species that is retained. Approximating this percentage is difficult because discards occur in a variety of places on fishing vessels. Discards include fish falling off of processing conveyor belts, dumping of large portions of nets before bringing them on-board the vessel, dumping fish from the decks, size sorting by crewmen, quality control discard, etc. Because observers can only be in one place at a time, they can provide only this rough approximation based on their visual observations rather than data from direct sampling. The discard estimate derived by expanding these approximations from sampled hauls to the remainder of the catch may be inaccurate because the approximation may be inaccurate. The numbers derived from the observer discard approximation can provide users with some information as to the disposition of the catch, but the discard numbers should not be treated as sound estimates. At best, they should be considered a rough gauge of the quantity of discard occurring.

For the BSAI and GOA fisheries as a whole, the annual discard rate for groundfish decreased from 14.6% in 1995 to 9.4% in 1999 after a very large reduction in 1998 and a small increase in 1999. The 43% reduction in the overall discard rate in 1998 is the result of prohibiting pollock and Pacific cod discards in all BSAI and GOA groundfish fisheries beginning in 1998. Total discards decreased by almost 49% in 1998 with the aid of a 9.5% reduction in total catch. The prohibition was so effective in decreasing the overall discard rate because the discards of these two species had accounted for 43% of the overall discards in 1997. The benefits and costs of the reduction in discards in 1998 have not been determined. In 1998, the overall discard rates were, 9.1% and 8.1%, respectively, for the GOA and the BSAI compared to 16.2% and 14.3% in 1997.

Although the fixed gear fisheries accounted for a small part of either total catch or total discards, the 1998 overall discard rate was substantially higher for fixed gear (13.9%) than for trawl gear (7.6%). Prior to 1998, the overall discard rates had been similar for these two gear groups. This change occurred because the prohibition on pollock and Pacific cod discards had a much larger effect on trawl discards than on fixed gear discards. In the BSAI, the 1999 discard rates were 11.7% and 8.9% for fixed and trawl gear, respectively. However, in the GOA, the corresponding discard rates were 9.0% and 11.4%. One explanation for the relatively low discard rates for the BSAI trawl fishery is the dominance of the pollock fishery with very low discard rates. The mortality rates of groundfish that are discarded are thought to differ by gear or species; however, estimates of groundfish discard mortality are not available.

Target fisheries are defined by area, gear and target species. The target designations are used to estimate prohibited species catch (PSC), to apportion PSC limits by fishery (i.e., establish PSC allowances by fishery) and to monitor those PSC allowances. The target fishery designations can also be used to provide estimates of catch and bycatch data by fishery. The blend catch data are assigned to a target fishery by processor, week, area, and gear. CDQ fishing activity is targeted separately from non-CDQ fishing. Generally, the species or species group that accounts for the largest proportion of the retained catch of the TAC species is considered the target species. One exception to the dominant retained catch rule is that the target for the midwater pollock fishery is assigned if 95 percent or more of the total catch is pollock.

Tables 6 and 7, 8 and 9, and 10 and 11, respectively, provide estimates of total catch, discarded catch, and discard rates by species, area, gear, and target fishery. Within each area or gear type, there are substantial differences in discard rates among target fisheries. Similarly, within a target fishery, there are often substantial differences in discard rates by species. Typically, in each target fishery the discard rates are very high except for the target species. The regulatory exceptions to the prohibition on pollock and Pacific cod discards explain, in part, why there are still high discard rates for these two species in some fisheries.

The bycatch of Pacific halibut, crab, Pacific salmon, and Pacific herring (*Clupea pallasii*) has been an important management issue for more than twenty years. The retention of these species was prohibited first in the foreign groundfish fisheries. This was done to ensure that groundfish fishermen had no incentive to target these species. Estimates of the bycatch of these prohibited species for 1996-99 are summarized by area and gear in Table 12. More detailed estimates of prohibited species bycatch and of bycatch rates for 1998 and 1999 are in Tables 13 - 16. The estimates for halibut are in terms of bycatch mortality because the bycatch limits for halibut are set and monitored using estimated discard mortality rates. The estimates for the other prohibited species are of total bycatch, this is in part due to the lack of well established discard mortality rates for these species. The discard mortality rates probably approach 100% for salmon and herring in the groundfish fishery as a whole; however, the discard mortality rates for crab may be substantially lower.

An extensive at-sea observer program was developed for the foreign fleets and then extended to the domestic fishery once it had all but replaced participation by foreign fishing and processing vessels. The observer program resulted in fundamental changes in the nature of the bycatch problem. First, by providing good estimates of total groundfish catch and non-groundfish bycatch by species, it eliminated much of the concern that total fishing mortality was being underestimated due to fish that were discarded at sea. Second, it made it possible to establish, monitor and enforce the groundfish quotas in terms of total catch as opposed to only retained catch. For the groundfish fisheries, this means that both retained catch and discarded catch are counted against the TACs. Third, it made it possible to implement and enforce bycatch quotas for the non-groundfish species that by regulation had to be discarded at sea. Finally, it provided extensive information that managers and the industry could use to assess methods to reduce bycatch and bycatch mortality. In summary, the observer program provided fishery managers with the information and tools necessary to prevent bycatch from adversely affecting the stocks of the bycatch species. Therefore, the bycatch in the groundfish fishery is principally not a conservation problem but it can be an allocation problem. Although this does not make it less controversial, it does help identify the types of information and management measures that are required to reduce bycatch to the extent practicable, as is required by the MSFCMA.

Residents of Alaska and of other states, particularly Washington and Oregon, are active participants in the BSAI and GOA groundfish fisheries. Catch data by residency of vessel owners are presented in Table 17. These data were extracted from the NMFS blend catch database and from the State of Alaska groundfish fish ticket database and vessel registration file

which includes the stated residency of each vessel owner. For the domestic groundfish fishery as a whole, 92% of the 1999 catch was made by vessels with owners who indicated that they were not residents of Alaska. The catches of the two vessel-residence groups were much closer to being equal in the Gulf where Alaskan vessels accounted for the majority of the Pacific cod and sablefish catch.

Table 18 contains the estimated ex-vessel prices that were used with estimates of retained catch to calculate ex-vessel values. The estimates of ex-vessel value by area, gear, type of vessel, and species are in Table 19. The ex-vessel value of the domestic landings in the FMP fisheries, excluding the value added by at-sea processing, decreased from \$585 million in 1995 to \$531 million in 1996, increased in 1997 to \$615 million, decreased again to \$416 million in 1998, and increased to \$488 in 1999. The distribution of ex-vessel value by type of vessel differed by area, gear and species. In 1999, catcher vessels accounted for 52% of the ex-vessel value of the groundfish landings compared to 48% of the total catch because catcher vessels take larger percentages of higher-priced species such as sablefish, which was \$2.79 per pound in 1999. Similarly, trawl gear accounted for only 64% of the total ex-vessel value compared to 89% of the catch because much of the trawl catch is of low-priced species such as pollock, which was about \$0.09 per pound in 1999.

Table 20 summarizes the ex-vessel value of catch delivered to inshore processors by vessel size class, gear, and area. The relative dominance of each of the three vessel size classes differs by area and by gear.

Table 21 provides estimates of ex-vessel value by residency of vessel owners, area, and species. For the BSAI and GOA combined, 80.6% of the 1999 ex-vessel value was accounted for by vessels with owners who indicated that they were not residents of Alaska. Vessels with owners who indicated that they were residents of Alaska accounted for 18.9% of the total and the remaining 0.5% was taken by vessels for which the residence of the owner was not known. The vessels owned by residents of Alaska accounted for a much larger share of the ex-vessel value than of catch (18.9% compared to 8.1%) because these vessels accounted for relatively large shares of the higher-priced species such as sablefish.

Groundfish are landed at a number of ports in Alaska. Table 22 presents estimates of ex-vessel value by port for catch delivered to inshore processors.

Product value data, through primary processing, are summarized by category of processor and by area in Table 23, by catcher processor size class, gear, and area in Table 24, and by port in Table 25.

Estimates of the numbers and net registered tonnage of vessels in the groundfish fisheries are presented by area and gear in Table 26 and estimates of the numbers of vessels that landed groundfish are depicted in Fig. 5 by gear type.



More detailed information on the BSAI and GOA groundfish vessels by type of vessel, vessel size class, catch amount classes, and residency of vessel owners is in Tables 27 - 31. Estimates of the number of vessels by month, gear, and area are in Table 32. Table 33 provides estimates of the number of catcher vessel weeks by size class, area, gear, and target fishery. Table 34 contains similar information for catcher processor vessels.

The Weekly Production Reports include employment data for at-sea processors but not inshore processors. Those data are summarized in Table 35 by month and area. The data indicate that in 1999, the crew weeks totaled 87,238 with the majority of them (80,591) occurring in the BSAI groundfish fishery. In 1999, the maximum monthly employment (14,839) occurred in February. Much of this was accounted for by the BSAI pollock fishery.

Estimates of weight and value of the processed products made with BSAI and GOA groundfish catch are presented by species, product form, area, and type of processor in Tables 36 - 38.

There are a variety of at least partially external factors that affect the economic performance of the BSAI and GOA groundfish fisheries. They include landing market prices in Japan, wholesale prices in Japan, U.S. imports of groundfish products, U.S. per capita consumption of seafood, U.S. consumer and producer price indexes, foreign exchange rates, and U.S. cold storage holdings of groundfish. Such data are included in Tables 39 - 49.

Exchange rates and world supplies of fishery products play a major role in international trade. Exchange rates change rapidly and can significantly affect the economic status of the groundfish fisheries. There is also considerable uncertainty concerning the future conditions of stocks, the resulting quotas, and future changes to the fishery management regimes for the BSAI and GOA groundfish fisheries. The management actions taken to allocate the catch between various user groups can significantly affect the economic health of either the domestic fishery as a whole or segments of the fishery. Changes in fishery management measures are expected as the result of continued concerns with: 1) the bycatch of prohibited species; 2) the discard and utilization of groundfish catch; 3) the effects of the groundfish fisheries on marine mammals and sea birds; 4) other effects of the groundfish fisheries on the ecosystem and habitat; 5) excess harvesting and processing capacity; and 6) the allocations of groundfish quotas among user groups.

The implementation of the American Fisheries Act, related regulatory changes, and the full implementation of the Multi-species CDQ Program have the potential to address a number of these concerns and to improve substantially the economic performance of the BSAI and GOA groundfish fisheries. They can do this by eliminating the race for fish which has given fishermen incentives to take actions that have decreased the overall benefits to the Nation from the BSAI and GOA groundfish fisheries. To the extent that these and other rights based management measures decrease the cost of providing additional protection for target species, non-target species, marine mammals, and seabirds, they will tend to increase the levels of protection that can be justified.

## CITATIONS

Hiatt, Terry, and Joe Terry. Stock assessment and fishery evaluation report for the groundfish fisheries of the Gulf of Alaska and Bering Sea/Aleutian Island area: economic status of the groundfish fisheries off Alaska, NPFMC, November 1999.

National Marine Fisheries Service. 2000. Fisheries of the United States, 1999.  
[www.st.nmfs.gov/st1/fus/fus99/index.html](http://www.st.nmfs.gov/st1/fus/fus99/index.html)

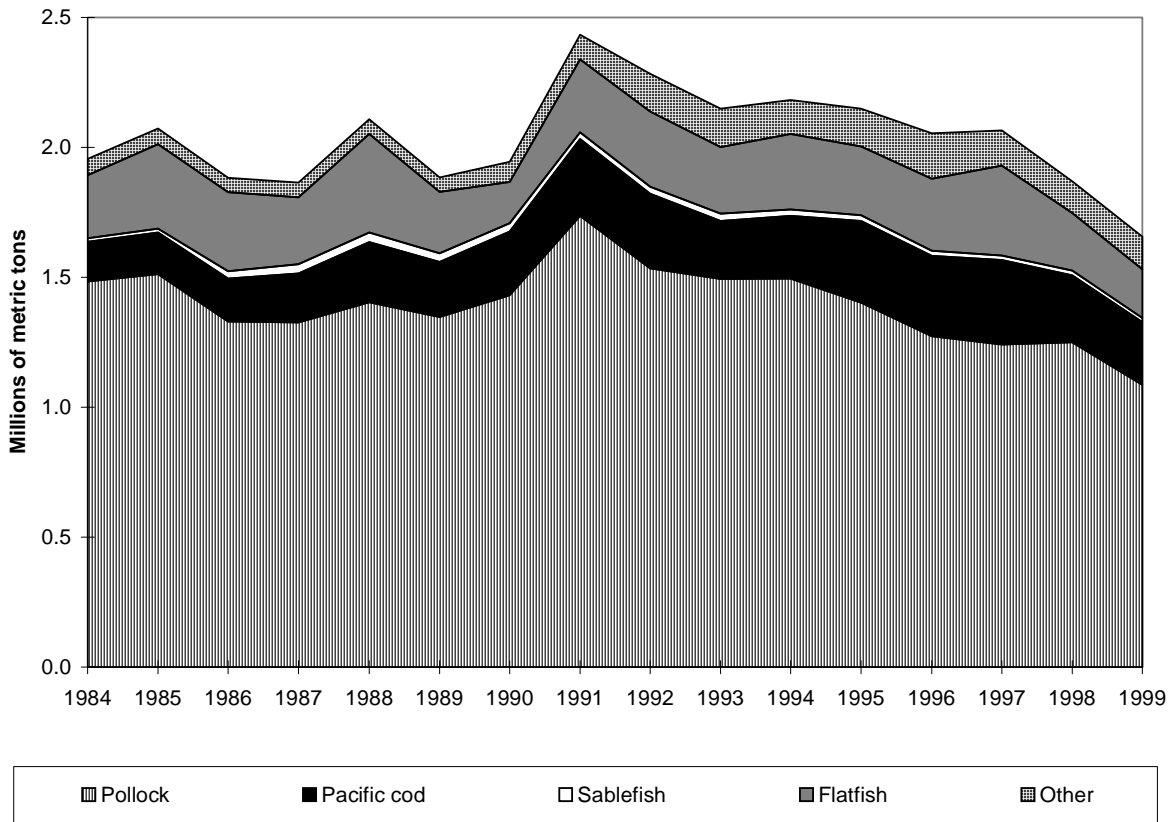


Figure 1.--Groundfish catch in the commercial fisheries off Alaska by species, 1984-1999.

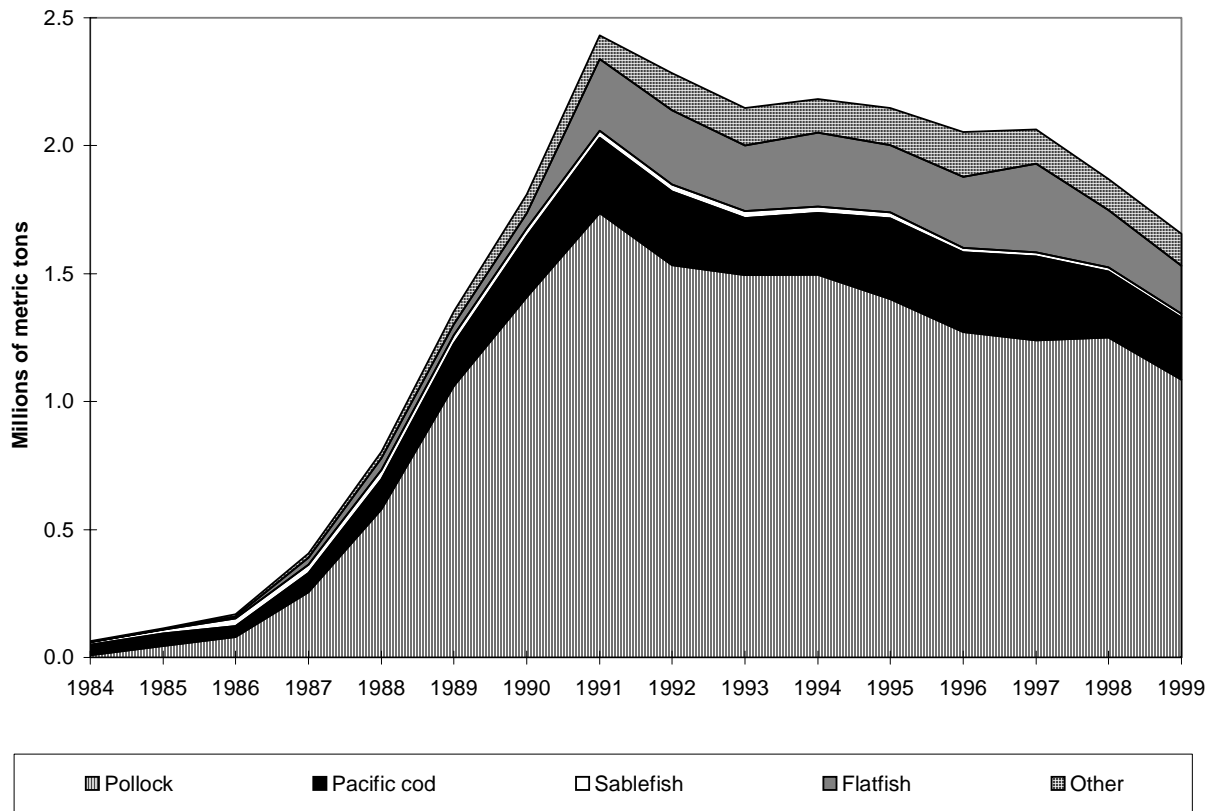


Figure -Groundfish catch in the domestic commercial fisheries off Alaska by species, 1984-1999.

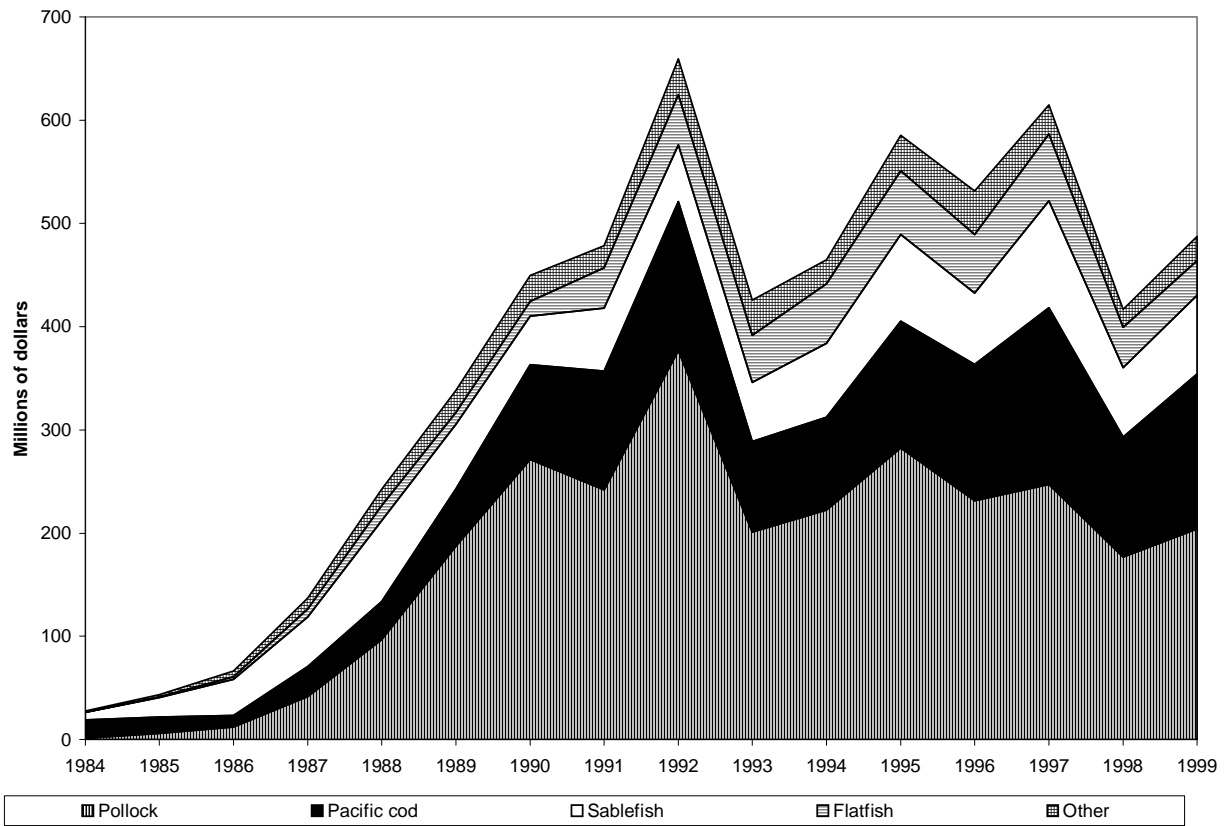


Figure 3.--Ex-vessel value of the groundfish catch in the domestic commercial fisheries off Alaska by species, 1984-1999.

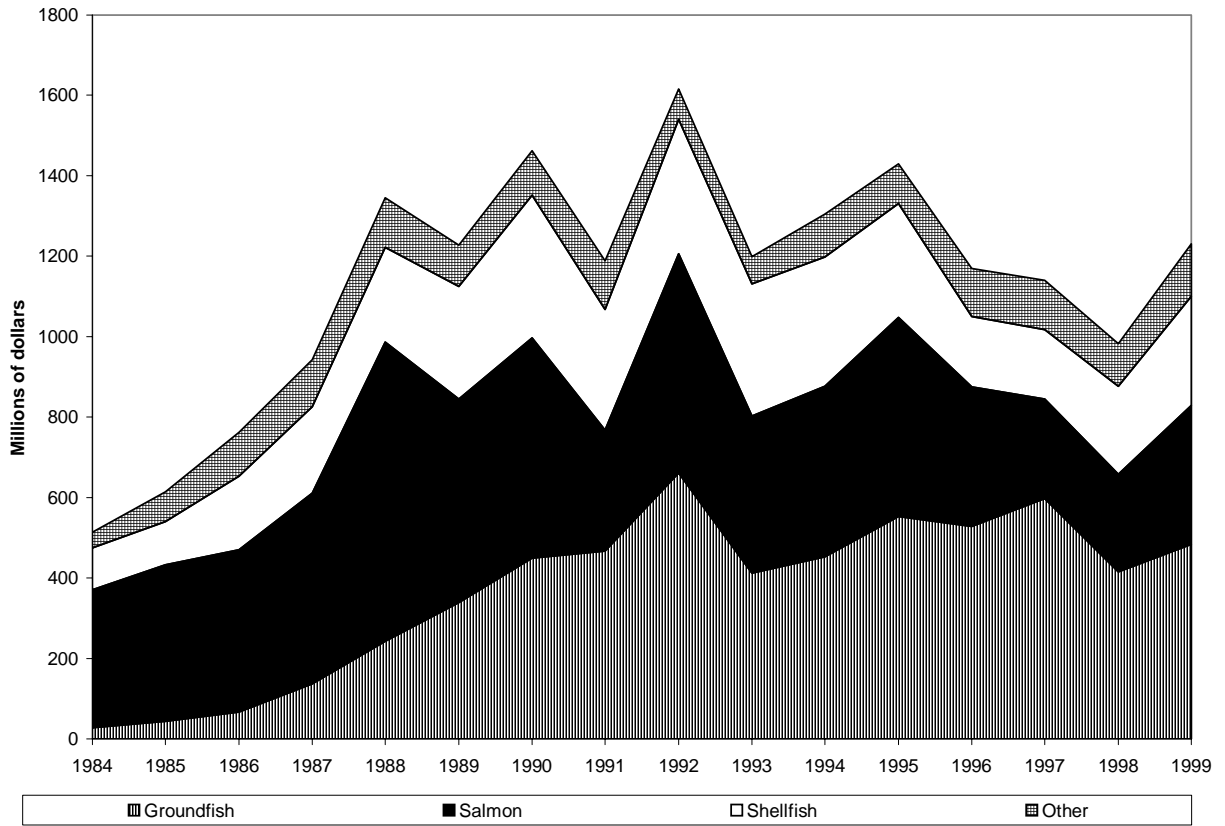


Figure 4.--Ex-vessel value of the domestic fish and shellfish catch off Alaska, 1984-1999.

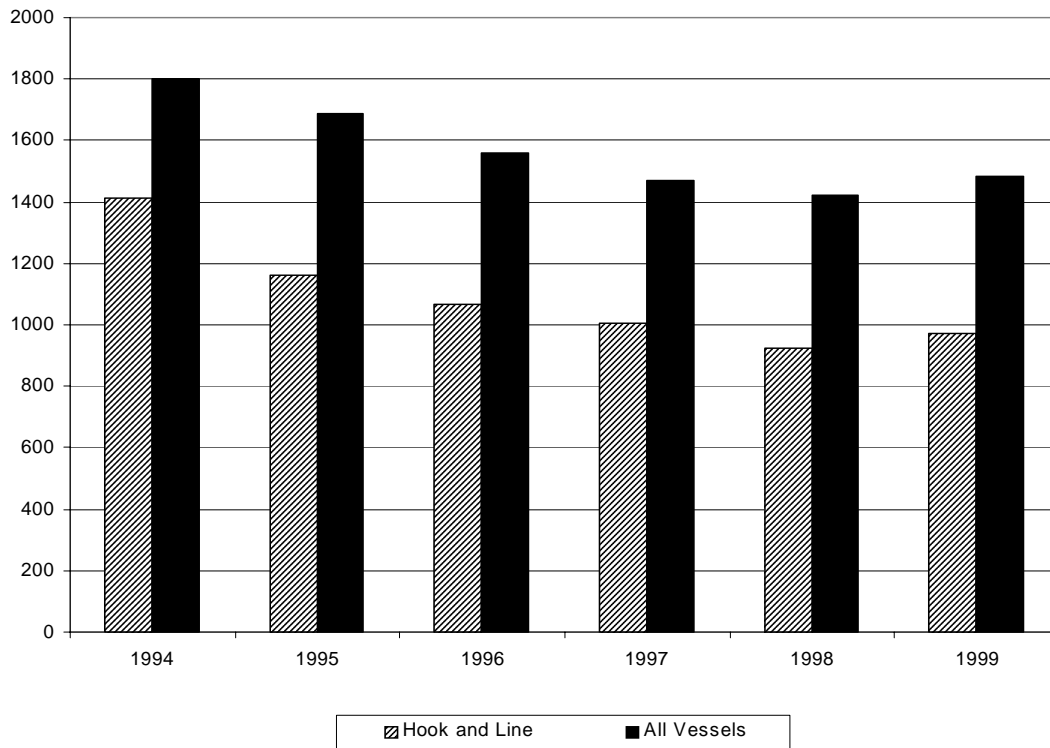
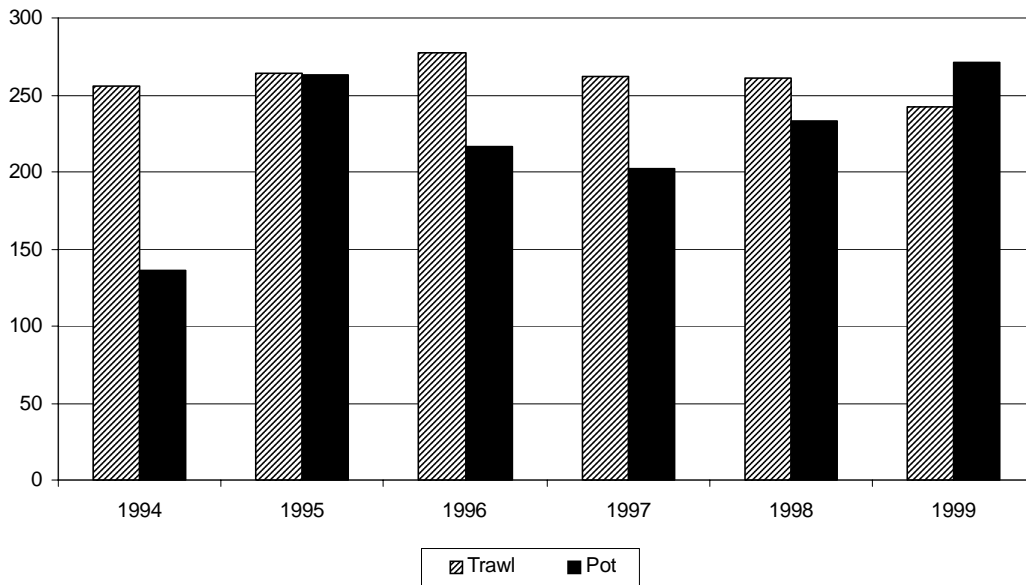


Figure 5.--Number of vessels in the domestic groundfish fishery off Alaska by gear type, 1994-1999.

Table 1.--Groundfish catch in the commercial fisheries off Alaska by area and species, 1984-99 (1,000 metric tons, round weight).

|  | Pollock | Sablefish | Pacific cod | Flatfish | Rockfish | Atka mackerel | Total   |
|--|---------|-----------|-------------|----------|----------|---------------|---------|
| <b>Gulf of Alaska</b>                  |         |           |             |          |          |               |         |
| 1984                                   | 307.4   | 10.5      | 23.8        | 6.9      | 6.3      | 1.2           | 358.2   |
| 1985                                   | 284.8   | 11.6      | 14.3        | 3.1      | 3.1      | 1.8           | 321.4   |
| 1986                                   | 84.0    | 21.9      | 24.6        | 2.5      | 8.0      | .0            | 141.7   |
| 1987                                   | 62.7    | 26.5      | 31.4        | 9.9      | 12.8     | .0            | 143.8   |
| 1988                                   | 55.9    | 31.0      | 32.6        | 8.8      | 18.4     | .1            | 147.7   |
| 1989                                   | 66.6    | 29.8      | 41.7        | 5.2      | 23.4     | .2            | 167.4   |
| 1990                                   | 77.8    | 27.3      | 74.6        | 15.4     | 21.1     | .1            | 219.8   |
| 1991                                   | 107.5   | 23.1      | 77.0        | 40.1     | 21.2     | 1.4           | 276.1   |
| 1992                                   | 90.9    | 23.6      | 80.7        | 41.9     | 24.9     | 6.4           | 280.7   |
| 1993                                   | 108.9   | 24.8      | 56.5        | 39.5     | 19.7     | 5.1           | 261.4   |
| 1994                                   | 107.3   | 22.5      | 47.5        | 36.0     | 16.1     | 3.5           | 235.8   |
| 1995                                   | 72.6    | 20.8      | 69.0        | 32.3     | 19.3     | .7            | 218.1   |
| 1996                                   | 51.3    | 18.2      | 68.3        | 43.1     | 18.2     | 1.6           | 205.2   |
| 1997                                   | 90.1    | 15.7      | 68.5        | 33.6     | 19.8     | .3            | 233.5   |
| 1998                                   | 125.1   | 15.2      | 62.1        | 23.3     | 19.5     | .3            | 249.3   |
| 1999                                   | 95.6    | 13.9      | 68.6        | 24.9     | 24.5     | .3            | 231.6   |
| <b>Bering Sea and Aleutian Islands</b> |         |           |             |          |          |               |         |
| 1984                                   | 1,177.3 | 3.3       | 127.9       | 236.3    | 2.9      | 36.1          | 1,597.1 |
| 1985                                   | 1,228.6 | 3.8       | 144.3       | 320.5    | 1.5      | 37.9          | 1,751.3 |
| 1986                                   | 1,245.8 | 6.6       | 139.3       | 301.4    | 1.6      | 32.0          | 1,739.4 |
| 1987                                   | 1,263.6 | 7.9       | 157.6       | 247.3    | 3.6      | 30.2          | 1,719.9 |
| 1988                                   | 1,349.0 | 6.6       | 197.1       | 369.5    | 4.7      | 21.6          | 1,960.7 |
| 1989                                   | 1,281.5 | 4.5       | 168.4       | 230.8    | 7.3      | 18.3          | 1,715.9 |
| 1990                                   | 1,352.9 | 4.5       | 171.0       | 141.8    | 25.2     | 22.2          | 1,723.9 |
| 1991                                   | 1,629.1 | 3.4       | 218.1       | 240.3    | 10.6     | 26.7          | 2,155.8 |
| 1992                                   | 1,442.9 | 2.2       | 207.3       | 248.9    | 17.9     | 48.5          | 2,003.0 |
| 1993                                   | 1,384.6 | 2.7       | 167.4       | 216.9    | 24.7     | 66.0          | 1,887.2 |
| 1994                                   | 1,388.6 | 2.4       | 193.8       | 253.4    | 18.7     | 65.4          | 1,947.2 |
| 1995                                   | 1,329.5 | 2.0       | 245.0       | 232.2    | 16.8     | 81.6          | 1,929.8 |
| 1996                                   | 1,222.3 | 1.4       | 240.7       | 233.7    | 24.0     | 103.9         | 1,848.6 |
| 1997                                   | 1,150.5 | 1.3       | 257.8       | 311.9    | 17.0     | 65.8          | 1,831.1 |
| 1998                                   | 1,125.1 | 1.2       | 195.8       | 199.8    | 15.5     | 57.1          | 1,620.9 |
| 1999                                   | 990.9   | 1.4       | 173.9       | 161.6    | 19.9     | 56.2          | 1,424.9 |
| <b>All Alaska</b>                      |         |           |             |          |          |               |         |
| 1984                                   | 1,484.7 | 13.8      | 151.7       | 243.2    | 9.2      | 37.3          | 1,955.3 |
| 1985                                   | 1,513.4 | 15.4      | 158.6       | 323.6    | 4.6      | 39.7          | 2,072.7 |
| 1986                                   | 1,329.8 | 28.5      | 163.9       | 303.9    | 9.6      | 32.0          | 1,881.1 |
| 1987                                   | 1,326.3 | 34.4      | 189.0       | 257.2    | 16.4     | 30.2          | 1,863.7 |
| 1988                                   | 1,404.9 | 37.6      | 229.7       | 378.3    | 23.1     | 21.7          | 2,108.4 |
| 1989                                   | 1,348.1 | 34.3      | 210.1       | 236.0    | 30.7     | 18.5          | 1,883.3 |
| 1990                                   | 1,430.7 | 31.8      | 245.6       | 157.2    | 46.3     | 22.3          | 1,943.7 |
| 1991                                   | 1,736.6 | 26.6      | 295.1       | 280.4    | 31.8     | 28.1          | 2,431.9 |
| 1992                                   | 1,533.8 | 25.7      | 288.0       | 290.8    | 42.8     | 54.9          | 2,283.7 |
| 1993                                   | 1,493.5 | 27.5      | 223.9       | 256.4    | 44.4     | 71.2          | 2,148.6 |
| 1994                                   | 1,495.9 | 24.9      | 241.3       | 289.4    | 34.8     | 68.9          | 2,183.0 |
| 1995                                   | 1,402.1 | 22.9      | 314.0       | 264.4    | 36.1     | 82.3          | 2,147.9 |
| 1996                                   | 1,273.6 | 19.6      | 309.0       | 276.8    | 42.2     | 105.5         | 2,053.8 |
| 1997                                   | 1,240.7 | 17.1      | 326.2       | 345.6    | 36.9     | 66.2          | 2,064.6 |
| 1998                                   | 1,250.2 | 16.4      | 257.9       | 223.1    | 34.9     | 57.4          | 1,870.2 |
| 1999                                   | 1,086.4 | 15.3      | 242.5       | 186.4    | 44.4     | 56.5          | 1,656.5 |

Notes: Totals may include additional categories.

Source: Blend estimates for 1991-99. Processor reports and fish tickets for 1988-90. National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.



Table 2--Groundfish catch in the commercial fisheries off Alaska by area and fishery, 1981-91 (1,000 metric tons, round weight).

-----  
Gulf of Alaska

| Year | Domestic | Joint venture | Foreign | Total |
|------|----------|---------------|---------|-------|
| 1981 | 4.5      | 17.0          | 232.5   | 254.0 |
| 1982 | 8.0      | 74.4          | 153.7   | 236.2 |
| 1983 | 9.1      | 143.0         | 147.5   | 299.5 |
| 1984 | 14.8     | 219.6         | 123.7   | 358.1 |
| 1985 | 33.2     | 247.2         | 41.0    | 321.4 |
| 1986 | 61.0     | 65.3          | 15.5    | 141.8 |
| 1987 | 111.4    | 32.5          | 0.0     | 143.9 |
| 1988 | 143.8    | 3.8           | 0.0     | 147.6 |
| 1989 | 167.4    | 0.0           | 0.0     | 167.4 |
| 1990 | 219.8    | 0.0           | 0.0     | 219.8 |
| 1991 | 276.1    | 0.0           | 0.0     | 276.1 |

Bering Sea/Aleutians

| Year | Domestic | Joint venture | Foreign | Total   |
|------|----------|---------------|---------|---------|
| 1981 | 14.4     | 78.5          | 1,272.9 | 1,365.8 |
| 1982 | 25.2     | 108.6         | 1,186.2 | 1,320.0 |
| 1983 | 46.5     | 210.0         | 1,123.8 | 1,380.4 |
| 1984 | 48.4     | 357.5         | 1,191.2 | 1,597.1 |
| 1985 | 81.5     | 636.4         | 1,033.4 | 1,751.3 |
| 1986 | 107.7    | 1,156.4       | 475.2   | 1,739.3 |
| 1987 | 295.9    | 1,355.4       | 68.6    | 1,719.9 |
| 1988 | 659.7    | 1,300.9       | 0.0     | 1,960.6 |
| 1989 | 1,184.9  | 530.9         | 0.0     | 1,715.9 |
| 1990 | 1,590.5  | 133.3         | 0.0     | 1,723.8 |
| 1991 | 2,155.8  | 0.0           | 0.0     | 2,155.8 |

All Alaska

| Year | Domestic | Joint venture | Foreign | Total   |
|------|----------|---------------|---------|---------|
| 1981 | 18.9     | 95.5          | 1,505.4 | 1,619.8 |
| 1982 | 33.2     | 183.0         | 1,339.9 | 1,556.2 |
| 1983 | 55.5     | 353.0         | 1,271.3 | 1,679.9 |
| 1984 | 63.2     | 577.2         | 1,314.9 | 1,955.3 |
| 1985 | 114.7    | 883.6         | 1,074.4 | 2,072.7 |
| 1986 | 166.4    | 1,221.7       | 490.7   | 1,881.8 |
| 1987 | 407.3    | 1,387.9       | 68.6    | 1,863.9 |
| 1988 | 803.5    | 1,304.7       | 0.0     | 2,108.2 |
| 1989 | 1,352.4  | 530.9         | 0.0     | 1,883.3 |
| 1990 | 1,810.8  | 133.3         | 0.0     | 1,944.1 |
| 1991 | 2,431.9  | 0.0           | 0.0     | 2,431.9 |

---

Notes: Domestic catch statistics from 1981-90 reflect only the amounts that were landed but in 1991 domestic catch includes discards. Joint venture and foreign catch includes discarded catch.

Source: 1981-90, National Marine Fisheries Service office of the Pacific Marine Fisheries Commission, Pacific Fisheries Information Network, 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070; and 1991-97, National Marine Fisheries Service, Alaska Region, blend estimates.

Table 3.--Ex-vessel value of the catch in the domestic commercial fisheries off Alaska by species group, 1984-98 (\$ millions).

| Year                | Shellfish | Salmon | Herring | Halibut | Groundfish | Total   |
|---------------------|-----------|--------|---------|---------|------------|---------|
| Value (\$ millions) |           |        |         |         |            |         |
| 1984                | 103.4     | 343.0  | 20.4    | 19.6    | 27.9       | 514.3   |
| 1985                | 106.9     | 389.6  | 36.9    | 37.5    | 43.4       | 614.3   |
| 1986                | 183.0     | 404.1  | 38.4    | 70.1    | 66.6       | 762.2   |
| 1987                | 215.2     | 473.0  | 41.7    | 76.3    | 137.1      | 943.3   |
| 1988                | 235.6     | 744.9  | 56.0    | 66.1    | 242.2      | 1,344.8 |
| 1989                | 279.2     | 506.7  | 18.7    | 84.4    | 338.3      | 1,227.3 |
| 1990                | 355.1     | 546.7  | 24.0    | 86.9    | 449.5      | 1,462.2 |
| 1991                | 301.1     | 300.1  | 28.6    | 91.6    | 467.0      | 1,188.4 |
| 1992                | 335.1     | 544.5  | 27.0    | 48.0    | 661.0      | 1,615.6 |
| 1993                | 328.5     | 391.1  | 14.1    | 53.6    | 411.8      | 1,199.1 |
| 1994                | 321.2     | 424.4  | 21.6    | 84.7    | 452.5      | 1,304.4 |
| 1995                | 282.9     | 495.9  | 39.1    | 59.5    | 552.4      | 1,429.8 |
| 1996                | 175.2     | 346.5  | 44.8    | 74.2    | 528.5      | 1,169.2 |
| 1997                | 172.1     | 247.8  | 15.9    | 106.5   | 597.7      | 1,140.0 |
| 1998                | 218.7     | 242.7  | 10.8    | 94.1    | 415.5      | 981.8   |
| 1999                | 271.2     | 345.7  | 14.2    | 116.9   | 483.4      | 1,231.4 |

Note: The value added by at-sea processing is not included in these estimates of ex-vessel value.

Source: National Marine Fisheries Service, Alaska Region; National Marine Fisheries Service Office of the Pacific Marine Fisheries Commission, Pacific Fisheries Information Network, 7600 Sand Point Way N.E., BIN C15700, Seattle, WA 98115-0070.

