

**DISCARDS IN THE NORTH PACIFIC GROUND FISH
FISHERIES
2002**

prepared for



Alaska Marine Conservation Council

by

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Alaska Marine Conservation Council (AMCC) is a community-based organization of commercial, recreational and subsistence fishermen, marine biologists, small business owners, conservationists and families throughout Alaska whose livelihoods and ways of life depend on a healthy and diverse marine ecosystem. Dedicated to protecting the health and diversity of Alaska's marine ecosystem, AMCC works to minimize bycatch, protect habitat, prevent overfishing and promote clean community-based fishing opportunities.

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Discards in the North Pacific Groundfish Fisheries 2002, is the continuation of a time series of catch and discard data. Previous years of bycatch data can be found at the Alaska Department of Fish and Game Commercial Fisheries web site; www.cf.adfg.state.ak.us and by contacting the Alaska Marine Conservation Council.

Discards in the Groundfish Fisheries of the Bering Sea/ Aleutian Islands & the Gulf of Alaska **1995-1997:**

http://www.cf.adfg.state.ak.us/GENINFO/pubs/95_97DSCARD/95_97discard.pdf

Discards in the Groundfish Fisheries of the Bering Sea/ Aleutian Islands & the Gulf of Alaska **1998-2000:**

http://www.cf.adfg.state.ak.us/GENINFO/pubs/98_00discard/98_00discard.pdf

Discards in the North Pacific Groundfish Fisheries **2001:**

www.akmarine.org

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1.0 Introduction

This report updates the Alaska Marine Conservation Council (AMCC) sponsored report, Discards in the North Pacific Groundfish Fisheries 2001. It documents the amounts and sources of groundfish, crab, halibut, herring and salmon discards in commercial groundfish fisheries in the Bering Sea/Aleutian Islands (BSAI) and the Gulf of Alaska (GOA) during calendar year 2002.

Appendix 1 includes figures and tables for the BSAI target fisheries, Appendix 2 has figures and tables for GOA target fisheries, Appendix 3 has tables for Community Development Quota (CDQ) groundfish fisheries.

A summary table below shows the total groundfish harvest, groundfish discards and prohibited species discards for years 1997 through 2002. As predicted in the 1998 version of this report, implementation of the Improved Retention/Improved Utilization program contributed to substantial declines in groundfish discards. However, 1999 showed an increase, followed by a slight decrease in 2000. It wasn't until 2001 that another substantial decrease in groundfish discards occurred; the discard rate was 72% of that in 2000. In 2002, the total groundfish discard rate increased from 6.5% to 7.1%, resulting from increased discard rates in the two largest target fisheries, pollock and Pacific cod.

TABLE 1. ALASKA
SUMMARY

	1997	1998	1999	2000	2001	2002
Total Groundfish Catch (mt)	1,940,764	1,774,489	1,527,219	1,672,261	1,831,197	1,924,256
Total Groundfish Discards (mt)	292,413	149,606	148,946	150,576	118,647	135,952
Groundfish Discards (pounds)	644,654,000	329,822,000	328,368,000	331,961,000	261,568,000	299,720,000
Percent Groundfish Discarded	15.1%	8.4%	9.8%	9.0%	6.5%	7.1%
Halibut Mortality (pounds)	14,620,000	14,087,000	14,414,000	13,558,000	13,673,000	13,688,000
Herring (pounds)	2,515,000	1,797,000	1,989,000	1,137,000	608,000	308,000
Chinook Salmon (numbers)	63,231	70,000	43,492	33,825	53,055	50,433
Other Salmon (numbers)	66,578	81,580	53,792	68,532	63,380	81,772
Red King Crab (numbers)	74,634	49,191	94,022	115,682	80,909	133,832
Other King Crab (numbers)	29,093	43,220	61,879	36,914	36,284	62,477
Bairdi Tanner Crab (numbers)	2,262,152	1,643,587	996,764	1,254,100	1,258,219	1,404,762
Other Tanner Crab (numbers)	5,654,941	4,633,578	1,604,354	3,314,970	2,043,627	1,501,745

The rate changes in “percent groundfish discarded” closely track those for pollock, which is by far the dominant species in Alaskan groundfish catch. Table 2 shows these details.

It is the opinion of the author that the accuracy of observer estimates of discards is suspect in high-volume, low-discard rate fisheries such as pollock, and that there may be no real significant difference, for example, between the 1.4% rate estimated for pollock in 2001 and the 1.6% rate estimated in 2002.

TABLE 2.	1997	1998	1999	2000	2001	2002
POLLOCK						
CATCH (mt)						
BSAI	1,060,641	1,040,268	889,337	1,019,186	1,247,048	1,332,380
GULF	89,667	125,288	95,420	72,845	72,028	51,844
TOTAL	1,150,308	1,165,555	984,758	1,092,031	1,319,076	1,384,224
DISCARDS (mt)						
BSAI	92,425	16,060	28,244	21,984	17,355	20,471
GULF	6,954	1,326	1,894	2,086	721	1,094
TOTAL	99,379	17,386	30,138	24,070	18,076	21,565
DISCARD RATE						
BSAI	8.71%	1.54%	3.18%	2.16%	1.39%	1.5%
GULF	7.76%	1.06%	1.98%	2.86%	1.00%	2.1%
TOTAL	8.64%	1.49%	3.06%	2.20%	1.37%	1.6%
POLLOCK HAR- VEST AS % OF TO- TAL GROUND FISH HARVEST	59.27%	65.68%	64.48%	65.30%	72.03%	71.94%

2.0 Data sources and Methodology

As in previous reports, the National Marine Fisheries Service (NMFS) “best blend” data provided by the Alaska Regional Office was used as the data source. A description of the derivation of this data can be found at: <http://www.fakr.noaa.gov/sustainablefisheries/catchaccounting.htm>

Numbers may differ slightly from those in NMFS annual reports posted on NMFS Alaska Fisheries Science Center web pages for several reasons. First, slightly different methodologies were used in assigning targets in the data. Second, small amounts of catch in unassigned categories were not included in this report; and third, data for categories with fewer than three processors were not available to the author due to NMFS confidentiality constraints.

2.1 The assumed mortality rate for all species except halibut is 100%. Halibut mortality rates are determined by the International Pacific Halibut Commission (IPHC), based on observer sampling data from recent years. Information on these rates can be found at: http://www.iphc.washington.edu/halcom/research/bycatch/dmr99_00.pdf

3.0 **Managing Entities**

The managing entities for groundfish fisheries in the North Pacific include NMFS, the North Pacific Fishery Management Council (NPFMC), Alaska Department of Fish and Game (ADF&G), and the IPHC. The NPFMC develops management policies and recommends harvest guidelines. NMFS is responsible for day-to-day management of fisheries and regulatory development. ADF&G manages groundfish fisheries in state waters. The IPHC provides information and recommendations about halibut bycatch issues. Information about these agencies can be found at:

NMFS: <http://www.fakr.noaa.gov/>

NPFMC: <http://www.fakr.noaa.gov/npfmc/default.htm>

ADF&G: <http://www.state.ak.us/local/akpages/FISH.GAME/home.html>

IPHC: <http://www.iphc.washington.edu/halcom/default.htm>

4.0 **General Causes of Discards**

This issue was comprehensively discussed in the 1998 report, Discards in the Groundfish Fisheries of the Bering Sea/ Aleutian Islands & The Gulf of Alaska 1995-1997 (p. 3). Regulatory discards continue to be a significant component of discards, although an exact accounting is beyond the scope of this series. In 2001 there were 52 inseason actions where a species or species group became “bycatch only” to one or more gear groups in a fisheries management area: 23 in the BSAI and 29 in the Gulf of Alaska. In 2002 there were 55 such actions: 22 in the BSAI and 33 in the Gulf of Alaska. These closures can be year-round, or for periods between open fisheries. They can apply to entire areas or subareas and affect one or more gear types. During these periods, the closed species can be retained according to a maximum retainable bycatch limit, or MRB. Despite such “bycatch only” closures being in effect, it is sometimes necessary for NMFS to make some groundfish species or species groups prohibited to retention (PSC) in certain areas when their Total Allowable Catch (TAC) amounts are exceeded. In 2002 there were eight such closures, five involving rockfish species with very low TACs.

5.0 **Improved Retention/Improved Utilization (IR/IU)**

Details of this program were described in the 2001 version of this series.

The most recent NPFMC action on this issue can be found at:

<http://www.fakr.noaa.gov/npfmc/Motions/IRIU.pdf>

6.0 **Prohibited Species Donation Program**

Details of this program were described in the 2001 version of this series. Regulations are found at: <http://www.fakr.noaa.gov/regs/679b26.pdf>

7.0 **Other Management Actions affecting fisheries bycatch.**

These were discussed in the 2001 version of this report, and included measures in the 1990's specifically intended to control bycatch, as well as the dramatic affect of the American Fisheries Act (1999) on pollock fisheries. Also initially implemented in 1999 were the first RPAs (Reasonable and Prudent Alternatives) for the protection of Steller sea lions. The RPAs dispersed pollock and Atka mackerel fishing effort both temporally and spatially, by establishing new quotas and seasons, and by established conservation zones in the Bering Sea and Gulf of Alaska. Subsequent Steller sea lion protection measures similarly affected Pacific cod fisheries.

8.0 **CDQ Fisheries.**

This program was described in the last version of this series. More information can be found at: <http://www.fakr.noaa.gov/cdq/default.htm>

Some 2002 CDQ information is unavailable in this report because CDQ data is in a different format than open-access groundfish and prohibited species data.

9.0 **Review of 2001-2002 Data**

Information from year 2001 is included in this section for purposes of comparison.

9.1 **BERING SEA/ALEUTIAN ISLANDS**

- Groundfish discards in 2001 were 209 million pounds (mp) or 5.8% of the total harvest; in 2002 they were 250 mp or 6.5% of the harvest.
- Trawl fisheries accounted for 91.6% of the harvest and 80.4% of discards in 2001; and 92.6% of the harvest and 85.4% of discards in 2002.
- Trawl catcher/processors accounted for 45.9% of the total harvest and 74.9% of discards in 2001; and 45.6% of the harvest and 77.8% of discards in 2002.
- Shoreside trawl catcher vessels accounted for 38.1% of the total harvest and 4.6% of discards in 2001; and 39.1% of harvest and 7.3% of discards in 2002.
- Fixed gear accounted for 8.5% of the harvest and 19.6% of discards in 2001; and 7.4% of the harvest and 14.6% of discards in 2002.
- Salmon bycatch totaled 95,310 fish in 2001, and 114,397 fish in 2002.
- Crab bycatch of all kinds was 3.2 million crabs in 2001, and 2.9 million crabs in 2002.
- Halibut bycatch mortality was 4,060 metric tons (mt) in 2001, and 4,068 mt in 2002.

Catcher/processor Mid-water trawl pollock fishery.

- 2001 Total groundfish harvest: 473,104 mt. Total groundfish discarded: 1,792 mt (0.4%). Total pollock discarded 175 mt (0.0%).
- 2002 Total groundfish harvest: 518,467 mt. Total groundfish discarded: 1,946 mt (0.4%). Total pollock discarded: 172 mt (0.0%).
- Salmon bycatch: 34,956 fish in 2001, 18,317 fish in 2002.

CDQ Catcher/processor Mid-water trawl pollock fishery.

- 2001 Total groundfish harvest: 118,597 mt. Total groundfish discarded: 569 mt (0.5%). Total pollock discarded: 0 mt (0.0%).
- 2002 Total groundfish harvest: 125,507 mt. Total groundfish discarded: 759 mt (0.6%). Total pollock discarded: 0 mt (0.0%)
- Salmon bycatch: 3,697 fish in 2001, 3,734 fish in 2002.

Catcher/processor Bottom trawl pollock fishery. At its June 1998 meeting, the NPFMC voted to prohibit bottom trawling for pollock effective January 1, 1999. Some tonnage continues to show up in this target because the target definition depends on the amount of crab bycatch, rather than only the gear used. There was a substantial decrease in this category in 2002.

- 2001 Total groundfish harvest: 17,853 mt. Total groundfish discarded: 842 mt (4.7%). Total pollock discarded: 172 mt (1.1%). Largest discard, pollock: 172 mt (1.1%).
- 2002 Total groundfish harvest: 4,418 mt. Total groundfish discarded: 352 mt (8.0%). Total pollock discarded: 87 mt (2.3%). Largest discard, yellowfin sole: 109 mt (59.3%).

CDQ Catcher/processor Bottom trawl pollock fishery

- 2001 Total groundfish harvest: 2,701 mt. Total groundfish discarded: 55 mt (2.0%). Total pollock discarded: 0 mt (0.0%).
- 2002 Total groundfish harvest: 4,378 mt. Total groundfish discarded: 185 mt (4.2%). Total pollock discarded: 0 mt (0%).

Catcher/processor Yellowfin sole trawl fishery.

- 2001 Total groundfish harvest: 99,173 mt. Total groundfish discarded: 26,856 mt (27.1%). Total yellowfin sole discarded: 5,940 mt (10.9%).
- 2002 Total groundfish harvest: 114,574 mt. Total groundfish discarded: 34,662 mt (30.3%). Total yellowfin sole discarded: 7,829 mt (12.1%).
- Halibut bycatch mortality: 2001 - 1,046 mt. 2002 - 1,017 mt.
- Crab bycatch: 2001 - 1,403,283 crabs. 2002 - 981,844 crabs.

CDQ Catcher/processor Yellowfin sole trawl fishery. Category does not appear in 2001.

- 2002 Total groundfish harvest: 1,946 mt. Total groundfish discarded: 139 mt (7.2%). Total yellowfin sole discarded: 0 mt (0.0%).
- Halibut bycatch mortality: 2002 - 33 mt.
- Crab bycatch: 2002 - 19,043 crabs.

Catcher/processor Rock sole trawl fishery. Traditionally this fishery was mostly a roe fishery and males were discarded. Because of NMFS' inseason target definitions, a portion of the catch in the fishery ends up assigned to the yellowfin sole target category.

- 2001 Total groundfish harvest: 30,435 mt. Total groundfish discarded: 9,386 mt (30.8%). Total Rock sole discarded: 3,480 mt (24.2%).
- 2002 Total groundfish harvest: 41,446 mt. Total groundfish discarded: 17,535 mt (42.3%). Total Rock sole discarded: 6,960 mt (34.8%).

Discards in the North Pacific Groundfish Fisheries, 2002

- Halibut bycatch mortality: 2001 - 729 mt; 2002 - 723 mt.
- Crab bycatch: 2001 - 535,701 crab; 2002 - 532,078 crab.

Catcher/processor Pacific cod trawl fishery.

- 2001 Total groundfish harvest: 27,037 mt. Total groundfish discarded: 8,233 mt (30.4%). Total Pacific cod discarded: 168 mt (1.3%). Largest discard, rock sole - 2,273 mt (47.4%).
- 2002 Total groundfish harvest: 39,304 mt. Total groundfish discarded: 11,964 mt (30.4%). Total Pacific cod discarded: 459 mt (2.3%). Largest discard, rock sole - 2,987 mt (55.9%).
- Halibut bycatch mortality: 2001 - 410 mt; 2002 - 616 mt.
- Crab bycatch: 2001 - 97,285 crab; 2002 - 334,851 crab.

Catcher/processor Atka mackerel trawl fishery.

- 2001 Total groundfish harvest: 64,414 mt. Total groundfish discarded: 10,994 mt (17.1%). Total Atka mackerel discarded: 3,490 mt (6.4%). Largest discard, sharpchin/northern rockfish: 5,437 mt (97.3%).
- 2002 Total groundfish harvest: 47,084 mt. Total groundfish discarded: 12,184 mt (25.9%). Total Atka mackerel (and largest discard) discarded: 6,845 mt (17.1%).

CDQ Catcher/processor Atka mackerel trawl fishery.

- 2001 Total groundfish harvest: 5,818 mt. Total groundfish discarded: 540 mt (8.5%). Total Atka mackerel discarded: 343 mt (6.9%).
- 2002 Total groundfish harvest: 3,985 mt. Total groundfish discarded: 66 mt (1.6%). Total Atka mackerel discarded: 0 mt (0.0%).

Shoreside Mid-water trawl pollock fishery.

- 2001 Total groundfish harvest: 602,316 mt. Total groundfish discarded: 1,248 mt (0.2%). Total pollock discarded: 200 mt (0.0%).
- 2002 Total groundfish harvest: 649,424 mt. Total groundfish discarded: 744 mt (0.1%). Total Pollock discarded: 91 mt (0.0%).
- Salmon bycatch: 2001 - 37,336 fish; 2002 - 73,863 fish.

Mothership Mid-water trawl pollock fishery.

- 2001 Total groundfish harvest: 121,813 mt. Total groundfish discarded: 662 mt (0.5%). Total pollock discarded: 412 mt (0.3%).
- 2002 Total groundfish harvest: 129,699 mt. Total groundfish discarded: 327 mt (0.3%). Total pollock discarded: 0 mt (0.0 %).
- Salmon bycatch: 2001 - 10,690 fish; 2002 - 17,202 fish.

CDQ Shoreside and Mothership Mid-water trawl pollock fishery. Not available due to confidentiality restraints (fewer than 3 companies).

Shoreside Pacific cod trawl fishery.

- 2001 Total groundfish harvest: 19,120 mt. Total groundfish discarded: 2,980 mt (15.6%). Total Pacific cod discarded: 38 mt (0.2%). Largest discard pollock: 1,234 mt (61.2%).
- 2002 Total groundfish harvest: 38,190 mt. Total groundfish discarded: 7,538 mt (19.7%). Total Pacific cod discarded: 387 mt (1.3%). Largest discard pollock: 3,275 mt (78.4%).
- Halibut bycatch mortality: 2001 - 245 mt; 2002 - 444 mt.
- Crab bycatch: 2001 - 19,022 crab; 2002 - 88,450 crab.

Catcher/processor Pacific cod Hook-and-Line fishery. More than half of the discards consist of “other species”, primarily skates and sculpins with negligible current market value.

- 2001 Total groundfish harvest: 118,197 mt. Total groundfish discarded: 17,027 mt (14.4%). Total Pacific cod discarded 1,516 mt (1.6%). Largest discard “other species”: 11,898 mt (87.6%).
- 2002 Total groundfish harvest: 110,175 mt. Total groundfish discarded: 14,151 mt (12.8%). Total Pacific cod discarded 1,814 mt (2.0%). Largest discard “other species”: 9,618 mt (76.4%).
- Halibut bycatch mortality: 2001 - 762 mt; 2002 - 576 mt.

CDQ Catcher/processor Pacific cod Hook-and-Line fishery.

- 2001 Total groundfish harvest: 13,594 mt. Total groundfish discarded: 1,717 mt (12.6%). Total Pacific cod discarded: 239 mt (2.1%).
- 2002 Total groundfish harvest: 16,077 mt. Total groundfish discarded 2,138 mt (13.3%). Total Pacific cod discarded: 308 mt (2.3%).
- Halibut bycatch mortality: 2001 - 48 mt; 2002 - 53 mt.

Catcher/processor and Shoreside catcher vessel Pacific cod Pot fisheries.

- 2001 Total groundfish harvest: 15,618 mt. Total groundfish discarded: 588 mt (3.8%).
- 2002 Total groundfish harvest: 14,266 mt. Total groundfish discarded: 798 mt (5.6%).
- Halibut bycatch mortality: 2001 - 2 mt; 2002 - 9 mt.
- Crab bycatch: 2001 - 194,277 crab; 2002 - 364,177 crab.

9.2 GULF OF ALASKA

- Groundfish discards in 2001 were 52.2 million pounds (mp) or 13.0%; in 2002 they were 49.3 mp or 13.5% of the Gulf of Alaska groundfish harvest.
- Trawl fisheries accounted for 81.2% of the catch and 84.4% of discards in 2001; and in 2002, 77.2% of the catch and 87.8% of the discards.
- Trawl catcher/processors accounted for 15.8% of the catch and 40.0% of discards in 2001 and in 2002, 20.6% of the catch and 45.1% of the discards.
- Shoreside trawl catcher vessels accounted for 65.4% the catch and 44.4% of discards in 2001; and in 2002, 56.6% of the catch and 45.1% of the discards.
- Fixed gear accounted for 18.7% of the catch and 15.5% of discards in 2001; and in 2002 22.8% of the catch and 12.2% of the discards.
- Salmon bycatch totaled 21,126 salmon in 2001, and 15,807 salmon in 2002.

Discards in the North Pacific Groundfish Fisheries, 2002

- Crab bycatch of all species was 198,514 crab in 2001, and 187,817 crab in 2002.
- Halibut bycatch mortality was 2,451 mt in 2001, and 2,197 mt in 2002.

Shoreside Mid-water trawl pollock fishery.

- 2001 Total groundfish harvest: 44,016 mt. Total groundfish discarded: 442 mt (1.0%). Total pollock discarded: 211 mt (0.5%).
- 2002 Total groundfish harvest: 41,853 mt. Total groundfish discarded: 486 mt (1.2%). Total pollock discarded: 297 mt (0.7%).
- Salmon bycatch: 2001 - 4,370 fish; 2002 - 4,385 fish.

Catcher/processor Rex sole trawl fishery.

- 2001 Total groundfish harvest: 7,621 mt. Total groundfish discarded: 4,605 mt (60.4%). Total Rex sole discarded: 22 mt (1.0%). Largest discard, arrowtooth flounder: 3,588 mt (98.5%).
- 2002 Total groundfish harvest: 7,845 mt. Total groundfish discarded: 4,286 mt (54.6%). Total Rex sole discarded: 32 mt (1.5%). Largest discard, arrowtooth flounder: 3,477 mt (89.0%).
- Crab bycatch: 2001 - 2,529 crab; 2002 - 7,557 crab.

Shoreside Pacific cod trawl fishery.

- 2001 Total groundfish harvest: 24,758 mt. Total groundfish discarded: 3,651 mt (14.7%). Total Pacific cod discarded: 251 mt (1.5%). Largest discard, arrowtooth flounder: 2,391 mt (82.9%).
- 2002 Total groundfish harvest: 14,753 mt. Total groundfish discarded: 1,609 mt (10.9%). Total Pacific cod discarded: 400 mt (3.1%). Largest discard, pollock: 497 mt (75.7%).
- Halibut bycatch mortality: 2001 - 608 mt; 2002 - 185 mt.

Catcher/processor and Shoreside catcher vessel Pacific cod Pot fisheries.

- 2001 Total groundfish harvest: 7,369 mt. Total groundfish discarded: 290 mt (3.9%). Total Pacific cod discarded: 128 mt (1.8%). Largest discard "other groundfish": 140 mt (80.7%).
- 2002 Total groundfish harvest: 7,918 mt. Total groundfish discarded: 276 mt (3.5%). Total Pacific cod discarded: 80 mt (1.0%). Largest discard "other groundfish": 174 mt (87.0%).
- Halibut bycatch mortality: 2001 - 4 mt; 2002 - 2 mt.
- Crab bycatch: 2001 - 69,582 crab; 2002 - 98,435 crab.

