


MEMORANDUM

TO: Council, SSC, and AP Members

FROM: Clarence G. Pautzke 
Executive Director

DATE: November 28, 1990

SUBJECT: Gulf of Alaska Groundfish - Halibut PSC Limits

ACTION REQUIRED

1. Set overall halibut PSC limit for 1991.
2. Consider apportioning the PSC limit by gear, season, and area.

BACKGROUND

Regulations allow the Council to annually specify a halibut PSC for the Gulf groundfish fisheries and apportion it among gear types, seasons and areas, but not among target fisheries. Unused PSC can be transferred to subsequent quarters. Conversely, overages can be deducted from subsequent quarters.

Review of 1990. For 1990 the Council set a 2,000 mt mortality limit for bottom trawl fisheries and a 750 mt limit for longline fisheries. Certain hook and line fisheries and the groundfish pot fisheries were exempted by emergency rule. The bottom trawl limit was sufficient to carry those fisheries through mid-November. The hook and line fisheries for sablefish and Pacific cod were closed on May 29 when data indicated that the entire yearly limit of 750 mt had been reached. About 1,500 mt of sablefish in the Western Regulatory area remain unharvested due to the closure. The closure may have resulted in the loss of potential harvest by the longline fleet of Pacific cod as well. The amount of discard mortality from the hook and line fisheries is now estimated at 967 mt. Discard mortality attributed to the pot fishery is estimated at 31 mt through November 7, 1990. These numbers are based on data collected from the NMFS domestic observer program. Observer data will continue to be used for the 1991 fishery.

Halibut PSC for 1991. At its September meeting, the Council recommended a preliminary halibut PSC limit of 2750 mt for the Gulf, apportioned as follows:

	<u>Trawl gear</u> <u>2,000 mt</u>	<u>Hook and line</u> <u>700 mt</u>	<u>Pot gear</u> <u>50 mt</u>
1st quarter	20% (400)	20% (140)	50% (25)
2nd quarter	30% (600)	30% (210)	
3rd quarter	30% (600)	30% (210)	50% (25)
4th quarter	20% (400)	20% (140)	

Item D-2(c)(1) has a recommendation from industry for different seasonal apportionments of the bottom trawl PSC limits.

Part B (pp. 206-227) of the GOA SAFE for 1991 addresses halibut PSC considerations. It contains information on bycatch rates and bycatch management from the 1990 fishery (through November 7), and information for establishing halibut PSC limits. Further information on monthly bycatch rates for major bottom trawl fisheries (through November 17) is provided as Item D-2(c)(2).

In setting PSC limits and apportionments for the fishery, the Council should consider the following:

- * estimated halibut bycatch in prior years
- * expected changes in groundfish biomass and catch
- * current estimates of halibut biomass and stock condition
- * potential impacts of expected groundfish fishing on halibut stocks and fisheries
- * methods available for reducing halibut bycatch, and costs thereof
- * other biological and socioeconomic information relevant to halibut PSC limits
- * seasonal distribution of halibut and target groundfish species
- * expected halibut bycatch needs on a seasonal basis relevant to expected groundfish catch
- * expected variations in bycatch rates throughout the fishing year
- * expected changes in groundfish seasons and start of fishing effort
- * economic effects of establishing seasonal halibut allocations on the groundfish industry

A bycatch spreadsheet model will be available which incorporates bycatch rates, discard mortality rates, and gear share percentages from the NMFS domestic observer program and the IPHC. As an example, the model was run with the Council's 1990 TACs and apportionments, and the bycatch and discard mortality rates (through November 7) from the domestic observer program. The results show that, to achieve the total 1990 TACs for all groundfish, the halibut bycatch would be 3,460 mt: 2,412 mt for bottom trawls (this assumes the harvest of all flatfish TACs including arrowtooth flounder); 1,013 mt for longlines; and 13 mt for pot gear. The staff will be able to give you estimated needs once you have determined the 1991 TACs. Note that a potential change in the sablefish season opening date for 1991 may reduce the longline PSC requirements. A PSC worksheet is provided as item D-2(c)(3). Area apportionments were not discussed in September and are not shown on the worksheet, but still could be considered.

