


MEMORANDUM

TO: Council, SSC and AP Members

FROM: Clarence G. Pautzke
Executive Director 

DATE: September 20, 1994

SUBJECT: Initial BSAI Groundfish Specifications for 1995

ESTIMATED TIME
8 HOURS
(all D-3 items)

ACTION REQUIRED

- (a) Review 1995 BSAI Preliminary Stock Assessment and Fishery Evaluation (SAFE) document.
- (b) Adopt for public review proposed specifications for the following:
 - 1. Annual Total Allowable Catch (TAC), initial TAC (ITAC), and domestic annual processing (DAP);
 - 2. Division of the pollock ITAC into the January 1-April 15 ('A' Season) and August 15-December 31 ('B' Season) allowances;
 - 3. Amount of the pollock TAC that may be taken with bottom trawls;
 - 4. Seasonal apportionment of the fixed gear Pacific cod TAC; and
 - 5. Bycatch allowances, and seasonal apportionments of Pacific halibut, red king crab, Tanner crab, and herring to target fishery (PSC) categories.
- (e) Recommend bycatch rate standards for the Vessel Incentive Program.

BACKGROUND

At this meeting, the Council begins the annual groundfish cycle in which it adopts for public review proposed specifications of groundfish amounts and bycatch allowances. The preliminary SAFE Report, groundfish specifications and bycatch allowances need to be adopted and made available for public review and comment. Twenty-five percent of the initial specifications will go forward as interim specifications for management of the 1995 groundfish fisheries until superseded by publication of the Council's final specifications. On the basis of comments and new information, the Council will adopt final recommendations for the 1995 fishing year at its December 1994 meeting.

(a) **BSAI SAFE Document**

The groundfish Plan Teams met in Seattle during the week of August 29 through September 2, 1994 to prepare the preliminary SAFE documents provided at this meeting. This SAFE forms the basis for preliminary

groundfish specifications for the 1995 fishing year. Because the latest survey data will not be available until November, individual species chapters remain unchanged from the last SAFE. Several different recommendations were made, however, including: (1) apportioning POP among the Aleutian Island subareas to prevent localized depletion, (2) breaking out flathead sole from the other flatfish complex as requested by the Council for managing directed fishing standards, and (3) lumping squid back into the other species category.

The preliminary BSAI SAFE contains the Plan Team's estimates of biomass and ABCs for all groundfish species covered under the FMP and information concerning PSC bycatch to provide guidance to the Council in establishing PSC apportionments. The attached tables from the SAFE lists the 1994 ABCs, TACs, and catches to date, and the Plan Team's recommended 1995 ABCs and corresponding overfishing levels for each of the species or species complexes.

(b) Initial ABCs, TACs, and Apportionments for the 1995 BSAI Fisheries

During the week of this Council meeting the SSC and AP recommendations will be provided to the Council. Under Amendment 21, 25% of the initial specifications for groundfish (from September) will go forward as interim specifications for the 1995 fisheries until superseded by publication of the Council's recommended final specifications in the *Federal Register*, sometime in early 1995.

Attached as Item D-3(d)(1) is Table 6 from the SAFE summary chapter listing Plan Team determinations of exploitable biomass and overfishing levels (OFL) for 1995. A table showing 1994 ABCs, TACs, and the Plan Team's 1995 ABC recommendations is attached as Item D-3(d)(2). The sum of the Plan Team's recommended ABCs for 1995 is 2.88 million mt. Overall, the status of the stocks continues to appear relatively favorable.

Adopt Seasonal Allowances for the Pollock Seasons

The FMP requires the Council to apportion pollock in the BSAI between the roe (January 1 - April 15) and non-roe (August 15 - December 31) seasons. For the 1991 and 1992 fisheries, the Council recommended a 40/60 percent split between the roe and non-roe seasons, and a 45/55 percent split for the 1993 and 1994 pollock fishery.

In recommending seasonal allowances of the BSAI pollock TAC, the Council will need to consider the following factors:

1. Estimated monthly pollock catch and effort in prior years;
2. Expected changes in harvesting and processing capacity and associated pollock catch;
3. Current estimates of and expected changes in pollock biomass and stock conditions, conditions of marine mammal stocks, and biomass and stock conditions of species taken as bycatch in directed pollock fisheries;
4. Potential impacts of expected seasonal fishing for pollock on pollock stocks, marine mammal stocks, and stocks of species taken as bycatch in directed pollock fisheries;
5. The need to obtain fishery-related data during all or part of the year;
6. Effects on operating costs and gross revenues;

7. The need to spread fishing effort over the year, minimize gear conflicts, and allow participation by various elements of the groundfish fleet and other fisheries;
8. Potential allocative effects among users and indirect effects on coastal communities; and,
9. Other biological and socioeconomic information that affects the consistency of seasonal pollock harvests with the goals and objectives of the FMP.

Information on these factors is presented in Appendix D of the preliminary 1995 SAFE document.

Adopt Amounts Of Pollock That Could Be Taken With Bottom Trawls

To control the bycatch of crab and halibut, the Council implemented Amendment 16a, which provided for the apportionment of pollock to pelagic trawl gear (i.e., set a limit on the amount of pollock that can be taken in the bottom trawl pollock fishery). In approving this amendment for Secretarial Review in 1990, the Council adopted the 88%-12% split (midwater-bottom trawl) recommended by the Region. The actual percentages from the 1990 fishery were 89%-11%. For the 1991 through 1994 fisheries, the Council noted that additional pollock harvests with non-pelagic trawl gear likely would be constrained by halibut bycatch, and did not recommend a specific apportionment between pelagic and non pelagic gear.

If the Council chooses to limit the amount of pollock taken with bottom trawl gear, then regulations require that pollock allocations to non pelagic trawls be based on the following types of information:

1. Bycatch allowances of PSC species;
2. Projected bycatch of prohibited species that might occur with and without constraining amounts of pollock taken with non pelagic trawls; and
3. Costs of a limit in terms of amounts of pollock TAC that may be taken with bottom trawls on the non pelagic trawl fisheries.

Adopt Seasonal Apportionments of the Pacific Cod TAC Allocated to Fixed Gear

Amendment 24 regulations allow seasonal apportionment of the Pacific cod TAC allocated to vessels using hook-and-line or pot gear. Seasonal apportionments will be divided among trimesters and established through the annual specifications process.

In recommending seasonal apportionments, regulations will require the Council to base its decision on the following information:

1. Seasonal distribution of Pacific cod relative to PSC distribution;
2. Expected variations in PSC bycatch rates in the Pacific cod fishery throughout the fishing year; and
3. Economic effects of any seasonal apportionment of Pacific cod on the hook-and-line and pot gear fisheries.

Under Amendment 24, two percent of the TAC is reserved for jig gear, 44 percent for hook and line, and 54 percent for trawl gear. For the 1994 fisheries, the Council recommended that 90 percent of the fixed gear's allocation be released during the first trimester (January 1 - April 30), 10 percent be released for the second trimester (May 1 - August 31), and any remaining TAC be rolled over into the third trimester. The Council also recommended that if the trawl gear component does not catch all of its 54% of the TAC, then the rollover of the cod TAC into the fixed gear component should be assigned 25% to the second trimester and the rest to the third.

Adopt proposed bycatch allowances of Pacific halibut, red king crab, Tanner crab (*C. bairdi*), and herring, and seasonal allowances

Halibut PSCs

For the Trawl Fisheries: Amendment 21 established a 3,775 mt limit on halibut mortality for trawl gear. This limit can be apportioned to the following trawl fishery categories:

1. Greenland turbot, arrowtooth flounder and sablefish;
2. rock sole and "other flatfish;"
3. yellowfin sole;
4. rockfish;
5. Pacific cod; and,
6. pollock, Atka mackerel and "other species."

For Fixed Gear Fisheries: A 900 mt non-trawl gear halibut mortality can be apportioned to the following fishery categories:

1. Pacific cod;
2. Other non-trawl (includes hook-and-line sablefish, rockfish and jig gear); and
3. Groundfish pot (recommended exempt for 1994).

Item D-3(d)(3) is a table indicating 1994 PSC allocations and seasonal apportionments for the trawl fisheries and non-trawl fisheries. Item D-3(d)(4) is a current summary of PSC bycatch accounting for the 1994 BSAI fisheries. Recall that an Emergency Rule was used to allow the Pacific cod jig fishery to be exempt from the hook and line halibut PSC cap in 1994. NMFS is proceeding with rulemaking to modify the current structure of non-trawl PSC and PSC rollover; regulations should be in place in early 1995. This rule will allow a separate PSC cap for jig gear (with exemption as an option), as well as allowing excess PSC to be apportioned among trimesters. NMFS staff will report on the status of the amendment at this meeting. Another amendment which would allow sablefish hook and line fisheries to be exempt from PSC caps (based on the upcoming IFQ program) is also being developed, and the Council may take into consideration when setting PSC apportionments.

Crab PSCs

Overall crab PSC limits for the BS trawl fisheries adopted by the Council in Amendment 16 are:

| | |
|---------------|--------------------------------------------------------------------------------------------------|
| C. bairdi: | 1,000,000 crabs in Zone 1 for a Zone 1 closure 3,000,000 crabs in Zone 2 for a Zone 2 closure |
| Red king crab | 200,000 crabs in Zone 1 for a Zone 1 closure |

Zone 1 is comprised of Areas 511, 512, and 516. Zone 2 is comprised of Areas 513, 517 and 521.

Herring PSCs

Amendment 16a established an overall herring PSC bycatch cap of 1 percent of the EBS biomass of herring. This cap is to be apportioned to the same six PSC fishery categories listed above, plus a seventh group, mid-water pollock. The Alaska Department of Fish and Game has recommended that the Council use the forecasted 1994 biomass estimates to set initial specifications at this meeting. Based on this forecast, the initial PSC limit is set at 1,962 metric tons. An updated assessment will be provided at the December meeting.

The Council may also seasonally apportion the bycatch allowances. Regulations require that seasonal apportionments of bycatch allowances be based on the following types of information:

1. Seasonal distribution of prohibited species;
2. Seasonal distribution of target groundfish species relative to prohibited species distribution;
3. Expected prohibited species bycatch needs on a seasonal basis relevant to change in prohibited species biomass and expected catches of target groundfish species;
4. Expected variations in bycatch rates throughout the fishing year;
5. Expected changes in directed groundfish fishing seasons;
6. Expected start of fishing efforts; and
7. Economic effects of establishing seasonal prohibited species apportionments on segments of the target groundfish industry.

Information on these factors is presented in Appendices C and E in the BSAI SAFE.

Staff will present a worksheet with SSC and AP recommendations for ABCs, TACs, PSC and seasonal apportionments when the Council addresses this Action Item. This will assist in recommending the 1995 preliminary specifications.

(e) Bycatch rate standards for the Vessel Incentive Program (VIP)

The VIP for halibut and crab PSCs includes all trawl fisheries in both the BSAI and GOA. The grouping for VIP fishery categories is as follows:

BSAI

| <u>Fishery</u> | <u>PSC Species</u> |
|------------------|--------------------------------------------------------------------|
| Midwater Pollock | Halibut (as a % of groundfish catch) |
| Bottom Pollock | Halibut |
| Yellowfin Sole | Halibut Red king crab (number of crab per ton groundfish catch) |
| Other Trawl | Halibut Red king crab |

GOA

| <u>Fishery</u> | <u>PSC Species</u> |
|------------------|--------------------|
| Midwater Pollock | Halibut |
| Other Trawl | Halibut |

Note that regulations specify that the vessel incentive program for the midwater pollock fishery becomes effective after the directed fishery for pollock by trawl vessels using non-pelagic trawl gear is closed.

Item D-3(d)(5) is a table provided by the NMFS Regional Director showing the VIP rate standards used in 1994 and catch rates observed during the past three years for these fishery categories. The Council will need to recommend to the Regional Director the bycatch rate standards for these categories for the first two quarters of the 1995 fishery.

Table 6-- Summary of stock abundance, overfishing constraints, and fishing mortality rates for the eastern Bering Sea (EBS), Aleutian Islands (AI), and Bogoslof district (518) in 1995. Biomass and catch are in metric tons.

| Species | Area | Biomass ^a | OFL ^b | F _{OFL} ^c | F _{ABC} ^d |
|---------------------------------|------|------------------------|------------------|-------------------------------|-------------------------------|
| Walleye pollock | EBS | 8,020,000 ^e | 1,590,000 | 0.38 | 0.37 |
| | AI | 189,000 | 60,400 | 0.45 | 0.42 |
| | 518 | 490,000 | 147,000 | 0.40 | 0.33 |
| Pacific cod | | 925,000 | 228,000 | 0.43 | 0.35 |
| Yellowfin sole | | 1,880,000 | 269,000 | 0.14 | 0.12 |
| Greenland turbot | | 165,000 | 24,800 | 0.34 | 0.23 |
| Arrowtooth flounder | | 519,000 | 130,000 | 0.25 | 0.18 |
| Rock sole | | 1,790,000 | 363,000 | 0.22 | 0.18 |
| Other flatfishes | | 1,240,000 | 270,000 | 0.22 ^f | 0.18 ^f |
| Sablefish | EBS | 4,600 | 670 | 0.17 | 0.13 |
| | AI | 23,900 | 3,490 | 0.17 | 0.13 |
| POP complex | | | | | |
| True POP | EBS | 48,400 | 2,920 | 0.10 | 0.06 |
| Other red rockfish ^g | EBS | 29,700 | 1,400 | 0.05 ^f | 0.05 ^f |
| True POP | AI | 244,000 | 16,600 | 0.10 | 0.06 |
| Sharp/Northern ^h | AI | 94,500 | 5,670 | 0.06 | 0.06 |
| Short/Rougheye ⁱ | AI | 45,000 | 1,220 | 0.03 | 0.03 |
| Other rockfish | EBS | 7,300 | 365 | 0.05 | 0.05 |
| | AI | 15,500 | 770 | 0.05 | 0.05 |
| Atka mackerel | | 816,000 | 484,000 | 0.88 | 0.37 |
| Other species | | 706,000 | 141,000 | 0.20 | 0.04 |

- a/ Projected exploitable biomass for January, 1994.
- b/ Maximum 1994 catch level allowable under overfishing definition (the "overfishing level").
- c/ Maximum fishing mortality rate allowable under overfishing definition.
- d/ Fishing mortality rate corresponding to acceptable biological catch.
- e/ B_{MSY} for walleye pollock is 6,000,000 t.
- f/ Weighted average of species-specific rates.
- g/ Sharpchin, northern, shortraker, and rougheye rockfish.
- h/ Sharpchin and northern rockfish
- i/ Shortraker and rougheye rockfish.