Discards in the North Pacific Groundfish Fisheries, 2002

Table 3. Comparison of Discarded, Retained and Total catch by Component in *Bering Sea/Aleutians*, 2001-2002

<u>GROUND FISH DISCARDS</u>	2001		2002	
	<u>mt</u>	<u>% of Tot</u>	<u>mt</u>	<u>% of Tot</u>
Trawl Catcher Processor	71,148	74.9%	88,384	77.8%
Shoreside Trawl Catcher Vessel	4,332	4.6%	8,282	7.3%
Mothership Trawl Catcher Vessel	880	0.9%	327	0.3%
Hook & Line Catcher Processor	17,436	18.4%	14,837	13.1%
Hook & Line Shoreside Catcher Vessel	576	0.6%	920	0.8%
All Pot Vessels	589	0.6%	829	0.7%
TOTAL	94,961	100.0%	113,579	100.0%
<u>GROUND FISH RETAINED CATCH</u>	<u>mt</u>	<u>% of Tot</u>	<u>mt</u>	<u>% of Tot</u>
Trawl Catcher Processor	684,527	44.1%	714,139	43.4%
Shoreside Trawl Catcher Vessel	622,922	40.1%	679,953	41.3%
Mothership Trawl Catcher Vessel	125,352	8.1%	137,407	8.4%
Hook & Line Catcher Processor	104,139	6.7%	98,540	6.0%
Hook & Line Shoreside Catcher Vessel	1,540	0.1%	1,196	0.1%
All Pot Vessels	15,030	1.0%	13,658	0.8%
TOTAL	1,553,581	100.0%	1,644,894	100.0%
<u>GROUND FISH TOTAL CATCH</u>	<u>mt</u>	<u>% of Tot</u>	<u>mt</u>	<u>% of Tot</u>
Trawl Catcher Processor	755,674	45.9%	802,523	45.6%
Shoreside Trawl Catcher Vessel	627,254	38.1%	688,234.8	39.1%
Mothership Trawl Catcher Vessel	126,232	7.7%	137,734	7.8%
Hook & Line Catcher Processor	121,575	7.4%	113,377	6.4%
Hook & Line Shoreside Catcher Vessel	2,117	0.1%	2,116	0.1%
All Pot Vessels	15,620	0.4%	14,487	0.8%
TOTAL	1,648,472	100.0%	1,758,473	100.0%

Discards in the North Pacific Groundfish Fisheries, 2002

Table 4. Comparison of Discarded, Retained and Total catch by Component in *Gulf of Alaska, 2001-2002*

<u>GROUND FISH DISCARDS</u>	2001		2002	
	<u>mt</u>	<u>% of Tot</u>	<u>mt</u>	<u>% of Tot</u>
Trawl Catcher Processor	9,485	40.0%	9,556	42.7%
Shoreside Trawl Catcher Vessel	10,521	44.4%	10,095	45.1%
Mothership Trawl Catcher Vessel	0	0.0%	0	0.0%
Hook & Line Catcher Processor	515	2.2%	968	4.3%
Hook & Line Shoreside Catcher Vessel	2,876	12.1%	1,477	6.6%
All Pot Vessels	290	1.2%	276	1.2%
TOTAL	23,687	100.0%	22,373	100.0%
 <u>GROUND FISH RETAINED CATCH</u>	 <u>mt</u>	 <u>% of Tot</u>	 <u>mt</u>	 <u>% of Tot</u>
Trawl Catcher Processor	19,390	12.2%	24,525	17.2%
Shoreside trawl Catcher Vessel	108,728	68.5%	83,444	58.4%
Mothership Trawl Catcher Vessel	0	0.0%	0	0.0%
Hook & Line Catcher Processor	5,575	3.5%	9,884	6.9%
Hook & Line Shoreside Catcher Vessel	17,855	11.3%	17,357	12.2%
All Pot Vessels	7,079	4.5%	7,640	5.3%
TOTAL	158,696	100.0%	142,851	100.0%
 <u>GROUND FISH TOTAL CATCH</u>	 <u>mt</u>	 <u>% of Tot</u>	 <u>mt</u>	 <u>% of Tot</u>
Trawl Catcher Processor	28,876	15.8%	34,081	20.6%
Shoreside Trawl Catcher Vessel	119,249	65.4%	93,539	56.6%
Mothership Trawl Catcher Vessel	0	0.0%	0	0.0%
Hook & Line Catcher Processor	6,090	3.3%	10,853	6.6%
Hook & Line Shoreside Catcher Vessel	20,731	11.4%	18,834	11.4%
All Pot Vessels	7,369	4.0%	7,918	4.8%
TOTAL	182,315	100.0%	165,225	100.0%

Discards in the North Pacific Groundfish Fisheries, 2002

Table 5. Comparison of Discarded, Retained and Total Catch by Component in *Bering Sea/Aleutians and Gulf of Alaska Combined, 2001-2002*

<u>GROUND FISH DISCARDS</u>	2001		2002	
	<u>mt</u>	<u>% of Tot</u>	<u>mt</u>	<u>% of Tot</u>
Trawl Catcher Processor	80,633	71.6%	97,940	72.0%
Shoreside trawl Catcher Vessel	14,853	12.4%	18,377	13.5%
Mothership Trawl Catcher Vessel	880	0.7%	327	0.2%
Hook & Line Catcher Processor	17,951	15.1%	15,805	11.6%
Hook & Line Shoreside Catcher Vessel	3,452	2.9%	2,397	1.8%
All Pot Vessels	879	0.7%	1,106	0.8%
TOTAL	118,648	100.0%	135,952	100.0%
<u>GROUND FISH RETAINED CATCH</u>	<u>mt</u>	<u>% of Tot</u>	<u>mt</u>	<u>% of Tot</u>
Trawl Catcher Processor	703,917	41.1%	738,664	41.3%
Shoreside Trawl Catcher Vessel	731,650	42.7%	763,397	42.7%
Mothership Trawl Catcher Vessel	125,352	7.3%	137,407	7.7%
Hook & Line Catcher Processor	109,714	6.4%	108,425	6.1%
Hook & Line Shoreside Catcher Vessel	19,395	1.1%	18,553	1.0%
All Pot Vessels	22,109	1.3%	21,298	1.2%
TOTAL	1,712,277	100.0%	1,787,745	100.0%
<u>GROUND FISH TOTAL CATCH</u>	<u>mt</u>	<u>% of Tot</u>	<u>mt</u>	<u>% of Tot</u>
Trawl Catcher Processor	784,550	42.9%	836,604	43.5%
Shoreside Trawl Catcher Vessel	746,503	40.8%	781,774	40.6%
Mothership Trawl Catcher Vessel	126,232	6.9%	137,734	7.2%
Hook & Line Catcher Processor	127,665	7.0%	124,230	6.5%
Hook & Line Shoreside Catcher Vessel	22,848	1.2%	20,950	1.1%
All Pot Vessels	22,989	1.3%	22,405	1.2%
TOTAL	1,830,787	100.0%	1,923,698	100.0%

APPENDIX 1:

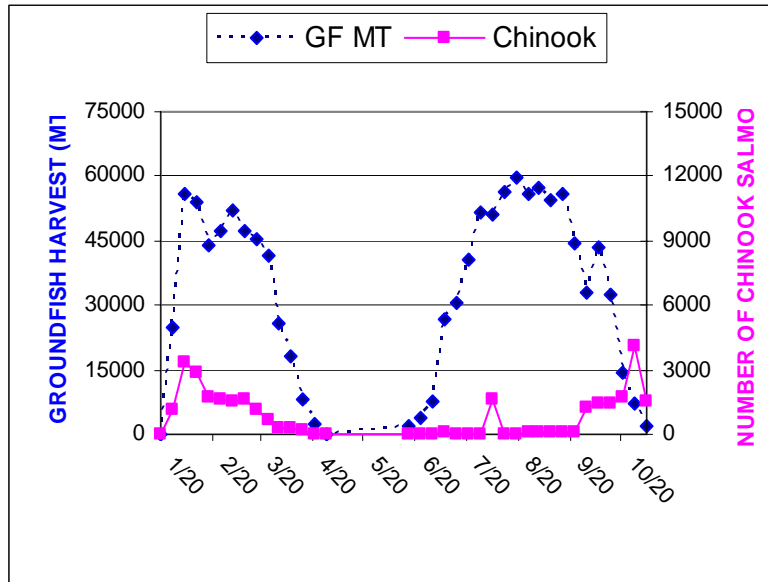
BERING SEA AND ALUETIAN ISLANDS

FIGURES 1-7

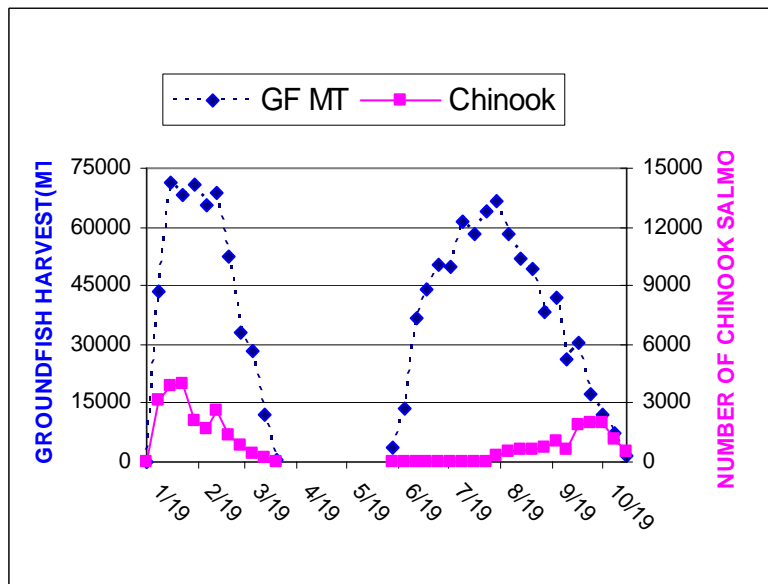
Discards in the North Pacific Groundfish Fisheries, 2002

FIGURE 1. WEEKLY GROUNDFISH HARVEST AND CHINOOK SALMON BYCATCH BY VESSELS TARGETING POLLOCK WITH PELAGIC TRAWLS

2001



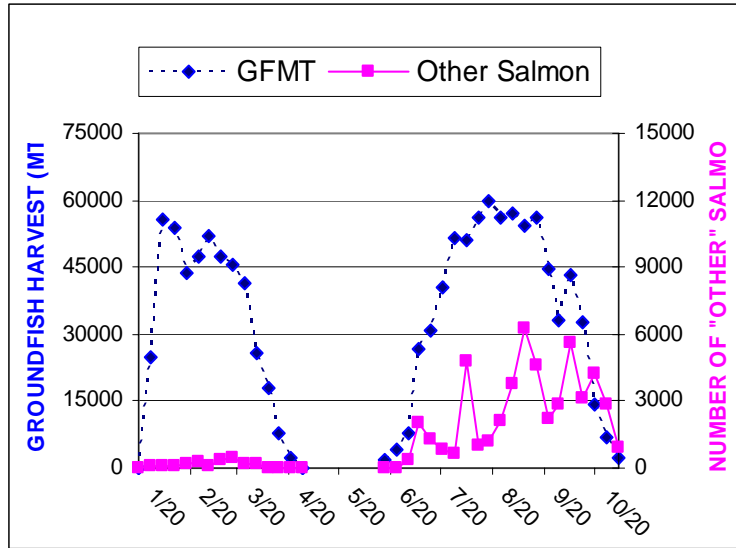
2002



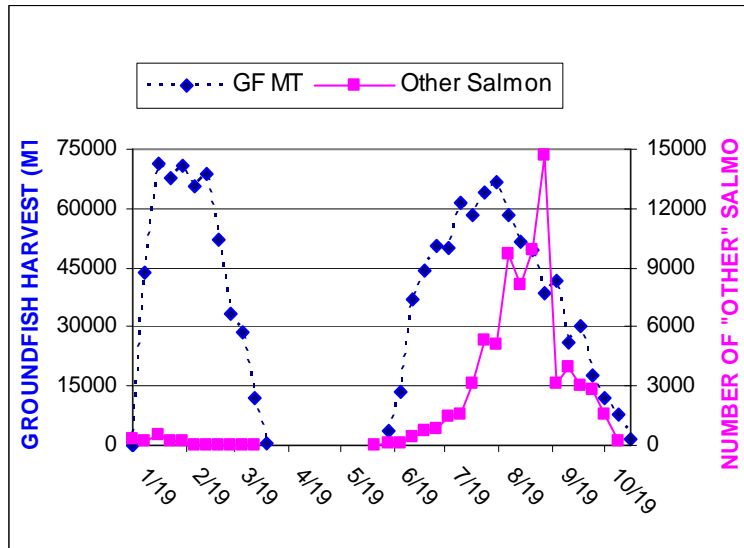
GROUNDFISH HARVESTED IN METRIC TONS (GF MT) INCLUDES TARGET AND NON-TARGET GROUNDFISH SPECIES

FIGURE 2. WEEKLY GROUNDFISH HARVEST AND "OTHER" SALMON BYCATCH BY VESSELS TARGETING POLLOCK WITH PELAGIC TRAWLS

2001



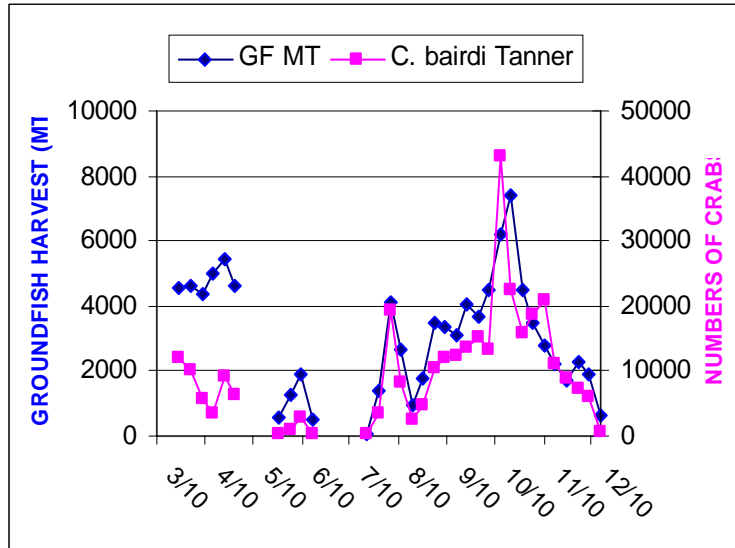
2002



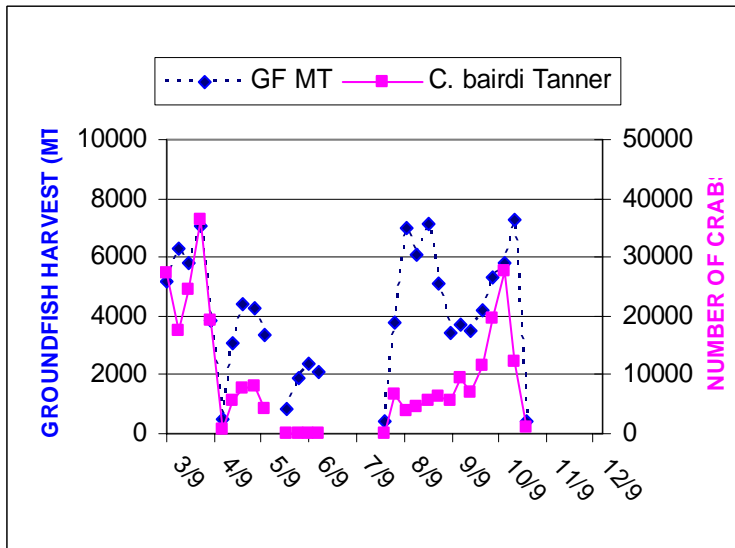
GROUNDFISH HARVESTED IN METRIC TONS (GF MT) INCLUDES TARGET AND NON-TARGET GROUNDFISH SPECIES

FIGURE 3. WEEKLY GROUNDFISH HARVEST AND *C. BAIRDI* TANNER CRAB BYCATCH BY VESSELS TARGETING YELLOWFIN SOLE WITH TRAWLS

2001



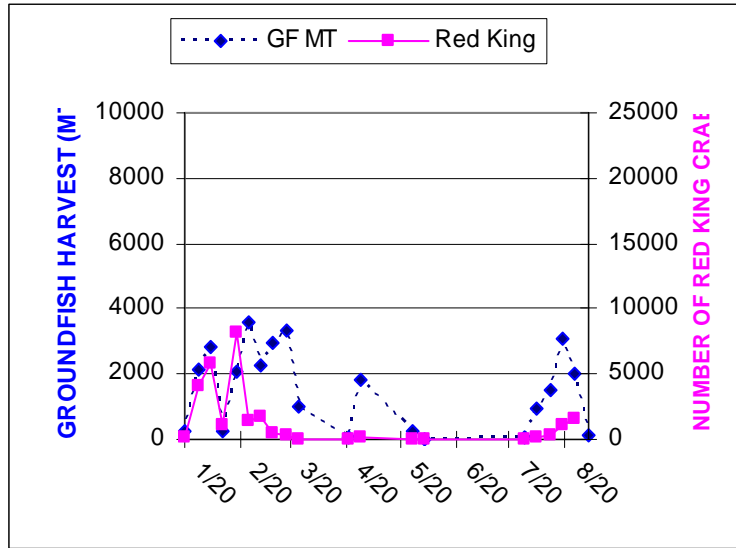
2002



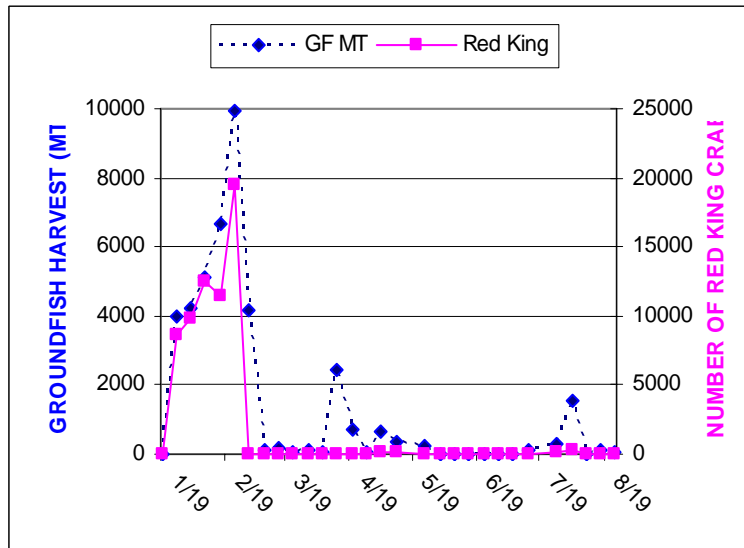
GROUNDFISH HARVESTED IN METRIC TONS (GF MT) INCLUDES TARGET AND NON-TARGET GROUNDFISH SPECIES

FIGURE 4. WEEKLY GROUNDFISH HARVEST AND RED KING CRAB BYCATCH BY VESSELS TARGETING ROCK SOLE WITH TRAWLS

2001

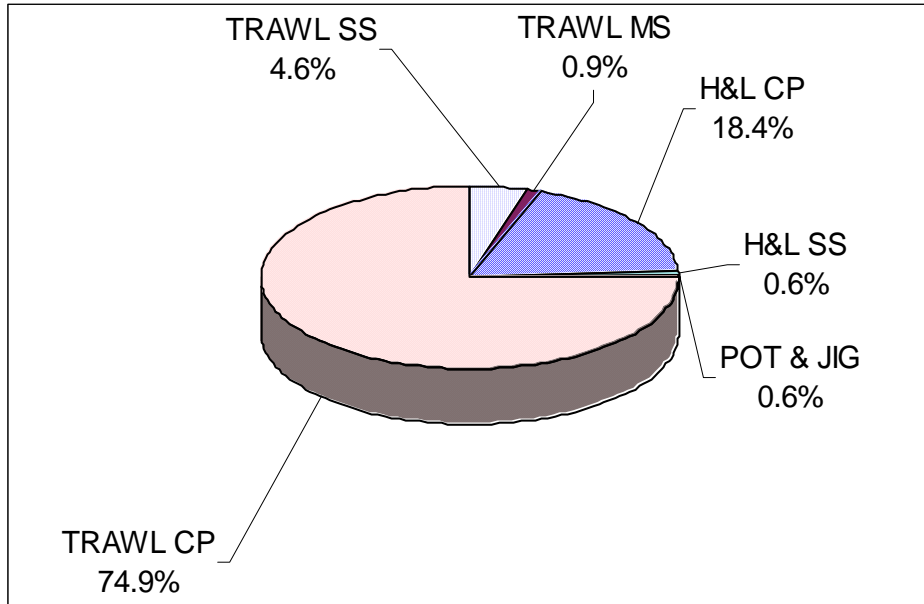


2002

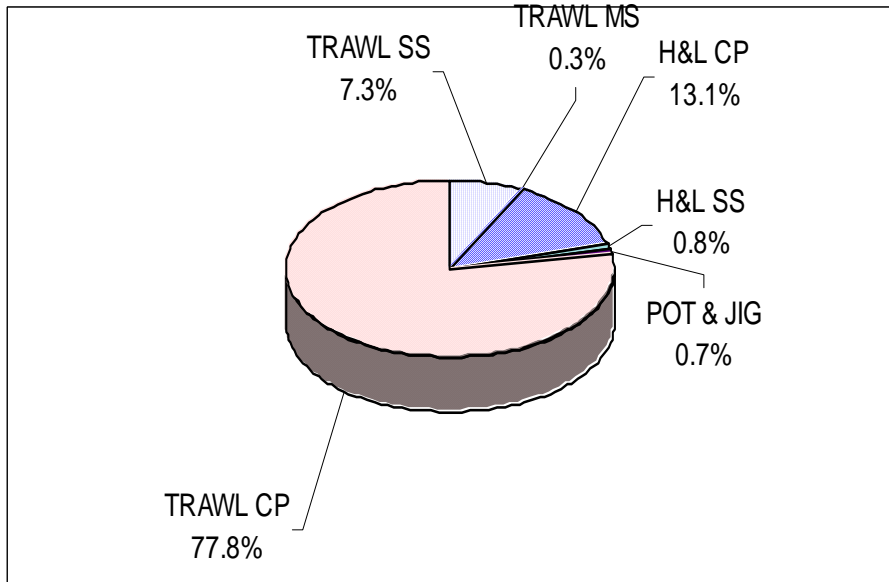


GROUNDFISH HARVESTED IN METRIC TONS (GF MT) INCLUDES TARGET AND NON-TARGET GROUNDFISH SPECIES

FIGURE 5. 2001 DISCARDS BY SECTOR: PERCENT OF TOTAL

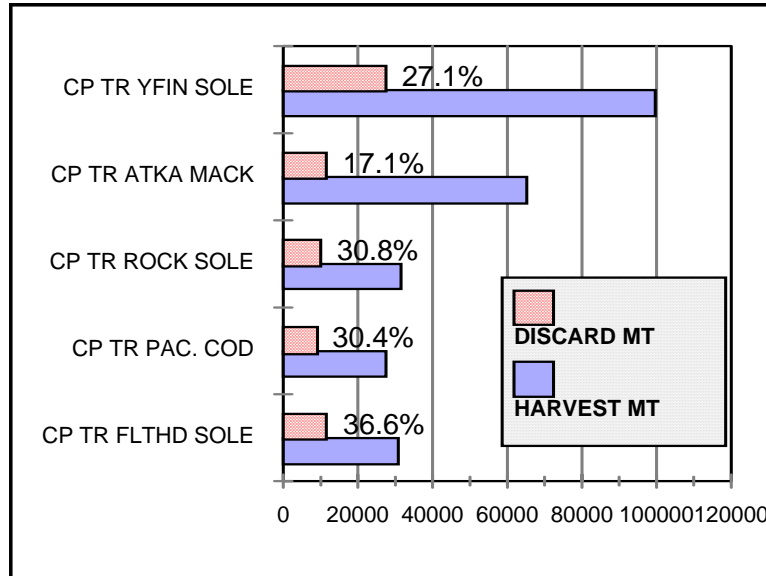


2002 DISCARDS BY SECTOR: PERCENT OF TOTAL

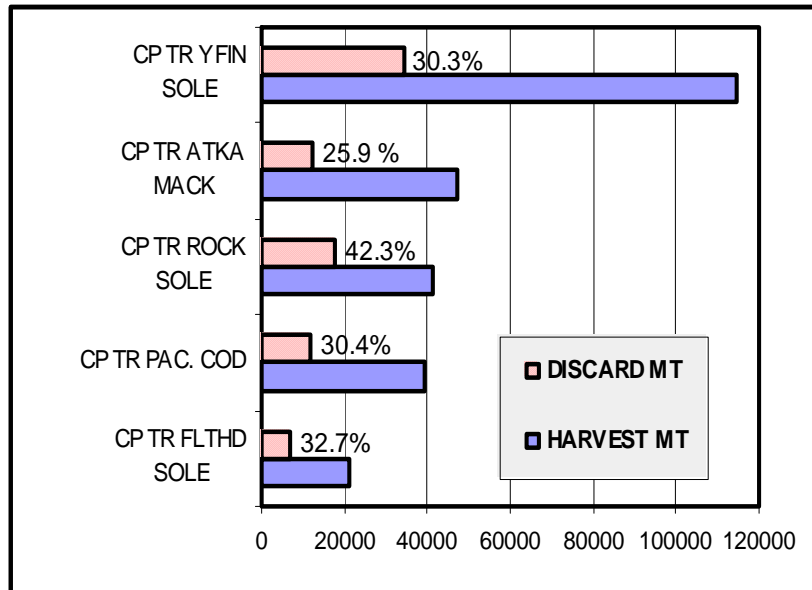


SS = SHORESIDE MS=MOTHERSHIP CP=CATCHER/PROCESSOR.
H&L= HOOK AND LINE

FIGURE 6. 2001 LARGER FISHERIES WITH HIGHEST DISCARD RATES

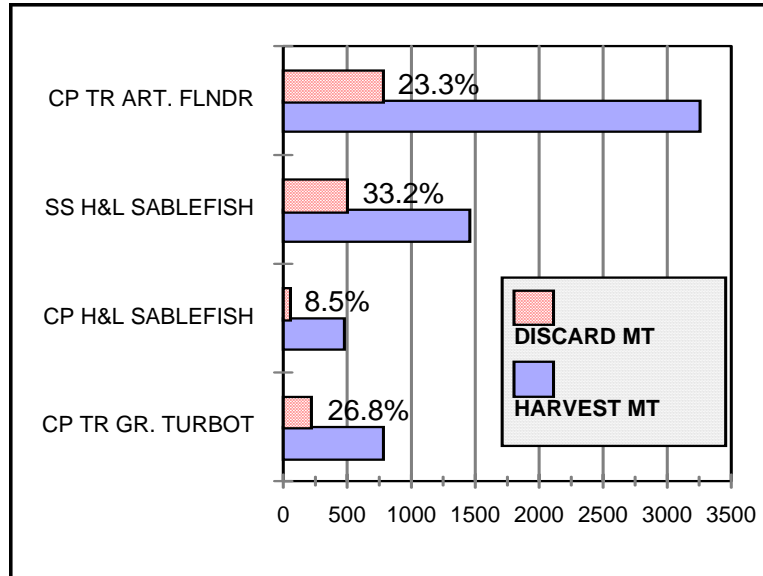


2002 LARGER FISHERIES WITH HIGHEST DISCARD RATES

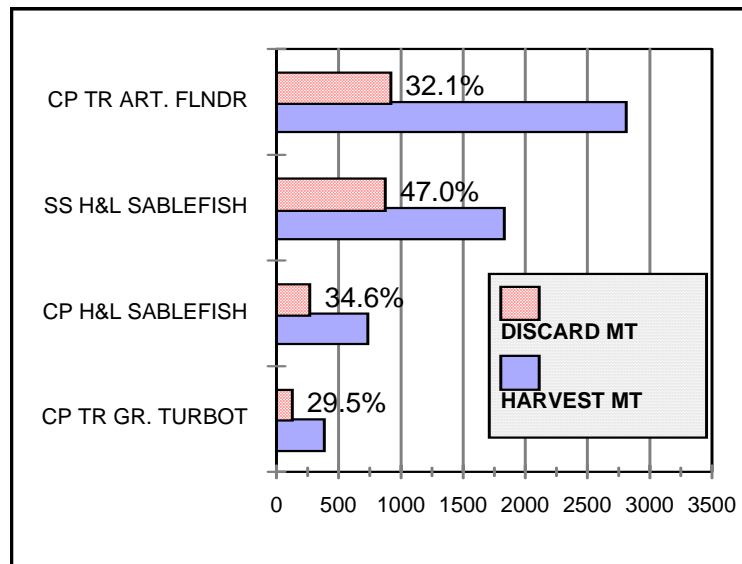


CP TR = CATCHER/PROCESSORS TRAWL
 YFSOLE = YELLOWFIN SOLE
 ATKA MACK = ATKA MACKEREL
 PAC. COD = PACIFIC COD
 FLTHD SOLE=FLATHEAD SOLE

FIGURE 7. 2001 SMALLER FISHERIES WITH HIGHEST DISCARD RATES



2002 SMALLER FISHERIES WITH HIGHEST DISCARD RATES



CP TR = CATCHER/PROCESSORS—TRAWL
 SS H&L= SHORESIDE (CATCHER BOATS) HOOK AND LINE
 ART. FLNDR = ARROWTOOTH FLOUNDER

BERING SEA/ ALEUTIAN ISLANDS

CATCH AND DISCARD TABLES

2002

Discards in the North Pacific Groundfish Fisheries, 2002

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 6.

