September 28, 1979

MEMORANDUM

To : Council Members, Scientific and Statistical Committee, and Advisory Panel

From : Jim H. Branson
Executive Director

Subject : Gulf of Alaska Groundfish Fishery Management Plan

ACTION REQUIRED: *Mostly informational however a schedule must be approved for the consideration of several amendments to the plan*

BACKGROUND: A Secretary of Commerce amendment to the Gulf of Alaska Groundfish FMP extending the plan year and implementing provisions of the Processor Preference Amendment has been approved and published for comment in the Federal Register on September 7, 1979. Comments are invited on the amendment until October 20, 1979. A similar amendment approved by the Council at the August 1979 meeting has been submitted to the Secretary and constitutes our defacto comments on the proposed Secretarial amendment. We have no information on the status of the Council's amendment nor on its impact on the Secretarial amendment.

At the present time, several additional amendments must be considered for the Groundfish plan: some dealing with current year fishery problems, others dealing with a longer-term 'framework' concepts.

The issue now is when to consider amendments to this plan. This decision must correspond with the recommendations produced by the Plan Scheduling Review Group for the overall coordination of the development of Fishery Management Plans and their amendments.

OTHER: At the August meeting a request was made by the NMFS to add four (4) species of rockfish (Northern, Rougheye, Shortraker, and Sharpchin) to the POP category. This was proposed to eliminate a problem the Soviet Union had in reaching its quota of "other rockfish" by allowing the four species to be counted against POP instead of "other rockfish." NMFS subsequently submitted and approved--effective September 12--an errata to the regulations which allows those four species of rockfish to be counted against the POP quota. The past catches of "other rockfish" were also reduced transferring all catches of these four species to POP. The new regulation is in effect "until or unless further change."

Attached are:
(1) The comments of the Management Plan Drafting Team on amendments and schedules

(2) A letter from Jay Hastings proposing the "Gulf-wide" amendment

(3) A letter from Branson to Stafne and the Loh-Lee Low blackcod report

ATTACHMENT 1
MANAGEMENT PLAN DRAFTING TEAM REPORT

The Management Plan Drafting Team met informally in Juneau last month at the INPFC U.S. Section Meeting. They discussed the request by the Japanese Fishery Association for Gulf-wide OY's for squid, other rockfish, other species, and Atka mackerel, and also discussed the Gulf of Alaska sablefish.

The Team agreed that a "Gulf-wide" OY for squid was acceptable. However, they maintained that Atka mackerel should have regional OY's. They did not reach a concensus for the categories "other rockfish" or "other species" and have deferred consideration until they consider a broader amendment which will take into account incidental species policy concepts.

The Team also considered the status of the sablefish resource and believes there is some reason for concern. They considered the survey results and catch per unit of effort (CPUE) data for the last two years and concluded that the sablefish OY should be reduced, possibly to 10,500 mt., for 1980. Their full report is not available at this time.

This sablefish issue is a current year fishery problem. Some of the other amendments dealing with the "Gulf-wide" OY's and incidental species policies are longer-term concepts. The issue now is when to consider amendments to this plan.

The recommendations of the Plan Scheduling Review Group and of the Management Plan Drafting Team are that:

(1) Proposals for amendments to the plan be solicited and submitted at the January Council meeting;

(2) These proposals be reviewed in February; with

(3) Council action in March.

It appears that the most urgent amendment is the sablefish OY. We may wish to handle this by conservative releases of any reserves until the amendment is implemented, probably in midsummer.

AGENDA G - 3
OCTOBER 1979

FILE	ACT	INFO	ROUTE TO	INITIAL
			Exec. Dir.	
			A. Exec. Dir.	
			Admin. Off.	
			Exec. Sec.	
			Writer/1	
			Writer/2	
			Sec. Progr.	
			Sec. Typist	
			SEP 4 1979	

JAY D. HASTINGS
610 UNITED PACIFIC BUILDING
1000 SECOND AVENUE
SEATTLE, WASHINGTON 98104
(206) 292-9792

August 30, 1979

Mr. Jim Branson
Executive Director
North Pacific Fishery Management Council
P. O. 3136 DT
Anchorage, AK 99510

Dear Jim:

During the August meeting of the Council, I proposed an amendment to the Gulf of Alaska Groundfish FMP which would establish single Gulf-wide OYs similar to the single OY established for Sebastolobus, for squid, "other rockfish", "other species," and Atka mackerel. All are incidental to the Japanese directed fisheries. Both the SSC and the AP deferred action on this proposal until the October meeting in order to give the Plan Development Team the opportunity to review any relevant biological data. Prior to the next meeting, we will also be submitting relevant data in support of the proposal.