BERING SEA AND ALUETIAN ISLANDS GROUND FISH
Initial 1995 Council Recommendations and Apportionments (mt)

| Species | Area | Council TAC 1994 | Council ABC 1994 | Plan Team ABC 1995 | 1995 Initial Specifications | | |
|--------------------|---------|-------------------------|---------------------|-----------------------|-----------------------------|-----|------|
| | | | | | ABC | TAC | ITAC |
| Pollock | EBS | 1,330,000 | 1,330,000 | 1,330,000 | | | |
| | "A" | 45% | | | | | |
| | "B" | 55% | | | | | |
| | AI | 56,600 | 56,600 | 56,600 | | | |
| | 518 | 1,000 | 31,750 | 127,000 | | | |
| Pacific cod | BS/AI | 191,000 | 191,000 | 191,000 | | | |
| Yellowfin sole | BS/AI | 150,325 | 230,000 | 230,000 | | | |
| Greenland turbot | BS/AI | 7,000 | 7,000 | 17,200 | | | |
| | BS | 67% | | | | | |
| | AI | 33% | | | | | |
| Arrowtooth | BS/AI | 10,000 | 93,400 | 93,400 | | | |
| Rock sole | BS/AI | 75,000 | 313,000 | 313,000 | | | |
| Flathead sole | BS/AI | included in other flats | | 119,000 | | | |
| Other flatfish | BS/AI | 56,000 | 225,000 | 106,000 | | | |
| Sablefish | EBS | 540 | 540 | 540 | | | |
| | AI | 2,800 | 2,800 | 2,800 | | | |
| POP complex | | | | | | | |
| True POP | EBS | 1,910 | 1,910 | 1,910 | | | |
| Other POP | EBS | 1,400 | 1,400 | 1,400 | | | |
| True POP | AI | 10,900 | 10,900 | 10,900 | | | |
| | Eastern | | | 16% | | | |
| | Central | not apportioned in 1994 | | 28% | | | |
| | Western | | | 56% | | | |
| Sharp/Northern | AI | 5,670 | 5,670 | 5,670 | | | |
| Short/Rougheye | AI | 1,220 | 1,220 | 1,220 | | | |
| Other rockfish | EBS | 365 | 365 | 365 | | | |
| | AI | 770 | 770 | 770 | | | |
| Atka mackerel | BS/AI | 68,000 | 122,500 | 245,000 | | | |
| | Eastern | 10,000 | 53,900 | 11% | | | |
| | Central | 44,525 | 55,125 | 45% | | | |
| | Western | 13,475 | 13,475 | 44% | | | |
| Squid | BS/AI | 3,110 | 3,110 | in other sp. | | | |
| Other species | BS/AI | 26,390 | 27,500 | 30,610 | | | |
| BS/AI TOTAL | | 2,000,000 | 2,656,435 | 2,884,387 | | | |

"A" season for pollock: January 20 to April 15. "B" season: August 15 to December 31.

ITAC = recommended TAC less the 15% reserve.

Council recommended 1994 BSAI Trawl Fisheries PSC Apportionments and Seasonal Allowances

| Fishery Group | Assumed Mortality* | Halibut Mortality Cap (mt) | Herring (mt) | Red King Crab (animals) Zone1 | C. bairdi Zone1 | C. bairdi Zone2 |
|----------------------------------------------------------------------------------------|--------------------|----------------------------|--------------|-------------------------------|------------------|------------------|
| Yellowfin sole Jan. 20 - Aug. 2 Aug. 3 - Dec. 31 | 70% | 592 230 362 | 332 | 40,000 | 175,000 | 1,275,000 |
| Rocksole/other flatfish Jan. 20 - Mar. 29 Mar. 30 - June 28 June 29 - Dec. 31 | 70% | 688 428 180 80 | | 110,000 | 475,000 | 260,000 |
| Turbot/arrowtooth/sablefish | 40% | 137 | | | | 5,000 |
| Rockfish Jan. 20 - Mar. 29 Mar. 30 - June 28 June 29 - Dec. 31 | 60% | 201 40 120 41 | 8 | | | 10,000 |
| Pacific cod Jan. 20 - June 28 | 60% | 1,200 | 25 | 10,000 | 175,000 | 200,000 |
| Pollock/mackerel/"o. species" Jan. 20 - April 15 April 16 - Dec. 31 | 60% | 957 430 527 | 178 | 40,000 | 175,000 | 1,250,000 |
| 7 MW Pollock (Herring) | | | 1,419 | | | |
| TOTAL | | 3,775 | 1,962 | 200,000 | 1,000,000 | 3,000,000 |

** Council recommended discard mortality rates for 1994.

Council Recommended 1994 Non-Trawl PSC Bycatch Allowances (Dec. 93)

| Fishery Group | Assumed Mortality** | Halibut Mortality (mt) | Seasonal Apportion (mt) | % |
|---------------------------------------------------------------------------|---------------------|------------------------|-------------------------|---------|
| Pacific Cod Jan 1 - April 30 May 1 - August 31 Sept. 1 - Dec. 31 | 12.5/15% | 725 | 685 40 Rollover | 95 5 |
| Other Non-Trawl* | 12.5/15% | 175 | | |
| Groundfish Pot | 5% | Exempt | | |
| TOTAL | | 900 metric tons | | |

* Includes Hook & Line Sablefish, Turbot, Rockfish and Jig. Lower number reflects the Careful Release Program.

** Council recommended discard mortality rates for 1994. hook-and-line fisheries for 1994.

NMFS/AKR
 09/15/94
 14:30:13

1994 BERING SEA / ALEUTIAN ISLANDS FISHERIES
 TRAWL HALIBUT BYCATCH MORTALITY (METRIC TONS)

| WED | PACIFIC COD | YELLOWFIN SOLE | ROCK SOLE OTHER FLATFISH | PLCK/AMCK/ OTHER | ROCKFISH | SABLEFISH/ TURBOT |
|-------------------|----------------|-------------------|-----------------------------|---------------------|----------|----------------------|
| 01/01/94 | 0 | 0 | 0 | 1 | 0 | 0 |
| 01/08/94 | 0 | 0 | 0 | 0 | 0 | 0 |
| 01/22/94 | 1 | 0 | 15 | 21 | 0 | 0 |
| 01/29/94 | 8 | 0 | 23 | 46 | 0 | 0 |
| 02/05/94 | 15 | 0 | 18 | 76 | 0 | 0 |
| 02/12/94 | 9 | 0 | 59 | 37 | 0 | 0 |
| 02/19/94 | 7 | 0 | 88 | 43 | 0 | 0 |
| 02/26/94 | 10 | 0 | 134 | 6 | 0 | 0 |
| 03/05/94 | 28 | 2 | 102 | 12 | 4 | 0 |
| 03/12/94 | 112 | 1 | 46 | 17 | 5 | 0 |
| 03/19/94 | 131 | 3 | 25 | 11 | 3 | 0 |
| 03/26/94 | 124 | 14 | 9 | 4 | 3 | 0 |
| 04/02/94 | 107 | 0 | 13 | 7 | 2 | 0 |
| 04/09/94 | 137 | 2 | 13 | 81 | 1 | 0 |
| 04/16/94 | 163 | 21 | 5 | 10 | 0 | 1 |
| 04/23/94 | 141 | 4 | 18 | 18 | 1 | 0 |
| 04/30/94 | 143 | 0 | 31 | 22 | 0 | 4 |
| 05/07/94 | 73 | 0 | 5 | 2 | 0 | 129 |
| 05/14/94 | 12 | 6 | 4 | 3 | 0 | 220 |
| 05/21/94 | 0 | 36 | 13 | 1 | 0 | 0 |
| 05/28/94 | 0 | 16 | 15 | 0 | 0 | 0 |
| 06/04/94 | 1 | 24 | 12 | 0 | 0 | 0 |
| 06/11/94 | 0 | 29 | 50 | 0 | 0 | 0 |
| 06/18/94 | 0 | 59 | 18 | 1 | 0 | 0 |
| 06/25/94 | 0 | 43 | 6 | 5 | 0 | 0 |
| 07/02/94 | 0 | 15 | 25 | 0 | 0 | 0 |
| 07/09/94 | 0 | 1 | 9 | 2 | 13 | 0 |
| 07/16/94 | 0 | 0 | 0 | 7 | 10 | 0 |
| 07/23/94 | 0 | 0 | 0 | 1 | 0 | 0 |
| 07/30/94 | 0 | 0 | 0 | 1 | 0 | 0 |
| 08/06/94 | 1 | 4 | 11 | 1 | 0 | 0 |
| 08/13/94 | 0 | 3 | 1 | 1 | 0 | 0 |
| 08/20/94 | 0 | 20 | 0 | 135 | 0 | 0 |
| 08/27/94 | 0 | 1 | 0 | 172 | 0 | 0 |
| 09/03/94 | 0 | 0 | 0 | 65 | 0 | 0 |
| 09/10/94 | 0 | 1 | 0 | 41 | 0 | 0 |
| 10/01/94 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL TO DATE: | 1222 | 306 | 767 | 849 | 41 | 354 |
| SEASONAL CAP: | 1200 | 592 | 688 | 957 | 201 | 137 |
| % OF CAP: | 102% | 52% | 112% | 89% | 21% | 258% |

NMFS/AKR
09/15/94

1994 BERING SEA/ALEUTIAN ISLANDS FISHERIES
PROHIBITED SPECIES BYCATCH MORTALITY
based on amendment 21 specifications
Week Ending: 09/10/94

TRAWL HERRING, BSAI

| Fishery group | Herring (mt) | Cap (mt) | % |
|------------------|-----------------|-------------|-----|
| Pacific cod | 2 | 25 | 9% |
| Yellowfin sole | 75 | 332 | 23% |
| Midwater pollock | 888 | 1,419 | 63% |
| Other | 34 | 178 | 19% |
| Rockfish | 0 | 8 | 0% |

TRAWL SALMON, BSAI

| Fishery group | Chinook (#'s) | Other (#'s) |
|--------------------------|------------------|----------------|
| Midwater pollock | 28,467 | 81,275 |
| Pacific cod | 7,035 | 1,207 |
| Rock sole/Other flatfish | 846 | 44 |
| Yellowfin sole | 52 | 6 |
| Other | 4,160 | 6,379 |
| Rockfish | 116 | 94 |

TRAWL BAIRDI TANNER CRAB

| Fishery group | ZONE 1 | | | ZONE 2 | | |
|--------------------------|----------------|--------------|------|----------------|--------------|------|
| | Crabs (#'s) | Cap (#'s) | % | Crabs (#'s) | Cap (#'s) | % |
| Pacific cod | 76,735 | 175,000 | 44% | 138,016 | 200,000 | 69% |
| Rock sole/Other flatfish | 360,039 | 475,000 | 76% | 319,685 | 260,000 | 123% |
| Yellowfin sole | 243,498 | 175,000 | 139% | 303,805 | 1,275,000 | 24% |
| PLCK/AMCK/OTHER | 60,617 | 175,000 | 35% | 335,925 | 1,250,000 | 27% |
| GTRB/ARTH/SABL | 0 | 0 | 0% | 58 | 5,000 | 1% |

TRAWL RED KING CRAB

| Fishery group | ZONE 1 | | |
|--------------------------|----------------|--------------|------|
| | Crabs (#'s) | Cap (#'s) | % |
| Pacific cod | 769 | 10,000 | 8% |
| Rock sole/Other flatfish | 190,149 | 110,000 | 173% |
| Yellowfin sole | 11,395 | 40,000 | 28% |
| PLCK/AMCK/OTHER | 37,734 | 40,000 | 94% |



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration

National Marine Fisheries Service

P.O. Box 21668

Juneau, Alaska 99802-1668

September 12, 1994

SEP 19

Mr. Richard B. Lauber
Chairman, North Pacific Fishery
Management Council
P.O. Box 103136
Anchorage, Alaska 99510

Dear Rick,

Standard bycatch rate standards for trawl fisheries under the Pacific halibut and red king crab vessel incentive program during the first half of 1995 are scheduled to be published in the Federal Register by January 1, 1995. A summary of 1992, 1993 and 1994 observer data on fishery bycatch rates is listed in the attached table. The Council may wish to review these data when recommending halibut and red king crab bycatch rate standards for the first half of 1995.