GROUND FISH SPECIES	2002		AREA:	BSAI	Discard	Rate/ Retain GF	Discard
	Harvest mt	Retained mt	GEAR: TYPE: TARGET:	All All All	Rate		Pounds
Atka Mackerel	42,023	34,758			17.3%	0.004	16,016,000
Pollock	1,332,380	1,311,909			1.5%	0.012	45,131,000
Pacific Cod	181,412	177,688			2.1%	0.002	8,211,000
Yellowfin sole	72,946	61,770			15.3%	0.007	24,638,000
Rock sole	41,140	23,458			43.0%	0.011	38,981,000
Flathead sole	15,048	11,044			26.6%	0.002	8,827,000
Other flatfish	14,517	1,224			91.6%	0.008	29,306,000
Greenland turbot	3,432	2,817			17.9%	0.000	1,355,000
Arrowtooth flounder	11,458	3,861			66.3%	0.005	16,749,000
Pacific ocean perch	10,518	8,940			15.0%	0.001	3,478,000
Sharpchin/northern rockfish	3,701	100			97.3%	0.002	7,940,000
Shortraker/rougheye rockfish	492	341			30.6%	0.000	332,000
Other rockfish	823	493			40.1%	0.000	728,000
Sablefish	1,880	1,691			10.1%	0.000	417,000
Other Species	26,867	4,964			81.5%	0.013	48,287,000
TOTAL	1,758,638	1,645,059			6.5%	0.069	250,396,000

PROHIBITED SPECIES	Discarded BYCATCH	Rate/ Retain GF	Discard Pounds
Halibut (mt)	10,039 mt	6 kg/mt	22,132,000
Halibut Mortality (mt)	4,068 mt	2 kg/mt	8,967,000
Herring (mt)	134 mt	0 kg/mt	296,000
C. bairdi Tanner crab	1,223,067 crab	0.743 indiv/mt	
Other Tanner crab	1,496,542 crab	0.910 indiv/mt	
Red king crab	133,784 crab	0.081 indiv/mt	
Other king crab	61,605 crab	0.037 indiv/mt	
Chinook salmon	37,578 salmon	0.023 indiv/mt	
Other salmon	78,819 salmon	0.048 indiv/mt	
Halibut and Herring Discard Pounds	9,263,000 pounds		
Crab and Salmon Discard Numbers	3,031,396 individuals		

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 7.

GROUND FISH SPECIES	Harvest		Discarded mt	Discard Rate	Rate/ Retain GF	Discard Pounds
	mt	Retained mt				
Atka Mackerel	41,684	34,578	7,105	17.0%	0.010	15,665,000
Pollock	548,734	532,397	16,337	3.0%	0.023	36,017,000
Pacific Cod	36,474	35,210	1,265	3.5%	0.002	2,788,000
Yellowfin sole	72,133	61,738	10,395	14.4%	0.015	22,917,000
Rock sole	39,151	23,149	16,002	40.9%	0.022	35,277,000
Flathead sole	13,699	10,606	3,093	22.6%	0.004	6,820,000
Other flatfish	14,208	1,129	13,079	92.1%	0.018	28,834,000
Greenland turbot	921	668	252	27.4%	0.000	556,000
Arrowtooth flounder	9,137	3,490	5,648	61.8%	0.008	12,451,000
Pacific ocean perch	10,227	8,751	1,476	14.4%	0.002	3,255,000
Sharpchin/northern rockfish	3,618	99	3,519	97.3%	0.005	7,758,000
Shortraker/rougheye rockfish	323	303	20	6.1%	0.000	43,000
Other rockfish	463	323	141	30.4%	0.000	311,000
Sablefish	274	245	29	10.6%	0.000	64,000
Other Species	11,477	1,454	10,023	87.3%	0.014	22,097,000
TOTAL	802,523	714,139	88,384	11.0%	0.124	194,852,000

PROHIBITED SPECIES	Discarded BYCATCH	Rate/ Retain GF	Discard Pounds
Halibut (mt)	3,793 mt	5 kg/mt	8,363,000
Halibut Mortality (mt)	2,822 mt	4 kg/mt	6,221,000
Herring (mt)	41 mt	0 kg/mt	90,000
C. bairdi Tanner crab	1,050,933 crab	1.472 indiv/mt	
Other Tanner crab	1,118,128 crab	1.566 indiv/mt	
Red king crab	102,607 crab	0.144 indiv/mt	
Other king crab	16,394 crab	0.023 indiv/mt	
Chinook salmon	12,615 salmon	0.018 indiv/mt	
Other salmon	10,333 salmon	0.014 indiv/mt	

Halibut and Herring Discard Pound 6,311,000 pounds

Crab and Salmon Discard Number 2,311,010 individuals

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 8.

2002 GROUND FISH SPECIES	AREA:		BSAI			
	GEAR:		Trawl			
	TYPE:		Catcher/processor			
	TARGET:		Atka mackerel			
	Harvest	Retained	Discarded	Discard	Rate/ Retain GF	Discard
	mt	mt	mt	Rate		Pounds
Atka Mackerel	40,052	33,207	6,845	17.1%	0.196	15,090,000
Pollock	192	124	68	35.5%	0.002	150,000
Pacific Cod	1,133	1,074	60	5.3%	0.002	131,000
Yellowfin sole	0	0	0	-	0.000	0
Rock sole	70	23	47	67.4%	0.001	104,000
Flathead sole	3	0	3	100.0%	0.000	6,000
Other flatfish	5	2	2	48.5%	0.000	5,000
Greenland turbot	72	63	9	13.0%	0.000	21,000
Arrowtooth flounder	125	53	72	57.6%	0.002	159,000
Pacific ocean perch	1,154	188	966	83.7%	0.028	2,130,000
Sharpchin/northern rockfish	3,340	87	3,253	97.4%	0.093	7,171,000
Shortraker/rougheye rockfish	24	12	12	49.5%	0.000	26,000
Other rockfish	181	67	114	62.8%	0.003	251,000
Sablefish	0	0	0	-	0.000	0
Other Species	734	0	734	100.0%	0.021	1,619,000
TOTAL	47,084	34,900	12,184	25.9%	0.349	26,861,000

PROHIBITED SPECIES	Discarded BYCATCH	Rate/ Retain GF	Discard Pounds
Halibut (mt)	65 mt	2 kg/mt	143,000
Halibut Mortality (mt)	49 mt	1 kg/mt	107,000
Herring (mt)	0 mt	0 kg/mt	0
C. bairdi Tanner crab	7 crab	0.000 indiv/mt	
Other Tanner crab	5 crab	0.000 indiv/mt	
Red king crab	229 crab	0.007 indiv/mt	
Other king crab	1,644 crab	0.047 indiv/mt	
Chinook salmon	800 salmon	0.023 indiv/mt	
Other salmon	10 salmon	0.000 indiv/mt	
Halibut and Herring Discard Pounds	107,000 pounds		
Crab and Salmon Discard Numbers	2,695 individuals		

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 9.

2002 GROUND FISH SPECIES	AREA:		BSAI			
	GEAR:		Trawl			
	TYPE:		Catcher/processor			
	TARGET:		Bottom pollock			
	Harvest	Retained	Discarded	Discard	Rate/ Retain GF	Discard
	mt	mt	mt	Rate		Pounds
Atka Mackerel	0	0	0	-	-	0
Pollock	3,837	3,750	87	2.3%	0.021	192,000
Pacific Cod	70	66	4	5.5%	0.001	8,000
Yellowfin sole	184	75	109	59.3%	0.027	240,000
Rock sole	125	73	52	41.7%	0.013	115,000
Flathead sole	42	30	11	27.3%	0.003	25,000
Other flatfish	18	11	7	39.1%	0.002	16,000
Greenland turbot	37	5	32	85.6%	0.008	70,000
Arrowtooth flounder	75	41	34	45.1%	0.008	74,000
Pacific ocean perch	1	0	1	100.0%	0.000	1,000
Sharpchin/northern rockfish	0	0	0	-	0.000	0
Shortraker/rougheye rockfish	0	0	0	-	0.000	0
Other rockfish	0	0	0	-	0.000	0
Sablefish	4	4	0	0.0%	0.000	0
Other Species	26	11	15	58.8%	0.004	34,000
TOTAL	4,418	4,066	352	8.0%	0.087	776,000

PROHIBITED SPECIES	Discarded BYCATCH	Rate/ Retain GF	Discard Pounds
Halibut (mt)	14 mt	3 kg/mt	30,000
Halibut Mortality (mt)	10 mt	3 kg/mt	2,000
Herring (mt)	0 mt	0 kg/mt	0
C. bairdi Tanner crab	1,452 crab	0.357 indiv/mt	
Other Tanner crab	943 crab	0.232 indiv/mt	
Red king crab	11 crab	0.003 indiv/mt	
Other king crab	113 crab	0.028 indiv/mt	
Chinook salmon	106 salmon	0.026 indiv/mt	
Other salmon	8 salmon	0.002 indiv/mt	
Halibut and Herring Discard Pounds	2,000 pounds		
Crab and Salmon Discard Numbers	2,633 individuals		

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 10.

GROUND FISH SPECIES	Harvest	Retained	Discarded	Discard	Rate/ Retain GF	Discard
	mt	mt	mt	Rate		Pounds
Atka Mackerel	2	1	1	60.2%	0.000	2,000
Pollock	513,146	512,974	172	0.0%	0.000	379,000
Pacific Cod	1,954	1,940	15	0.7%	0.000	32,000
Yellowfin sole	337	214	123	36.5%	0.000	271,000
Rock sole	1,018	474	544	53.5%	0.001	1,200,000
Flathead sole	859	433	426	49.6%	0.001	939,000
Other flatfish	51	25	26	50.7%	0.000	57,000
Greenland turbot	11	7	4	36.7%	0.000	9,000
Arrowtooth flounder	146	86	60	40.9%	0.000	132,000
Pacific ocean perch	244	16	228	93.6%	0.000	503,000
Sharpchin/northern rockfish	11	3	8	73.6%	0.000	17,000
Shortraker/rougeye rockfish	13	13	0	0.0%	0.000	0
Other rockfish	2	2	0	15.1%	0.000	1,000
Sablefish	1	1	0	26.5%	0.000	0
Other Species	673	334	339	50.4%	0.001	748,000
TOTAL	518,467	516,521	1,946	0.4%	0.004	4,291,000

PROHIBITED SPECIES	Discarded BYCATCH	Rate/ Retain GF	Discard Pounds
Halibut (mt)	47 mt	0 kg/mt	103,000
Halibut Mortality (mt)	39 mt	0 kg/mt	86,000
Herring (mt)	15 mt	0 kg/mt	33,000
C. bairdi Tanner crab	636 crab	0.001 indiv/mt	
Other Tanner crab	1,599 crab	0.003 indiv/mt	
Red king crab	6 crab	0.000 indiv/mt	
Other king crab	81 crab	0.000 indiv/mt	
Chinook salmon	9,022 salmon	0.017 indiv/mt	
Other salmon	9,295 salmon	0.018 indiv/mt	
Halibut and Herring Discard Pounds	119,000 pounds		
Crab and Salmon Discard Numbers	20,639 individuals		

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 11.

2002 GROUND FISH SPECIES	AREA: GEAR: TYPE: TARGET:		BSAI Trawl Catcher/processor Pacific cod			
	Harvest mt	Retained mt	Discarded mt	Discard Rate	Rate/ Retain GF	Discard Pounds
Atka Mackerel	572	472	99	17.4%	0.004	219,000
Pollock	4,913	2,166	2,748	55.9%	0.100	6,057,000
Pacific Cod	20,398	19,938	459	2.3%	0.017	1,013,000
Yellowfin sole	1,368	493	874	63.9%	0.032	1,927,000
Rock sole	5,346	2,359	2,987	55.9%	0.109	6,586,000
Flathead sole	1,145	593	552	48.2%	0.020	1,218,000
Other flatfish	802	238	564	70.4%	0.021	1,244,000
Greenland turbot	49	27	23	45.9%	0.001	50,000
Arrowtooth flounder	2,700	583	2,117	78.4%	0.077	4,668,000
Pacific ocean perch	72	29	44	60.5%	0.002	97,000
Sharpchin/northern rockfish	135	2	133	98.7%	0.005	293,000
Shortraker/rougheyeye rockfish	1	0	1	100.0%	0.000	3,000
Other rockfish	23	17	6	26.8%	0.000	14,000
Sablefish	24	15	9	37.9%	0.000	20,000
Other Species	1,755	409	1,346	76.7%	0.049	2,967,000
TOTAL	39,304	27,340	11,964	30.4%	0.438	26,376,000

PROHIBITED SPECIES	Discarded BYCATCH	Rate/ Retain GF	Discard Pounds
Halibut (mt)	920 mt	34 kg/mt	2,028,000
Halibut Mortality (mt)	616 mt	23 kg/mt	1,359,000
Herring (mt)	3 mt	0 kg/mt	6,000
C. bairdi Tanner crab	190,379 crab	6.963 indiv/mt	
Other Tanner crab	127,083 crab	4.648 indiv/mt	
Red king crab	16,555 crab	0.606 indiv/mt	
Other king crab	834 crab	0.031 indiv/mt	
Chinook salmon	1,601 salmon	0.059 indiv/mt	
Other salmon	382 salmon	0.014 indiv/mt	
Halibut and Herring Discard Pounds	1,365,000 pounds		
Crab and Salmon Discard Numbers	336,834 individuals		

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 13.

2002 GROUND FISH SPECIES	AREA: GEAR: TYPE: TARGET:		BSAI Trawl Catcher/processor Flathead sole			
	Harvest mt	Retained mt	Discarded mt	Discard Rate	Rate/ Retain GF	Discard Pounds
Atka Mackerel	0	0	0	-	0.000	1,000
Pollock	1,929	1,228	701	36.3%	0.049	1,545,000
Pacific Cod	2,082	2,007	75	3.6%	0.005	166,000
Yellowfin sole	2,033	1,627	406	20.0%	0.028	896,000
Rock sole	1,756	709	1,048	59.6%	0.073	2,309,000
Flathead sole	8,477	7,215	1,261	14.9%	0.088	2,781,000
Other flatfish	803	80	723	90.1%	0.050	1,594,000
Greenland turbot	86	64	22	25.2%	0.002	48,000
Arrowtooth flounder	2,062	992	1,070	51.9%	0.075	2,358,000
Pacific ocean perch	54	52	2	3.7%	0.000	4,000
Sharpchin/northern rockfish	1	0	1	100.0%	0.000	2,000
Shortraker/rougheyeye rockfish	0	0	0	-	0.000	0
Other rockfish	76	68	7	9.6%	0.001	16,000
Sablefish	66	66	0	0.0%	0.000	0
Other Species	1,857	208	1,649	88.8%	0.115	3,634,000
TOTAL	21,280	14,316	6,964	32.7%	0.486	15,353,000

PROHIBITED SPECIES	Discarded BYCATCH	Rate/ Retain GF	Discard Pounds
Halibut (mt)	339 mt	24 kg/mt	748,000
Halibut Mortality (mt)	227 mt	16 kg/mt	501,000
Herring (mt)	5 mt	0 kg/mt	10,000
C. bairdi Tanner crab	210,168 crab	14.680 indiv/mt	
Other Tanner crab	165,512 crab	11.561 indiv/mt	
Red king crab	243 crab	0.017 indiv/mt	
Other king crab	1,395 crab	0.097 indiv/mt	
Chinook salmon	0 salmon	0.000 indiv/mt	
Other salmon	121 salmon	0.008 indiv/mt	
Halibut and Herring Discard Pounds	511,000 pounds		
Crab and Salmon Discard Numbers	377,440 individuals		

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 15.

2002 GROUND FISH SPECIES	AREA: GEAR: TYPE: TARGET:		BSAI Trawl Catcher/processor Greenland turbot			
	Harvest mt	Retained mt	Discarded mt	Discard Rate	Rate/ Retain GF	Discard Pounds
Atka Mackerel	0	0	0	-	0.000	0
Pollock	0	0	0	-	0.000	0
Pacific Cod	0	0	0	-	0.000	0
Yellowfin sole	0	0	0	-	0.000	0
Rock sole	0	0	0	-	0.000	0
Flathead sole	27	27	0	0.0%	0.000	0
Other flatfish	0	0	0	-	0.000	0
Greenland turbot	134	108	26	19.3%	0.105	57,000
Arrowtooth flounder	150	73	77	51.3%	0.313	170,000
Pacific ocean perch	0	0	0	-	0.000	0
Sharpchin/northern rockfish	0	0	0	-	0.000	0
Shorthead/rougeye rockfish	0	0	0	-	0.000	0
Other rockfish	0	0	0	-	0.000	0
Sablefish	38	38	0	0.0%	0.000	0
Other Species	0	0	0	-	0.000	0
TOTAL	349	246	103	29.5%	0.418	226,000

PROHIBITED SPECIES	Discarded BYCATCH	Rate/ Retain GF	Discard Pounds
Halibut (mt)	2 mt	7 kg/mt	4,000
Halibut Mortality (mt)	1 mt	5 kg/mt	3,000
Herring (mt)	0 mt	0 kg/mt	0
C. bairdi Tanner crab	731 crab	2.974 indiv/mt	
Other Tanner crab	2,644 crab	10.752 indiv/mt	
Red king crab	0 crab	0.000 indiv/mt	
Other king crab	211 crab	0.857 indiv/mt	
Chinook salmon	0 salmon	0.000 indiv/mt	
Other salmon	0 salmon	0.000 indiv/mt	
Halibut and Herring Discard Pounds	3,000		
Crab and Salmon Discard Numbers	3,586		

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 16.

2002 GROUND FISH SPECIES	AREA: GEAR: TYPE: TARGET:		BSAI Trawl Catcher/processor Yellowfin sole			
	Harvest mt	Retained mt	Discarded mt	Discard Rate	Rate/ Retain GF	Discard Pounds
Atka Mackerel	0	0	0	-	0.000	0
Pollock	14,312	8,099	6,213	43.4%	0.078	13,697,000
Pacific Cod	6,199	5,761	438	7.1%	0.005	965,000
Yellowfin sole	64,642	56,813	7,829	12.1%	0.098	17,260,000
Rock sole	10,626	6,410	4,216	39.7%	0.053	9,295,000
Flathead sole	2,151	1,618	533	24.8%	0.007	1,174,000
Other flatfish	10,806	352	10,454	96.7%	0.131	23,048,000
Greenland turbot	2	0	2	100.0%	0.000	4,000
Arrowtooth flounder	973	421	552	56.7%	0.007	1,217,000
Pacific ocean perch	0	0	0	-	0.000	0
Sharpchin/northern rockfish	0	0	0	-	0.000	0
Shortraker/rougheye rockfish	0	0	0	-	0.000	0
Other rockfish	0	0	0	-	0.000	0
Sablefish	0	0	0	-	0.000	0
Other Species	4,863	438	4,426	91.0%	0.055	9,757,000
TOTAL	114,574	79,912	34,662	30.3%	0.434	76,416,000

PROHIBITED SPECIES	Discarded BYCATCH	Rate/ Retain GF	Discard Pounds
Halibut (mt)	1,256 mt	16 kg/mt	2,768,000
Halibut Mortality (mt)	1,017 mt	13 kg/mt	2,242,000
Herring (mt)	17 mt	0 kg/mt	38,000
C. bairdi Tanner crab	272,178 crab	3.406 indiv/mt	
Other Tanner crab	685,366 crab	8.577 indiv/mt	
Red king crab	22,693 crab	0.284 indiv/mt	
Other king crab	1,608 crab	0.020 indiv/mt	
Chinook salmon	321 salmon	0.004 indiv/mt	
Other salmon	446 salmon	0.006 indiv/mt	
Halibut and Herring Discard Pounds	2,280,000 pounds		
Crab and Salmon Discard Numbers	982,611 individuals		

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 17.

2002 GROUND FISH SPECIES	AREA:		BSAI			
	GEAR:		Trawl			
	TYPE:		Catcher/processor			
	TARGET:		Arrowtooth Flounder			
	Harvest mt	Retained mt	Discarded mt	Discard Rate	Rate/ Retain GF	Discard Pounds
Atka Mackerel	0	0	0	-	0.000	0
Pollock	197	105	92	46.7%	0.049	203,000
Pacific Cod	134	133	1	0.7%	0.000	2,000
Yellowfin sole	15	14	0	2.9%	0.000	1,000
Rock sole	20	8	12	61.8%	0.006	27,000
Flathead sole	159	149	10	6.5%	0.006	23,000
Other flatfish	180	175	5	2.7%	0.003	11,000
Greenland turbot	343	225	118	34.4%	0.062	260,000
Arrowtooth flounder	1,427	906	521	36.5%	0.276	1,149,000
Pacific ocean perch	10	8	2	21.4%	0.001	5,000
Sharpchin/northern rockfish	0	0	0	-	0.000	0
Shortraker/rougheye rockfish	0	0	0	-	0.000	0
Other rockfish	69	68	1	1.0%	0.000	2,000
Sablefish	93	75	18	19.3%	0.009	40,000
Other Species	135	23	112	82.8%	0.059	246,000
TOTAL	2,783	1,891	893	32.1%	0.472	1,968,000

PROHIBITED SPECIES	Discarded BYCATCH	Rate/ Retain GF	Discard Pounds
Halibut (mt)	66 mt	35 kg/mt	146,000
Halibut Mortality (mt)	47 mt	25 kg/mt	104,000
Herring (mt)	0 mt	0 kg/mt	0
C. bairdi Tanner crab	7,221 crab	3.819 indiv/mt	
Other Tanner crab	20,837 crab	11.021 indiv/mt	
Red king crab	0 crab	0.000 indiv/mt	
Other king crab	3,402 crab	1.799 indiv/mt	
Chinook salmon	90 salmon	0.048 indiv/mt	
Other salmon	25 salmon	0.013 indiv/mt	
Halibut and Herring Discard Pounds	104,000 pounds		
Crab and Salmon Discard Numbers	31,576 individuals		

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 18.