In order to assure proper notice prior to the October meeting, we would like to have our proposed amendment noted as an agenda item for Council action.

As always, your assistance is sincerely appreciated.

Sincerely,

Jay D. Hastings

pjf

cc: Steve Pennoyer
Keith Specking
James Bulsiger
Roland Finch
Paul MacGregor
Ichiro Nakamura

AGENDA ITEM G-3
October, 1979

September 26, 1979

Mr. Scott E. Stafne
Suite 210 Ballard Building
2208 N.W. Market Street
Seattle, WA 98107

Dear Scott,

Thanks for your letter of September 18th on the 1980 sablefish OY. I appreciate the information and was particularly interested in the paper by Dr. Loh-Lee Low which I had not seen before. Dr. Low's paper, and the information you and Jake have developed, indicates that there are some problems with the sablefish resource, certainly its not bouncing back up again as we had hoped it would when we originally set the OY at 13,000 mt.

I am including your letter with its attachments in Agenda Item G-3 of the October meeting, which is a discussion of the Gulf of Alaska Groundfish FMP. Since we haven't advertised proposals for an OY change for sablefish it won't be possible for the Council to take any action at that meeting on this subject though it is one they will undoubtedly discuss. I understand there is more information coming from the Plan Development Team that should be available early enough in the year so that changes in OY for 1980 can be made if necessary.

Sincerely,

Jim H. Branson
Executive Director

cc: Paul MacGregor
Jim Balsiger
Dr. Loh-Lee Low
Bert Larkins
Frank Fukuhara

G-4

Law Offices Of

SCOTT E. STAFNE

Suite 210 Ballard Building
2208 N.W. Market Street
Seattle, Washington 98107

Scott E. Stafne
David L. Flory
Fred Ebert

Fisheries, Ocean Resources and Admiralty Law

(206) 784-5344

September 18, 1979

Jim Branson, Executive Director
North Pacific Regional
Fishery Management Council
P.O. Box 3136 DT
Anchorage, Alaska 99510

FILE	ACT	INFO	ROUTE TO	INITIAL
			Exec. Dir.	
			A. Exec. Dir.	

SEP 21 1979

Re: 1980 Sablefish OY.

Dear Jim:

At the last Council meeting Jake Phillips and I expressed concern over the biological status of the sablefish resource and indicated that we believed the Gulf of Alaska OY was probably too high[1]. This letter reiterates our concern that past Council and Secretarial action has not arrested the decline in the sablefish stocks, but has resulted in OY's which have simply followed the decline of the sablefish resource.

As we stated at the August Council meeting and reiterate in this letter, experienced longline fishermen continue to experience decreased CPUE's and therefore believe sablefish stocks are not in good condition and that a more restrictive OY is necessary for their protection. I would point out that these observations appear well corraborated by the most recent scientific data on the status of sablefish stocks in the Gulf of Alaska. In this regard, Dr. Loh-Lee Low in his most recent report on the "Status of Sablefish Resources In The Gulf Of Alaska" (a copy of which is attached hereto) notes that previous OY's set by the Council and the Secretary of Commerce have not stopped the decline of the resource.

> "By comparing the catch and CPUE trend through 1976, it was determined in the Fishery Management Plan for the Gulf of Alaska Groundfish Fishery during 1978 (DOC 1978) that the equilibrium yield for sablefish in the Gulf of Alaska was in the 17,400 - 19,800 mt range. This range was viewed to be optimistic because CPUE data used to derive EY had not been adjusted by gear efficiency and saturation factors. In view of the fact that CPUE declined an additional 25% from 1976 to 1977, EY in 1978 appears to have declined further to about 14,000 mt.