Sincerely,

Steven Pennoyer
Director, Alaska Region



1992 - 1994 (through 03/31/94) observed bycatch rates, by quarter, of halibut and red king crab in the fishery categories included in the vessel incentive program. Also listed are the bycatch rate standards established for 1994.

Halibut Bycatch (Kilograms Halibut/ MT Allocated Groundfish Catch)

| <u>Fishery and quarter</u> | <u>Bycatch Rate Standards</u> | <u>Observed Bycatch Rates</u> | | |
|----------------------------|-----------------------------------|-------------------------------|-------------|-------------|
| | | <u>1992</u> | <u>1993</u> | <u>1994</u> |
| BSAI Midwater Pollock | | | | |
| QT 1 | 1.0 | 1.40 | 0.95 | 0.17 |
| QT 2 | 1.0 | 0.73 | 0.20 | 0.01 |
| QT 3 | 1.0 | 0.50 | 0.06 | 0.50 |
| QT 4 | 1.0 | 0.40 | 0.12 | |
| Year to date | | 0.87 | 0.43 | 0.25 |
| BSAI Bottom Pollock | | | | |
| QT 1 | 7.5 | 7.58 | 7.49 | 2.71 |
| QT 2 | 5.0 | 4.34 | 2.72 | 29.67 |
| QT 3 | 5.0 | 2.31 | 0.84 | 4.12 |
| QT 4 | 5.0 | 0.29 | 25.28 | |
| Year to date | | 5.64 | 6.86 | 3.43 |
| BSAI Yellowfin sole | | | | |
| QT 1 | 5.0 | **** | **** | 2.70 |
| QT 2 | 5.0 | 3.40 | 13.02 | 5.98 |
| QT 3 | 5.0 | 3.71 | 1.82 | 3.22 |
| QT 4 | 5.0 | 5.52 | 3.34 | |
| Year to date | | 4.02 | 6.18 | 5.10 |
| BSAI Other Trawl Fisheries | | | | |
| QT 1 | 30.0 | 12.20 | 8.80 | 9.02 |
| QT 2 | 30.0 | 16.25 | 13.69 | 20.00 |
| QT 3 | 30.0 | 4.81 | 4.66 | 3.51 |
| QT 4 | 30.0 | 0.94 | 3.91 | |
| Year to date | | 12.83 | 9.25 | 12.39 |
| GOA Midwater Pollock | | | | |
| QT 1 | 1.0 | 0.11 | 0.01 | 0.06 |
| QT 2 | 1.0 | 0.06 | 0.02 | 0.07 |
| QT 3 | 1.0 | 0.03 | 0.03 | 0.56 |
| QT 4 | 1.0 | 0.35 | 0.05 | |
| Year to date | | 0.11 | 0.03 | 0.23 |
| GOA Other Trawl fisheries | | | | |
| QT 1 | 40.0 | 19.75 | 34.49 | 19.97 |
| QT 2 | 40.0 | 22.08 | 26.80 | 43.13 |
| QT 3 | 40.0 | 24.14 | 33.90 | 26.83 |
| QT 4 | 40.0 | 26.85 | 37.81 | |
| Year to date | | 21.95 | 33.04 | 27.09 |

Zone 1 Red King Crab Bycatch Rates
(number of crab/mt of allocated groundfish)

| | | | | |
|--------------------------------------------------------|-----|------|------|------|
| BSAI yellowfin sole (in 1992, includes other flatfish) | | | | |
| QT 1 | 2.5 | 1.19 | **** | 0.68 |
| QT 2 | 2.5 | 1.34 | 2.19 | 0.23 |
| QT 3 | 2.5 | 0.00 | 0.00 | 0.00 |
| QT 4 | 2.5 | **** | 0.27 | |
| Year to date | | 1.34 | 1.30 | 0.33 |
| BSAI Other Trawl | | | | |
| QT 1 | 2.5 | 1.19 | 2.39 | 1.78 |
| QT 2 | 2.5 | 1.72 | 0.04 | 0.02 |
| QT 3 | 2.5 | 0.00 | **** | 0.00 |
| QT 4 | 2.5 | **** | **** | |
| Year to date | | 1.21 | 1.50 | 1.18 |

*J. Henderson,
Mike Petersen,
Mark Kanderis*

1995 Rock Sole Fishery Plan

In response to high king crab bycatch in the 1994 rock sole fishery, the rocksole fleet voluntarily moved its operations out of area 516 for more than a week. The effort was successful in that it demonstrated that 100% cooperation between the members of the fleet is possible when working to reduce bycatch. Following this effort, fishermen, vessel owners and managers involved in the rocksole fishery have worked together in developing a comprehensive plan to reduce bycatch and increase the percentage of retained groundfish in the rocksole fishery in 1995 and the years to follow. The plan is designed to improve the quality and timeliness of data available to the fishermen so that they can avoid high bycatch areas, reduce the catch of small rock sole, cod, pollock, and other flatfish and increase the percentage of harvested groundfish that are retained.

The rock sole fleet plans to take the following steps in 1995 to achieve these goals:

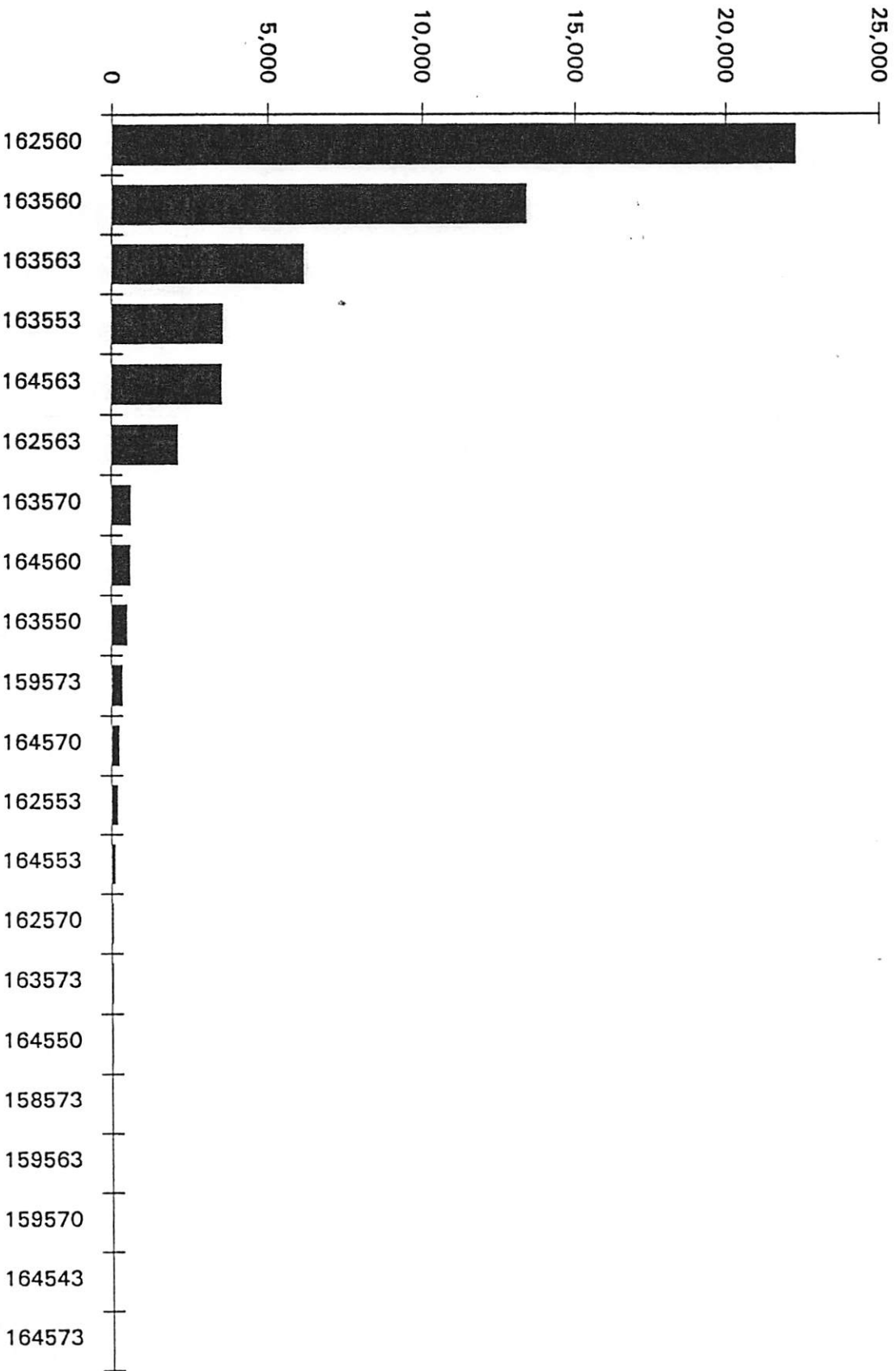
- 1. Bycatch and Retention Information Clearinghouse** -- Participants will fund an independent service to collect and process daily bycatch and groundfish retention data. The purpose of this data collection is to provide meaningful and timely information to the rock sole fleet regarding king crab and halibut bycatch rates by specific location so that PSC caps are not exceeded and the rocksole fishery is conducted with the lowest possible crab and halibut bycatch rates. Another purpose is to provide information on rock sole vessels' groundfish retention rates by location so that vessels can avoid areas where discards are likely to be high. Bycatch and retention data will be received, processed, plotted, and provided to vessels in a format similar to the one used in the SEASTATE program for salmon.
- 2. King Crab Area Closure** -- The rock sole fleet agrees to a voluntary closure of ADF&G statistical areas 162560 and 163560. Averaged over that past three years, thirty-five percent of the groundfish and sixty-six percent of the king crab were taken in these two statistical areas. This closure will be in effect through the annual spring closure of area 516. In addition to this closure, the rock sole fleet will use the information provided by the data clearinghouse to make additional "hot spot" closures as needed in order to further reduce king crab bycatch.
- 3. Large Mesh Codends** -- Vessels participating in the program will be experimenting with a variety of large mesh codends to determine the best methods for reducing the take of small, unmarketable fish. All members of the fleet have agreed to at least use six inch (between the knots) single-layer mesh for the top panels of the codends. In 1994, the most common mesh size used in the rock sole fishery was double-layer 4 1/2 inch mesh. Other vessels will be using six inch mesh on all sides of the codend. Using six inch web in the rock sole codends will considerably reduce the bycatch of small rock sole, pollock, cod, and other flatfish species. The results of this experiment will provide information on which the fishing industry can base refinements of its rock sole mesh size proposal.

Due to the expected decrease in overall groundfish harvested under this program, we anticipate that there may be an increase in the kilograms of halibut caught per metric ton of harvested groundfish and will therefore need an adjustment of the VIP rate (see Council Action).

Rocksole Fishery

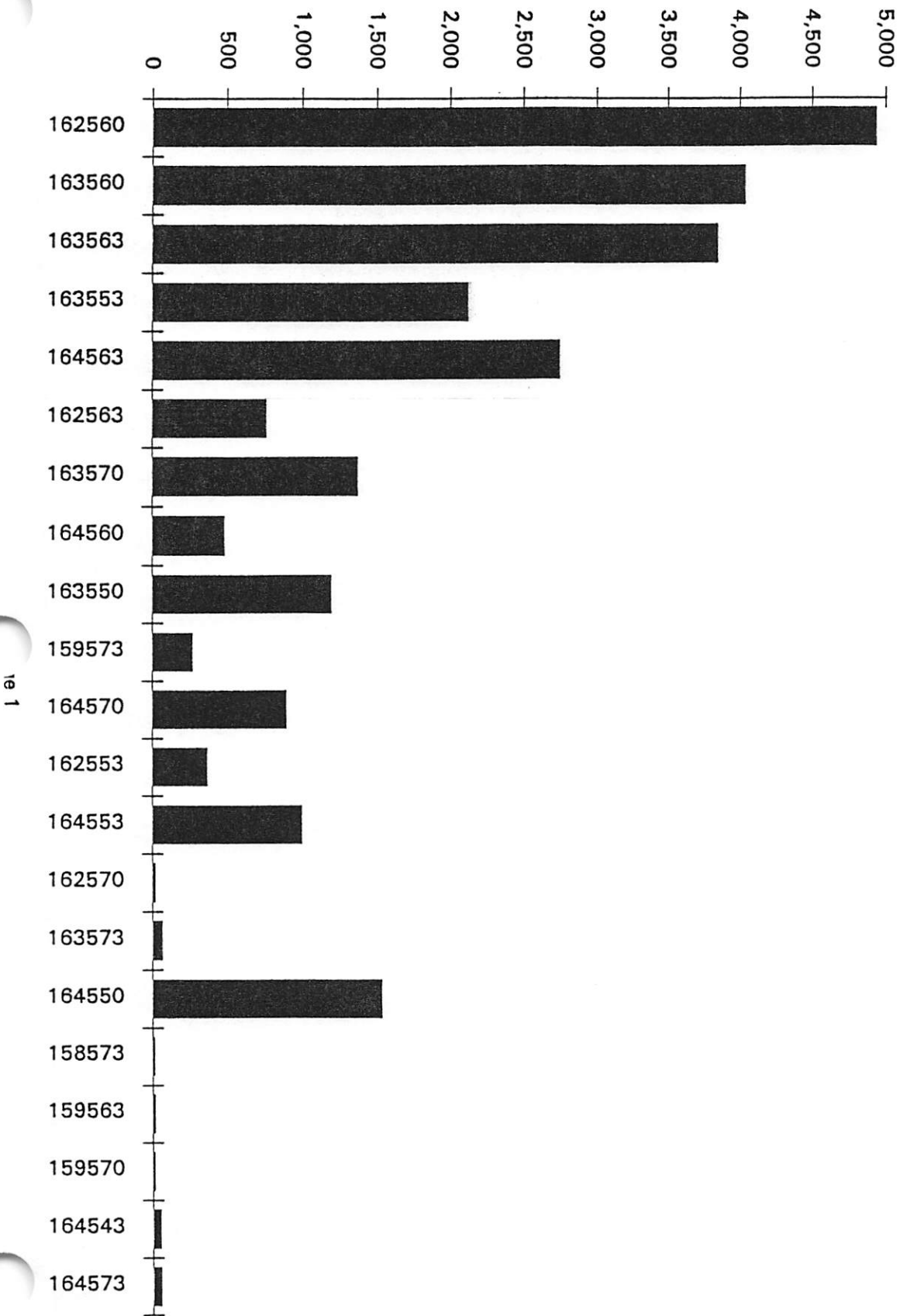
1992-1994

Average catch of King Crab
(in number of individuals)