2002 GROUND FISH SPECIES	AREA: GEAR: TYPE: TARGET:		BSAI Trawl Shoreside All			
	Harvest mt	Retained mt	Discarded mt	Discard Rate	Rate/ Retain GF	Discard Pounds
Atka Mackerel	248	180	68	27.4%	0.000	150,000
Pollock	649,221	645,855	3,366	0.5%	0.005	7,421,000
Pacific Cod	32,586	32,199	387	1.2%	0.001	854,000
Yellowfin sole	202	20	182	90.0%	0.000	400,000
Rock sole	1,860	278	1,582	85.1%	0.002	3,488,000
Flathead sole	888	403	484	54.6%	0.001	1,068,000
Other flatfish	193	89	104	53.9%	0.000	229,000
Greenland turbot	13	10	3	24.7%	0.000	7,000
Arrowtooth flounder	959	190	769	80.2%	0.001	1,695,000
Pacific ocean perch	279	187	92	32.9%	0.000	202,000
Sharpchin/northern rockfish	47	0	47	100.0%	0.000	103,000
Shorthead/rougeye rockfish	0	0	0	-	0.000	0
Other rockfish	15	1	13	91.4%	0.000	30,000
Sablefish	28	17	11	39.6%	0.000	24,000
Other Species	1,697	524	1,173	69.1%	0.002	2,586,000
TOTAL	688,235	679,953	8,282	1.2%	0.012	18,258,000

PROHIBITED SPECIES	Discarded BYCATCH	Rate/ Retain GF	Discard Pounds
Halibut (mt)	765 mt	1 kg/mt	1,686,000
Halibut Mortality (mt)	530 mt	1 kg/mt	1,168,000
Herring (mt)	79 mt	0 kg/mt	174,000
C. bairdi Tanner crab	67,081 crab	0.099 indiv/mt	
Other Tanner crab	19,666 crab	0.029 indiv/mt	
Red king crab	1,754 crab	0.003 indiv/mt	
Other king crab	43 crab	0.000 indiv/mt	
Chinook salmon	20,766 salmon	0.031 indiv/mt	
Other salmon	54,532 salmon	0.080 indiv/mt	
Halibut and Herring Discard Pounds	1,342,000 pounds		
Crab and Salmon Discard Numbers	163,843 individuals		

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 19.

2002 GROUND FISH SPECIES	AREA:		BSAI			
	GEAR:		Trawl			
	TYPE:		Shoreside			
	TARGET:		Bottom pollock			
	Harvest mt	Retained mt	Discarded mt	Discard Rate	Rate/ Retain GF	Discard Pounds
Atka Mackerel	0	0	0	-	0.000	0
Pollock	598	598	0	0.0%	0.000	0
Pacific Cod	23	23	0	0.0%	0.000	0
Yellowfin sole	0	0	0	-	0.000	0
Rock sole	0	0	0	-	0.000	0
Flathead sole	0	0	0	-	0.000	0
Other flatfish	0	0	0	-	0.000	0
Greenland turbot	0	0	0	-	0.000	0
Arrowtooth flounder	0	0	0	-	0.000	0
Pacific ocean perch	0	0	0	-	0.000	0
Sharpchin/northern rockfish	0	0	0	-	0.000	0
Shortraker/rougheye rockfish	0	0	0	-	0.000	0
Other rockfish	0	0	0	-	0.000	0
Sablefish	0	0	0	-	0.000	0
Other Species	0	0	0	100.0%	0.000	0
TOTAL	621	621	0	0.0%	0.000	0

PROHIBITED SPECIES	Discarded BYCATCH	Rate/ Retain GF	Discard Pounds
Halibut (mt)	0 mt	0 kg/mt	0
Halibut Mortality (mt)	0 mt	0 kg/mt	0
Herring (mt)	0 mt	1 kg/mt	1,000
C. bairdi Tanner crab	9 crab	0.014 indiv/mt	
Other Tanner crab	85 crab	0.138 indiv/mt	
Red king crab	0 crab	0.000 indiv/mt	
Other king crab	0 crab	0.000 indiv/mt	
Chinook salmon	22 salmon	0.036 indiv/mt	
Other salmon	14 salmon	0.022 indiv/mt	
Halibut and Herring Discard Pounds	1,000 pounds		
Crab and Salmon Discard Numbers	130 individuals		

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 20.

2002 GROUNDFISH SPECIES	AREA: GEAR: TYPE: TARGET:		BSAI Trawl Shoreside Midwater pollock			
	Harvest mt	Retained mt	Discarded mt	Discard Rate	Rate/ Retain GF	Discard Pounds
Atka Mackerel	213	180	33	15.5%	0.000	73,000
Pollock	644,443	644,352	91	0.0%	0.000	201,000
Pacific Cod	2,458	2,458	0	0.0%	0.000	0
Yellowfin sole	20	20	0	0.0%	0.000	0
Rock sole	304	264	40	13.2%	0.000	88,000
Flathead sole	475	394	81	17.1%	0.000	180,000
Other flatfish	103	88	15	14.4%	0.000	33,000
Greenland turbot	10	10	0	0.0%	0.000	0
Arrowtooth flounder	246	187	59	24.0%	0.000	130,000
Pacific ocean perch	278	187	91	32.8%	0.000	201,000
Sharpchin/northern rockfish	30	0	30	100.0%	0.000	66,000
Shortraker/rougheye rockfish	0	0	0	-	0.000	0
Other rockfish	1	1	0	0.0%	0.000	0
Sablefish	17	16	2	8.8%	0.000	3,000
Other Species	826	523	302	36.6%	0.000	666,000
TOTAL	649,424	648,680	744	0.1%	0.001	1,640,000

PROHIBITED SPECIES	Discarded BYCATCH	Rate/ Retain GF	Discard Pounds
Halibut (mt)	102 mt	0 kg/mt	226,000
Halibut Mortality (mt)	86 mt	0 kg/mt	190,000
Herring (mt)	78 mt	0 kg/mt	173,000
C. bairdi Tanner crab	0 crab	0.000 indiv/mt	
Other Tanner crab	0 crab	0.000 indiv/mt	
Red king crab	0 crab	0.000 indiv/mt	
Other king crab	0 crab	0.000 indiv/mt	
Chinook salmon	19,874 salmon	0.031 indiv/mt	
Other salmon	53,989 salmon	0.083 indiv/mt	
Halibut and Herring Discard Pounds	363,000 pounds		
Crab and Salmon Discard Numbers	73,863 individuals		

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 21.

2002 GROUND FISH SPECIES	AREA: GEAR: TYPE: TARGET:		BSAI Trawl Shoreside Pacific cod			
	Harvest mt	Retained mt	Discarded mt	Discard Rate	Rate/ Retain GF	Discard Pounds
Atka Mackerel	35	0	35	100.0%	0.001	77,000
Pollock	4,180	905	3,275	78.4%	0.107	7,221,000
Pacific Cod	30,105	29,718	387	1.3%	0.013	854,000
Yellowfin sole	182	0	182	99.8%	0.006	400,000
Rock sole	1,556	14	1,542	99.1%	0.050	3,400,000
Flathead sole	413	10	403	97.7%	0.013	889,000
Other flatfish	90	1	89	99.2%	0.003	197,000
Greenland turbot	3	0	3	100.0%	0.000	7,000
Arrowtooth flounder	713	3	710	99.6%	0.023	1,565,000
Pacific ocean perch	1	0	1	100.0%	0.000	1,000
Sharpchin/northern rockfish	17	0	17	100.0%	0.001	37,000
Shortraker/rougeye rockfish	0	0	0	-	0.000	0
Other rockfish	13	0	13	100.0%	0.000	30,000
Sablefish	10	1	9	91.7%	0.000	21,000
Other Species	872	1	871	99.9%	0.028	1,920,000
TOTAL	38,190	30,652	7,538	19.7%	0.246	16,617,000

PROHIBITED SPECIES	Discarded BYCATCH	Rate/ Retain GF	Discard Pounds
Halibut (mt)	662 mt	22 kg/mt	1,459,000
Halibut Mortality (mt)	444 mt	14 kg/mt	978,000
Herring (mt)	0 mt	0 kg/mt	0
C. bairdi Tanner crab	67,072 crab	2.188 indiv/mt	
Other Tanner crab	19,580 crab	0.639 indiv/mt	
Red king crab	1,754 crab	0.057 indiv/mt	
Other king crab	43 crab	0.001 indiv/mt	
Chinook salmon	870 salmon	0.028 indiv/mt	
Other salmon	530 salmon	0.017 indiv/mt	
Halibut and Herring Discard Pounds	978,000 pounds		
Crab and Salmon Discard Numbers	89,850 individuals		

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 22.

2002 GROUND FISH SPECIES	AREA:		BSAI			
	GEAR:	TYPE:	TARGET:	Discard Rate	Rate/ Retain GF	Discard Pounds
	Harvest mt	Retained mt	Discarded mt			
Atka Mackerel	1	0	1	100.0%	0.000	1,000
Pollock	128,501	128,501	0	0.0%	0.000	0
Pacific Cod	8,860	8,855	5	0.1%	0.000	11,000
Yellowfin sole	4	0	4	100.0%	0.000	8,000
Rock sole	97	31	67	68.4%	0.000	147,000
Flathead sole	118	18	100	84.5%	0.001	219,000
Other flatfish	10	2	8	84.1%	0.000	18,000
Greenland turbot	0	0	0	-	0.000	1,000
Arrowtooth flounder	34	0	34	100.0%	0.000	75,000
Pacific ocean perch	9	1	8	86.9%	0.000	17,000
Sharpchin/northern rockfish	1	0	1	100.0%	0.000	3,000
Shortraker/roughey rockfish	0	0	0	-	0.000	0
Other rockfish	0	0	0	-	0.000	1,000
Sablefish	1	0	1	100.0%	0.000	2,000
Other Species	98	0	98	100.0%	0.001	216,000
TOTAL	137,734	137,407	327	0.2%	0.002	721,000

PROHIBITED SPECIES	Discarded BYCATCH	Rate/ Retain GF	Discard Pounds
Halibut (mt)	104 mt	1 kg/mt	230,000
Halibut Mortality (mt)	70 mt	1 kg/mt	155,000
Herring (mt)	15 mt	0 kg/mt	33,000
C. bairdi Tanner crab	12,827 crab	0.093 indiv/mt	
Other Tanner crab	1,161 crab	0.008 indiv/mt	
Red king crab	1,944 crab	0.014 indiv/mt	
Other king crab	13 crab	0.000 indiv/mt	
Chinook salmon	4,171 salmon	0.030 indiv/mt	
Other salmon	13,837 salmon	0.101 indiv/mt	
Halibut and Herring Discard Pounds	188,000 pounds		
Crab and Salmon Discard Numbers	33,953 individuals		

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 23.

GROUNDFISH SPECIES	Harvest		Discarded		Discard Rate	Rate/ Retain GF	Discard Pounds
	mt	Retained mt	mt	mt			
Atka Mackerel	1	0	1	100.0%	0.000	1,000	
Pollock	128,501	128,501	0	0.0%	0.000	0	
Pacific Cod	824	819	5	0.6%	0.000	11,000	
Yellowfin sole	4	0	4	100.0%	0.000	8,000	
Rock sole	97	31	67	68.4%	0.001	147,000	
Flathead sole	118	18	100	84.5%	0.001	219,000	
Other flatfish	10	2	8	84.1%	0.000	18,000	
Greenland turbot	0	0	0	-	0.000	1,000	
Arrowtooth flounder	34	0	34	100.0%	0.000	75,000	
Pacific ocean perch	9	1	8	86.9%	0.000	17,000	
Sharpchin/northern rockfish	1	0	1	100.0%	0.000	3,000	
Shortraker/rougeye rockfish	0	0	0	-	0.000	0	
Other rockfish	0	0	0	100.0%	0.000	1,000	
Sablefish	1	0	1	100.0%	0.000	2,000	
Other Species	98	0	98	100.0%	0.001	216,000	
TOTAL	129,699	129,372	327	0.3%	0.003	721,000	

PROHIBITED SPECIES	Discarded BYCATCH	Rate/ Retain GF	Discard Pounds
Halibut (mt)	2 mt	0 kg/mt	5,000
Halibut Mortality (mt)	2 mt	0 kg/mt	4,000
Herring (mt)	15 mt	0 kg/mt	33,000
C. bairdi Tanner crab	16 crab	0.000 indiv/mt	
Other Tanner crab	70 crab	0.001 indiv/mt	
Red king crab	0 crab	0.000 indiv/mt	
Other king crab	0 crab	0.000 indiv/mt	
Chinook salmon	3,375 salmon	0.026 indiv/mt	
Other salmon	13,828 salmon	0.107 indiv/mt	
Halibut and Herring Discard Pounds	37,000 pounds		
Crab and Salmon Discard Numbers	17,288 individuals		

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 24.

2002 GROUND FISH SPECIES	AREA: GEAR: TYPE: TARGET:		BSAI Trawl Mothership Pacific cod			
	Harvest mt	Retained mt	Discarded mt	Discard Rate	Rate/ Retain GF	Discard Pounds
Atka Mackerel	0	0	0	-	0.000	0
Pollock	0	0	0	-	0.000	0
Pacific Cod	8,035	8,035	0	0.0%	0.000	0
Yellowfin sole	0	0	0	-	0.000	0
Rock sole	0	0	0	-	0.000	0
Flathead sole	0	0	0	-	0.000	0
Other flatfish	0	0	0	-	0.000	0
Greenland turbot	0	0	0	-	0.000	0
Arrowtooth flounder	0	0	0	-	0.000	0
Pacific ocean perch	0	0	0	-	0.000	0
Sharpchin/northern rockfish	0	0	0	-	0.000	0
Shortraker/rougeye rockfish	0	0	0	-	0.000	0
Other rockfish	0	0	0	-	0.000	0
Sablefish	0	0	0	-	0.000	0
Other Species	0	0	0	-	0.000	0
TOTAL	8,035	8,035	0	0.0%	0.000	0

PROHIBITED SPECIES	Discarded BYCATCH	Rate/ Retain GF	Discard Pounds
Halibut (mt)	102 mt	13 kg/mt	225,000
Halibut Mortality (mt)	68 mt	8 kg/mt	151,000
Herring (mt)	0 mt	0 kg/mt	0
C. bairdi Tanner crab	12,812 crab	1.594 indiv/mt	
Other Tanner crab	1,091 crab	0.136 indiv/mt	
Red king crab	1,944 crab	0.242 indiv/mt	
Other king crab	13 crab	0.002 indiv/mt	
Chinook salmon	796 salmon	0.099 indiv/mt	
Other salmon	9 salmon	0.001 indiv/mt	
Halibut and Herring Discard Pounds	151,000 pounds		
Crab and Salmon Discard Numbers	16665 individuals		

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 25.

GROUND FISH SPECIES	2002		AREA:	BSAI		
	Harvest mt	Retained mt	GEAR:	Hook and line	Discard Rate	Discard Pounds
			TYPE:	Catcher/processor	Rate/ Retain GF	
			TARGET:	All		
Atka Mackerel	42	0			100.0%	92,000
Pollock	5,901	5,151			12.7%	1,653,000
Pacific Cod	89,394	87,563			2.0%	4,037,000
Yellowfin sole	570	12			97.8%	1,229,000
Rock sole	29	0			99.2%	64,000
Flathead sole	343	17			95.1%	720,000
Other flatfish	103	4			95.9%	218,000
Greenland turbot	2,214	2,099			5.2%	252,000
Arrowtooth flounder	1,112	182			83.7%	2,051,000
Pacific ocean perch	3	2			49.1%	3,000
Sharpchin/northern rockfish	35	1			98.1%	75,000
Shortraker/roughey rockfish	104	38			63.5%	146,000
Other rockfish	137	73			46.9%	142,000
Sablefish	549	416			24.2%	293,000
Other Species	12,842	2,983			76.8%	21,734,000
TOTAL	113,377	98,540			13.1%	32,709,000

PROHIBITED SPECIES	Discarded BYCATCH	Rate/ Retain GF	Discard Pounds
Halibut (mt)	5,075 mt	52 kg/mt	11,189,000
Halibut Mortality (mt)	625 mt	6 kg/mt	1,378,000
Herring (mt)	0 mt	0 kg/mt	0
C. bairdi Tanner crab	17,455 crab	0.177 indiv/mt	
Other Tanner crab	78,262 crab	0.794 indiv/mt	
Red king crab	26,504 crab	0.269 indiv/mt	
Other king crab	17,384 crab	0.176 indiv/mt	
Chinook salmon	25 salmon	0.000 indiv/mt	
Other salmon	100 salmon	0.001 indiv/mt	
Halibut and Herring Discard Pounds	1,378,000 pounds		
Crab and Salmon Discard Numbers	139,730 individuals		

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 26.

2002 GROUNDFISH SPECIES	AREA:		BSAI				Discard Pounds	
	GEAR:	TYPE:	Harvest mt	Retained mt	Discarded mt	Discard Rate		Rate/ Retain GF
	TARGET:							
		Hook and line Catcher/processor Greenland turbot						
Atka Mackerel			0	0	0	-	0.000	0
Pollock			3	2	2	55.2%	0.001	4,000
Pacific Cod			81	66	15	18.1%	0.007	32,000
Yellowfin sole			0	0	0	-	0.000	0
Rock sole			0	0	0	-	0.000	0
Flathead sole			7	0	7	100.0%	0.003	15,000
Other flatfish			1	0	1	100.0%	0.001	2,000
Greenland turbot			1,909	1,862	47	2.5%	0.023	104,000
Arrowtooth flounder			177	51	126	71.4%	0.061	278,000
Pacific ocean perch			0	0	0	-	0.000	0
Sharpchin/northern rockfish			0	0	0	-	0.000	0
Shortraker/rougheyeye rockfish			13	6	7	53.4%	0.003	16,000
Other rockfish			23	17	6	24.9%	0.003	13,000
Sablefish			126	42	85	66.9%	0.041	186,000
Other Species			151	7	145	95.6%	0.071	319,000
TOTAL			2,491	2,052	439	17.6%	0.214	969,000

PROHIBITED SPECIES	Discarded BYCATCH	Rate/ Retain GF	Discard Pounds
Halibut (mt)	271 mt	132 kg/mt	598,000
Halibut Mortality (mt)	49 mt	24 kg/mt	107,000
Herring (mt)	0 mt	0 kg/mt	0
C. bairdi Tanner crab	64 crab	0.031 indiv/mt	
Other Tanner crab	562 crab	0.274 indiv/mt	
Red king crab	6 crab	0.003 indiv/mt	
Other king crab	55 crab	0.027 indiv/mt	
Chinook salmon	3 salmon	0.001 indiv/mt	
Other salmon	45 salmon	0.022 indiv/mt	
Halibut and Herring Discard Pounds	107,000 pounds		
Crab and Salmon Discard Numbers	735 individuals		

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 28.

2002 GROUND FISH SPECIES	AREA:		BSAI				Discard Pounds	
	GEAR:	TYPE:	Harvest mt	Retained mt	Discarded mt	Discard Rate		Rate/ Retain GF
	TARGET:							
		Hook and line Catcher/processor Sablefish						
Atka Mackerel			0	0	0	-	0.000	0
Pollock			1	0	1	77.6%	0.002	2,000
Pacific Cod			15	13	2	14.0%	0.004	5,000
Yellowfin sole			0	0	0	-	0.000	0
Rock sole			0	0	0	-	0.000	0
Flathead sole			0	0	0	-	0.000	0
Other flatfish			3	0	3	100.0%	0.006	6,000
Greenland turbot			96	68	29	29.9%	0.062	63,000
Arrowtooth flounder			58	0	58	100.0%	0.124	127,000
Pacific ocean perch			0	0	0	-	0.000	0
Sharpchin/northern rockfish			0	0	0	-	0.000	0
Shortraker/roughey rockfish			40	16	25	61.0%	0.053	54,000
Other rockfish			67	51	17	24.8%	0.036	37,000
Sablefish			334	317	16	4.9%	0.035	36,000
Other Species			97	1	96	99.2%	0.206	212,000
TOTAL			711	465	246	34.6%	0.529	543,000

PROHIBITED SPECIES	Discarded BYCATCH	Rate/ Retain GF	Discard Pounds
Halibut (mt)	104	224 kg/mt	
Halibut Mortality (mt)	0	0 kg/mt	
Herring (mt)	0 mt	0 kg/mt	0
C. bairdi Tanner crab	5 crab	0.010 indiv/mt	
Other Tanner crab	61 crab	0.131 indiv/mt	
Red king crab	0 crab	0.000 indiv/mt	
Other king crab	701 crab	1.508 indiv/mt	
Chinook salmon	0 salmon	0.000 indiv/mt	
Other salmon	1 salmon	0.002 indiv/mt	
Halibut and Herring Discard Pounds	0 pounds		
Crab and Salmon Discard Numbers	768 individuals		

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 29.

2002	AREA:		BSAI			
	GEAR:	Hook and line				
	TYPE:		Shoreside			
	TARGET:		All			
GROUND FISH SPECIES	Harvest mt	Retained mt	Discarded mt	Discard Rate	Rate/ Retain GF	Discard Pounds
Atka Mackerel	0	0	0	-	0.000	0
Pollock	0	0	0	-	0.000	1,000
Pacific Cod	404	237	167	41.3%	0.139	367,000
Yellowfin sole	0	0	0	-	0.000	0
Rock sole	0	0	0	-	0.000	0
Flathead sole	0	0	0	-	0.000	0
Other flatfish	1	0	1	100.0%	0.001	3,000
Greenland turbot	212	40	172	81.2%	0.144	379,000
Arrowtooth flounder	51	0	51	100.0%	0.042	112,000
Pacific ocean perch	0	0	0	-	0.000	0
Sharpchin/northern rockfish	1	0	1	100.0%	0.000	1,000
Shortraker/rougheye rockfish	64	0	64	100.0%	0.053	140,000
Other rockfish	204	97	107	52.6%	0.090	237,000
Sablefish	836	823	14	1.6%	0.011	30,000
Other Species	344	0	344	100.0%	0.287	758,000
TOTAL	2,116	1,196	920	43.5%	0.769	2,028,000

PROHIBITED SPECIES	Discarded BYCATCH	Rate/ Retain GF	Discard Pounds
Halibut (mt)	88 mt	74 kg/mt	194,000
Halibut Mortality (mt)	12 mt	10 kg/mt	26,000
Herring (mt)	0 mt	0 kg/mt	0
C. bairdi Tanner crab	2 crab	0.002 indiv/mt	
Other Tanner crab	122 crab	0.102 indiv/mt	
Red king crab	2 crab	0.002 indiv/mt	
Other king crab	632 crab	0.528 indiv/mt	
Chinook salmon	0 salmon	0.000 indiv/mt	
Other salmon	11 salmon	0.009 indiv/mt	
Halibut and Herring Discard Pounds	26,000 pounds		
Crab and Salmon Discard Numbers	769 individuals		

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 30.

2001 GROUND FISH SPECIES	AREA: GEAR: TYPE: TARGET:		BSAI Hook and line Shoreside Greenland turbot			
	Harvest mt	Retained mt	Discarded mt	Discard Rate	Rate/ Retain GF	Discard Pounds
Atka Mackerel	0	0	0	-	-	0
Pollock	0	0	0	-	-	0
Pacific Cod	0	0	0	-	-	0
Yellowfin sole	0	0	0	-	-	0
Rock sole	0	0	0	-	-	0
Flathead sole	0	0	0	-	-	0
Other flatfish	0	0	0	-	-	0
Greenland turbot	6	0	6	100.0%	-	14,000
Arrowtooth flounder	1	0	1	100.0%	-	2,000
Pacific ocean perch	0	0	0	-	-	0
Sharpchin/northern rockfish	0	0	0	-	-	0
Shortraker/rougeye rockfish	0	0	0	-	-	0
Other rockfish	0	0	0	-	-	0
Sablefish	2	0	2	100.0%	-	3,000
Other Species	2	0	2	100.0%	-	3,000
TOTAL	11	0	11	100.0%	-	24,000

PROHIBITED SPECIES	Discarded BYCATCH	Rate/ Retain GF	Discard Pounds
Halibut (mt)	20 mt	- kg/mt	43,000
Halibut Mortality (mt)	4 mt	- kg/mt	8,000
Herring (mt)	0 mt	- kg/mt	0
C. bairdi Tanner crab	0 crab	- indiv/mt	
Other Tanner crab	17 crab	- indiv/mt	
Red king crab	2 crab	- indiv/mt	
Other king crab	10 crab	- indiv/mt	
Chinook salmon	0 salmon	- indiv/mt	
Other salmon	5 salmon	- indiv/mt	
Halibut and Herring Discard Pounds	8000 pounds		
Crab and Salmon Discard Numbers	34 individuals		

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 31.