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1. You will recall that the basis for our concern was 1.) Jake's observations of continued declines in his own CPUE and in the CPUE's of other domestic fishermen with whom he had spoken and 2.) my observation that although domestic fishing effort had greatly increased in 1979, catches of the resource had not. With regard to this observation, I have attached a letter from the Alaska Limited Entry Commission documenting the great increase in sablefish licenses in recent years and particularly in 1979.

This EY value represented catches of those large sablefish (generally exceeding 7 lbs round weight, age 6-7 years) generally taken in the Japanese longline fishery. In 1979, U.S. research surveys in the Gulf of Alaska and the Bering Sea that show recruitment of 3 and 4 year-old sablefish (1975 and 1976 year-classes) is higher than normal. Although the absolute strength of these year-classes has not been quantified, large numbers of them have been observed by U.S. fishermen fishing in southeast Alaska (Jake Phillips and Dan Cushing pers. comm.). U.S. fishermen also noted that large sablefish (generally exceed 9 lbs round weight, age 8-9 years) were scarce in 1979. This latter observation seems to be consistent with general conclusions drawn from declining Japanese longline CPUE trends through 1978.

The 1975 and 1976 year-classes which are apparently stronger than normal will begin to contribute to the fishery in 1980. They should be fully recruited to the domestic setline fishery by 1983. Threfore, although the current (1979) EY may be somewhat below the 14,000 mt of 1978, abundance of the exploitable portion of the population will begin to increase in 1980, and there is no reason to consider ABC for 1980 to be less than the current OY of 13,000 mt. However, until the 1975 and 1976 year-classes reach maturity and enhance the stock's production potential, ABC should remain below the current estimate of EY which is no greater than 14,000 mt".

With all due respect for Dr. Low, we believe it would be unwise for the Council or the Secretary to continue a 13,000 mt OY for sablefish simply because of the existence of large 3 and 4 year old year classes. These fish are sexually immature[2] and will not be recruited into the fishery in substantial numbers until 1981. Consequently, keeping the OY at 13,000 mt will allow a continued overexploitation of the older, sexually mature fish which are already severely depleted and which are necessary for producing the 1980 year class.

In addition to our belief that increases in sexually immature, non-harvestable year classes do not provide a good rationale for keeping the OY on harvestable stocks at 13,000 mt, another indication that the OY is too high is that in 1978 only 9,000 mt of sablefish were caught, but the EY continued to decline. Certainly, this fact, that a 9,000 mt harvest in 1978 did not arrest the decline of EY in 1979, indicates that an allowance of 13,000 mt harvest in 1980 may well work to further the long term depletion of this important domestic resource.

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2. 50% of female sablefish attain sexual maturity at age 7. These young mothers, who produce only approximately 100,000 ova, do not have as high a fecundity as the older females, who can produce over 1,000,000 ova. These are the fish which have continued to decline under the Council's 13,000 mt OY.

Nowhere is this more clearly indicated than in Southeastern, Alaska where the OY has been approximately 4,000 mt. Despite the fact that domestic fishermen have caught only approximately half of this amount for the past three years, it is our understanding the preliminary results of the NMFS pot survey conducted in Southeastern, Alaska suggest that the harvestable numbers of sablefish in this region have remained stable, not increased. (Steve Hughes Pers. Comm.) If this understanding is correct it would seem that as a practical matter the EY in Southeastern, Alaska on the harvestable stocks approximates the past domestic catch since at this level of production the harvestable stocks appear to have remained stable.

Jim, I want to stress once again that this scientific data merely corraborates what ALFA members have observed on the ocean. The existing sablefish breeding stock continues to be depressed. ALFA members hope that the OY's set by the Council will not merely follow the decline of the resource, but will arrest it. In order to do this, it appears that a substantial reduction below a 13,000 mt OY is necessary.

Very truly yours,

Scott E. Stafne

SES/ss

Enclosure

cc: North Pacific Council members
Steve Pennoyer
Paul McGregor
Jim Balsinger
Dr. Loh-Lee Low
Steve Hughes
Bert Larkins
Lee Alverson
Terry Leitzell
Jim Ferguson
Bob Dignon
John Dapsovich
Bob Thorstensen
Allan Otness
Bob Alverson
Albert Kawabe

STATE OF ALASKA

JAY S. HAMMOND, GOVERNOR

COMMERCIAL FISHERIES ENTRY COMMISSION

POUCH KB
JUNEAU, ALASKA 99811

September 10, 1979

Scott Stafne
2208 NW Market Street
Suite 210
Seattle, Washington 98107

Dear Mr. Stafne:

Commissioner Simon has asked me to provide you with a list of the number of permits issued for black cod from 1975 through 1979.