Alaska Groundfish Data Bank

November 20, 1990

Clarence Pautzke, Executive Director
North Pacific Fishery Management Council



Sent by fax

RE: Apportionment scheme for Gulf of Alaska trawl halibut cap among quarters for 1991.

Dear Clarence:

The members of the Alaska Groundfish Data Bank request that the 1990 quarterly apportionment percentages used for Gulf of Alaska trawl halibut cap also be used in 1991 without change.

Quarter	PREFERRED APPORTIONMENT		1990 Halibut Actual Catch
	1990 Apportionment Percent of Cap	1990 Quarter Quota	
First Quarter	30%	600 MT	471 MT
Second Quarter	30%	600 MT	592 MT*
Third Quarter	20%	400 MT	597 MT
Fourth Quarter	20%	400 MT	177 MT**

Remainder as of 11/10 - 163 MT

*The June closure to Gulf bottom trawling was due to a NMFS error. Technically bottom trawling should have been uninterrupted for the first two quarters.

**Through 11/10

RATIONALE FOR APPORTIONMENT

In determining our preferred halibut apportionment we have used the following criteria:

1. Allow fishing to continue uninterrupted the first two quarters when halibut bycatch rates, historically, for bottom trawling appear to be lowest.
2. Allow the rockfish fishery to be prosecuted second quarter without interruption.

We note that the "premature" closure in June resulted in a small rockfish quota being left until July. This quota was too small to allow NMFS to track the fishery when it opened in July. As a result the "Other Rockfish" quota in the Central Gulf was exceeded and nothing was left for retainable bycatch.

3. Allow for a rollover of unused halibut mortality from first to second and second to third quarter. This in itself serves as an incentive for clean fishing.
4. Restrain the bottom trawl fishery third and fourth quarters when bycatch rates historically have been highest to further encourage clean fishing.

GOA Trawl halibut cap seasonal apportionment - page 2

We also took into account that the only two year-long fisheries are Pacific cod and flounder. The halibut bycatch rates for the flounder fisheries can be kept low by moving during the season between deep and shallow water -- by going where the halibut aren't.

The rockfish fleet has a relatively short season in any one area.

This apportionment scheme worked well for 1990 and had there not been a premature closure in June, would have met all the above objectives.

SUGGESTED APPORTIONMENT FOR 1991 WOULD CLOSE FISHERY FIRST QUARTER

The suggested apportionment sent out for public review calls for 400 MT first quarter. As can be seen from the actual catch in the previous table, this apportionment in 1990 would have resulted in a bottom trawl closure first quarter -- at the time of lowest halibut bycatch rates and at a time when Pacific cod is the only fishery available to many of the communities along the Alaska Peninsula.

ADEQUATE DATA NOT AVAILABLE

Unfortunately data which should be examined to determine the best apportionment of the Gulf of Alaska trawl halibut cap among quarters is not available.

Needed are the corrected bottom trawl catch and bycatch rates by quarter, by area and by target species with deep water and shallow water flatfish separated. Basic problems with the existing data presentation are outlined below in the next section.

Time is too short to adequately develop, analyze and review the appropriate data in time for the December meeting to determine if there might be a better way to apportion the Gulf trawl halibut bycatch cap.

Since the apportionment used in 1990 appears to have worked well -- the Gulf bottom trawl fishery is continuing through Thanksgiving and may go into December -- we see no reason to change the 1990 apportionment at this time.

PROBLEMS WITH THE AGGREGATED DATA

The aggregated Gulf-wide data by month and target species contains the following problems:

Pacific cod: During the first quarter it appears that the bottom trawl catch was about equally divided between the Central and Western Gulf. However, the bycatch rate was much lower in the Western Gulf (0.8% versus 5% in the Central Gulf), creating an apparent low first quarter Gulf-wide halibut rate which is an artifact of area rather than a reality.