Table 4.--Groundfish catch off Alaska by area, catcher category, gear and species, 1995-99, (1,000 metric tons, round weight).

|                | Gulf of Alaska  |                     |       | Bering Sea and Aleutian |                     |       | All Alaska      |                     |       |
|----------------|-----------------|---------------------|-------|-------------------------|---------------------|-------|-----------------|---------------------|-------|
|                | Catcher vessels | Catcher process ors | Total | Catcher vessels         | Catcher process ors | Total | Catcher vessels | Catcher process ors | Total |
| All gear       |                 |                     |       |                         |                     |       |                 |                     |       |
| All groundfish |                 |                     |       |                         |                     |       |                 |                     |       |
| 1995           | 159             | 52                  | 212   | 715                     | 1,214               | 1,930 | 875             | 1,267               | 2,141 |
| 1996           | 145             | 57                  | 201   | 710                     | 1,138               | 1,849 | 855             | 1,195               | 2,050 |
| 1997           | 189             | 39                  | 228   | 669                     | 1,162               | 1,831 | 858             | 1,201               | 2,059 |
| 1998           | 207             | 36                  | 244   | 592                     | 1,029               | 1,621 | 799             | 1,066               | 1,865 |
| 1999           | 183             | 43                  | 226   | 615                     | 810                 | 1,425 | 798             | 853                 | 1,651 |
| Hook and line  |                 |                     |       |                         |                     |       |                 |                     |       |
| Sablefish      |                 |                     |       |                         |                     |       |                 |                     |       |
| 1995           | 14              | 2                   | 16    | 1                       | 1                   | 2     | 15              | 3                   | 18    |
| 1996           | 12              | 2                   | 14    | 1                       | 1                   | 1     | 13              | 2                   | 15    |
| 1997           | 10              | 2                   | 12    | 1                       | 1                   | 1     | 11              | 2                   | 13    |
| 1998           | 10              | 2                   | 12    | 1                       | 0                   | 1     | 11              | 2                   | 13    |
| 1999           | 9               | 1                   | 11    | 0                       | 1                   | 1     | 9               | 2                   | 12    |
| Pacific cod    |                 |                     |       |                         |                     |       |                 |                     |       |
| 1995           | 5               | 6                   | 11    | 3                       | 101                 | 103   | 7               | 107                 | 114   |
| 1996           | 5               | 5                   | 10    | 0                       | 94                  | 95    | 5               | 100                 | 105   |
| 1997           | 7               | 4                   | 11    | 0                       | 124                 | 124   | 7               | 128                 | 135   |
| 1998           | 6               | 3                   | 10    | 0                       | 100                 | 100   | 7               | 103                 | 110   |
| 1999           | 7               | 5                   | 12    | 0                       | 89                  | 89    | 7               | 94                  | 101   |
| Flatfish       |                 |                     |       |                         |                     |       |                 |                     |       |
| 1995           | 1               | 0                   | 2     | 1                       | 5                   | 7     | 3               | 6                   | 8     |
| 1996           | 0               | 0                   | 1     | 1                       | 7                   | 8     | 2               | 7                   | 9     |
| 1997           | 0               | 0                   | 1     | 2                       | 8                   | 10    | 2               | 8                   | 11    |
| 1998           | 1               | 0                   | 1     | 1                       | 9                   | 11    | 2               | 10                  | 11    |
| 1999           | 1               | 0                   | 1     | 1                       | 6                   | 6     | 2               | 6                   | 8     |
| Rockfish       |                 |                     |       |                         |                     |       |                 |                     |       |
| 1995           | 2               | 0                   | 2     | 0                       | 0                   | 0     | 2               | 1                   | 2     |
| 1996           | 2               | 0                   | 2     | 0                       | 0                   | 0     | 2               | 1                   | 2     |
| 1997           | 1               | 0                   | 2     | 0                       | 0                   | 0     | 1               | 1                   | 2     |
| 1998           | 1               | 0                   | 2     | 0                       | 1                   | 1     | 1               | 1                   | 2     |
| 1999           | 1               | 0                   | 1     | 0                       | 0                   | 0     | 1               | 1                   | 2     |
| All groundfish |                 |                     |       |                         |                     |       |                 |                     |       |
| 1995           | 23              | 9                   | 32    | 5                       | 122                 | 127   | 28              | 131                 | 158   |
| 1996           | 20              | 7                   | 27    | 3                       | 114                 | 116   | 22              | 121                 | 144   |
| 1997           | 19              | 6                   | 26    | 3                       | 151                 | 154   | 22              | 157                 | 180   |
| 1998           | 19              | 5                   | 25    | 2                       | 128                 | 130   | 22              | 133                 | 155   |
| 1999           | 19              | 8                   | 27    | 2                       | 110                 | 112   | 20              | 118                 | 138   |
| Pot            |                 |                     |       |                         |                     |       |                 |                     |       |
| Pacific cod    |                 |                     |       |                         |                     |       |                 |                     |       |
| 1995           | 15              | 0                   | 16    | 16                      | 5                   | 20    | 31              | 5                   | 36    |
| 1996           | 12              | -                   | 12    | 24                      | 8                   | 33    | 36              | 8                   | 45    |
| 1997           | 9               | -                   | 9     | 17                      | 5                   | 22    | 26              | 5                   | 31    |
| 1998           | -               | -                   | -     | 10                      | 4                   | 14    | -               | -                   | -     |
| 1999           | 14              | 4                   | 19    | 13                      | 3                   | 16    | 27              | 7                   | 35    |

Table 4.--Continued.

|                | Gulf of Alaska  |                    |       | Bering Sea and Aleutian |                    |       | All Alaska      |                    |       |
|----------------|-----------------|--------------------|-------|-------------------------|--------------------|-------|-----------------|--------------------|-------|
|                | Catcher vessels | Catcher processors | Total | Catcher vessels         | Catcher processors | Total | Catcher vessels | Catcher processors | Total |
| Trawl          |                 |                    |       |                         |                    |       |                 |                    |       |
| Pollock        |                 |                    |       |                         |                    |       |                 |                    |       |
| 1995           | 67              | 2                  | 70    | 609                     | 718                | 1,326 | 676             | 720                | 1,396 |
| 1996           | 48              | 2                  | 50    | 597                     | 623                | 1,219 | 645             | 625                | 1,270 |
| 1997           | 87              | 1                  | 88    | 548                     | 597                | 1,146 | 635             | 599                | 1,234 |
| 1998           | 123             | 0                  | 123   | 529                     | 592                | 1,122 | 652             | 593                | 1,245 |
| 1999           | 93              | 0                  | 93    | 553                     | 434                | 987   | 646             | 435                | 1,080 |
| Sablefish      |                 |                    |       |                         |                    |       |                 |                    |       |
| 1995           | 1               | 2                  | 2     | 0                       | 0                  | 0     | 1               | 2                  | 3     |
| 1996           | 1               | 1                  | 2     | 0                       | 0                  | 0     | 1               | 1                  | 2     |
| 1997           | 1               | 1                  | 2     | 0                       | 0                  | 0     | 1               | 1                  | 2     |
| 1998           | 1               | 1                  | 1     | 0                       | 0                  | 0     | 1               | 1                  | 1     |
| 1999           | 1               | 1                  | 2     | 0                       | 0                  | 0     | 1               | 1                  | 2     |
| Pacific cod    |                 |                    |       |                         |                    |       |                 |                    |       |
| 1995           | 38              | 4                  | 42    | 52                      | 69                 | 122   | 90              | 74                 | 163   |
| 1996           | 40              | 6                  | 46    | 61                      | 52                 | 113   | 101             | 58                 | 159   |
| 1997           | 46              | 2                  | 48    | 63                      | 48                 | 111   | 109             | 50                 | 160   |
| 1998           | 36              | 5                  | 41    | 40                      | 42                 | 82    | 76              | 47                 | 123   |
| 1999           | 35              | 2                  | 37    | 36                      | 32                 | 68    | 71              | 35                 | 105   |
| Flatfish       |                 |                    |       |                         |                    |       |                 |                    |       |
| 1995           | 13              | 18                 | 30    | 31                      | 194                | 225   | 44              | 212                | 256   |
| 1996           | 17              | 25                 | 42    | 22                      | 204                | 225   | 39              | 229                | 268   |
| 1997           | 19              | 14                 | 33    | 34                      | 268                | 302   | 53              | 282                | 335   |
| 1998           | 10              | 12                 | 22    | 7                       | 182                | 189   | 17              | 194                | 211   |
| 1999           | 11              | 12                 | 23    | 9                       | 147                | 155   | 20              | 159                | 179   |
| Rockfish       |                 |                    |       |                         |                    |       |                 |                    |       |
| 1995           | 1               | 16                 | 17    | 0                       | 16                 | 16    | 1               | 32                 | 34    |
| 1996           | 4               | 12                 | 16    | 0                       | 23                 | 23    | 5               | 35                 | 40    |
| 1997           | 5               | 13                 | 18    | 0                       | 16                 | 17    | 5               | 29                 | 34    |
| 1998           | 5               | 12                 | 17    | 1                       | 14                 | 15    | 6               | 26                 | 32    |
| 1999           | 8               | 14                 | 23    | 0                       | 19                 | 19    | 8               | 34                 | 42    |
| Atka mackerel  |                 |                    |       |                         |                    |       |                 |                    |       |
| 1995           | 0               | 0                  | 1     | 0                       | 81                 | 81    | 0               | 82                 | 82    |
| 1996           | 0               | 1                  | 2     | 0                       | 104                | 104   | 0               | 105                | 105   |
| 1997           | 0               | 0                  | 0     | 0                       | 66                 | 66    | 0               | 66                 | 66    |
| 1998           | 0               | 0                  | 0     | 0                       | 57                 | 57    | 0               | 57                 | 57    |
| 1999           | 0               | 0                  | 0     | 0                       | 56                 | 56    | 0               | 56                 | 56    |
| All groundfish |                 |                    |       |                         |                    |       |                 |                    |       |
| 1995           | 121             | 43                 | 164   | 694                     | 1,088              | 1,782 | 815             | 1,131              | 1,946 |
| 1996           | 113             | 49                 | 162   | 683                     | 1,016              | 1,699 | 796             | 1,065              | 1,860 |
| 1997           | 161             | 33                 | 193   | 648                     | 1,005              | 1,654 | 809             | 1,038              | 1,847 |
| 1998           | 177             | 31                 | 208   | 579                     | 897                | 1,476 | 756             | 929                | 1,685 |
| 1999           | 150             | 31                 | 180   | 599                     | 697                | 1,296 | 749             | 728                | 1,477 |

Note: All groundfish include additional species categories. Includes only catches counted against Federal TACs. A dash (-) indicates that data are not available, either because there was no activity or to preserve confidentiality.

Source: Blend estimates, National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 5.--Discards and discard rate for groundfish catch off Alaska by area, gear, and species, 1995-99 (1,000 metric tons, round weight).

| Area/Species/Year | Fixed          |              | Trawl          |              | All gear       |              |
|-------------------|----------------|--------------|----------------|--------------|----------------|--------------|
|                   | Total Discards | Discard Rate | Total Discards | Discard Rate | Total Discards | Discard Rate |
| Gulf of Alaska    |                |              |                |              |                |              |
| All groundfish    |                |              |                |              |                |              |
| 1995              | 4.17           | 8.56%        | 34.91          | 20.88%       | 39.07          | 18.10%       |
| 1996              | 2.69           | 6.70%        | 38.32          | 23.67%       | 41.01          | 20.30%       |
| 1997              | 3.11           | 8.70%        | 34.37          | 17.60%       | 37.47          | 16.23%       |
| 1998              | 3.47           | 9.50%        | 18.85          | 9.04%        | 22.32          | 9.11%        |
| 1999              | 4.21           | 8.98%        | 20.57          | 11.40%       | 24.78          | 10.90%       |
| Pollock           |                |              |                |              |                |              |
| 1995              | .03            | 40.06%       | 7.82           | 10.79%       | 7.86           | 10.82%       |
| 1996              | .05            | 71.31%       | 5.09           | 10.09%       | 5.14           | 10.18%       |
| 1997              | .04            | 42.45%       | 7.20           | 8.00%        | 7.24           | 8.04%        |
| 1998              | .01            | 10.74%       | 1.01           | .82%         | 1.02           | .83%         |
| 1999              | .11            | 68.51%       | 1.80           | 1.93%        | 1.91           | 2.04%        |
| Sablefish         |                |              |                |              |                |              |
| 1995              | .36            | 2.20%        | .74            | 33.69%       | 1.11           | 5.93%        |
| 1996              | .31            | 2.19%        | .53            | 26.06%       | .83            | 5.21%        |
| 1997              | .49            | 4.18%        | .48            | 30.65%       | .97            | 7.29%        |
| 1998              | .54            | 4.73%        | .32            | 23.67%       | .86            | 6.70%        |
| 1999              | .27            | 2.57%        | .71            | 42.25%       | .98            | 8.03%        |
| Pacific cod       |                |              |                |              |                |              |
| 1995              | .61            | 2.25%        | 2.94           | 7.01%        | 3.55           | 5.14%        |
| 1996              | .45            | 2.03%        | 7.10           | 15.44%       | 7.55           | 11.06%       |
| 1997              | .70            | 3.50%        | 4.13           | 8.52%        | 4.83           | 7.05%        |
| 1998              | .37            | 1.82%        | 1.36           | 3.27%        | 1.73           | 2.79%        |
| 1999              | .60            | 1.91%        | 1.03           | 2.77%        | 1.63           | 2.37%        |
| Flatfish          |                |              |                |              |                |              |
| 1995              | 1.66           | 92.60%       | 17.60          | 57.72%       | 19.26          | 59.66%       |
| 1996              | .66            | 96.81%       | 19.36          | 45.62%       | 20.02          | 46.43%       |
| 1997              | .69            | 98.88%       | 15.95          | 48.46%       | 16.64          | 49.51%       |
| 1998              | .78            | 90.19%       | 11.37          | 50.75%       | 12.16          | 52.22%       |
| 1999              | 1.43           | 97.89%       | 11.86          | 50.72%       | 13.29          | 53.49%       |
| Rockfish          |                |              |                |              |                |              |
| 1995              | .42            | 20.58%       | 3.57           | 20.77%       | 3.99           | 20.75%       |
| 1996              | .32            | 15.29%       | 3.26           | 20.35%       | 3.59           | 19.76%       |
| 1997              | .29            | 15.25%       | 3.50           | 19.62%       | 3.79           | 19.20%       |
| 1998              | .48            | 24.79%       | 2.71           | 15.69%       | 3.19           | 16.61%       |
| 1999              | .24            | 16.06%       | 3.42           | 15.07%       | 3.66           | 15.13%       |
| Atka mackerel     |                |              |                |              |                |              |
| 1995              | .00            | 100.00%      | .20            | 28.18%       | .20            | 28.38%       |
| 1996              | .00            | 100.00%      | .34            | 21.12%       | .34            | 21.12%       |
| 1997              | .00            | 96.90%       | .05            | 16.23%       | .05            | 16.64%       |
| 1998              | .00            | 100.00%      | .16            | 51.89%       | .16            | 51.90%       |
| 1999              | .00            | 21.21%       | .03            | 12.98%       | .03            | 13.01%       |

Table 5.--Continued.

| Area/Species/Year               | Fixed          |              | Trawl          |              | All gear       |              |
|---------------------------------|----------------|--------------|----------------|--------------|----------------|--------------|
|                                 | Total Discards | Discard Rate | Total Discards | Discard Rate | Total Discards | Discard Rate |
| Bering Sea and Aleutian Islands |                |              |                |              |                |              |
| All groundfish                  |                |              |                |              |                |              |
| 1995                            | 23.42          | 15.85%       | 250.69         | 14.07%       | 274.11         | 14.20%       |
| 1996                            | 19.50          | 12.99%       | 224.01         | 13.19%       | 243.51         | 13.17%       |
| 1997                            | 25.15          | 14.23%       | 235.83         | 14.26%       | 260.98         | 14.26%       |
| 1998                            | 21.66          | 14.98%       | 109.37         | 7.41%        | 131.03         | 8.08%        |
| 1999                            | 15.12          | 11.74%       | 114.88         | 8.86%        | 130.00         | 9.12%        |
| Pollock                         |                |              |                |              |                |              |
| 1995                            | 2.67           | 86.66%       | 96.18          | 7.25%        | 98.85          | 7.44%        |
| 1996                            | 2.65           | 90.17%       | 74.56          | 6.11%        | 77.21          | 6.32%        |
| 1997                            | 3.75           | 82.14%       | 90.46          | 7.90%        | 94.22          | 8.19%        |
| 1998                            | .73            | 21.69%       | 16.16          | 1.44%        | 16.88          | 1.50%        |
| 1999                            | .59            | 15.03%       | 28.90          | 2.93%        | 29.49          | 2.98%        |
| Sablefish                       |                |              |                |              |                |              |
| 1995                            | .15            | 9.41%        | .04            | 10.00%       | .20            | 9.53%        |
| 1996                            | .13            | 10.02%       | .03            | 17.59%       | .15            | 10.90%       |
| 1997                            | .14            | 11.22%       | .01            | 16.83%       | .15            | 11.52%       |
| 1998                            | .12            | 11.42%       | .02            | 11.01%       | .13            | 11.36%       |
| 1999                            | .11            | 10.35%       | .05            | 15.94%       | .16            | 11.59%       |
| Pacific cod                     |                |              |                |              |                |              |
| 1995                            | 5.63           | 4.56%        | 37.56          | 30.90%       | 43.19          | 17.63%       |
| 1996                            | 3.86           | 3.03%        | 24.94          | 22.05%       | 28.80          | 11.97%       |
| 1997                            | 3.97           | 2.71%        | 17.98          | 16.16%       | 21.95          | 8.52%        |
| 1998                            | 3.14           | 2.76%        | 1.11           | 1.35%        | 4.24           | 2.17%        |
| 1999                            | 1.60           | 1.51%        | 2.00           | 2.93%        | 3.60           | 2.07%        |
| Flatfish                        |                |              |                |              |                |              |
| 1995                            | 4.25           | 61.48%       | 87.04          | 38.64%       | 91.29          | 39.32%       |
| 1996                            | 4.55           | 54.72%       | 87.10          | 38.64%       | 91.65          | 39.21%       |
| 1997                            | 5.04           | 50.54%       | 104.73         | 34.68%       | 109.76         | 35.19%       |
| 1998                            | 3.73           | 34.59%       | 70.96          | 37.54%       | 74.69          | 37.38%       |
| 1999                            | 2.48           | 38.87%       | 62.94          | 40.55%       | 65.43          | 40.49%       |
| Rockfish                        |                |              |                |              |                |              |
| 1995                            | .15            | 33.54%       | 5.00           | 30.56%       | 5.14           | 30.63%       |
| 1996                            | .22            | 45.12%       | 8.05           | 34.30%       | 8.27           | 34.52%       |
| 1997                            | .19            | 47.04%       | 4.39           | 26.41%       | 4.59           | 26.91%       |
| 1998                            | .40            | 57.62%       | 4.74           | 32.10%       | 5.14           | 33.23%       |
| 1999                            | .26            | 56.49%       | 6.94           | 35.60%       | 7.20           | 36.08%       |
| Atka mackerel                   |                |              |                |              |                |              |
| 1995                            | .14            | 98.69%       | 14.76          | 18.13%       | 14.90          | 18.27%       |
| 1996                            | .09            | 98.18%       | 17.07          | 16.43%       | 17.16          | 16.50%       |
| 1997                            | .09            | 97.60%       | 6.50           | 9.88%        | 6.58           | 10.00%       |
| 1998                            | .11            | 95.31%       | 5.56           | 9.76%        | 5.67           | 9.93%        |
| 1999                            | .08            | 94.79%       | 4.95           | 8.82%        | 5.03           | 8.94%        |

Table 5.--Continued.

| Area/Species/Year | Fixed          |              | Trawl          |              | All gear       |              |
|-------------------|----------------|--------------|----------------|--------------|----------------|--------------|
|                   | Total Discards | Discard Rate | Total Discards | Discard Rate | Total Discards | Discard Rate |
| All Alaska        |                |              |                |              |                |              |
| All groundfish    |                |              |                |              |                |              |
| 1995              | 27.59          | 14.04%       | 285.59         | 14.65%       | 313.18         | 14.60%       |
| 1996              | 22.19          | 11.66%       | 262.34         | 14.10%       | 284.52         | 13.87%       |
| 1997              | 28.25          | 13.30%       | 270.20         | 14.61%       | 298.46         | 14.48%       |
| 1998              | 25.13          | 13.88%       | 128.22         | 7.61%        | 153.35         | 8.22%        |
| 1999              | 19.33          | 11.00%       | 135.45         | 9.17%        | 154.78         | 9.37%        |
| Pollock           |                |              |                |              |                |              |
| 1995              | 2.70           | 85.39%       | 104.01         | 7.43%        | 106.71         | 7.61%        |
| 1996              | 2.70           | 89.74%       | 79.65          | 6.27%        | 82.34          | 6.47%        |
| 1997              | 3.79           | 81.38%       | 97.67          | 7.90%        | 101.46         | 8.18%        |
| 1998              | .73            | 21.45%       | 17.17          | 1.38%        | 17.90          | 1.43%        |
| 1999              | .70            | 17.05%       | 30.70          | 2.84%        | 31.40          | 2.90%        |
| Sablefish         |                |              |                |              |                |              |
| 1995              | .52            | 2.86%        | .78            | 30.01%       | 1.30           | 6.29%        |
| 1996              | .43            | 2.83%        | .56            | 25.42%       | .99            | 5.67%        |
| 1997              | .63            | 4.87%        | .49            | 30.05%       | 1.12           | 7.68%        |
| 1998              | .66            | 5.28%        | .33            | 22.39%       | .99            | 7.09%        |
| 1999              | .38            | 3.28%        | .76            | 38.24%       | 1.14           | 8.38%        |
| Pacific cod       |                |              |                |              |                |              |
| 1995              | 6.24           | 4.14%        | 40.49          | 24.78%       | 46.73          | 14.88%       |
| 1996              | 4.32           | 2.88%        | 32.04          | 20.14%       | 36.36          | 11.77%       |
| 1997              | 4.67           | 2.80%        | 22.10          | 13.84%       | 26.77          | 8.21%        |
| 1998              | 3.51           | 2.61%        | 2.46           | 2.00%        | 5.97           | 2.32%        |
| 1999              | 2.20           | 1.60%        | 3.03           | 2.87%        | 5.23           | 2.16%        |
| Flatfish          |                |              |                |              |                |              |
| 1995              | 5.91           | 67.89%       | 104.64         | 40.92%       | 110.55         | 41.81%       |
| 1996              | 5.21           | 57.90%       | 106.46         | 39.75%       | 111.67         | 40.34%       |
| 1997              | 5.73           | 53.72%       | 120.68         | 36.04%       | 126.41         | 36.58%       |
| 1998              | 4.51           | 38.74%       | 82.33          | 38.94%       | 86.84          | 38.93%       |
| 1999              | 3.91           | 49.88%       | 74.81          | 41.88%       | 78.72          | 42.22%       |
| Rockfish          |                |              |                |              |                |              |
| 1995              | .57            | 22.86%       | 8.56           | 25.54%       | 9.14           | 25.36%       |
| 1996              | .54            | 20.88%       | 11.31          | 28.64%       | 11.86          | 28.16%       |
| 1997              | .48            | 20.95%       | 7.89           | 22.90%       | 8.37           | 22.78%       |
| 1998              | .87            | 33.41%       | 7.45           | 23.26%       | 8.32           | 24.03%       |
| 1999              | .51            | 25.51%       | 10.36          | 24.55%       | 10.86          | 24.59%       |
| Atka mackerel     |                |              |                |              |                |              |
| 1995              | .14            | 98.71%       | 14.96          | 18.22%       | 15.10          | 18.36%       |
| 1996              | .09            | 98.18%       | 17.40          | 16.50%       | 17.49          | 16.57%       |
| 1997              | .09            | 97.58%       | 6.55           | 9.91%        | 6.64           | 10.03%       |
| 1998              | .11            | 95.31%       | 5.73           | 9.99%        | 5.83           | 10.16%       |
| 1999              | .08            | 93.75%       | 4.99           | 8.84%        | 5.06           | 8.96%        |

Notes: All groundfish and all gear may include additional categories. Includes only catch counted against Federal TACs. Although these are the best available estimates of discards and are used for several management purposes, these estimates are not necessarily accurate. The reasons for this are as follows: 1) they are wholly or partially derived from observer estimates; 2) discards occur at many different places on vessels; 3) observers only record a rough approximation of what they see; and 4) the estimation methods used by at-sea observers focus on providing good estimates of total catch by species, not on the disposition of that catch.

Source: Blend estimates, National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 6.--Gulf of Alaska groundfish catch by species, gear, and target fishery, 1998-99 (1,000 metric tons, round weight).

|                  | Species |                |                |                 |                 |             |              |                 |               |               |       | Total  |
|------------------|---------|----------------|----------------|-----------------|-----------------|-------------|--------------|-----------------|---------------|---------------|-------|--------|
|                  | Pollock | Sable-<br>fish | Pacific<br>cod | Arrow-<br>tooth | Flathd.<br>sole | Rex<br>sole | Flat<br>deep | Flat<br>shallow | Rock-<br>fish | Atka<br>mack. | Other |        |
| Year/Gear/Target |         |                |                |                 |                 |             |              |                 |               |               |       |        |
| 1998             |         |                |                |                 |                 |             |              |                 |               |               |       |        |
| Hook and line    |         |                |                |                 |                 |             |              |                 |               |               |       |        |
| Sablefish        | .00     | 11.47          | .35            | .62             | -               | .00         | .03          | .00             | 1.40          | -             | .45   | 14.33  |
| Pacific cod      | .07     | .01            | 9.64           | .10             | .02             | -           | .00          | .01             | .10           | -             | .79   | 10.74  |
| Rockfish         | .00     | .02            | .04            | .01             | -               | -           | .00          | .05             | .43           | -             | -     | .54    |
| Total            | .07     | 11.51          | 10.04          | .72             | .02             | .00         | .04          | .06             | 1.93          | -             | 1.30  | 25.70  |
| Pot              |         |                |                |                 |                 |             |              |                 |               |               |       |        |
| Pacific cod      | .00     | -              | 10.52          | .00             | -               | -           | -            | .00             | .00           | .00           | .18   | 10.71  |
| Total            | .00     | -              | 10.52          | .00             | -               | -           | -            | .02             | .00           | .00           | .27   | 10.82  |
| Trawl            |         |                |                |                 |                 |             |              |                 |               |               |       |        |
| Pollock          |         |                |                |                 |                 |             |              |                 |               |               |       |        |
| bottom           | 3.46    | .00            | .35            | .17             | .04             | .02         | .00          | .03             | .00           | -             | .09   | 4.16   |
| pelagic          | 118.76  | .00            | .54            | .15             | .05             | .00         | .00          | .00             | .04           | .00           | .22   | 119.78 |
| Pacific cod      | .68     | .08            | 37.52          | 2.00            | .32             | .34         | .12          | 1.64            | .34           | .15           | .62   | 43.83  |
| Arrowtooth       | .06     | .10            | .29            | 1.71            | .06             | .15         | .06          | .01             | .21           | .00           | .06   | 2.70   |
| Flathd. sole     | .06     | .02            | .21            | 1.36            | .76             | .09         | .05          | .14             | .04           | .00           | .13   | 2.86   |
| Rex sole         | .04     | .06            | .64            | 3.48            | .16             | 1.89        | .09          | .02             | .24           | -             | .27   | 6.88   |
| Flat deep        | .02     | .20            | .21            | .95             | .13             | .06         | 1.82         | .10             | .27           | -             | .07   | 3.83   |
| Flat shallow     | .19     | .04            | 1.12           | .79             | .18             | .04         | .03          | 1.48            | .04           | -             | .35   | 4.25   |
| Rockfish         | .10     | .83            | .68            | 1.67            | .02             | .06         | .09          | .06             | 16.07         | .16           | .15   | 19.89  |
| Total            | 123.36  | 1.33           | 41.57          | 12.29           | 1.72            | 2.67        | 2.25         | 3.48            | 17.25         | .32           | 2.25  | 208.49 |
| All gear         |         |                |                |                 |                 |             |              |                 |               |               |       |        |
| Total            | 123.44  | 12.84          | 62.13          | 13.01           | 1.74            | 2.67        | 2.29         | 3.57            | 19.18         | .32           | 3.82  | 245.01 |



Table 6.--Continued.

|                  | Species |                |                |                 |                 |             |              |                 |               |               |       | Total  |
|------------------|---------|----------------|----------------|-----------------|-----------------|-------------|--------------|-----------------|---------------|---------------|-------|--------|
|                  | Pollock | Sable-<br>fish | Pacific<br>cod | Arrow-<br>tooth | Flathd.<br>sole | Rex<br>sole | Flat<br>deep | Flat<br>shallow | Rock-<br>fish | Atka<br>mack. | Other |        |
| Year/Gear/Target |         |                |                |                 |                 |             |              |                 |               |               |       |        |
| 1999             |         |                |                |                 |                 |             |              |                 |               |               |       |        |
| Hook and line    |         |                |                |                 |                 |             |              |                 |               |               |       |        |
| Sablefish        | .00     | 10.48          | .37            | .73             | -               | -           | .03          | .02             | 1.10          | .00           | .35   | 13.09  |
| Pacific cod      | .15     | .03            | 12.00          | .56             | .03             | -           | .00          | .04             | .08           | .00           | 1.08  | 13.97  |
| Rockfish         | .00     | .03            | .06            | .01             | -               | -           | .00          | .00             | .34           | -             | .01   | .45    |
| Total            | .15     | 10.54          | 12.42          | 1.31            | .03             | -           | .03          | .06             | 1.52          | .00           | 1.51  | 27.57  |
| Pot              |         |                |                |                 |                 |             |              |                 |               |               |       |        |
| Pacific cod      | .01     | .01            | 19.01          | .01             | .00             | .00         | .00          | .01             | .00           | .00           | .22   | 19.27  |
| Total            | .01     | .01            | 19.01          | .02             | .00             | .00         | .00          | .01             | .00           | .00           | .25   | 19.31  |
| Trawl            |         |                |                |                 |                 |             |              |                 |               |               |       |        |
| Pollock          |         |                |                |                 |                 |             |              |                 |               |               |       |        |
| bottom           | 3.55    | .01            | .43            | .27             | .03             | .00         | .00          | .03             | .01           | -             | .08   | 4.41   |
| pelagic          | 88.21   | .01            | .44            | .72             | .06             | .00         | .00          | .00             | .03           | .12           | .27   | 89.87  |
| Pacific cod      | 1.00    | .16            | 33.45          | 3.42            | .30             | .26         | .16          | 1.35            | .44           | .00           | .57   | 41.11  |
| Arrowtooth       | .11     | .15            | .27            | 2.90            | .11             | .31         | .23          | .02             | .27           | .00           | .10   | 4.47   |
| Rex sole         | .06     | .08            | .57            | 3.74            | .21             | 2.24        | .14          | .01             | .35           | .00           | .49   | 7.88   |
| Flat deep        | .09     | .23            | .28            | 1.10            | .04             | .06         | 1.37         | .05             | .39           | -             | .05   | 3.67   |
| Flat shallow     | .08     | .00            | .27            | .07             | .03             | .01         | .00          | .87             | .00           | -             | .12   | 1.45   |
| Rockfish         | .09     | 1.04           | 1.33           | 2.39            | .06             | .17         | .14          | .07             | 21.20         | .14           | .15   | 26.80  |
| Total            | 93.22   | 1.68           | 37.15          | 14.74           | .86             | 3.06        | 2.25         | 2.48            | 22.69         | .26           | 2.08  | 180.48 |
| All gear         |         |                |                |                 |                 |             |              |                 |               |               |       |        |
| Total            | 93.37   | 12.23          | 68.59          | 16.07           | .89             | 3.06        | 2.28         | 2.55            | 24.21         | .26           | 3.85  | 227.36 |

Notes: Totals may include additional categories. The target, calculated by AFSC staff, is based on processor, week, processing mode, NMFS area, and gear. Includes only catch counted against Federal TACs.

Source: Blend estimates, National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 7.--Bering Sea and Aleutian Islands groundfish catch by species, gear, and target fishery, 1998-99  
(1,000 metric tons, round weight).

| Year/Gear/Target | Species |                |                |                 |                 |              |        |               |               |               |               |       | Total   |
|------------------|---------|----------------|----------------|-----------------|-----------------|--------------|--------|---------------|---------------|---------------|---------------|-------|---------|
|                  | Pollock | Sable-<br>fish | Pacific<br>cod | Arrow-<br>tooth | Flathd.<br>sole | Rock<br>sole | Turbot | Yellow<br>fin | Flat<br>other | Rock-<br>fish | Atka<br>mack. | Other |         |
| 1998             |         |                |                |                 |                 |              |        |               |               |               |               |       |         |
| Hook and line    |         |                |                |                 |                 |              |        |               |               |               |               |       |         |
| Sablefish        | .00     | .57            | .05            | .12             | .00             | .00          | .28    | -             | .00           | .09           | .00           | .14   | 1.25    |
| Pacific cod      | 3.29    | .03            | 99.80          | 1.63            | .38             | .04          | .32    | .26           | .03           | .39           | .10           | 13.96 | 120.22  |
| Turbot           | .01     | .43            | .16            | .86             | .01             | .00          | 6.71   | .00           | .00           | .20           | -             | .39   | 8.77    |
| Total            | 3.30    | 1.03           | 100.11         | 2.62            | .39             | .04          | 7.31   | .26           | .03           | .68           | .10           | 14.51 | 130.39  |
| Pot              |         |                |                |                 |                 |              |        |               |               |               |               |       |         |
| Pacific cod      | .04     | .00            | 13.69          | .00             | .00             | .00          | .00    | .11           | .00           | .00           | .02           | .36   | 14.23   |
| Total            | .04     | .00            | 13.69          | .00             | .00             | .00          | .00    | .11           | .00           | .00           | .02           | .36   | 14.23   |
| Trawl            |         |                |                |                 |                 |              |        |               |               |               |               |       |         |
| Pollock          |         |                |                |                 |                 |              |        |               |               |               |               |       |         |
| bottom           | 52.37   | .02            | 1.93           | 1.40            | .96             | .54          | .12    | 1.43          | .31           | .11           | .08           | .53   | 59.81   |
| pelagic          | 1039.89 | .00            | 4.73           | .75             | 1.23            | .17          | .10    | .46           | .80           | .64           | .01           | 1.18  | 1049.95 |
| Pacific cod      | 7.27    | .01            | 54.28          | 1.52            | 1.61            | 5.78         | .11    | .92           | .77           | .48           | 1.00          | 2.18  | 75.91   |
| Arrowtooth       | .34     | .03            | .13            | 1.08            | .12             | .07          | .21    | .04           | .09           | .03           | .11           | .10   | 2.35    |
| Flathd. sole     | 2.44    | .03            | 2.95           | 4.09            | 14.07           | 3.64         | .44    | 5.74          | 2.62          | .01           | .01           | 2.46  | 38.48   |
| Rock sole        | 4.01    | .00            | 3.59           | .28             | 1.41            | 14.11        | .00    | 2.20          | .85           | .00           | .01           | 1.03  | 27.50   |
| Turbot           | .05     | .03            | .03            | .46             | .06             | .01          | .52    | .01           | .04           | .03           | .02           | .04   | 1.29    |
| Yellowfin        | 14.63   | .00            | 9.68           | 2.19            | 4.30            | 9.02         | .09    | 88.43         | 8.65          | .00           | .00           | 3.25  | 140.25  |
| Flat, other      | .36     | .01            | .49            | .84             | .42             | .20          | .11    | 1.70          | 1.15          | .01           | .02           | .24   | 5.54    |
| Rockfish         | .15     | .01            | .15            | .26             | .03             | .01          | .03    | .01           | .03           | 8.05          | .74           | .06   | 9.53    |
| Atka mack.       | .26     | .00            | 3.95           | .21             | .00             | .07          | .08    | .00           | .01           | 5.42          | 54.98         | .49   | 65.47   |
| Total            | 1121.78 | .15            | 81.90          | 13.09           | 24.21           | 33.63        | 1.83   | 100.94        | 15.33         | 14.77         | 56.98         | 11.58 | 1476.19 |
| All gear         |         |                |                |                 |                 |              |        |               |               |               |               |       |         |
| Total            | 1125.12 | 1.18           | 195.70         | 15.72           | 24.60           | 33.67        | 9.15   | 101.32        | 15.37         | 15.45         | 57.10         | 26.45 | 1620.82 |

Table 7.--Continued.

|                  | Species |                |                |                 |                 |              |        |               |               |               |               |       | Total   |
|------------------|---------|----------------|----------------|-----------------|-----------------|--------------|--------|---------------|---------------|---------------|---------------|-------|---------|
|                  | Pollock | Sable-<br>fish | Pacific<br>cod | Arrow-<br>tooth | Flathd.<br>sole | Rock<br>sole | Turbot | Yellow<br>fin | Flat<br>other | Rock-<br>fish | Atka<br>mack. | Other |         |
| Year/Gear/Target |         |                |                |                 |                 |              |        |               |               |               |               |       |         |
| 1999             |         |                |                |                 |                 |              |        |               |               |               |               |       |         |
| Hook and line    |         |                |                |                 |                 |              |        |               |               |               |               |       |         |
| Sablefish        | .00     | .72            | .09            | .27             | .00             | .00          | .25    | -             | .00           | .13           | -             | .09   | 1.55    |
| Pacific cod      | 3.91    | .03            | 89.24          | .79             | .28             | .03          | .22    | .18           | .10           | .23           | .07           | 9.98  | 105.06  |
| Arrowtooth       | -       | .00            | -              | .08             | -               | -            | -      | -             | .00           | .00           | -             | .01   | .10     |
| Turbot           | .00     | .26            | .09            | .44             | .01             | .03          | 3.53   | -             | .00           | .09           | -             | .41   | 4.86    |
| Total            | 3.92    | 1.02           | 89.45          | 1.59            | .29             | .06          | 4.02   | .18           | .10           | .46           | .07           | 10.53 | 111.70  |
| Pot              |         |                |                |                 |                 |              |        |               |               |               |               |       |         |
| Pacific cod      | .02     | .01            | 16.15          | .02             | .00             | .00          | .01    | .07           | .00           | .00           | .01           | .74   | 17.03   |
| Total            | .02     | .03            | 16.15          | .02             | .00             | .00          | .04    | .07           | .00           | .00           | .01           | .74   | 17.10   |
| Trawl            |         |                |                |                 |                 |              |        |               |               |               |               |       |         |
| Pollock          |         |                |                |                 |                 |              |        |               |               |               |               |       |         |
| bottom           | 10.97   | .00            | .41            | .14             | .35             | .68          | .01    | .46           | .23           | .06           | .11           | .11   | 13.54   |
| pelagic          | 940.30  | .01            | 3.07           | .24             | 1.64            | .75          | .03    | .11           | .52           | .11           | .01           | .59   | 947.38  |
| Pacific cod      | 16.88   | .00            | 50.98          | 1.11            | 1.96            | 9.60         | .03    | .35           | .52           | .33           | .53           | 2.12  | 84.41   |
| Arrowtooth       | .22     | .04            | .09            | .79             | .08             | .02          | .16    | .01           | .09           | .06           | .02           | .05   | 1.62    |
| Flathd. sole     | 3.56    | .05            | 3.24           | 3.56            | 11.23           | 2.59         | .44    | 3.59          | 1.51          | .02           | .02           | 2.23  | 32.05   |
| Rock sole        | 5.63    | .00            | 3.59           | .06             | .65             | 17.95        | .00    | 3.29          | 1.11          | .00           | .00           | .71   | 33.01   |
| Turbot           | .15     | .13            | .07            | .53             | .09             | .01          | .73    | .00           | .08           | .04           | .05           | .04   | 1.91    |
| Yellowfin        | 8.08    | .00            | 3.97           | 1.50            | 2.01            | 9.24         | .05    | 61.13         | 10.86         | .00           | .02           | 2.30  | 99.17   |
| Flat, other      | .30     | .03            | .14            | 1.14            | .17             | .09          | .18    | .07           | .39           | .06           | .04           | .16   | 2.77    |
| Rockfish         | .36     | .02            | .15            | .22             | .00             | .01          | .02    | -             | .02           | 12.08         | .52           | .07   | 13.45   |
| Atka mack.       | .45     | .01            | 2.61           | .46             | .08             | .08          | .13    | .02           | .03           | 6.72          | 54.79         | .52   | 65.89   |
| Oth. & unk.      | -       | -              | -              | -               | -               | -            | -      | -             | -             | -             | -             | .81   | .81     |
| Total            | 986.91  | .30            | 68.33          | 9.76            | 18.26           | 41.03        | 1.80   | 69.02         | 15.35         | 19.49         | 56.15         | 9.71  | 1296.11 |
| All gear         |         |                |                |                 |                 |              |        |               |               |               |               |       |         |
| Total            | 990.85  | 1.36           | 173.93         | 11.37           | 18.55           | 41.09        | 5.86   | 69.28         | 15.44         | 19.95         | 56.24         | 20.99 | 1424.91 |

Notes: Totals may include additional categories. The target, calculated by AFSC staff, is based on processor, week, processing mode, NMFS area, and gear. Includes only catch counted against Federal TACs.

Source: Blend estimates, National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 8.--Gulf of Alaska groundfish discards by species, gear, and target fishery, 1998-99 (1,000 metric tons, round weight).

|                  | Species |                |                |                 |                 |             |              |                 |               |               |       |       |
|------------------|---------|----------------|----------------|-----------------|-----------------|-------------|--------------|-----------------|---------------|---------------|-------|-------|
|                  | Pollock | Sable-<br>fish | Pacific<br>cod | Arrow-<br>tooth | Flathd.<br>sole | Rex<br>sole | Flat<br>deep | Flat<br>shallow | Rock-<br>fish | Atka<br>mack. | Other | Total |
| Year/Gear/Target |         |                |                |                 |                 |             |              |                 |               |               |       |       |
| 1998             |         |                |                |                 |                 |             |              |                 |               |               |       |       |
| Hook and line    |         |                |                |                 |                 |             |              |                 |               |               |       |       |
| Sablefish        | .00     | .53            | .23            | .62             | -               | .00         | .03          | .00             | .44           | -             | .44   | 2.29  |
| Pacific cod      | .01     | .01            | .12            | .10             | .02             | -           | .00          | .01             | .04           | -             | .75   | 1.05  |
| Rockfish         | .00     | .01            | .00            | .00             | -               | -           | .00          | .00             | .00           | -             | -     | .01   |
| Total            | .01     | .54            | .35            | .72             | .02             | .00         | .03          | .01             | .48           | -             | 1.20  | 3.36  |
| Pot              |         |                |                |                 |                 |             |              |                 |               |               |       |       |
| Pacific cod      | .00     | -              | .02            | .00             | -               | -           | -            | .00             | .00           | .00           | .08   | .11   |
| Total            | .00     | -              | .02            | .00             | -               | -           | -            | .00             | .00           | .00           | .09   | .11   |
| Trawl            |         |                |                |                 |                 |             |              |                 |               |               |       |       |
| Pollock          |         |                |                |                 |                 |             |              |                 |               |               |       |       |
| bottom           | .02     | .00            | .02            | .17             | .01             | .00         | .00          | .01             | .00           | -             | .09   | .32   |
| pelagic          | .44     | .00            | .01            | .11             | .01             | .00         | .00          | .00             | .01           | .00           | .20   | .78   |
| Pacific cod      | .31     | .05            | .35            | 1.86            | .09             | .03         | .06          | .44             | .24           | .15           | .61   | 4.18  |
| Arrowtooth       | .04     | .08            | .02            | .63             | .01             | .01         | .02          | .00             | .19           | .00           | .06   | 1.06  |
| Flathd. sole     | .01     | .00            | .09            | 1.27            | .10             | .01         | .00          | .02             | .01           | .00           | .13   | 1.64  |
| Rex sole         | .01     | .01            | .07            | 3.40            | .02             | .02         | .07          | .01             | .14           | -             | .27   | 4.01  |
| Flat deep        | .01     | .07            | .04            | .77             | .00             | .00         | .01          | .00             | .12           | -             | .07   | 1.09  |
| Flat shallow     | .13     | .03            | .69            | .65             | .00             | .00         | .00          | .10             | .01           | -             | .34   | 1.95  |
| Rockfish         | .06     | .07            | .07            | 1.38            | .01             | .02         | .04          | .01             | 1.99          | .01           | .15   | 3.80  |
| Total            | 1.01    | .32            | 1.36           | 10.24           | .27             | .08         | .20          | .59             | 2.71          | .16           | 1.92  | 18.85 |
| All gear         |         |                |                |                 |                 |             |              |                 |               |               |       |       |
| Total            | 1.02    | .86            | 1.73           | 10.96           | .30             | .08         | .22          | .60             | 3.19          | .16           | 3.20  | 22.32 |

Table 8.--Continued.

|                  | Species |                |                |                 |                 |             |              |                 |               |               |       |       |
|------------------|---------|----------------|----------------|-----------------|-----------------|-------------|--------------|-----------------|---------------|---------------|-------|-------|
|                  | Pollock | Sable-<br>fish | Pacific<br>cod | Arrow-<br>tooth | Flathd.<br>sole | Rex<br>sole | Flat<br>deep | Flat<br>shallow | Rock-<br>fish | Atka<br>mack. | Other | Total |
| Year/Gear/Target |         |                |                |                 |                 |             |              |                 |               |               |       |       |
| 1999             |         |                |                |                 |                 |             |              |                 |               |               |       |       |
| Hook and line    |         |                |                |                 |                 |             |              |                 |               |               |       |       |
| Sablefish        | .00     | .25            | .19            | .73             | -               | -           | .03          | .02             | .23           | .00           | .35   | 1.80  |
| Pacific cod      | .10     | .00            | .14            | .56             | .03             | -           | .00          | .04             | .01           | .00           | 1.07  | 1.95  |
| Rockfish         | .00     | .01            | .01            | .01             | -               | -           | .00          | .00             | .01           | -             | .01   | .05   |
| Total            | .10     | .27            | .34            | 1.30            | .03             | -           | .03          | .06             | .24           | .00           | 1.43  | 3.80  |
| Pot              |         |                |                |                 |                 |             |              |                 |               |               |       |       |
| Pacific cod      | .00     | .01            | .26            | .01             | .00             | .00         | .00          | .00             | .00           | .00           | .12   | .41   |
| Total            | .00     | .01            | .26            | .01             | .00             | .00         | .00          | .00             | .00           | .00           | .12   | .41   |
| Trawl            |         |                |                |                 |                 |             |              |                 |               |               |       |       |
| Pollock          |         |                |                |                 |                 |             |              |                 |               |               |       |       |
| bottom           | .23     | .00            | .01            | .18             | .01             | .00         | .00          | .02             | .01           | -             | .07   | .51   |
| pelagic          | .89     | .00            | .01            | .14             | .02             | .00         | .00          | .00             | .02           | .00           | .23   | 1.32  |
| Pacific cod      | .40     | .15            | .44            | 3.16            | .11             | .02         | .06          | .32             | .41           | .00           | .55   | 5.62  |
| Arrowtooth       | .06     | .11            | .03            | .89             | .04             | .01         | .03          | .00             | .16           | .00           | .09   | 1.42  |
| Rex sole         | .01     | .03            | .06            | 3.52            | .09             | .04         | .13          | .01             | .27           | .00           | .49   | 4.64  |
| Flat deep        | .06     | .15            | .08            | .86             | .01             | .00         | .01          | .03             | .17           | -             | .04   | 1.42  |
| Flat shallow     | .05     | .00            | .15            | .04             | .00             | .00         | .00          | .07             | .00           | -             | .08   | .39   |
| Rockfish         | .07     | .27            | .25            | 1.60            | .02             | .06         | .05          | .04             | 2.38          | .03           | .15   | 4.92  |
| Total            | 1.80    | .71            | 1.03           | 10.50           | .30             | .13         | .43          | .49             | 3.42          | .03           | 1.72  | 20.57 |
| All gear         |         |                |                |                 |                 |             |              |                 |               |               |       |       |
| Total            | 1.91    | .98            | 1.63           | 11.81           | .33             | .13         | .46          | .56             | 3.66          | .03           | 3.27  | 24.78 |

Notes: Totals may include additional categories. The target, calculated by AFSC staff, is based on processor, week, processing mode, NMFS area, and gear. Includes only catch counted against Federal TACs. Although these are the best available estimates of discards and are used for several management purposes, these estimates are not necessarily accurate. The reasons for this are as follows: 1) they are wholly or partially derived from observer estimates; 2) discards occur at many different places on vessels; 3) observers only record a rough approximation of what they see; and 4) the estimation methods used by at-sea observers focus on providing good estimates of total catch by species, not on the disposition of that catch.