1975:	Blackcod Handtroll	- 4	1976:	Blackcod Handtroll	- 2
	Blackcod Longline	- 62		Blackcod Longline	- 85
	Blackcod Pots	- 19		Blackcod Pots	- 9
1977:	Blackcod Handtroll	- 2	1978:	Blackcod Handtroll	- 2
	Blackcod Longline	- 155		Blackcod Longline	- 164
	Blackcod Pots	- 11		Blackcod Trawl	- 1
				Blackcod Pots	- 11

1979: (as of 9/6/79): Blackcod Handtroll - 4
Blackcod Longline - 272
Blackcod Trawl - 2
Blackcod Pots - 22

The number of permits issued is not necessarily equal to the number actually fished. I hope this is of help to you. Please let me know if you have any further questions.

Sincerely,

Beth Stewart

Beth Stewart
Fisheries Coordinator

01-A6LH

STATUS OF SABLEFISH RESOURCES IN THE GULF OF ALASKA

by Loh-Lee Low*

INTRODUCTION

The sablefish resource is found in waters off California, northward to the Gulf of Alaska, westward to the Aleutian Region, and into the Bering Sea. The major fishing area for this species over this range is in the Gulf of Alaska and generally in depths exceeding 500 m. The species is taken mostly by longline gear, but trawlers and trap (pot) gear also account for some catches.

The fishery for sablefish has existed in certain parts of the Gulf of Alaska for more than 50 years, but the resource was not fully utilized until Japan entered the fishery in the mid-1960's. Catches increased substantially then and peaked at 36,500 mt in 1972 (Table 1). Catches declined to 30,300 mt in 1973, and folowing some area-wide catch restrictions and declining stock abundance, catches in 1977 declined to 16,800 mt. Further fishery restrictions were imposed in 1978, and catches amounted to about 9,000 mt when the limit was set at 10,000 mt.

STOCK STRUCTURE

The number and delineation of sablefish stocks in the North Pacific has not been satisfactorily determined. The sablefish throughout this wide geographical area are apparently genetically related in the sense that some individuals have been noted to migrate over long distances. However, the degree of interchange between regions is thought to be small in relation to the stock size within each region, which led Low et al. (1976) and Wespestad et al. (1977) to suggest that management of the resource be conducted by discrete geographical regions. These geographical regions are the eastern Bering Sea, the Aleutian

Region, the Gulf of Alaska, waters off Canada, and waters off Washington to California.

MAXIMUM SUSTAINABLE YIELD

Although the sablefish resource should be managed by regions, the long-term productivity in each region is probably related to the overall condition of the resource. Therefore, it is difficult to get an accurate estimation of the MSY within each region by using fishery information of that region alone. To reduce this problem, both Japanese and U.S. scientists have estimated MSY of the resource as a whole and apportioned MSY according to region. The latest Japanese estimate of MSY for the entire resource from California to the Bering Sea was 69,600 mt (Anon. 1978). The best U.S. estimate of MSY was 50,300 mt (Low and Wespestad 1979), using essentially the same general production model, but with a different weighting of data among regions.

The overall MSY estimate of 50,300 mt was apportioned to individual management areas according to their catch history. By region, the weighting factors were Bering Sea (25%), Aleutian region (4%), Gulf of Alaska (47%), and British Columbia-Washington region (25%). These apportioned MSY estimates were then compared to MSY estimates derived by applying general production models region by region. The resulting mean and overall estimate of MSY was 25,100 mt for the Gulf of Alaska (Low and Wespestad 1979).