Rocksole Fishery

1992-1994
Average Catch of Groundfish
in metric tons



| Stat area | Mt Gfish | # KCrab | %Reduction |
|-----------|----------|---------|------------|
| 162560 | 4,933 | 22,285 | 41.55% |
| 163560 | 4,034 | 13,381 | 66.50% |
| 163563 | 3,847 | 6,134 | 77.93% |
| 163553 | 2,120 | 3,532 | 84.52% |
| 164563 | 2,743 | 3,499 | 91.04% |
| 162563 | 753 | 2,132 | 95.02% |
| 163570 | 1,369 | 609 | 96.15% |
| 164560 | 481 | 594 | 97.26% |
| 163550 | 1,191 | 489 | 98.17% |
| 159573 | 270 | 342 | 98.81% |
| 164570 | 887 | 243 | 99.26% |
| 162553 | 369 | 193 | 99.62% |
| 164553 | 993 | 114 | 99.83% |
| 162570 | 17 | 49 | 99.93% |
| 163573 | 64 | 35 | 99.99% |
| 164550 | 1,527 | 5 | 100.00% |
| 158573 | 11 | 0 | 100.00% |
| 159563 | 15 | 0 | 100.00% |
| 159570 | 11 | 0 | 100.00% |
| 164543 | 51 | 0 | 100.00% |
| 164573 | 55 | 0 | 100.00% |
| | 25,740 | 53,635 | |



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration

National Marine Fisheries Service

P.O. Box 21668

Juneau, Alaska 99802-1668

September 23, 1994

Richard B. Lauber
Chairman, North Pacific Fishery
Management Council
P.O. Box 103136
Anchorage, Alaska 99510

Dear Mr. Lauber *Rich*:

The impending implementation of the sablefish and halibut IFQ program in 1995 presents some interesting challenges for monitoring halibut bycatch mortality in the Gulf of Alaska (GOA) and Bering Sea and Aleutian Islands management area (BSAI) hook-and-line groundfish fisheries. The intent of this letter is to present the issues associated with monitoring halibut bycatch mortality under the IFQ program, NMFS' suggested approach for monitoring bycatch in the 1995 fisheries, and recommendations for regulatory action required to facilitate monitoring halibut bycatch mortality during 1995 and beyond.

The Issues: The IFQ program for sablefish and halibut will require that NMFS modify procedures used to estimate halibut bycatch mortality in the GOA and BSAI hook-and-line gear fisheries. In-season estimates of halibut bycatch mortality will be more susceptible to change as information on IFQ landings of halibut become available. Monitoring halibut bycatch mortality in the groundfish hook-and-line fisheries will become further complicated given that undersize halibut bycatch mortality associated with target operations for IFQ halibut will be difficult to separate from halibut mortality associated with directed fishing for groundfish, particularly for unobserved vessels. As a result, some halibut bycatch mortality normally associated with the setline halibut fishery probably will be credited against the halibut bycatch limits established for the non-trawl groundfish fisheries. Last, monitoring of halibut bycatch mortality for unobserved vessels will be complicated because of the difficulty of deriving an assumed halibut bycatch mortality rate for vessels that may or may not retain halibut, depending on whether or not a person is onboard who is an IFQ holder for that vessel class and area.

Background: Vessels without halibut IFQ must return all bycaught halibut to the sea as a prohibited species. Vessels with halibut IFQ are required to retain all legal sized halibut. Some bycatch mortality, therefore, is assumed for undersize halibut incidentally taken by an IFQ vessel. Nonetheless, vessels with IFQ may have a different bycatch mortality rate compared to vessels without halibut IFQ. NMFS will not have in-season



information on whether a vessel has halibut IFQ unless an observer is present to report retained amounts of halibut or until a quota share holder onboard an unobserved vessel reports landed amounts of halibut.

NMFS typically estimates halibut bycatch mortality by assuming that no halibut are retained and by applying observed bycatch rates to unobserved catch of groundfish. This procedure will not work if some groundfish vessels legally retain halibut. Furthermore, NMFS will need to develop a bycatch monitoring program that will identify vessels targeting on halibut so that the associated halibut discard mortality is not attributed to a groundfish fishery's bycatch allowance.

Halibut catch and discard amounts can be estimated for observed vessels in a manner that would allow monitoring of halibut bycatch mortality. Hook-and-line fisheries that are predominately comprised of unobserved vessels, however, present a vexing problem for monitoring halibut bycatch mortality, particularly under the IFQ program if bycatch rate assumptions effectively cannot be applied to the fleet for in-season estimates of halibut bycatch mortality.

NMFS Recommendations for 1995 halibut bycatch management:

The Council could recommend that NMFS implement rulemaking to establish the GOA and BSAI hook-and-line sablefish fisheries as separate fisheries for purposes of allocating halibut bycatch mortality allowances. This regulation would need to be effective prior to the opening date of the 1995 hook-and-line sablefish fishery (sometime this spring). Once these fisheries are separately defined in regulations, they can be exempted from halibut bycatch limitations during the annual specification process.

Under this recommendation, the Pacific cod, Greenland turbot, and rockfish hook-and-line fisheries would continue to operate under halibut bycatch mortality allowances. NMFS would revise procedures necessary to monitor halibut bycatch mortality for four different categories of vessels participating in these fisheries. A possible monitoring scheme is set out below:

Vessel Category

Management Scheme

Observed Vessels with IFQ halibut

- If target is halibut, no bycatch is assigned to a groundfish bycatch allowance

- If target is groundfish, observed halibut discard is applied to a groundfish fishery's bycatch allowance

Unobserved Vessels with Subsequent Landing of IFQ Halibut

- Halibut bycatch will be estimated using an assumed bycatch rate for the groundfish fishery based on observed vessels with no IFQ halibut. Estimated bycatch later will be reduced by the IFQ landing. If the balance > 0 mt, the balance is applied to a groundfish fishery's bycatch allowance

Observed Vessels Without IFQ

- Observed bycatch rates will be used to estimate halibut bycatch amount that is applied to a groundfish fishery's bycatch allowance

Unobserved vessels Without Subsequent Landing of IFQ halibut

- Assumed bycatch rates based on observed boats are applied to vessel's catch and resulting estimate of halibut bycatch mortality is applied to a groundfish fishery's bycatch allowance

NOTE: THE SABLEFISH HOOK-AND-FISHERY WOULD BE EXEMPT FROM HALIBUT BYCATCH RESTRICTIONS

Given that the GOA hook-and-line sablefish fishery has accounted for most of the halibut bycatch mortality in the GOA, exemption of this fishery from halibut bycatch restrictions under the IFQ program probably would support a reduction in the 1995 halibut bycatch limit established for GOA hook-and-line fisheries as part of the annual specification process. Based on estimated 1994 halibut bycatch mortality experienced in the GOA Pacific cod and rockfish hook-and-line fisheries (214 metric tons), a bycatch limit of 250 metric tons probably would be adequate.

The hook-and-line fisheries for BSAI Pacific cod and Greenland turbot have accounted for most of the halibut bycatch mortality estimated for the BSAI non-trawl fisheries. Therefore, we do not recommend initiating rulemaking to reduce the 900-mt halibut bycatch mortality limit established for these fisheries until we have better data on bycatch needs under the IFQ program.

NMFS staff will be available at the September 1994 to discuss these issues further if necessary.

Sincerely,



Steven Pennoyer
Director, Alaska Region



ALASKA CRAB COALITION

3901 Leary Way (Bldg.) N.W., Suite #6 • Seattle, WA 98107 • (206) 547-7560 • FAX (206) 547-0130

DATE: September 22, 1994

TO: Mr. Rick Lauber, Chairman
North Pacific Fishery Management Council
P.O. Box 103136
Anchorage, Alaska 99501

FROM: Arni Thomson, Executive Director

RE: AGENDA ITEM D-3(b) BERING SEA/ALEUTIAN ISLANDS
GROUNDFISH AND BYCATCH SPECIFICATIONS FOR 1994:
THE NEED FOR REDUCTION OF KING AND TANNER CRAB
BYCATCHES IN THE GROUNDFISH FISHERIES

BACKGROUND:

The Alaska Crab Coalition (ACC) references its letter of November 17, 1993 to the NPFMC and we resubmit it for additional background at this time. The ACC letter requested the Council begin analyzing crab bycatches in the groundfish fisheries, with a focus on reduction of king and tanner crab bycatches in the roe rock sole fishery in statistical areas 516 and 509.

The letter also describes recent ADF&G/Board of Fisheries approved management measures imposed on the crab fleet to reduce bycatches and waste in fishing operations.

Since last November, the downturn of king and tanner crab has worsened to the extent that an economic crisis is developing for the overcapitalized fleet. In particular, the king crab resource is in a state of crisis and there will be no season for the first time since 1983.

Last winter the rock sole fleet joined together in a voluntary shutdown of the fishery for one week in an attempt to reduce king crab bycatches, but by the conclusion of the fishery the fleet had exceeded its bycatch apportionment of king crab by more than 100%, ending up with a total of 200,000 king crabs in areas 509 and 516. The rock sole cap in Zone 1 is 80,000 king crab. This fishery customarily exceeds its bycatch level of king crab every year.

RECOMMENDATIONS:

1. With the resource crisis that has developed with Bristol Bay king crab stocks and with the crab fleet being unable to have a season due to potential reproductive damage to the below threshold females, it does not seem justifiable for

2

Similarly, the bairdi resource has also entered a downturn and for 1994, the quota has been set at 19.7 million pounds, more than a forty per cent reduction from the 1992/93 quota of 35.1 million pounds. The trawl bycatch cap of 4 million animals (assuming an average weight of 1 pound per animal), represents 20% of the harvestable quota, a rather high bycatch cap to harvest quota ratio (1:5).

King crab is still at depressed abundance levels. Even though the 1993 Bristol Bay quota has been increased substantially to 16.7 million pounds, from 10 million pounds in 1992, the stocks are at historically low levels.

RECENT MANAGEMENT MEASURES IMPOSED ON THE CRAB FLEET TO REDUCE BYCATCH AND WASTE IN FISHING OPERATIONS:

The burden of conservation should not be laid entirely on the crab fleet. For the last two years, the crab fleet has been restricted considerably by pot limits, and most recently, a reduction in the height of the crab pot tunnel opening from five inches to three inches in the bairdi crab fishery. The intent is to reduce the bycatches of mature male and female king crab.

Escape mesh for one third of a vertical sidewall, has been set at a minimum of 7 3/4 inches for the Bristol Bay king crab fishery, to allow for maximum escapage of undersize juveniles and females. An 18 inch seam, sewn with light-weight biodegradable #30 cotton thread is also mandatory in all king and tanner crab pots. This eliminates ghost fishing in the case of lost pots. However, since the imposition of the pot limits, lost pots are now at a minimum, with very low pot losses being reported.

In addition, for the first time in November 1993, retention of bairdi crab has been permitted in the Bristol Bay king crab fishery. After the closure of the king crab fishery, no bairdi fishing is to be allowed in the entire area east of 163 degrees West longitude, habitat for the major concentrations of female and juvenile king crab. Both of these measures are also aimed at minimizing the bycatch of king crab.

The ACC also supports combining the bairdi and opilio fisheries with a simultaneous opening of both of these fisheries on January 15th, to minimize handling and discard mortality of both species. However, the ACC has met with considerable opposition to this season change from others outside the ACC, who prefer the November opening of bairdi following the king crab fishery.

RECOMMENDATIONS:

1. The excesses of trawl bycatch of bairdi and opilio crab particularly in the yellowfin sole fishery and both the bottom and midwater pollock fisheries need to be curtailed in 1994 (3.2 million crab, just with midwater gear).



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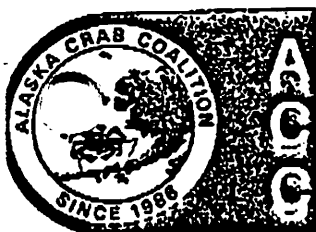
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the Council to allow a single king crab for bycatch in the bottom trawl fisheries in areas 516 and 509.