2002 GROUND FISH SPECIES	AREA:		BSAI				Discard Pounds
	GEAR:	TYPE:	TARGET:	Discard Rate	Rate/ Retain GF		
	Harvest mt	Retained mt	Discarded mt	Discard Rate	Rate/ Retain GF	Discard Pounds	
Atka Mackerel	0	0	0	-	0.000	0	
Pollock	0	0	0	-	0.000	0	
Pacific Cod	237	215	22	9.2%	0.091	48,000	
Yellowfin sole	0	0	0	-	0.000	0	
Rock sole	0	0	0	-	0.000	0	
Flathead sole	0	0	0	-	0.000	0	
Other flatfish	1	0	1	100.0%	0.005	3,000	
Greenland turbot	2	0	2	100.0%	0.010	5,000	
Arrowtooth flounder	3	0	3	100.0%	0.013	7,000	
Pacific ocean perch	0	0	0	-	0.000	0	
Sharpchin/northern rockfish	0	0	0	-	0.000	0	
Shortraker/rougheye rockfish	2	0	2	100.0%	0.010	5,000	
Other rockfish	13	1	12	89.7%	0.049	26,000	
Sablefish	24	22	2	7.1%	0.007	4,000	
Other Species	26	0	26	100.0%	0.110	58,000	
TOTAL	309	239	70	22.7%	0.294	155,000	

PROHIBITED SPECIES	Discarded BYCATCH	Rate/ Retain GF	Discard Pounds
Halibut (mt)	69 mt	287 kg/mt	151,000
Halibut Mortality (mt)	8 mt	34 kg/mt	18,000
Herring (mt)	0 mt	0 kg/mt	0
C. bairdi Tanner crab	1 crab	0.004 indiv/mt	
Other Tanner crab	35 crab	0.145 indiv/mt	
Red king crab	0 crab	0.000 indiv/mt	
Other king crab	3 crab	0.011 indiv/mt	
Chinook salmon	0 salmon	0.000 indiv/mt	
Other salmon	1 salmon	0.004 indiv/mt	
Halibut and Herring Discard Pounds	18,000 pounds		
Crab and Salmon Discard Numbers	39 individuals		

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 32.

2002 GROUND FISH SPECIES	AREA:		BSAI			
	GEAR:	TYPE:	Hook and line Shoreside Sablefish			
	Harvest mt	Retained mt	Discarded mt	Discard Rate	Rate/ Retain GF	Discard Pounds
Atka Mackerel	0	0	0	-	0.000	0
Pollock	0	0	0	-	0.000	0
Pacific Cod	167	22	145	86.9%	0.151	319,000
Yellowfin sole	0	0	0	-	0.000	0
Rock sole	0	0	0	-	0.000	0
Flathead sole	0	0	0	-	0.000	0
Other flatfish	0	0	0	-	0.000	0
Greenland turbot	209	40	170	81.0%	0.177	374,000
Arrowtooth flounder	48	0	48	100.0%	0.050	105,000
Pacific ocean perch	0	0	0	-	0.000	0
Sharpchin/northern rockfish	1	0	1	100.0%	0.001	1,000
Shortraker/roughey rockfish	61	0	61	100.0%	0.064	135,000
Other rockfish	191	95	96	50.1%	0.100	211,000
Sablefish	813	801	12	1.5%	0.012	26,000
Other Species	318	0	318	100.0%	0.332	700,000
						0
TOTAL	1,807	958	850	47.0%	0.887	1,873,000

PROHIBITED SPECIES	Discarded BYCATCH	Rate/ Retain GF	Discard Pounds
Halibut (mt)	256	kg/mt	
Halibut Mortality (mt)	0	kg/mt	
Herring (mt)	0 mt	0 kg/mt	0
C. bairdi Tanner crab	2 crab	0.002 indiv/mt	
Other Tanner crab	71 crab	0.074 indiv/mt	
Red king crab	0 crab	0.000 indiv/mt	
Other king crab	619 crab	0.647 indiv/mt	
Chinook salmon	0 salmon	0.000 indiv/mt	
Other salmon	5 salmon	0.006 indiv/mt	
Halibut and Herring Discard Pounds	0 pounds		
Crab and Salmon Discard Numbers	697 individuals		

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 33.

2002 GROUNDFISH SPECIES	AREA: GEAR: TYPE: TARGET:		BSAI Jig Shoreside Pacific cod			
	Harvest mt	Retained mt	Discarded mt	Discard Rate	Rate/ Retain GF	Discard Pounds
Atka Mackerel	0	0	0	-	0.000	0
Pollock	0	0	0	-	0.000	0
Pacific Cod	166	166	0	0.0%	0.000	0
Yellowfin sole	0	0	0	-	0.000	0
Rock sole	0	0	0	-	0.000	0
Flathead sole	0	0	0	-	0.000	0
Other flatfish	0	0	0	-	0.000	0
Greenland turbot	0	0	0	-	0.000	0
Arrowtooth flounder	0	0	0	-	0.000	0
Pacific ocean perch	0	0	0	-	0.000	0
Sharpchin/northern rockfish	0	0	0	-	0.000	0
Shortraker/rougheye rockfish	0	0	0	-	0.000	0
Other rockfish	0	0	0	-	0.000	0
Sablefish	0	0	0	-	0.000	0
Other Species	0	0	0	-	0.000	0
TOTAL	166	166	0	0.0%	0.000	0

PROHIBITED SPECIES	Discarded BYCATCH	Rate/ Retain GF	Discard Pounds
Halibut (mt)	0 mt	0 kg/mt	0
Halibut Mortality (mt)	0 mt	0 kg/mt	0
Herring (mt)	0 mt	0 kg/mt	0
C. bairdi Tanner crab	0 crab	0.000 indiv/mt	
Other Tanner crab	0 crab	0.000 indiv/mt	
Red king crab	0 crab	0.000 indiv/mt	
Other king crab	0 crab	0.000 indiv/mt	
Chinook salmon	0 salmon	0.000 indiv/mt	
Other salmon	0 salmon	0.000 indiv/mt	
Halibut and Herring Discard Pounds	0 pounds		
Crab and Salmon Discard Numbers	0 individuals		

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 34.

2002 GROUND FISH SPECIES	AREA:		BSAI			
	GEAR:	Pot				
	TYPE:		All			
	TARGET:		All			
	Harvest mt	Retained mt	Discarded mt	Discard Rate	Rate/ Retain GF	Discard Pounds
Atka Mackerel	49	0	49	100.0%	0.004	108,000
Pollock	23	5	18	76.6%	0.001	39,000
Pacific Cod	13,529	13,460	70	0.5%	0.005	154,000
Yellowfin sole	38	0	38	100.0%	0.003	83,000
Rock sole	2	0	2	100.0%	0.000	4,000
Flathead sole	0	0	0	-	0.000	0
Other flatfish	2	0	2	100.0%	0.000	4,000
Greenland turbot	72	0	72	100.0%	0.005	159,000
Arrowtooth flounder	165	0	165	100.0%	0.012	365,000
Pacific ocean perch	0	0	0	-	0.000	0
Sharpchin/northern rockfish	0	0	0	-	0.000	1,000
Shortraker/roughey rockfish	1	0	1	100.0%	0.000	3,000
Other rockfish	4	0	4	100.0%	0.000	9,000
Sablefish	192	190	2	0.9%	0.000	4,000
Other Species	409	3	406	99.3%	0.030	895,000
TOTAL	14,487	13,658	829	5.7%	0.061	1,828,000

PROHIBITED SPECIES	Discarded BYCATCH	Rate/ Retain GF	Discard Pounds
Halibut (mt)	213 mt	16 kg/mt	471,000
Halibut Mortality (mt)	9 mt	1 kg/mt	19,000
Herring (mt)	0 mt	0 kg/mt	0
C. bairdi Tanner crab	74,769 crab	5.474 indiv/mt	
Other Tanner crab	279,204 crab	20.442 indiv/mt	
Red king crab	973 crab	0.071 indiv/mt	
Other king crab	27,139 crab	1.987 indiv/mt	
Chinook salmon	0 salmon	0.000 indiv/mt	
Other salmon	6 salmon	0.000 indiv/mt	
Halibut and Herring Discard Pounds	19,000 pounds		
Crab and Salmon Discard Numbers	382,091 individuals		

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 35.

2002 GROUND FISH SPECIES	AREA:		BSAI			
	GEAR:	Pot	Discarded	Discard	Rate/ Retain GF	Discard
	TYPE:	Shoreside	mt	Rate		Pounds
	TARGET:	Pacific cod	mt			
Atka Mackerel			49	100.0%	0.004	108,000
Pollock			22	75.3%	0.001	36,000
Pacific Cod			11,481	0.6%	0.006	154,000
Yellowfin sole			20	100.0%	0.002	45,000
Rock sole			2	100.0%	0.000	4,000
Flathead sole			0	-	0.000	0
Other flatfish			2	100.0%	0.000	4,000
Greenland turbot			65	100.0%	0.006	143,000
Arrowtooth flounder			149	100.0%	0.013	329,000
Pacific ocean perch			0	-	0.000	0
Sharpchin/northern rockfish			0	100.0%	0.000	1,000
Shortraker/roughey rockfish			1	100.0%	0.000	2,000
Other rockfish			4	100.0%	0.000	8,000
Sablefish			1	100.0%	0.000	1,000
Other Species			378	99.9%	0.033	832,000
TOTAL			12,173	6.2%	0.066	1,666,000

PROHIBITED SPECIES	Discarded BYCATCH	Rate/ Retain GF	Discard Pounds
Halibut (mt)	132 mt	12 kg/mt	291,000
Halibut Mortality (mt)	5 mt	0 kg/mt	11,000
Herring (mt)	0 mt	0 kg/mt	0
C. bairdi Tanner crab	49,048 crab	4.296 indiv/mt	
Other Tanner crab	207,865 crab	18.207 indiv/mt	
Red king crab	830 crab	0.073 indiv/mt	
Other king crab	3,588 crab	0.314 indiv/mt	
Chinook salmon	0 salmon	0.000 indiv/mt	
Other salmon	0 salmon	0.000 indiv/mt	
Halibut and Herring Discard Pounds	11,000 pounds		
Crab and Salmon Discard Numbers	261,332 individuals		

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 36.

2002 GROUND FISH SPECIES	AREA:		BSAI			
	GEAR:		Pot			
	TYPE:		Catcher/processor			
	TARGET:		Pacific cod			
	Harvest mt	Retained mt	Discarded mt	Discard Rate	Rate/ Retain GF	Discard Pounds
Atka Mackerel	0	0	0	-	0.000	0
Pollock	1	0	1	100.0%	0.001	2,000
Pacific Cod	2,049	2,049	0	0.0%	0.000	0
Yellowfin sole	17	0	17	100.0%	0.008	38,000
Rock sole	0	0	0	-	0.000	0
Flathead sole	0	0	0	-	0.000	0
Other flatfish	0	0	0	-	0.000	0
Greenland turbot	0	0	0	-	0.000	0
Arrowtooth flounder	0	0	0	-	0.000	0
Pacific ocean perch	0	0	0	-	0.000	0
Sharpchin/northern rockfish	0	0	0	-	0.000	0
Shortraker/rougheye rockfish	0	0	0	-	0.000	0
Other rockfish	0	0	0	-	0.000	0
Sablefish	0	0	0	-	0.000	0
Other Species	26	2	24	91.2%	0.012	53,000
TOTAL	2,094	2,051	43	2.0%	0.021	94,000

PROHIBITED SPECIES	Discarded BYCATCH	Rate/ Retain GF	Discard Pounds
Halibut (mt)	132 mt	64 kg/mt	291,000
Halibut Mortality (mt)	5 mt	3 kg/mt	11,000
Herring (mt)	0 mt	0 kg/mt	0
C. bairdi Tanner crab	49,048 crab	23.914 indiv/mt	
Other Tanner crab	207,865 crab	101.345 indiv/mt	
Red king crab	830 crab	0.405 indiv/mt	
Other king crab	3,588 crab	1.750 indiv/mt	
Chinook salmon	0 salmon	0.000 indiv/mt	
Other salmon	0 salmon	0.000 indiv/mt	
Halibut and Herring Discard Pounds	11,000 pounds		
Crab and Salmon Discard Numbers	261,332 individuals		

APPENDIX 2:

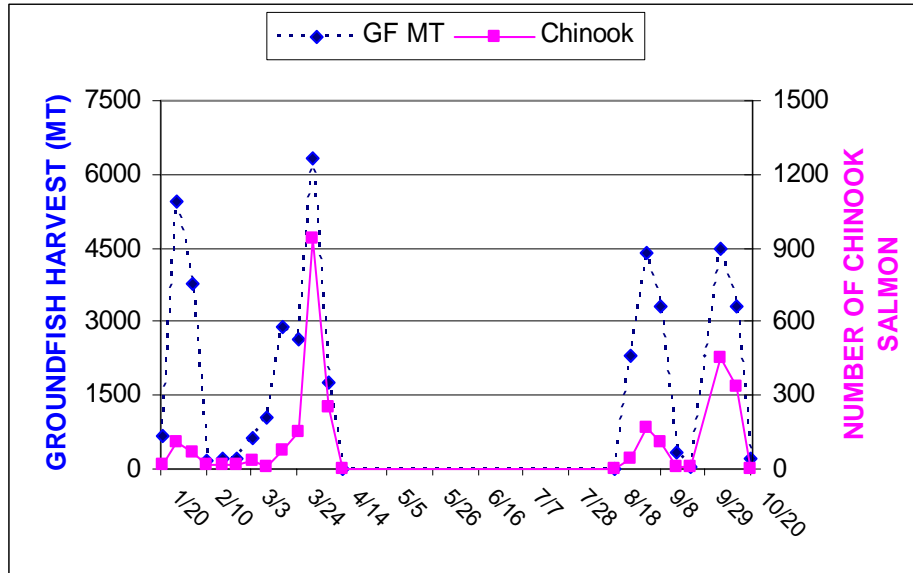
GULF OF ALASKA

FIGURES 8-14

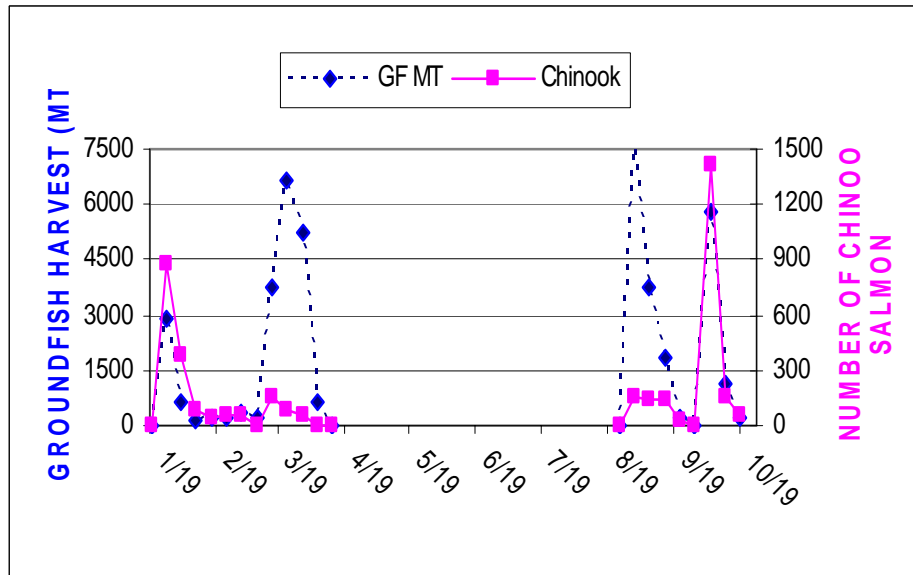
Discards in the North Pacific Groundfish Fisheries, 2002

FIGURE 8. WEEKLY GROUNDFISH HARVEST AND CHINOOK SALMON BYCATCH BY VESSELS TARGETING POLLOCK WITH PELAGIC TRAWLS

2001



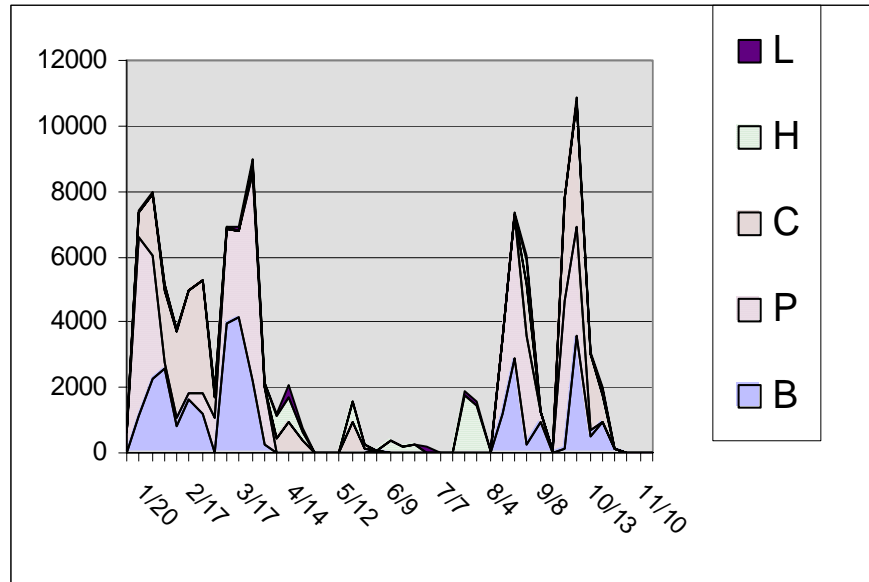
2002



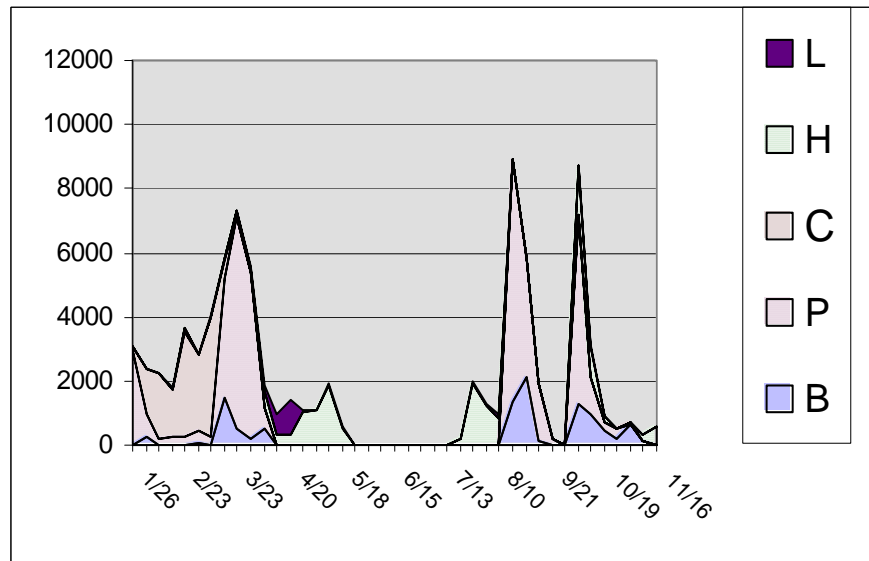
GROUNDFISH HARVESTED IN METRIC TONS (GF MT) INCLUDES TARGET AND NON-TARGET GROUNDFISH SPECIES

FIGURE 9. WEEKLY GROUNDFISH HARVEST BY VESSELS TARGETING SHALLOW-WATER COMPLEX SPECIES WITH TRAWLS

2001



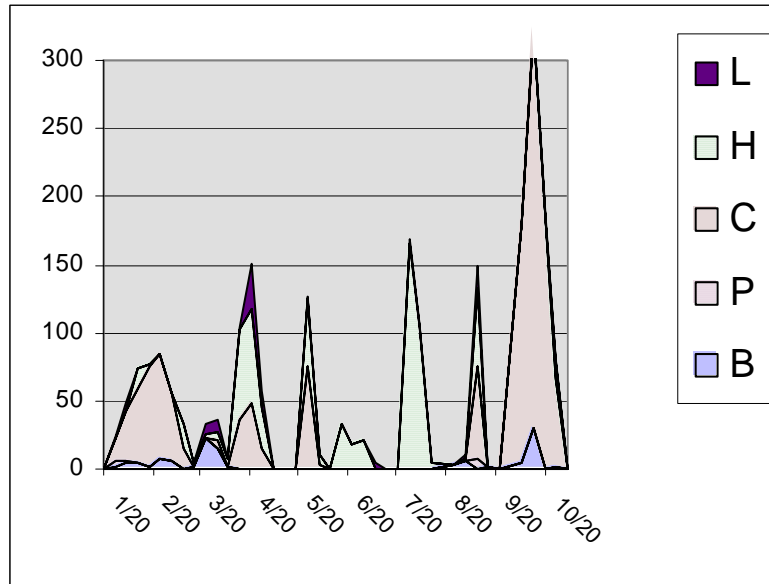
2002



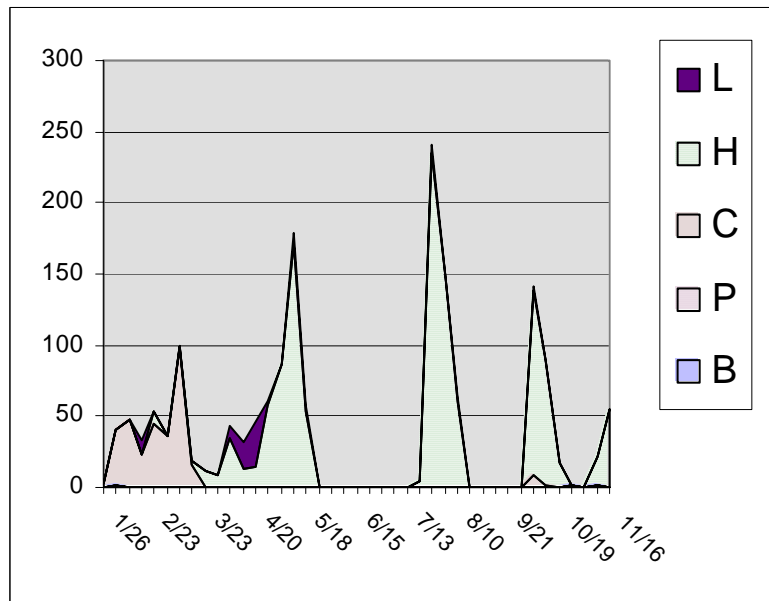
GROUNDFISH HARVESTED (GF MT) INCLUDES TARGET AND NON-TARGET GROUNDFISH SPECIES
 L=FLATHEAD SOLE C=PACIFIC COD P=PELAGIC POLLOCK
 B=BOTTOM POLLOCK H=SHALLOW-WATER FLATFISH

FIGURE 10. WEEKLY HALIBUT MORTALITY BY VESSELS TARGETTING SHALLOW-WATER COMPLEX SPECIES WITH TRAWLS

2001



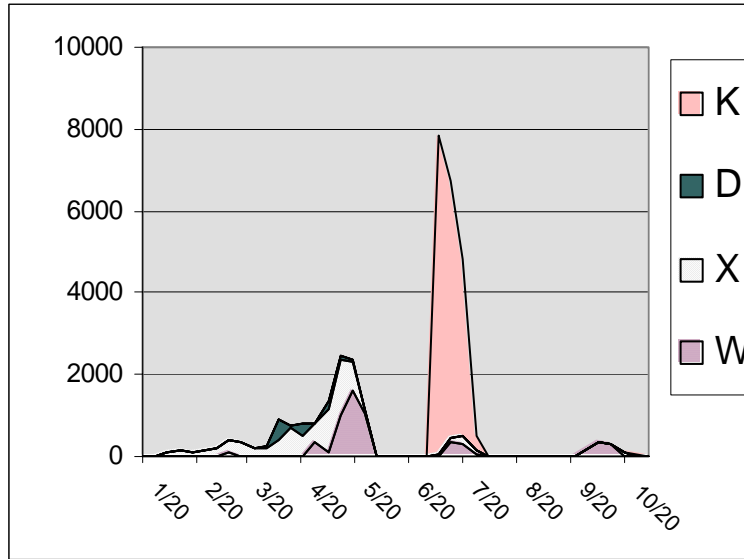
2002



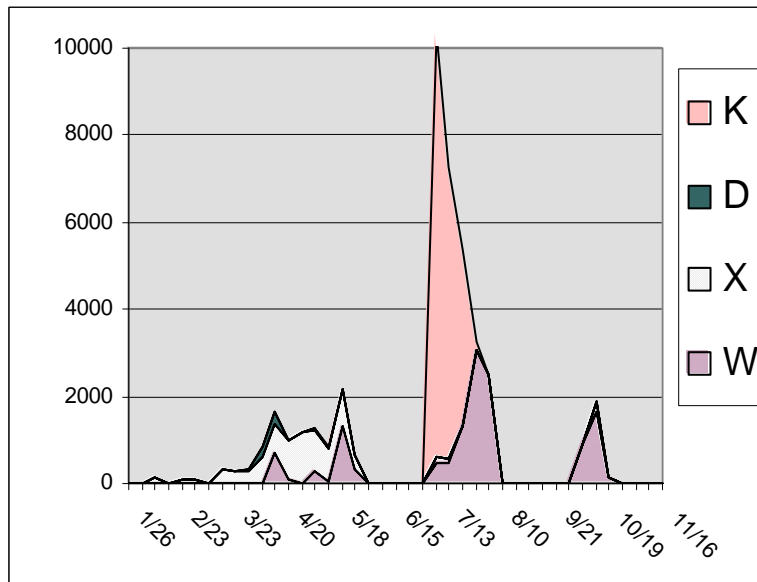
GROUNDFISH HARVESTED (MT) INCLUDES TARGET AND NON-TARGET GROUNDFISH SPECIES
 L=FLATHEAD SOLE C=PACIFIC COD P=PELAGIC POLLOCK
 B=BOTTOM POLLOCK H=SHALLOW-WATER FLATFISH