GOA Trawl halibut cap seasonal apportionment - page 3

The Western Gulf Pacific cod fishery closed April 28. The apparent jump in the Gulf wide rate for Pacific cod between April and May reflects not an actual increase in bycatch rates, but the closure of the Western Gulf Pacific cod fishery.

Flatfish: These rates are meaningless because shallow water and deep water flatfish are not segregated. Basically when the rates deep are high, the halibut bycatch rates shallow should be low -- and vice versa. When the halibut begin to move the rates jump while the fleet figures out how the halibut are moving.

The question is whether the fleet is voluntarily switching between the deep and shallow water species. If not, season opening dates and closing dates may be the most appropriate method of controlling halibut bycatch. This issue cannot be addressed with the data available and should be analyzed during 1991.

Rockfish: The traditional rockfish fleet does not start until April. The March rate is an anomaly and is connected to the high flatfish rate for that month. It does appear that the rockfish rate drops as the year progresses, but this, like the Pacific cod rates, may be a function of area fished and needs to be examined by area before any conclusions can be drawn.

As with flatfish, the rockfish fishery should be analyzed during 1991.

Arrowtooth Flounder: There appears to have been only one area in which arrowtooth flounder targeting was observed and three other areas in which arrowtooth flounder was targeted but the catch unobserved. The rate for the observed area has been applied to the unobserved areas. Total arrowtooth-target groundfish catch from all four areas was 1,952 MT. In short, the data is inadequate to draw any conclusions -- though the application of the observed rate to the unobserved areas is appropriate for determining halibut mortality.

In short, this is a case of "if it's not broke, don't fix it." We hope that during 1991 NMFS will be able to provide more complete analysis of the bycatch rates and that another year of data will clarify where the 1990 data shows dependable trends and where it shows anomalies.

Thank you for considering our comments.

Sincerely,



Chris Blackburn, Director
Alaska Groundfish Data Bank

National Marine Fisheries Service
 Fishery Management Division
 Juneau, Alaska
 November 26, 1990

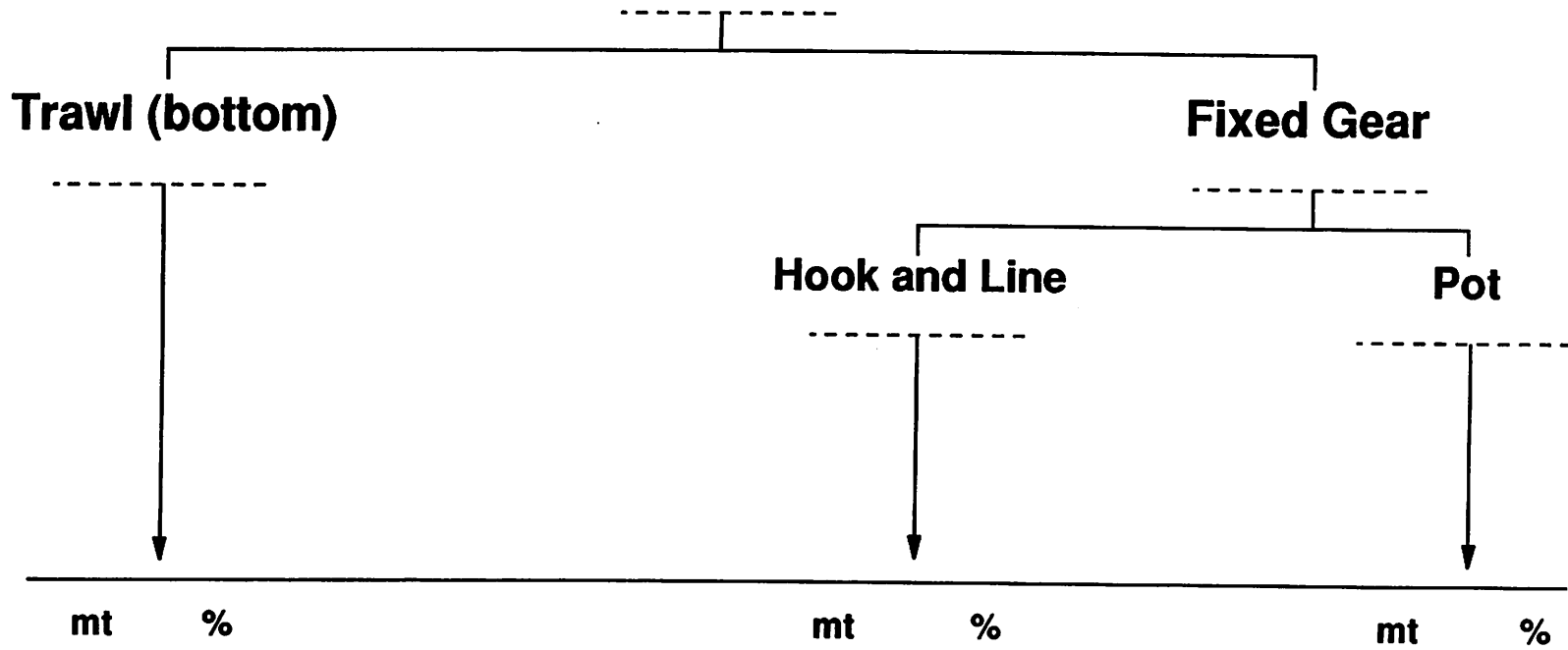
Summary of halibut bycatch rates (kg/mt) in the Gulf of Alaska bottom trawl groundfish fishery (Source: observer data collected through November 17, 1990).