Thus ACC is recommending zero bycatch of king crab in the roe rock sole fishery in areas 516 and 509, on an emergency basis for 1995.

2. The ACC also requests that the Council initiate immediate action to close area 516 to all bottom trawling. With no king crab season, this area is closed to all crab fishing as is area 512. In other words, if area 516 is closed to pot fishing for king and tanner crabs for conservation reasons, it should also be closed to bottom trawling.



ALASKA CRAB COALITION

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FROM: Arni Thomson, Executive Director *Arni Thomson*

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BYCATCHES IN THE GROUNDFISH FISHERIES

INTRODUCTION:

Recently the ACC has requested that the NMFS produce cumulative crab bycatch reports for the Bering Sea groundfish fisheries for 1992 and 1993 as part of the NMFS management report for the December 1993 Council Meeting in Seattle.

These reports will substantiate the information recently released by the Alaska Dept. of Fish and Game in a special report on bycatch of prohibited species and discards in the groundfish fisheries. The report is quoted extensively in the Anchorage Daily News, October 17, 1993 (Enclosure). The report estimates a total of 20 million animals taken as crab bycatch in 1992 in the Bering Sea groundfish fisheries. Although there are bairdi and king crab bycatch caps of 4 million animals and 200,000 animals respectively, the balance of the bycatch is opilio crab, an estimated 16 million animals.

As the Council is aware, there is no cap on opilio crab and no reports tracking opilio bycatch are even being presented to the Council. However, this has been a valuable fishery for the last seven years and in each of the last three years it has brought over \$150 million dollars in exvessel revenues to the Bering Sea crab fleet.

The opilio resource has now entered a downturn in the abundance cycle and for 1994, the quota has been set at 107 million pounds, half of what it was in 1993 and less than one third of what it was in 1992 and 1991, when the quotas exceeded 300 million pounds. If the opilio bycatch continues at the 1992 level, it will begin to represent a significant percentage of the harvestable quota that is being discarded as waste.

2

Similarly, the bairdi resource has also entered a downturn and for 1994, the quota has been set at 19.7 million pounds, more than a forty per cent reduction from the 1992/93 quota of 35.1 million pounds. The trawl bycatch cap of 4 million animals (assuming an average weight of 1 pound per animal), represents 20% of the harvestable quota, a rather high bycatch cap to harvest quota ratio (1:5).

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The burden of conservation should not be laid entirely on the crab fleet. For the last two years, the crab fleet has been restricted considerably by pot limits, and most recently, a reduction in the height of the crab pot tunnel opening from five inches to three inches in the bairdi crab fishery. The intent is to reduce the bycatches of mature male and female king crab.

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In addition, for the first time in November 1993, retention of bairdi crab has been permitted in the Bristol Bay king crab fishery. After the closure of the king crab fishery, no bairdi fishing is to be allowed in the entire area east of 163 degrees West longitude, habitat for the major concentrations of female and juvenile king crab. Both of these measures are also aimed at minimizing the bycatch of king crab.

The ACC also supports combining the bairdi and opilio fisheries with a simultaneous opening of both of these fisheries on January 15th, to minimize handling and discard mortality of both species. However, the ACC has met with considerable opposition to this season change from others outside the ACC, who prefer the November opening of bairdi following the king crab fishery.

RECOMMENDATIONS:

1. The excesses of trawl bycatch of bairdi and opilio crab particularly in the yellowfin sole fishery and both the bottom and midwater pollock fisheries need to be curtailed in 1994 (3.2 million crab, just with midwater gear).

3

Bycatch reduction can be started by establishing bycatch incentive rate programs in 1994 for these fisheries, similar to the incentive programs for king crab. This can be followed by a cap for opilio in 1995 and a reduced cap for bairdi. The present Zone 2 cap of 3 million animals is normally not constraining. Therefore it is not providing an incentive for reducing bycatch.

2. Since only very limited pot fishing for king crab is now being permitted in the area east of 163 degrees, then the ACC feels it is fair to request that the Bristol Bay trawl closure zone from 160 to 162 degrees West longitude be expanded one degree of longitude to 163 degrees W. longitude to provide improved protection to king crab.

3. The ADF&G report on bycatch also highlights the roe rock sole fishery, which occurs almost exclusively in the Zone 1 Bristol Bay king crab area. This fishery, in terms of both groundfish discards and discards of prohibited species of king and bairdi crab and halibut has been identified as "the most wasteful fishery in Alaska." It is a fishery of negative economic proportions, due to the potential lost value of the finfish and shellfish discarded during the intense roe fishery.

Out of a total groundfish harvest of 115.5 million pounds in the roe rock sole fishery, 61% (70 million pounds) of the total catch was discarded in 1992. (In 1993, 68% of the total catch was discarded.) In 1992, the prohibited species discards consisted of an additional 2 million crab and 1.6 million pounds of halibut mortality.

For the roe rock sole fishery, the ACC recommends that the NPFMC phase this fishery out over a three year period, by incremental reductions in the TAC quota.

To date, the NPFMC has taken the lead among Councils in the United States in implementing bycatch reduction and observer programs and it is actively working toward reducing discards in the groundfish fisheries through development of a weighing system for offshore caught groundfish (shorebased deliveries of groundfish are systematically weighed dockside).

In order to maintain its lead on the reduction of waste in fisheries in 1994 and in the face of bycatch reduction language being included in the MFCMA during the coming year, the Council should utilize management tools within its grasp to reduce crab bycatches in 1994.

cc: Steve Pennoyer, RD, NMFS, AKR
Tom Elias, Chairman, Alaska Board of Fisheries
Jeffrey Koenings, Dir. Com. Fish. ADF&G
Bill Mott, Marine Fish Conservation Network



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RECOMMENDATIONS:

1. With the resource crisis that has developed with Bristol Bay king crab stocks and with the crab fleet being unable to have a season due to potential reproductive damage to the below threshold females, it does not seem justifiable for

the Council to allow a single king crab for bycatch in the bottom trawl fisheries in areas 516 and 509.

Thus ACC is recommending zero bycatch of king crab in the roe rock sole fishery in areas 516 and 509, on an emergency basis for 1995.

2. The ACC also requests that the Council initiate immediate action to close area 516 to all bottom trawling. With no king crab season, this area is closed to all crab fishing as is area 512. In other words, if area 516 is closed to pot fishing for king and tanner crabs for conservation reasons, it should also be closed to bottom trawling.