Source: Blend estimates, National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 9.--Bering Sea and Aleutian Islands groundfish discards by species, gear, and target fishery, 1998-99  
(1,000 metric tons, round weight).

| Year/Gear/Target | Species |                |                |                 |                 |              |        |               |               |               |               | Total |        |
|------------------|---------|----------------|----------------|-----------------|-----------------|--------------|--------|---------------|---------------|---------------|---------------|-------|--------|
|                  | Pollock | Sable-<br>fish | Pacific<br>cod | Arrow-<br>tooth | Flathd.<br>sole | Rock<br>sole | Turbot | Yellow<br>fin | Flat<br>other | Rock-<br>fish | Atka<br>mack. |       | Other  |
| 1998             |         |                |                |                 |                 |              |        |               |               |               |               |       |        |
| Hook and line    |         |                |                |                 |                 |              |        |               |               |               |               |       |        |
| Sablefish        | .00     | .01            | .05            | .12             | .00             | .00          | .17    | -             | .00           | .03           | .00           | .14   | .53    |
| Pacific cod      | .71     | .02            | 2.92           | 1.48            | .35             | .04          | .06    | .26           | .03           | .32           | .09           | 12.57 | 18.83  |
| Turbot           | .01     | .09            | .01            | .86             | .01             | .00          | .24    | .00           | .00           | .04           | -             | .39   | 1.65   |
| Total            | .72     | .12            | 3.08           | 2.47            | .35             | .04          | .47    | .26           | .03           | .39           | .09           | 13.11 | 21.14  |
| Pot              |         |                |                |                 |                 |              |        |               |               |               |               |       |        |
| Pacific cod      | .01     | .00            | .05            | .00             | .00             | .00          | .00    | .10           | .00           | .00           | .01           | .34   | .52    |
| Total            | .01     | .00            | .05            | .00             | .00             | .00          | .00    | .10           | .00           | .00           | .01           | .34   | .53    |
| Trawl            |         |                |                |                 |                 |              |        |               |               |               |               |       |        |
| Pollock          |         |                |                |                 |                 |              |        |               |               |               |               |       |        |
| bottom           | .68     | .00            | .16            | 1.10            | .62             | .33          | .06    | .92           | .23           | .06           | .08           | .51   | 4.74   |
| pelagic          | 4.80    | .00            | .21            | .56             | .93             | .12          | .07    | .39           | .16           | .13           | .00           | .72   | 8.08   |
| Pacific cod      | 3.57    | .01            | .21            | 1.41            | 1.21            | 4.85         | .09    | .56           | .64           | .44           | .69           | 2.12  | 15.81  |
| Arrowtooth       | .24     | .01            | .00            | .37             | .03             | .04          | .11    | .03           | .01           | .02           | .04           | .07   | .97    |
| Flathd. sole     | 1.10    | .00            | .06            | 3.82            | 2.12            | 2.86         | .05    | 2.94          | 2.03          | .00           | .00           | 2.44  | 17.42  |
| Rock sole        | 1.29    | .00            | .10            | .26             | .52             | 5.87         | .00    | 1.17          | .76           | .00           | .00           | 1.02  | 10.99  |
| Turbot           | .00     | .00            | .00            | .28             | .00             | .01          | .06    | .00           | .00           | .00           | .00           | .04   | .41    |
| Yellowfin        | 4.37    | .00            | .33            | 1.42            | 1.27            | 6.72         | .03    | 13.89         | 7.62          | .00           | .00           | 3.12  | 38.78  |
| Flat, other      | .08     | .00            | .01            | .70             | .09             | .12          | .05    | .59           | .38           | .00           | .01           | .24   | 2.28   |
| Rockfish         | .01     | .00            | .00            | .14             | .00             | .01          | .00    | .01           | .03           | .44           | .14           | .06   | .85    |
| Atka mack.       | .03     | .00            | .02            | .15             | .00             | .04          | .04    | .00           | .00           | 3.62          | 4.60          | .48   | 8.98   |
| Total            | 16.16   | .02            | 1.11           | 10.22           | 6.81            | 20.98        | .58    | 20.50         | 11.87         | 4.74          | 5.56          | 10.83 | 109.37 |
| All gear         |         |                |                |                 |                 |              |        |               |               |               |               |       |        |
| Total            | 16.88   | .13            | 4.24           | 12.70           | 7.16            | 21.01        | 1.05   | 20.86         | 11.91         | 5.14          | 5.67          | 24.28 | 131.03 |

Table 9.--Continued.

|                  | Species |                |                |                 |                 |              |        |               |               |               |               |       |        |
|------------------|---------|----------------|----------------|-----------------|-----------------|--------------|--------|---------------|---------------|---------------|---------------|-------|--------|
|                  | Pollock | Sable-<br>fish | Pacific<br>cod | Arrow-<br>tooth | Flathd.<br>sole | Rock<br>sole | Turbot | Yellow<br>fin | Flat<br>other | Rock-<br>fish | Atka<br>mack. | Other | Total  |
| Year/Gear/Target |         |                |                |                 |                 |              |        |               |               |               |               |       |        |
| 1999             |         |                |                |                 |                 |              |        |               |               |               |               |       |        |
| Hook and line    |         |                |                |                 |                 |              |        |               |               |               |               |       |        |
| Sablefish        | .00     | .03            | .06            | .26             | .00             | .00          | .09    | -             | .00           | .04           | -             | .08   | .57    |
| Pacific cod      | .57     | .01            | 1.45           | .73             | .27             | .03          | .04    | .18           | .09           | .20           | .07           | 8.80  | 12.44  |
| Arrowtooth       | -       | .00            | -              | .03             | -               | -            | -      | -             | .00           | .00           | -             | .01   | .04    |
| Turbot           | .00     | .06            | .00            | .43             | .00             | .03          | .17    | -             | .00           | .01           | -             | .41   | 1.12   |
| Total            | .57     | .11            | 1.53           | 1.45            | .28             | .06          | .31    | .18           | .09           | .26           | .07           | 9.32  | 14.23  |
| Pot              |         |                |                |                 |                 |              |        |               |               |               |               |       |        |
| Pacific cod      | .02     | .00            | .07            | .02             | .00             | .00          | .00    | .07           | .00           | .00           | .01           | .67   | .87    |
| Total            | .02     | .00            | .07            | .02             | .00             | .00          | .01    | .07           | .00           | .00           | .01           | .67   | .88    |
| Trawl            |         |                |                |                 |                 |              |        |               |               |               |               |       |        |
| Pollock          |         |                |                |                 |                 |              |        |               |               |               |               |       |        |
| bottom           | 1.36    | .00            | .03            | .09             | .18             | .46          | .00    | .08           | .22           | .04           | .06           | .11   | 2.63   |
| pelagic          | 5.57    | .00            | .19            | .16             | 1.06            | .54          | .01    | .08           | .01           | .03           | .00           | .30   | 7.96   |
| Pacific cod      | 12.94   | .00            | .56            | .95             | 1.03            | 8.04         | .01    | .31           | .40           | .30           | .46           | 2.10  | 27.11  |
| Arrowtooth       | .09     | .01            | .00            | .22             | .01             | .01          | .08    | .00           | .01           | .03           | .00           | .05   | .51    |
| Flathd. sole     | 2.01    | .00            | .43            | 3.16            | 1.42            | 1.94         | .06    | 1.98          | 1.34          | .00           | .00           | 2.22  | 14.56  |
| Rock sole        | 3.59    | .00            | .15            | .05             | .31             | 8.07         | .00    | 1.21          | 1.06          | .00           | .00           | .70   | 15.15  |
| Turbot           | .11     | .01            | .01            | .40             | .00             | .01          | .06    | .00           | .01           | .00           | .00           | .04   | .65    |
| Yellowfin        | 2.78    | .00            | .49            | .72             | .45             | 6.37         | .01    | 8.50          | 9.96          | .00           | .00           | 2.23  | 31.50  |
| Flat, other      | .22     | .02            | .02            | 1.03            | .03             | .08          | .12    | .05           | .03           | .03           | .02           | .15   | 1.80   |
| Rockfish         | .06     | .00            | .00            | .08             | .00             | .00          | .00    | -             | .00           | .69           | .11           | .06   | 1.00   |
| Atka mack.       | .17     | .00            | .12            | .33             | .02             | .06          | .02    | .00           | .00           | 5.79          | 4.26          | .52   | 11.29  |
| Oth. & unk.      | -       | -              | -              | -               | -               | -            | -      | -             | -             | -             | -             | .60   | .60    |
| Total            | 28.90   | .05            | 2.00           | 7.20            | 4.52            | 25.59        | .41    | 12.22         | 13.02         | 6.94          | 4.95          | 9.10  | 114.88 |
| All gear         |         |                |                |                 |                 |              |        |               |               |               |               |       |        |
| Total            | 29.49   | .16            | 3.60           | 8.67            | 4.80            | 25.65        | .73    | 12.47         | 13.11         | 7.20          | 5.03          | 19.09 | 130.00 |

Notes: Totals may include additional categories. The target, calculated by AFSC staff, is based on processor, week, processing mode, NMFS area, and gear. Includes only catch counted against Federal TACs. Although these are the best available estimates of discards and are used for several management purposes, these estimates are not necessarily accurate. The reasons for this are as follows: 1) they are wholly or partially derived from observer estimates; 2) discards occur at many different places on vessels; 3) observers only record a rough approximation of what they see; and 4) the estimation methods used by at-sea observers focus on providing good estimates of total catch by species, not on the disposition of that catch.

Source: Blend estimates, National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 10.--Gulf of Alaska groundfish discard rate by species, gear, and target fishery, 1998-99.

|                  | Species |                |                |                 |                 |             |              |                 |               |               |        | Total |
|------------------|---------|----------------|----------------|-----------------|-----------------|-------------|--------------|-----------------|---------------|---------------|--------|-------|
|                  | Pollock | Sable-<br>fish | Pacific<br>cod | Arrow-<br>tooth | Flathd.<br>sole | Rex<br>sole | Flat<br>deep | Flat<br>shallow | Rock-<br>fish | Atka<br>mack. | Other  |       |
| Year/Gear/Target |         |                |                |                 |                 |             |              |                 |               |               |        |       |
| 1998             |         |                |                |                 |                 |             |              |                 |               |               |        |       |
| Hook and line    |         |                |                |                 |                 |             |              |                 |               |               |        |       |
| Sablefish        | 86.2%   | 4.6%           | 66.0%          | 99.9%           | -               | 100.0%      | 81.5%        | 75.0%           | 31.4%         | -             | 98.3%  | 16.0% |
| Pacific cod      | 9.2%    | 45.7%          | 1.2%           | 100.0%          | 99.3%           | -           | 99.8%        | 82.0%           | 38.1%         | -             | 95.9%  | 9.8%  |
| Rockfish         | .0%     | 46.8%          | .0%            | 92.1%           | -               | -           | .0%          | .0%             | .0%           | -             | -      | 2.5%  |
| Total            | 9.7%    | 4.7%           | 3.5%           | 99.9%           | 99.3%           | 100.0%      | 69.4%        | 12.7%           | 24.8%         | -             | 92.3%  | 13.1% |
| Pot              |         |                |                |                 |                 |             |              |                 |               |               |        |       |
| Pacific cod      | 67.9%   | -              | .2%            | 100.0%          | -               | -           | -            | 100.0%          | 97.9%         | 100.0%        | 46.3%  | 1.0%  |
| Total            | 65.9%   | -              | .2%            | 100.0%          | -               | -           | -            | 14.9%           | 96.1%         | 100.0%        | 31.5%  | 1.0%  |
| Trawl            |         |                |                |                 |                 |             |              |                 |               |               |        |       |
| Pollock          |         |                |                |                 |                 |             |              |                 |               |               |        |       |
| bottom           | .7%     | 100.0%         | 4.6%           | 97.9%           | 37.0%           | 7.5%        | .0%          | 20.6%           | 34.0%         | -             | 97.9%  | 7.8%  |
| pelagic          | .4%     | 100.0%         | 1.5%           | 75.7%           | 29.0%           | 10.9%       | .0%          | 35.4%           | 13.3%         | .0%           | 89.5%  | .7%   |
| Pacific cod      | 44.7%   | 59.0%          | .9%            | 92.9%           | 29.1%           | 7.5%        | 49.4%        | 26.7%           | 69.4%         | 99.7%         | 98.2%  | 9.5%  |
| Arrowtooth       | 66.6%   | 81.9%          | 8.1%           | 36.5%           | 21.1%           | 5.0%        | 30.0%        | 35.4%           | 91.7%         | .0%           | 99.9%  | 39.2% |
| Flathd. sole     | 18.8%   | 23.4%          | 42.3%          | 92.9%           | 13.2%           | 7.7%        | 1.8%         | 15.8%           | 27.3%         | 8.9%          | 100.0% | 57.4% |
| Rex sole         | 22.0%   | 14.1%          | 10.4%          | 97.6%           | 15.1%           | .9%         | 77.7%        | 67.0%           | 59.0%         | -             | 100.0% | 58.3% |
| Flat deep        | 33.6%   | 35.0%          | 21.2%          | 81.1%           | 2.8%            | .3%         | .3%          | 1.4%            | 43.5%         | -             | 94.6%  | 28.5% |
| Flat shallow     | 66.5%   | 83.6%          | 62.0%          | 82.8%           | 1.4%            | 3.7%        | 6.4%         | 6.8%            | 32.8%         | -             | 96.7%  | 46.0% |
| Rockfish         | 57.6%   | 8.2%           | 10.4%          | 82.5%           | 36.2%           | 31.0%       | 47.1%        | 13.4%           | 12.4%         | 8.1%          | 99.9%  | 19.1% |
| Total            | .8%     | 23.7%          | 3.3%           | 83.3%           | 15.8%           | 2.9%        | 8.7%         | 17.0%           | 15.7%         | 51.9%         | 85.3%  | 9.0%  |
| All gear         |         |                |                |                 |                 |             |              |                 |               |               |        |       |
| Total            | .8%     | 6.7%           | 2.8%           | 84.2%           | 16.9%           | 2.9%        | 9.8%         | 16.9%           | 16.6%         | 51.9%         | 83.8%  | 9.1%  |



Table 10.--Continued.

|                  | Species |                |                |                 |                 |             |              |                 |               |               |       |       |
|------------------|---------|----------------|----------------|-----------------|-----------------|-------------|--------------|-----------------|---------------|---------------|-------|-------|
|                  | Pollock | Sable-<br>fish | Pacific<br>cod | Arrow-<br>tooth | Flathd.<br>sole | Rex<br>sole | Flat<br>deep | Flat<br>shallow | Rock-<br>fish | Atka<br>mack. | Other | Total |
| Year/Gear/Target |         |                |                |                 |                 |             |              |                 |               |               |       |       |
| 1999             |         |                |                |                 |                 |             |              |                 |               |               |       |       |
| Hook and line    |         |                |                |                 |                 |             |              |                 |               |               |       |       |
| Sablefish        | 99.2%   | 2.4%           | 52.2%          | 99.4%           | -               | -           | 84.2%        | 99.1%           | 20.5%         | .0%           | 99.4% | 13.8% |
| Pacific cod      | 68.9%   | 2.7%           | 1.2%           | 99.9%           | 99.9%           | -           | 43.8%        | 99.2%           | 13.5%         | 100.0%        | 99.0% | 14.0% |
| Rockfish         | .0%     | 33.2%          | 12.8%          | 100.0%          | -               | -           | 60.0%        | .0%             | 1.7%          | -             | 99.8% | 10.6% |
| Total            | 68.9%   | 2.5%           | 2.7%           | 99.5%           | 99.9%           | -           | 80.9%        | 98.9%           | 16.0%         | 2.4%          | 94.9% | 13.8% |
| Pot              |         |                |                |                 |                 |             |              |                 |               |               |       |       |
| Pacific cod      | 57.2%   | 97.9%          | 1.4%           | 99.9%           | .0%             | .0%         | .0%          | 27.9%           | 76.2%         | 100.0%        | 55.5% | 2.1%  |
| Total            | 57.2%   | 97.9%          | 1.4%           | 43.3%           | .0%             | .0%         | .0%          | 27.9%           | 75.2%         | 100.0%        | 48.7% | 2.1%  |
| Trawl            |         |                |                |                 |                 |             |              |                 |               |               |       |       |
| Pollock          |         |                |                |                 |                 |             |              |                 |               |               |       |       |
| bottom           | 6.5%    | 25.6%          | 1.2%           | 65.6%           | 26.9%           | 22.5%       | .0%          | 54.2%           | 81.9%         | -             | 88.3% | 11.7% |
| pelagic          | 1.0%    | 52.0%          | 1.8%           | 19.9%           | 28.1%           | 30.3%       | .0%          | 22.0%           | 69.0%         | .0%           | 85.2% | 1.5%  |
| Pacific cod      | 39.9%   | 94.6%          | 1.3%           | 92.6%           | 36.0%           | 7.9%        | 40.5%        | 23.7%           | 92.7%         | 100.0%        | 95.8% | 13.7% |
| Arrowtooth       | 57.5%   | 68.8%          | 10.4%          | 30.6%           | 38.2%           | 4.0%        | 12.9%        | 6.8%            | 60.7%         | .0%           | 94.6% | 31.8% |
| Rex sole         | 18.4%   | 42.3%          | 10.2%          | 94.1%           | 42.4%           | 1.7%        | 93.5%        | 57.0%           | 76.4%         | 100.0%        | 99.9% | 58.8% |
| Flat deep        | 70.3%   | 61.9%          | 30.1%          | 77.5%           | 38.5%           | 5.8%        | .6%          | 59.8%           | 43.8%         | -             | 82.4% | 38.6% |
| Flat shallow     | 58.5%   | 38.7%          | 54.1%          | 57.4%           | 4.0%            | .0%         | 24.4%        | 8.2%            | 100.0%        | -             | 69.2% | 26.9% |
| Rockfish         | 74.2%   | 25.7%          | 18.8%          | 66.8%           | 33.6%           | 34.0%       | 39.4%        | 55.5%           | 11.2%         | 23.1%         | 98.4% | 18.4% |
| Total            | 1.9%    | 42.2%          | 2.8%           | 71.2%           | 35.2%           | 4.4%        | 19.3%        | 19.9%           | 15.1%         | 13.0%         | 82.3% | 11.4% |
| All gear         |         |                |                |                 |                 |             |              |                 |               |               |       |       |
| Total            | 2.0%    | 8.0%           | 2.4%           | 73.5%           | 37.3%           | 4.4%        | 20.2%        | 21.9%           | 15.1%         | 13.0%         | 85.0% | 10.9% |

Notes: Totals may include additional categories. The target, calculated by AFSC staff, is based on processor, week, processing mode, NMFS area, and gear. Includes only catch counted against Federal TACs. Although these are the best available estimates of discards and are used for several management purposes, these estimates are not necessarily accurate. The reasons for this are as follows: 1) they are wholly or partially derived from observer estimates; 2) discards occur at many different places on vessels; 3) observers only record a rough approximation of what they see; and 4) the estimation methods used by at-sea observers focus on providing good estimates of total catch by species, not on the disposition of that catch.

Source: Blend estimates, National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 11.--Bering Sea and Aleutian Islands groundfish discard rate by species, gear, and target fishery, 1998-99.

|                  | Species |                |                |                 |                 |              |        |               |               |               |               |        | Total |
|------------------|---------|----------------|----------------|-----------------|-----------------|--------------|--------|---------------|---------------|---------------|---------------|--------|-------|
|                  | Pollock | Sable-<br>fish | Pacific<br>cod | Arrow-<br>tooth | Flathd.<br>sole | Rock<br>sole | Turbot | Yellow<br>fin | Flat<br>other | Rock-<br>fish | Atka<br>mack. | Other  |       |
| Year/Gear/Target |         |                |                |                 |                 |              |        |               |               |               |               |        |       |
| 1998             |         |                |                |                 |                 |              |        |               |               |               |               |        |       |
| Hook and line    |         |                |                |                 |                 |              |        |               |               |               |               |        |       |
| Sablefish        | 100.0%  | 1.8%           | 97.1%          | 99.9%           | 18.5%           | 100.0%       | 60.4%  | -             | 100.0%        | 37.3%         | 100.0%        | 100.0% | 42.2% |
| Pacific cod      | 21.6%   | 51.7%          | 2.9%           | 90.9%           | 90.5%           | 98.9%        | 18.9%  | 97.0%         | 100.0%        | 82.1%         | 95.5%         | 90.1%  | 15.7% |
| Turbot           | 47.9%   | 21.2%          | 7.3%           | 99.8%           | 99.9%           | 37.6%        | 3.6%   | 100.0%        | 100.0%        | 20.3%         | -             | 99.3%  | 18.8% |
| Total            | 21.7%   | 11.4%          | 3.1%           | 94.3%           | 90.7%           | 97.4%        | 6.4%   | 97.0%         | 100.0%        | 57.5%         | 95.5%         | 90.4%  | 16.2% |
| Pot              |         |                |                |                 |                 |              |        |               |               |               |               |        |       |
| Pacific cod      | 22.6%   | 100.0%         | .4%            | 100.0%          | 95.4%           | 100.0%       | 100.0% | 91.8%         | 100.0%        | 99.5%         | 93.9%         | 94.0%  | 3.7%  |
| Total            | 22.6%   | 36.4%          | .4%            | 100.0%          | 95.4%           | 100.0%       | 30.8%  | 91.8%         | 100.0%        | 99.5%         | 93.9%         | 94.0%  | 3.7%  |
| Trawl            |         |                |                |                 |                 |              |        |               |               |               |               |        |       |
| Pollock          |         |                |                |                 |                 |              |        |               |               |               |               |        |       |
| bottom           | 1.3%    | 3.7%           | 8.3%           | 78.7%           | 64.5%           | 60.3%        | 49.7%  | 63.9%         | 74.1%         | 55.6%         | 96.0%         | 95.9%  | 7.9%  |
| pelagic          | .5%     | 16.6%          | 4.4%           | 74.1%           | 75.5%           | 72.7%        | 65.0%  | 84.0%         | 19.6%         | 21.1%         | 40.4%         | 61.3%  | .8%   |
| Pacific cod      | 49.1%   | 71.9%          | .4%            | 92.8%           | 75.4%           | 84.0%        | 84.6%  | 61.4%         | 83.4%         | 92.2%         | 69.3%         | 97.2%  | 20.8% |
| Arrowtooth       | 70.5%   | 26.0%          | 1.7%           | 34.1%           | 24.4%           | 52.3%        | 51.1%  | 73.1%         | 15.2%         | 77.1%         | 32.3%         | 75.9%  | 41.2% |
| Flathd. sole     | 45.0%   | 3.5%           | 2.0%           | 93.3%           | 15.1%           | 78.5%        | 12.0%  | 51.2%         | 77.3%         | 10.9%         | 2.9%          | 99.3%  | 45.3% |
| Rock sole        | 32.0%   | 75.5%          | 2.9%           | 93.8%           | 36.6%           | 41.6%        | 38.4%  | 53.1%         | 89.6%         | 100.0%        | 1.2%          | 98.1%  | 40.0% |
| Turbot           | 9.5%    | .8%            | 3.1%           | 61.5%           | 5.1%            | 61.5%        | 12.1%  | 58.4%         | 6.1%          | 4.8%          | 7.0%          | 99.5%  | 31.4% |
| Yellowfin        | 29.8%   | 72.7%          | 3.4%           | 65.0%           | 29.6%           | 74.5%        | 38.1%  | 15.7%         | 88.1%         | 29.0%         | 15.6%         | 95.9%  | 27.7% |
| Flat, other      | 22.8%   | 8.0%           | 1.5%           | 82.7%           | 22.4%           | 61.1%        | 47.9%  | 34.9%         | 33.2%         | 64.3%         | 50.9%         | 99.3%  | 41.1% |
| Rockfish         | 7.9%    | 1.0%           | .9%            | 55.5%           | 9.8%            | 97.8%        | 4.1%   | 97.8%         | 90.4%         | 5.5%          | 18.8%         | 96.5%  | 8.9%  |
| Atka mack.       | 10.2%   | 6.0%           | .4%            | 72.8%           | 22.4%           | 54.8%        | 51.4%  | 100.0%        | 32.3%         | 66.9%         | 8.4%          | 98.0%  | 13.7% |
| Total            | 1.4%    | 11.0%          | 1.4%           | 78.1%           | 28.1%           | 62.4%        | 31.5%  | 20.3%         | 77.4%         | 32.1%         | 9.8%          | 93.6%  | 7.4%  |
| All gear         |         |                |                |                 |                 |              |        |               |               |               |               |        |       |
| Total            | 1.5%    | 11.4%          | 2.2%           | 80.8%           | 29.1%           | 62.4%        | 11.5%  | 20.6%         | 77.5%         | 33.2%         | 9.9%          | 91.8%  | 8.1%  |

Table 11.--Continued.

|                  | Species |                |                |                 |                 |              |        |               |               |               |               |        |       |
|------------------|---------|----------------|----------------|-----------------|-----------------|--------------|--------|---------------|---------------|---------------|---------------|--------|-------|
|                  | Pollock | Sable-<br>fish | Pacific<br>cod | Arrow-<br>tooth | Flathd.<br>sole | Rock<br>sole | Turbot | Yellow<br>fin | Flat<br>other | Rock-<br>fish | Atka<br>mack. | Other  | Total |
| Year/Gear/Target |         |                |                |                 |                 |              |        |               |               |               |               |        |       |
| 1999             |         |                |                |                 |                 |              |        |               |               |               |               |        |       |
| Hook and line    |         |                |                |                 |                 |              |        |               |               |               |               |        |       |
| Sablefish        | 10.4%   | 4.8%           | 67.2%          | 96.9%           | 100.0%          | 84.6%        | 36.6%  | -             | 100.0%        | 29.2%         | -             | 94.5%  | 36.5% |
| Pacific cod      | 14.6%   | 35.0%          | 1.6%           | 92.3%           | 97.0%           | 95.2%        | 17.7%  | 97.4%         | 97.8%         | 89.3%         | 94.2%         | 88.1%  | 11.8% |
| Arrowtooth       | -       | 6.0%           | -              | 31.6%           | -               | -            | -      | -             | 100.0%        | 32.7%         | -             | 100.0% | 38.2% |
| Turbot           | 20.8%   | 22.2%          | 4.8%           | 97.4%           | 44.6%           | 100.0%       | 4.9%   | -             | 100.0%        | 15.8%         | -             | 99.8%  | 23.1% |
| Total            | 14.7%   | 10.3%          | 1.7%           | 91.3%           | 95.3%           | 97.5%        | 7.8%   | 97.4%         | 97.8%         | 56.2%         | 94.2%         | 88.5%  | 12.7% |
| Pot              |         |                |                |                 |                 |              |        |               |               |               |               |        |       |
| Pacific cod      | 72.8%   | 47.2%          | .5%            | 91.6%           | 71.0%           | 99.8%        | 2.9%   | 99.0%         | 1.5%          | 94.0%         | 98.3%         | 90.8%  | 5.1%  |
| Total            | 72.8%   | 13.6%          | .5%            | 92.6%           | 71.0%           | 99.8%        | 19.3%  | 99.0%         | 1.7%          | 88.9%         | 98.3%         | 90.7%  | 5.2%  |
| Trawl            |         |                |                |                 |                 |              |        |               |               |               |               |        |       |
| Pollock          |         |                |                |                 |                 |              |        |               |               |               |               |        |       |
| bottom           | 12.4%   | 33.7%          | 6.2%           | 65.2%           | 51.7%           | 68.0%        | 34.9%  | 17.8%         | 95.4%         | 71.6%         | 52.4%         | 92.2%  | 19.5% |
| pelagic          | .6%     | 4.3%           | 6.1%           | 67.8%           | 64.7%           | 71.7%        | 43.9%  | 71.4%         | 1.6%          | 29.3%         | .7%           | 52.0%  | .8%   |
| Pacific cod      | 76.7%   | 42.0%          | 1.1%           | 85.7%           | 52.5%           | 83.8%        | 46.9%  | 87.4%         | 76.9%         | 92.0%         | 86.7%         | 99.2%  | 32.1% |
| Arrowtooth       | 41.1%   | 18.1%          | 4.2%           | 27.6%           | 12.5%           | 35.1%        | 51.9%  | 31.4%         | 6.4%          | 56.5%         | 9.2%          | 98.7%  | 31.7% |
| Flathd. sole     | 56.3%   | .3%            | 13.4%          | 88.8%           | 12.7%           | 75.0%        | 12.8%  | 55.0%         | 88.6%         | 8.4%          | .5%           | 99.9%  | 45.4% |
| Rock sole        | 63.7%   | 91.9%          | 4.1%           | 89.4%           | 46.7%           | 45.0%        | .0%    | 36.9%         | 95.5%         | 92.1%         | 100.0%        | 98.3%  | 45.9% |
| Turbot           | 78.0%   | 6.3%           | 13.5%          | 75.0%           | 3.1%            | 71.4%        | 8.4%   | 70.2%         | 6.9%          | 6.9%          | 9.2%          | 99.4%  | 34.2% |
| Yellowfin        | 34.4%   | .0%            | 12.4%          | 47.7%           | 22.3%           | 68.9%        | 15.1%  | 13.9%         | 91.7%         | 38.1%         | .1%           | 96.9%  | 31.8% |
| Flat, other      | 72.4%   | 69.9%          | 11.1%          | 90.4%           | 20.7%           | 80.1%        | 68.0%  | 73.1%         | 7.2%          | 43.8%         | 41.6%         | 98.9%  | 64.9% |
| Rockfish         | 15.5%   | .0%            | 2.0%           | 35.1%           | 13.7%           | 36.1%        | 6.5%   | -             | 19.1%         | 5.7%          | 20.4%         | 93.7%  | 7.5%  |
| Atka mack.       | 37.1%   | 1.4%           | 4.6%           | 71.9%           | 31.6%           | 82.3%        | 15.2%  | 29.0%         | 7.8%          | 86.3%         | 7.8%          | 98.9%  | 17.1% |
| Oth. & unk.      | -       | -              | -              | -               | -               | -            | -      | -             | -             | -             | -             | 74.4%  | 74.4% |
| Total            | 2.9%    | 15.9%          | 2.9%           | 73.8%           | 24.7%           | 62.4%        | 22.6%  | 17.7%         | 84.8%         | 35.6%         | 8.8%          | 93.7%  | 8.9%  |
| All gear         |         |                |                |                 |                 |              |        |               |               |               |               |        |       |
| Total            | 3.0%    | 11.6%          | 2.1%           | 76.2%           | 25.9%           | 62.4%        | 12.4%  | 18.0%         | 84.9%         | 36.1%         | 8.9%          | 91.0%  | 9.1%  |

Notes: Totals may include additional categories. The target, calculated by AFSC staff, is based on processor, week, processing mode, NMFS area, and gear. Includes only catch counted against Federal TACs. Although these are the best available estimates of discards and are used for several management purposes, these estimates are not necessarily accurate. The reasons for this are as follows: 1) they are wholly or partially derived from observer estimates; 2) discards occur at many different places on vessels; 3) observers only record a rough approximation of what they see; and 4) the estimation methods used by at-sea observers focus on providing good estimates of total catch by species, not on the disposition of that catch.

Source: Blend estimates, National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 12.--Prohibited species bycatch by species, area and gear, 1996-99  
(metric tons (t) or number in 1,000s)

|                       | Halibut<br>mort. | Herring | Chinook | Other<br>salmon | Red king<br>crab | Other<br>k.crab | Bairdi | Other<br>tanner |
|-----------------------|------------------|---------|---------|-----------------|------------------|-----------------|--------|-----------------|
|                       | t                | t       | 1,000s  | 1,000s          | 1,000s           | 1,000s          | 1,000s | 1,000s          |
| BSAI Hook and line    |                  |         |         |                 |                  |                 |        |                 |
| 96                    | 882              | 0       | 0       | 0               | 2                | 3               | 18     | 90              |
| 97                    | 900              | 0       | 0       | 0               | 5                | 3               | 11     | 141             |
| 98                    | 775              | 0       | 0       | 0               | 3                | 6               | 6      | 156             |
| 99                    | 581              | 0       | 0       | 0               | 8                | 4               | 3      | 92              |
| BSAI Pot              |                  |         |         |                 |                  |                 |        |                 |
| 96                    | 21               | 0       | 0       | 0               | 74               | 5               | 262    | 177             |
| 97                    | 11               | 0       | 0       | 0               | 21               | 1               | 39     | 413             |
| 98                    | 4                | 0       | 0       | 0               | 4                | 21              | 41     | 403             |
| 99                    | 3                | 0       | 0       | 0               | 1                | 45              | 41     | 179             |
| BSAI Trawl            |                  |         |         |                 |                  |                 |        |                 |
| 96                    | 3,765            | 1,513   | 63      | 78              | 31               | 13              | 1,836  | 3,643           |
| 97                    | 3,602            | 1,293   | 51      | 67              | 51               | 24              | 1,918  | 5,276           |
| 98                    | 3,297            | 906     | 50      | 51              | 37               | 15              | 1,447  | 4,047           |
| 99                    | 3,434            | 892     | 12      | 47              | 85               | 18              | 872    | 1,342           |
| BSAI All gear         |                  |         |         |                 |                  |                 |        |                 |
| 96                    | 4,669            | 1,513   | 63      | 78              | 107              | 21              | 2,116  | 3,911           |
| 97                    | 4,512            | 1,293   | 51      | 67              | 76               | 28              | 1,968  | 5,830           |
| 98                    | 4,076            | 906     | 50      | 51              | 44               | 42              | 1,494  | 4,606           |
| 99                    | 4,018            | 892     | 12      | 47              | 94               | 67              | 915    | 1,613           |
| GOA Hook and line     |                  |         |         |                 |                  |                 |        |                 |
| 96                    | 0                | 0       | 0       | 0               | 0                | 0               | 0      | 0               |
| 97                    | 0                | 0       | 0       | 0               | 0                | 0               | 0      | 0               |
| 98                    | 0                | 0       | 0       | 0               | 0                | 0               | 0      | 0               |
| 99                    | 0                | 0       | 0       | 0               | 0                | 0               | 0      | 0               |
| GOA Pot               |                  |         |         |                 |                  |                 |        |                 |
| 96                    | 17               | 0       | 0       | 0               | 0                | 0               | 71     | 2               |
| 97                    | 10               | 0       | 0       | 0               | 0                | 0               | 219    | 0               |
| 98                    | 13               | 0       | 0       | 0               | 0                | 0               | 91     | 1               |
| 99                    | 41               | 0       | 0       | 0               | 0                | 0               | 50     | 1               |
| GOA Trawl             |                  |         |         |                 |                  |                 |        |                 |
| 96                    | 1,946            | 4       | 16      | 4               | 0                | 2               | 154    | 2               |
| 97                    | 2,143            | 9       | 16      | 3               | 0                | 2               | 197    | 8               |
| 98                    | 2,085            | 21      | 15      | 9               | 0                | 1               | 106    | 3               |
| 99                    | 2,198            | 10      | 32      | 8               | 0                | 2               | 30     | 2               |
| GOA All gear          |                  |         |         |                 |                  |                 |        |                 |
| 96                    | 1,963            | 4       | 16      | 4               | 0                | 2               | 225    | 4               |
| 97                    | 2,152            | 9       | 16      | 3               | 0                | 2               | 416    | 9               |
| 98                    | 2,098            | 21      | 15      | 9               | 0                | 1               | 198    | 3               |
| 99                    | 2,239            | 10      | 32      | 8               | 0                | 2               | 80     | 4               |
| BSAI and GOA All gear |                  |         |         |                 |                  |                 |        |                 |
| 96                    | 6,631            | 1,516   | 79      | 82              | 107              | 22              | 2,340  | 3,915           |
| 97                    | 6,664            | 1,302   | 67      | 70              | 76               | 30              | 2,384  | 5,839           |
| 98                    | 6,174            | 927     | 65      | 60              | 45               | 43              | 1,692  | 4,610           |
| 99                    | 6,257            | 903     | 44      | 54              | 94               | 69              | 995    | 1,617           |

Notes: Includes only catches counted against Federal TACs. Totals may include additional categories. The estimates of halibut bycatch mortality are based on the International Pacific Halibut Commission discard mortality rates that were used for in-season management. The halibut Individual Fishing Quota program allows retention of halibut in the hook-and-line groundfish fisheries, making true halibut bycatch numbers unavailable. This is particularly a problem in the Gulf of Alaska for all hook-and-line fisheries and in the Bering Sea and Aleutian Islands for the sablefish hook-and-line fishery. Therefore, estimates of halibut bycatch mortality are not included in this table for those fisheries for 1996-99.

Source: Blend estimates, National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 13.--Prohibited species bycatch in the Gulf of Alaska by species, gear, and groundfish target fishery, 1998-99. (Metric tons (t) or number in 1,000s)

|                  | Halibut<br>mort. | Herring | Red king<br>crab | Other<br>k.crab | Bairdi | Other<br>tanner | Chinook | Other<br>salmon |
|------------------|------------------|---------|------------------|-----------------|--------|-----------------|---------|-----------------|
|                  | t                | t       | 1,000s           | 1,000s          | 1,000s | 1,000s          | 1,000s  | 1,000s          |
| Year/Gear/Target |                  |         |                  |                 |        |                 |         |                 |
| 1998             |                  |         |                  |                 |        |                 |         |                 |
| Hook and line    |                  |         |                  |                 |        |                 |         |                 |
| Pacific cod      | n.a.             | .0      | .1               | .0              | .0     | .1              | .0      | .0              |
| Flat deep        | n.a.             | .0      | .0               | .0              | .0     | .0              | .0      | .0              |
| Flat shallow     | n.a.             | .0      | .0               | .0              | .0     | .0              | .0      | .0              |
| Rockfish         | n.a.             | .0      | .0               | .0              | .0     | .0              | .0      | .0              |
| Total            | n.a.             | .0      | .1               | .0              | .0     | .2              | .0      | .0              |
| Pot              |                  |         |                  |                 |        |                 |         |                 |
| Pacific cod      | 13.4             | .0      | .0               | .0              | 91.8   | .5              | .0      | .0              |
| Total            | 13.4             | .0      | .0               | .0              | 91.8   | .5              | .0      | .0              |
| Trawl            |                  |         |                  |                 |        |                 |         |                 |
| Pollock          |                  |         |                  |                 |        |                 |         |                 |
| bottom           | 23.4             | 1.2     | .0               | .0              | .4     | .0              | .4      | .2              |
| pelagic          | 9.3              | 19.1    | .0               | .0              | .0     | .0              | 12.3    | 7.1             |
| Pacific cod      | 680.6            | .1      | .1               | .1              | 14.5   | .2              | .7      | .6              |
| Arrowtooth       | 113.1            | .0      | .1               | .0              | 1.0    | .0              | .0      | .2              |
| Flathd. sole     | 105.2            | .2      | .0               | .0              | 73.7   | .3              | .1      | .0              |
| Rex sole         | 216.0            | .0      | .0               | .0              | 2.1    | .2              | 1.6     | .2              |
| Flat deep        | 169.1            | .0      | .0               | .1              | 1.8    | 1.1             | .0      | .0              |
| Flat shallow     | 407.7            | .9      | .1               | .0              | 9.8    | .8              | .2      | .7              |
| Rockfish         | 359.6            | .0      | .0               | .4              | 3.0    | .0              | .1      | .4              |
| Total            | 2,088.0          | 21.5    | .3               | .6              | 106.3  | 2.7             | 15.5    | 9.3             |
| All gear         |                  |         |                  |                 |        |                 |         |                 |
| Total            | 2,101.3          | 21.5    | .3               | .7              | 198.0  | 3.4             | 15.5    | 9.3             |

Table 13.--Continued.

|                  | Halibut<br>mort. | Herring | Red king<br>crab | Other<br>k.crab | Bairdi | Other<br>tanner | Chinook | Other<br>salmon |
|------------------|------------------|---------|------------------|-----------------|--------|-----------------|---------|-----------------|
|                  | t                | t       | 1,000s           | 1,000s          | 1,000s | 1,000s          | 1,000s  | 1,000s          |
| Year/Gear/Target |                  |         |                  |                 |        |                 |         |                 |
| 1999             |                  |         |                  |                 |        |                 |         |                 |
| Hook and line    |                  |         |                  |                 |        |                 |         |                 |
| Pacific cod      | n.a.             | .0      | .1               | .0              | .0     | .3              | .0      | .0              |
| Flat deep        | n.a.             | .0      | .0               | .0              | .0     | .0              | .0      | .0              |
| Rockfish         | n.a.             | .0      | .0               | .0              | .0     | .0              | .0      | .0              |
| Total            | n.a.             | .0      | .1               | .0              | .0     | .4              | .0      | .0              |
| Pot              |                  |         |                  |                 |        |                 |         |                 |
| Pacific cod      | 41.0             | .0      | .0               | .1              | 51.1   | 1.0             | .0      | .0              |
| Total            | 41.0             | .0      | .0               | .1              | 51.1   | 1.0             | .0      | .0              |
| Trawl            |                  |         |                  |                 |        |                 |         |                 |
| Pollock          |                  |         |                  |                 |        |                 |         |                 |
| bottom           | 5.4              | 1.4     | .0               | .0              | .0     | .0              | 3.3     | .1              |
| pelagic          | 11.8             | 7.9     | .0               | .0              | .0     | .0              | 24.1    | 5.2             |
| Pacific cod      | 1,235.3          | 1.0     | .0               | .0              | 22.5   | 1.8             | 1.5     | .1              |
| Arrowtooth       | 138.7            | .0      | .0               | .1              | 2.2    | .0              | .4      | .1              |
| Rex sole         | 238.4            | .0      | .0               | .1              | 1.4    | .2              | 1.6     | .3              |
| Flat deep        | 137.3            | .0      | .0               | .3              | 2.2    | .1              | .0      | .0              |
| Flat shallow     | 53.0             | .0      | .0               | .0              | 1.0    | .3              | .0      | .0              |
| Rockfish         | 372.0            | .0      | .2               | 1.2             | .7     | .0              | 1.0     | 1.9             |
| Total            | 2,198.0          | 10.3    | .2               | 1.7             | 30.0   | 2.4             | 32.0    | 7.8             |
| All gear         |                  |         |                  |                 |        |                 |         |                 |
| Total            | 2,239.0          | 10.3    | .3               | 1.8             | 81.1   | 3.7             | 32.0    | 7.8             |

Notes: Totals may include additional categories. The target, calculated by AFSC staff, is based on processor, week, processing mode, NMFS area and gear. Includes only catch counted against Federal TACs. International Pacific Halibut Commission discard mortality rates are used to estimate halibut mortality. The halibut Individual Fishing Quota program allows retention of halibut in the hook and line groundfish fisheries making true halibut bycatch numbers unavailable. No prohibited species bycatch numbers were available for the sablefish fishery.