MONTH	POLLOCK					MONTH	FLATFISH				
	610	620	ZONE 630	640	650		610	620	ZONE 630	640	650
JANUARY	.....	.....	0.00	.....	.....	JANUARY	.....	.....	.....	.....	.....
FEBRUARY	.....	.....	.....	.....	.....	FEBRUARY	NA	NA	10.20	.....	.....
MARCH	.....	.....	.....	.....	.....	MARCH	59.33	0.69	70.17	.....	.....
APRIL	.....	.....	3.21	.....	.....	APRIL	83.38	0.20	23.00	.....	.....
MAY	.....	.....	.....	.....	.....	MAY	NA	0.25	34.55	.....	.....
JUNE	.....	.....	.....	.....	.....	JUNE	NA	NA	.....	.....	.....
JULY	.....	.....	.....	.....	.....	JULY	16.67	1.54	5.36	.....	.....
AUGUST	.....	.....	6.56	.....	.....	AUGUST	1.79	12.25	27.64	.....	.....
SEPTEMBER	0.01	.....	7.04	.....	.....	SEPTEMBER	2.05	2.58	30.23	.....	.....
OCTOBER	5.57	.....	1.10	.....	.....	OCTOBER	23.33	0.47	52.79	.....	.....
NOVEMBER	.....	.....	.....	.....	.....	NOVEMBER	13.17	157.08	97.42	.....	.....
DECEMBER	.....	.....	.....	.....	.....	DECEMBER	.....	.....	.....	.....	.....
OVERALL	4.89	NA	4.65	NA	NA	OVERALL	19.84	44.81	46.27	.....	.....