FIGURE 11. WEEKLY GROUNDFISH HARVEST BY VESSELS TARGETTING DEEP-WATER COMPLEX SPECIES WITH TRAWLS

2001



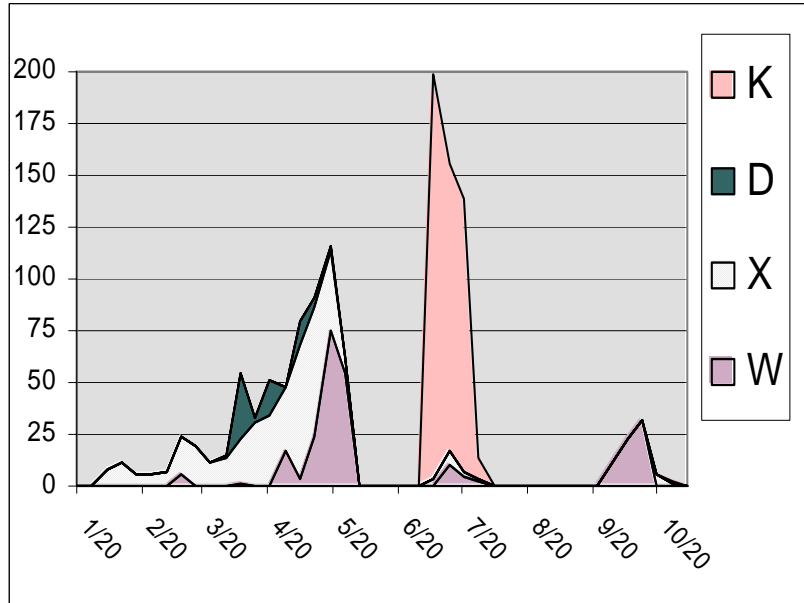
2002



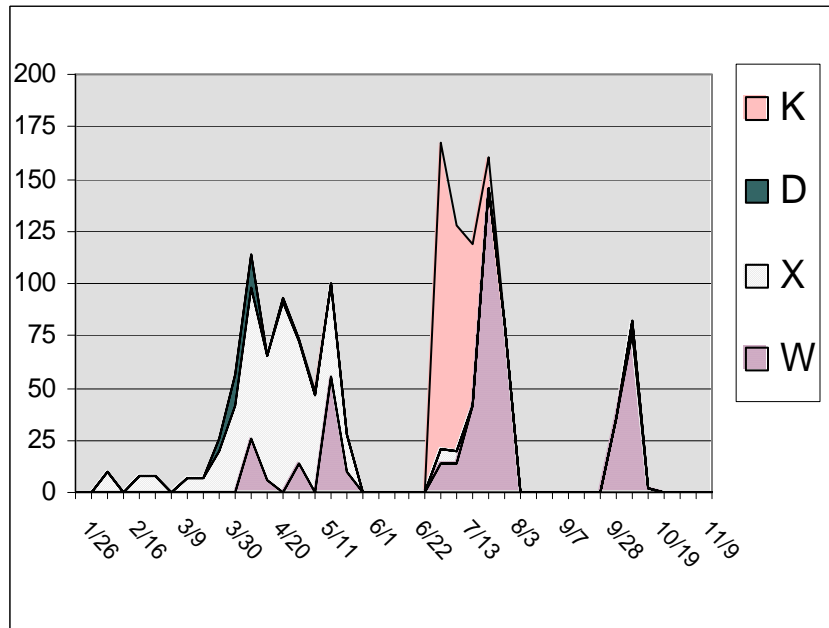
GROUNDFISH HARVESTED (MT) INCLUDES TARGET AND NON-TARGET GROUNDFISH SPECIES
 K=ROCKFISH D=DEEP-WATER FLATFISH X=REX SOLE
 W=ARROWTOOTH FLOUNDER

FIGURE 12. WEEKLY HALIBUT MORTALITY BY VESSELS TARGETTING DEEP-WATER COMPLEX SPECIES WITH TRAWLS

2001

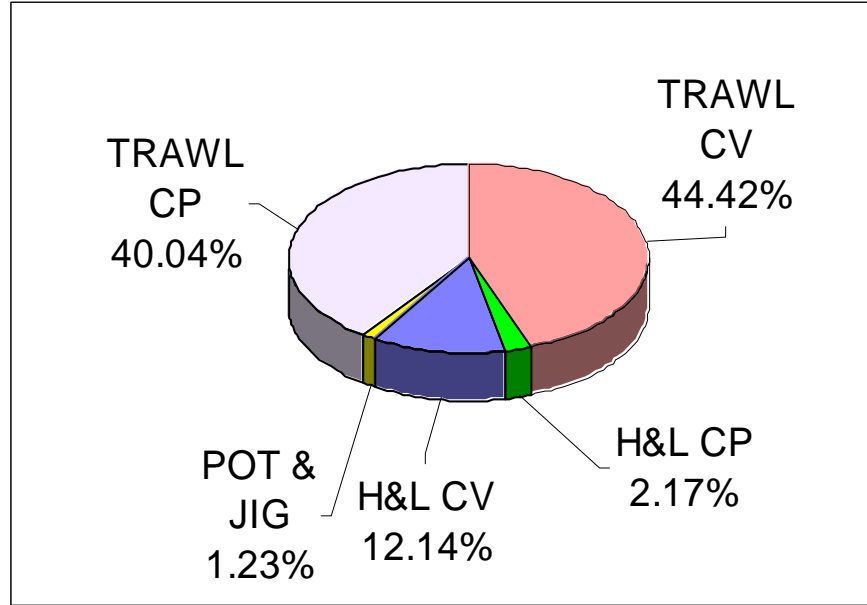


2002

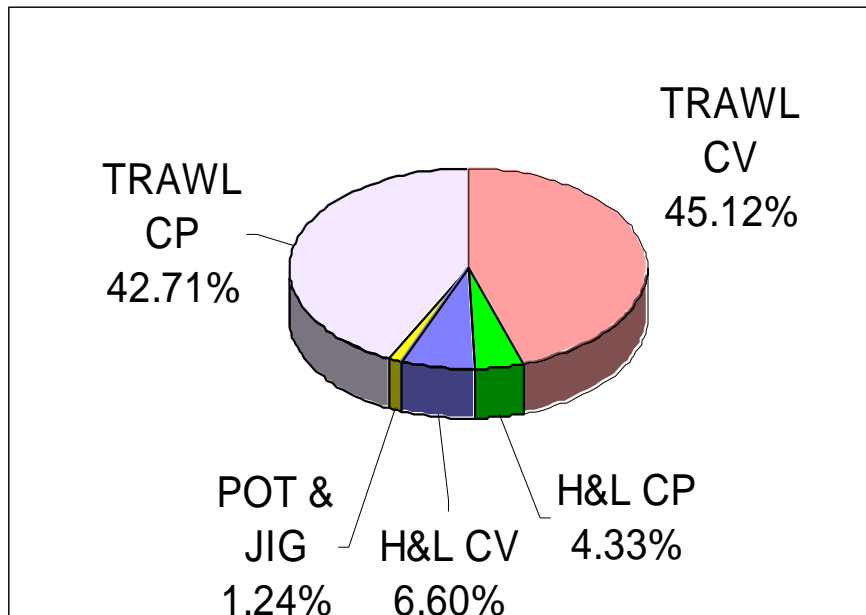


GROUNDFISH HARVESTED (MT) INCLUDES TARGET AND NON-TARGET GROUNDFISH SPECIES
 K=ROCKFISH D=DEEP-WATER FLATFISH X=REX SOLE
 W=ARROWTOOTH FLOUNDER

FIGURE 13. 2001 GROUNDFISH DISCARDS BY SECTOR: PERCENT OF TOTAL

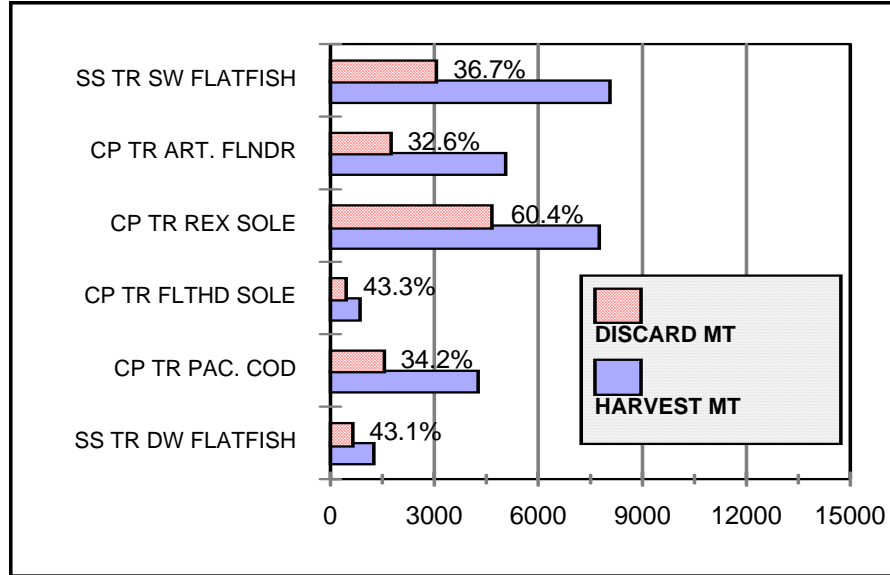


2002 DISCARDS BY SECTOR: PERCENT OF TOTAL

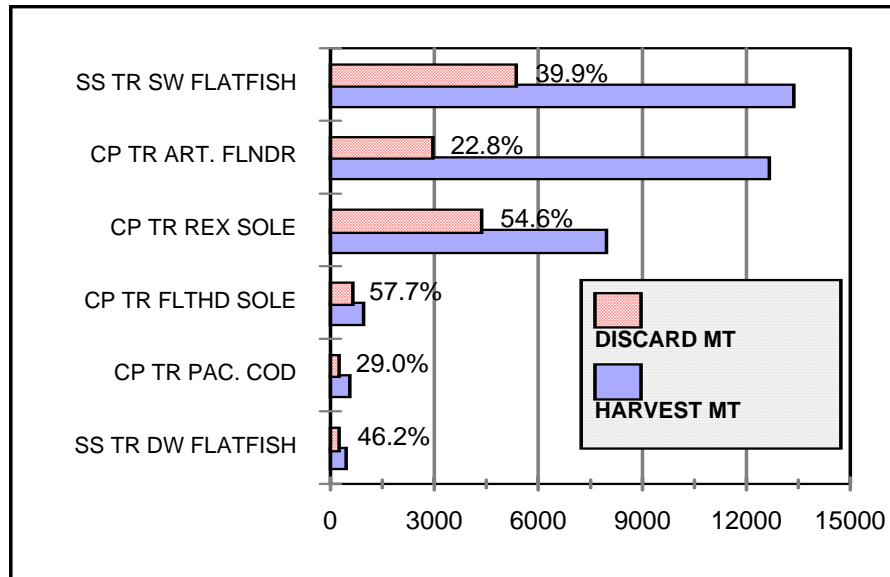


CP=CATCHER/PROCESSER. CV=CATCHER VESSEL (SHORESIDE)
H&L=HOOK AND LINE

FIGURE 14. 2001 FISHERIES WITH HIGHEST DISCARD RATES



2002 FISHERIES WITH HIGHEST DISCARD RATES



TONNAGES SHOWN ARE ALL GROUND FISH SPECIES IN EACH TARGET FISHERY

SS = SHORESIDE (CATCHER VESSELS), TR = TRAWL, SW=SHALLOW WATER, ART. FLNDR =ARROWTOOTH FLOUNDER, FLTHD SOLE = FLATHEAD SOLE, PAC. COD= PACIFIC COD, DW = DEEPWATER

GULF OF ALASKA
CATCH AND DISCARD TABLES
2002

Discards in the North Pacific Groundfish Fisheries, 2002

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 38.

2002		AREA:	GOA					
		GEAR:	Trawl					
		TYPE:	Catcher/processor					
		TARGET:	All					
GROUND FISH		Harvest	Retained	Discarded	Discard	Rate/	Discard	
SPECIES		mt	mt	mt	Rate	Retain GF	Pounds	
Atka Mackerel		31	20	11	35.0%	0.000	24,000	
Pollock		232	178	54	23.2%	0.002	119,000	
Pacific Cod		1,331	1,135	197	14.8%	0.008	433,000	
Deep-water flatfish		159	7	152	95.6%	0.006	334,000	
Rex sole		2,687	2,596	92	3.4%	0.004	202,000	
Arrowtooth Flounder		15,277	8,896	6,381	41.8%	0.260	14,067,000	
Shallow-water flatfish		163	101	62	38.3%	0.003	138,000	
Flathead sole		810	685	126	15.5%	0.005	277,000	
Pacific ocean perch		6,799	6,158	641	9.4%	0.026	1,413,000	
Pelagic shelf rockfish		1,952	1,832	121	6.2%	0.005	266,000	
Slope rockfish		535	211	325	60.6%	0.013	715,000	
Shortraker/rougheye rockfish		610	578	32	5.2%	0.001	70,000	
Northern rockfish		1,136	856	280	24.7%	0.011	618,000	
Demersal shelf rockfish		4	0	4	100.0%	0.000	8,000	
Black/Blue rockfish		0	0	0	-	0.000	0	
Thornyhead rockfish		453	415	38	8.4%	0.002	84,000	
Sablefish		1,234	739	495	40.1%	0.020	1,090,000	
Other groundfish		669	121	549	81.9%	0.022	1,209,000	
							0	
TOTAL		34,081	24,525	9,556	28.0%	0.390	21,067,000	
				Discarded		Rate/	Discard	
PROHIBITED SPECIES				BYCATCH		Retain GF	Pounds	
	Halibut			1,258	mt	51	kg/mt	2,774,000
	Halibut Mortality			788	mt	32	kg/mt	1,738,000
	Herring			0	mt	0	kg/mt	0
	C. bairdi Tanner crab			29,236	crab	1.192	indiv/mt	
	Other Tanner crab			1,373	crab	0.056	indiv/mt	
	Red king crab			17	crab	0.001	indiv/mt	
	Other king crab			442	crab	0.018	indiv/mt	
	Chinook salmon			3,125	salmon	0.127	indiv/mt	
	Other salmon			1,587	salmon	0.065	indiv/mt	
	Halibut and Herring Discard Pounds			1,738,000	pounds			
	Crab and Salmon Discard Numbers			35,779	individuals			

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 39.

2002		AREA:		GOA				
		GEAR:		Trawl				
		TYPE:		Catcher/processor				
		TARGET:		Arrowtooth flounder				
GROUNDFISH		Harvest	Retained	Discarded	Discard	Rate/		Discard
SPECIES		mt	mt	mt	Rate	Retain GF		Pounds
Atka Mackerel		7	6	1	15.0%	0.000		2,000
Pollock		131	97	34	25.7%	0.003		74,000
Pacific Cod		570	440	130	22.8%	0.013		286,000
Deep-water flatfish		44	0	44	100.0%	0.005		98,000
Rex sole		391	369	23	5.8%	0.002		50,000
Arrowtooth Flounder		10,209	8,180	2,028	19.9%	0.210		4,472,000
Shallow-water flatfish		79	41	37	47.3%	0.004		82,000
Flathead sole		191	146	44	23.3%	0.005		98,000
Pacific ocean perch		171	21	150	87.7%	0.016		331,000
Pelagic shelf rockfish		113	102	10	9.0%	0.001		22,000
Slope rockfish		0	0	0	-	0.000		0
Shortraker/rougheye rockfish		7	6	2	22.6%	0.000		4,000
Northern rockfish		160	78	82	51.5%	0.009		182,000
Demersal shelf rockfish		0	0	0	-	0.000		0
Black/Blue rockfish								0
Thornyhead rockfish		75	69	6	8.1%	0.001		14,000
Sablefish		198	78	120	60.7%	0.012		264,000
Other groundfish		168	26	142	84.5%	0.015		313,000
TOTAL		12,514	9,660	2,854	22.8%	0.295		6,292,000
				Discarded		Rate/		Discard
	PROHIBITED SPECIES			BYCATCH		Retain GF		Pounds
	Halibut			487	mt	50 kg/mt		1,074,000
	Halibut Mortality			302	mt	31 kg/mt		666,000
	Herring			0	mt	0 kg/mt		0
	C. bairdi Tanner crab			13,588	crab	1.407 indiv/mt		
	Other Tanner crab			72	crab	0.007 indiv/mt		
	Red king crab			0	crab	0.000 indiv/mt		
	Other king crab			0	crab	0.000 indiv/mt		
	Chinook salmon			331	salmon	0.034 indiv/mt		
	Other salmon			777	salmon	0.080 indiv/mt		
	Halibut and Herring Discard Pounds			666,000	pounds			
	Crab and Salmon Discard Numbers			14,768	individuals			

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 40.

2002		AREA:	GOA					
		GEAR:	Trawl					
		TYPE:	Catcher/processor					
		TARGET:	Flathead sole					
GROUND FISH		Harvest	Retained	Discarded	Discard	Rate/	Discard	
SPECIES		mt	mt	mt	Rate	Retain GF	Pounds	
Atka Mackerel		4	2	1	36.4%	0.004	3,000	
Pollock		11	11	0	0.0%	0.000	0	
Pacific Cod		103	59	44	43.0%	0.117	98,000	
Deep-water flatfish		0	0	0	-	0.001	1,000	
Rex sole		55	51	4	6.7%	0.010	8,000	
Arrowtooth Flounder		419	15	404	96.5%	1.069	891,000	
Shallow-water flatfish		37	30	7	17.8%	0.017	14,000	
Flathead sole		219	207	12	5.7%	0.033	27,000	
Pacific ocean perch		3	0	3	100.0%	0.007	6,000	
Pelagic shelf rockfish		4	0	4	100.0%	0.011	9,000	
Slope rockfish		0	0	0	-	0.000	0	
Shortraker/rougheye rockfish		0	0	0	-	0.000	0	
Northern rockfish		3	0	3	100.0%	0.009	7,000	
Demersal shelf rockfish		0	0	0	-	0.000	0	
Black/Blue rockfish							0	
Thornyhead rockfish		0	0	0	-	0.000	0	
Sablefish		4	3	1	21.8%	0.002	2,000	
Other groundfish		33	0	33	100.0%	0.087	73,000	
TOTAL		895	378	517	57.7%	1.366	1,139,000	
				Discarded		Rate/	Discard	
PROHIBITED SPECIES				BYCATCH		Retain GF	Pounds	
Halibut (mt)				37	mt	98	kg/mt	0
Halibut Mortality (mt)				21	mt	57	kg/mt	47,000
Herring (mt)				0	mt	0	kg/mt	0
C. bairdi Tanner crab				7,567	crab	20.007	indiv/mt	
Other Tanner crab				1,014	crab	2.681	indiv/mt	
Red king crab				17	crab	0.044	indiv/mt	
Other king crab				0	crab	0.000	indiv/mt	
Chinook salmon				0	salmon	0.000	indiv/mt	
Other salmon				75	salmon	0.198	indiv/mt	
Halibut and Herring Discard Pounds				47,000	pounds			
Crab and Salmon Discard Numbers				8,673	individuals			

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 41.

2002		AREA:		GOA				
		GEAR:		Trawl				
		TYPE:		Catcher/processor				
		TARGET:		Rex sole				
GROUND FISH SPECIES		Harvest mt	Retained mt	Discarded mt	Discard Rate	Rate/ Retain GF		Discard Pounds
Atka Mackerel		6	6	1	10.3%	0.000		1,000
Pollock		47	47	0	0.0%	0.000		0
Pacific Cod		357	339	18	5.1%	0.005		40,000
Deep-water flatfish		79	0	79	100.0%	0.022		175,000
Rex sole		2,115	2,083	32	1.5%	0.009		70,000
Arrowtooth Flounder		3,906	429	3,477	89.0%	0.977		7,666,000
Shallow-water flatfish		5	0	5	100.0%	0.001		12,000
Flathead sole		332	294	38	11.3%	0.011		83,000
Pacific ocean perch		274	41	234	85.2%	0.066		515,000
Pelagic shelf rockfish		9	1	8	92.3%	0.002		18,000
Slope rockfish		1	0	1	100.0%	0.000		2,000
Shortraker/rougheye rockfish		32	26	7	21.0%	0.002		15,000
Northern rockfish		56	8	48	85.8%	0.014		107,000
Demersal shelf rockfish		0	0	0	-	0.000		0
Black/Blue rockfish								0
Thornyhead rockfish		87	80	7	8.5%	0.002		16,000
Sablefish		185	124	61	32.9%	0.017		134,000
Other groundfish		352	82	269	76.6%	0.076		594,000
TOTAL		7,845	3,559	4,286	54.6%	1.204		9,448,000
				Discarded		Rate/		Discard
	PROHIBITED SPECIES			BYCATCH		Retain GF		Pounds
	Halibut (mt)			508	mt	143 kg/mt		1,120,000
	Halibut Mortality (mt)			310	mt	87 kg/mt		683,000
	Herring (mt)			0	mt	0 kg/mt		0
	C. bairdi Tanner crab			7,199	crab	2.023 indiv/mt		
	Other Tanner crab			270	crab	0.076 indiv/mt		
	Red king crab			0	crab	0.000 indiv/mt		
	Other king crab			87	crab	0.025 indiv/mt		
	Chinook salmon			1,589	salmon	0.446 indiv/mt		
	Other salmon			64	salmon	0.018 indiv/mt		
	Halibut and Herring Discard Pounds			683,000	pounds			
	Crab and Salmon Discard Numbers			9,210	individuals			

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 42.

2002		AREA:	GOA				
		GEAR:	Trawl				
		TYPE:	Catcher/processor				
		TARGET:	Pacific cod				
GROUND FISH SPECIES	Harvest mt	Retained mt	Discarded mt	Discard Rate	Rate/ Retain GF	Discard Pounds	
Atka Mackerel	0	0	0	-	0.000	0	
Pollock	8	8	0	0.0%	0.000	0	
Pacific Cod	188	188	0	0.0%	0.000	0	
Deep-water flatfish	0	0	0	-	0.000	0	
Rex sole	50	50	0	0.0%	0.000	0	
Arrowtooth Flounder	92	0	92	100.0%	0.301	203,000	
Shallow-water flatfish	32	21	11	34.1%	0.035	24,000	
Flathead sole	51	33	19	36.2%	0.061	41,000	
Pacific ocean perch	0	0	0	-	0.000	0	
Pelagic shelf rockfish	0	0	0	-	0.000	0	
Slope rockfish	0	0	0	-	0.000	0	
Shortraker/rougheye rockfish	0	0	0	-	0.000	0	
Northern rockfish	0	0	0	-	0.000	0	
Demersal shelf rockfish	0	0	0	-	0.000	0	
Black/Blue rockfish						0	
Thornyhead rockfish	0	0	0	-	0.000	0	
Sablefish	0	0	0	-	0.000	0	
Other groundfish	10	7	3	32.9%	0.011	7,000	
TOTAL	431	306	125	29.0%	0.408	275,000	
PROHIBITED SPECIES			Discarded BYCATCH	Rate/ Retain GF	Discard Pounds		
			14 mt	44 kg/mt	30,000		
			8 mt	27 kg/mt	18,000		
			0 mt	0 kg/mt	0		
			156 crab	0.508 indiv/mt			
			16 crab	0.054 indiv/mt			
			0 crab	0.000 indiv/mt			
			0 crab	0.000 indiv/mt			
			63 salmon	0.207 indiv/mt			
			0 salmon	0.000 indiv/mt			
			18,000 pounds				
			235 individuals				

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 43.