EQUILIBRIUM YIELD

Catch and effort information from the Japanese North Pacific longline fishery is the most consistent source of information for assessing the condition of sablefish stocks in the Gulf of Alaska. In the computation of longline CPUE, however, various methods of estimating fishing effort have been used to derive the best measure of stock abundance. The latest and

most detailed procedure was presented by Japanese scientists in Doc. 2080 and took into consideration only that portion of the time spent fishing by excluding time spent for travelling, landing, weathering storms, repairs, and other activities not considered to be associated with productive fishing. This analysis provided CPUE data standardized to catch per boat-day on the basis of 376 hachi longline units per boat-day. Doc. 2118 by U.S. scientists assumed all longline fishing effort (hachi units) to target on sablefish and computed catch per hachi as an index of abundance (Table 2).

Trends in CPUE computed according to the above procedures of analyses are summarized in Table 3. Based on kg per 10 hachi data, catch rates were generally greater than 200 in all INPFC areas prior to 1974. In 1975 catch rates dropped to as low as 154 in the Shumagin Area and were generally about 185 in the other areas. In 1976, CPUE increased in all areas of the Gulf of Alaska (Shumagin-Southeastern Region). A dramatic change occurred from 1976 to 1977--CPUE dropped in all areas. The decline ranged from 13-34% and averaged 25%.

In 1978, some fishing regulations in the Gulf of Alaska were changed which permitted Japanese longliners to fish in depths shallower than 500 m in the Shumagin-Chirikof Region for Pacific cod. This resulted in a shift of some Japanese longline fishing effort towards Pacific cod in depths of 100-300 m, while in the past all of the effort was directed to catching sablefish in depths generally greater than 500 m. Since catch-effort statistics are reported to the U.S. without reference to depth, it is not now possible to distinguish effort directed towards cod as opposed to those efforts directed towards sablefish. Therefore, comparable CPUE data for 1978 cannot be computed to reflect stock conditions of sablefish in the Shumagin-Chirikof Region. In addition, the southeast area was closed to foreign longlining so Japanese CPUE data for that area is no longer available. In the Kodiak Area, where fishing regulations remained essentially the same, Japanese longline data show that CPUE remained

about the same in 1978 as in 1977 (Table 2). The eastern one-third of the Yakutat Area was closed to foreign longlining in 1978, but the CPUE remained about the same as in 1977.

As a result of changes in fishing regulations in the Shumagin-Chirikof Region, CPUE trends for sablefish were determined from U.S. observer data. Observers were first placed aboard Japanese longliners in late 1977, and the data collected since are tabulated in Table 4. In order to determine CPUE trends for sablefish, data collected from depths exceeding 500 m are considered to be directed towards sablefish. For the months of September-October, when observers were present both years, CPUE trends (kg per 1000 hooks) for sablefish in depths greater than 500 m were:

	Shumagin	Chirikof	Kodiak	Yakutat
1977	.2337	--	.2448	.3582
1978	--	--	.2097	.1441[1]

1/ Part of Yakutat was closed to foreign longlining in 1978.

These observer data show that CPUE may have declined in the Kodiak-Yakutat Region from 1977 to 1978.

By comparing the catch and CPUE trend through 1976, it was determined in the Fishery Management Plan for the Gulf of Alaska Groundfish Fishery during 1978 (DOC 1978) that the equilibrium yield for sablefish in the Gulf of Alaska was in the 17,400-19,800 mt range. This range was viewed to be optimistic because CPUE data used to derive EY had not been adjusted by gear efficiency and saturation factors. In view of the fact that CPUE declined an additional

25% from 1976 to 1977, EY in 1978 appears to have declined further to about about 14,000 mt.

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The 1975 and 1976 year-classes which are apparently stronger than normal will begin to contribute to the fishery in 1980. They should be fully recruited to the domestic setline fishery by 1983. Therefore, although the current (1979) EY may be somewhat below the 14,000 mt of 1978, abundance of the exploitable portion of the population will begin to increase in 1980, and there is no reason to consider ABC for 1980 to be less than the current OY of 13,000 mt. However, until the 1975 and 1976 year-classes reach maturity and enhance the stock's production potential, ABC should remain below the current estimate of EY which is no greater than 14,000 mt.

LITERATURE CITED

Anonymous, 1978. Report of the meeting between U.S. and Japanese scientists for the exchange of information on the condition of fishery stocks in the Bering Sea and northeastern Pacific. U.S. Dept. of Commerce, NOAA, NMFS, NWAFC, Seattle, WA (Unpubl.)