MONTH	PACIFIC COD					MONTH	ROCKFISH				
	610	620	ZONE 630	640	650		610	620	ZONE 630	640	650
JANUARY	.....	.....	.....	.....	.....	JANUARY	.....	.....	.....	00.00	.....
FEBRUARY	.....	.....	16.14	.....	.....	FEBRUARY	.....	.....	.....	.....	.....
MARCH	4.72	25.69	12.87	27.66	12.05	MARCH	41.63	41.69	274.20	.....	14.25
APRIL	12.74	7.71	24.80	.....	.....	APRIL	34.18	31.38	130.04	39.60	11.94
MAY	36.67	65.77	159.26	.....	.....	MAY	70.14	20.84	51.71	18.72	4.31
JUNE	.....	35.31	.....	.....	.....	JUNE	41.71	9.33	233.30	844.11	.....
JULY	.....	17.73	28.99	.....	.....	JULY	11.63	11.06	24.94	38.95	7.51
AUGUST	3.21	45.83	24.65	.....	.....	AUGUST	11.45	50.45	74.50	12.96	.....
SEPTEMBER	.....	96.17	31.99	.....	.....	SEPTEMBER	8.49	.....	.....	.....	.....
OCTOBER	7.34	60.92	100.49	.....	.....	OCTOBER	10.60	22.27	.....	.....	.....
NOVEMBER	18.98	71.86	94.21	.....	.....	NOVEMBER	.....	.....	.....	.....	.....
DECEMBER	.....	.....	.....	.....	.....	DECEMBER	.....	.....	.....	.....	.....
OVERALL	9.66	45.41	42.39	27.66	12.05	OVERALL	16.47	20.70	53.22	22.50	8.80

Gulf of Alaska Halibut Bycatch Worksheet

Total Limit



	mt	%
1st Qrt.	-----	-----
2nd Qrt.	-----	-----
3rd Qrt.	-----	-----
4th Qrt.	-----	-----

	mt	%
	-----	-----
	-----	-----
	-----	-----
	-----	-----

	mt	%
	-----	-----
	-----	-----
	-----	-----
	-----	-----

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November 27, 1990

North Pacific Fishery Management Council
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ALFA POSITION PAPER

SABLEFISH ITQ- The members of ALFA fully support the sablefish longline ITQ program developed and proposed by Mr. Joe Blum. This ITQ program is carefully tailored to the sablefish industry, offering solutions to the problems currently plaguing the fishery. ALFA requests that the Council make a commitment to resolving this management issue no later than January, 1991 and urges the Council to adopt sablefish ITQ by this date.

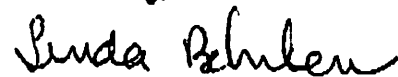
HALIBUT PSC AND OBSERVER PROGRAM- Based on first quarter observer data, the IPHC planning team is recommending that the halibut mortality rate assigned to the longline fleet be increased to 16%. Because the sablefish fishery was not open during the first quarter, the data used for this analysis were collected on Pacific cod boats. As the Council is probably aware, the Pacific cod boats run a modified jay hook, rather than the circle hooks used by the sablefish boats. IPHC studies have shown that the halibut mortality rate associated with jay hooks is significantly higher than that associated with circle hooks, since halibut tend to swallow jay hooks but only be lip hooked by circle hooks. If time and money constraints do not allow for a separate analysis of sablefish observer data, ALFA asks that the Council bear in mind this critical difference between P-cod and sablefish gear when considering the IPHC recommendation to raise the halibut mortality rate for the longline fleet.

Also on the subject of observer data: the current system of recording halibut bycatch as a poundage percentage rather than in terms of the number of fish caught is misleading and inappropriate. A high percentage of the halibut caught incidentally on sablefish gear are over thirty pounds, hence one halibut weighs as much as seven or more sablefish. It follows that even ten incidentally caught halibut recorded in terms of poundage can result in bycatch rates of 60% and higher, while in actual numbers taken the bycatch

rate could be closer to 10%. The IPHC reports that the larger fish (i.e., over thirty pounds) have a higher survival rate than the smaller fish (more likely to be caught in trawls than on longline gear), hence the current accounting system is penalizing the longline fleet inappropriately. The foreign longline fleet recorded halibut bycatch in terms of the number of halibut hooked, not in terms of poundage; ALFA feels that the same system should be used in the domestic observer program.

There will be two ALFA representatives attending the December Council meetings. If further clarification of ALFA's position on these or other issues is needed, please address questions to Jay Skordahl (AP member) or Lonnie Chestnut (ALFA member). Thank you for your time and attention.

Sincerely,



Linda Behnken, exec. director