Source: Blend estimates, National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 14.--Prohibited species bycatch in the Bering Sea and Aleutian Islands by species, gear, and groundfish target fishery, 1998-99. (Metric tons (t) or number in 1,000s)

|                  | Halibut<br>mort. | Herring | Red king<br>crab | Other<br>k.crab | Bairdi  | Other<br>tanner | Chinook | Other<br>salmon |
|------------------|------------------|---------|------------------|-----------------|---------|-----------------|---------|-----------------|
|                  | t                | t       | 1,000s           | 1,000s          | 1,000s  | 1,000s          | 1,000s  | 1,000s          |
| Year/Gear/Target |                  |         |                  |                 |         |                 |         |                 |
| 1998             |                  |         |                  |                 |         |                 |         |                 |
| Hook and line    |                  |         |                  |                 |         |                 |         |                 |
| Pacific cod      | 716.0            | .0      | 3.0              | 3.2             | 6.0     | 154.4           | .0      | .0              |
| Turbot           | 55.8             | .0      | .0               | 2.1             | .0      | 1.3             | .0      | .0              |
| Rockfish         | .6               | .0      | .0               | .0              | .0      | .0              | .0      | .0              |
| Total            | 775.3            | .0      | 3.0              | 5.4             | 6.0     | 156.0           | .0      | .1              |
| Pot              |                  |         |                  |                 |         |                 |         |                 |
| Sablefish        | .1               | .0      | .0               | .0              | .0      | .0              | .0      | .0              |
| Pacific cod      | 3.8              | .0      | 4.0              | 21.1            | 41.2    | 402.9           | .0      | .0              |
| Total            | 3.8              | .0      | 4.0              | 21.1            | 41.2    | 402.9           | .0      | .0              |
| Trawl            |                  |         |                  |                 |         |                 |         |                 |
| Pollock          |                  |         |                  |                 |         |                 |         |                 |
| bottom           | 148.4            | 43.5    | 6.0              | 1.2             | 31.9    | 84.7            | 2.1     | 3.2             |
| pelagic          | 120.3            | 844.8   | 3.9              | 2.8             | 19.8    | 35.2            | 44.5    | 46.6            |
| Sablefish        | .3               | .0      | .0               | .0              | .0      | .4              | .0      | .0              |
| Pacific cod      | 1,122.5          | .5      | 3.3              | .7              | 105.2   | 261.8           | 2.4     | .5              |
| Arrowtooth       | 38.3             | .4      | .0               | .1              | 3.4     | 14.9            | .0      | .1              |
| Flathd. sole     | 437.2            | .6      | 1.7              | .3              | 214.5   | 683.4           | .4      | .1              |
| Rock sole        | 420.2            | .3      | 14.5             | .4              | 226.7   | 487.0           | .0      | .0              |
| Turbot           | 9.9              | .0      | .0               | .2              | .7      | 26.3            | .0      | .0              |
| Yellowfin        | 878.1            | 14.8    | 7.5              | 1.8             | 802.3   | 2,341.9         | .1      | .2              |
| Flat, other      | 38.3             | .4      | .2               | .2              | 41.8    | 109.8           | .0      | .0              |
| Rockfish         | 18.9             | .0      | .1               | 5.3             | .7      | 1.0             | .0      | .0              |
| Atka mack.       | 62.5             | .1      | .0               | 2.0             | .0      | .5              | .4      | .5              |
| Total            | 3,296.7          | 905.5   | 37.2             | 14.8            | 1,447.2 | 4,047.2         | 50.0    | 51.1            |
| All gear         |                  |         |                  |                 |         |                 |         |                 |
| Total            | 4,075.9          | 905.5   | 44.3             | 41.4            | 1,494.4 | 4,606.2         | 50.0    | 51.2            |

Table 14.--Continued.

|                  | Halibut<br>mort. | Herring | Red king<br>crab | Other<br>k.crab | Bairdi | Other<br>tanner | Chinook | Other<br>salmon |
|------------------|------------------|---------|------------------|-----------------|--------|-----------------|---------|-----------------|
|                  | t                | t       | 1,000s           | 1,000s          | 1,000s | 1,000s          | 1,000s  | 1,000s          |
| Year/Gear/Target |                  |         |                  |                 |        |                 |         |                 |
| 1999             |                  |         |                  |                 |        |                 |         |                 |
| Hook and line    |                  |         |                  |                 |        |                 |         |                 |
| Pacific cod      | 500.8            | .0      | 7.9              | 1.8             | 2.8    | 91.6            | .0      | .0              |
| Arrowtooth       | .0               | .0      | .0               | .0              | .0     | .0              | .0      | .0              |
| Turbot           | 79.5             | .0      | .0               | .7              | .0     | .7              | .0      | .0              |
| Rockfish         | .6               | .0      | .0               | .0              | .0     | .0              | .0      | .0              |
| Total            | 581.1            | .0      | 7.9              | 2.6             | 2.8    | 92.4            | .0      | .0              |
| Pot              |                  |         |                  |                 |        |                 |         |                 |
| Sablefish        | .2               | .0      | .0               | 3.3             | .0     | .4              | .0      | .0              |
| Pacific cod      | 2.8              | .0      | 1.0              | 14.2            | 40.6   | 177.8           | .0      | .0              |
| Turbot           | .0               | .0      | .0               | 27.9            | .0     | .7              | .0      | .0              |
| Total            | 3.0              | .0      | 1.0              | 45.4            | 40.6   | 178.8           | .0      | .0              |
| Trawl            |                  |         |                  |                 |        |                 |         |                 |
| Pollock          |                  |         |                  |                 |        |                 |         |                 |
| bottom           | 85.0             | 16.3    | 2.3              | .3              | 11.8   | 21.6            | .0      | .7              |
| pelagic          | 67.3             | 783.3   | .0               | .0              | .5     | 11.0            | 10.2    | 44.2            |
| Pacific cod      | 1,300.1          | .6      | 5.9              | 3.6             | 109.3  | 264.3           | 1.8     | .0              |
| Arrowtooth       | 58.6             | .2      | .0               | .8              | .5     | .8              | .0      | .0              |
| Flathd. sole     | 401.5            | .9      | .1               | 1.0             | 137.4  | 213.4           | .1      | .1              |
| Rock sole        | 518.1            | 5.9     | 63.8             | .3              | 139.5  | 111.6           | .2      | .3              |
| Turbot           | 15.6             | .2      | .0               | 1.2             | 4.8    | 1.0             | .0      | .0              |
| Yellowfin        | 734.8            | 83.0    | 12.6             | 2.4             | 452.3  | 657.2           | .0      | .7              |
| Flat, other      | 42.7             | .2      | .0               | 1.7             | 15.4   | 59.5            | .0      | .0              |
| Rockfish         | 51.8             | .0      | .0               | 6.1             | .0     | .2              | .0      | .0              |
| Atka mack.       | 157.9            | 1.7     | .0               | 1.2             | .4     | 1.2             | .0      | .5              |
| Total            | 3,433.6          | 892.5   | 84.7             | 18.5            | 871.9  | 1,341.8         | 12.4    | 46.6            |
| All gear         |                  |         |                  |                 |        |                 |         |                 |
| Total            | 4,017.6          | 892.5   | 93.6             | 66.6            | 915.3  | 1,613.0         | 12.4    | 46.6            |

Notes: Totals may include additional categories. The target, calculated by AFSC staff, is based on processor, week, processing mode, NMFS area and gear. Includes only catch counted against Federal TACs. International Pacific Halibut Commission discard mortality rates are used to estimate halibut mortality. The halibut Individual Fishing Quota program allows retention of halibut in the hook and line groundfish fisheries making true halibut bycatch numbers unavailable. No prohibited species bycatch numbers were available for the sablefish fishery.

Source: Blend estimates, National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.



Table 15.--Prohibited species bycatch rates in the Gulf of Alaska by species, gear, and groundfish target fishery, 1998-99. (Metric tons (t))

|                  | Halibut<br>mort. | Herring | Red king<br>crab | Other<br>k.crab | Bairdi | Other<br>tanner | Chinook | Other<br>salmon |
|------------------|------------------|---------|------------------|-----------------|--------|-----------------|---------|-----------------|
|                  | t/t              | t/t     | No./t            | No./t           | No./t  | No./t           | No./t   | No./t           |
| Year/Gear/Target |                  |         |                  |                 |        |                 |         |                 |
| 1998             |                  |         |                  |                 |        |                 |         |                 |
| Hook and line    |                  |         |                  |                 |        |                 |         |                 |
| Pacific cod      | n.a.             | .000    | .005             | .000            | .000   | .009            | .000    | .000            |
| Flat deep        | n.a.             | .000    | .000             | .000            | .000   | .000            | .000    | .000            |
| Flat shallow     | n.a.             | .000    | .000             | .000            | .000   | .000            | .000    | .000            |
| Rockfish         | n.a.             | .000    | .000             | .024            | .000   | .000            | .000    | .000            |
| Total            | n.a.             | .000    | .005             | .002            | .001   | .016            | .000    | .000            |
| Pot              |                  |         |                  |                 |        |                 |         |                 |
| Pacific cod      | .001             | .000    | .001             | .002            | 8.570  | .051            | .000    | .000            |
| Total            | .001             | .000    | .001             | .002            | 8.484  | .051            | .000    | .000            |
| Trawl            |                  |         |                  |                 |        |                 |         |                 |
| Pollock          |                  |         |                  |                 |        |                 |         |                 |
| bottom           | .006             | .000    | .000             | .000            | .090   | .002            | .097    | .045            |
| pelagic          | .000             | .000    | .000             | .000            | .000   | .000            | .103    | .059            |
| Pacific cod      | .016             | .000    | .002             | .002            | .331   | .005            | .016    | .013            |
| Arrowtooth       | .042             | .000    | .022             | .001            | .368   | .007            | .014    | .057            |
| Flathd. sole     | .037             | .000    | .000             | .000            | 25.797 | .103            | .041    | .006            |
| Rex sole         | .031             | .000    | .000             | .007            | .310   | .032            | .233    | .024            |
| Flat deep        | .044             | .000    | .000             | .030            | .465   | .297            | .000    | .000            |
| Flat shallow     | .096             | .000    | .031             | .000            | 2.312  | .187            | .041    | .158            |
| Rockfish         | .018             | .000    | .000             | .020            | .151   | .000            | .007    | .022            |
| Total            | .010             | .000    | .001             | .003            | .510   | .013            | .074    | .044            |
| All gear         |                  |         |                  |                 |        |                 |         |                 |
| Total            | .009             | .000    | .001             | .003            | .859   | .015            | .067    | .040            |

Table 15.--Continued.

|                  | Halibut<br>mort. | Herring | Red king<br>crab | Other<br>k.crab | Bairdi | Other<br>tanner | Chinook | Other<br>salmon |
|------------------|------------------|---------|------------------|-----------------|--------|-----------------|---------|-----------------|
|                  | t/t              | t/t     | No./t            | No./t           | No./t  | No./t           | No./t   | No./t           |
| Year/Gear/Target |                  |         |                  |                 |        |                 |         |                 |
| 1999             |                  |         |                  |                 |        |                 |         |                 |
| Hook and line    |                  |         |                  |                 |        |                 |         |                 |
| Pacific cod      | n.a.             | .000    | .004             | .000            | .000   | .024            | .000    | .000            |
| Flat deep        | n.a.             | .000    | .000             | .000            | .000   | .000            | .000    | .000            |
| Rockfish         | n.a.             | .000    | .000             | .022            | .000   | .002            | .000    | .000            |
| Total            | n.a.             | .000    | .004             | .001            | .000   | .025            | .000    | .000            |
| Pot              |                  |         |                  |                 |        |                 |         |                 |
| Pacific cod      | .002             | .000    | .000             | .004            | 2.653  | .053            | .000    | .000            |
| Total            | .002             | .000    | .000             | .004            | 2.647  | .052            | .000    | .000            |
| Trawl            |                  |         |                  |                 |        |                 |         |                 |
| Pollock          |                  |         |                  |                 |        |                 |         |                 |
| bottom           | .001             | .000    | .000             | .000            | .008   | .002            | .750    | .032            |
| pelagic          | .000             | .000    | .000             | .000            | .000   | .000            | .268    | .058            |
| Pacific cod      | .030             | .000    | .000             | .000            | .547   | .043            | .037    | .002            |
| Arrowtooth       | .031             | .000    | .000             | .019            | .491   | .001            | .090    | .023            |
| Rex sole         | .030             | .000    | .000             | .012            | .181   | .024            | .207    | .041            |
| Flat deep        | .037             | .000    | .000             | .082            | .606   | .015            | .004    | .001            |
| Flat shallow     | .037             | .000    | .001             | .000            | .667   | .240            | .002    | .001            |
| Rockfish         | .014             | .000    | .009             | .046            | .024   | .000            | .039    | .070            |
| Total            | .012             | .000    | .001             | .010            | .166   | .013            | .177    | .043            |
| All gear         |                  |         |                  |                 |        |                 |         |                 |
| Total            | .010             | .000    | .001             | .008            | .379   | .017            | .149    | .036            |

Notes: Totals may include additional categories. The target, calculated by AFSC staff, is based on processor, week, processing mode, NMFS area and gear. Includes only catch counted against Federal TACs. International Pacific Halibut Commission discard mortality rates are used to estimate halibut mortality. The halibut Individual Fishing Quota program allows retention of halibut in the hook and line groundfish fisheries making true halibut bycatch numbers unavailable. No prohibited species bycatch numbers were available for the sablefish fishery.

Source: Blend estimates, National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 16.--Prohibited species bycatch rates in the Bering Sea and Aleutian Islands by species, gear, and groundfish target fishery, 1998-99. Metric tons (t))

|                  | Halibut<br>mort. | Herring | Red king<br>crab | Other<br>k.crab | Bairdi | Other<br>tanner | Chinook | Other<br>salmon |
|------------------|------------------|---------|------------------|-----------------|--------|-----------------|---------|-----------------|
|                  | t/t              | t/t     | No./t            | No./t           | No./t  | No./t           | No./t   | No./t           |
| Year/Gear/Target |                  |         |                  |                 |        |                 |         |                 |
| 1998             |                  |         |                  |                 |        |                 |         |                 |
| Hook and line    |                  |         |                  |                 |        |                 |         |                 |
| Pacific cod      | .006             | .000    | .025             | .027            | .050   | 1.284           | .000    | .000            |
| Turbot           | .006             | .000    | .001             | .242            | .004   | .153            | .000    | .005            |
| Rockfish         | .030             | .000    | .000             | .566            | .000   | .121            | .000    | .000            |
| Total            | .006             | .000    | .023             | .042            | .047   | 1.208           | .000    | .000            |
| Pot              |                  |         |                  |                 |        |                 |         |                 |
| Sablefish        | .033             | .000    | .000             | 16.593          | .000   | 1.099           | .000    | .033            |
| Pacific cod      | .000             | .000    | .284             | 1.484           | 2.895  | 28.322          | .000    | .000            |
| Total            | .000             | .000    | .284             | 1.486           | 2.894  | 28.313          | .000    | .000            |
| Trawl            |                  |         |                  |                 |        |                 |         |                 |
| Pollock          |                  |         |                  |                 |        |                 |         |                 |
| bottom           | .002             | .001    | .101             | .020            | .533   | 1.416           | .035    | .053            |
| pelagic          | .000             | .001    | .004             | .003            | .019   | .034            | .042    | .044            |
| Sablefish        | .015             | .000    | .000             | .166            | .000   | 21.046          | .000    | .223            |
| Pacific cod      | .015             | .000    | .044             | .009            | 1.386  | 3.449           | .032    | .007            |
| Arrowtooth       | .016             | .000    | .008             | .029            | 1.434  | 6.344           | .017    | .028            |
| Flathd. sole     | .011             | .000    | .045             | .007            | 5.573  | 17.759          | .010    | .002            |
| Rock sole        | .015             | .000    | .526             | .015            | 8.244  | 17.708          | .000    | .000            |
| Turbot           | .008             | .000    | .000             | .158            | .575   | 20.365          | .000    | .000            |
| Yellowfin        | .006             | .000    | .053             | .013            | 5.720  | 16.699          | .001    | .002            |
| Flat, other      | .007             | .000    | .030             | .027            | 7.539  | 19.821          | .000    | .000            |
| Rockfish         | .002             | .000    | .013             | .553            | .073   | .100            | .000    | .000            |
| Atka mack.       | .001             | .000    | .000             | .030            | .000   | .008            | .006    | .007            |
| Total            | .002             | .001    | .025             | .010            | .980   | 2.742           | .034    | .035            |
| All gear         |                  |         |                  |                 |        |                 |         |                 |
| Total            | .003             | .001    | .027             | .026            | .923   | 2.844           | .031    | .032            |

Table 16.--Continued.

|                  | Halibut<br>mort. | Herring | Red king<br>crab | Other<br>k.crab | Bairdi | Other<br>tanner | Chinook | Other<br>salmon |
|------------------|------------------|---------|------------------|-----------------|--------|-----------------|---------|-----------------|
|                  | t/t              | t/t     | No./t            | No./t           | No./t  | No./t           | No./t   | No./t           |
| Year/Gear/Target |                  |         |                  |                 |        |                 |         |                 |
| 1999             |                  |         |                  |                 |        |                 |         |                 |
| Hook and line    |                  |         |                  |                 |        |                 |         |                 |
| Pacific cod      | .005             | .000    | .086             | .020            | .031   | .993            | .000    | .000            |
| Arrowtooth       | .000             | .000    | .000             | .405            | .000   | .000            | .000    | .000            |
| Turbot           | .017             | .000    | .001             | .157            | .002   | .139            | .000    | .005            |
| Rockfish         | .023             | .000    | .002             | .691            | .000   | .128            | .000    | .000            |
| Total            | .006             | .000    | .082             | .027            | .029   | .951            | .000    | .000            |
| Pot              |                  |         |                  |                 |        |                 |         |                 |
| Sablefish        | .006             | .000    | .000             | 110.81          | .000   | 11.819          | .000    | .000            |
| Pacific cod      | .000             | .000    | .057             | .834            | 2.381  | 10.438          | .001    | .000            |
| Turbot           | .000             | .000    | .000             | 832.06          | .618   | 20.342          | .000    | .000            |
| Total            | .000             | .000    | .057             | 2.657           | 2.373  | 10.460          | .001    | .000            |
| Trawl            |                  |         |                  |                 |        |                 |         |                 |
| Pollock          |                  |         |                  |                 |        |                 |         |                 |
| bottom           | .007             | .001    | .179             | .023            | .936   | 1.711           | .003    | .058            |
| pelagic          | .000             | .001    | .000             | .000            | .001   | .013            | .012    | .052            |
| Pacific cod      | .015             | .000    | .070             | .043            | 1.301  | 3.147           | .021    | .000            |
| Arrowtooth       | .055             | .000    | .000             | .713            | .486   | .764            | .000    | .000            |
| Flathd. sole     | .013             | .000    | .004             | .034            | 4.444  | 6.903           | .003    | .004            |
| Rock sole        | .016             | .000    | 1.956            | .009            | 4.280  | 3.423           | .006    | .010            |
| Turbot           | .008             | .000    | .000             | .659            | 2.631  | .524            | .000    | .000            |
| Yellowfin        | .008             | .001    | .131             | .024            | 4.678  | 6.797           | .000    | .007            |
| Flat, other      | .016             | .000    | .013             | .613            | 5.658  | 21.894          | .018    | .001            |
| Rockfish         | .004             | .000    | .000             | .470            | .000   | .012            | .000    | .000            |
| Atka mack.       | .003             | .000    | .000             | .019            | .007   | .019            | .001    | .008            |
| Total            | .003             | .001    | .071             | .016            | .734   | 1.130           | .010    | .039            |
| All gear         |                  |         |                  |                 |        |                 |         |                 |
| Total            | .003             | .001    | .072             | .051            | .703   | 1.239           | .010    | .036            |

Notes: Totals may include additional categories. The target, calculated by AFSC staff, is based on processor, week, processing mode, NMFS area and gear. Includes only catch counted against Federal TACs. International Pacific Halibut Commission discard mortality rates are used to estimate halibut mortality. The halibut Individual Fishing Quota program allows retention of halibut in the hook and line groundfish fisheries making true halibut bycatch numbers unavailable. No prohibited species bycatch numbers were available for the sablefish fishery.

Source: Blend estimates, National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 17.--Groundfish catch off Alaska by area, residency, and species, 1995-99, (1,000 metric tons, round weight).

| Species/Year          | Gulf of Alaska |       |         | Bering Sea and Aleutian |       |         | All Alaska |       |         |
|-----------------------|----------------|-------|---------|-------------------------|-------|---------|------------|-------|---------|
|                       | Alaska         | Other | Unknown | Alaska                  | Other | Unknown | Alaska     | Other | Unknown |
| <b>All groundfish</b> |                |       |         |                         |       |         |            |       |         |
| 1995                  | 85             | 125   | 1       | 113                     | 1,817 | 0       | 199        | 1,942 | 1       |
| 1996                  | 90             | 103   | 8       | 72                      | 1,764 | 13      | 162        | 1,867 | 21      |
| 1997                  | 108            | 119   | 1       | 67                      | 1,758 | 6       | 174        | 1,877 | 7       |
| 1998                  | 95             | 148   | 0       | 48                      | 1,572 | 0       | 144        | 1,721 | 0       |
| 1999                  | 91             | 134   | 0       | 33                      | 1,269 | 1       | 124        | 1,403 | 1       |
| <b>Pollock</b>        |                |       |         |                         |       |         |            |       |         |
| 1995                  | 25             | 45    | 0       | 22                      | 1,308 | 0       | 46         | 1,353 | 0       |
| 1996                  | 23             | 25    | 3       | 16                      | 1,197 | 9       | 39         | 1,222 | 12      |
| 1997                  | 37             | 51    | 0       | 12                      | 1,134 | 4       | 49         | 1,185 | 5       |
| 1998                  | 36             | 88    | 0       | 4                       | 1,121 | 0       | 40         | 1,208 | 0       |
| 1999                  | 32             | 61    | 0       | 8                       | 882   | 1       | 40         | 943   | 1       |
| <b>Sablefish</b>      |                |       |         |                         |       |         |            |       |         |
| 1995                  | 9              | 10    | 0       | 0                       | 2     | 0       | 9          | 11    | 0       |
| 1996                  | 7              | 8     | 1       | 0                       | 1     | 0       | 8          | 9     | 1       |
| 1997                  | 7              | 6     | 0       | 1                       | 1     | 0       | 7          | 7     | 0       |
| 1998                  | 7              | 6     | 0       | 0                       | 1     | 0       | 7          | 7     | 0       |
| 1999                  | 6              | 6     | 0       | 0                       | 1     | 0       | 6          | 7     | 0       |
| <b>Pacific cod</b>    |                |       |         |                         |       |         |            |       |         |
| 1995                  | 35             | 32    | 0       | 34                      | 211   | 0       | 70         | 243   | 0       |
| 1996                  | 36             | 28    | 4       | 27                      | 211   | 3       | 63         | 239   | 6       |
| 1997                  | 41             | 26    | 1       | 26                      | 230   | 1       | 68         | 256   | 2       |
| 1998                  | 38             | 24    | 0       | 21                      | 174   | 0       | 59         | 198   | 0       |
| 1999                  | 40             | 28    | 0       | 17                      | 145   | 0       | 57         | 173   | 0       |
| <b>Flatfish</b>       |                |       |         |                         |       |         |            |       |         |
| 1995                  | 11             | 21    | 0       | 24                      | 208   | 0       | 35         | 229   | 0       |
| 1996                  | 18             | 25    | 1       | 11                      | 221   | 1       | 28         | 246   | 2       |
| 1997                  | 15             | 19    | 0       | 18                      | 294   | 0       | 33         | 313   | 0       |
| 1998                  | 9              | 15    | 0       | 14                      | 186   | 0       | 22         | 201   | 0       |
| 1999                  | 7              | 18    | 0       | 6                       | 151   | 0       | 13         | 169   | 0       |
| <b>Rockfish</b>       |                |       |         |                         |       |         |            |       |         |
| 1995                  | 4              | 15    | 0       | 3                       | 14    | 0       | 7          | 29    | 0       |
| 1996                  | 4              | 14    | 0       | 2                       | 22    | 0       | 6          | 36    | 0       |
| 1997                  | 5              | 14    | 0       | 1                       | 16    | 0       | 6          | 30    | 0       |
| 1998                  | 5              | 14    | 0       | 1                       | 15    | 0       | 5          | 29    | 0       |
| 1999                  | 5              | 19    | 0       | 0                       | 19    | 0       | 5          | 38    | 0       |
| <b>Atka mackerel</b>  |                |       |         |                         |       |         |            |       |         |
| 1995                  | 0              | 1     | 0       | 26                      | 55    | 0       | 26         | 56    | 0       |
| 1996                  | 0              | 1     | 0       | 13                      | 91    | 0       | 13         | 92    | 0       |
| 1997                  | 0              | 0     | 0       | 7                       | 59    | 0       | 7          | 59    | 0       |
| 1998                  | 0              | 0     | 0       | 6                       | 51    | 0       | 6          | 51    | 0       |
| 1999                  | 0              | 0     | 0       | 0                       | 54    | 0       | 0          | 54    | 0       |

Notes: Includes only catch counted against Federal TACS. Catch delivered to motherships is classified by the residence of the owner of the mothership. All other catch is classified by the residence of the owner of the fishing vessel. All groundfish include additional species categories.

Source: Blend estimates, fish tickets, CFEC vessel data, National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 18.--Ex-vessel prices\* in the groundfish fisheries off Alaska by area, gear, and species, 1995-99 (\$/lb, round weight).

|               | Gulf of Alaska |         | Bering Sea and Aleutian |          | All Alaska   |
|---------------|----------------|---------|-------------------------|----------|--------------|
|               | Fixed          | Trawl   | Fixed                   | Trawl    | All gear**** |
| Pollock       |                |         |                         |          |              |
| 1995          | .112 ***       | .112    | .098 ***                | .098     | .099         |
| 1996          | .100 ***       | .100    | .088 ***                | .088     | .088         |
| 1997          | .100 ***       | .100    | .098 ***                | .098     | .098         |
| 1998          | .070 ***       | .070    | .065 ***                | .065     | .065         |
| 1999          | .093 ***       | .093    | .087 ***                | .087     | .088         |
| Sablefish     |                |         |                         |          |              |
| 1995          | 2.018          | 1.722   | 1.875                   | 1.018 ** | 1.966        |
| 1996          | 1.939          | 1.704   | 1.907                   | .893 **  | 1.907        |
| 1997          | 3.556          | 2.794   | 3.508                   | 1.041 ** | 3.480        |
| 1998          | 2.448          | 1.731   | 2.235                   | .738 **  | 2.359        |
| 1999          | 2.879          | 2.347   | 2.776                   | .904 **  | 2.789        |
| Pacific cod   |                |         |                         |          |              |
| 1995          | .242           | .190    | .249                    | .148     | .208         |
| 1996          | .232           | .165    | .286                    | .149     | .220         |
| 1997          | .243           | .184    | .351                    | .157     | .259         |
| 1998          | .210           | .160    | .276                    | .142     | .209         |
| 1999          | .315           | .267    | .323                    | .227     | .287         |
| Flatfish      |                |         |                         |          |              |
| 1995          | .173 ***       | .173    | .279                    | .180 **  | .181         |
| 1996          | .161 ***       | .161    | .270                    | .152 **  | .156         |
| 1997          | .158 ***       | .158    | .417                    | .125 **  | .134         |
| 1998          | .144 ***       | .144    | .396                    | .112 **  | .129         |
| 1999          | .127 ***       | .127    | .498                    | .128 **  | .141         |
| Rockfish      |                |         |                         |          |              |
| 1995          | .618           | .200 ** | .723                    | .217 **  | .239         |
| 1996          | .628           | .153 ** | .783                    | .141 **  | .181         |
| 1997          | .733           | .147 ** | 1.382                   | .144 **  | .188         |
| 1998          | .741           | .108 ** | 1.127                   | .087 **  | .146         |
| 1999          | .798           | .139 ** | .919                    | .104 **  | .156         |
| Atka mackerel |                |         |                         |          |              |
| 1995          | -              | .181 ** | .129 ***                | .129 **  | .129         |
| 1996          | -              | .158 ** | .145 ***                | .145 **  | .145         |
| 1997          | .150           | .150 ** | .123 ***                | .123 **  | .123         |
| 1998          | -              | .261 ** | .069 ***                | .069 **  | .069         |
| 1999          | .135           | .135 ** | .091 ***                | .091 **  | .091         |

\* Prices do not include the value added by at-sea processing; therefore they reflect prices prior to processing. Prices do reflect the value added by dressing fish at sea, where the fish have not been frozen. Except where noted unfrozen landings price is calculated as landed value divided by estimated or actual round weight.

\*\* Since this category is not well represented by on-shore landings, a price was calculated from product survey prices. The price in this case is the value of the product divided by the calculated round weight and multiplied by a constant .4 to correct for value added by processing.

\*\*\* The trawl price was used for this category.

\*\*\*\*This column is the weighted average of the other columns.

Source: Blend estimates, PacFIN prices, ADFG fish tickets, annual processor survey, weekly processor reports, National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 19.--Ex-vessel value of the groundfish catch off Alaska by area, catcher category, gear, and species, 1995-99, (\$ millions).

|               | Gulf of Alaska  |                    |       | Bering Sea and Aleutian |                    |       | All Alaska      |                    |       |
|---------------|-----------------|--------------------|-------|-------------------------|--------------------|-------|-----------------|--------------------|-------|
|               | Catcher vessels | Catcher processors | Total | Catcher vessels         | Catcher processors | Total | Catcher vessels | Catcher processors | Total |
| All gear      |                 |                    |       |                         |                    |       |                 |                    |       |
| All species   |                 |                    |       |                         |                    |       |                 |                    |       |
| 1995          | 110.3           | 26.7               | 137.0 | 158.2                   | 290.1              | 448.3 | 268.5           | 316.8              | 585.3 |
| 1996          | 93.0            | 22.0               | 114.9 | 144.0                   | 272.2              | 416.3 | 237.0           | 294.2              | 531.2 |
| 1997          | 130.4           | 24.6               | 154.9 | 151.2                   | 308.8              | 459.9 | 281.6           | 333.3              | 614.9 |
| 1998          | 96.9            | 17.5               | 114.4 | 96.7                    | 204.5              | 301.3 | 193.7           | 222.0              | 415.7 |
| 1999          | 117.0           | 26.6               | 143.6 | 135.7                   | 208.1              | 343.9 | 252.7           | 234.7              | 487.5 |
| Hook and line |                 |                    |       |                         |                    |       |                 |                    |       |
| All species   |                 |                    |       |                         |                    |       |                 |                    |       |
| 1995          | 67.1            | 12.5               | 79.6  | 3.9                     | 61.8               | 65.7  | 70.9            | 74.4               | 145.3 |
| 1996          | 56.3            | 9.8                | 66.1  | 2.6                     | 71.5               | 74.2  | 59.0            | 81.3               | 140.3 |
| 1997          | 82.3            | 14.3               | 96.6  | 5.1                     | 110.0              | 115.1 | 87.4            | 124.3              | 211.7 |
| 1998          | 56.5            | 9.4                | 65.9  | 3.2                     | 70.0               | 73.3  | 59.7            | 79.4               | 139.1 |
| 1999          | 62.9            | 13.5               | 76.4  | 2.8                     | 71.7               | 74.4  | 65.7            | 85.2               | 150.8 |
| Sablefish     |                 |                    |       |                         |                    |       |                 |                    |       |
| 1995          | 62.5            | 9.0                | 71.5  | 2.8                     | 3.2                | 6.1   | 65.4            | 12.2               | 77.6  |
| 1996          | 51.6            | 6.5                | 58.1  | 2.1                     | 2.6                | 4.7   | 53.7            | 9.1                | 62.8  |
| 1997          | 76.2            | 11.8               | 88.0  | 4.4                     | 4.2                | 8.7   | 80.6            | 16.1               | 96.7  |
| 1998          | 51.3            | 7.4                | 58.7  | 2.5                     | 1.9                | 4.5   | 53.8            | 9.3                | 63.2  |
| 1999          | 55.9            | 9.3                | 65.2  | 2.2                     | 3.4                | 5.6   | 58.1            | 12.7               | 70.8  |
| Pacific cod   |                 |                    |       |                         |                    |       |                 |                    |       |
| 1995          | 2.6             | 3.2                | 5.8   | .7                      | 55.5               | 56.3  | 3.3             | 58.7               | 62.0  |
| 1996          | 2.6             | 2.9                | 5.5   | .3                      | 65.4               | 65.7  | 2.9             | 68.3               | 71.2  |
| 1997          | 3.7             | 2.2                | 5.9   | .2                      | 100.9              | 101.1 | 3.9             | 103.1              | 107.0 |
| 1998          | 3.1             | 1.6                | 4.7   | .1                      | 61.4               | 61.6  | 3.2             | 63.1               | 66.3  |
| 1999          | 4.9             | 4.0                | 8.9   | .3                      | 62.7               | 63.0  | 5.2             | 66.6               | 71.9  |
| Flatfish      |                 |                    |       |                         |                    |       |                 |                    |       |
| 1995          | .0              | .0                 | .0    | .1                      | 1.5                | 1.6   | .1              | 1.6                | 1.7   |
| 1996          | .0              | .0                 | .0    | .2                      | 2.1                | 2.2   | .2              | 2.1                | 2.3   |
| 1997          | .0              | .0                 | .0    | .3                      | 4.2                | 4.5   | .3              | 4.2                | 4.5   |
| 1998          | .0              | .0                 | .0    | .4                      | 5.7                | 6.2   | .5              | 5.7                | 6.2   |
| 1999          | .0              | .0                 | .0    | .2                      | 4.1                | 4.3   | .2              | 4.1                | 4.3   |
| Rockfish      |                 |                    |       |                         |                    |       |                 |                    |       |
| 1995          | 1.9             | .4                 | 2.2   | .2                      | .2                 | .5    | 2.1             | .6                 | 2.7   |
| 1996          | 2.1             | .4                 | 2.5   | .1                      | .4                 | .5    | 2.2             | .7                 | 2.9   |
| 1997          | 2.3             | .3                 | 2.6   | .2                      | .4                 | .7    | 2.5             | .8                 | 3.3   |
| 1998          | 2.0             | .4                 | 2.4   | .1                      | .6                 | .7    | 2.1             | .9                 | 3.1   |
| 1999          | 2.0             | .2                 | 2.2   | .1                      | .3                 | .4    | 2.1             | .6                 | 2.7   |
| Pot           |                 |                    |       |                         |                    |       |                 |                    |       |
| Pacific cod   |                 |                    |       |                         |                    |       |                 |                    |       |
| 1995          | 8.3             | .1                 | 8.4   | 6.6                     | 2.0                | 8.5   | 14.9            | 2.0                | 16.9  |
| 1996          | 5.7             | -                  | 5.7   | 9.2                     | 3.2                | 12.4  | 14.9            | 3.2                | 18.1  |
| 1997          | 4.5             | -                  | 4.5   | 6.9                     | 2.2                | 9.1   | 11.4            | 2.2                | 13.6  |
| 1998          | 4.6             | .0                 | 4.6   | 4.2                     | 1.6                | 5.7   | 8.7             | 1.6                | 10.3  |
| 1999          | 9.6             | 2.9                | 12.5  | 8.9                     | 2.2                | 11.2  | 18.6            | 5.1                | 23.7  |

Table 19.--Continued.

|               | Gulf of Alaska  |                    |       | Bering Sea and Aleutian |                    |       | All Alaska      |                    |       |
|---------------|-----------------|--------------------|-------|-------------------------|--------------------|-------|-----------------|--------------------|-------|
|               | Catcher vessels | Catcher processors | Total | Catcher vessels         | Catcher processors | Total | Catcher vessels | Catcher processors | Total |
| Trawl         |                 |                    |       |                         |                    |       |                 |                    |       |
| All species   |                 |                    |       |                         |                    |       |                 |                    |       |
| 1995          | 34.8            | 14.1               | 48.9  | 147.7                   | 226.3              | 374.0 | 182.5           | 240.4              | 422.9 |
| 1996          | 30.6            | 12.2               | 42.9  | 132.2                   | 197.4              | 329.6 | 162.8           | 209.7              | 372.5 |
| 1997          | 43.6            | 10.2               | 53.8  | 139.1                   | 196.6              | 335.7 | 182.7           | 206.8              | 389.5 |
| 1998          | 35.9            | 8.1                | 43.9  | 89.3                    | 132.9              | 222.3 | 125.2           | 141.0              | 266.2 |
| 1999          | 44.4            | 10.2               | 54.6  | 123.9                   | 134.2              | 258.1 | 168.3           | 144.4              | 312.7 |
| Pollock       |                 |                    |       |                         |                    |       |                 |                    |       |
| 1995          | 15.7            | .2                 | 15.9  | 126.3                   | 140.0              | 266.3 | 142.0           | 140.2              | 282.3 |
| 1996          | 10.0            | .1                 | 10.0  | 111.8                   | 109.4              | 221.2 | 121.7           | 109.5              | 231.2 |
| 1997          | 18.1            | .1                 | 18.2  | 113.5                   | 115.3              | 228.8 | 131.6           | 115.4              | 247.0 |
| 1998          | 18.7            | .0                 | 18.8  | 76.0                    | 81.8               | 157.8 | 94.8            | 81.8               | 176.6 |
| 1999          | 18.6            | .0                 | 18.7  | 104.9                   | 79.8               | 184.7 | 123.5           | 79.8               | 203.4 |
| Sablefish     |                 |                    |       |                         |                    |       |                 |                    |       |
| 1995          | 1.0             | 4.5                | 5.6   | .3                      | .6                 | .8    | 1.3             | 5.1                | 6.4   |
| 1996          | 2.4             | 3.2                | 5.6   | .0                      | .3                 | .3    | 2.4             | 3.5                | 5.9   |
| 1997          | 2.7             | 3.9                | 6.7   | .0                      | .1                 | .1    | 2.7             | 4.1                | 6.8   |
| 1998          | 1.6             | 2.2                | 3.9   | .0                      | .2                 | .2    | 1.6             | 2.5                | 4.1   |
| 1999          | 2.4             | 2.6                | 5.0   | .0                      | .5                 | .5    | 2.4             | 3.1                | 5.5   |
| Pacific cod   |                 |                    |       |                         |                    |       |                 |                    |       |
| 1995          | 15.2            | 1.1                | 16.3  | 14.3                    | 13.2               | 27.4  | 29.4            | 14.3               | 43.7  |
| 1996          | 12.9            | 1.3                | 14.1  | 18.3                    | 10.7               | 29.0  | 31.2            | 12.0               | 43.2  |
| 1997          | 17.6            | .4                 | 18.0  | 20.5                    | 11.8               | 32.3  | 38.1            | 12.3               | 50.3  |
| 1998          | 12.2            | 1.9                | 14.2  | 12.6                    | 12.7               | 25.4  | 24.9            | 14.7               | 39.5  |
| 1999          | 19.7            | 1.6                | 21.3  | 18.1                    | 15.1               | 33.2  | 37.9            | 16.6               | 54.5  |
| Flatfish      |                 |                    |       |                         |                    |       |                 |                    |       |
| 1995          | 2.4             | 2.5                | 4.9   | 6.8                     | 48.2               | 54.9  | 9.2             | 50.6               | 59.8  |
| 1996          | 4.1             | 4.1                | 8.2   | 1.9                     | 44.3               | 46.2  | 6.0             | 48.4               | 54.4  |
| 1997          | 3.8             | 2.1                | 5.9   | 4.9                     | 49.6               | 54.5  | 8.7             | 51.7               | 60.4  |
| 1998          | 2.1             | 1.4                | 3.5   | .6                      | 28.5               | 29.1  | 2.7             | 29.9               | 32.6  |
| 1999          | 1.6             | 1.6                | 3.2   | .7                      | 25.3               | 26.0  | 2.3             | 26.9               | 29.2  |
| Rockfish      |                 |                    |       |                         |                    |       |                 |                    |       |
| 1995          | .4              | 5.6                | 6.0   | .1                      | 5.4                | 5.4   | .4              | 11.0               | 11.5  |
| 1996          | 1.2             | 3.1                | 4.3   | .0                      | 4.7                | 4.8   | 1.3             | 7.8                | 9.1   |
| 1997          | 1.1             | 3.5                | 4.6   | .1                      | 3.8                | 3.9   | 1.2             | 7.3                | 8.5   |
| 1998          | 1.1             | 2.4                | 3.5   | .1                      | 1.8                | 1.9   | 1.2             | 4.2                | 5.4   |
| 1999          | 1.6             | 4.3                | 5.9   | .0                      | 2.9                | 2.9   | 1.6             | 7.2                | 8.8   |
| Atka mackerel |                 |                    |       |                         |                    |       |                 |                    |       |
| 1995          | .0              | .2                 | .2    | .0                      | 18.9               | 18.9  | .0              | 19.1               | 19.1  |
| 1996          | .0              | .4                 | .4    | .0                      | 27.7               | 27.7  | .0              | 28.2               | 28.2  |
| 1997          | .0              | .1                 | .1    | .0                      | 16.0               | 16.0  | .0              | 16.1               | 16.1  |
| 1998          | .0              | .1                 | .1    | .0                      | 7.8                | 7.8   | .0              | 7.9                | 7.9   |
| 1999          | .0              | .0                 | .1    | .0                      | 10.3               | 10.3  | .0              | 10.3               | 10.4  |

Note: Includes only catches counted against Federal TACs.  
Ex-vessel value is calculated using prices on table 18. Please refer to Table 18 for a description of the price derivation. All groundfish includes additional species categories.

Source: Blend estimates, Pacfin prices, ADFG fishtickets, annual processor survey, weekly processor reports, National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.



Table 20.--Ex-vessel value of Alaska groundfish delivered on shore by area, gear and catcher vessel length, 1993-99. (\$ millions)

|          | Gulf of Alaska |        |      | Bering Sea and Aleutian |        |      | All Alaska    |        |      |
|----------|----------------|--------|------|-------------------------|--------|------|---------------|--------|------|
|          | Vessel length  |        |      | Vessel length           |        |      | Vessel length |        |      |
|          | <60            | 60-124 | >124 | <60                     | 60-124 | >124 | <60           | 60-124 | >124 |
| Fixed    |                |        |      |                         |        |      |               |        |      |
| 1993     | 28.5           | 11.2   | -    | .6                      | 1.6    | .2   | 29.1          | 12.7   | .2   |
| 1994     | 39.2           | 16.0   | -    | .8                      | 3.3    | .2   | 40.0          | 19.2   | .2   |
| 1995     | 40.3           | 36.7   | .4   | 1.5                     | 7.9    | 1.4  | 41.8          | 44.7   | 1.8  |
| 1996     | 34.4           | 28.8   | .2   | .9                      | 7.6    | 1.7  | 35.3          | 36.5   | 2.0  |
| 1997     | 50.7           | 38.7   | .1   | 1.6                     | 7.0    | 1.9  | 52.3          | 45.7   | 2.0  |
| 1998     | 35.2           | 21.0   | .1   | .7                      | 3.8    | 1.0  | 36.0          | 24.9   | 1.1  |
| 1999     | 44.9           | 26.0   | .0   | .8                      | 6.8    | 2.5  | 45.7          | 32.8   | 2.5  |
| Trawl    |                |        |      |                         |        |      |               |        |      |
| 1993     | 4.9            | 23.4   | 2.9  | .3                      | 32.5   | 39.0 | 5.2           | 55.9   | 41.9 |
| 1994     | 5.4            | 21.2   | 2.7  | .1                      | 36.0   | 45.0 | 5.5           | 57.2   | 47.7 |
| 1995     | 5.2            | 24.1   | 4.1  | .1                      | 48.1   | 59.1 | 5.3           | 72.2   | 63.2 |
| 1996     | 9.5            | 19.1   | 1.5  | .1                      | 46.4   | 47.2 | 9.6           | 65.5   | 48.7 |
| 1997     | 11.0           | 24.2   | 3.3  | -                       | 40.0   | 55.0 | 11.0          | 64.2   | 58.3 |
| 1998     | 8.2            | 21.2   | 3.1  | .2                      | 25.0   | 37.7 | 8.3           | 46.2   | 40.8 |
| 1999     | 8.7            | 25.0   | 2.0  | .3                      | 38.5   | 46.8 | 9.0           | 63.6   | 48.8 |
| All gear |                |        |      |                         |        |      |               |        |      |
| 1993     | 33.4           | 34.6   | 2.9  | .9                      | 34.0   | 39.2 | 34.3          | 68.6   | 42.1 |
| 1994     | 44.7           | 37.2   | 2.7  | .9                      | 39.3   | 45.2 | 45.5          | 76.5   | 47.9 |
| 1995     | 45.5           | 60.8   | 4.5  | 1.6                     | 56.1   | 60.5 | 47.1          | 116.9  | 65.0 |
| 1996     | 43.9           | 47.9   | 1.7  | 1.0                     | 54.0   | 48.9 | 44.9          | 102.0  | 50.6 |
| 1997     | 61.7           | 62.9   | 3.4  | 1.6                     | 47.0   | 56.9 | 63.3          | 109.9  | 60.3 |
| 1998     | 43.4           | 42.3   | 3.2  | .9                      | 28.8   | 38.7 | 44.3          | 71.1   | 41.8 |
| 1999     | 53.6           | 51.0   | 2.0  | 1.1                     | 45.3   | 49.2 | 54.7          | 96.4   | 51.3 |

Note: Includes only catches counted against Federal TACs.