2002		AREA:	GOA				
		GEAR:	Trawl				
		TYPE:	Catcher/processor				
		TARGET:	Rockfish				
GROUND FISH		Harvest	Retained	Discarded	Discard	Rate/	Discard
SPECIES		mt	mt	mt	Rate	Retain GF	Pounds
Atka Mackerel		14	6	8	55.2%	0.001	17,000
Pollock		35	15	20	57.4%	0.002	44,000
Pacific Cod		114	110	4	3.7%	0.000	9,000
Deep-water flatfish		35	7	28	80.0%	0.003	61,000
Rex sole		76	42	34	44.7%	0.003	75,000
Arrowtooth Flounder		650	272	378	58.2%	0.036	834,000
Shallow-water flatfish		11	8	3	24.4%	0.000	6,000
Flathead sole		17	5	12	72.6%	0.001	28,000
Pacific ocean perch		6,351	6,096	255	4.0%	0.024	562,000
Pelagic shelf rockfish		1,827	1,729	98	5.4%	0.009	216,000
Slope rockfish		535	211	324	60.6%	0.030	714,000
Shortraker/rougheye rockfish		570	547	23	4.1%	0.002	51,000
Northern rockfish		916	770	146	15.9%	0.014	321,000
Demersal shelf rockfish		4	0	4	100.0%	0.000	8,000
Black/Blue rockfish							0
Thornyhead rockfish		290	265	25	8.5%	0.002	54,000
Sablefish		847	534	313	36.9%	0.029	690,000
Other groundfish		106	6	101	94.5%	0.009	222,000
TOTAL		12,397	10,622	1,775	14.3%	0.167	3,913,000
				Discarded	Rate/	Discard	
PROHIBITED SPECIES				BYCATCH	Retain GF	Pounds	
	Halibut (mt)			213 mt	20 kg/mt	469,000	
	Halibut Mortality (mt)			147 mt	14 kg/mt	324,000	
	Herring (mt)			0 mt	0 kg/mt	0	
	C. bairdi Tanner crab			726 crab	0.068 indiv/mt		
	Other Tanner crab			0 crab	0.000 indiv/mt		
	Red king crab			0 crab	0.000 indiv/mt		
	Other king crab			354 crab	0.033 indiv/mt		
	Chinook salmon			1,142 salmon	0.107 indiv/mt		
	Other salmon			671 salmon	0.063 indiv/mt		
	Halibut and Herring Discard Pounds			324,000 pounds			
	Crab and Salmon Discard Numbers			2,894 individuals			

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 45.

2002		AREA:	GOA				
		GEAR:	Trawl				
		TYPE:	Shoreside				
		TARGET:	Bottom pollock				
GROUND FISH SPECIES	Harvest mt	Retained mt	Discarded mt	Discard Rate	Rate/ Retain GF	Discard Pounds	
Atka Mackerel	0	0	0	-	0.000	0	
Pollock	9,182	9,179	3	0.0%	0.000	7,000	
Pacific Cod	235	235	0	0.0%	0.000	0	
Deep-water flatfish	0	0	0	-	0.000	0	
Rex sole	0	0	0	-	0.000	0	
Arrowtooth Flounder	419	401	19	4.5%	0.002	41,000	
Shallow-water flatfish	15	15	0	0.0%	0.000	0	
Flathead sole	113	67	46	40.6%	0.005	101,000	
Pacific ocean perch	14	14	0	0.0%	0.000	0	
Pelagic shelf rockfish	0	0	0	-	0.000	0	
Slope rockfish	0	0	0	-	0.000	0	
Shortraker/rougheye rockfish	10	9	1	5.9%	0.000	1,000	
Northern rockfish	0	0	0	-	0.000	0	
Demersal shelf rockfish	0	0	0	-	0.000	0	
Black/Blue rockfish						0	
Thornyhead rockfish	0	0	0	-	0.000	0	
Sablefish	0	0	0	-	0.000	0	
Other groundfish	229	10	219	95.8%	0.022	483,000	
TOTAL	10,217	9,930	288	2.8%	0.029	634,000	
PROHIBITED SPECIES			Discarded BYCATCH	Rate/ Retain GF	Discard Pounds		
	Halibut (mt)		5 mt	0 kg/mt	11,000		
	Halibut Mortality (mt)		3 mt	0 kg/mt	7,000		
	Herring (mt)		1 mt	0 kg/mt	3,000		
	C. bairdi Tanner crab		774 crab	0.078 indiv/mt			
	Other Tanner crab		368 crab	0.037 indiv/mt			
	Red king crab		0 crab	0.000 indiv/mt			
	Other king crab		0 crab	0.000 indiv/mt			
	Chinook salmon		1,198 salmon	0.121 indiv/mt			
	Other salmon		374 salmon	0.038 indiv/mt			
	Halibut and Herring Discard Pounds		10,000 pounds				
	Crab and Salmon Discard Numbers		2,714 individuals				

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 46.

2002		AREA:	GOA				
		GEAR:	Trawl				
		TYPE:	Shoreside				
		TARGET:	Mid-water pollock				
GROUNDFISH		Harvest	Retained	Discarded	Discard	Rate/	Discard
SPECIES		mt	mt	mt	Rate	Retain GF	Pounds
Atka Mackerel		0	0	0	-	0.000	0
Pollock		41,219	40,923	297	0.7%	0.007	654,000
Pacific Cod		84	84	0	0.4%	0.000	1,000
Deep-water flatfish		0	0	0	-	0.000	0
Rex sole		1	1	0	0.0%	0.000	0
Arrowtooth Flounder		241	222	19	7.9%	0.000	42,000
Shallow-water flatfish		3	2	2	48.8%	0.000	4,000
Flathead sole		94	87	7	7.7%	0.000	16,000
Pacific ocean perch		27	26	1	5.5%	0.000	3,000
Pelagic shelf rockfish		0	0	0	-	0.000	0
Slope rockfish		0	0	0	-	0.000	0
Shortraker/rougheye rockfish		15	11	3	22.5%	0.000	7,000
Northern rockfish		0	0	0	-	0.000	0
Demersal shelf rockfish		0	0	0	-	0.000	0
Black/Blue rockfish							0
Thornyhead rockfish		0	0	0	-	0.000	0
Sablefish		0	0	0	-	0.000	0
Other groundfish		168	13	156	92.5%	0.004	343,000
TOTAL		41,853	41,368	486	1.2%	0.012	1,071,000
				Discarded		Rate/	Discard
	PROHIBITED SPECIES			BYCATCH		Retain GF	Pounds
	Halibut (mt)			1 mt		0 kg/mt	2,000
	Halibut Mortality (mt)			0 mt		0 kg/mt	1,000
	Herring (mt)			1 mt		0 kg/mt	1,000
	C. bairdi Tanner crab			0 crab		0.000 indiv/mt	
	Other Tanner crab			0 crab		0.000 indiv/mt	
	Red king crab			0 crab		0.000 indiv/mt	
	Other king crab			0 crab		0.000 indiv/mt	
	Chinook salmon			3,964 salmon		0.096 indiv/mt	
	Other salmon			421 salmon		0.010 indiv/mt	
	Halibut and Herring Discard Pounds			2,000 pounds			
	Crab and Salmon Discard Numbers			4,385 individuals			

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 47.

2002		AREA:	GOA				
		GEAR:	Trawl				
		TYPE:	Shoreside				
		TARGET:	Pacific cod				
GROUND FISH		Harvest	Retained	Discarded	Discard	Rate/	Discard
SPECIES		mt	mt	mt	Rate	Retain GF	Pounds
Atka Mackerel		1	0	1	100.0%	0.000	3,000
Pollock		657	160	497	75.7%	0.038	1,097,000
Pacific Cod		12,807	12,407	400	3.1%	0.030	881,000
Deep-water flatfish		0	0	0	-	0.000	0
Rex sole		5	1	4	75.7%	0.000	8,000
Arrowtooth Flounder		353	63	290	82.0%	0.022	638,000
Shallow-water flatfish		541	421	119	22.1%	0.009	263,000
Flathead sole		95	55	40	42.5%	0.003	89,000
Pacific ocean perch		50	4	46	92.2%	0.003	101,000
Pelagic shelf rockfish		32	1	31	95.6%	0.002	68,000
Slope rockfish		0	0	0	-	0.000	0
Shortraker/rougheye rockfish		0	0	0	-	0.000	0
Northern rockfish		53	9	44	82.8%	0.003	97,000
Demersal shelf rockfish		0	0	0	-	0.000	0
Black/Blue rockfish		0	0	0	-	0.000	0
Thornyhead rockfish		0	0	0	-	0.000	0
Sablefish		2	0	2	100.0%	0.000	4,000
Other groundfish		157	22	135	85.8%	0.010	298,000
TOTAL		14,753	13,144	1,609	10.9%	0.122	3,547,000
				Discarded		Rate/	Discard
PROHIBITED SPECIES				BYCATCH		Retain GF	Pounds
	Halibut (mt)			303 mt		23 kg/mt	669,000
	Halibut Mortality (mt)			185 mt		14 kg/mt	408,000
	Herring (mt)			0 mt		0 kg/mt	0
	C. bairdi Tanner crab			4,750 crab		0.361 indiv/mt	
	Other Tanner crab			476 crab		0.036 indiv/mt	
	Red king crab			0 crab		0.000 indiv/mt	
	Other king crab			13 crab		0.001 indiv/mt	
	Chinook salmon			4,002 salmon		0.304 indiv/mt	
	Other salmon			29 salmon		0.002 indiv/mt	
	Halibut and Herring Discard Pounds			408,000 pounds			
	Crab and Salmon Discard Numbers			9,270 individuals			

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 48.

2002		AREA:	GOA				
		GEAR:	Trawl				
		TYPE:	Shoreside				
		TARGET:	Deep-water flatfish				
GROUND FISH		Harvest	Retained	Discarded	Discard	Rate/	Discard
SPECIES		mt	mt	mt	Rate	Retain GF	Pounds
Atka Mackerel		0	0	0	-	0.000	0
Pollock		3	0	3	100.0%	0.015	7,000
Pacific Cod		14	0	14	100.0%	0.073	32,000
Deep-water flatfish		198	198	0	0.0%	0.000	0
Rex sole		0	0	0	-	0.000	0
Arrowtooth Flounder		69	0	69	100.0%	0.348	152,000
Shallow-water flatfish		7	0	7	100.0%	0.035	15,000
Flathead sole		0	0	0	-	0.000	0
Pacific ocean perch		0	0	0	-	0.000	0
Pelagic shelf rockfish		0	0	0	-	0.000	0
Slope rockfish		0	0	0	-	0.000	0
Shortraker/rougheye rockfish		11	0	11	100.0%	0.056	24,000
Northern rockfish		0	0	0	-	0.000	0
Demersal shelf rockfish		0	0	0	-	0.000	0
Black/Blue rockfish							0
Thornyhead rockfish		32	0	32	100.0%	0.162	71,000
Sablefish		18	0	18	100.0%	0.093	41,000
Other groundfish		15	0	15	100.0%	0.078	34,000
TOTAL		369	198	171	46.2%	0.860	376,000
				Discarded		Rate/	Discard
PROHIBITED SPECIES				BYCATCH		Retain GF	Pounds
	Halibut (mt)			40 mt		202 kg/mt	89,000
	Halibut Mortality (mt)			24 mt		122 kg/mt	53,000
	Herring (mt)			0 mt		0 kg/mt	0
	C. bairdi Tanner crab			185 crab		0.930 indiv/mt	
	Other Tanner crab			144 crab		0.724 indiv/mt	
	Red king crab			0 crab		0.000 indiv/mt	
	Other king crab			46 crab		0.233 indiv/mt	
	Chinook salmon			0 salmon		0.000 indiv/mt	
	Other salmon			0 salmon		0.000 indiv/mt	
	Halibut and Herring Discard Pounds			53,000 pounds			
	Crab and Salmon Discard Numbers			374 individuals			

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 50.

2002		AREA:	GOA				
		GEAR:	Trawl				
		TYPE:	Shoreside				
		TARGET:	Rockfish				
GROUND FISH		Harvest	Retained	Discarded	Discard	Rate/	Discard
SPECIES		mt	mt	mt	Rate	Retain GF	Pounds
Atka Mackerel		15	4	11	70.8%	0.001	23,000
Pollock		93	48	44	47.9%	0.005	98,000
Pacific Cod		1,467	1,172	295	20.1%	0.030	650,000
Deep-water flatfish		14	0	14	100.0%	0.001	30,000
Rex sole		163	127	36	22.2%	0.004	80,000
Arrowtooth Flounder		748	131	617	82.5%	0.063	1,359,000
Shallow-water flatfish		128	114	15	11.3%	0.001	32,000
Flathead sole		17	7	10	56.6%	0.001	21,000
Pacific ocean perch		4,759	4,614	145	3.0%	0.015	320,000
Pelagic shelf rockfish		1,175	1,175	0	0.0%	0.000	0
Slope rockfish		19	1	18	97.3%	0.002	41,000
Shortraker/rougheye rockfish		36	35	1	2.7%	0.000	2,000
Northern rockfish		2,012	2,012	0	0.0%	0.000	0
Demersal shelf rockfish		11	10	2	16.9%	0.000	4,000
Black/Blue rockfish							0
Thornyhead rockfish		46	35	11	23.1%	0.001	23,000
Sablefish		511	366	145	28.4%	0.015	321,000
Other groundfish		91	8	83	91.2%	0.008	184,000
TOTAL		11,305	9,859	1,447	12.8%	0.147	3,189,000
				Discarded		Rate/	Discard
PROHIBITED SPECIES				BYCATCH		Retain GF	Pounds
	Halibut (mt)			138 mt		14 kg/mt	304,000
	Halibut Mortality (mt)			95 mt		10 kg/mt	210,000
	Herring (mt)			0 mt		0 kg/mt	0
	C. bairdi Tanner crab			178 crab		0.018 indiv/mt	
	Other Tanner crab			0 crab		0.000 indiv/mt	
	Red king crab			0 crab		0.000 indiv/mt	
	Other king crab			21 crab		0.002 indiv/mt	
	Chinook salmon			108 salmon		0.011 indiv/mt	
	Other salmon			223 salmon		0.023 indiv/mt	
	Halibut and Herring Discard Pounds			210,000 pounds			
	Crab and Salmon Discard Numbers			530 individuals			

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 52.

2002		AREA:	GOA				
		GEAR:	Hook-and-line				
		TYPE:	Catcher/processor				
		TARGET:	Pacific cod				
GROUND FISH SPECIES	Harvest mt	Retained mt	Discarded mt	Discard Rate	Rate/ Retain GF	Discard Pounds	
Atka Mackerel	1	0	1	100.0%	0.000	2,000	
Pollock	53	50	3	5.1%	0.000	6,000	
Pacific Cod	8,077	7,991	86	1.1%	0.011	191,000	
Deep-water flatfish	1	0	1	100.0%	0.000	3,000	
Rex sole	0	0	0	-	0.000	0	
Arrowtooth Flounder	120	0	120	100.0%	0.015	265,000	
Shallow-water flatfish	45	0	45	100.0%	0.005	98,000	
Flathead sole	6	0	6	100.0%	0.001	13,000	
Pacific ocean perch	0	0	0	-	0.000	0	
Pelagic shelf rockfish	6	0	6	100.0%	0.001	14,000	
Slope rockfish	0	0	0	-	0.000	0	
Shortraker/rougheye rockfish	0	0	0	-	0.000	1,000	
Northern rockfish	1	0	1	100.0%	0.000	2,000	
Demersal shelf rockfish	4	1	3	64.6%	0.000	6,000	
Black and blue rockfish	0	0	0	-	0.000	0	
Thornyhead rockfish	0	0	0	-	0.000	0	
Sablefish	32	0	32	100.0%	0.004	71,000	
Other groundfish	551	120	431	78.2%	0.053	950,000	
TOTAL	8,898	8,162	736	8.3%	0.090	1,622,000	
			Discarded	Rate/	Discard		
PROHIBITED SPECIES			BYCATCH	Retain GF	Pounds		
Halibut (mt)			1,161 mt	142 kg/mt	2,560,000		
Halibut Mortality (mt)			163 mt	20 kg/mt	358,000		
Herring (mt)			0 mt	0 kg/mt	0		
C. bairdi Tanner crab			17 crab	0.002 indiv/mt			
Other Tanner crab			37 crab	0.005 indiv/mt			
Red king crab			19 crab	0.002 indiv/mt			
Other king crab			0 crab	0.000 indiv/mt			
Chinook salmon			0 salmon	0.000 indiv/mt			
Other salmon			0 salmon	0.000 indiv/mt			
Halibut and Herring Discard Pounds			358,000 pounds				
Crab and Salmon Discard Numbers			74 individuals				

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 53.

2002		AREA:		GOA				
		GEAR:		Hook-and-line				
		TYPE:		Catcher/processor				
		TARGET:		Sablefish				
GROUNDFISH		Harvest	Retained	Discarded	Discard	Rate/		Discard
SPECIES		mt	mt	mt	Rate	Retain GF		Pounds
Atka Mackerel		0	0	0	-	0.000		0
Pollock		1	0	1	100.0%	0.000		2,000
Pacific Cod		66	58	8	12.1%	0.005		18,000
Deep-water flatfish		3	1	2	65.2%	0.001		4,000
Rex sole		0	0	0	-	0.000		0
Arrowtooth Flounder		96	0	96	100.0%	0.056		212,000
Shallow-water flatfish		0	0	0	-	0.000		0
Flathead sole		0	0	0	-	0.000		0
Pacific ocean perch		0	0	0	-	0.000		0
Pelagic shelf rockfish		0	0	0	-	0.000		0
Slope rockfish		0	0	0	-	0.000		0
Shortraker/rougeye rockfish		112	52	59	53.1%	0.034		131,000
Northern rockfish		0	0	0	-	0.000		0
Demersal shelf rockfish		1	1	0	0.0%	0.000		0
Black and blue rockfish		0	0	0	-	0.000		0
Thornyhead rockfish		99	94	5	5.4%	0.003		12,000
Sablefish		1,519	1,510	8	0.5%	0.005		18,000
Other groundfish		60	6	53	89.1%	0.031		117,000
TOTAL		1,955	1,722	233	11.9%	0.135		513,000
				Discarded		Rate/		Discard
	PROHIBITED SPECIES			BYCATCH		Retain GF		Pounds
	Halibut (mt)			not available		kg/mt		0
	Halibut Mortality (mt)					0 kg/mt		0
	Herring (mt)				mt	0 kg/mt		0
	C. bairdi Tanner crab				crab	0.000 indiv/mt		
	Other Tanner crab				crab	0.000 indiv/mt		
	Red king crab				crab	0.000 indiv/mt		
	Other king crab				crab	0.000 indiv/mt		
	Chinook salmon				salmon	0.000 indiv/mt		
	Other salmon				salmon	0.000 indiv/mt		
	Halibut and Herring Discard Pounds				0 pounds			
	Crab and Salmon Discard Numbers				0 individuals			

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 54.

2002		AREA:	GOA				
		GEAR:	Hook-and-line				
		TYPE:	Shoreside				
		TARGET:	All				
GROUND FISH SPECIES	Harvest mt	Retained mt	Discarded mt	Discard Rate	Rate/ Retain GF	Discard Pounds	
Atka Mackerel	0	0	0	-	0.000	0	
Pollock	43	32	11	26.1%	0.001	25,000	
Pacific Cod	6,510	6,479	31	0.5%	0.002	68,000	
Deep-water flatfish	16	0	16	100.0%	0.001	36,000	
Rex sole	0	0	0	-	0.000	0	
Arrowtooth Flounder	388	0	388	100.0%	0.022	854,000	
Shallow-water flatfish	3	0	3	100.0%	0.000	6,000	
Flathead sole	0	0	0	-	0.000	0	
Pacific ocean perch	3	0	2	95.3%	0.000	5,000	
Pelagic shelf rockfish	9	4	5	57.0%	0.000	11,000	
Slope rockfish	28	25	4	12.6%	0.000	8,000	
Shortraker/rougheye rockfish	452	292	160	35.3%	0.009	352,000	
Northern rockfish	0	0	0	-	0.000	0	
Demersal shelf rockfish	317	307	9	3.0%	0.001	21,000	
Black and blue rockfish	6	6	0	0.0%	0.000	0	
Thornyhead rockfish	438	397	42	9.5%	0.002	92,000	
Sablefish	10,066	9,796	270	2.7%	0.016	595,000	
Other groundfish	556	19	537	96.6%	0.031	1,184,000	
TOTAL	18,834	17,357	1,477	7.8%	0.085	3,257,000	
				Discarded	Rate/		
PROHIBITED SPECIES				BYCATCH	Retain GF		
Halibut (mt)			771 mt	44 kg/mt	2,528,000		
Halibut Mortality (mt)			80 mt	5 kg/mt	411,000		
Herring (mt)			0 mt	0 kg/mt	0		
C. bairdi Tanner crab			0 crab	0.000 indiv/mt			
Other Tanner crab			0 crab	0.000 indiv/mt			
Red king crab			0 crab	0.000 indiv/mt			
Other king crab			8 crab	0.000 indiv/mt			
Chinook salmon			0 salmon	0.000 indiv/mt			
Other salmon			0 salmon	0.000 indiv/mt			
Halibut and Herring Discard Pounds			411,000 pounds				
Crab and Salmon Discard Numbers			8 individuals				

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 55.

2002		AREA:	GOA				
		GEAR:	Hook-and-line				
		TYPE:	Shoreside				
		TARGET:	Pacific cod				
GROUNDFISH SPECIES	Harvest mt	Retained mt	Discarded mt	Discard Rate	Rate/ Retain GF	Discard Pounds	
Atka Mackerel	0	0	0	-	0.000	0	
Pollock	32	32	0	0.0%	0.000	0	
Pacific Cod	6,387	6,387	0	0.0%	0.000	0	
Deep-water flatfish	0	0	0	-	0.000	0	
Rex sole	0	0	0	-	0.000	0	
Arrowtooth Flounder	0	0	0	-	0.000	0	
Shallow-water flatfish	0	0	0	-	0.000	0	
Flathead sole	0	0	0	-	0.000	0	
Pacific ocean perch	0	0	0	-	0.000	0	
Pelagic shelf rockfish	0	0	0	-	0.000	0	
Slope rockfish	1	1	0	0.0%	0.000	0	
Shortraker/rougheye rockfish	4	4	0	0.0%	0.000	0	
Northern rockfish	0	0	0	-	0.000	0	
Demersal shelf rockfish	7	7	0	0.0%	0.000	0	
Black and blue rockfish	1	1	0	0.0%	0.000	0	
Thornyhead rockfish	1	1	0	0.0%	0.000	0	
Sablefish	16	16	0	0.0%	0.000	0	
Other groundfish	19	19	0	0.0%	0.000	0	
TOTAL	6,467	6,467	0	0.0%	0.000	0	
			Discarded		Rate/	Discard	
PROHIBITED SPECIES			BYCATCH		Retain GF	Pounds	
Halibut (mt)			546 mt		84 kg/mt	1,204,000	
Halibut Mortality (mt)			76 mt		12 kg/mt	168,000	
Herring (mt)			0 mt		0 kg/mt	0	
C. bairdi Tanner crab			0 crab		0.000 indiv/mt		
Other Tanner crab			0 crab		0.000 indiv/mt		
Red king crab			0 crab		0.000 indiv/mt		
Other king crab			0 crab		0.000 indiv/mt		
Chinook salmon			0 salmon		0.000 indiv/mt		
Other salmon			0 salmon		0.000 indiv/mt		
Halibut and Herring Discard Pounds			168,000 pounds				
Crab and Salmon Discard Numbers			0 individuals				

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 56.

2002		AREA:		GOA					
		GEAR:		Hook-and-line					
		TYPE:		Shoreside					
		TARGET:		Rockfish					
GROUND FISH		Harvest	Retained	Discarded	Discard	Rate/		Discard	
SPECIES		mt	mt	mt	Rate	Retain GF		Pounds	
Atka Mackerel		0	0	0	-	0.000		0	
Pollock		0	0	0	-	0.000		0	
Pacific Cod		13	13	0	0.0%	0.000		0	
Deep-water flatfish		0	0	0	-	0.001		1,000	
Rex sole		0	0	0	-	0.000		0	
Arrowtooth Flounder		30	0	30	100.0%	0.104		67,000	
Shallow-water flatfish		0	0	0	-	0.000		0	
Flathead sole		0	0	0	-	0.000		0	
Pacific ocean perch		0	0	0	-	0.000		0	
Pelagic shelf rockfish		3	3	0	0.0%	0.000		0	
Slope rockfish		10	10	0	0.0%	0.000		0	
Shortraker/rougheye rockfish		39	39	0	0.0%	0.000		0	
Northern rockfish		0	0	0	-	0.000		0	
Demersal shelf rockfish		191	191	0	0.0%	0.000		0	
Black and blue rockfish		1	1	0	0.0%	0.000		0	
Thornyhead rockfish		14	13	0	1.7%	0.001		1,000	
Sablefish		38	20	18	47.0%	0.061		39,000	
Other groundfish		27	0	27	100.0%	0.091		59,000	
TOTAL		366	291	75	20.6%	0.259		166,000	
PROHIBITED SPECIES				Discarded	Rate/	Discard			
				BYCATCH	Retain GF	Pounds			
Halibut (mt)				225 mt	775 kg/mt	497,000			
Halibut Mortality (mt)				4 mt	12 kg/mt	8,000			
Herring (mt)				0 mt	0 kg/mt	0			
C. bairdi Tanner crab				0 crab	0.000 indiv/mt				
Other Tanner crab				0 crab	0.000 indiv/mt				
Red king crab				0 crab	0.000 indiv/mt				
Other king crab				8 crab	0.028 indiv/mt				
Chinook salmon				0 salmon	0.000 indiv/mt				
Other salmon				0 salmon	0.000 indiv/mt				
Halibut and Herring Discard Pounds				8,000 pounds					
Crab and Salmon Discard Numbers				8 individuals					

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 57.