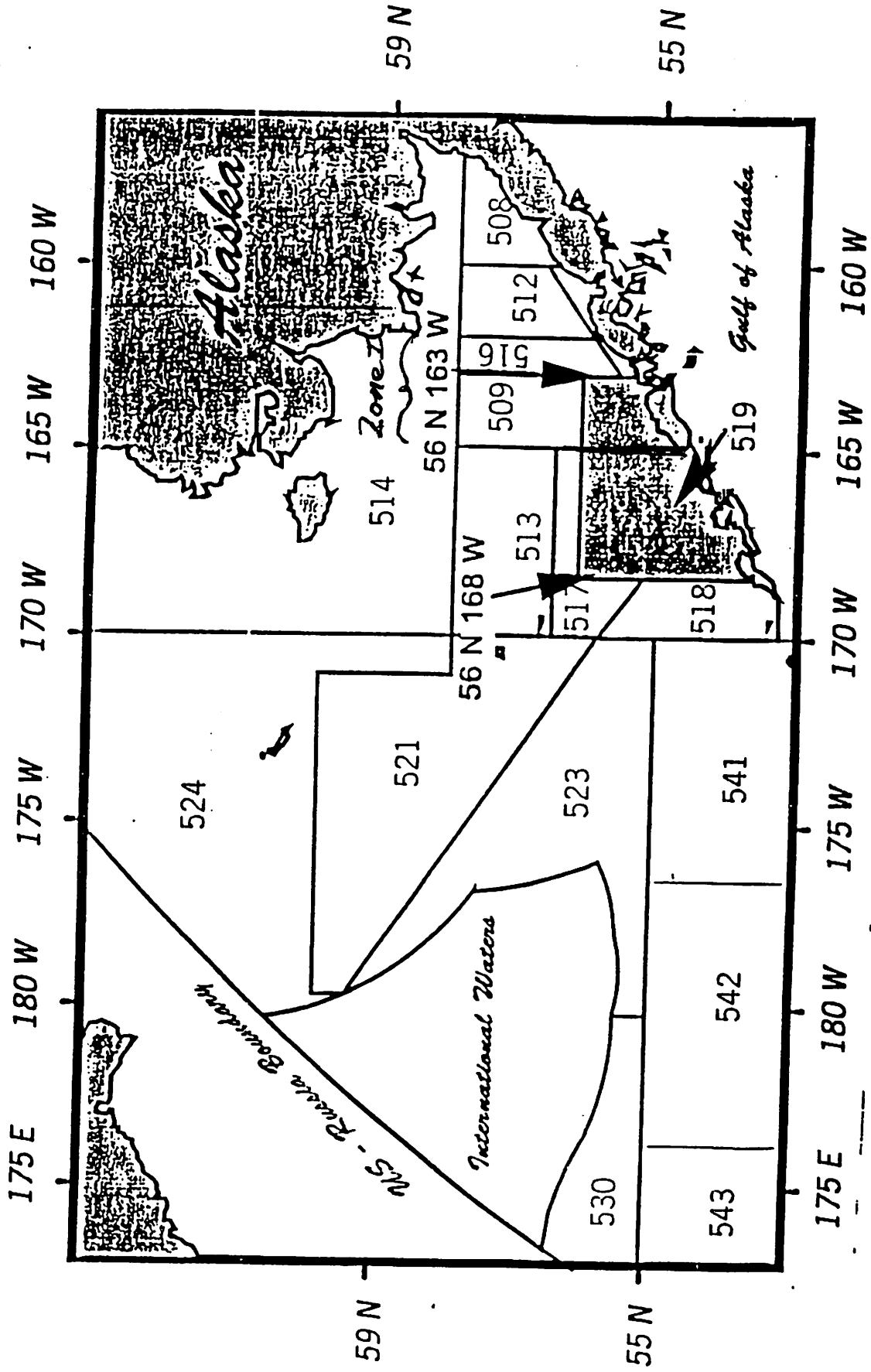


Figure 2. BSAI Catcher Vessel Operational Area

1994 Bairdi Tanner and Red King Crab bycatch by target fishery, zone, & mode in the Bering Sea and Aleutian Islands

| KEY | Trawl Gear | | | | |
|---------|-----------------|----------------|---------------|------------------|-----------------|
| | Groundfish Tons | Bairdi Bycatch | Bairdi per mt | Red King Bycatch | Red King per mt |
| A 517 P | 63.62 | 0 | 0.00 | 0 | 0.00 |
| A 541 P | 16,684.05 | 0 | 0.00 | 0 | 0.00 |
| A 542 P | 51,503.31 | 0 | 0.00 | 0 | 0.00 |
| A 543 P | 13,847.74 | 0 | 0.00 | 0 | 0.00 |
| B 509 F | 339.05 | 149 | 0.44 | 42 | 0.13 |
| B 509 M | 2,088.42 | 0 | 0.00 | 0 | 0.00 |
| B 509 P | 39,339.08 | 30,724 | 0.78 | 6,672 | 0.17 |
| B 513 M | 168.89 | 0 | 0.00 | 0 | 0.00 |
| B 513 P | 19,267.79 | 51,308 | 3.18 | 462 | 0.02 |
| B 514 P | 124.92 | 75 | 0.60 | 4 | 0.03 |
| B 516 M | 55.77 | 311 | 5.58 | 711 | 12.74 |
| B 516 P | 2,410.99 | 18,660 | 7.74 | 29,452 | 12.22 |
| B 517 F | 84.99 | 0 | 0.00 | 0 | 0.00 |
| B 517 M | 122.42 | 490 | 4.00 | 0 | 0.00 |
| B 517 P | 12,256.09 | 34,498 | 2.81 | 0 | 0.00 |
| B 518 P | 108.85 | 0 | 0.00 | 0 | 0.00 |
| B 519 M | 84.47 | 0 | 0.00 | 0 | 0.00 |
| B 521 M | 10,401.68 | 560 | 0.05 | 0 | 0.00 |
| B 521 P | 33,490.06 | 86,209 | 1.68 | 3,213 | 0.10 |
| B 523 P | 471.77 | 0 | 0.00 | 0 | 0.00 |
| B 524 P | 8.82 | 6 | 0.54 | 0 | 0.00 |
| B 541 P | 702.19 | 0 | 0.00 | 0 | 0.00 |
| C 509 F | 44,938.76 | 63,925 | 1.42 | 349 | 0.01 |
| C 509 M | 1,749.55 | 93 | 0.05 | 0 | 0.00 |
| C 509 P | 12,231.63 | 12,717 | 1.04 | 420 | 0.03 |
| C 513 F | 22.82 | 26 | 1.15 | 1 | 0.06 |
| C 513 M | 7.80 | 27 | 3.48 | 0 | 0.00 |
| C 513 P | 3,470.42 | 33,252 | 9.58 | 133 | 0.04 |
| C 514 P | 81.92 | 18,824 | 229.78 | 0 | 0.00 |
| C 517 F | 12,249.84 | 75,032 | 6.13 | 0 | 0.00 |
| C 517 M | 275.07 | 292 | 1.06 | 0 | 0.00 |
| C 517 P | 2,757.76 | 26,716 | 9.69 | 0 | 0.00 |
| C 518 F | 2.91 | 1 | 0.21 | 0 | 0.00 |
| C 519 F | 613.35 | 63 | 0.10 | 0 | 0.00 |
| C 519 P | 84.22 | 7 | 0.08 | 0 | 0.00 |
| C 521 F | 12.50 | 24 | 1.93 | 0 | 0.01 |
| C 521 P | 3,347.71 | 2,647 | 0.79 | 0 | 0.00 |
| C 523 P | 78.43 | 3 | 0.04 | 0 | 0.00 |
| C 524 M | 78.81 | 50 | 0.63 | 0 | 0.00 |
| C 524 P | 2,173.97 | 2,654 | 2.22 | 0 | 0.00 |
| C 541 M | 24.08 | 7 | 0.27 | 0 | 0.00 |
| C 541 P | 7,079.81 | 1,423 | 0.20 | 289 | 0.04 |
| C 542 P | 754.37 | 2 | 0.00 | 11 | 0.04 |
| F 513 P | 10,154.35 | 65,475 | 6.48 | 0 | 0.00 |
| F 514 P | 22.85 | 0 | 0.00 | 0 | 0.00 |
| F 517 P | 1,909.98 | 11,303 | 5.92 | 0 | 0.00 |
| F 519 P | 1,677.63 | 1,724 | 1.03 | 0 | 0.00 |
| F 521 P | 5,492.08 | 35,618 | 6.49 | 0 | 0.00 |
| F 524 P | 59.28 | 0 | 0.00 | 0 | 0.00 |
| X 541 P | 9,842.66 | 11 | 0.00 | 1,623 | 0.16 |
| X 542 P | 3,189.49 | 0 | 0.00 | 0 | 0.00 |
| X 543 P | 303.66 | 0 | 0.00 | 0 | 0.00 |
| P 509 F | 110,315.24 | 1,255 | 0.01 | 4 | 0.00 |
| P 509 M | 48,012.42 | 99 | 0.00 | 0 | 0.00 |
| P 509 P | 187,014.27 | 9,418 | 0.05 | 653 | 0.00 |
| P 513 M | 527.18 | 39 | 0.07 | 0 | 0.00 |
| P 513 P | 20,289.22 | 41,215 | 2.03 | 0 | 0.00 |
| P 516 P | 67.28 | 1 | 0.01 | 0 | 0.00 |
| P 517 F | 179,992.50 | 4,182 | 0.02 | 0 | 0.00 |
| P 517 M | 84,976.11 | 610 | 0.01 | 0 | 0.00 |
| P 517 P | 159,797.76 | 24,624 | 0.18 | 0 | 0.00 |
| P 518 P | 366.81 | 0 | 0.00 | 0 | 0.00 |
| P 519 P | 25,162.48 | 0 | 0.00 | 0 | 0.00 |
| P 519 M | 169.84 | 0 | 0.00 | 0 | 0.00 |
| P 519 P | 6,116.59 | 0 | 0.00 | 0 | 0.00 |
| P 521 M | 10,323.40 | 3,933 | 0.38 | 0 | 0.00 |

*Bottoms Trawl
Dollock* *36,000*

BAIRD

KMG

Composition
of
Rock Sole
190,000
pycnel?
(Size sex etc)

| | | | | | |
|---------|-------------------|---------|-------|---------|------|
| P 521 P | 122,605.23 | 108,257 | 0.88 | 16 | 0.00 |
| P 523 P | 521.02 | 40 | 0.08 | 0 | 0.00 |
| P 524 P | 49.96 | 0 | 0.00 | 0 | 0.00 |
| P 541 P | 14,172.49 | 11 | 0.00 | 0 | 0.00 |
| P 541 M | 1,489.11 | 0 | 0.00 | 0 | 0.00 |
| P 541 P | 32,448.49 | 0 | 0.00 | 0 | 0.00 |
| R 508 M | 11.29 | 0 | 0.00 | 0 | 0.00 |
| R 509 M | 112.68 | 7,676 | 68.12 | 0 | 0.00 |
| R 509 P | 23,136.02 | 231,485 | 10.09 | 65,444 | 2.83 |
| R 512 P | 100.50 | 449 | 4.47 | 63 | 0.62 |
| R 513 P | 8,890.15 | 69,838 | 7.86 | 10,463 | 1.18 |
| R 514 P | 3,247.16 | 602 | 0.19 | 712 | 0.22 |
| R 516 P | 26,540.38 | 118,429 | 4.46 | 124,641 | 4.70 |
| R 517 P | 4,203.04 | 28,428 | 4.76 | 50 | 0.01 |
| R 519 P | 1,171.94 | 3,903 | 3.33 | 930 | 0.79 |
| R 521 P | 5,504.61 | 109,025 | 19.81 | 9,269 | 1.68 |
| R 523 P | 15.29 | 0 | 0.00 | 0 | 0.00 |
| R 524 P | 2,108.15 | 5,152 | 2.44 | 238 | 0.11 |
| S 517 F | 73,000 MT 6.76 | 0 | 0.00 | 0 | 0.00 |
| S 517 P | 21.24 | 0 | 0.00 | 0 | 0.00 |
| S 518 P | 21.07 | 0 | 0.00 | 0 | 0.00 |
| S 519 P | 186.31 | 575 | 3.09 | 0 | 0.00 |
| S 541 P | 267.38 | 0 | 0.00 | 0 | 0.00 |
| T 517 F | 56.69 | 2 | 0.06 | 2 | 0.04 |
| T 517 P | 833.03 | 54 | 0.07 | 36 | 0.04 |
| T 518 P | 2,787.84 | 0 | 0.00 | 0 | 0.00 |
| T 519 P | 667.15 | 400 | 0.60 | 7 | 0.01 |
| T 519 P | 1,756.63 | 1,447 | 0.82 | 47 | 0.03 |
| T 541 P | 1,216.43 | 0 | 0.00 | 236 | 0.19 |
| Y 509 F | 3,803.43 | 44,127 | 11.60 | 1,089 | 0.29 |
| Y 509 M | 132.36 | 0 | 0.00 | 0 | 0.00 |
| Y 509 P | 23,255.52 | 195,048 | 8.39 | 7,880 | 0.34 |
| Y 513 P | 267.07 | 934 | 3.50 | 0 | 0.00 |
| Y 513 M | 29.12 | 209 | 7.18 | 0 | 0.00 |
| Y 513 P | 50,930.21 | 300,863 | 5.91 | 338 | 0.01 |
| Y 514 P | 3,576.28 | 0 | 0.00 | 431 | 0.12 |
| Y 514 M | 1,618.04 | 0 | 0.00 | 195 | 0.12 |
| Y 514 P | 17,177.55 | 416 | 0.02 | 2,020 | 0.12 |
| Y 516 P | 2,817.92 | 4,323 | 1.53 | 2,426 | 0.86 |
| Y 517 P | 86.99 | 1,787 | 11.35 | 0 | 0.00 |
| Y 521 P | 19.55 | 12 | 0.89 | 0 | 0.01 |
| Y 524 P | 13.05 | 0 | 0.00 | 0 | 0.00 |
| Z 509 P | 13.45 | 0 | 0.00 | 0 | 0.00 |
| Z 513 P | 0.18 | 0 | 2.44 | 0 | 0.00 |
| Z 517 P | 1.19 | 0 | 0.00 | 0 | 0.00 |
| Z 541 M | 0.21 | 0 | 0.00 | 0 | 0.00 |
| Z 541 P | 0.25 | 0 | 0.00 | 0 | 0.00 |

Yellowfin Sole
10,000

1994 Bairdi Tanner and Red King Crab bycatch by cargo fishery, zone, & mode
in the Bering Sea and Aleutian Islands

Hook & Line Gear

| KEY | Groundfish Tons | | Bairdi Bycatch | Bairdi per mt | Red King Bycatch | Red King per mt |
|---------|--------------------|-------|-------------------|------------------|---------------------|--------------------|
| | | | | | | |
| B 517 P | 28.17 | 0 | 0 | 0.00 | 0 | 0.00 |
| B 521 P | 167.92 | 0 | 0 | 0.00 | 0 | 0.00 |
| C 609 P | 4.72 | 2 | 0 | 0.44 | 0 | 0.02 |
| C 909 P | 5,521.05 | 3,070 | 16 | 0.86 | 0 | 0.00 |
| C 512 P | 3.74 | 1 | 7 | 0.26 | 0 | 1.83 |
| C 513 P | 3,024.11 | 2,596 | 2 | 0.89 | 0 | 0.00 |
| C 514 P | 12.37 | 125 | 0 | 10.09 | 0 | 0.00 |
| C 516 P | 11.91 | 3 | 65 | 0.18 | 0 | 4.65 |
| C 517 P | 9,121.78 | 6,396 | 0 | 0.70 | 0 | 0.00 |
| C 518 P | 97.27 | 0 | 1 | 0.00 | 0 | 0.01 |
| C 519 P | 1,262.05 | 3 | 0 | 0.00 | 0 | 0.00 |
| C 519 P | 462.53 | 4 | 0 | 0.01 | 0 | 0.00 |
| C 519 P | 585.84 | 4 | 0 | 0.01 | 0 | 0.00 |
| C 521 P | 40,494.73 | 5,012 | 0 | 0.12 | 0 | 0.00 |
| C 523 P | 3,483.23 | 87 | 94 | 0.03 | 0 | 0.00 |
| C 524 P | 2,345.49 | 326 | 8 | 0.15 | 0 | 0.00 |
| C 541 P | 28.91 | 0 | 0 | 0.00 | 0 | 0.00 |
| C 543 P | 3,258.16 | 0 | 0 | 0.00 | 0 | 0.00 |
| C 543 P | 32.28 | 0 | 7 | 0.00 | 0 | 0.00 |
| C 543 P | 2,580.28 | 0 | 0 | 0.00 | 0 | 0.00 |
| C 543 P | 580.76 | 0 | 0 | 0.00 | 0 | 0.00 |
| K 518 P | 0.37 | 0 | 0 | 0.00 | 0 | 0.00 |
| K 520 P | 0.91 | 0 | 0 | 0.00 | 0 | 0.00 |
| K 541 P | 1.41 | 0 | 0 | 0.00 | 0 | 0.00 |
| S 62 P | 9.61 | 0 | 0 | 0.00 | 0 | 0.04 |
| S 541 P | 5.24 | 1 | 0 | 0.11 | 0 | 0.00 |
| P 521 P | 422.94 | 0 | 0 | 0.00 | 0 | 0.00 |
| P 523 P | 115.65 | 0 | 0 | 0.00 | 0 | 0.00 |
| S 509 P | 147.81 | 0 | 0 | 0.00 | 0 | 0.00 |
| S 527 P | 107.22 | 0 | 0 | 0.00 | 0 | 0.00 |
| S 517 P | 39.41 | 0 | 0 | 0.00 | 0 | 0.00 |
| S 518 P | 394.18 | 1 | 0 | 0.00 | 0 | 0.00 |
| S 518 P | 218.89 | 1 | 0 | 0.00 | 0 | 0.00 |
| S 519 P | 186.99 | 0 | 4 | 0.00 | 0 | 0.02 |
| S 519 P | 87.42 | 0 | 0 | 0.00 | 0 | 0.00 |
| S 521 P | 2.00 | 0 | 0 | 0.00 | 0 | 0.00 |
| S 523 P | 8.19 | 0 | 0 | 0.00 | 0 | 0.00 |
| S 541 P | 772.39 | 0 | 0 | 0.00 | 0 | 0.00 |
| S 541 P | 1,083.69 | 0 | 1 | 0.00 | 0 | 0.00 |
| S 542 P | 257.61 | 0 | 11 | 0.01 | 0 | 0.01 |
| S 542 P | 442.65 | 0 | 1 | 0.01 | 0 | 0.01 |
| S 543 P | 51.58 | 0 | 220 | 0.00 | 0 | 0.50 |
| T 517 P | 108.24 | 0 | 0 | 0.00 | 0 | 0.01 |
| T 517 P | 40.17 | 0 | 0 | 0.00 | 0 | 0.00 |
| T 518 P | 189.62 | 0 | 2 | 0.00 | 0 | 0.05 |
| T 518 P | 115.31 | 0 | 0 | 0.00 | 0 | 0.00 |
| T 519 P | 107.99 | 0 | 0 | 0.00 | 0 | 0.00 |
| T 519 P | 78.88 | 0 | 0 | 0.00 | 0 | 0.00 |
| T 521 P | 103.82 | 0 | 0 | 0.00 | 0 | 0.00 |
| T 521 P | 69.67 | 0 | 0 | 0.00 | 0 | 0.00 |
| T 523 P | 241.83 | 0 | 0 | 0.00 | 0 | 0.00 |
| T 541 P | 16.74 | 0 | 0 | 0.00 | 0 | 0.00 |
| T 541 P | 417.12 | 0 | 14 | 0.00 | 0 | 0.03 |
| T 542 P | 79.24 | 0 | 0 | 0.00 | 0 | 0.00 |
| S 541 P | 0.02 | 0 | 0 | 0.00 | 0 | 0.00 |

1994 Bairdi Tanner and Red King Crab bycatch by target fishery, zone, & mode in the Bering Sea and Aleutian Islands

| KEY | Pot Gear | | | | |
|---------|-----------------|----------------|---------------|------------------|-----------------|
| | Groundfish Tons | Bairdi Bycatch | Bairdi per mt | Red King Bycatch | Red King per mt |
| A 519 P | 7.06 | 5 | 0.84 | 0 | 0.00 |
| C 509 P | 1,668.49 | 5,309 | 3.18 | 1 | 0.00 |
| C 509 P | 3.58 | 28 | 7.84 | 0 | 0.00 |
| C 517 F | 69.26 | 133 | 1.93 | 0 | 0.00 |
| C 517 P | 299.01 | 134 | 0.45 | 0 | 0.00 |
| C 518 F | 215.76 | 270 | 1.25 | 12 | 0.06 |
| C 518 P | 2.98 | 0 | 0.00 | 0 | 0.00 |
| C 519 F | 1,377.89 | 453 | 0.23 | 0 | 0.00 |
| C 519 P | 938.61 | 73 | 0.08 | 0 | 0.00 |
| C 521 P | 158.48 | 13,882 | 87.41 | 604 | 3.81 |
| C 541 P | 8.77 | 0 | 0.00 | 0 | 0.00 |
| S 541 P | 4.47 | 0 | 0.00 | 0 | 0.00 |

Groundfish tons is total of all allocated groundfish species harvested in the target fishery.