Source: ADFG Fishtickets, Pacfin, NMFS permits. National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 21.--Ex-vessel value of the groundfish catch off Alaska by area, residency, and species, 1995-99, (\$ millions).

| Species/Year   | Gulf of Alaska |       |         | Bering Sea and Aleutian |       |         | All Alaska |       |         |
|----------------|----------------|-------|---------|-------------------------|-------|---------|------------|-------|---------|
|                | Alaska         | Other | Unknown | Alaska                  | Other | Unknown | Alaska     | Other | Unknown |
| All groundfish |                |       |         |                         |       |         |            |       |         |
| 1995           | 56.7           | 64.6  | 15.7    | 31.9                    | 355.7 | 60.7    | 88.6       | 420.3 | 76.4    |
| 1996           | 54.5           | 52.0  | 8.4     | 24.4                    | 347.8 | 44.0    | 78.9       | 399.8 | 52.5    |
| 1997           | 80.6           | 72.5  | 1.9     | 28.0                    | 421.7 | 10.2    | 108.6      | 494.2 | 12.1    |
| 1998           | 59.7           | 54.7  | .1      | 16.5                    | 285.5 | .0      | 76.2       | 340.2 | .1      |
| 1999           | 72.5           | 69.2  | 2.0     | 19.7                    | 323.7 | .5      | 92.2       | 392.9 | 2.4     |
| Pollock        |                |       |         |                         |       |         |            |       |         |
| 1995           | 4.9            | 9.4   | 1.6     | 3.3                     | 228.1 | 35.0    | 8.2        | 237.5 | 36.6    |
| 1996           | 4.4            | 4.4   | 1.2     | 2.6                     | 197.0 | 21.6    | 7.1        | 201.4 | 22.7    |
| 1997           | 7.6            | 10.6  | .1      | 1.7                     | 219.0 | 8.2     | 9.4        | 229.6 | 8.3     |
| 1998           | 5.5            | 13.3  | .0      | .4                      | 157.8 | .0      | 5.9        | 171.1 | .0      |
| 1999           | 6.4            | 12.3  | .0      | 1.5                     | 183.6 | .2      | 7.9        | 195.9 | .2      |
| Sablefish      |                |       |         |                         |       |         |            |       |         |
| 1995           | 33.3           | 35.4  | 8.4     | 1.7                     | 4.9   | .4      | 35.0       | 40.4  | 8.7     |
| 1996           | 31.0           | 28.8  | 4.2     | 1.5                     | 3.4   | .1      | 32.5       | 32.2  | 4.3     |
| 1997           | 50.0           | 43.2  | 1.5     | 3.8                     | 4.9   | .1      | 53.8       | 48.1  | 1.6     |
| 1998           | 36.5           | 26.0  | .1      | 1.8                     | 2.9   | .0      | 38.3       | 28.9  | .1      |
| 1999           | 37.8           | 30.7  | 1.8     | 2.1                     | 4.2   | .1      | 39.9       | 34.8  | 1.8     |
| Pacific cod    |                |       |         |                         |       |         |            |       |         |
| 1995           | 14.5           | 12.4  | 3.5     | 12.2                    | 64.9  | 15.1    | 26.8       | 77.4  | 18.6    |
| 1996           | 12.9           | 10.0  | 2.4     | 14.0                    | 78.0  | 15.1    | 26.9       | 88.0  | 17.5    |
| 1997           | 17.3           | 10.8  | .3      | 17.2                    | 124.8 | .5      | 34.5       | 135.6 | .8      |
| 1998           | 14.2           | 9.3   | .0      | 11.0                    | 81.7  | .0      | 25.2       | 90.9  | .0      |
| 1999           | 24.8           | 17.7  | .1      | 14.1                    | 93.2  | .1      | 38.9       | 110.9 | .2      |
| Flatfish       |                |       |         |                         |       |         |            |       |         |
| 1995           | 1.7            | 2.2   | 1.1     | 7.1                     | 41.2  | 8.2     | 8.8        | 43.4  | 9.3     |
| 1996           | 3.7            | 4.1   | .4      | 2.5                     | 39.1  | 6.9     | 6.2        | 43.2  | 7.3     |
| 1997           | 2.7            | 3.3   | .0      | 3.5                     | 54.2  | 1.4     | 6.1        | 57.4  | 1.4     |
| 1998           | 1.4            | 2.2   | .0      | 2.5                     | 32.7  | .0      | 3.9        | 34.9  | .0      |
| 1999           | 1.1            | 2.2   | .0      | 1.7                     | 28.4  | .2      | 2.8        | 30.6  | .2      |
| Rockfish       |                |       |         |                         |       |         |            |       |         |
| 1995           | 2.2            | 4.9   | 1.1     | .9                      | 4.9   | .2      | 3.1        | 9.8   | 1.3     |
| 1996           | 2.3            | 4.3   | .2      | .2                      | 4.9   | .1      | 2.5        | 9.2   | .3      |
| 1997           | 2.7            | 4.5   | .0      | .3                      | 4.3   | .0      | 3.0        | 8.8   | .0      |
| 1998           | 2.0            | 3.8   | .0      | .1                      | 2.5   | .0      | 2.1        | 6.3   | .0      |
| 1999           | 2.0            | 6.1   | .0      | .1                      | 3.2   | .0      | 2.1        | 9.3   | .0      |
| Atka mackerel  |                |       |         |                         |       |         |            |       |         |
| 1995           | .0             | .2    | .0      | 6.3                     | 11.2  | 1.5     | 6.3        | 11.3  | 1.5     |
| 1996           | .0             | .4    | .0      | 3.6                     | 24.2  | .0      | 3.6        | 24.6  | .0      |
| 1997           | .0             | .1    | .0      | 1.6                     | 14.5  | .0      | 1.6        | 14.5  | .0      |
| 1998           | .0             | .1    | .0      | .7                      | 7.1   | .0      | .7         | 7.2   | .0      |
| 1999           | .0             | .1    | .0      | .0                      | 10.3  | .0      | .0         | 10.4  | .0      |

Note: Includes only catches counted against Federal TACs.  
 Ex-vessel value is calculated using prices on table 18. Please refer to Table 18 for a description of the price derivation. Catch delivered to motherships is classified by the residence of the owner of the mothership. All other catch is classified by the residence of the owner of the fishing vessel. All groundfish include additional species categories.

Source: Blend estimates, Pacfin prices, ADFG fishtickets, annual processor survey, weekly processor reports, National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 22. Groundfish ex-vessel value by port of landing, 1993-99.  
(\$ thousands)

|                   | 1993   | 1994   | 1995   | 1996   | 1997   | 1998   | 1999   |
|-------------------|--------|--------|--------|--------|--------|--------|--------|
| Alaskan ports     |        |        |        |        |        |        |        |
| Adak              | -      | -      | -      | -      | -      | -      | (c)    |
| Akutan            | (e)    | (e)    | (e)    | (e)    | (e)    | (e)    | (e)    |
| Anchorage         | 704    | 1,265  | 1,053  | 1,587  | 1,609  | 2,523  | 3,375  |
| Atka              | -      | -      | -      | -      | -      | -      | (a)    |
| Chignik           | (c)    | -      | -      | -      | (a)    | (a)    | (a)    |
| Cordova           | 2,014  | 2,966  | 3,147  | 2,297  | (c)    | 2,839  | 3,024  |
| Craig             | (a)    | -      | (a)    | (a)    | (b)    | (a)    | -      |
| Dutch Harbor      | 59,455 | 64,776 | 87,735 | 72,779 | 75,276 | 49,089 | 70,565 |
| Gustavus          | -      | (a)    | -      | -      | -      | (a)    | -      |
| Hoonah            | (b)    | (b)    | (c)    | (c)    | (c)    | (c)    | (c)    |
| Homer             | 1,661  | 1,711  | 1,015  | 838    | 1,096  | 1,032  | 645    |
| Juneau            | (a)    | (a)    | (a)    | (c)    | (c)    | (c)    | (c)    |
| Kake              | -      | (c)    | -      | (b)    | (c)    | (a)    | -      |
| King Cove         | (c)    | (c)    | (d)    | (d)    | (d)    | (d)    | (d)    |
| Kenai             | 3,180  | 3,012  | 5,196  | (c)    | 6,997  | (c)    | 5,284  |
| Klawock           | -      | -      | (a)    | -      | -      | -      | -      |
| Kodiak            | 31,015 | 29,434 | 34,435 | 26,609 | 37,742 | 36,311 | 50,988 |
| Ketchikan         | 1,021  | 2,778  | 1,212  | 897    | 900    | 695    | (c)    |
| Lazy Bay          | (c)    | (b)    | (a)    | (b)    | (c)    | (c)    | (b)    |
| Metlakatla        | (a)    | (a)    | (a)    | -      | -      | -      | -      |
| Nikiski           | -      | -      | -      | -      | (c)    | (a)    | -      |
| Ninilchik         | (a)    | (a)    | (a)    | (a)    | (a)    | (a)    | (a)    |
| Petersburg        | 2,389  | 4,749  | 3,077  | 2,934  | (c)    | (c)    | (c)    |
| Pelican           | (c)    | (c)    | (c)    | (c)    | (c)    | -      | (a)    |
| Seward            | 7,319  | 9,131  | 15,046 | 13,619 | 20,847 | (e)    | (e)    |
| Sitka             | (c)    | 6,731  | (e)    | 10,765 | 14,845 | 9,889  | 9,772  |
| Soldotna          | (a)    | -      | -      | -      | -      | -      | -      |
| Sand Point        | (d)    | (d)    | (e)    | (e)    | (e)    | (e)    | (e)    |
| Saint Paul Island | (a)    | (a)    | (a)    | (a)    | (a)    | -      | -      |
| Valdez            | (b)    | (c)    | (a)    | (a)    | (a)    | (a)    | (a)    |
| Wasilla           | -      | -      | -      | (a)    | -      | -      | -      |
| Whittier          | (a)    | (a)    | -      | -      | -      | -      | -      |
| Wrangell          | (a)    | (a)    | (a)    | (a)    | (a)    | -      | (a)    |
| Excursion Inlet   | (c)    | (c)    | (b)    | (a)    | (a)    | (a)    | -      |
| Yakutat           | (c)    | (c)    | (c)    | (c)    | (c)    | (b)    | (a)    |

Note: The following amounts are in thousands of dollars.  
(a)=<500, (b)=500-1000, (c)=1000-5000, (d)=5000-10000, (e)=>10000.

Includes only catches counted against Federal TACs.

Source: NMFS blend estimates, Pacfin prices, ADFG intent to process.  
National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 23.--Product value of Alaska groundfish by area and processing mode, 1994-99.  
(\$ millions)

|      | Gulf of Alaska |          | Bering Sea and Aleutian |                        |          |
|------|----------------|----------|-------------------------|------------------------|----------|
|      | At-sea         | On-shore | Motherships             | Catcher-<br>processors | On-shore |
| 1994 | 36.2           | 186.8    | 54.0                    | 586.1                  | 267.5    |
| 1995 | 46.0           | 212.1    | 80.0                    | 704.7                  | 350.0    |
| 1996 | 48.2           | 181.1    | 71.3                    | 634.6                  | 297.0    |
| 1997 | 30.3           | 201.6    | 75.9                    | 608.4                  | 287.0    |
| 1998 | 28.0           | 183.7    | 59.2                    | 541.1                  | 240.0    |
| 1999 | 43.2           | 209.1    | 33.4                    | 607.7                  | 325.2    |

Note: Includes only catches counted against Federal TACs. Catcher-processors that at times during a year act like motherships are classified as catcher-processors for the entire year.

Source: NMFS weekly production and ADFG survey prices.  
National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 24.--Product value of Alaska groundfish processed by catcher-processors by area, gear, and vessel length, 1994-99. (\$ millions)

|       | Gulf of Alaska |         |      | Bering Sea and Aleutian |         |         |         |       |
|-------|----------------|---------|------|-------------------------|---------|---------|---------|-------|
|       | Vessel length  |         |      | Vessel length           |         |         |         |       |
|       | <124           | 125-165 | >166 | <124                    | 125-165 | 166-235 | 236-260 | >260  |
| Fixed |                |         |      |                         |         |         |         |       |
| 1994  | 7.0            | 3.4     | 1.2  | 16.7                    | 34.5    | 22.6    | *       | -     |
| 1995  | 9.0            | 2.2     | 1.8  | 14.9                    | 42.0    | 23.1    | *       | -     |
| 1996  | 9.5            | 1.5     | 1.4  | 18.4                    | 37.4    | 30.7    | -       | -     |
| 1997  | 9.6            | *       | 1.7  | 17.0                    | 37.5    | 30.4    | -       | -     |
| 1998  | 6.9            | *       | 1.2  | 17.9                    | 45.5    | 37.7    | -       | -     |
| 1999  | 11.0           | 4.9     | 3.6  | 21.9                    | 51.1    | 44.9    | -       | -     |
| Trawl |                |         |      |                         |         |         |         |       |
| 1994  | 5.1            | 6.0     | 13.3 | 7.6                     | 23.4    | 187.0   | 68.0    | 226.3 |
| 1995  | 7.1            | 5.2     | 17.9 | 8.5                     | 28.3    | 189.4   | 84.8    | 313.7 |
| 1996  | 12.7           | 2.5     | 18.4 | 15.5                    | 30.6    | 182.6   | 76.6    | 242.9 |
| 1997  | 6.3            | .7      | 12.1 | 19.1                    | 26.3    | 158.3   | 63.3    | 256.4 |
| 1998  | 8.7            | *       | 10.9 | 17.0                    | 17.2    | 120.0   | 47.5    | 173.8 |
| 1999  | 11.1           | *       | 11.5 | 19.9                    | 23.5    | 72.3    | 50.9    | 227.8 |

Note: \* This category was included in the previous column.  
Includes only catches counted against Federal TACs.

Source: NMFS weekly production, ADFG survey prices, and NMFS permits.  
National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 25. Groundfish product value by port, 1994-99.  
(\$ thousands)

|                   | 1994    | 1995    | 1996    | 1997    | 1998    | 1999    |
|-------------------|---------|---------|---------|---------|---------|---------|
| Alaskan ports     |         |         |         |         |         |         |
| Adak              | -       | -       | -       | -       | -       | (c)     |
| Akutan            | (g)     | (g)     | (g)     | (g)     | (g)     | (e)     |
| Anchorage         | 1,864   | 2,062   | 3,155   | 2,771   | 3,027   | 4,405   |
| Chignik           | -       | -       | -       | (a)     | (a)     | (c)     |
| Cordova           | 6,217   | 7,157   | 4,986   | 5,009   | 1,956   | 2,378   |
| Craig             | -       | (a)     | (a)     | (a)     | -       | -       |
| Dutch Harbor      | 211,538 | 272,839 | 212,703 | 209,457 | 166,713 | 147,804 |
| Gustavus          | (a)     | (a)     | -       | -       | (a)     | -       |
| Hoonah            | (c)     | (c)     | (c)     | (d)     | (c)     | (c)     |
| Homer             | 1,998   | 1,975   | (c)     | 1,012   | 831     | (a)     |
| Juneau            | (b)     | (a)     | (c)     | (c)     | (c)     | (c)     |
| Kake              | (c)     | (b)     | -       | (c)     | (b)     | -       |
| King Cove         | (d)     | (e)     | (e)     | (e)     | (d)     | (e)     |
| Kenai             | 4,359   | 8,043   | (d)     | 9,295   | (c)     | (c)     |
| Klawock           | -       | (a)     | -       | -       | -       | -       |
| Kodiak            | 84,833  | 91,478  | 70,113  | 74,723  | 60,204  | 21,776  |
| Ketchikan         | (c)     | 1,392   | 1,512   | 1,147   | 785     | (b)     |
| Lazy Bay          | (b)     | (b)     | (c)     | (c)     | (c)     | (b)     |
| Metlakatla        | (a)     | (a)     | -       | -       | -       | -       |
| Nikiski           | -       | -       | -       | (d)     | (d)     | (c)     |
| Ninilchik         | (a)     | (b)     | (c)     | (a)     | (a)     | (a)     |
| Petersburg        | 10,160  | 7,567   | 6,369   | 5,066   | (c)     | (c)     |
| Pelican           | (d)     | (d)     | (c)     | (b)     | -       | (a)     |
| Seward            | 11,385  | 20,185  | 17,482  | 16,688  | (d)     | (d)     |
| Sitka             | 12,164  | (e)     | 19,964  | 17,918  | (d)     | (d)     |
| Sand Point        | (e)     | (f)     | (e)     | (f)     | (e)     | (e)     |
| Saint Paul Island | (a)     | (a)     | (a)     | (a)     | -       | -       |
| Valdez            | (c)     | (b)     | (a)     | (a)     | -       | -       |
| Wasilla           | -       | -       | (a)     | -       | -       | -       |
| Whittier          | (a)     | (a)     | (a)     | -       | -       | -       |
| Wrangell          | (b)     | (a)     | (a)     | (a)     | -       | (a)     |
| Excursion Inlet   | (c)     | (b)     | (a)     | (a)     | (a)     | -       |
| Yakutat           | (c)     | -       | (a)     | -       | -       | -       |

Note: The following amounts are in thousands of dollars.  
(a)=<500, (b)=500-1000, (c)=1000-5000, (d)=5000-15000,  
(e)=15000-25000, (f)=25000-50000, (g)=>50000.

Source: NMFS weekly processor reports, ADFG survey prices, ADFG intent to process.  
National Marine Fisheries Service, P.O. Box 15700,  
Seattle, WA 98115-0070.

Table 26.--Number and total registered net tons of vessels that caught groundfish off Alaska by area and gear, 1993-99.

| Gear/Year            | Gulf of Alaska    |                     | Bering Sea and Aleutian |                     | All Alaska        |                     |
|----------------------|-------------------|---------------------|-------------------------|---------------------|-------------------|---------------------|
|                      | Number of vessels | Registered net tons | Number of vessels       | Registered net tons | Number of vessels | Registered net tons |
| <b>Hook and line</b> |                   |                     |                         |                     |                   |                     |
| 1993                 | 1,201             | 44,711              | 115                     | 19,086              | 1,226             | 49,299              |
| 1994                 | 1,386             | 51,264              | 138                     | 17,822              | 1,410             | 54,422              |
| 1995                 | 1,107             | 39,203              | 175                     | 18,395              | 1,159             | 45,317              |
| 1996                 | 1,017             | 39,658              | 158                     | 16,902              | 1,066             | 45,762              |
| 1997                 | 975               | 32,455              | 137                     | 15,616              | 1,004             | 38,116              |
| 1998                 | 887               | 31,551              | 115                     | 16,032              | 926               | 38,698              |
| 1999                 | 934               | 32,765              | 116                     | 15,464              | 972               | 37,733              |
| <b>Pot</b>           |                   |                     |                         |                     |                   |                     |
| 1993                 | 101               | 4,751               | 21                      | 2,956               | 117               | 7,260               |
| 1994                 | 110               | 5,767               | 40                      | 5,253               | 136               | 9,787               |
| 1995                 | 188               | 13,939              | 126                     | 16,457              | 263               | 24,419              |
| 1996                 | 146               | 9,121               | 103                     | 14,579              | 217               | 20,151              |
| 1997                 | 147               | 8,917               | 84                      | 13,369              | 202               | 19,056              |
| 1998                 | 181               | 11,054              | 79                      | 12,033              | 233               | 19,585              |
| 1999                 | 212               | 16,449              | 105                     | 16,797              | 271               | 25,211              |
| <b>Trawl</b>         |                   |                     |                         |                     |                   |                     |
| 1993                 | 193               | 37,107              | 182                     | 80,259              | 282               | 87,786              |
| 1994                 | 187               | 34,247              | 164                     | 77,830              | 256               | 84,565              |
| 1995                 | 220               | 49,909              | 184                     | 80,551              | 264               | 86,024              |
| 1996                 | 199               | 40,124              | 192                     | 77,789              | 277               | 83,374              |
| 1997                 | 206               | 37,452              | 168                     | 72,324              | 262               | 78,725              |
| 1998                 | 197               | 32,077              | 166                     | 68,074              | 261               | 74,448              |
| 1999                 | 172               | 25,785              | 166                     | 55,281              | 242               | 60,200              |
| <b>All gear</b>      |                   |                     |                         |                     |                   |                     |
| 1993                 | 1,406             | 80,577              | 309                     | 98,995              | 1,528             | 135,431             |
| 1994                 | 1,571             | 84,051              | 335                     | 98,381              | 1,683             | 139,075             |
| 1995                 | 1,396             | 95,026              | 464                     | 112,253             | 1,545             | 144,446             |
| 1996                 | 1,269             | 82,935              | 439                     | 107,061             | 1,448             | 140,338             |
| 1997                 | 1,245             | 73,808              | 381                     | 98,655              | 1,374             | 127,919             |
| 1998                 | 1,153             | 68,041              | 337                     | 92,419              | 1,284             | 122,306             |
| 1999                 | 1,208             | 67,576              | 373                     | 83,925              | 1,358             | 112,686             |

Note: Includes only vessels fishing Federal TACs. Registered net tons totals excludes mainly smaller vessels for which data were unavailable. The percent of vessels missing are: 1993 - 5%, 1994 - 3%, 1995 - 4%, 1996 - 6%, 1997 - 4%, 1998 - 3%, 1999 - 5%.

Source: Blend estimates, fish tickets, Norpac data, federal permit file, CFEC vessel data, National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 27.--Number of vessels that caught groundfish off Alaska by area, vessel category, target, and gear, 1995-99.

| Gear/Target/Year | Gulf of Alaska  |                    |       | Bering Sea and Aleutian |                    |       | All Alaska      |                    |       |
|------------------|-----------------|--------------------|-------|-------------------------|--------------------|-------|-----------------|--------------------|-------|
|                  | Catcher vessels | Catcher processors | Total | Catcher vessels         | Catcher processors | Total | Catcher vessels | Catcher processors | Total |
| All gear         |                 |                    |       |                         |                    |       |                 |                    |       |
| All groundfish   |                 |                    |       |                         |                    |       |                 |                    |       |
| 1995             | 1,331           | 74                 | 1,396 | 364                     | 118                | 464   | 1,445           | 123                | 1,545 |
| 1996             | 1,213           | 63                 | 1,268 | 340                     | 114                | 439   | 1,350           | 117                | 1,448 |
| 1997             | 1,197           | 54                 | 1,244 | 286                     | 113                | 381   | 1,280           | 116                | 1,374 |
| 1998             | 1,111           | 43                 | 1,152 | 246                     | 99                 | 337   | 1,195           | 99                 | 1,284 |
| 1999             | 1,156           | 57                 | 1,208 | 288                     | 88                 | 373   | 1,274           | 91                 | 1,358 |
| Hook and line    |                 |                    |       |                         |                    |       |                 |                    |       |
| Sablefish        |                 |                    |       |                         |                    |       |                 |                    |       |
| 1995             | 586             | 25                 | 607   | 78                      | 15                 | 90    | 591             | 28                 | 613   |
| 1996             | 557             | 17                 | 571   | 66                      | 18                 | 82    | 560             | 22                 | 578   |
| 1997             | 484             | 15                 | 494   | 73                      | 12                 | 83    | 490             | 19                 | 504   |
| 1998             | 427             | 14                 | 439   | 40                      | 9                  | 47    | 437             | 17                 | 450   |
| 1999             | 416             | 17                 | 432   | 36                      | 15                 | 51    | 426             | 20                 | 444   |
| Pacific cod      |                 |                    |       |                         |                    |       |                 |                    |       |
| 1995             | 386             | 20                 | 406   | 57                      | 44                 | 100   | 430             | 46                 | 475   |
| 1996             | 210             | 16                 | 223   | 51                      | 39                 | 88    | 252             | 41                 | 288   |
| 1997             | 394             | 14                 | 408   | 31                      | 38                 | 69    | 412             | 39                 | 451   |
| 1998             | 345             | 8                  | 353   | 22                      | 36                 | 58    | 357             | 36                 | 393   |
| 1999             | 398             | 22                 | 420   | 39                      | 38                 | 76    | 427             | 41                 | 467   |
| Flatfish         |                 |                    |       |                         |                    |       |                 |                    |       |
| 1995             | 0               | 3                  | 3     | 8                       | 37                 | 44    | 8               | 38                 | 45    |
| 1996             | 1               | 1                  | 2     | 20                      | 32                 | 52    | 21              | 33                 | 54    |
| 1997             | 0               | 1                  | 1     | 17                      | 33                 | 50    | 17              | 33                 | 50    |
| 1998             | 0               | 0                  | 0     | 22                      | 32                 | 51    | 22              | 32                 | 51    |
| 1999             | 1               | 1                  | 2     | 10                      | 31                 | 40    | 10              | 31                 | 40    |
| Rockfish         |                 |                    |       |                         |                    |       |                 |                    |       |
| 1995             | 408             | 2                  | 409   | 18                      | 3                  | 21    | 422             | 5                  | 426   |
| 1996             | 464             | 4                  | 467   | 12                      | 4                  | 16    | 472             | 8                  | 479   |
| 1997             | 373             | 1                  | 374   | 9                       | 3                  | 12    | 380             | 4                  | 384   |
| 1998             | 349             | 1                  | 350   | 8                       | 2                  | 10    | 352             | 3                  | 354   |
| 1999             | 388             | 4                  | 391   | 12                      | 4                  | 16    | 393             | 8                  | 400   |
| All groundfish   |                 |                    |       |                         |                    |       |                 |                    |       |
| 1995             | 1,079           | 36                 | 1,107 | 136                     | 47                 | 175   | 1,119           | 52                 | 1,159 |
| 1996             | 998             | 27                 | 1,017 | 122                     | 44                 | 158   | 1,031           | 47                 | 1,066 |
| 1997             | 957             | 25                 | 975   | 101                     | 44                 | 137   | 969             | 46                 | 1,004 |
| 1998             | 871             | 18                 | 887   | 77                      | 43                 | 115   | 890             | 43                 | 926   |
| 1999             | 909             | 29                 | 933   | 78                      | 41                 | 116   | 934             | 44                 | 971   |
| Pot              |                 |                    |       |                         |                    |       |                 |                    |       |
| Pacific cod      |                 |                    |       |                         |                    |       |                 |                    |       |
| 1995             | 184             | 3                  | 187   | 116                     | 8                  | 123   | 255             | 8                  | 261   |
| 1996             | 146             | 0                  | 146   | 92                      | 13                 | 100   | 206             | 13                 | 214   |
| 1997             | 145             | 0                  | 145   | 75                      | 13                 | 82    | 193             | 13                 | 199   |
| 1998             | 166             | 1                  | 167   | 71                      | 7                  | 78    | 211             | 7                  | 218   |
| 1999             | 200             | 11                 | 211   | 89                      | 13                 | 102   | 254             | 13                 | 267   |



Table 27.--Continued.

| Gear/Target/Year | Gulf of Alaska  |                    |       | Bering Sea and Aleutian |                    |       | All Alaska      |                    |       |
|------------------|-----------------|--------------------|-------|-------------------------|--------------------|-------|-----------------|--------------------|-------|
|                  | Catcher vessels | Catcher processors | Total | Catcher vessels         | Catcher processors | Total | Catcher vessels | Catcher processors | Total |
| Trawl            |                 |                    |       |                         |                    |       |                 |                    |       |
| Pollock          |                 |                    |       |                         |                    |       |                 |                    |       |
| 1995             | 129             | 8                  | 137   | 116                     | 45                 | 158   | 155             | 45                 | 197   |
| 1996             | 94              | 3                  | 97    | 118                     | 40                 | 158   | 158             | 40                 | 198   |
| 1997             | 119             | 6                  | 125   | 106                     | 34                 | 139   | 173             | 35                 | 207   |
| 1998             | 120             | 2                  | 122   | 100                     | 38                 | 137   | 168             | 39                 | 206   |
| 1999             | 112             | 0                  | 112   | 114                     | 17                 | 131   | 160             | 17                 | 177   |
| Pacific cod      |                 |                    |       |                         |                    |       |                 |                    |       |
| 1995             | 143             | 14                 | 157   | 86                      | 40                 | 125   | 185             | 43                 | 227   |
| 1996             | 108             | 16                 | 124   | 108                     | 39                 | 146   | 191             | 41                 | 231   |
| 1997             | 136             | 6                  | 142   | 85                      | 41                 | 123   | 185             | 43                 | 225   |
| 1998             | 117             | 13                 | 130   | 85                      | 36                 | 121   | 171             | 36                 | 207   |
| 1999             | 106             | 9                  | 115   | 81                      | 26                 | 107   | 170             | 27                 | 197   |
| Flatfish         |                 |                    |       |                         |                    |       |                 |                    |       |
| 1995             | 44              | 19                 | 63    | 37                      | 50                 | 86    | 77              | 50                 | 126   |
| 1996             | 51              | 19                 | 70    | 13                      | 37                 | 50    | 63              | 40                 | 103   |
| 1997             | 48              | 15                 | 63    | 12                      | 33                 | 45    | 59              | 34                 | 93    |
| 1998             | 37              | 14                 | 51    | 8                       | 30                 | 38    | 45              | 30                 | 75    |
| 1999             | 29              | 11                 | 40    | 2                       | 29                 | 31    | 31              | 29                 | 60    |
| Rockfish         |                 |                    |       |                         |                    |       |                 |                    |       |
| 1995             | 6               | 21                 | 27    | 0                       | 14                 | 14    | 6               | 22                 | 28    |
| 1996             | 29              | 17                 | 46    | 0                       | 15                 | 15    | 29              | 21                 | 50    |
| 1997             | 23              | 17                 | 40    | 0                       | 10                 | 10    | 23              | 17                 | 40    |
| 1998             | 26              | 14                 | 40    | 0                       | 8                  | 8     | 26              | 17                 | 43    |
| 1999             | 28              | 12                 | 40    | 1                       | 11                 | 12    | 29              | 17                 | 46    |
| Atka mack.       |                 |                    |       |                         |                    |       |                 |                    |       |
| 1995             | 0               | 2                  | 2     | 0                       | 17                 | 17    | 0               | 18                 | 18    |
| 1996             | 0               | 9                  | 9     | 0                       | 17                 | 17    | 0               | 18                 | 18    |
| 1997             | 0               | 0                  | 0     | 0                       | 12                 | 12    | 0               | 12                 | 12    |
| 1998             | 0               | 0                  | 0     | 0                       | 14                 | 14    | 0               | 14                 | 14    |
| 1999             | 0               | 0                  | 0     | 0                       | 17                 | 17    | 0               | 17                 | 17    |
| All groundfish   |                 |                    |       |                         |                    |       |                 |                    |       |
| 1995             | 186             | 35                 | 220   | 125                     | 67                 | 184   | 205             | 67                 | 264   |
| 1996             | 161             | 37                 | 198   | 131                     | 62                 | 192   | 215             | 63                 | 277   |
| 1997             | 176             | 29                 | 205   | 113                     | 59                 | 168   | 206             | 60                 | 262   |
| 1998             | 172             | 24                 | 196   | 118                     | 51                 | 166   | 213             | 51                 | 261   |
| 1999             | 154             | 18                 | 172   | 126                     | 40                 | 166   | 202             | 40                 | 242   |

Note: A target is calculated based on vessel, week, catching mode, NMFS area, and gear. Includes only vessels that fished part of Federal TACs.

Source: Blend estimates, fish tickets, Norpac data, federal permit file, CFEC vessel data, National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 28.--Numbers of vessels, mean length and mean net tonnage for vessels that caught groundfish off Alaska by area, vessel length class (feet), and gear, 1995-99 (excluding catcher-processors).

|                   | Gulf of Alaska      |        |      | Bering Sea and Aleutian |        |      | All Alaska          |        |      |
|-------------------|---------------------|--------|------|-------------------------|--------|------|---------------------|--------|------|
|                   | Vessel length class |        |      | Vessel length class     |        |      | Vessel length class |        |      |
|                   | <60                 | 60-125 | >125 | <60                     | 60-125 | >125 | <60                 | 60-125 | >125 |
| Number of vessels |                     |        |      |                         |        |      |                     |        |      |
| Gear/Year         |                     |        |      |                         |        |      |                     |        |      |
| Hook and line     |                     |        |      |                         |        |      |                     |        |      |
| 1995              | 901                 | 162    | 2    | 73                      | 63     | 0    | 935                 | 168    | 2    |
| 1996              | 821                 | 148    | 5    | 59                      | 58     | 2    | 848                 | 150    | 6    |
| 1997              | 822                 | 126    | 3    | 49                      | 52     | 0    | 833                 | 127    | 3    |
| 1998              | 739                 | 122    | 3    | 39                      | 38     | 0    | 752                 | 128    | 3    |
| 1999              | 766                 | 117    | 2    | 34                      | 40     | 3    | 780                 | 124    | 5    |
| Pot               |                     |        |      |                         |        |      |                     |        |      |
| 1995              | 99                  | 76     | 9    | 14                      | 80     | 24   | 103                 | 126    | 26   |
| 1996              | 79                  | 59     | 4    | 5                       | 64     | 24   | 81                  | 98     | 24   |
| 1997              | 90                  | 53     | 3    | 5                       | 52     | 19   | 91                  | 82     | 21   |
| 1998              | 124                 | 50     | 5    | 4                       | 46     | 21   | 124                 | 77     | 23   |
| 1999              | 131                 | 65     | 2    | 4                       | 63     | 23   | 133                 | 97     | 23   |
| Trawl             |                     |        |      |                         |        |      |                     |        |      |
| 1995              | 55                  | 102    | 29   | 3                       | 89     | 33   | 56                  | 116    | 33   |
| 1996              | 58                  | 84     | 17   | 5                       | 91     | 32   | 61                  | 116    | 33   |
| 1997              | 58                  | 93     | 25   | 3                       | 76     | 34   | 59                  | 113    | 34   |
| 1998              | 58                  | 90     | 23   | 6                       | 78     | 34   | 60                  | 118    | 34   |
| 1999              | 50                  | 74     | 25   | 6                       | 84     | 31   | 53                  | 108    | 31   |

Table 28.--Continued.

|                           | Gulf of Alaska      |        |      | Bering Sea and Aleutian |        |      | All Alaska          |        |      |
|---------------------------|---------------------|--------|------|-------------------------|--------|------|---------------------|--------|------|
|                           | Vessel length class |        |      | Vessel length class     |        |      | Vessel length class |        |      |
|                           | <60                 | 60-125 | >125 | <60                     | 60-125 | >125 | <60                 | 60-125 | >125 |
| Mean vessel length (feet) |                     |        |      |                         |        |      |                     |        |      |
| Gear/Year                 |                     |        |      |                         |        |      |                     |        |      |
| Hook and line             |                     |        |      |                         |        |      |                     |        |      |
| 1995                      | 43                  | 77     | 133  | 43                      | 73     | -    | 43                  | 77     | 133  |
| 1996                      | 44                  | 76     | 164  | 43                      | 77     | 155  | 43                  | 77     | 160  |
| 1997                      | 43                  | 77     | 130  | 46                      | 75     | -    | 43                  | 77     | 130  |
| 1998                      | 44                  | 75     | 142  | 41                      | 76     | -    | 43                  | 75     | 142  |
| 1999                      | 44                  | 75     | 132  | 45                      | 74     | 148  | 43                  | 75     | 141  |
| Pot                       |                     |        |      |                         |        |      |                     |        |      |
| 1995                      | 50                  | 93     | 134  | 53                      | 102    | 140  | 50                  | 97     | 140  |
| 1996                      | 50                  | 87     | 140  | 41                      | 101    | 136  | 50                  | 93     | 136  |
| 1997                      | 50                  | 89     | 129  | 55                      | 104    | 136  | 50                  | 95     | 135  |
| 1998                      | 52                  | 89     | 132  | 57                      | 103    | 137  | 52                  | 95     | 137  |
| 1999                      | 52                  | 90     | 129  | 44                      | 99     | 133  | 52                  | 94     | 133  |
| Trawl                     |                     |        |      |                         |        |      |                     |        |      |
| 1995                      | 57                  | 97     | 156  | 54                      | 102    | 164  | 56                  | 97     | 164  |
| 1996                      | 56                  | 96     | 145  | 49                      | 103    | 154  | 55                  | 98     | 153  |
| 1997                      | 56                  | 97     | 155  | 48                      | 105    | 163  | 56                  | 97     | 163  |
| 1998                      | 55                  | 95     | 155  | 49                      | 105    | 161  | 54                  | 98     | 161  |
| 1999                      | 57                  | 98     | 150  | 46                      | 104    | 155  | 56                  | 99     | 155  |

Table 28.--Continued.

|                          | Gulf of Alaska      |        |      | Bering Sea and Aleutian |        |      | All Alaska          |        |      |
|--------------------------|---------------------|--------|------|-------------------------|--------|------|---------------------|--------|------|
|                          | Vessel length class |        |      | Vessel length class     |        |      | Vessel length class |        |      |
|                          | <60                 | 60-125 | >125 | <60                     | 60-125 | >125 | <60                 | 60-125 | >125 |
| Mean registered net tons |                     |        |      |                         |        |      |                     |        |      |
| Gear/Year                |                     |        |      |                         |        |      |                     |        |      |
| Hook and line            |                     |        |      |                         |        |      |                     |        |      |
| 1995                     | 22                  | 75     | 133  | 25                      | 63     | -    | 22                  | 76     | 133  |
| 1996                     | 27                  | 72     | 423  | 25                      | 67     | 208  | 27                  | 72     | 372  |
| 1997                     | 23                  | 72     | 127  | 28                      | 65     | -    | 23                  | 72     | 127  |
| 1998                     | 23                  | 71     | 166  | 24                      | 69     | -    | 23                  | 71     | 166  |
| 1999                     | 23                  | 69     | 125  | 26                      | 74     | 267  | 23                  | 70     | 210  |
| Pot                      |                     |        |      |                         |        |      |                     |        |      |
| 1995                     | 34                  | 106    | 182  | 33                      | 124    | 176  | 34                  | 115    | 184  |
| 1996                     | 35                  | 100    | 133  | 29                      | 123    | 161  | 35                  | 110    | 161  |
| 1997                     | 32                  | 105    | 152  | 44                      | 126    | 160  | 32                  | 114    | 160  |
| 1998                     | 38                  | 98     | 142  | 41                      | 118    | 146  | 38                  | 106    | 147  |
| 1999                     | 40                  | 106    | 142  | 16                      | 118    | 168  | 40                  | 111    | 168  |
| Trawl                    |                     |        |      |                         |        |      |                     |        |      |
| 1995                     | 55                  | 122    | 250  | 65                      | 130    | 294  | 55                  | 123    | 294  |
| 1996                     | 54                  | 115    | 175  | 40                      | 126    | 225  | 52                  | 119    | 223  |
| 1997                     | 54                  | 117    | 223  | 45                      | 130    | 284  | 53                  | 118    | 284  |
| 1998                     | 53                  | 113    | 227  | 51                      | 128    | 292  | 51                  | 116    | 292  |
| 1999                     | 58                  | 115    | 202  | 45                      | 123    | 230  | 56                  | 116    | 230  |

Note: Includes only vessels that fished part of Federal TACs.

Source: Blend estimates, ADFG fish tickets, Norpac, NMSF permits.  
National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 29.--Numbers of vessels, mean length and mean net tonnage for vessels that caught and processed groundfish off Alaska by area, vessel length class (feet), and gear, 1995-99.

|                   | Gulf of Alaska      |             |             |             |      | Bering Sea and Aleutian |             |             |             |      | All Alaska          |             |             |             |      |
|-------------------|---------------------|-------------|-------------|-------------|------|-------------------------|-------------|-------------|-------------|------|---------------------|-------------|-------------|-------------|------|
|                   | Vessel length class |             |             |             |      | Vessel length class     |             |             |             |      | Vessel length class |             |             |             |      |
|                   | <125<br>164         | 125-<br>164 | 165-<br>234 | 235-<br>259 | >260 | <125<br>164             | 125-<br>164 | 165-<br>234 | 235-<br>259 | >260 | <125<br>164         | 125-<br>164 | 165-<br>234 | 235-<br>259 | >260 |
| Number of vessels |                     |             |             |             |      |                         |             |             |             |      |                     |             |             |             |      |
| Gear/Year         |                     |             |             |             |      |                         |             |             |             |      |                     |             |             |             |      |
| Hook and line     |                     |             |             |             |      |                         |             |             |             |      |                     |             |             |             |      |
| 1995              | 21                  | 10          | 5           | 0           | 0    | 19                      | 16          | 11          | 1           | 0    | 24                  | 16          | 11          | 1           | 0    |
| 1996              | 18                  | 6           | 3           | 0           | 0    | 18                      | 13          | 13          | 0           | 0    | 21                  | 13          | 13          | 0           | 0    |
| 1997              | 16                  | 6           | 3           | 0           | 0    | 18                      | 15          | 11          | 0           | 0    | 20                  | 15          | 11          | 0           | 0    |
| 1998              | 10                  | 3           | 5           | 0           | 0    | 16                      | 15          | 12          | 0           | 0    | 16                  | 15          | 12          | 0           | 0    |
| 1999              | 16                  | 5           | 8           | 0           | 0    | 15                      | 15          | 11          | 0           | 0    | 18                  | 15          | 11          | 0           | 0    |
| Pot               |                     |             |             |             |      |                         |             |             |             |      |                     |             |             |             |      |
| 1995              | 1                   | 2           | 0           | 0           | 0    | 4                       | 3           | 1           | 0           | 0    | 4                   | 3           | 1           | 0           | 0    |
| 1996              | 0                   | 0           | 0           | 0           | 0    | 5                       | 6           | 3           | 0           | 0    | 5                   | 6           | 3           | 0           | 0    |
| 1997              | 0                   | 0           | 0           | 0           | 0    | 6                       | 4           | 3           | 0           | 0    | 6                   | 4           | 3           | 0           | 0    |
| 1998              | 0                   | 1           | 0           | 0           | 0    | 2                       | 4           | 2           | 0           | 0    | 2                   | 4           | 2           | 0           | 0    |
| 1999              | 2                   | 6           | 3           | 0           | 0    | 3                       | 7           | 4           | 0           | 0    | 3                   | 7           | 4           | 0           | 0    |
| Trawl             |                     |             |             |             |      |                         |             |             |             |      |                     |             |             |             |      |
| 1995              | 7                   | 5           | 15          | 3           | 5    | 10                      | 7           | 26          | 6           | 18   | 10                  | 7           | 26          | 6           | 18   |
| 1996              | 9                   | 4           | 18          | 4           | 2    | 9                       | 5           | 23          | 7           | 18   | 10                  | 5           | 23          | 7           | 18   |
| 1997              | 6                   | 3           | 16          | 1           | 2    | 12                      | 5           | 21          | 5           | 16   | 12                  | 5           | 21          | 5           | 16   |
| 1998              | 7                   | 2           | 14          | 1           | 0    | 8                       | 4           | 18          | 5           | 16   | 8                   | 4           | 18          | 5           | 16   |
| 1999              | 6                   | 2           | 7           | 1           | 2    | 9                       | 4           | 10          | 3           | 14   | 9                   | 4           | 10          | 3           | 14   |

Table 29.--Continued.

|                           | Gulf of Alaska      |      |      |      |      | Bering Sea and Aleutian |      |      |      |      | All Alaska          |      |      |      |      |
|---------------------------|---------------------|------|------|------|------|-------------------------|------|------|------|------|---------------------|------|------|------|------|
|                           | Vessel length class |      |      |      |      | Vessel length class     |      |      |      |      | Vessel length class |      |      |      |      |
|                           | <125                | 125- | 165- | 235- | >260 | <125                    | 125- | 165- | 235- | >260 | <125                | 125- | 165- | 235- | >260 |
|                           | 164                 | 234  | 259  |      |      | 164                     | 234  | 259  |      |      | 164                 | 234  | 259  |      |      |
| Mean vessel length (feet) |                     |      |      |      |      |                         |      |      |      |      |                     |      |      |      |      |
| Gear/Year                 |                     |      |      |      |      |                         |      |      |      |      |                     |      |      |      |      |
| Hook and line             |                     |      |      |      |      |                         |      |      |      |      |                     |      |      |      |      |
| 1995                      | 90                  | 143  | 179  | -    | -    | 101                     | 141  | 177  | 236  | -    | 93                  | 141  | 177  | 236  | -    |
| 1996                      | 93                  | 145  | 183  | -    | -    | 102                     | 142  | 180  | -    | -    | 95                  | 142  | 180  | -    | -    |
| 1997                      | 97                  | 137  | 183  | -    | -    | 94                      | 143  | 181  | -    | -    | 91                  | 143  | 181  | -    | -    |
| 1998                      | 100                 | 151  | 178  | -    | -    | 94                      | 145  | 180  | -    | -    | 94                  | 145  | 180  | -    | -    |
| 1999                      | 99                  | 146  | 175  | -    | -    | 104                     | 143  | 177  | -    | -    | 98                  | 143  | 177  | -    | -    |
| Pot                       |                     |      |      |      |      |                         |      |      |      |      |                     |      |      |      |      |
| 1995                      | 37                  | 165  | -    | -    | -    | 99                      | 155  | 166  | -    | -    | 99                  | 155  | 166  | -    | -    |
| 1996                      | -                   | -    | -    | -    | -    | 102                     | 149  | 173  | -    | -    | 102                 | 149  | 173  | -    | -    |
| 1997                      | -                   | -    | -    | -    | -    | 111                     | 146  | 169  | -    | -    | 111                 | 146  | 169  | -    | -    |
| 1998                      | -                   | 165  | -    | -    | -    | 118                     | 153  | 176  | -    | -    | 118                 | 153  | 176  | -    | -    |
| 1999                      | 108                 | 151  | 171  | -    | -    | 112                     | 150  | 172  | -    | -    | 112                 | 150  | 172  | -    | -    |
| Trawl                     |                     |      |      |      |      |                         |      |      |      |      |                     |      |      |      |      |
| 1995                      | 109                 | 144  | 200  | 242  | 293  | 109                     | 149  | 200  | 243  | 302  | 109                 | 149  | 200  | 243  | 302  |
| 1996                      | 109                 | 147  | 205  | 241  | 271  | 111                     | 149  | 204  | 241  | 302  | 108                 | 149  | 204  | 241  | 302  |
| 1997                      | 113                 | 149  | 207  | 238  | 303  | 107                     | 149  | 206  | 241  | 302  | 107                 | 149  | 206  | 241  | 302  |
| 1998                      | 114                 | 155  | 213  | 238  | -    | 115                     | 152  | 211  | 241  | 302  | 115                 | 152  | 211  | 241  | 302  |
| 1999                      | 113                 | 155  | 207  | 238  | 287  | 114                     | 152  | 207  | 245  | 306  | 114                 | 152  | 207  | 245  | 306  |

Table 29.--Continued.

|                          | Gulf of Alaska      |             |             |             |      | Bering Sea and Aleutian |             |             |             |      | All Alaska          |             |             |             |      |
|--------------------------|---------------------|-------------|-------------|-------------|------|-------------------------|-------------|-------------|-------------|------|---------------------|-------------|-------------|-------------|------|
|                          | Vessel length class |             |             |             |      | Vessel length class     |             |             |             |      | Vessel length class |             |             |             |      |
|                          | <125                | 125-<br>164 | 165-<br>234 | 235-<br>259 | >260 | <125                    | 125-<br>164 | 165-<br>234 | 235-<br>259 | >260 | <125                | 125-<br>164 | 165-<br>234 | 235-<br>259 | >260 |
| Mean registered net tons |                     |             |             |             |      |                         |             |             |             |      |                     |             |             |             |      |
| Gear/Year                |                     |             |             |             |      |                         |             |             |             |      |                     |             |             |             |      |
| Hook and line            |                     |             |             |             |      |                         |             |             |             |      |                     |             |             |             |      |
| 1995                     | 99                  | 212         | 845         | -           | -    | 111                     | 258         | 575         | 945         | -    | 100                 | 258         | 575         | 945         | -    |
| 1996                     | 102                 | 331         | 846         | -           | -    | 116                     | 271         | 526         | -           | -    | 104                 | 271         | 526         | -           | -    |
| 1997                     | 107                 | 289         | 846         | -           | -    | 106                     | 258         | 530         | -           | -    | 99                  | 258         | 530         | -           | -    |
| 1998                     | 116                 | 316         | 808         | -           | -    | 110                     | 271         | 602         | -           | -    | 110                 | 271         | 602         | -           | -    |
| 1999                     | 112                 | 239         | 604         | -           | -    | 121                     | 252         | 520         | -           | -    | 109                 | 252         | 520         | -           | -    |
| Pot                      |                     |             |             |             |      |                         |             |             |             |      |                     |             |             |             |      |
| 1995                     | 16                  | 491         | -           | -           | -    | 94                      | 378         | 192         | -           | -    | 94                  | 378         | 192         | -           | -    |
| 1996                     | -                   | -           | -           | -           | -    | 140                     | 292         | 397         | -           | -    | 140                 | 292         | 397         | -           | -    |
| 1997                     | -                   | -           | -           | -           | -    | 121                     | 331         | 245         | -           | -    | 121                 | 331         | 245         | -           | -    |
| 1998                     | -                   | 793         | -           | -           | -    | 128                     | 487         | 583         | -           | -    | 128                 | 487         | 583         | -           | -    |
| 1999                     | 133                 | 399         | 492         | -           | -    | 130                     | 409         | 478         | -           | -    | 130                 | 409         | 478         | -           | -    |
| Trawl                    |                     |             |             |             |      |                         |             |             |             |      |                     |             |             |             |      |
| 1995                     | 130                 | 232         | 773         | 1134        | 2231 | 127                     | 221         | 719         | 1201        | 1863 | 127                 | 221         | 719         | 1201        | 1863 |
| 1996                     | 142                 | 249         | 728         | 932         | 2206 | 141                     | 226         | 665         | 1116        | 1868 | 141                 | 226         | 665         | 1116        | 1868 |
| 1997                     | 136                 | 289         | 712         | 533         | 1611 | 130                     | 226         | 707         | 1056        | 1897 | 130                 | 226         | 707         | 1056        | 1897 |
| 1998                     | 136                 | 256         | 766         | 533         | -    | 150                     | 193         | 737         | 1056        | 1897 | 150                 | 193         | 737         | 1056        | 1897 |
| 1999                     | 136                 | 256         | 610         | 533         | 1618 | 141                     | 193         | 624         | 1130        | 1853 | 141                 | 193         | 624         | 1130        | 1853 |

Note: Includes only vessels that fished part of Federal TACs.