2002		AREA:		GOA			
		GEAR:		Hook-and-line			
		TYPE:		Shoreside			
		TARGET:		Sablefish			
GROUND FISH		Harvest	Retained	Discarded	Discard	Rate/	Discard
SPECIES		mt	mt	mt	Rate	Retain GF	Pounds
Atka Mackerel		0	0	0	-	0.000	0
Pollock		11	0	11	100.0%	0.001	25,000
Pacific Cod		110	79	31	28.0%	0.003	68,000
Deep-water flatfish		16	0	16	100.0%	0.002	35,000
Rex sole		0	0	0	-	0.000	0
Arrowtooth Flounder		357	0	357	100.0%	0.034	788,000
Shallow-water flatfish		3	0	3	100.0%	0.000	6,000
Flathead sole		0	0	0	-	0.000	0
Pacific ocean perch		3	0	2	95.3%	0.000	5,000
Pelagic shelf rockfish		5	0	5	95.4%	0.000	11,000
Slope rockfish		18	14	4	20.5%	0.000	8,000
Shortraker/rougheye rockfish		409	250	160	39.0%	0.015	352,000
Northern rockfish		0	0	0	-	0.000	0
Demersal shelf rockfish		119	109	9	7.9%	0.001	21,000
Black and blue rockfish		4	4	0	0.0%	0.000	0
Thornyhead rockfish		423	382	41	9.8%	0.004	91,000
Sablefish		10,012	9,760	252	2.5%	0.024	556,000
Other groundfish		511	0	511	100.0%	0.048	1,125,000
TOTAL		12,001	10,599	1,402	11.7%	0.132	3,091,000
				Discarded		Rate/	Discard
PROHIBITED SPECIES				BYCATCH		Retain GF	Pounds
				not available			
Halibut (mt)					mt	0 kg/mt	0
Halibut Mortality (mt)					mt	0 kg/mt	0
Herring (mt)					mt	0 kg/mt	0
C. bairdi Tanner crab					crab	0.000 indiv/mt	
Other Tanner crab					crab	0.000 indiv/mt	
Red king crab					crab	0.000 indiv/mt	
Other king crab					crab	0.000 indiv/mt	
Chinook salmon					salmon	0.000 indiv/mt	
Other salmon					salmon	0.000 indiv/mt	
Halibut and Herring Discard Pounds					0 pounds		
Crab and Salmon Discard Numbers					0 individuals		

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 58.

2002		AREA:	GOA				
		GEAR:	Pot				
		TYPE:	All				
		TARGET:	All				
GROUND FISH SPECIES	Harvest mt	Retained mt	Discarded mt	Discard Rate	Rate/ Retain GF	Discard Pounds	
Atka Mackerel	1	0	1	100.0%	0.000	2,000	
Pollock	4	1	2	61.7%	0.000	5,000	
Pacific Cod	7,693	7,613	80	1.0%	0.010	176,000	
Deep-water flatfish	0	0	0	-	0.000	0	
Rex sole	0	0	0	-	0.000	0	
Arrowtooth Flounder	6	0	6	100.0%	0.001	12,000	
Shallow-water flatfish	8	0	8	100.0%	0.001	17,000	
Flathead sole	0	0	0	-	0.000	0	
Pacific ocean perch	0	0	0	-	0.000	0	
Pelagic shelf rockfish	2	0	1	55.1%	0.000	3,000	
Slope rockfish	0	0	0	-	0.000	0	
Shortraker/rougeye rockfish	0	0	0	-	0.000	0	
Northern rockfish	1	0	1	100.0%	0.000	1,000	
Demersal shelf rockfish	1	0	1	100.0%	0.000	1,000	
Black and blue rockfish	1	0	1	100.0%	0.000	2,000	
Thomyhead rockfish	0	0	0	-	0.000	0	
Sablefish	2	0	2	100.0%	0.000	5,000	
Other groundfish	201	26	174	87.0%	0.022	384,000	
TOTAL	7,918	7,640	276	3.5%	0.035	610,000	
PROHIBITED SPECIES			Discarded BYCATCH	Rate/ Retain GF	Discard Pounds		
Halibut (mt)			43 mt	5 kg/mt	95,000		
Halibut Mortality (mt)			2 mt	0 kg/mt	5,000		
Herring (mt)			0 mt	0 kg/mt	0		
C. bairdi Tanner crab			95,766 crab	12095 indiv/mt			
Other Tanner crab			2,659 crab	336 indiv/mt			
Red king crab			10 crab	1 indiv/mt			
Other king crab			0 crab	0 indiv/mt			
Chinook salmon			0 salmon	0 indiv/mt			
Other salmon			0 salmon	0 indiv/mt			
Halibut and Herring Discard Pounds			5,000 pounds				
Crab and Salmon Discard Numbers			98,435 individuals				

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 60.

2002		AREA:	GOA				
		GEAR:	Pot				
		TYPE:	Shoreside				
		TARGET:	Pacific cod				
GROUND FISH		Harvest	Retained	Discarded	Discard	Rate/	Discard
SPECIES		mt	mt	mt	Rate	Retain GF	Pounds
Atka Mackerel		1	0	1	100.0%	0.000	2,000
Pollock		4	1	2	61.7%	0.000	5,000
Pacific Cod		6,998	6,919	80	1.1%	0.011	176,000
Deep-water flatfish		0	0	0	-	0.000	0
Rex sole		0	0	0	-	0.000	0
Arrowtooth Flounder		6	0	6	100.0%	0.001	12,000
Shallow-water flatfish		8	0	8	100.0%	0.001	17,000
Flathead sole		0	0	0	-	0.000	0
Pacific ocean perch		0	0	0	-	0.000	0
Pelagic shelf rockfish		2	0	1	55.1%	0.000	3,000
Slope rockfish		0	0	0	-	0.000	0
Shortraker/rougheye rockfish		0	0	0	-	0.000	0
Northern rockfish		1	0	1	100.0%	0.000	1,000
Demersal shelf rockfish		1	0	1	100.0%	0.000	1,000
Black and blue rockfish		1	0	1	100.0%	0.000	2,000
Thornyhead rockfish		0	0	0	-	0.000	0
Sablefish		2	0	2	100.0%	0.000	5,000
Other groundfish		200	26	174	86.9%	0.025	383,000
TOTAL		7,223	6,946	276	3.8%	0.040	608,000
				Discarded		Rate/	Discard
PROHIBITED SPECIES				BYCATCH		Retain GF	Pounds
	Halibut (mt)			39 mt		6 kg/mt	86,000
	Halibut Mortality (mt)			2 mt		0 kg/mt	5,000
	Herring (mt)			0 mt		0 kg/mt	0
	C. bairdi Tanner crab			88,885 crab		12.796 indiv/mt	
	Other Tanner crab			2,617 crab		0.377 indiv/mt	
	Red king crab			10 crab		0.001 indiv/mt	
	Other king crab			0 crab		0.000 indiv/mt	
	Chinook salmon			0 salmon		0.000 indiv/mt	
	Other salmon			0 salmon		0.000 indiv/mt	
	Halibut and Herring Discard Pounds			5,000 pounds			
	Crab and Salmon Discard Numbers			91,512 individuals			

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 62.

2002		AREA:	GOA					
		GEAR:	Jig					
		TYPE:	Shoreside					
		TARGET:	Rockfish					
GROUNDFISH		Harvest	Retained	Discarded	Discard	Rate/		Discard
SPECIES		mt	mt	mt	Rate	Retain GF		Pounds
Atka Mackerel		0	0	0	-	0.000		0
Pollock		0	0	0	-	0.000		0
Pacific Cod		2	2	0	0.0%	0.000		0
Deep-water flatfish		0	0	0	-	0.000		0
Rex sole		0	0	0	-	0.000		0
Arrowtooth Flounder		0	0	0	-	0.000		0
Shallow-water flatfish		0	0	0	-	0.000		0
Flathead sole		0	0	0	-	0.000		0
Pacific ocean perch		0	0	0	-	0.000		0
Pelagic shelf rockfish		16	16	0	0.0%	0.000		0
Slope rockfish		2	2	0	0.0%	0.000		0
Shortraker/rougheye rockfish		0	0	0	-	0.000		0
Northern rockfish		0	0	0	-	0.000		0
Demersal shelf rockfish		5	5	0	0.0%	0.000		0
Black and blue rockfish		188	188	0	0.0%	0.000		0
Thornyhead rockfish		6	6	0	0.0%	0.000		0
Sablefish		0	0	0	-	0.000		0
Other groundfish		0	0	0	-	0.000		0
TOTAL		219	219	0	0.0%	0.000		0
				Discarded		Rate/		Discard
	PROHIBITED SPECIES			BYCATCH		Retain GF		Pounds
	Halibut (mt)			0 mt		0 kg/mt		0
	Halibut Mortality (mt)			0 mt		0 kg/mt		0
	Herring (mt)			0 mt		0 kg/mt		0
	C. bairdi Tanner crab			0 crab		0.000 indiv/mt		
	Other Tanner crab			0 crab		0.000 indiv/mt		
	Red king crab			0 crab		0.000 indiv/mt		
	Other king crab			0 crab		0.000 indiv/mt		
	Chinook salmon			0 salmon		0.000 indiv/mt		
	Other salmon			0 salmon		0.000 indiv/mt		
	Halibut and Herring Discard Pounds			0 pounds				
	Crab and Salmon Discard Numbers			0 individuals				

APPENDIX 3:

**COMMUNITY DEVELOPMENT QUOTA
(CDQ)**

CATCH AND DISCARD TABLES

2002

Discards in the North Pacific Groundfish Fisheries, 2002

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 63.

2002 CDQ	AREA:		BSAI			
	GEAR:		All			
TYPE:		All				
TARGET:		All				
GROUND FISH SPECIES	Harvest mt	Retained mt	Discarded mt	Discard Rate	Rate/ Retain GF	Discard Pounds
Atka Mackerel	2,948	2,946	2	0.1%	0.000	5,000
Pollock	128,510	128,405	105	0.1%	0.001	232,000
Pacific Cod	14,037	13,728	309	2.2%	0.002	682,000
Yellowfin sole	1,957	1,838	118	6.1%	0.001	261,000
Rock sole	503	318	185	36.8%	0.001	408,000
Flathead sole	393	222	171	43.4%	0.001	377,000
Other flatfish	185	24	161	86.9%	0.001	355,000
Greenland turbot	83	74	9	10.3%	0.000	19,000
Arrowtooth flounder	270	140	130	48.2%	0.001	287,000
Pacific ocean perch	493	489	4	0.9%	0.000	9,000
Sharpchin/northern rockfish	251	249	2	0.8%	0.000	4,000
Shortraker/rougheye rockfish	1	1	0	22.4%	0.000	1,000
Other rockfish	18	16	2	9.3%	0.000	4,000
Sablefish	212	208	49	23.0%	0.000	108,000
Other Species	2,756	620	2,091	75.9%	0.014	4,610,000
TOTAL	152,619	149,280	3,339	2.2%	0.022	7,361,000

PROHIBITED SPECIES	Discarded BYCATCH	Rate/ Retain GF	Discard Pounds
Halibut (mt)	635 mt	4 kg/mt	1401000
Halibut Mortality (mt)	135 mt	1 kg/mt	298,000
Herring (mt)	14 mt	0 kg/mt	32,000
C. bairdi Tanner crab	10,136 crab	0.068 indiv/mt	
Other Tanner crab	35,056 crab	0.235 indiv/mt	
Red king crab	1,927 crab	0.013 indiv/mt	
Other king crab	28,914 crab	0.194 indiv/mt	
Chinook salmon	1,742 salmon	0.012 indiv/mt	
Other salmon	2,199 salmon	0.015 indiv/mt	
Halibut and Herring Discard Pounds	330,000 pounds		
Crab and Salmon Discard Numbers	79,974 individuals		

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 65.

2002 CDQ	AREA:		BSAI			
	GEAR:		Trawl			
	TYPE:		Catcher/processor			
	TARGET:		Bottom pollock			
GROUND FISH SPECIES	Harvest mt	Retained mt	Discarded mt	Discard Rate	Rate/ Retain GF	Discard Pounds
Atka Mackerel	0	0	0	-	0.000	0
Pollock	3,934	3,934	0	0.0%	0.000	0
Pacific Cod	50	50	0	0.0%	0.000	0
Yellowfin sole	133	79	54	40.6%	0.013	119,000
Rock sole	37	21	15	41.8%	0.004	34,000
Flathead sole	83	65	18	22.1%	0.004	40,000
Other flatfish	6	1	5	86.4%	0.001	11,000
Greenland turbot	3	2	0	10.5%	0.000	1,000
Arrowtooth flounder	27	26	1	4.1%	0.000	2,000
Pacific ocean perch	1	1	0	14.6%	0.000	0
Sharpchin/northern rockfish	0	0	0	-	0.000	0
Shortraker/rougheye rockfish	0	0	0	-	0.000	0
Other rockfish	0	0	0	-	0.000	0
Sablefish	0	0	0	-	0.000	0
Other Species	103	13	91	87.6%	0.022	200,000
TOTAL	4,378	4,193	185	4.2%	0.044	408,000

PROHIBITED SPECIES	Discarded BYCATCH	Rate/ Retain GF	Discard Pounds
Halibut (mt)	8 mt	2 kg/mt	17,000
Halibut Mortality (mt)	7 mt	2 kg/mt	15,000
Herring (mt)	0 mt	0 kg/mt	1,000
C. bairdi Tanner crab	1,287 crab	0.307 indiv/mt	
Other Tanner crab	11,954 crab	2.851 indiv/mt	
Red king crab	3 crab	0.001 indiv/mt	
Other king crab	7 crab	0.002 indiv/mt	
Chinook salmon	17 salmon	0.004 indiv/mt	
Other salmon	36 salmon	0.009 indiv/mt	
Halibut and Herring Discard Pounds	16,000 pounds		
Crab and Salmon Discard Numbers	13,304 individuals		

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 66.

2002 CDQ	AREA:		BSAI			
	GEAR:		Trawl			
TYPE:		Catcher/processor				
TARGET:		Midwater pollock				
GROUND FISH SPECIES	Harvest mt	Retained mt	Discarded mt	Discard Rate	Rate/ Retain GF	Discard Pounds
Atka Mackerel	5	3	2	38.8%	0.000	4,000
Pollock	123,804	123,804	0	0.0%	0.000	0
Pacific Cod	420	419	1	0.4%	0.000	3,000
Yellowfin sole	45	30	15	33.0%	0.000	33,000
Rock sole	287	123	163	57.0%	0.001	360,000
Flathead sole	234	119	114	48.9%	0.001	252,000
Other flatfish	46	23	22	48.6%	0.000	49,000
Greenland turbot	8	5	4	44.1%	0.000	8,000
Arrowtooth flounder	70	36	33	47.9%	0.000	74,000
Pacific ocean perch	8	4	4	52.3%	0.000	9,000
Sharpchin/northern rockfish	0	0	0	90.9%	0.000	1,000
Shortraker/roughey rockfish	0	0	0	-	0.000	0
Other rockfish	0	0	0	52.8%	0.000	0
Sablefish	7	6	1	13.9%	0.000	2,000
Other Species	573	175	398	69.5%	0.003	877,000
TOTAL	125,507	124,748	759	0.6%	0.006	1,672,000

PROHIBITED SPECIES	Discarded BYCATCH	Rate/ Retain GF	Discard Pounds
Halibut (mt)	26 mt	0 kg/mt	57,000
Halibut Mortality (mt)	23 mt	0 kg/mt	51,000
Herring (mt)	14 mt	0 kg/mt	30,000
C. bairdi Tanner crab	49 crab	0.000 indiv/mt	
Other Tanner crab	244 crab	0.002 indiv/mt	
Red king crab	0 crab	0.000 indiv/mt	
Other king crab	2 crab	0.000 indiv/mt	
Chinook salmon	1,715 salmon	0.014 indiv/mt	
Other salmon	2,019 salmon	0.016 indiv/mt	
Halibut and Herring Discard Pounds	81,000 pounds		
Crab and Salmon Discard Numbers	4,029 individuals		

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 67.

2002 CDQ	AREA:		BSAI				
	GEAR:		Trawl				
		TYPE:		Catcher/processor			
		TARGET:		Rock sole			
GROUND FISH SPECIES	Harvest mt	Retained mt	Discarded mt	Discard Rate	Rate/ Retain GF	Discard Pounds	
Atka Mackerel	0	0	0	-	0.000	0	
Pollock	39	39	0	0.0%	0.000	0	
Pacific Cod	39	39	0	0.0%	0.000	0	
Yellowfin sole	210	210	0	0.0%	0.000	0	
Rock sole	134	134	0	0.0%	0.000	0	
Flathead sole	0	0	0	-	0.000	0	
Other flatfish	35	0	35	100.0%	0.083	77,000	
Greenland turbot	0	0	0	-	0.000	0	
Arrowtooth flounder	0	0	0	-	0.000	0	
Pacific ocean perch	0	0	0	-	0.000	0	
Sharpchin/northern rockfish	0	0	0	-	0.000	0	
Shortraker/rougeye rockfish	0	0	0	-	0.000	0	
Other rockfish	0	0	0	-	0.000	0	
Sablefish	0	0	0	-	0.000	0	
Other Species	16	0	16	100.0%	0.038	35,000	
TOTAL	473	422	51	10.8%	0.121	112,000	

PROHIBITED SPECIES	Discarded BYCATCH	Rate/ Retain GF	Discard Pounds
Halibut (mt)	11 mt	26 kg/mt	25,000
Halibut Mortality (mt)	9 mt	21 kg/mt	19,000
Herring (mt)	0 mt	0 kg/mt	0
C. bairdi Tanner crab	3,268 crab	7.738 indiv/mt	
Other Tanner crab	1,867 crab	4.420 indiv/mt	
Red king crab	0 crab	0.000 indiv/mt	
Other king crab	0 crab	0.000 indiv/mt	
Chinook salmon	0 salmon	0.000 indiv/mt	
Other salmon	46 salmon	0.109 indiv/mt	
Halibut and Herring Discard Pounds	19,000 pounds		
Crab and Salmon Discard Numbers	5,181 individuals		

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 68.

2002 CDQ	AREA:		BSAI			
	GEAR:		Trawl			
TYPE:		Catcher/processor				
TARGET:		Yellowfin sole				
GROUND FISH SPECIES	Harvest mt	Retained mt	Discarded mt	Discard Rate	Rate/ Retain GF	Discard Pounds
Atka Mackerel	0	0	0	-	0.000	0
Pollock	141	141	0	0.0%	0.000	0
Pacific Cod	56	56	0	0.0%	0.000	0
Yellowfin sole	1,519	1,519	0	0.0%	0.000	0
Rock sole	33	33	0	0.0%	0.000	0
Flathead sole	38	38	0	0.0%	0.000	0
Other flatfish	95	0	95	100.0%	0.053	0
Greenland turbot	0	0	0	-	0.000	0
Arrowtooth flounder	18	18	0	0.0%	0.000	0
Pacific ocean perch	0	0	0	-	0.000	0
Sharpchin/northern rockfish	0	0	0	-	0.000	0
Shortraker/rougeye rockfish	0	0	0	-	0.000	0
Other rockfish	0	0	0	-	0.000	0
Sablefish	0	0	0	-	0.000	0
Other Species	44	0	44	100.0%	0.024	0
TOTAL	1,946	1,806	139	7.2%	0.077	0

PROHIBITED SPECIES	Discarded BYCATCH	Discard Rate/ Retained GF mt	Discard Pounds
Halibut (mt)	40 mt	22 kg/mt	89,000
Halibut Mortality (mt)	33 mt	19 kg/mt	74,000
Herring (mt)	0 mt	0 kg/mt	0
C. bairdi Tanner crab	3,804 crab	2.106 indiv/mt	
Other Tanner crab	14,631 crab	8.100 indiv/mt	
Red king crab	604 crab	0.334 indiv/mt	
Other king crab	4 crab	0.002 indiv/mt	
Chinook salmon	8 salmon	0.004 indiv/mt	
Other salmon	5 salmon	0.003 indiv/mt	
Halibut and Herring Discard Pounds		74,000 pounds	
Crab and Salmon Discard Numbers		19,056 individuals	

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 69.

2002 CDQ	AREA:		BSAI			
	GEAR:		Hook and line			
TYPE:		Catcher/processor				
TARGET:		Pacific cod				
GROUND FISH SPECIES	Harvest mt	Retained mt	Discarded mt	Discard Rate	Rate/ Retain GF	Discard Pounds
Atka Mackerel	1	0	1	100.0%	0.000	1,000
Pollock	591	486	105	17.8%	0.008	232,000
Pacific Cod	13,317	13,009	308	2.3%	0.022	678,000
Yellowfin sole	49	0	49	100.0%	0.004	109,000
Rock sole	6	0	6	99.8%	0.000	14,000
Flathead sole	38	0	38	100.0%	0.003	84,000
Other flatfish	3	0	3	100.0%	0.000	8,000
Greenland turbot	15	11	5	30.2%	0.000	10,000
Arrowtooth flounder	88	1	87	98.9%	0.006	191,000
Pacific ocean perch	0	0	0	-	0.000	0
Sharpchin/northern rockfish	2	0	2	88.7%	0.000	3,000
Shortraker/rougeye rockfish	0	0	0	100.0%	0.000	1,000
Other rockfish	2	0	2	83.1%	0.000	3,000
Sablefish	4	0	4	100.0%	0.000	8,000
Other Species	1,962	433	1,529	77.9%	0.110	3,370,000
TOTAL	16,077	13,939	2,138	13.3%	0.153	4,713,000

PROHIBITED SPECIES	Discarded BYCATCH	Rate/ Retain GF	Discard Pounds
Halibut (mt)	535 mt	38 kg/mt	1,179,000
Halibut Mortality (mt)	53 mt	4 kg/mt	118,000
Herring (mt)	0 mt	0 kg/mt	0
C. bairdi Tanner crab	1,684 crab	0.121 indiv/mt	
Other Tanner crab	4,919 crab	0.353 indiv/mt	
Red king crab	1,320 crab	0.095 indiv/mt	
Other king crab	892 crab	0.064 indiv/mt	
Chinook salmon	0 salmon	0.000 indiv/mt	
Other salmon	43 salmon	0.003 indiv/mt	
Halibut and Herring Discard Pounds	118,000 pounds		
Crab and Salmon Discard Numbers	8,858 individuals		

Discards in the North Pacific Groundfish Fisheries, 2002

TABLE 70.

2002 CDQ GROUND FISH SPECIES	AREA: GEAR: TYPE: TARGET:		BSAI Pot Shoreside Sablefish			
	Harvest mt	Retained mt	Discarded mt	Discard Rate	Rate/ Retain GF	Discard Pounds
Atka Mackerel	0	0	0	-	0.000	0
Pollock	0	0	0	0.0%	0.000	0
Pacific Cod	0	0	0	-	0.000	0
Yellowfin sole	0	0	0	-	0.000	0
Rock sole	0	0	0	-	0.000	0
Flathead sole	0	0	0	-	0.000	0
Other flatfish	0	0	0	-	0.000	0
Greenland turbot	26	26	0	0.0%	0.000	0
Arrowtooth flounder	22	21	1	2.9%	0.003	0
Pacific ocean perch	0	0	0	-	0.000	0
Sharpchin/northern rockfish	0	0	0	-	0.000	0
Shortraker/rougheye rockfish	1	1	0	0.0%	0.000	0
Other rockfish	0	0	0	0.0%	0.000	0
Sablefish	202	202	0	0.0%	0.000	0
Other Species	1	0	1	100.0%	0.003	0
TOTAL	252	251	1	0.5%	0.005	0

PROHIBITED SPECIES	Discarded BYCATCH	Rate/ Retain GF	Discard Pounds
Halibut (mt)	5 mt	18 kg/mt	21,000
Halibut Mortality (mt)	1 mt	2 kg/mt	2,000
Herring (mt)	0 mt	0 kg/mt	0
C. bairdi Tanner crab	44 crab	0.175 indiv/mt	
Other Tanner crab	1,441 crab	5.740 indiv/mt	
Red king crab	0 crab	0.000 indiv/mt	
Other king crab	27,112 crab	107.988 indiv/mt	
Chinook salmon	0 salmon	0.000 indiv/mt	
Other salmon	0 salmon	0.000 indiv/mt	
Halibut and Herring Discard Pounds		pounds	
Crab and Salmon Discard Numbers		28,597 individuals	