The KEY is composed of a target fishery, the zone (subarea), and the processing mode. Targets and modes are defined below.

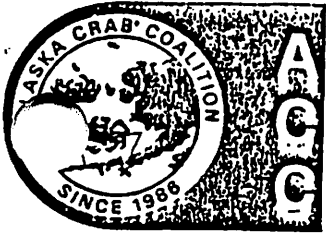
1994 Groundfish Targets

| | | |
|---|---------------------------|-----------|
| A | Atka Mackerel | BSAI |
| . | Pollock -- bottom* | BSAI, GOA |
| . | Pacific Cod | BSAI, GOA |
| D | Deep Water Flatfish* | GOA |
| H | Shallow Water Flatfish* | GOA |
| K | Rockfish | BSAI, GOA |
| L | Flathead Sole | GOA |
| O | 'Other' | BSAI, GOA |
| P | Pollock - midwater* | BSAI, GOA |
| R | Rock Sole/Other Flatfish* | BSAI |
| S | Sablefish | BSAI, GOA |
| T | Greenland Turbot | BSAI |
| W | Arrowtooth Flounder | BSAI |
| X | Roxsole | GOA |
| Y | Yellowfin sole | BSAI |

- * Pollock targets defined by catch composition, not reported gear type.
- * Deep Water Flatfish includes Dover sole and Greenland turbot.
- * Shallow Water Flatfish includes flatfish not including Deep Water Flatfish, flathead sole, rox sole, or arrowtooth flounder.
- * Other includes sculpins, sharks, skates, walchons, smelts, capelin, and octopus.
- * Other Flatfish includes all flatfish species except for Pacific halibut (a prohibited species) and all other flatfish species that have a separate specified TAC amount.

Modes

| | |
|---|-------------------|
| M | Mothership |
| P | Catcher/Processor |
| F | Shore Plant |



ALASKA CRAB COALITION

3901 Leary Way (Bldg.) N.W., Suite #6 • Seattle, WA 98107 • (206) 547-7560 • FAX (206) 547-0130

DATE: November 17, 1993

TO: Mr. Rick Lauber, Chairman
North Pacific Fishery Management Council
P.O. Box 103136
Anchorage, Alaska 99501

FROM: Arni Thomson, Executive Director

RE: AGENDA ITEM D-3(d) BERING SEA/ALEUTIAN ISLANDS
GROUNDFISH AND BYCATCH SPECIFICATIONS FOR 1994:
THE NEED FOR REDUCTION OF KING AND TANNER CRAB
BYCATCHES IN THE GROUNDFISH FISHERIES

INTRODUCTION:

Recently the ACC has requested that the NMFS produce cumulative crab bycatch reports for the Bering Sea groundfish fisheries for 1992 and 1993 as part of the NMFS management report for the December 1993 Council Meeting in Seattle.

These reports will substantiate the information recently released by the Alaska Dept. of Fish and Game in a special report on bycatch of prohibited species and discards in the groundfish fisheries. The report is quoted extensively in the Anchorage Daily News, October 17, 1993 (Enclosure). The report estimates a total of 20 million animals taken as crab bycatch in 1992 in the Bering Sea groundfish fisheries. Although there are bairdi and king crab bycatch caps of 4 million animals and 200,000 animals respectively, the balance of the bycatch is opilio crab, an estimated 16 million animals.

As the Council is aware, there is no cap on opilio crab and no reports tracking opilio bycatch are even being presented to the Council. However, this has been a valuable fishery for the last seven years and in each of the last three years it has brought over \$150 million dollars in exvessel revenues to the Bering Sea crab fleet.

The opilio resource has now entered a downturn in the abundance cycle and for 1994, the quota has been set at 107 million pounds, half of what it was in 1993 and less than one third of what it was in 1992 and 1991, when the quotas exceeded 300 million pounds. If the opilio bycatch continues at the 1992 level, it will begin to represent a significant percentage of the harvestable quota that is being discarded as waste.

Similarly, the bairdi resource has also entered a downturn and for 1994, the quota has been set at 19.7 million pounds, more than a forty per cent reduction from the 1992/93 quota of 35.1 million pounds. The trawl bycatch cap of 4 million animals (assuming an average weight of 1 pound per animal), represents 20% of the harvestable quota, a rather high bycatch cap to harvest quota ratio (1:5).

King crab is still at depressed abundance levels. Even though the 1993 Bristol Bay quota has been increased substantially to 16.7 million pounds, from 10 million pounds in 1992, the stocks are at historically low levels.

RECENT MANAGEMENT MEASURES IMPOSED ON THE CRAB FLEET TO REDUCE BYCATCH AND WASTE IN FISHING OPERATIONS:

The burden of conservation should not be laid entirely on the crab fleet. For the last two years, the crab fleet has been restricted considerably by pot limits, and most recently, a reduction in the height of the crab pot tunnel opening from five inches to three inches in the bairdi crab fishery. The intent is to reduce the bycatches of mature male and female king crab.

Escape mesh for one third of a vertical sidewall, has been set at a minimum of 7 3/4 inches for the Bristol Bay king crab fishery, to allow for maximum escapage of undersize juveniles and females. An 18 inch seam, sewn with light-weight biodegradable #30 cotton thread is also mandatory in all king and tanner crab pots. This eliminates ghost fishing in the case of lost pots. However, since the imposition of the pot limits, lost pots are now at a minimum, with very low pot losses being reported.

In addition, for the first time in November 1993, retention of bairdi crab has been permitted in the Bristol Bay king crab fishery. After the closure of the king crab fishery, no bairdi fishing is to be allowed in the entire area east of 163 degrees West longitude, habitat for the major concentrations of female and juvenile king crab. Both of these measures are also aimed at minimizing the bycatch of king crab.

The ACC also supports combining the bairdi and opilio fisheries with a simultaneous opening of both of these fisheries on January 15th, to minimize handling and discard mortality of both species. However, the ACC has met with considerable opposition to this season change from others outside the ACC, who prefer the November opening of bairdi following the king crab fishery.

RECOMMENDATIONS:

1. The excesses of trawl bycatch of bairdi and opilio crab particularly in the yellowfin sole fishery and both the bottom and midwater pollock fisheries need to be curtailed in 1994 (3.2 million crab, just with midwater gear).

Bycatch reduction can be started by establishing bycatch incentive rate programs in 1994 for these fisheries, similar to the incentive programs for king crab. This can be followed by a cap for opilio in 1995 and a reduced cap for bairdi. The present Zone 2 cap of 3 million animals is normally not constraining. Therefore it is not providing an incentive for reducing bycatch.

2. Since only very limited pot fishing for king crab is now being permitted in the area east of 163 degrees, then the ACC feels it is fair to request that the Bristol Bay trawl closure zone from 160 to 162 degrees West longitude be expanded one degree of longitude to 163 degrees W. longitude to provide improved protection to king crab.

3. The ADF&G report on bycatch also highlights the roe rock sole fishery, which occurs almost exclusively in the Zone 1 Bristol Bay king crab area. This fishery, in terms of both groundfish discards and discards of prohibited species of king and bairdi crab and halibut has been identified as "the most wasteful fishery in Alaska." It is a fishery of negative economic proportions, due to the potential lost value of the finfish and shellfish discarded during the intense roe fishery.

Out of a total groundfish harvest of 115.5 million pounds in the roe rock sole fishery, 61% (70 million pounds) of the total catch was discarded in 1992. (In 1993, 68% of the total catch was discarded.) In 1992, the prohibited species discards consisted of an additional 2 million crab and 1.6 million pounds of halibut mortality.

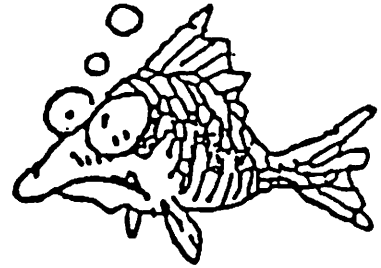
For the roe rock sole fishery, the ACC recommends that the NPFMC phase this fishery out over a three year period, by incremental reductions in the TAC quota.

To date, the NPFMC has taken the lead among Councils in the United States in implementing bycatch reduction and observer programs and it is actively working toward reducing discards in the groundfish fisheries through development of a weighing system for offshore caught groundfish (shorebased deliveries of groundfish are systematically weighed dockside).

In order to maintain its lead on the reduction of waste in fisheries in 1994 and in the face of bycatch reduction language being included in the MFCMA during the coming year, the Council should utilize management tools within its grasp to reduce crab bycatches in 1994.

cc: Steve Pennoyer, RD, NMFS, AKR
Tom Elias, Chairman, Alaska Board of Fisheries
Jeffrey Koenings, Dir. Com. Fish. ADF&G
Bill Mott, Marine Fish Conservation Network

North
Pacific
Longline
Association



September 28, 1995

Mr. Richard B. Lauber, Chairman
North Pacific Fishery Management Council
P.O. Box 103136
Anchorage, AK 99510

**RE: Seasonal Apportionment of BSAI Cod TAC, Halibut PSC,
Etc.**

Dear Rick:

The North Pacific Longline Association would like to make the following proposed recommendations for the 1995 specifications:

Seasonal Apportionment - BSAI Fixed Gear Cod TAC

We recommend that the 1995 fixed gear cod TAC be divided between the first and third trimesters, 70/30 - 70% to the first trimester, 30% to the third.

Seasonal Apportionment of Halibut PSC

We recommend that halibut PSC devoted to the BSAI fixed gear cod fishery be apportioned seasonally in the same manner - 70% to the first trimester, 30% to the third.

Underages/Overages

Cod TAC not harvested in the first trimester should be transferred to the third. Halibut PSC not used in the first trimester should be transferred to the third. Any cod TAC in excess of 70% harvested in the first trimester should be deducted from the third. Ditto with halibut PSC.

"Other" Fishery - Halibut PSC

This year 175 mt of halibut PSC was dedicated to the fixed gear "Other" fishery in the BSAI - sablefish, rockfish, Greenland turbot. About 100 mt of halibut PSC was used in the turbot fishery, and 50 or 60 mt are used each year in the sablefish fishery. If the Council elects to exempt the ITQ sablefish fishery from the halibut PSC

limitation for 1995, we propose that all or most of the 175 mt be transferred to the cod fishery. If the sablefish fishery is not exempted, we would like to request that the turbot fishery be separated from the "other" fishery for purposes of PSC apportionment.

Begin Third Trimester Fishery in October

We would like to inquire whether a mechanism exists which could postpone the beginning of the fixed gear third trimester cod fishery from September 1 to October 1. We would like to consider this change as a method of reducing halibut bycatch. If no such mechanism exists, we would like to request that the Council consider adopting a regulatory amendment which would provide such flexibility on an annual basis.

Thank you for your attention.