Source: Blend estimates, NMSF permits.

National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 30.--Number of vessels that caught groundfish off Alaska by area, tonnage caught, and gear, 1993-99.

|               | Gulf of Alaska |             |                | Bering Sea and Aleutian |             |                | All Alaska     |             |                |
|---------------|----------------|-------------|----------------|-------------------------|-------------|----------------|----------------|-------------|----------------|
|               | Tonnage caught |             |                | Tonnage caught          |             |                | Tonnage caught |             |                |
|               | Less than 2 t  | 2 t to 25 t | More than 25 t | Less than 2 t           | 2 t to 25 t | More than 25 t | Less than 2 t  | 2 t to 25 t | More than 25 t |
| Gear/Year     |                |             |                |                         |             |                |                |             |                |
| Hook and line |                |             |                |                         |             |                |                |             |                |
| 1993          | 361            | 525         | 315            | 10                      | 31          | 74             | 363            | 529         | 334            |
| 1994          | 467            | 625         | 294            | 20                      | 34          | 84             | 465            | 618         | 327            |
| 1995          | 481            | 354         | 272            | 38                      | 67          | 70             | 483            | 373         | 303            |
| 1996          | 418            | 343         | 256            | 40                      | 59          | 59             | 430            | 355         | 281            |
| 1997          | 384            | 355         | 236            | 33                      | 43          | 61             | 384            | 360         | 260            |
| 1998          | 349            | 362         | 176            | 24                      | 42          | 49             | 347            | 368         | 211            |
| 1999          | 408            | 350         | 176            | 30                      | 39          | 47             | 410            | 361         | 201            |
| Pot           |                |             |                |                         |             |                |                |             |                |
| 1993          | 8              | 29          | 64             | 3                       | 3           | 15             | 10             | 31          | 76             |
| 1994          | 19             | 29          | 62             | 3                       | 5           | 32             | 20             | 29          | 87             |
| 1995          | 12             | 59          | 117            | 13                      | 48          | 65             | 20             | 86          | 157            |
| 1996          | 7              | 41          | 98             | 5                       | 16          | 82             | 11             | 46          | 160            |
| 1997          | 18             | 26          | 103            | 13                      | 19          | 52             | 29             | 35          | 138            |
| 1998          | 10             | 50          | 121            | 13                      | 19          | 47             | 23             | 58          | 152            |
| 1999          | 14             | 46          | 152            | 5                       | 21          | 79             | 18             | 46          | 207            |
| Trawl         |                |             |                |                         |             |                |                |             |                |
| 1993          | 1              | 10          | 182            | 0                       | 2           | 180            | 0              | 9           | 273            |
| 1994          | 1              | 4           | 182            | 0                       | 1           | 163            | 0              | 3           | 253            |
| 1995          | 0              | 5           | 215            | 0                       | 1           | 183            | 0              | 1           | 263            |
| 1996          | 1              | 10          | 188            | 0                       | 4           | 188            | 1              | 9           | 267            |
| 1997          | 1              | 4           | 201            | 0                       | 2           | 166            | 0              | 4           | 258            |
| 1998          | 4              | 9           | 184            | 1                       | 0           | 165            | 4              | 6           | 251            |
| 1999          | 1              | 5           | 166            | 0                       | 5           | 161            | 0              | 5           | 237            |
| All gear      |                |             |                |                         |             |                |                |             |                |
| 1993          | 348            | 521         | 537            | 12                      | 35          | 262            | 350            | 526         | 652            |
| 1994          | 453            | 609         | 509            | 21                      | 40          | 274            | 451            | 600         | 632            |
| 1995          | 455            | 379         | 562            | 44                      | 109         | 311            | 460            | 412         | 673            |
| 1996          | 402            | 355         | 512            | 40                      | 76          | 323            | 412            | 365         | 671            |
| 1997          | 380            | 354         | 511            | 45                      | 61          | 275            | 389            | 362         | 623            |
| 1998          | 332            | 387         | 434            | 25                      | 55          | 257            | 330            | 391         | 563            |
| 1999          | 396            | 373         | 439            | 33                      | 61          | 279            | 395            | 380         | 583            |

Notes: Includes only vessels fishing part of Federal TACs.

Source: Blend estimates, fish tickets, Norpac data, federal permit file, CFEC vessel data, National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.



Table 31.--Number of vessels that caught groundfish off Alaska by area, residency, target, and gear, 1995-99.

|                  | Gulf of Alaska |       |      | Bering Sea and Aleutian |       |      | All Alaska |       |      |
|------------------|----------------|-------|------|-------------------------|-------|------|------------|-------|------|
|                  | Alaska         | Other | Unk. | Alaska                  | Other | Unk. | Alaska     | Other | Unk. |
| Gear/Target/Year |                |       |      |                         |       |      |            |       |      |
| All gear         |                |       |      |                         |       |      |            |       |      |
| All groundfish   |                |       |      |                         |       |      |            |       |      |
| 1995             | 1,006          | 365   | 13   | 139                     | 324   | 0    | 1,042      | 481   | 13   |
| 1996             | 906            | 321   | 29   | 126                     | 303   | 8    | 946        | 456   | 37   |
| 1997             | 902            | 325   | 7    | 100                     | 278   | 0    | 921        | 439   | 7    |
| 1998             | 798            | 319   | 9    | 85                      | 251   | 0    | 821        | 430   | 9    |
| 1999             | 828            | 336   | 31   | 90                      | 275   | 5    | 853        | 454   | 36   |
| Hook and line    |                |       |      |                         |       |      |            |       |      |
| Sablefish        |                |       |      |                         |       |      |            |       |      |
| 1995             | 450            | 150   | 7    | 30                      | 60    | 0    | 451        | 155   | 7    |
| 1996             | 416            | 147   | 8    | 31                      | 51    | 0    | 418        | 152   | 8    |
| 1997             | 360            | 132   | 2    | 35                      | 48    | 0    | 364        | 138   | 2    |
| 1998             | 310            | 127   | 2    | 21                      | 26    | 0    | 317        | 131   | 2    |
| 1999             | 300            | 127   | 5    | 20                      | 33    | 0    | 306        | 135   | 5    |
| Pacific cod      |                |       |      |                         |       |      |            |       |      |
| 1995             | 355            | 51    | 0    | 56                      | 44    | 0    | 395        | 80    | 0    |
| 1996             | 193            | 26    | 4    | 45                      | 40    | 3    | 230        | 51    | 7    |
| 1997             | 354            | 51    | 3    | 28                      | 41    | 0    | 372        | 76    | 3    |
| 1998             | 295            | 55    | 3    | 21                      | 37    | 0    | 309        | 81    | 3    |
| 1999             | 342            | 67    | 11   | 28                      | 47    | 1    | 358        | 97    | 12   |
| Flatfish         |                |       |      |                         |       |      |            |       |      |
| 1995             | 1              | 2     | 0    | 8                       | 36    | 0    | 9          | 36    | 0    |
| 1996             | 2              | 0     | 0    | 17                      | 35    | 0    | 19         | 35    | 0    |
| 1997             | 1              | 0     | 0    | 20                      | 30    | 0    | 20         | 30    | 0    |
| 1998             | 0              | 0     | 0    | 23                      | 28    | 0    | 23         | 28    | 0    |
| 1999             | 1              | 1     | 0    | 14                      | 26    | 0    | 14         | 26    | 0    |
| Rockfish         |                |       |      |                         |       |      |            |       |      |
| 1995             | 346            | 56    | 7    | 4                       | 17    | 0    | 348        | 71    | 7    |
| 1996             | 386            | 68    | 13   | 4                       | 12    | 0    | 388        | 78    | 13   |
| 1997             | 317            | 54    | 3    | 9                       | 3     | 0    | 324        | 57    | 3    |
| 1998             | 289            | 59    | 2    | 9                       | 1     | 0    | 293        | 59    | 2    |
| 1999             | 312            | 71    | 8    | 7                       | 9     | 0    | 315        | 77    | 8    |
| All groundfish   |                |       |      |                         |       |      |            |       |      |
| 1995             | 873            | 209   | 13   | 82                      | 93    | 0    | 903        | 231   | 13   |
| 1996             | 776            | 201   | 24   | 73                      | 81    | 3    | 804        | 219   | 27   |
| 1997             | 770            | 193   | 6    | 61                      | 75    | 0    | 782        | 210   | 6    |
| 1998             | 678            | 189   | 7    | 54                      | 60    | 0    | 695        | 211   | 7    |
| 1999             | 696            | 203   | 23   | 48                      | 67    | 1    | 710        | 226   | 24   |
| Pot              |                |       |      |                         |       |      |            |       |      |
| Pacific cod      |                |       |      |                         |       |      |            |       |      |
| 1995             | 151            | 36    | 0    | 38                      | 86    | 0    | 161        | 101   | 0    |
| 1996             | 124            | 18    | 4    | 38                      | 60    | 2    | 140        | 68    | 6    |
| 1997             | 125            | 21    | 0    | 26                      | 57    | 0    | 132        | 69    | 0    |
| 1998             | 135            | 31    | 1    | 22                      | 56    | 0    | 144        | 73    | 1    |
| 1999             | 159            | 49    | 3    | 32                      | 71    | 0    | 173        | 92    | 3    |
| All groundfish   |                |       |      |                         |       |      |            |       |      |
| 1995             | 151            | 36    | 1    | 39                      | 86    | 0    | 161        | 101   | 1    |
| 1996             | 124            | 18    | 4    | 41                      | 60    | 2    | 143        | 68    | 6    |
| 1997             | 125            | 22    | 0    | 27                      | 57    | 0    | 132        | 70    | 0    |
| 1998             | 135            | 31    | 1    | 22                      | 57    | 0    | 144        | 74    | 1    |
| 1999             | 159            | 50    | 3    | 32                      | 73    | 0    | 173        | 95    | 3    |

Table 31.--Continued.

|                  | Gulf of Alaska |       |      | Bering Sea and Aleutian |       |      | All Alaska |       |      |
|------------------|----------------|-------|------|-------------------------|-------|------|------------|-------|------|
|                  | Alaska         | Other | Unk. | Alaska                  | Other | Unk. | Alaska     | Other | Unk. |
| Gear/Target/Year |                |       |      |                         |       |      |            |       |      |
| Trawl            |                |       |      |                         |       |      |            |       |      |
| Pollock          |                |       |      |                         |       |      |            |       |      |
| 1995             | 42             | 95    | 0    | 19                      | 139   | 0    | 44         | 153   | 0    |
| 1996             | 38             | 59    | 1    | 16                      | 141   | 1    | 43         | 153   | 2    |
| 1997             | 54             | 71    | 1    | 12                      | 127   | 0    | 57         | 149   | 1    |
| 1998             | 45             | 77    | 1    | 9                       | 128   | 0    | 49         | 156   | 1    |
| 1999             | 32             | 76    | 4    | 11                      | 118   | 2    | 36         | 135   | 6    |
| Pacific cod      |                |       |      |                         |       |      |            |       |      |
| 1995             | 72             | 85    | 0    | 14                      | 111   | 0    | 79         | 148   | 0    |
| 1996             | 63             | 61    | 0    | 13                      | 131   | 2    | 71         | 158   | 2    |
| 1997             | 71             | 71    | 0    | 7                       | 117   | 0    | 75         | 151   | 0    |
| 1998             | 65             | 64    | 1    | 9                       | 112   | 0    | 66         | 140   | 1    |
| 1999             | 60             | 54    | 1    | 5                       | 100   | 2    | 61         | 133   | 3    |
| Flatfish         |                |       |      |                         |       |      |            |       |      |
| 1995             | 30             | 33    | 0    | 7                       | 79    | 0    | 33         | 93    | 0    |
| 1996             | 35             | 34    | 1    | 4                       | 46    | 0    | 36         | 66    | 1    |
| 1997             | 34             | 29    | 0    | 3                       | 42    | 0    | 34         | 59    | 0    |
| 1998             | 23             | 28    | 0    | 3                       | 35    | 0    | 23         | 52    | 0    |
| 1999             | 14             | 26    | 0    | 2                       | 29    | 0    | 14         | 46    | 0    |
| Rockfish         |                |       |      |                         |       |      |            |       |      |
| 1995             | 6              | 21    | 0    | 3                       | 11    | 0    | 6          | 22    | 0    |
| 1996             | 21             | 25    | 0    | 1                       | 14    | 0    | 22         | 28    | 0    |
| 1997             | 16             | 24    | 0    | 1                       | 9     | 0    | 16         | 24    | 0    |
| 1998             | 15             | 25    | 0    | 2                       | 6     | 0    | 16         | 27    | 0    |
| 1999             | 13             | 27    | 0    | 1                       | 13    | 0    | 13         | 33    | 0    |
| Atka mack.       |                |       |      |                         |       |      |            |       |      |
| 1995             | 0              | 2     | 0    | 3                       | 14    | 0    | 3          | 15    | 0    |
| 1996             | 1              | 8     | 0    | 1                       | 16    | 0    | 1          | 17    | 0    |
| 1997             | 0              | 0     | 0    | 1                       | 11    | 0    | 1          | 11    | 0    |
| 1998             | 0              | 0     | 0    | 2                       | 12    | 0    | 2          | 12    | 0    |
| 1999             | 0              | 0     | 0    | 1                       | 16    | 0    | 1          | 16    | 0    |
| All groundfish   |                |       |      |                         |       |      |            |       |      |
| 1995             | 78             | 139   | 0    | 25                      | 159   | 0    | 81         | 183   | 0    |
| 1996             | 76             | 116   | 2    | 18                      | 169   | 3    | 77         | 193   | 5    |
| 1997             | 76             | 123   | 1    | 15                      | 151   | 0    | 78         | 181   | 1    |
| 1998             | 74             | 115   | 1    | 13                      | 152   | 0    | 75         | 179   | 1    |
| 1999             | 61             | 105   | 5    | 14                      | 145   | 4    | 64         | 166   | 9    |

Note: A target is calculated based on vessel, week, processing mode, NMFS area, and gear. Vessels are classified by the residency of the owner of the fishing vessel. Includes only vessels fishing part of Federal TACs.

Source: Blend estimates, fish tickets, Norpac data, federal permit file, CFEC vessel data, National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 32.--Number of vessels that caught groundfish off Alaska by month, area, catcher type, and gear, 1995-99.

|  | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Year |
|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| Area/Catcher type/Gear/Year                    |     |     |     |     |     |     |     |     |     |     |     |     |      |
| Gulf of Alaska                                 |     |     |     |     |     |     |     |     |     |     |     |     |      |
| Catcher vessels (excluding catcher-processors) |     |     |     |     |     |     |     |     |     |     |     |     |      |
| Hook and line                                  |     |     |     |     |     |     |     |     |     |     |     |     |      |
| 1995   | 119 | 103 | 167 | 248 | 393 | 374 | 202 | 211 | 307 | 217 | 149 | 3   | 1079 |
| 1996   | 134 | 126 | 253 | 242 | 394 | 342 | 148 | 223 | 197 | 156 | 105 | 31  | 998  |
| 1997   | 125 | 116 | 210 | 270 | 430 | 309 | 150 | 199 | 165 | 150 | 82  | 11  | 957  |
| 1998   | 88  | 73  | 135 | 198 | 389 | 303 | 167 | 197 | 195 | 163 | 112 | 14  | 871  |
| 1999   | 82  | 55  | 155 | 195 | 429 | 346 | 175 | 149 | 169 | 205 | 112 | 7   | 910  |
| Pot  |     |     |     |     |     |     |     |     |     |     |     |     |      |
| 1995   | 109 | 105 | 140 | 8   | 6   | 3   | 0   | 3   | 5   | 12  | 11  | 8   | 185  |
| 1996   | 103 | 85  | 99  | 13  | 14  | 2   | 1   | 1   | 1   | 2   | 0   | 0   | 146  |
| 1997   | 63  | 59  | 58  | 64  | 58  | 14  | 12  | 4   | 17  | 17  | 23  | 31  | 146  |
| 1998   | 71  | 68  | 101 | 124 | 32  | 0   | 0   | 0   | 3   | 25  | 28  | 31  | 180  |
| 1999   | 66  | 73  | 109 | 128 | 79  | 13  | 0   | 0   | 21  | 22  | 23  | 41  | 201  |
| Trawl  |     |     |     |     |     |     |     |     |     |     |     |     |      |
| 1995   | 72  | 90  | 140 | 34  | 23  | 81  | 65  | 0   | 0   | 102 | 0   | 0   | 186  |
| 1996   | 79  | 96  | 108 | 33  | 15  | 50  | 33  | 29  | 63  | 44  | 21  | 2   | 161  |
| 1997   | 85  | 104 | 143 | 42  | 17  | 53  | 24  | 9   | 88  | 28  | 16  | 0   | 176  |
| 1998   | 80  | 103 | 118 | 44  | 15  | 79  | 30  | 14  | 70  | 56  | 0   | 0   | 172  |
| 1999   | 77  | 99  | 103 | 24  | 4   | 60  | 26  | 8   | 83  | 54  | 1   | 0   | 154  |
| All gear                                       |     |     |     |     |     |     |     |     |     |     |     |     |      |
| 1995   | 289 | 291 | 439 | 289 | 421 | 452 | 266 | 213 | 312 | 329 | 157 | 11  | 1331 |
| 1996   | 307 | 297 | 452 | 288 | 421 | 390 | 182 | 252 | 260 | 202 | 125 | 33  | 1213 |
| 1997   | 267 | 278 | 406 | 373 | 499 | 373 | 185 | 211 | 268 | 192 | 120 | 42  | 1197 |
| 1998   | 231 | 242 | 322 | 362 | 431 | 381 | 197 | 210 | 268 | 241 | 140 | 45  | 1111 |
| 1999   | 222 | 225 | 331 | 344 | 499 | 419 | 201 | 157 | 273 | 279 | 135 | 48  | 1156 |
| Catcher-processors                             |     |     |     |     |     |     |     |     |     |     |     |     |      |
| Hook and line                                  |     |     |     |     |     |     |     |     |     |     |     |     |      |
| 1995   | 6   | 12  | 15  | 4   | 11  | 14  | 7   | 4   | 6   | 7   | 5   | 1   | 36   |
| 1996   | 8   | 15  | 12  | 4   | 10  | 12  | 4   | 2   | 4   | 4   | 4   | 0   | 27   |
| 1997   | 8   | 9   | 7   | 1   | 7   | 10  | 7   | 1   | 4   | 1   | 1   | 0   | 25   |
| 1998   | 5   | 5   | 5   | 2   | 3   | 7   | 6   | 5   | 5   | 2   | 2   | 0   | 18   |
| 1999   | 5   | 12  | 11  | 12  | 8   | 8   | 5   | 3   | 3   | 4   | 0   | 0   | 29   |
| Pot  |     |     |     |     |     |     |     |     |     |     |     |     |      |
| 1995   | 0   | 0   | 2   | 0   | 0   | 0   | 0   | 0   | 0   | 1   | 0   | 0   | 3    |
| 1998   | 0   | 0   | 0   | 0   | 1   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 1    |
| 1999   | 0   | 0   | 0   | 2   | 5   | 10  | 6   | 6   | 1   | 0   | 0   | 0   | 11   |
| Trawl  |     |     |     |     |     |     |     |     |     |     |     |     |      |
| 1995   | 2   | 8   | 13  | 12  | 7   | 0   | 21  | 0   | 2   | 21  | 0   | 0   | 35   |
| 1996   | 1   | 5   | 20  | 16  | 4   | 0   | 21  | 13  | 2   | 12  | 6   | 0   | 37   |
| 1997   | 1   | 9   | 12  | 9   | 4   | 2   | 18  | 3   | 0   | 7   | 5   | 0   | 29   |
| 1998   | 3   | 2   | 11  | 12  | 5   | 0   | 16  | 7   | 0   | 10  | 0   | 0   | 24   |
| 1999   | 3   | 3   | 6   | 9   | 3   | 0   | 12  | 13  | 1   | 7   | 0   | 0   | 18   |
| All gear                                       |     |     |     |     |     |     |     |     |     |     |     |     |      |
| 1995   | 8   | 20  | 30  | 16  | 18  | 14  | 28  | 4   | 8   | 29  | 5   | 1   | 74   |
| 1996   | 9   | 19  | 32  | 20  | 14  | 12  | 25  | 15  | 6   | 16  | 10  | 0   | 63   |
| 1997   | 9   | 18  | 19  | 10  | 11  | 12  | 25  | 4   | 4   | 8   | 6   | 0   | 54   |
| 1998   | 8   | 7   | 16  | 14  | 9   | 7   | 22  | 12  | 5   | 12  | 2   | 0   | 43   |
| 1999   | 8   | 15  | 17  | 23  | 16  | 18  | 23  | 22  | 5   | 11  | 0   | 0   | 57   |

Table 32.--Continued.

|  | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Year |     |
|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|
| Area/Catcher type/Gear/Year                    |     |     |     |     |     |     |     |     |     |     |     |     |      |     |
| Bering Sea and Aleutian Islands                |     |     |     |     |     |     |     |     |     |     |     |     |      |     |
| Catcher vessels (excluding catcher-processors) |     |     |     |     |     |     |     |     |     |     |     |     |      |     |
| Hook and line                                  |     |     |     |     |     |     |     |     |     |     |     |     |      |     |
| 1995   |     | 11  | 8   | 11  | 21  | 38  | 38  | 44  | 34  | 37  | 17  | 18  | 8    | 136 |
| 1996   |     | 8   | 7   | 7   | 11  | 33  | 46  | 44  | 44  | 17  | 21  | 12  | 11   | 122 |
| 1997   |     | 2   | 0   | 0   | 11  | 41  | 40  | 30  | 36  | 14  | 13  | 4   | 1    | 101 |
| 1998   |     | 0   | 0   | 1   | 3   | 18  | 29  | 25  | 31  | 14  | 20  | 10  | 0    | 77  |
| 1999   |     | 1   | 1   | 2   | 6   | 19  | 19  | 36  | 28  | 18  | 18  | 7   | 2    | 78  |
| Pot  |     |     |     |     |     |     |     |     |     |     |     |     |      |     |
| 1995   |     | 2   | 13  | 50  | 48  | 37  | 18  | 5   | 8   | 20  | 14  | 12  | 19   | 118 |
| 1996   |     | 2   | 1   | 41  | 60  | 50  | 32  | 7   | 12  | 13  | 23  | 10  | 14   | 95  |
| 1997   |     | 2   | 1   | 6   | 33  | 35  | 15  | 7   | 7   | 13  | 20  | 27  | 6    | 76  |
| 1998   |     | 3   | 1   | 5   | 30  | 30  | 8   | 3   | 1   | 6   | 17  | 13  | 2    | 71  |
| 1999   |     | 2   | 2   | 2   | 40  | 54  | 22  | 0   | 0   | 24  | 30  | 1   | 1    | 90  |
| Trawl  |     |     |     |     |     |     |     |     |     |     |     |     |      |     |
| 1995   |     | 78  | 97  | 96  | 75  | 26  | 7   | 1   | 107 | 114 | 19  | 1   | 0    | 125 |
| 1996   |     | 87  | 107 | 111 | 90  | 46  | 4   | 0   | 14  | 111 | 111 | 41  | 0    | 131 |
| 1997   |     | 86  | 99  | 91  | 86  | 31  | 0   | 0   | 15  | 97  | 99  | 0   | 1    | 113 |
| 1998   |     | 91  | 100 | 92  | 70  | 12  | 2   | 2   | 12  | 88  | 93  | 13  | 0    | 118 |
| 1999   |     | 64  | 86  | 80  | 70  | 0   | 0   | 12  | 91  | 73  | 69  | 2   | 1    | 126 |
| All gear                                       |     |     |     |     |     |     |     |     |     |     |     |     |      |     |
| 1995   |     | 91  | 118 | 156 | 141 | 100 | 62  | 49  | 148 | 170 | 48  | 29  | 26   | 364 |
| 1996   |     | 97  | 115 | 159 | 161 | 126 | 81  | 51  | 70  | 140 | 154 | 63  | 24   | 340 |
| 1997   |     | 90  | 100 | 97  | 130 | 106 | 55  | 37  | 58  | 124 | 132 | 31  | 7    | 286 |
| 1998   |     | 94  | 101 | 98  | 102 | 58  | 39  | 30  | 44  | 108 | 130 | 36  | 2    | 246 |
| 1999   |     | 67  | 89  | 84  | 115 | 73  | 41  | 48  | 119 | 115 | 117 | 10  | 4    | 288 |
| Catcher-processors                             |     |     |     |     |     |     |     |     |     |     |     |     |      |     |
| Hook and line                                  |     |     |     |     |     |     |     |     |     |     |     |     |      |     |
| 1995   |     | 29  | 32  | 36  | 40  | 40  | 5   | 4   | 5   | 35  | 36  | 25  | 21   | 47  |
| 1996   |     | 30  | 26  | 35  | 34  | 40  | 6   | 4   | 4   | 31  | 35  | 27  | 0    | 44  |
| 1997   |     | 25  | 26  | 30  | 30  | 41  | 5   | 4   | 3   | 33  | 35  | 32  | 27   | 44  |
| 1998   |     | 25  | 25  | 27  | 29  | 38  | 23  | 4   | 4   | 30  | 36  | 34  | 32   | 43  |
| 1999   |     | 27  | 28  | 34  | 36  | 27  | 6   | 4   | 8   | 37  | 37  | 8   | 14   | 41  |
| Pot  |     |     |     |     |     |     |     |     |     |     |     |     |      |     |
| 1995   |     | 0   | 1   | 5   | 3   | 6   | 5   | 4   | 5   | 4   | 4   | 0   | 0    | 8   |
| 1996   |     | 0   | 0   | 7   | 8   | 10  | 11  | 7   | 7   | 7   | 7   | 2   | 4    | 14  |
| 1997   |     | 1   | 0   | 2   | 4   | 6   | 8   | 7   | 5   | 4   | 6   | 4   | 2    | 13  |
| 1998   |     | 0   | 0   | 0   | 3   | 3   | 5   | 4   | 3   | 4   | 3   | 1   | 1    | 8   |
| 1999   |     | 0   | 0   | 0   | 5   | 11  | 4   | 1   | 1   | 6   | 3   | 0   | 0    | 14  |
| Trawl  |     |     |     |     |     |     |     |     |     |     |     |     |      |     |
| 1995   |     | 60  | 62  | 57  | 46  | 35  | 1   | 24  | 58  | 55  | 35  | 4   | 0    | 67  |
| 1996   |     | 57  | 60  | 59  | 36  | 23  | 20  | 17  | 43  | 53  | 49  | 12  | 0    | 62  |
| 1997   |     | 43  | 56  | 53  | 34  | 22  | 18  | 21  | 42  | 54  | 51  | 16  | 2    | 59  |
| 1998   |     | 49  | 48  | 43  | 25  | 16  | 7   | 17  | 32  | 50  | 47  | 21  | 5    | 51  |
| 1999   |     | 36  | 36  | 37  | 29  | 20  | 6   | 29  | 38  | 37  | 32  | 6   | 2    | 40  |
| All gear                                       |     |     |     |     |     |     |     |     |     |     |     |     |      |     |
| 1995   |     | 89  | 95  | 97  | 88  | 80  | 11  | 32  | 67  | 94  | 75  | 29  | 21   | 118 |
| 1996   |     | 86  | 85  | 101 | 78  | 72  | 37  | 27  | 54  | 91  | 90  | 41  | 4    | 114 |
| 1997   |     | 69  | 82  | 85  | 68  | 69  | 31  | 32  | 50  | 91  | 91  | 52  | 31   | 113 |
| 1998   |     | 74  | 73  | 70  | 57  | 57  | 34  | 25  | 39  | 83  | 86  | 56  | 38   | 99  |
| 1999   |     | 63  | 63  | 71  | 70  | 55  | 16  | 33  | 46  | 78  | 72  | 14  | 16   | 88  |

Table 32.--Continued.

|  | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Year |
|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| Area/Catcher type/Gear/Year                    |     |     |     |     |     |     |     |     |     |     |     |     |      |
| All Alaska                                     |     |     |     |     |     |     |     |     |     |     |     |     |      |
| Catcher vessels (excluding catcher-processors) |     |     |     |     |     |     |     |     |     |     |     |     |      |
| Hook and line                                  |     |     |     |     |     |     |     |     |     |     |     |     |      |
| 1995   | 130 | 111 | 176 | 267 | 422 | 398 | 227 | 235 | 330 | 231 | 165 | 11  | 1119 |
| 1996   | 140 | 132 | 259 | 253 | 415 | 371 | 174 | 252 | 212 | 173 | 115 | 42  | 1031 |
| 1997   | 127 | 116 | 210 | 281 | 446 | 333 | 171 | 223 | 175 | 155 | 84  | 12  | 969  |
| 1998   | 88  | 73  | 136 | 201 | 399 | 326 | 183 | 215 | 207 | 176 | 121 | 14  | 890  |
| 1999   | 83  | 56  | 157 | 201 | 441 | 363 | 202 | 171 | 182 | 222 | 119 | 9   | 935  |
| Pot  |     |     |     |     |     |     |     |     |     |     |     |     |      |
| 1995   | 111 | 116 | 178 | 49  | 38  | 20  | 5   | 11  | 24  | 26  | 23  | 27  | 256  |
| 1996   | 104 | 85  | 135 | 62  | 52  | 34  | 8   | 12  | 14  | 23  | 10  | 14  | 209  |
| 1997   | 65  | 60  | 64  | 84  | 83  | 28  | 17  | 10  | 30  | 36  | 47  | 36  | 194  |
| 1998   | 73  | 68  | 105 | 144 | 54  | 8   | 3   | 1   | 9   | 36  | 40  | 31  | 225  |
| 1999   | 68  | 74  | 111 | 163 | 119 | 34  | 0   | 0   | 43  | 49  | 24  | 42  | 256  |
| Trawl  |     |     |     |     |     |     |     |     |     |     |     |     |      |
| 1995   | 144 | 173 | 194 | 102 | 48  | 84  | 65  | 107 | 114 | 109 | 1   | 0   | 205  |
| 1996   | 163 | 192 | 192 | 121 | 61  | 53  | 33  | 42  | 143 | 143 | 61  | 2   | 215  |
| 1997   | 170 | 194 | 188 | 127 | 48  | 53  | 24  | 24  | 151 | 123 | 16  | 1   | 206  |
| 1998   | 168 | 191 | 180 | 110 | 27  | 79  | 32  | 26  | 139 | 142 | 13  | 0   | 213  |
| 1999   | 141 | 175 | 174 | 93  | 4   | 60  | 38  | 97  | 127 | 114 | 3   | 1   | 202  |
| All gear                                       |     |     |     |     |     |     |     |     |     |     |     |     |      |
| 1995   | 374 | 393 | 539 | 414 | 505 | 495 | 295 | 351 | 466 | 360 | 184 | 37  | 1445 |
| 1996   | 398 | 399 | 577 | 436 | 522 | 453 | 215 | 305 | 367 | 338 | 185 | 57  | 1350 |
| 1997   | 356 | 369 | 456 | 489 | 570 | 411 | 211 | 256 | 354 | 310 | 146 | 48  | 1280 |
| 1998   | 321 | 330 | 389 | 449 | 473 | 412 | 218 | 241 | 355 | 351 | 174 | 45  | 1195 |
| 1999   | 289 | 302 | 406 | 453 | 549 | 457 | 240 | 268 | 352 | 383 | 145 | 52  | 1274 |
| Catcher-processors                             |     |     |     |     |     |     |     |     |     |     |     |     |      |
| Hook and line                                  |     |     |     |     |     |     |     |     |     |     |     |     |      |
| 1995   | 33  | 36  | 41  | 42  | 41  | 15  | 8   | 8   | 38  | 39  | 26  | 21  | 52   |
| 1996   | 35  | 35  | 38  | 37  | 42  | 17  | 8   | 6   | 35  | 38  | 27  | 0   | 47   |
| 1997   | 28  | 30  | 32  | 31  | 42  | 14  | 10  | 4   | 34  | 36  | 32  | 27  | 46   |
| 1998   | 27  | 27  | 28  | 31  | 38  | 25  | 10  | 8   | 32  | 38  | 35  | 32  | 43   |
| 1999   | 31  | 36  | 38  | 36  | 28  | 14  | 7   | 10  | 38  | 39  | 8   | 14  | 44   |
| Pot  |     |     |     |     |     |     |     |     |     |     |     |     |      |
| 1995   | 0   | 1   | 5   | 3   | 6   | 5   | 4   | 5   | 4   | 4   | 0   | 0   | 8    |
| 1996   | 0   | 0   | 7   | 8   | 10  | 11  | 7   | 7   | 7   | 7   | 2   | 4   | 14   |
| 1997   | 1   | 0   | 2   | 4   | 6   | 8   | 7   | 5   | 4   | 6   | 4   | 2   | 13   |
| 1998   | 0   | 0   | 0   | 3   | 3   | 5   | 4   | 3   | 4   | 3   | 1   | 1   | 8    |
| 1999   | 0   | 0   | 0   | 5   | 12  | 10  | 7   | 7   | 7   | 3   | 0   | 0   | 14   |
| Trawl  |     |     |     |     |     |     |     |     |     |     |     |     |      |
| 1995   | 60  | 62  | 61  | 51  | 37  | 1   | 29  | 58  | 55  | 41  | 4   | 0   | 67   |
| 1996   | 57  | 61  | 60  | 46  | 25  | 20  | 30  | 44  | 53  | 52  | 17  | 0   | 63   |
| 1997   | 43  | 56  | 56  | 38  | 24  | 19  | 26  | 42  | 54  | 53  | 21  | 2   | 60   |
| 1998   | 50  | 50  | 45  | 30  | 20  | 7   | 26  | 32  | 50  | 48  | 21  | 5   | 51   |
| 1999   | 37  | 39  | 39  | 34  | 21  | 6   | 29  | 38  | 37  | 37  | 6   | 2   | 40   |
| All gear                                       |     |     |     |     |     |     |     |     |     |     |     |     |      |
| 1995   | 93  | 99  | 106 | 95  | 83  | 21  | 41  | 70  | 97  | 84  | 30  | 21  | 123  |
| 1996   | 91  | 94  | 105 | 91  | 76  | 48  | 44  | 57  | 94  | 96  | 46  | 4   | 117  |
| 1997   | 72  | 86  | 90  | 73  | 72  | 41  | 43  | 51  | 92  | 94  | 57  | 31  | 116  |
| 1998   | 77  | 77  | 73  | 64  | 61  | 36  | 40  | 43  | 85  | 89  | 57  | 38  | 99   |
| 1999   | 68  | 74  | 77  | 75  | 58  | 30  | 42  | 54  | 79  | 79  | 14  | 16  | 91   |

Notes: Includes only vessels fishing part of Federal TACs.

Source: Blend estimates, fish tickets, Norpac data, federal permit file, CFEC vessel data, National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 33.--Catcher vessel (excluding catcher-processors) weeks of fishing groundfish off Alaska by area, vessel length class (feet), gear, and target, 1995-99.

|                  | Gulf of Alaska      |            |      | Bering Sea and Aleutian |            |      | All Alaska          |            |      |
|------------------|---------------------|------------|------|-------------------------|------------|------|---------------------|------------|------|
|                  | Vessel length class |            |      | Vessel length class     |            |      | Vessel length class |            |      |
|                  | <60                 | 60-<br>124 | >124 | <60                     | 60-<br>124 | >124 | <60                 | 60-<br>124 | >124 |
| Gear/Target/Year |                     |            |      |                         |            |      |                     |            |      |
| Hook and line    |                     |            |      |                         |            |      |                     |            |      |
| Sablefish        |                     |            |      |                         |            |      |                     |            |      |
| 1995             | 1207                | 523        | 2    | 52                      | 98         | -    | 1258                | 621        | 2    |
| 1996             | 1197                | 455        | 5    | 48                      | 84         | -    | 1245                | 539        | 5    |
| 1997             | 1052                | 355        | 2    | 58                      | 85         | -    | 1109                | 440        | 2    |
| 1998             | 952                 | 306        | 1    | 16                      | 42         | -    | 968                 | 348        | 1    |
| 1999             | 915                 | 302        | -    | 22                      | 48         | -    | 938                 | 350        | -    |
| Pacific cod      |                     |            |      |                         |            |      |                     |            |      |
| 1995             | 855                 | 90         | 1    | 360                     | 4          | -    | 1215                | 94         | 1    |
| 1996             | 731                 | 48         | 1    | 268                     | 7          | 0    | 999                 | 55         | 1    |
| 1997             | 1269                | 50         | 1    | 94                      | 13         | -    | 1362                | 63         | 1    |
| 1998             | 1036                | 66         | 2    | 89                      | 5          | -    | 1125                | 71         | 2    |
| 1999             | 1058                | 74         | 3    | 85                      | 39         | 4    | 1143                | 113        | 7    |
| Flatfish         |                     |            |      |                         |            |      |                     |            |      |
| 1995             | -                   | -          | -    | 6                       | 7          | -    | 6                   | 7          | -    |
| 1996             | 0                   | -          | -    | 11                      | 14         | -    | 11                  | 14         | -    |
| 1997             | -                   | -          | -    | 20                      | 8          | -    | 20                  | 8          | -    |
| 1998             | -                   | -          | -    | 57                      | 7          | -    | 57                  | 7          | -    |
| 1999             | -                   | 0          | -    | 11                      | 5          | -    | 11                  | 5          | -    |
| Rockfish         |                     |            |      |                         |            |      |                     |            |      |
| 1995             | 1070                | 25         | -    | 7                       | 11         | -    | 1078                | 37         | -    |
| 1996             | 1112                | 42         | -    | 3                       | 10         | 1    | 1115                | 52         | 1    |
| 1997             | 795                 | 29         | -    | 9                       | 1          | -    | 804                 | 30         | -    |
| 1998             | 767                 | 40         | 4    | 3                       | 3          | -    | 770                 | 43         | 4    |
| 1999             | 797                 | 49         | -    | 10                      | 7          | -    | 807                 | 56         | -    |
| All groundfish   |                     |            |      |                         |            |      |                     |            |      |
| 1995             | 3168                | 645        | 3    | 424                     | 121        | -    | 3593                | 766        | 3    |
| 1996             | 3111                | 567        | 7    | 330                     | 121        | 1    | 3441                | 689        | 8    |
| 1997             | 3167                | 444        | 4    | 183                     | 114        | -    | 3350                | 558        | 4    |
| 1998             | 2819                | 422        | 7    | 165                     | 60         | -    | 2984                | 482        | 7    |
| 1999             | 2821                | 432        | 3    | 129                     | 107        | 4    | 2950                | 540        | 7    |
| Pot              |                     |            |      |                         |            |      |                     |            |      |
| Pacific cod      |                     |            |      |                         |            |      |                     |            |      |
| 1995             | 690                 | 324        | 13   | 68                      | 363        | 90   | 758                 | 687        | 103  |
| 1996             | 515                 | 299        | 15   | 22                      | 427        | 129  | 538                 | 726        | 144  |
| 1997             | 723                 | 300        | 4    | 6                       | 240        | 108  | 729                 | 540        | 111  |
| 1998             | 790                 | 297        | 4    | 8                       | 167        | 55   | 798                 | 464        | 59   |
| 1999             | 1018                | 363        | 1    | 4                       | 250        | 115  | 1021                | 613        | 116  |
| All groundfish   |                     |            |      |                         |            |      |                     |            |      |
| 1995             | 690                 | 325        | 13   | 68                      | 364        | 90   | 758                 | 689        | 103  |
| 1996             | 518                 | 300        | 15   | 26                      | 429        | 129  | 545                 | 729        | 144  |
| 1997             | 731                 | 302        | 4    | 6                       | 241        | 108  | 737                 | 543        | 111  |
| 1998             | 917                 | 298        | 4    | 8                       | 168        | 55   | 925                 | 466        | 59   |
| 1999             | 1023                | 365        | 1    | 4                       | 254        | 119  | 1026                | 619        | 120  |

Table 33.--Continued.

|                | Gulf of Alaska      |            |      | Bering Sea and Aleutian |            |      | All Alaska          |            |      |
|----------------|---------------------|------------|------|-------------------------|------------|------|---------------------|------------|------|
|                | Vessel length class |            |      | Vessel length class     |            |      | Vessel length class |            |      |
|                | <60                 | 60-<br>124 | >124 | <60                     | 60-<br>124 | >124 | <60                 | 60-<br>124 | >124 |
| Trawl          |                     |            |      |                         |            |      |                     |            |      |
| Pollock        |                     |            |      |                         |            |      |                     |            |      |
| 1995           | 79                  | 286        | 51   | 4                       | 765        | 390  | 84                  | 1052       | 441  |
| 1996           | 90                  | 205        | 19   | 4                       | 790        | 396  | 94                  | 995        | 415  |
| 1997           | 182                 | 299        | 24   | 1                       | 612        | 397  | 182                 | 911        | 421  |
| 1998           | 203                 | 429        | 44   | 5                       | 624        | 451  | 208                 | 1053       | 496  |
| 1999           | 132                 | 335        | 45   | 6                       | 534        | 383  | 138                 | 870        | 428  |
| Pacific cod    |                     |            |      |                         |            |      |                     |            |      |
| 1995           | 231                 | 279        | 13   | -                       | 327        | 73   | 231                 | 606        | 86   |
| 1996           | 356                 | 232        | 6    | 2                       | 583        | 132  | 358                 | 815        | 138  |
| 1997           | 340                 | 281        | 7    | -                       | 415        | 106  | 340                 | 696        | 113  |
| 1998           | 298                 | 222        | 3    | 4                       | 386        | 95   | 302                 | 608        | 98   |
| 1999           | 282                 | 220        | 6    | 0                       | 340        | 81   | 282                 | 560        | 87   |
| Flatfish       |                     |            |      |                         |            |      |                     |            |      |
| 1995           | 16                  | 206        | 1    | -                       | 64         | 19   | 16                  | 270        | 20   |
| 1996           | 70                  | 299        | -    | -                       | 15         | 9    | 70                  | 314        | 9    |
| 1997           | 51                  | 240        | -    | -                       | 10         | 45   | 51                  | 250        | 45   |
| 1998           | 16                  | 133        | -    | -                       | 3          | 5    | 16                  | 135        | 5    |
| 1999           | 3                   | 73         | -    | -                       | -          | 3    | 3                   | 73         | 3    |
| Rockfish       |                     |            |      |                         |            |      |                     |            |      |
| 1995           | -                   | 8          | 2    | -                       | -          | -    | -                   | 8          | 2    |
| 1996           | 3                   | 67         | -    | -                       | -          | -    | 3                   | 67         | -    |
| 1997           | 2                   | 32         | -    | -                       | -          | -    | 2                   | 32         | -    |
| 1998           | 3                   | 64         | -    | -                       | -          | -    | 3                   | 64         | -    |
| 1999           | -                   | 59         | 2    | -                       | 0          | -    | -                   | 59         | 2    |
| All groundfish |                     |            |      |                         |            |      |                     |            |      |
| 1995           | 328                 | 812        | 68   | 4                       | 2873       | 605  | 332                 | 3685       | 674  |
| 1996           | 520                 | 831        | 27   | 12                      | 3259       | 862  | 532                 | 4090       | 889  |
| 1997           | 576                 | 896        | 32   | 2                       | 2504       | 689  | 578                 | 3400       | 721  |
| 1998           | 543                 | 902        | 49   | 9                       | 2646       | 605  | 552                 | 3549       | 654  |
| 1999           | 418                 | 691        | 53   | 7                       | 1807       | 520  | 425                 | 2497       | 573  |
| All gear       |                     |            |      |                         |            |      |                     |            |      |
| All groundfish |                     |            |      |                         |            |      |                     |            |      |
| 1995           | 4186                | 1782       | 84   | 496                     | 3358       | 696  | 4682                | 5140       | 780  |
| 1996           | 4149                | 1698       | 49   | 368                     | 3810       | 993  | 4518                | 5508       | 1041 |
| 1997           | 4474                | 1641       | 40   | 190                     | 2859       | 796  | 4664                | 4500       | 836  |
| 1998           | 4279                | 1623       | 60   | 182                     | 2874       | 660  | 4461                | 4497       | 720  |
| 1999           | 4261                | 1488       | 58   | 140                     | 2168       | 642  | 4401                | 3656       | 700  |

Notes: A vessel that fished more than one category in a week is apportioned a partial week based on catch weight. A target is calculated based on vessel, week, processing mode, NMFS area, and gear. All groundfish include additional target categories.

Source: Blend estimates, fish tickets, Norpac data, federal permit file, CFEC vessel data, National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 34.--Catcher-processor vessel weeks of fishing groundfish off Alaska by area, vessel length class (feet), gear, and target, 1995-99.

|                  | Gulf of Alaska      |        |         | Bering Sea and Aleutian |        |         |      | All Alaska          |        |         |      |
|------------------|---------------------|--------|---------|-------------------------|--------|---------|------|---------------------|--------|---------|------|
|                  | Vessel length class |        |         | Vessel length class     |        |         |      | Vessel length class |        |         |      |
|                  | <60                 | 60-124 | 125-230 | <60                     | 60-124 | 125-230 | >230 | <60                 | 60-124 | 125-230 | >230 |
| Gear/Target/Year |                     |        |         |                         |        |         |      |                     |        |         |      |
| Hook and line    |                     |        |         |                         |        |         |      |                     |        |         |      |
| Sablefish        |                     |        |         |                         |        |         |      |                     |        |         |      |
| 1995             | 17                  | 54     | 37      | -                       | 70     | 8       | -    | 17                  | 124    | 45      | -    |
| 1996             | 15                  | 43     | 21      | -                       | 51     | 15      | -    | 15                  | 93     | 36      | -    |
| 1997             | 10                  | 38     | 15      | -                       | 34     | 13      | -    | 10                  | 72     | 28      | -    |
| 1998             | 14                  | 38     | 15      | 1                       | 17     | 2       | -    | 15                  | 55     | 17      | -    |
| 1999             | 7                   | 41     | 16      | -                       | 28     | 20      | -    | 7                   | 69     | 36      | -    |
| Pacific cod      |                     |        |         |                         |        |         |      |                     |        |         |      |
| 1995             | 0                   | 67     | 10      | 2                       | 186    | 675     | 3    | 2                   | 253    | 685     | 3    |
| 1996             | -                   | 56     | 6       | -                       | 201    | 579     | -    | -                   | 257    | 585     | -    |
| 1997             | 1                   | 36     | 6       | -                       | 196    | 736     | -    | 1                   | 232    | 742     | -    |
| 1998             | -                   | 30     | 2       | -                       | 174    | 720     | -    | -                   | 204    | 723     | -    |
| 1999             | 8                   | 53     | 11      | -                       | 184    | 585     | -    | 8                   | 237    | 597     | -    |
| Flatfish         |                     |        |         |                         |        |         |      |                     |        |         |      |
| 1995             | 1                   | 1      | 1       | -                       | 28     | 35      | -    | 1                   | 29     | 35      | -    |
| 1996             | 0                   | -      | -       | 3                       | 40     | 29      | -    | 3                   | 40     | 29      | -    |
| 1997             | -                   | 0      | -       | 7                       | 38     | 40      | -    | 7                   | 38     | 40      | -    |
| 1998             | -                   | -      | -       | 12                      | 64     | 90      | -    | 12                  | 64     | 90      | -    |
| 1999             | -                   | -      | 0       | 4                       | 44     | 46      | -    | 4                   | 44     | 47      | -    |
| All groundfish   |                     |        |         |                         |        |         |      |                     |        |         |      |
| 1995             | 19                  | 124    | 47      | 2                       | 290    | 720     | 3    | 21                  | 414    | 767     | 3    |
| 1996             | 17                  | 99     | 27      | 3                       | 295    | 626     | -    | 20                  | 394    | 653     | -    |
| 1997             | 12                  | 75     | 21      | 7                       | 268    | 791     | -    | 19                  | 343    | 812     | -    |
| 1998             | 14                  | 68     | 18      | 13                      | 256    | 813     | -    | 27                  | 324    | 831     | -    |
| 1999             | 16                  | 96     | 28      | 4                       | 258    | 653     | -    | 20                  | 354    | 681     | -    |
| Pot              |                     |        |         |                         |        |         |      |                     |        |         |      |
| Pacific cod      |                     |        |         |                         |        |         |      |                     |        |         |      |
| 1995             | 0                   | -      | 2       | 1                       | 46     | 71      | -    | 1                   | 46     | 73      | -    |
| 1996             | -                   | -      | -       | -                       | 56     | 159     | -    | -                   | 56     | 159     | -    |
| 1997             | -                   | -      | -       | -                       | 43     | 85      | -    | -                   | 43     | 85      | -    |
| 1998             | -                   | -      | 0       | -                       | 29     | 48      | -    | -                   | 29     | 48      | -    |
| 1999             | -                   | 21     | 70      | -                       | 11     | 53      | -    | -                   | 32     | 122     | -    |
| All groundfish   |                     |        |         |                         |        |         |      |                     |        |         |      |
| 1995             | 0                   | -      | 2       | 1                       | 46     | 71      | -    | 1                   | 46     | 73      | -    |
| 1996             | -                   | -      | -       | -                       | 57     | 163     | -    | -                   | 57     | 163     | -    |
| 1997             | -                   | -      | -       | -                       | 43     | 85      | -    | -                   | 43     | 85      | -    |
| 1998             | -                   | -      | 0       | -                       | 29     | 48      | -    | -                   | 29     | 48      | -    |
| 1999             | -                   | 21     | 70      | -                       | 11     | 60      | -    | -                   | 32     | 129     | -    |



Table 34.--Continued.

|                | Gulf of Alaska      |         |      | Bering Sea and Aleutian |         |      | All Alaska          |         |      |
|----------------|---------------------|---------|------|-------------------------|---------|------|---------------------|---------|------|
|                | Vessel length class |         |      | Vessel length class     |         |      | Vessel length class |         |      |
|                | 60-124              | 125-230 | >230 | 60-124                  | 125-230 | >230 | 60-124              | 125-230 | >230 |
| Trawl          |                     |         |      |                         |         |      |                     |         |      |
| Pollock        |                     |         |      |                         |         |      |                     |         |      |
| 1995           | -                   | 1       | 0    | 1                       | 150     | 316  | 1                   | 151     | 317  |
| 1996           | -                   | 0       | 0    | 0                       | 148     | 319  | 0                   | 148     | 319  |
| 1997           | -                   | 0       | 0    | -                       | 96      | 243  | -                   | 97      | 243  |
| 1998           | 1                   | -       | -    | 2                       | 134     | 290  | 3                   | 134     | 290  |
| 1999           | -                   | -       | -    | -                       | 25      | 261  | -                   | 25      | 261  |
| Pacific cod    |                     |         |      |                         |         |      |                     |         |      |
| 1995           | 4                   | 9       | 1    | 29                      | 66      | 33   | 33                  | 74      | 34   |
| 1996           | 3                   | 6       | 4    | 23                      | 67      | 23   | 25                  | 73      | 28   |
| 1997           | 15                  | 1       | -    | 30                      | 71      | 18   | 45                  | 72      | 18   |
| 1998           | 13                  | 10      | -    | 27                      | 66      | 31   | 40                  | 75      | 31   |
| 1999           | 16                  | 3       | -    | 32                      | 59      | 27   | 48                  | 62      | 27   |
| Flatfish       |                     |         |      |                         |         |      |                     |         |      |
| 1995           | 71                  | 33      | -    | 74                      | 395     | 74   | 145                 | 427     | 74   |
| 1996           | 124                 | 46      | 1    | 139                     | 315     | 71   | 262                 | 361     | 72   |
| 1997           | 63                  | 22      | -    | 174                     | 444     | 66   | 237                 | 466     | 66   |
| 1998           | 53                  | 21      | -    | 140                     | 336     | 57   | 193                 | 357     | 57   |
| 1999           | 62                  | 19      | 0    | 132                     | 226     | 53   | 195                 | 245     | 53   |
| Rockfish       |                     |         |      |                         |         |      |                     |         |      |
| 1995           | 3                   | 61      | 2    | -                       | 34      | -    | 3                   | 95      | 2    |
| 1996           | 3                   | 29      | 1    | -                       | 38      | 5    | 3                   | 67      | 7    |
| 1997           | 4                   | 32      | 2    | -                       | 16      | 4    | 4                   | 48      | 6    |
| 1998           | 2                   | 27      | 0    | 1                       | 13      | 3    | 3                   | 39      | 3    |
| 1999           | 4                   | 32      | 4    | 0                       | 16      | 4    | 4                   | 48      | 8    |
| Atka mack.     |                     |         |      |                         |         |      |                     |         |      |
| 1995           | -                   | 2       | 0    | -                       | 127     | 17   | -                   | 129     | 17   |
| 1996           | 1                   | 2       | 0    | -                       | 162     | 29   | 1                   | 164     | 29   |
| 1997           | -                   | -       | -    | -                       | 79      | 13   | -                   | 79      | 13   |
| 1998           | -                   | -       | -    | 2                       | 87      | 14   | 2                   | 87      | 14   |
| 1999           | -                   | -       | -    | 3                       | 88      | 27   | 3                   | 88      | 27   |
| All groundfish |                     |         |      |                         |         |      |                     |         |      |
| 1995           | 78                  | 107     | 3    | 106                     | 774     | 441  | 184                 | 881     | 444  |
| 1996           | 130                 | 84      | 7    | 164                     | 732     | 448  | 294                 | 816     | 455  |
| 1997           | 83                  | 55      | 2    | 204                     | 706     | 343  | 286                 | 761     | 345  |
| 1998           | 68                  | 57      | 0    | 173                     | 636     | 396  | 241                 | 693     | 396  |
| 1999           | 82                  | 54      | 4    | 168                     | 415     | 373  | 250                 | 469     | 377  |

Table 34.--Continued.

|                | Gulf of Alaska      |            |             |      | Bering Sea and Aleutian |            |             |      | All Alaska          |            |             |      |
|----------------|---------------------|------------|-------------|------|-------------------------|------------|-------------|------|---------------------|------------|-------------|------|
|                | Vessel length class |            |             |      | Vessel length class     |            |             |      | Vessel length class |            |             |      |
|                | <60                 | 60-<br>124 | 125-<br>230 | >230 | <60                     | 60-<br>124 | 125-<br>230 | >230 | <60                 | 60-<br>124 | 125-<br>230 | >230 |
| All gear       |                     |            |             |      |                         |            |             |      |                     |            |             |      |
| All groundfish |                     |            |             |      |                         |            |             |      |                     |            |             |      |
| 1995           | 20                  | 202        | 156         | 3    | 2                       | 441        | 1565        | 444  | 22                  | 643        | 1721        | 447  |
| 1996           | 17                  | 230        | 111         | 7    | 3                       | 515        | 1520        | 448  | 20                  | 745        | 1632        | 455  |
| 1997           | 12                  | 157        | 76          | 2    | 7                       | 515        | 1582        | 343  | 19                  | 672        | 1658        | 345  |
| 1998           | 14                  | 136        | 76          | 0    | 13                      | 458        | 1496        | 396  | 27                  | 594        | 1572        | 396  |
| 1999           | 16                  | 199        | 152         | 4    | 4                       | 437        | 1127        | 373  | 20                  | 636        | 1279        | 377  |

Notes: A vessel that fished more than one category in a week is apportioned a partial week based on catch weight. A target is calculated based on vessel, week, processing mode, NMFS area, and gear. All groundfish include additional target categories.

Source: Blend estimates, fish tickets, Norpac data, federal permit file, CFEC vessel data, National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 35.--Total crew weeks in groundfish fisheries off Alaska by month and area, 1995-99.

|                                 | Jan   | Feb    | Mar    | Apr    | May   | Jun   | Jul   | Aug    | Sep    | Oct    | Nov   | Dec   | Year   |
|---------------------------------|-------|--------|--------|--------|-------|-------|-------|--------|--------|--------|-------|-------|--------|
| Area/Year                       |       |        |        |        |       |       |       |        |        |        |       |       |        |
| Gulf of Alaska                  |       |        |        |        |       |       |       |        |        |        |       |       |        |
| 1995                            | 171   | 357    | 2,341  | 1,122  | 565   | 526   | 1,512 | 109    | 40     | 1,165  | 110   | -     | 8,018  |
| 1996                            | 194   | 516    | 3,112  | 1,487  | 382   | 407   | 1,990 | 613    | 21     | 649    | 380   | -     | 9,750  |
| 1997                            | 160   | 430    | 967    | 714    | 187   | 390   | 1,809 | 89     | 97     | 333    | 310   | -     | 5,485  |
| 1998                            | 226   | 327    | 465    | 897    | 182   | 241   | 2,233 | 262    | 103    | 366    | -     | -     | 5,301  |
| 1999                            | 322   | 549    | 471    | 1,197  | 423   | 684   | 1,544 | 976    | 52     | 431    | -     | -     | 6,647  |
| Bering Sea and Aleutian Islands |       |        |        |        |       |       |       |        |        |        |       |       |        |
| 1995                            | 8,685 | 24,463 | 16,708 | 12,907 | 4,181 | 377   | 2,146 | 14,542 | 25,896 | 6,914  | 1,127 | 950   | 118896 |
| 1996                            | 9,729 | 28,044 | 21,227 | 12,130 | 5,911 | 4,184 | 2,468 | 6,802  | 23,776 | 18,327 | 2,087 | 25    | 134711 |
| 1997                            | 5,056 | 22,832 | 19,922 | 8,760  | 6,904 | 2,422 | 2,315 | 6,457  | 21,816 | 10,209 | 5,522 | 1,978 | 114192 |
| 1998                            | 8,991 | 17,768 | 11,501 | 6,232  | 5,190 | 2,231 | 2,000 | 5,574  | 16,136 | 18,498 | 5,318 | 1,624 | 101064 |
| 1999                            | 6,938 | 14,291 | 11,519 | 5,958  | 4,730 | 1,078 | 3,273 | 7,596  | 12,447 | 10,491 | 1,587 | 684   | 80,591 |
| All Alaska                      |       |        |        |        |       |       |       |        |        |        |       |       |        |
| 1995                            | 8,856 | 24,820 | 19,050 | 14,029 | 4,747 | 903   | 3,658 | 14,651 | 25,936 | 8,080  | 1,236 | 950   | 126914 |
| 1996                            | 9,923 | 28,560 | 24,339 | 13,618 | 6,292 | 4,591 | 4,458 | 7,416  | 23,797 | 18,975 | 2,467 | 25    | 144461 |
| 1997                            | 5,216 | 23,262 | 20,889 | 9,474  | 7,091 | 2,812 | 4,124 | 6,546  | 21,913 | 10,541 | 5,831 | 1,978 | 119677 |
| 1998                            | 9,217 | 18,096 | 11,965 | 7,129  | 5,371 | 2,472 | 4,233 | 5,836  | 16,239 | 18,864 | 5,318 | 1,624 | 106365 |
| 1999                            | 7,260 | 14,839 | 11,990 | 7,154  | 5,153 | 1,762 | 4,816 | 8,572  | 12,499 | 10,922 | 1,587 | 684   | 87,238 |

Note: Crew weeks are calculated by summing weekly reported crew size over vessels and time period. Includes only vessels targeting groundfish counted toward Federal TACs. Catcher processors accounted for the following proportions of the total crew weeks in all areas: 1995 - 77%, 1996 - 76%, 1997 - 84%, 1998 - 93%, 1999 - 97%.

Source: Weekly Processor Reports National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 36.--Production and value of groundfish products in the fisheries off Alaska by species, 1995-99,  
(1,000 metric tons product weight and million dollars).

|                   | 1995     |         | 1996     |         | 1997     |         | 1998     |         | 1999     |         |
|-------------------|----------|---------|----------|---------|----------|---------|----------|---------|----------|---------|
|                   | Quantity | Value   | Quantity | Value   | Quantity | Value   | Quantity | Value   | Quantity | Value   |
| Pollock           |          |         |          |         |          |         |          |         |          |         |
| Whole fish        | 2.8      | \$2.6   | 3.2      | \$2.7   | 2.9      | \$2.1   | 2.1      | \$1.3   | 5.0      | \$1.8   |
| H&G               | .9       | \$.7    | .7       | \$.5    | .8       | \$.5    | 7.8      | \$5.0   | 6.8      | \$5.1   |
| Roe               | 15.9     | \$217.5 | 14.5     | \$176.2 | 18.7     | \$167.3 | 12.8     | \$84.4  | 11.6     | \$139.9 |
| Deep-skin fillets | 34.9     | \$87.9  | 36.8     | \$100.1 | 29.3     | \$81.2  | 31.5     | \$95.5  | 36.9     | \$129.9 |
| Other fillets     | 24.7     | \$59.8  | 23.4     | \$53.0  | 16.1     | \$32.8  | 35.2     | \$89.3  | 21.6     | \$60.3  |
| Surimi            | 178.2    | \$439.8 | 160.9    | \$298.3 | 159.9    | \$363.2 | 148.0    | \$285.1 | 153.5    | \$332.9 |
| Minced fish       | 9.8      | \$8.9   | 14.2     | \$15.2  | 9.5      | \$9.3   | 17.5     | \$20.0  | 9.8      | \$11.0  |
| Fish meal         | 50.9     | \$28.4  | 46.9     | \$28.2  | 46.4     | \$28.1  | 48.1     | \$44.3  | 50.9     | \$32.4  |
| Other products    | 15.1     | \$5.3   | 13.6     | \$5.8   | 12.0     | \$5.2   | 14.4     | \$7.9   | 17.1     | \$8.0   |
| All products      | 333.2    | \$851.0 | 314.0    | \$680.0 | 295.5    | \$689.7 | 317.4    | \$632.9 | 313.2    | \$721.3 |
| Pacific cod       |          |         |          |         |          |         |          |         |          |         |
| Whole fish        | 3.7      | \$5.2   | 8.1      | \$8.7   | 5.4      | \$5.7   | 2.9      | \$2.5   | 2.9      | \$3.4   |
| H&G               | 60.9     | \$91.3  | 57.7     | \$98.2  | 69.0     | \$90.9  | 62.9     | \$126.7 | 67.5     | \$172.6 |
| Salted/split      | 7.6      | \$18.5  | 10.8     | \$23.6  | 5.5      | \$12.0  | 4.6      | \$11.2  | 4.6      | \$17.3  |
| Fillets           | 19.2     | \$79.0  | 19.3     | \$71.8  | 24.5     | \$98.5  | 18.3     | \$74.9  | 17.4     | \$95.5  |
| Other products    | 17.3     | \$23.8  | 17.0     | \$22.2  | 18.9     | \$19.1  | 12.0     | \$13.4  | 14.2     | \$18.0  |
| All products      | 108.6    | \$217.8 | 112.9    | \$224.6 | 123.3    | \$226.1 | 100.7    | \$228.6 | 106.7    | \$306.9 |
| Sablefish         |          |         |          |         |          |         |          |         |          |         |
| H&G               | 12.3     | \$109.5 | 10.7     | \$96.8  | 9.2      | \$89.9  | 9.1      | \$65.2  | 8.5      | \$70.9  |
| Other products    | .2       | \$1.4   | .1       | \$.3    | .1       | \$.6    | .3       | \$1.5   | .2       | \$1.3   |
| All products      | 12.6     | \$111.0 | 10.8     | \$97.1  | 9.3      | \$90.5  | 9.4      | \$66.8  | 8.7      | \$72.2  |

Table 36.--Continued.

|                | 1995     |           | 1996     |           | 1997     |           | 1998     |           | 1999     |           |
|----------------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|
|                | Quantity | Value     | Quantity | Value     | Quantity | Value     | Quantity | Value     | Quantity | Value     |
| Flatfish       |          |           |          |           |          |           |          |           |          |           |
| Whole fish     | 55.2     | \$53.8    | 35.0     | \$31.2    | 52.5     | \$34.0    | 34.0     | \$23.9    | 12.8     | \$14.5    |
| H&G            | 28.7     | \$60.1    | 37.6     | \$68.7    | 52.0     | \$71.3    | 39.7     | \$50.9    | 38.0     | \$49.1    |
| Kirimi         | 6.3      | \$10.3    | 14.5     | \$22.6    | 15.9     | \$17.8    | 6.5      | \$4.1     | 4.3      | \$4.5     |
| Filletts       | 2.1      | \$10.2    | 2.4      | \$11.8    | 1.8      | \$7.7     | 1.1      | \$5.8     | .8       | \$3.1     |
| Other products | 3.1      | \$2.5     | 2.8      | \$.9      | 3.9      | \$3.7     | 1.1      | \$.6      | 1.3      | \$1.9     |
| All products   | 95.3     | \$136.9   | 92.3     | \$135.2   | 126.2    | \$134.5   | 82.4     | \$85.4    | 57.1     | \$73.1    |
| Rockfish       |          |           |          |           |          |           |          |           |          |           |
| Whole fish     | 1.4      | \$1.8     | 2.5      | \$2.5     | 1.4      | \$1.9     | 2.5      | \$2.9     | 5.9      | \$4.8     |
| H&G            | 11.3     | \$26.8    | 11.5     | \$20.3    | 11.2     | \$18.4    | 9.1      | \$11.5    | 10.0     | \$12.4    |
| Other products | .6       | \$2.5     | 1.0      | \$3.4     | 1.1      | \$4.1     | 1.4      | \$5.4     | 1.5      | \$4.6     |
| All products   | 13.3     | \$31.1    | 15.0     | \$26.2    | 13.8     | \$24.4    | 13.0     | \$19.8    | 17.5     | \$21.8    |
| Atka mackerel  |          |           |          |           |          |           |          |           |          |           |
| Whole fish     | 6.4      | \$5.3     | 16.7     | \$15.1    | 6.8      | \$4.2     | 4.9      | \$2.5     | 10.1     | \$4.7     |
| H&G            | 28.6     | \$36.3    | 38.8     | \$52.9    | 22.3     | \$30.0    | 22.0     | \$15.1    | 22.2     | \$18.2    |
| Other products | 1.4      | \$2.6     | .8       | \$.8      | 1.8      | \$2.5     | 1.1      | \$.8      | .0       | \$.0      |
| All products   | 36.4     | \$44.3    | 56.4     | \$68.7    | 31.0     | \$36.7    | 27.9     | \$18.4    | 32.4     | \$22.9    |
| Total          | 599.3    | \$1,391.9 | 601.4    | \$1,231.7 | 599.0    | \$1,201.9 | 550.9    | \$1,051.7 | 535.6    | \$1,218.2 |

Notes: Includes only catches counted against Federal TACs.

Source: Weekly processor report data and annual processor price survey, National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 37.--Production of groundfish products in the fisheries off Alaska by species, product and area, 1995-99,  
(1,000 metric tons product weight).

|                | Bering Sea and Aleutians |       |       |       |       | Gulf of Alaska |      |      |      |      |
|----------------|--------------------------|-------|-------|-------|-------|----------------|------|------|------|------|
|                | 1995                     | 1996  | 1997  | 1998  | 1999  | 1995           | 1996 | 1997 | 1998 | 1999 |
| Pollock        |                          |       |       |       |       |                |      |      |      |      |
| Whole fish     | 2.7                      | 3.2   | 2.6   | 1.0   | 4.1   | .0             | .0   | .4   | 1.1  | .9   |
| H&G            | .9                       | .7    | .7    | 6.8   | 4.9   | .0             | .0   | .1   | 1.1  | 1.8  |
| Roe            | 15.3                     | 13.9  | 17.6  | 11.6  | 10.9  | .6             | .6   | 1.2  | 1.2  | .7   |
| Filletts       | 51.6                     | 55.1  | 37.8  | 55.7  | 50.1  | 8.1            | 5.1  | 7.6  | 11.0 | 8.4  |
| Surimi         | 170.7                    | 156.1 | 151.2 | 135.7 | 142.3 | 7.4            | 4.8  | 8.7  | 12.3 | 11.2 |
| Minced fish    | 9.3                      | 13.7  | 9.1   | 15.8  | 9.3   | .5             | .5   | .3   | 1.7  | .4   |
| Fish meal      | 49.7                     | 45.8  | 42.9  | 44.2  | 48.2  | 1.3            | 1.1  | 3.4  | 4.0  | 2.7  |
| Other products | 14.5                     | 13.3  | 11.6  | 13.5  | 16.1  | .7             | .2   | .4   | .9   | 1.0  |
| Pacific cod    |                          |       |       |       |       |                |      |      |      |      |
| Whole fish     | 1.8                      | 2.9   | 2.2   | 2.3   | 1.3   | 1.9            | 5.3  | 3.2  | .6   | 1.6  |
| H&G            | 55.1                     | 54.0  | 65.4  | 56.2  | 54.1  | 5.8            | 3.7  | 3.6  | 6.8  | 13.4 |
| Salted/split   | 7.1                      | 10.3  | -     | -     | -     | .5             | .5   | -    | -    | -    |
| Filletts       | 9.0                      | 10.4  | 12.4  | 8.1   | 7.0   | 10.1           | 8.8  | 12.1 | 10.3 | 10.5 |
| Other products | 10.2                     | 10.5  | 11.8  | 7.4   | 7.4   | 7.1            | 6.5  | 7.1  | 4.5  | 6.8  |
| Sablefish      |                          |       |       |       |       |                |      |      |      |      |
| H&G            | 1.3                      | .8    | .8    | .7    | .8    | 11.0           | 9.9  | 8.4  | 8.5  | 7.7  |
| Other products | .0                       | .0    | .0    | .0    | .0    | .2             | .1   | .1   | .2   | .2   |
| Flatfish       |                          |       |       |       |       |                |      |      |      |      |
| Whole fish     | 51.2                     | 29.5  | 49.3  | 31.4  | 9.6   | 3.9            | 5.6  | 3.2  | 2.7  | 3.1  |
| H&G            | 27.4                     | 33.1  | 50.2  | 38.1  | 36.4  | 1.2            | 4.4  | 1.8  | 1.6  | 1.5  |
| Kirimmi        | 6.1                      | 14.1  | 15.6  | 6.3   | 4.2   | .2             | .3   | .3   | -    | .1   |
| Filletts       | .2                       | .0    | -     | .0    | -     | 1.9            | 2.4  | 1.8  | 1.1  | .8   |
| Other products | 3.1                      | 2.7   | 3.6   | 1.0   | 1.1   | .1             | .0   | .3   | .0   | .2   |
| Rockfish       |                          |       |       |       |       |                |      |      |      |      |
| Whole fish     | .2                       | 1.0   | .1    | .2    | 1.7   | 1.2            | 1.6  | 1.3  | 2.3  | 4.2  |
| H&G            | 5.2                      | 6.7   | 5.7   | 4.5   | 5.0   | 6.1            | 4.8  | 5.5  | 4.7  | 5.0  |
| Other products | .0                       | .0    | .0    | .0    | .0    | .6             | 1.0  | 1.1  | 1.3  | 1.5  |
| Atka mackerel  |                          |       |       |       |       |                |      |      |      |      |
| Whole fish     | -                        | -     | 6.8   | 4.9   | 10.1  | .0             | -    | -    | -    | -    |
| H&G            | 28.2                     | 38.0  | 22.1  | 21.9  | 22.2  | .4             | .8   | .2   | .1   | .0   |
| Other products | 1.4                      | .0    | .0    | 1.1   | .0    | .0             | .0   | -    | -    | -    |

Notes: Includes only catches counted against Federal TACs.

Source: Weekly processor report, National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 38.--Production of groundfish products in the fisheries off Alaska by species, product and processing mode, 1995-99, (1,000 metric tons product weight).

|                | At-sea |      |      |      |      | On-shore |      |      |      |      |
|----------------|--------|------|------|------|------|----------|------|------|------|------|
|                | 1995   | 1996 | 1997 | 1998 | 1999 | 1995     | 1996 | 1997 | 1998 | 1999 |
| Pollock        |        |      |      |      |      |          |      |      |      |      |
| Whole fish     | 2.7    | 3.1  | 2.5  | .9   | 4.0  | .1       | .1   | .4   | 1.2  | .9   |
| H&G            | .9     | .7   | .7   | 6.7  | 4.5  | -        | .0   | .1   | 1.1  | 2.2  |
| Roe            | 10.7   | 9.6  | 12.2 | 8.4  | 7.0  | 5.2      | 4.9  | 6.5  | 4.4  | 4.6  |
| Fillets        | 39.5   | 38.8 | 25.5 | 40.5 | 32.7 | 20.2     | 21.4 | 19.9 | 26.2 | 25.8 |
| Surimi         | 93.5   | 85.8 | 84.6 | 72.2 | 64.1 | 84.7     | 75.1 | 75.2 | 75.8 | 89.4 |
| Minced fish    | 6.8    | 11.1 | 7.5  | 13.3 | 6.5  | 2.9      | 3.1  | 2.0  | 4.2  | 3.3  |
| Fish meal      | 19.6   | 18.2 | 14.0 | 15.1 | 14.5 | 31.3     | 28.7 | 32.4 | 33.1 | 36.4 |
| Other products | .6     | .9   | .0   | .8   | .7   | 14.6     | 12.7 | 12.0 | 13.6 | 16.4 |
| Pacific cod    |        |      |      |      |      |          |      |      |      |      |
| Whole fish     | .6     | 1.4  | .9   | .4   | .2   | 3.0      | 6.8  | 4.5  | 2.5  | 2.8  |
| H&G            | 56.6   | 55.6 | 67.5 | 58.9 | 59.2 | 4.3      | 2.1  | 1.4  | 4.0  | 8.3  |
| Salted/split   | .7     | 1.1  | -    | -    | -    | 6.9      | 9.7  | -    | -    | -    |
| Fillets        | 4.0    | 4.1  | 4.6  | 3.0  | 1.6  | 15.2     | 15.1 | 19.9 | 15.3 | 15.8 |
| Other products | 3.4    | 3.8  | 4.5  | 2.9  | 2.0  | 13.9     | 13.2 | 14.4 | 9.0  | 12.2 |
| Sablefish      |        |      |      |      |      |          |      |      |      |      |
| H&G            | 2.5    | 2.0  | 1.5  | 1.5  | 1.7  | 9.9      | 8.8  | 7.7  | 7.6  | 6.9  |
| Other products | .1     | .1   | .1   | .1   | .0   | .2       | .0   | .0   | .2   | .1   |
| Flatfish       |        |      |      |      |      |          |      |      |      |      |
| Whole fish     | 51.1   | 31.1 | 48.2 | 33.7 | 12.4 | 4.1      | 3.9  | 4.3  | .3   | .3   |
| H&G            | 28.0   | 37.0 | 51.4 | 39.2 | 37.8 | .7       | .6   | .6   | .5   | .2   |
| Kirimim        | 6.1    | 14.1 | 15.5 | 6.3  | 4.2  | .2       | .4   | .4   | -    | .1   |
| Fillets        | .2     | .0   | -    | .0   | -    | 1.9      | 2.4  | 1.8  | 1.1  | .8   |
| Other products | 1.9    | 2.4  | .8   | .9   | .7   | 1.2      | .3   | 3.1  | .2   | .6   |
| Rockfish       |        |      |      |      |      |          |      |      |      |      |
| Whole fish     | 1.0    | 1.5  | .5   | 1.1  | 4.2  | .4       | 1.0  | .9   | 1.5  | 1.7  |
| H&G            | 10.8   | 11.0 | 10.8 | 8.7  | 9.7  | .5       | .4   | .3   | .4   | .3   |
| Other products | .0     | .0   | .0   | .0   | .0   | .6       | 1.0  | 1.1  | 1.3  | 1.5  |
| Atka mackerel  |        |      |      |      |      |          |      |      |      |      |
| Whole fish     | -      | -    | 6.8  | 4.9  | 10.1 | .0       | -    | -    | -    | -    |
| H&G            | 28.6   | 38.8 | 22.3 | 22.0 | 22.2 | -        | .0   | -    | -    | -    |
| Other products | 1.4    | -    | -    | 1.1  | .0   | .0       | .0   | .0   | -    | .0   |

Notes: Includes only catches counted against Federal TACs.

Source: Weekly processor report, National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 39.--Monthly Japanese landing market price of selected groundfish  
by species, 1987-99, in yen/kilogram (weighted average).

| Species         | Jan. | Feb. | Mar. | Apr. | May | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. |
|-----------------|------|------|------|------|-----|------|------|------|------|------|------|------|
| Flatfish, fresh |      |      |      |      |     |      |      |      |      |      |      |      |
| 1987            | 671  | 721  | 659  | 488  | 440 | 439  | 518  | 492  | 504  | 518  | 543  | 547  |
| 1988            | 586  | 695  | 716  | 630  | 523 | 496  | 568  | 497  | 528  | 547  | 546  | 587  |
| 1989            | 634  | 712  | 645  | 588  | 505 | 542  | 590  | 486  | 515  | 552  | 613  | 692  |
| 1990            | 674  | 704  | 701  | 665  | 497 | 515  | 615  | 629  | 597  | 637  | 687  | 801  |
| 1991            | 695  | 840  | 785  | 640  | 548 | 598  | 684  | 699  | 535  | 737  | 752  | 688  |
| 1992            | 739  | 799  | 749  | 687  | 567 | 558  | 605  | 584  | 556  | 587  | 600  | 570  |
| 1993            | 638  | 746  | 681  | 611  | 487 | 515  | 475  | 651  | 486  | 576  | 512  | 490  |
| 1994            | 603  | 592  | 534  | 573  | 585 | 467  | 541  | 542  | 508  | 474  | 454  | 505  |
| 1995            | 499  | 510  | 485  | 540  | 478 | 473  | 523  | 511  | 464  | 362  | 415  | 424  |
| 1996            | 501  | 556  | 543  | 472  | 431 | 385  | 477  | 550  | 419  | 403  | 418  | 490  |
| 1997            | 473  | 500  | 424  | 417  | 472 | 405  | 445  | 605  | 438  | 476  | 387  | 474  |
| 1998            | 434  | 482  | 403  | 337  | 391 | 432  | 505  | 567  | 451  | 397  | 404  | 486  |
| 1999            | 433  | 446  | 427  | 397  | 372 | 394  | 417  | 506  | 366  | 346  | 365  | 467  |
| Cod, fresh      |      |      |      |      |     |      |      |      |      |      |      |      |
| 1987            | 160  | 144  | 122  | 108  | 74  | 63   | 50   | 110  | 89   | 146  | 182  | 155  |
| 1988            | 176  | 112  | 124  | 89   | 90  | 90   | 130  | 114  | 88   | 180  | 223  | 229  |
| 1989            | 170  | 155  | 168  | 119  | 105 | 87   | 132  | 129  | 121  | 211  | 204  | 325  |
| 1990            | 282  | 230  | 180  | 148  | 123 | 124  | 153  | 113  | 151  | 192  | 242  | 343  |
| 1991            | 296  | 279  | 216  | 148  | 124 | 137  | 136  | 128  | 173  | 261  | 398  | 366  |
| 1992            | 332  | 316  | 180  | 164  | 128 | 119  | 135  | 134  | 175  | 221  | 366  | 299  |
| 1993            | 281  | 285  | 207  | 167  | 118 | 128  | 154  | 215  | 175  | 305  | 319  | 366  |
| 1994            | 261  | 272  | 170  | 132  | 98  | 129  | 117  | 115  | 204  | 311  | 288  | 287  |
| 1995            | 244  | 185  | 188  | 103  | 64  | 110  | 146  | 146  | 197  | 257  | 401  | 315  |
| 1996            | 296  | 235  | 153  | 83   | 68  | 72   | 176  | 149  | 205  | 273  | 304  | 289  |
| 1997            | 235  | 174  | 157  | 111  | 105 | 82   | 192  | 177  | 134  | 330  | 269  | 311  |
| 1998            | 234  | 167  | 150  | 104  | 88  | 94   | 173  | 172  | 115  | 211  | 289  | 368  |
| 1999            | 284  | 276  | 180  | 153  | 109 | 115  | 148  | 154  | 103  | 225  | 315  | 352  |
| Cod, frozen     |      |      |      |      |     |      |      |      |      |      |      |      |
| 1987            | 315  | 305  | 332  | 319  | 317 | --   | 284  | 340  | 348  | 380  | 334  | 304  |
| 1988            | 313  | 274  | 199  | 191  | 215 | --   | --   | 224  | 227  | 348  | --   | 330  |
| 1989            | 280  | 300  | 308  | 238  | 236 | --   | 132  | 202  | 201  | 350  | 384  | 377  |
| 1990            | 374  | 427  | 326  | 347  | 411 | --   | --   | 373  | 353  | --   | 320  | 300  |
| 1991            | 331  | 290  | 307  | 325  | 312 | 342  | --   | 332  | 391  | 410  | 456  | 440  |
| 1992            | 369  | 324  | 281  | 251  | 264 | 270  | 298  | 322  | 339  | 348  | 315  | 163  |
| 1993            | 278  | 148  | 171  | 164  | 206 | 288  | 259  | 148  | 329  | 387  | 260  | 278  |
| 1994            | 309  | 258  | 112  | 245  | 264 | 124  | 217  | 258  | 258  | 246  | 264  | 228  |
| 1995            | 232  | 182  | 154  | 177  | 196 | 109  | 135  | 184  | 138  | 134  | 259  | 249  |
| 1996            | 265  | 220  | 183  | 211  | 146 | 201  | 247  | 326  | 213  | 292  | 299  | 262  |
| 1997            | 199  | 210  | 200  | 184  | 131 | 211  | 223  | 133  | 214  | 225  | 195  | 148  |
| 1998            | 185  | 137  | 137  | 217  | 138 | 231  | 239  | 401  | 333  | 296  | 266  | 249  |
| 1999            | 298  | 257  | 215  | 302  | 220 | 237  | 218  | 266  | 315  | 266  | 283  | 243  |



Table 39.--Continued.

| Species               | Jan. | Feb. | Mar. | Apr. | May  | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. |
|-----------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Alaska pollock, fresh |      |      |      |      |      |      |      |      |      |      |      |      |
| 1987                  | 81   | 81   | 45   | 60   | 48   | 43   | 34   | 41   | 40   | 48   | 48   | 39   |
| 1988                  | 85   | 113  | 69   | 52   | 35   | 40   | 39   | 38   | 33   | 38   | 32   | 58   |
| 1989                  | 96   | 117  | 67   | 49   | 47   | 43   | 36   | 35   | 31   | 42   | 48   | 70   |
| 1990                  | 121  | 121  | 76   | 64   | 57   | 58   | 55   | 57   | 50   | 53   | 66   | 94   |
| 1991                  | 150  | 172  | 168  | 108  | 81   | 87   | 91   | 111  | 89   | 115  | 135  | 146  |
| 1992                  | 144  | 201  | 132  | 68   | 35   | 33   | 59   | 64   | 51   | 57   | 64   | 74   |
| 1993                  | 107  | 157  | 141  | 91   | 54   | 56   | 51   | 51   | 37   | 60   | 62   | 72   |
| 1994                  | 76   | 125  | 118  | 88   | 45   | 46   | 52   | 51   | 44   | 55   | 67   | 74   |
| 1995                  | 104  | 132  | 131  | 101  | 40   | 38   | 66   | 59   | 40   | 47   | 74   | 72   |
| 1996                  | 90   | 120  | 110  | 77   | 33   | 27   | 63   | 46   | 42   | 41   | 54   | 91   |
| 1997                  | 126  | 122  | 110  | 97   | 69   | 65   | 55   | 48   | 33   | 45   | 51   | 70   |
| 1998                  | 80   | 85   | 91   | 86   | 35   | 26   | 37   | 35   | 26   | 33   | 56   | 52   |
| 1999                  | 73   | 86   | 76   | 78   | 42   | 36   | 40   | 24   | 21   | 31   | 46   | 53   |
| Atka mackerel, fresh  |      |      |      |      |      |      |      |      |      |      |      |      |
| 1987                  | 57   | 44   | 54   | 76   | 67   | 45   | 42   | 41   | 36   | 71   | 42   | 50   |
| 1988                  | 40   | 41   | 80   | 59   | 86   | 63   | 87   | 90   | 44   | 48   | 37   | 33   |
| 1989                  | 41   | 37   | 42   | 40   | 47   | 36   | 31   | 55   | 46   | 106  | 53   | 44   |
| 1990                  | 42   | 54   | 45   | 50   | 42   | 48   | 59   | 61   | 57   | 64   | 79   | 85   |
| 1991                  | 65   | 93   | 111  | 90   | 101  | 120  | 168  | 143  | 93   | 79   | 80   | 57   |
| 1992                  | 47   | 36   | 65   | 85   | 88   | 91   | 136  | 95   | 87   | 94   | 84   | 48   |
| 1993                  | 66   | 41   | 33   | 33   | 24   | 44   | 57   | 56   | 40   | 66   | 46   | 26   |
| 1994                  | 25   | 28   | 21   | 20   | 28   | 30   | 49   | 50   | 42   | 49   | 35   | 30   |
| 1995                  | 35   | 31   | 29   | 29   | 37   | 49   | 109  | 98   | 39   | 36   | 27   | 19   |
| 1996                  | 21   | 22   | 29   | 40   | 51   | 40   | 95   | 69   | 40   | 46   | 69   | 28   |
| 1997                  | 36   | 40   | 40   | 44   | 55   | 59   | 114  | 79   | 48   | 44   | 27   | 30   |
| 1998                  | 23   | 31   | 23   | 22   | 26   | 26   | 25   | 28   | 23   | 32   | 35   | 27   |
| 1999                  | 43   | 44   | 32   | 36   | 38   | 57   | 78   | 88   | 40   | 35   | 29   | 17   |
| Rockfish, fresh       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1987                  | 1825 | 1591 | 1337 | 957  | 1118 | 1282 | 1466 | 1518 | 1393 | 1420 | 1318 | 1427 |
| 1988                  | 1703 | 1378 | 1395 | 1375 | 1309 | 1431 | 1573 | 1366 | 1275 | 1256 | 1419 | 1628 |
| 1989                  | 1760 | 1493 | 1670 | 1583 | 1513 | 1765 | 1935 | 1835 | 1588 | 1682 | 1830 | 2056 |
| 1990                  | 2058 | 1975 | 1919 | 1896 | 1803 | 2049 | 2316 | 1961 | 1643 | 1948 | 2017 | 2231 |
| 1991                  | 2328 | 2054 | 2074 | 1937 | 2035 | 2145 | 2553 | 2328 | 2003 | 2320 | 2513 | 2630 |
| 1992                  | 2992 | 2653 | 3281 | 2204 | 1951 | 2174 | 2383 | 2307 | 1786 | 2177 | 2808 | 2613 |
| 1993                  | 2847 | 2987 | 2452 | 2480 | 2053 | 2004 | 2050 | 2140 | 1783 | 2010 | 2445 | 2633 |
| 1994                  | 2687 | 2861 | 1944 | 2363 | 2205 | 2433 | 2230 | 2118 | 2069 | 2075 | 2323 | 2778 |
| 1995                  | 3214 | 2725 | 2360 | 2545 | 2142 | 1993 | 2234 | 2189 | 2149 | 2373 | 3179 | 3119 |
| 1996                  | 3471 | 3586 | 3510 | 2630 | 2321 | 2188 | 2234 | 2374 | 2419 | 3012 | 3073 | 3414 |
| 1997                  | 3770 | 4240 | 3281 | 2699 | 2760 | 2384 | 2472 | 2475 | 2873 | 3117 | 2943 | 3433 |
| 1998                  | 3348 | 3753 | 3365 | 2721 | 2729 | 2790 | 2675 | 2574 | 2636 | 2831 | 2238 | 2181 |
| 1999                  | 4518 | 3750 | 3872 | 2935 | 2992 | 3041 | 3324 | 2634 | 2951 | 2512 | 1736 | 3035 |

Source: Monthly Stat. of Agriculture, Forestry, and Fisheries, Stat. and Info. Dept., Ministry of Agriculture, Forestry, and Fishery, Government of Japan. Available from Alaska Fish. Sci. Cen., P.O. Box 15700, Seattle, WA 98115-0070.