Sincerely,



Thorn Smith

DRAFT

DRAFT

BERING SEA AND ALEUTIAN ISLANDS GROUND FISH
Initial 1995 Recommendations and Apportionments (mt)

| Species | Area | Council TAC 1994 | Council ABC 1994 | Plan Team ABC 1995 | ABC | Council TAC | ITAC |
|------------------|---------|-------------------------|------------------|--------------------|-----------|--------------------|-----------|
| Pollock | EBS | 1,330,000 | 1,330,000 | 1,330,000 | 1,330,000 | 1,330,000 | 1,130,500 |
| | "A" | 45% | | | | as yet unspecified | |
| | "B" | 55% | | | | | |
| | AI | 56,600 | 56,600 | 56,600 | 56,600 | 56,600 | 48,110 |
| | 518 | 1,000 | 31,750 | 127,000 | 20,000 | 1,000 | 850 |
| Pacific cod | BS/AI | 191,000 | 191,000 | 191,000 | 191,000 | 191,000 | 162,350 |
| Yellowfin sole | BS/AI | 150,325 | 230,000 | 230,000 | 230,000 | 150,325 | 127,776 |
| Greenland turbot | BS/AI | 7,000 | 7,000 | 17,200 | 7,000 | 7,000 | 5,950 |
| | BS | 67% | | | | 67% | |
| | AI | 33% | | | | 33% | |
| Arrowtooth | BS/AI | 10,000 | 93,400 | 93,400 | 93,400 | 10,000 | 8,500 |
| Rock sole | BS/AI | 75,000 | 313,000 | 313,000 | 313,000 | 75,000 | 63,750 |
| Flathead sole | BS/AI | included in other flats | | 119,000 | 119,000 | 29,618 | 25,175 |
| Other flatfish | BS/AI | 56,000 | 225,000 | 106,000 | 106,000 | 26,382 | 22,425 |
| Sablefish | EBS | 540 | 540 | 540 | 540 | 540 | 459 |
| | AI | 2,800 | 2,800 | 2,800 | 2,800 | 2,800 | 2,380 |
| POP complex | | | | | | | |
| True POP | EBS | 1,910 | 1,910 | 1,910 | 1,910 | 1,910 | 1,624 |
| Other POP | EBS | 1,400 | 1,400 | 1,400 | 1,400 | 1,400 | 1,190 |
| True POP | AI | 10,900 | 10,900 | 10,900 | 10,900 | 10,900 | 9,265 |
| | Eastern | not apportioned in 1994 | | 16% | 16% | 1,744 | 1,483 |
| | Central | | | 28% | 28% | 3,052 | 2,594 |
| | Western | | | 56% | 56% | 6,104 | 5,188 |
| Sharp/Northern | AI | 5,670 | 5,670 | 5,670 | 5,670 | 5,670 | 4,820 |
| Short/Rougheye | AI | 1,220 | 1,220 | 1,220 | 1,220 | 1,220 | 1,037 |
| Other rockfish | EBS | 365 | 365 | 365 | 365 | 365 | 310 |
| | AI | 770 | 770 | 770 | 770 | 770 | 655 |
| Atka mackerel | BS/AI | 68,000 | 122,500 | 245,000 | 163,350 | 68,000 | 57,800 |
| | Eastern | 10,000 | 53,900 | 44% | 71,900 | 10,000 | 8,500 |
| | Central | 44,525 | 55,125 | 45% | 73,500 | 44,525 | 37,846 |
| | Western | 13,475 | 13,475 | 11% | 17,950 | 13,475 | 11,454 |
| Squid | BS/AI | 3,110 | 3,110 | in other sp. | 3,110 | 3,110 | 2,644 |
| Other species | BS/AI | 26,390 | 27,500 | 30,610 | 27,500 | 26,390 | 22,432 |
| BS/AI TOTAL | | 2,000,000 | 2,656,435 | 2,884,387 | 2,685,536 | 2,000,000 | 1,700,000 |

"A" season for pollock: January 20 to April 15. "B" season: August 15 to December 31.
ITAC = recommended TAC less the 15% reserve.

1995 Rock Sole Fishery Plan

In response to high king crab bycatch in the 1994 rock sole fishery, the rocksole fleet voluntarily moved its operations out of area 516 for more than a week. The effort was successful in that it demonstrated that 100% cooperation between the members of the fleet is possible when working to reduce bycatch. Following this effort, fishermen, vessel owners and managers involved in the rocksole fishery have worked together in developing a comprehensive plan to reduce bycatch and increase the percentage of retained groundfish in the rocksole fishery in 1995 and the years to follow. The plan is designed to improve the quality and timeliness of data available to the fishermen so that they can avoid high bycatch areas, reduce the catch of small rock sole, cod, pollock, and other flatfish and increase the percentage of harvested groundfish that are retained.

The rock sole fleet plans to take the following steps in 1995 to achieve these goals:

- 1. Bycatch and Retention Information Clearinghouse** -- Participants will fund an independent service to collect and process daily bycatch and groundfish retention data. The purpose of this data collection is to provide meaningful and timely information to the rock sole fleet regarding king crab and halibut bycatch rates by specific location so that PSC caps are not exceeded and the rocksole fishery is conducted with the lowest possible crab and halibut bycatch rates. Another purpose is to provide information on rock sole vessels' groundfish retention rates by location so that vessels can avoid areas where discards are likely to be high. Bycatch and retention data will be received, processed, plotted, and provided to vessels in a format similar to the one used in the SEASTATE program for salmon.
- 2. King Crab Area Closure** -- The rock sole fleet agrees to a voluntary closure of ADF&G statistical areas 162560 and 163560. Averaged over that past three years, thirty-five percent of the groundfish and sixty-six percent of the king crab were taken in these two statistical areas. This closure will be in effect through the annual spring closure of area 516. In addition to this closure, the rock sole fleet will use the information provided by the data clearinghouse to make additional "hot spot" closures as needed in order to further reduce king crab bycatch.
- 3. Large Mesh Codends** -- Vessels participating in the program will be experimenting with a variety of large mesh codends to determine the best methods for reducing the take of small, unmarketable fish. All members of the fleet have agreed to at least use six inch (between the knots) single-layer mesh for the top panels of the codends. In 1994, the most common mesh size used in the rock sole fishery was double-layer 4 1/2 inch mesh. Other vessels will be using six inch mesh on all sides of the codend. Using six inch web in the rock sole codends will considerably reduce the bycatch of small rock sole, pollock, cod, and other flatfish species. The results of this experiment will provide information on which the fishing industry can base refinements of its rock sole mesh size proposal.

Due to the expected decrease in overall groundfish harvested under this program, we anticipate that there may be an increase in the kilograms of halibut caught per metric ton of harvested groundfish and will therefore need an adjustment of the VIP rate (see Council Action).

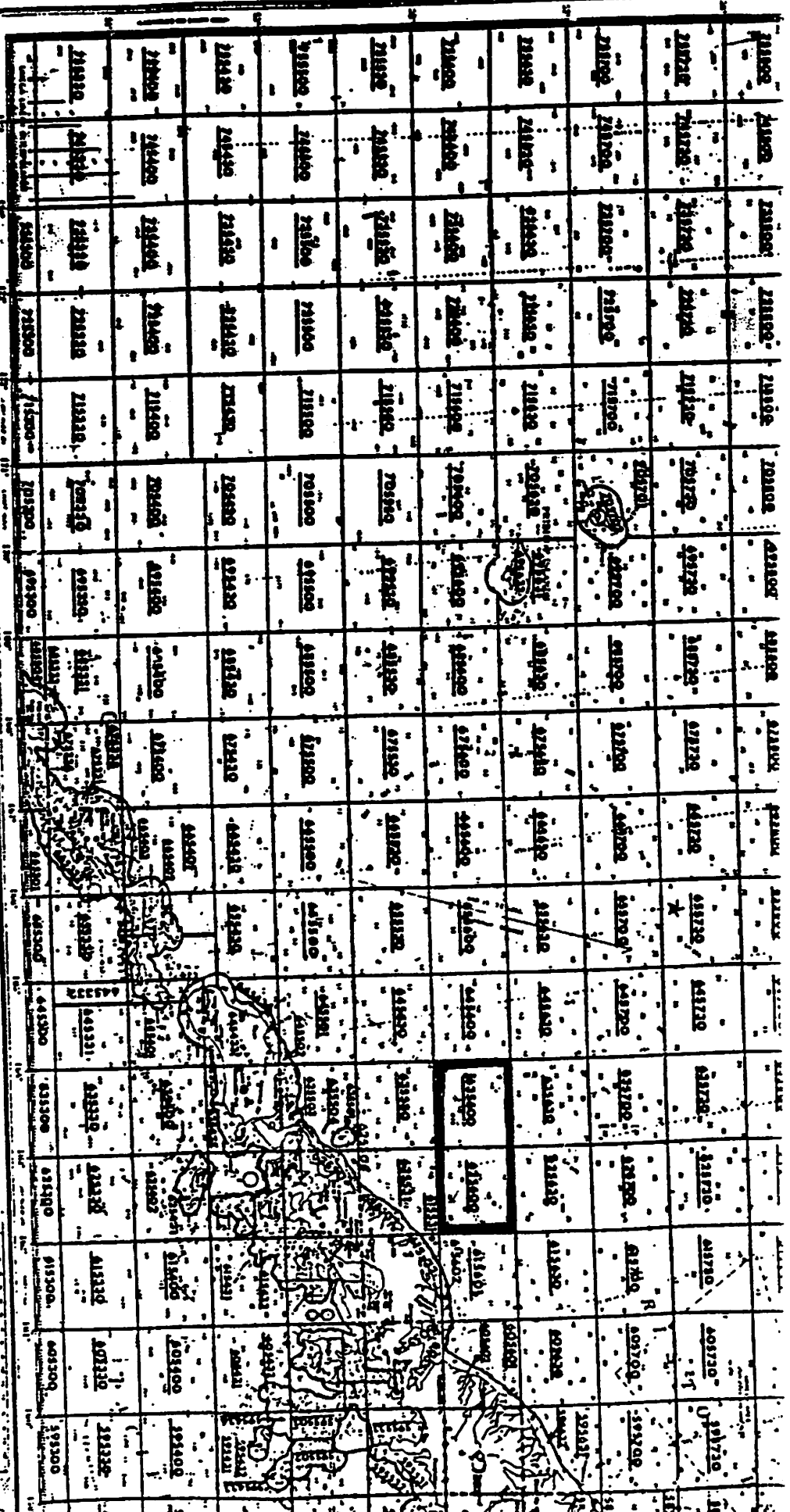
58

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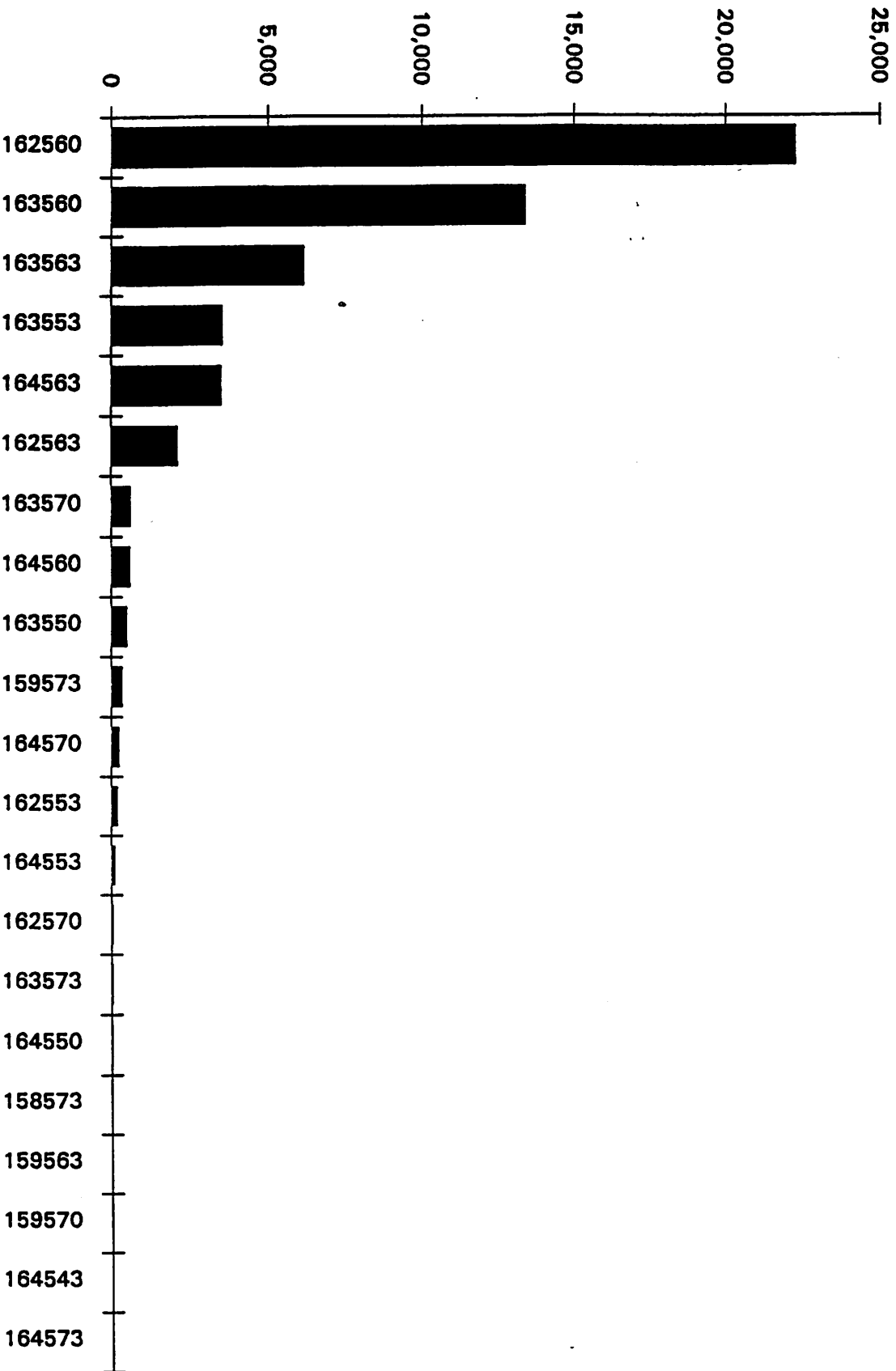


10000
 SOUNDINGS IN FATHOMS
 NOT FOR NAVIGATIONAL USE

174 173 172 171 170 169 168 167 166 165 164 163 162 161 160 159

Rocksole Fishery

**1992-1994
Average catch of King Crab
(in number of individuals)**



Rocksole Fishery

**1992-1994
Average Catch of Groundfish
in metric tons**