Table 40.--Monthly Tokyo wholesale prices of selected products, 1987-99  
in yen/kilogram (weighted average).

| Year             | Jan. | Feb. | Mar. | Apr. | May | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. |
|------------------|------|------|------|------|-----|------|------|------|------|------|------|------|
| Flatfish, frozen |      |      |      |      |     |      |      |      |      |      |      |      |
| 1987             | 528  | 502  | 593  | 594  | 580 | 557  | 601  | 496  | 518  | 624  | 499  | 531  |
| 1988             | 496  | 503  | 462  | 451  | 442 | 437  | 408  | 424  | 407  | 419  | 396  | 392  |
| 1989             | 409  | 357  | 349  | 421  | 343 | 433  | 410  | 457  | 462  | 472  | 480  | 459  |
| 1990             | 496  | 433  | 439  | 463  | 509 | 616  | 570  | 578  | 637  | 526  | 592  | 552  |
| 1991             | 449  | 512  | 572  | 570  | 520 | 541  | 565  | 573  | 509  | 543  | 482  | 485  |
| 1992             | 499  | 486  | 517  | 511  | 530 | 491  | 423  | 433  | 499  | 437  | 460  | 413  |
| 1993             | 412  | 386  | 404  | 427  | 431 | 447  | 431  | 406  | 418  | 423  | 407  | 414  |
| 1994             | 423  | 426  | 403  | 450  | 460 | 433  | 470  | 394  | 414  | 433  | 422  | 455  |
| 1995             | 446  | 435  | 450  | 455  | 427 | 443  | 447  | 464  | 440  | 466  | 475  | 500  |
| 1996             | 478  | 478  | 467  | 520  | 532 | 544  | 575  | 550  | 562  | 550  | 565  | 580  |
| 1997             | 538  | 535  | 535  | 536  | 506 | 533  | 512  | 530  | 509  | 508  | 528  | 540  |
| 1998             | 482  | 473  | 511  | 505  | 519 | 514  | 509  | 544  | 524  | 518  | 457  | 447  |
| 1999             | 471  | 460  | 475  | 516  | 516 | 490  | 524  | 533  | 469  | 484  | 507  | 514  |
| Cod, frozen      |      |      |      |      |     |      |      |      |      |      |      |      |
| 1987             | 486  | 384  | 365  | 404  | 398 | 352  | 444  | 433  | 464  | 552  | 557  | 418  |
| 1988             | 499  | 515  | 552  | 505  | 482 | 483  | 472  | 525  | 531  | 507  | 495  | 479  |
| 1989             | 472  | 451  | 341  | 600  | 529 | 474  | 511  | 608  | 174  | 529  | 506  | 577  |
| 1990             | 566  | 635  | 623  | 588  | 601 | 678  | 690  | 748  | 708  | 684  | 620  | 726  |
| 1991             | 702  | 681  | 694  | 704  | 737 | 694  | 764  | 771  | 780  | 800  | 721  | 742  |
| 1992             | 798  | 741  | 774  | 770  | 764 | 741  | 750  | 726  | 734  | 665  | 658  | 647  |
| 1993             | 643  | 663  | 670  | 671  | 666 | 707  | 614  | 602  | 604  | 587  | 639  | 644  |
| 1994             | 610  | 612  | 635  | 648  | 625 | 614  | 665  | 700  | 633  | 652  | 656  | 656  |
| 1995             | 644  | 646  | 628  | 649  | 623 | 583  | 571  | 605  | 614  | 527  | 458  | 567  |
| 1996             | 586  | 603  | 636  | 689  | 657 | 677  | 715  | 561  | 584  | 624  | 545  | 590  |
| 1997             | 484  | 539  | 598  | 613  | 651 | 560  | 610  | 638  | 609  | 555  | 484  | 503  |
| 1998             | 452  | 469  | 508  | 532  | 578 | 596  | 589  | 616  | 598  | 571  | 520  | 565  |
| 1999             | 603  | 574  | 624  | 678  | 691 | 751  | 728  | 667  | 567  | 559  | 520  | 542  |
| Surimi           |      |      |      |      |     |      |      |      |      |      |      |      |
| 1992             | 683  | 624  | 591  | 541  | 576 | 555  | 504  | 438  | 443  | 438  | 445  | 415  |
| 1993             | 360  | 340  | 347  | 348  | 364 | 350  | 367  | 326  | 332  | 295  | 295  | 309  |
| 1994             | 322  | 315  | 309  | 302  | 311 | 320  | 309  | 316  | 310  | 319  | 333  | 350  |
| 1995             | 340  | 337  | 332  | 335  | 338 | 341  | 356  | 343  | 368  | 353  | 348  | 335  |
| 1996             | 334  | 319  | 314  | 330  | 303 | 342  | 334  | 286  | 308  | 309  | 347  | 321  |
| 1997             | 356  | 345  | 340  | 351  | 374 | 388  | 383  | 381  | 402  | 391  | 401  | 402  |
| 1998             | 389  | 339  | 354  | 337  | 329 | 339  | 333  | 328  | 313  | 313  | 319  | 334  |
| 1999             | 315  | 331  | 328  | 339  | 340 | 346  | 337  | 323  | 339  | 351  | 339  | 330  |

Note: From 1988-1995 prices are for six large cities wholesale market, and from 1996-1999 prices are for ten large cities wholesale market.

Source: Monthly Stat. of Agriculture, Forestry, and Fisheries, Stat. and Info. Dep., Ministry of Agriculture, Forestry, and Fisheries, Government of Japan. Available from Alaska Fish. Sci. Cen., P.O. Box 15700, Seattle, WA 98115-0070.

Table 41.--U.S. imports of groundfish fillets, steaks, and blocks, 1976-99, quantity in million lb, product weight and value in million dollars.

| Year | Fillets<br>and steaks |       | Blocks   |       | Total    |       |
|------|-----------------------|-------|----------|-------|----------|-------|
|      | Quantity              | Value | Quantity | Value | Quantity | Value |
| 1976 | 337                   | \$273 | 379      | \$211 | 716      | \$484 |
| 1977 | 321                   | 305   | 385      | 292   | 706      | 597   |
| 1978 | 333                   | 341   | 406      | 325   | 739      | 666   |
| 1979 | 340                   | 385   | 408      | 337   | 748      | 722   |
| 1980 | 297                   | 341   | 336      | 289   | 633      | 630   |
| 1981 | 346                   | 415   | 344      | 301   | 690      | 716   |
| 1982 | 371                   | 458   | 319      | 274   | 690      | 732   |
| 1983 | 355                   | 449   | 384      | 339   | 739      | 788   |
| 1984 | 373                   | 459   | 316      | 263   | 689      | 722   |
| 1985 | 388                   | 500   | 334      | 275   | 722      | 775   |
| 1986 | 366                   | 542   | 364      | 380   | 730      | 922   |
| 1987 | 408                   | 759   | 403      | 539   | 812      | 1,298 |
| 1988 | 323                   | 568   | 303      | 382   | 626      | 950   |
| 1989 | 333                   | 578   | 282      | 325   | 616      | 903   |
| 1990 | 262                   | 482   | 264      | 373   | 526      | 856   |
| 1991 | 255                   | 526   | 290      | 444   | 545      | 970   |
| 1992 | 221                   | 437   | 229      | 304   | 450      | 741   |
| 1993 | 236                   | 452   | 212      | 219   | 447      | 671   |
| 1994 | 229                   | 433   | 200      | 184   | 428      | 617   |
| 1995 | 232                   | 437   | 210      | 213   | 442      | 650   |
| 1996 | 223                   | 407   | 234      | 213   | 457      | 620   |
| 1997 | 219                   | 426   | 234      | 231   | 453      | 657   |
| 1998 | 236                   | 460   | 233      | 271   | 469      | 731   |
| 1999 | 272                   | 550   | 214      | 250   | 486      | 801   |

Source: U.S. Dep. Commer., Bur. of the Census, Washington, D.C. 20233; and Fisheries of the United States, Natl. Mar. Fish. Serv., Fish. Stat. Div., 1315 East-West Highway, Silver Spring, MD 20910, various issues.

Table 42.--U.S. per capita consumption of fish and shellfish, 1970-99,  
population in millions and consumption in pounds, edible weight.

| Year | Total civilian<br>population | Per capita consumption |        |       |       |
|------|------------------------------|------------------------|--------|-------|-------|
|      |                              | Fresh and<br>frozen    | Canned | Cured | Total |
| 1970 | 201.9                        | 6.9                    | 4.5    | .4    | 11.8  |
| 1971 | 204.9                        | 6.7                    | 4.3    | .5    | 11.5  |
| 1972 | 207.5                        | 7.1                    | 4.9    | .5    | 12.5  |
| 1973 | 209.6                        | 7.4                    | 5.0    | .4    | 12.8  |
| 1974 | 211.6                        | 6.9                    | 4.7    | .5    | 12.1  |
| 1975 | 213.8                        | 7.5                    | 4.3    | .4    | 12.2  |
| 1976 | 215.9                        | 8.2                    | 4.2    | .5    | 12.9  |
| 1977 | 218.1                        | 7.7                    | 4.6    | .4    | 12.7  |
| 1978 | 220.5                        | 8.1                    | 5.0    | .3    | 13.4  |
| 1979 | 223.0                        | 7.8                    | 4.8    | .4    | 13.0  |
| 1980 | 225.6                        | 7.9                    | 4.3    | .3    | 12.5  |
| 1981 | 227.8                        | 7.8                    | 4.6    | .3    | 12.7  |
| 1982 | 230.0                        | 7.9                    | 4.3    | .3    | 12.5  |
| 1983 | 232.1                        | 8.4                    | 4.7    | .3    | 13.4  |
| 1984 | 234.1                        | 9.0                    | 4.9    | .3    | 14.2  |
| 1985 | 236.2                        | 9.8                    | 5.0    | .3    | 15.1  |
| 1986 | 238.4                        | 9.8                    | 5.4    | .3    | 15.5  |
| 1987 | 240.6                        | 10.7                   | 5.2    | .3    | 16.2  |
| 1988 | 242.8                        | 10.0                   | 4.9    | .3    | 15.2  |
| 1989 | 245.1                        | 10.2                   | 5.1    | .3    | 15.6  |
| 1990 | 247.8                        | 9.6                    | 5.1    | .3    | 15.0  |
| 1991 | 250.5                        | 9.7                    | 4.9    | .3    | 14.9  |
| 1992 | 253.5                        | 9.9                    | 4.6    | .3    | 14.8  |
| 1993 | 256.4                        | 10.2                   | 4.5    | .3    | 15.0  |
| 1994 | 259.2                        | 10.4                   | 4.5    | .3    | 15.2  |
| 1995 | 261.4                        | 10.0                   | 4.7    | .3    | 15.0  |
| 1996 | 264.0                        | 10.0                   | 4.5    | .3    | 14.8  |
| 1997 | 266.4                        | 9.9                    | 4.4    | .3    | 14.6  |
| 1998 | 269.1                        | 10.2                   | 4.4    | .3    | 14.9  |
| 1999 | 271.5                        | 10.4                   | 4.6    | .3    | 15.3  |

Note: Per capita consumption represents pounds of edible meat consumed from domestically caught and imported fish and shellfish adjusted for beginning and ending inventories, and exports, divided by the civilian population of the United States as of 1 July of each year. Population estimates for 1980-91 were revised to reflect changes from the 1990 decennial population enumeration. Changes did not significantly alter pounds per capita.

Source: Fisheries of the United States, 1996. Natl. Mar. Fish. Serv., 1315 East-West Highway, Silver Spring, MD 20910, CFS No. 9600, July 1997.

Table 43.--U.S. consumption of all fillets and steaks, and fish sticks and portions, total in 1,000 lb and per capita in pounds, product weight, 1980-99.

| Year | Fillets and steaks <sup>1</sup> |            | Fish sticks and portions |            |
|------|---------------------------------|------------|--------------------------|------------|
|      | Total <sup>2</sup>              | Per capita | Total <sup>2</sup>       | Per capita |
| 1980 | 541,440                         | 2.4        | 451,200                  | 2.0        |
| 1981 | 546,720                         | 2.4        | 410,040                  | 1.8        |
| 1982 | 575,000                         | 2.5        | 391,000                  | 1.7        |
| 1983 | 626,670                         | 2.7        | 417,780                  | 1.8        |
| 1984 | 702,300                         | 3.0        | 421,380                  | 1.8        |
| 1985 | 755,840                         | 3.2        | 425,160                  | 1.8        |
| 1986 | 810,560                         | 3.4        | 429,120                  | 1.8        |
| 1987 | 866,160                         | 3.6        | 409,020                  | 1.7        |
| 1988 | 776,960                         | 3.2        | 364,200                  | 1.5        |
| 1989 | 759,810                         | 3.1        | 367,650                  | 1.5        |
| 1990 | 768,180                         | 3.1        | 371,700                  | 1.5        |
| 1991 | 751,500                         | 3.0        | 300,600                  | 1.2        |
| 1992 | 735,150                         | 2.9        | 228,150                  | 0.9        |
| 1993 | 743,560                         | 2.9        | 256,400                  | 1.0        |
| 1994 | 803,520                         | 3.1        | 233,280                  | 0.9        |
| 1995 | 758,060                         | 2.9        | 313,680                  | 1.2        |
| 1996 | 792,000                         | 3.0        | 264,000                  | 1.0        |
| 1997 | 799,200                         | 3.0        | 266,400                  | 1.0        |
| 1998 | 861,120                         | 3.2        | 242,190                  | 0.9        |
| 1999 | 868,800                         | 3.2        | 271,500                  | 1.0        |

<sup>1</sup>Series revised in 1993 to reflect deduction of fillet production used to produce blocks, exports of foreign fillets and steaks, and changes in population estimates from 1990 decennial population enumeration.

<sup>2</sup>Per Capita multiplied by total U.S. population.

Source: Computed from data from U.S. Dep. of Commerce, Bur. of the Census; and Fisheries of the United States, Natl. Mar. Fish. Serv., Fish. Stat. Div., 1315 East-West Highway, Silver Spring, MD 20910, various issues.

Table 44.--Annual U.S. economic indicators: Selected producer and consumer price indexes, 1977-99.

| Year | Producer price index<br>(Index 1982=100) |       |         |       |                 | Consumer price index<br>(Index 1982-84=100) |       |         |       |
|------|--|-------|---------|-------|-----------------|---|-------|---------|-------|
|      | All items                                | Meat  | Poultry | Fish  | Petrl. products | All items                                   | Meat  | Poultry | Fish  |
| 1976 | 61.1                                     | 69.3  | 93.0    | 64.5  | 36.3            | 56.9  | 66.4  | 76.4    | 60.2  |
| 1977 | 64.9                                     | 68.1  | 97.0    | 69.7  | 40.5            | 60.6  | 64.9  | 76.9    | 66.6  |
| 1978 | 69.9                                     | 83.6  | 108.6   | 74.1  | 42.2            | 65.2  | 77.0  | 84.9    | 73.0  |
| 1979 | 78.7                                     | 93.3  | 105.6   | 90.9  | 58.4            | 72.6  | 90.1  | 89.1    | 80.1  |
| 1980 | 89.8                                     | 94.1  | 108.2   | 87.8  | 88.6            | 82.4  | 92.7  | 93.7    | 87.5  |
| 1981 | 98.0                                     | 95.4  | 108.2   | 89.4  | 105.9           | 90.9  | 96.0  | 97.5    | 94.8  |
| 1982 | 100.0                                    | 100.0 | 100.0   | 100.0 | 100.0           | 96.5  | 100.7 | 95.8    | 98.2  |
| 1983 | 101.3                                    | 94.3  | 103.7   | 105.4 | 89.9            | 99.6  | 99.5  | 97.0    | 99.3  |
| 1984 | 103.7                                    | 94.5  | 115.3   | 112.7 | 87.4            | 103.9                                       | 99.8  | 107.3   | 102.5 |
| 1985 | 103.2                                    | 90.9  | 110.4   | 114.6 | 83.2            | 107.6                                       | 98.9  | 106.2   | 107.5 |
| 1986 | 100.2                                    | 93.9  | 116.8   | 124.9 | 53.2            | 109.6                                       | 102.0 | 114.2   | 117.4 |
| 1987 | 102.8                                    | 100.4 | 103.5   | 140.0 | 56.8            | 113.6                                       | 109.6 | 112.6   | 129.9 |
| 1988 | 106.9                                    | 99.9  | 111.6   | 148.7 | 53.9            | 118.3                                       | 112.2 | 120.7   | 139.4 |
| 1989 | 112.2                                    | 104.8 | 120.4   | 142.9 | 61.2            | 124.0                                       | 116.7 | 132.7   | 143.6 |
| 1990 | 116.3                                    | 117.0 | 113.6   | 147.2 | 74.8            | 130.7                                       | 128.5 | 132.5   | 146.7 |
| 1991 | 116.5                                    | 113.5 | 109.9   | 149.5 | 67.2            | 136.2                                       | 132.5 | 131.5   | 148.3 |
| 1992 | 117.2                                    | 106.7 | 109.0   | 156.1 | 64.7            | 140.3                                       | 130.7 | 131.4   | 151.7 |
| 1993 | 118.9                                    | 110.6 | 111.7   | 156.5 | 62.0            | 144.5                                       | 134.6 | 136.9   | 156.6 |
| 1994 | 120.4                                    | 104.7 | 114.7   | 161.4 | 59.1            | 148.2                                       | 135.4 | 141.5   | 163.7 |
| 1995 | 124.7                                    | 102.9 | 114.2   | 170.8 | 60.8            | 152.4                                       | 135.5 | 143.5   | 171.6 |
| 1996 | 127.7                                    | 109.0 | 119.7   | 165.9 | 70.1            | 156.9                                       | 140.2 | 152.4   | 173.1 |
| 1997 | 127.6                                    | 111.6 | 117.4   | 178.1 | 68.0            | 160.5                                       | 144.4 | 156.6   | 177.1 |
| 1998 | 124.4                                    | 101.3 | 120.8   | 183.2 | 51.3            | 163.0                                       | 141.6 | 157.1   | 181.7 |
| 1999 | 125.5                                    | 104.5 | 114.1   | 190.7 | 60.9            | 166.6                                       | 142.3 | 157.9   | 185.3 |

Source: Producer prices and price indexes, and consumer price indexes, U.S. Dep. of Labor, Bur. of Labor Statistics.

Table 45.--Monthly U.S. economic indicators: Selected producer and consumer price indexes, 1997-99.

| Month | Producer price index<br>(Index 1982=100) |       |         |       |                 | Consumer price index<br>(Index 1982-84=100) |       |         |       |
|-------|--|-------|---------|-------|-----------------|---|-------|---------|-------|
|       | All items                                | Meat  | Poultry | Fish  | Petrl. products | All items                                   | Meat  | Poultry | Fish  |
| 1997  |  |       |         |       |                 |   |       |         |       |
| Jan.  | 129.7                                    | 111.1 | 118.6   | 183.8 | 74.3            | 159.1                                       | 144.5 | 158.2   | 178.6 |
| Feb.  | 128.5                                    | 109.0 | 118.3   | 173.1 | 72.9            | 159.6                                       | 144.0 | 157.9   | 175.3 |
| Mar.  | 127.3                                    | 111.7 | 117.4   | 187.1 | 69.5            | 160.0                                       | 143.1 | 156.3   | 178.2 |
| Apr.  | 127.0                                    | 112.4 | 117.3   | 175.4 | 68.2            | 160.2                                       | 143.4 | 155.4   | 176.9 |
| May   | 127.4                                    | 115.7 | 117.1   | 180.9 | 67.9            | 160.1                                       | 143.9 | 156.6   | 176.5 |
| Jun.  | 127.2                                    | 113.2 | 117.3   | 172.9 | 66.3            | 160.3                                       | 144.5 | 156.7   | 176.6 |
| Jul.  | 126.9                                    | 113.4 | 118.1   | 169.3 | 64.3            | 160.5                                       | 144.6 | 157.9   | 174.9 |
| Aug.  | 127.2                                    | 115.4 | 119.4   | 166.8 | 67.8            | 160.8                                       | 145.5 | 155.6   | 177.5 |
| Sep.  | 127.5                                    | 112.5 | 118.6   | 169.7 | 68.5            | 161.2                                       | 145.6 | 156.8   | 176.5 |
| Oct.  | 127.8                                    | 109.8 | 117.0   | 187.8 | 67.7            | 161.6                                       | 145.2 | 155.6   | 178.4 |
| Nov.  | 127.9                                    | 108.1 | 116.0   | 189.1 | 66.3            | 161.5                                       | 144.6 | 157.4   | 178.9 |
| Dec.  | 126.8                                    | 106.8 | 114.0   | 181.7 | 62.2            | 161.3                                       | 143.4 | 155.2   | 177.2 |
| 1998  |  |       |         |       |                 |   |       |         |       |
| Jan.  | 125.4                                    | 102.4 | 113.6   | 187.4 | 57.4            | 161.6                                       | 143.2 | 155.1   | 180.7 |
| Feb.  | 125.0                                    | 102.3 | 115.7   | 193.0 | 54.4            | 161.9                                       | 142.4 | 155.3   | 180.9 |
| Mar.  | 124.7                                    | 100.0 | 116.8   | 187.2 | 50.6            | 162.2                                       | 142.2 | 155.1   | 180.3 |
| Apr.  | 124.9                                    | 101.2 | 117.2   | 185.8 | 52.7            | 162.5                                       | 140.8 | 154.3   | 181.0 |
| May   | 125.1                                    | 105.5 | 116.5   | 186.4 | 54.9            | 162.8                                       | 141.0 | 155.6   | 180.9 |
| Jun.  | 124.8                                    | 106.0 | 120.1   | 177.7 | 53.2            | 163.0                                       | 141.5 | 155.5   | 180.5 |
| Jul.  | 124.9                                    | 103.0 | 125.4   | 179.1 | 52.1            | 163.2                                       | 141.8 | 156.6   | 181.4 |
| Aug.  | 124.2                                    | 104.6 | 128.4   | 179.8 | 49.1            | 163.4                                       | 142.2 | 158.9   | 183.5 |
| Sep.  | 123.8                                    | 100.0 | 129.4   | 178.7 | 49.7            | 163.6                                       | 141.6 | 159.3   | 181.5 |
| Oct.  | 124.0                                    | 98.1  | 124.6   | 181.2 | 51.0            | 164.0                                       | 141.3 | 161.1   | 183.1 |
| Nov.  | 123.6                                    | 97.2  | 123.4   | 186.3 | 48.8            | 164.0                                       | 141.4 | 159.6   | 183.1 |
| Dec.  | 122.8                                    | 95.5  | 118.3   | 175.6 | 42.2            | 163.9                                       | 140.2 | 159.3   | 183.7 |
| 1999  |  |       |         |       |                 |   |       |         |       |
| Jan.  | 122.9                                    | 99.1  | 115.7   | 186.2 | 44.9            | 164.3                                       | 139.4 | 158.5   | 183.6 |
| Feb.  | 122.3                                    | 98.6  | 113.6   | 186.9 | 42.6            | 164.5                                       | 140.6 | 157.4   | 184.3 |
| Mar.  | 122.6                                    | 100.2 | 113.6   | 200.9 | 46.3            | 165.0                                       | 140.3 | 158.3   | 183.5 |
| Apr.  | 123.6                                    | 99.8  | 111.8   | 185.0 | 58.7            | 166.2                                       | 140.5 | 157.6   | 185.3 |
| May   | 124.7                                    | 104.8 | 114.4   | 187.1 | 59.8            | 166.2                                       | 141.4 | 155.7   | 185.9 |
| Jun.  | 125.2                                    | 106.5 | 115.6   | 186.9 | 58.8            | 166.2                                       | 141.8 | 156.8   | 184.6 |
| Jul.  | 125.7                                    | 104.3 | 114.5   | 188.6 | 63.6            | 166.7                                       | 142.2 | 157.3   | 184.4 |
| Aug.  | 126.9                                    | 108.4 | 113.7   | 189.0 | 68.6            | 167.1                                       | 142.8 | 158.5   | 185.2 |
| Sep.  | 128.0                                    | 109.2 | 115.1   | 193.6 | 72.5            | 167.9                                       | 143.9 | 159.8   | 184.7 |
| Oct.  | 127.9                                    | 108.4 | 111.7   | 195.9 | 69.1            | 168.2                                       | 144.4 | 158.1   | 187.3 |
| Nov.  | 128.4                                    | 105.8 | 115.1   | 197.7 | 71.8            | 168.3                                       | 145.3 | 159.4   | 187.9 |
| Dec.  | 128.0                                    | 108.8 | 114.5   | 190.5 | 74.8            | 168.3                                       | 145.3 | 157.5   | 186.9 |

Source: Producer prices and price indexes, and consumer price indexes, U.S. Dep. of Labor, Bur. of Labor Statistics.

Table 46.--Annual foreign exchange rates for selected countries, 1976-99,  
in national currency units per U.S. dollar.

| Year | Canada<br>(dollar) | Denmark<br>(kroner) | Japan<br>(yen) | ROK<br>(won) | New Zeal.<br>(dollar) | Iceland<br>(kronur) | Norway<br>(kroner) | U.K.<br>(pound) |
|------|--------------------|---------------------|----------------|--------------|-----------------------|---------------------|--------------------|-----------------|
| 1976 | 0.9860             | 6.0450              | 296.55         | 484.00       | 1.0036                | 1.822               | 5.4565             | 0.5536          |
| 1977 | 1.0635             | 6.0032              | 268.51         | 484.00       | 1.0301                | 1.989               | 5.3235             | .5729           |
| 1978 | 1.1407             | 5.5146              | 210.44         | 484.00       | .9636                 | 2.711               | 5.2423             | .5210           |
| 1979 | 1.1714             | 5.2610              | 219.14         | 484.00       | .9776                 | 3.526               | 5.0641             | .4713           |
| 1980 | 1.1692             | 5.6359              | 226.74         | 607.43       | 1.0265                | 4.798               | 4.9392             | .4299           |
| 1981 | 1.1989             | 7.1234              | 220.54         | 681.03       | 1.4194                | 7.224               | 5.7395             | .4931           |
| 1982 | 1.2337             | 8.3324              | 249.08         | 731.08       | 1.3300                | 12.352              | 6.4540             | .5713           |
| 1983 | 1.2324             | 9.1450              | 237.51         | 775.75       | 1.4952                | 24.843              | 7.2964             | .6592           |
| 1984 | 1.2951             | 10.3566             | 237.52         | 805.98       | 1.7286                | 31.694              | 8.1615             | .7483           |
| 1985 | 1.3655             | 10.5964             | 238.54         | 870.02       | 2.0064                | 41.508              | 8.5970             | .7714           |
| 1986 | 1.3895             | 8.0910              | 168.52         | 881.45       | 1.9088                | 41.104              | 7.3947             | .6971           |
| 1987 | 1.3260             | 6.8400              | 144.64         | 822.57       | 1.6886                | 38.677              | 6.7375             | .6102           |
| 1988 | 1.2307             | 6.7320              | 128.15         | 731.47       | 1.5244                | 43.014              | 6.5170             | .5614           |
| 1989 | 1.1840             | 7.3100              | 137.96         | 671.46       | 1.6708                | 57.042              | 6.9045             | .6099           |
| 1990 | 1.1668             | 6.1890              | 144.79         | 707.76       | 1.6750                | 58.284              | 6.2597             | .5603           |
| 1991 | 1.1457             | 6.3960              | 134.71         | 733.35       | 1.7265                | 58.996              | 6.4829             | .5652           |
| 1992 | 1.2087             | 6.0360              | 126.65         | 780.65       | 1.8580                | 57.546              | 6.2145             | .5664           |
| 1993 | 1.2901             | 6.4840              | 111.20         | 802.67       | 1.8494                | 67.603              | 7.0941             | .6658           |
| 1994 | 1.3656             | 6.3610              | 102.21         | 803.44       | 1.6844                | 69.944              | 7.0576             | .6529           |
| 1995 | 1.3724             | 5.6020              | 94.06          | 771.27       | 1.5235                | 64.692              | 6.3352             | .6335           |
| 1996 | 1.3635             | 5.7990              | 108.78         | 804.45       | 1.4540                | 66.500              | 6.4498             | .6400           |
| 1997 | 1.3849             | 6.6092              | 121.06         | 950.77       | 1.5094                | 70.904              | 7.0857             | .6106           |
| 1998 | 1.4835             | 6.7008              | 130.91         | 1401.44      | 1.8683                | 70.958              | 7.5451             | .6038           |
| 1999 | 1.49               | 6.98                | 113.91         | 1188.82      | 1.89                  | 72.35               | 7.80               | .62             |

ROK - Republic of Korea. U.K. - United Kingdom.

Source: Intl. Financial Statistics, Intl. Mon. Fund, Washington, D.C.



Table 47.--Monthly foreign exchange rates for selected countries, 1997-99,  
in national currency units per U.S. dollar.

| Month | Canada<br>(dollar) | Denmark<br>(kroner) | Japan<br>(yen) | ROK<br>(won) | New Zeal.<br>(dollar) | Iceland<br>(kronur) | Norway<br>(kroner) | U.K.<br>(pound) |
|-------|--------------------|---------------------|----------------|--------------|-----------------------|---------------------|--------------------|-----------------|
| 1997  |                    |                     |                |              |                       |                     |                    |                 |
| Jan.  | 1.349              | 6.12                | 117.9          | 854.1        | 1.427                 | 72.97               | 6.46               | .603            |
| Feb.  | 1.356              | 6.39                | 123.0          | 868.4        | 1.448                 | 72.96               | 6.63               | .615            |
| Mar.  | 1.373              | 6.46                | 122.8          | 882.6        | 1.433                 | 72.05               | 6.79               | .621            |
| Apr.  | 1.394              | 6.52                | 125.6          | 895.6        | 1.445                 | 72.10               | 6.99               | .614            |
| May   | 1.380              | 6.49                | 119.2          | 894.7        | 1.447                 | 70.86               | 7.08               | .613            |
| Jun.  | 1.384              | 6.58                | 114.4          | 891.4        | 1.455                 | 70.10               | 7.22               | .608            |
| Jul.  | 1.378              | 6.83                | 115.4          | 893.1        | 1.513                 | 68.43               | 7.45               | .599            |
| Aug.  | 1.391              | 7.01                | 117.9          | 898.7        | 1.557                 | 68.53               | 7.62               | .624            |
| Sep.  | 1.387              | 6.80                | 120.9          | 912.5        | 1.572                 | 67.91               | 7.30               | .624            |
| Oct.  | 1.387              | 6.69                | 121.1          | 929.4        | 1.573                 | 67.10               | 7.08               | .612            |
| Nov.  | 1.413              | 6.59                | 125.4          | 1035.2       | 1.602                 | 67.56               | 7.06               | .592            |
| Dec.  | 1.427              | 6.78                | 129.7          | 1494.0       | 1.691                 | 68.77               | 7.26               | .603            |
| 1998  |                    |                     |                |              |                       |                     |                    |                 |
| Jan.  | 1.441              | 6.92                | 129.6          | 1707.3       | 1.726                 | 72.79               | 7.50               | .612            |
| Feb.  | 1.433              | 6.91                | 125.9          | 1628.4       | 1.716                 | 72.32               | 7.55               | .610            |
| Mar.  | 1.417              | 6.97                | 129.1          | 1489.3       | 1.746                 | 72.51               | 7.58               | .602            |
| Apr.  | 1.430              | 6.92                | 131.8          | 1391.6       | 1.807                 | 71.89               | 7.53               | .598            |
| May   | 1.445              | 6.77                | 134.9          | 1399.1       | 1.856                 | 71.34               | 7.45               | .610            |
| Jun.  | 1.466              | 6.83                | 140.3          | 1397.8       | 1.952                 | 71.32               | 7.58               | .606            |
| Jul.  | 1.487              | 6.85                | 140.8          | 1295.8       | 1.929                 | 71.52               | 7.62               | .608            |
| Aug.  | 1.535              | 6.81                | 144.7          | 1314.3       | 1.996                 | 71.59               | 7.72               | .612            |
| Sep.  | 1.522              | 6.47                | 134.5          | 1375.5       | 1.983                 | 69.98               | 7.56               | .594            |
| Oct.  | 1.545              | 6.23                | 121.1          | 1344.1       | 1.918                 | 68.47               | 7.43               | .590            |
| Nov.  | 1.540              | 6.40                | 120.3          | 1294.0       | 1.873                 | 70.01               | 7.46               | .602            |
| Dec.  | 1.543              | 6.35                | 117.1          | 1213.2       | 1.915                 | 69.64               | 7.61               | .599            |
| 1999  |                    |                     |                |              |                       |                     |                    |                 |
| Jan.  | 1.519              | 6.42                | 113.3          | 1175.1       | 1.856                 | 69.46               | 7.45               | .606            |
| Feb.  | 1.498              | 6.64                | 116.7          | 1188.8       | 1.840                 | 71.00               | 7.72               | .614            |
| Mar.  | 1.518              | 6.83                | 119.5          | 1229.7       | 1.871                 | 72.18               | 7.82               | .617            |
| Apr.  | 1.488              | 6.95                | 119.8          | 1210.0       | 1.843                 | 72.99               | 7.78               | .622            |
| May   | 1.461              | 6.99                | 122.0          | 1197.9       | 1.808                 | 73.71               | 7.75               | .619            |
| Jun.  | 1.470              | 7.16                | 120.7          | 1168.9       | 1.878                 | 74.20               | 7.87               | .627            |
| Jul.  | 1.489              | 7.18                | 119.3          | 1189.1       | 1.901                 | 74.47               | 7.90               | .635            |
| Aug.  | 1.493              | 7.01                | 113.2          | 1198.3       | 1.902                 | 72.88               | 7.80               | .623            |
| Sep.  | 1.477              | 7.08                | 106.9          | 1201.0       | 1.912                 | 72.62               | 7.84               | .616            |
| Oct.  | 1.478              | 6.95                | 106.0          | 1205.3       | 1.945                 | 70.78               | 7.74               | .603            |
| Nov.  | 1.467              | 7.20                | 104.7          | 1177.0       | 1.952                 | 71.78               | 7.94               | .617            |
| Dec.  | 1.472              | 7.36                | 102.6          | 1136.8       | 1.966                 | 72.34               | 8.01               | .620            |

ROK - Republic of Korea. U.K. - United Kingdom.

Source: Intl. Financial Statistics, Intl. Mon. Fund, Washington, DC.

Table 48.--Monthly U.S. cold storage holdings of selected groundfish blocks, 1997-99, in 1,000 lb (end of month).

| Month | Cod    | Flounder | Alaska pollock | Pollock, other | Whiting | Minced | Total* |
|-------|--------|----------|----------------|----------------|---------|--------|--------|
| 1997  |        |          |                |                |         |        |        |
| Jan.  | 3,869  | 940      | 21,380         | 9,515          | 934     | 10,237 | 50,959 |
| Feb.  | 1,997  | 803      | 17,656         | 8,643          | 991     | 9,270  | 41,390 |
| Mar.  | 1,545  | 772      | 20,493         | 10,082         | 1,091   | 9,164  | 45,306 |
| Apr.  | 3,359  | 747      | 18,697         | 9,712          | 1,324   | 8,430  | 47,224 |
| May   | 5,101  | 1,081    | 19,946         | 9,650          | 1,378   | 10,103 | 51,215 |
| Jun.  | 6,323  | 1,042    | 24,623         | 11,167         | 1,474   | 10,749 | 58,928 |
| Jul.  | 4,395  | 669      | 25,422         | 10,665         | 1,253   | 12,350 | 58,261 |
| Aug.  | 6,477  | 1,487    | 24,113         | 11,081         | 1,062   | 10,312 | 57,381 |
| Sep.  | 6,676  | 2,344    | 25,369         | 8,523          | 859     | 12,284 | 58,981 |
| Oct.  | 7,544  | 2,260    | 25,839         | 8,627          | 612     | 11,685 | 60,474 |
| Nov.  | 8,756  | 2,265    | 24,677         | 9,681          | 1,483   | 9,991  | 59,897 |
| Dec.  | 8,632  | 1,905    | 25,246         | 8,866          | 847     | 9,851  | 60,290 |
| 1998  |        |          |                |                |         |        |        |
| Jan.  | 10,036 | 1,747    | 21,295         | 6,010          | 678     | 8,475  | 52,187 |
| Feb.  | 5,871  | 919      | 19,070         | 8,141          | 683     | 8,384  | 46,241 |
| Mar.  | 4,134  | 633      | 11,006         | 6,539          | 718     | 3,646  | 28,592 |
| Apr.  | 3,609  | 505      | 12,087         | 8,777          | 420     | 3,845  | 31,432 |
| May   | 5,077  | 665      | 14,979         | 8,558          | 812     | 12,232 | 45,271 |
| Jun.  | 3,655  | 2,023    | 12,168         | 10,876         | 538     | 14,594 | 47,932 |
| Jul.  | 4,541  | 1,005    | 13,517         | 13,804         | 918     | 14,539 | 53,244 |
| Aug.  | 5,865  | 1,697    | 12,377         | 11,121         | 1,784   | 12,636 | 54,881 |
| Sep.  | 4,867  | 2,501    | 16,791         | 4,417          | 630     | 11,272 | 43,921 |
| Oct.  | 5,626  | 3,798    | 14,857         | 5,241          | 785     | 12,214 | 45,417 |
| Nov.  | 5,882  | 3,611    | 17,728         | 5,923          | 1,059   | 12,997 | 51,206 |
| Dec.  | 6,773  | 3,269    | 23,866         | 11,380         | 863     | 16,084 | 66,694 |
| 1999  |        |          |                |                |         |        |        |
| Jan.  | 6,086  | 2,890    | 26,368         | 8,541          | 790     | 13,948 | 62,313 |
| Feb.  | 5,253  | 2,242    | 18,417         | 4,490          | 1,050   | 5,704  | 41,270 |
| Mar.  | 5,368  | 1,374    | 18,535         | 3,596          | 1,017   | 3,585  | 36,962 |
| Apr.  | 6,056  | 952      | 24,214         | 12,492         | 1,373   | 5,905  | 54,232 |
| May   | 5,383  | 740      | 25,264         | 14,584         | 785     | 4,474  | 53,790 |
| Jun.  | 5,169  | 587      | 27,691         | 16,929         | 1,854   | 3,769  | 58,340 |
| Jul.  | 6,143  | 475      | 24,422         | 16,795         | 775     | 5,739  | 57,736 |
| Aug.  | 5,490  | 487      | 22,439         | 13,162         | 666     | 5,408  | 50,763 |
| Sep.  | 5,004  | 655      | 22,156         | 9,695          | 336     | 5,225  | 46,599 |
| Oct.  | 4,723  | 744      | 21,331         | 9,558          | 582     | 4,240  | 44,460 |
| Nov.  | 4,110  | 705      | 15,473         | 9,757          | 586     | 8,188  | 42,154 |
| Dec.  | 4,817  | 763      | 12,264         | 12,390         | 464     | 9,289  | 43,244 |

Notes: \* Total includes other species not listed.

Source: Natl. Mar. Fish. Serv., Fish. Stat. Div., Silver Spring, MD 20910.

Table 49.--Monthly U.S. cold storage holdings of selected groundfish fillets, 1997-99, in 1,000 lb (end of month).

| Month | Cod    | Flounder | Ocean perch | Alaska pollock | Pollock, other | Whiting | Total* |
|-------|--------|----------|-------------|----------------|----------------|---------|--------|
| 1997  |        |          |             |                |                |         |        |
| Jan.  | 13,710 | 3,701    | 4,374       | 6,117          | 5,406          | 4,028   | 40,893 |
| Feb.  | 14,753 | 3,916    | 3,185       | 11,491         | 4,327          | 4,823   | 45,626 |
| Mar.  | 17,963 | 2,249    | 2,259       | 14,935         | 4,251          | 4,594   | 49,189 |
| Apr.  | 23,938 | 4,653    | 2,185       | 12,878         | 4,743          | 2,727   | 54,605 |
| May   | 27,648 | 3,935    | 1,713       | 11,953         | 4,097          | 3,172   | 55,798 |
| Jun.  | 26,640 | 3,408    | 1,360       | 10,321         | 4,868          | 5,012   | 55,951 |
| Jul.  | 29,984 | 4,056    | 1,526       | 9,542          | 6,474          | 6,499   | 63,940 |
| Aug.  | 25,285 | 5,680    | 1,314       | 7,395          | 4,392          | 6,870   | 52,710 |
| Sep.  | 23,453 | 4,432    | 1,757       | 8,523          | 4,417          | 5,697   | 51,688 |
| Oct.  | 21,339 | 4,116    | 1,580       | 10,827         | 4,124          | 5,493   | 49,975 |
| Nov.  | 21,575 | 6,753    | 1,505       | 10,255         | 3,796          | 4,947   | 50,268 |
| Dec.  | 25,521 | 5,441    | 2,032       | 9,753          | 3,157          | 4,772   | 54,787 |
| 1998  |        |          |             |                |                |         |        |
| Jan.  | 21,215 | 4,264    | 1,643       | 7,515          | 2,916          | 4,177   | 79,000 |
| Feb.  | 20,518 | 4,423    | 1,249       | 7,820          | 1,388          | 2,688   | 64,348 |
| Mar.  | 21,628 | 6,080    | 1,318       | 8,176          | 1,528          | 2,208   | 71,119 |
| Apr.  | 23,914 | 11,738   | 1,314       | 7,839          | 1,709          | 1,816   | 73,953 |
| May   | 21,412 | 12,037   | 1,711       | 6,105          | 1,759          | 2,252   | 65,310 |
| Jun.  | 18,830 | 12,371   | 2,339       | 5,899          | 1,751          | 8,039   | 68,109 |
| Jul.  | 19,147 | 12,400   | 4,297       | 5,824          | 1,623          | 6,883   | 69,300 |
| Aug.  | 16,190 | 12,406   | 4,393       | 4,284          | 2,313          | 8,210   | 65,531 |
| Sep.  | 14,831 | 13,138   | 4,585       | 6,051          | 2,436          | 8,358   | 67,702 |
| Oct.  | 13,599 | 6,544    | 4,255       | 15,179         | 2,539          | 7,604   | 69,712 |
| Nov.  | 13,626 | 6,294    | 4,131       | 13,786         | 2,964          | 33,907  | 94,227 |
| Dec.  | 13,291 | 6,270    | 4,656       | 12,389         | 4,144          | 9,559   | 70,020 |
| 1999  |        |          |             |                |                |         |        |
| Jan.  | 13,694 | 6,275    | 4,045       | 10,435         | 3,423          | 7,246   | 62,971 |
| Feb.  | 11,891 | 5,263    | 3,993       | 11,781         | 3,115          | 5,424   | 58,895 |
| Mar.  | 15,698 | 4,663    | 3,800       | 18,215         | 2,621          | 5,439   | 67,397 |
| Apr.  | 16,532 | 4,167    | 4,170       | 16,503         | 2,474          | 4,349   | 69,241 |
| May   | 18,097 | 3,658    | 3,635       | 15,968         | 2,402          | 4,172   | 64,968 |
| Jun.  | 18,624 | 4,435    | 3,788       | 16,261         | 2,461          | 5,624   | 67,463 |
| Jul.  | 19,646 | 4,788    | 3,032       | 13,830         | 2,304          | 7,697   | 67,407 |
| Aug.  | 19,118 | 5,002    | 1,899       | 14,183         | 1,958          | 10,583  | 70,492 |
| Sep.  | 17,982 | 4,543    | 2,546       | 16,534         | 1,945          | 11,290  | 73,178 |
| Oct.  | 18,161 | 4,655    | 2,348       | 20,670         | 2,270          | 9,650   | 74,602 |
| Nov.  | 17,556 | 4,702    | 2,163       | 24,016         | 1,949          | 9,652   | 76,890 |
| Dec.  | 18,673 | 3,956    | 2,178       | 21,462         | 3,060          | 9,882   | 76,652 |

Notes: \* Total includes other species not listed.

Source: Natl. Mar. Fish. Serv., Fish. Stat. Div., Silver Spring, MD 20910.