Department of Commerce. 1978. Fishery management plan for the Gulf of Alaska groundfish fishery during 1978. U.S. Dept. of Commerce, North Pacific Fish. Mgmt. Council. April 21, 1978. 220 p.

Low, L.L. and V. Wespestad. 1979. General production models on sablefish in the North Pacific. Doc. submitted to INPFC. 16 p.

TABLE 1.--HISTORICAL CATCHES OF SABLEFISH IN METRIC TONS BY AREA AND NATION 1958-78.

GULF OF ALASKA (SHUMAGIN-SOUTHEASTERN)

YEAR	U.S.	CANADA	JAPAN A/	USSR	ROK B/	TOTAL
1958	--	C/	--	--	--	--
1959	967	C/	--	--	--	--
1960	1,348	C/	--	--	--	--
1961	606	C/	--	--	--	--
1962	684	C/	--	--	--	--
1963	617	C/	1,681	--	--	2,298
1964	1,173	C/	1,041	--	--	2,214
1965	1,048	C/	2,107	--	--	3,155
1966	1,051	C/	3,514	--	--	4,565
1967	947	C/	4,217	--	--	5,164
1968	112	C/	13,886	--	--	13,998
1969	302	C/	19,587	--	--	19,889
1970	369	C/	21,397	--	--	21,766
1971	270	15	25,636	--	--	25,921
1972	1,387	16	34,259	535	308	36,505
1973	867	16	29,246	109	58	30,296
1974	771	10	23,300	38	2,431	26,550
1975	1,088	16	21,561	33	3,000	25,698
1976	803	23	22,947	41	3,700	27,514
1977	828 D/	3	14,367	4	1,594	16,791
1978	1,813	C/	6,458	4	665	8,940

A/ JAPANESE CATCH IS REPORTED BY FISHING YEAR; ALL OTHERS ARE REPORTED CALENDAR YEAR.
B/ INCLUDES CATCHES FROM OTHER AREAS IN THE NORTHEASTERN PACIFIC.
C/ DATA NOT AVAILABLE.
D/ TRAWL DATA ONLY; POT AND LINE CATCH NOT INCLUDED
SOURCE: U.S. DATA THROUGH 1973 FROM FISHERY STATISTICS OF THE U.S., STATISTICAL DIGESTS 49-68; 1974-76 DATA FROM PMFC DATA SERIES, GROUNDFISH SECTION.
CANADIAN DATA 1971-76 FROM PMFC DATA SERIES, GROUNDFISH SECTION; 1958-70 DATA NOT AVAILABLE.
JAPANESE, USSR, ROK DATA FROM INPFC DOCUMENT 1883 AND PERS. COMM. T. SASAKI, FAR SEAS FISHERY LAB., SHIMIZU, JAPAN.

TABLE 2. -- TOTAL SABLEFISH CATCH IN METRIC TONS (MT), LONGLINE CATCH (MT), LONGLINE EFFORT (IN 10 HACHI UNITS), LONGLINE CPUE (MT/10 HACHI), AND TOTAL EFFORT BASED ON LONGLINE CPUE FOR SABLEFISH, BY INPFC AREAS FOR 1966 TO 1978.

YEAR	TOTAL CATCH (MT)	LONGLINE CATCH (MT)	LONGLINE EFFORT (10 HACHI UNITS)	LONGLINE CPUE (MT/10 HACHI)	TOTAL EFFORT (10 HACHI UNITS)
			SHUMAGIN		
1966	1,088	0	--	--	--
1967	514	40	217	0.184	2,793
1968	297	67	445	0.151	1,966
1969	838	488	2,022	0.241	3,477
1970	1,561	1,141	5,158	0.221	7,056
1971	2,058	1,752	9,839	0.178	11,557
1972	3,869	3,335	15,125	0.220	17,586
1973	3,946	3,507	16,329	0.215	18,373
1974	3,922	3,538	19,421	0.182	21,528
1975	4,170	3,875	25,125	0.154	27,038
1976	4,265	3,882	23,503	0.165	25,822
1977	1,251	1,212	8,388	0.144	8,658
1978	1,386	1,362	27,432*	0.050*	*
			CHIRIKOF		
1966	748	0	--	--	--
1967	371	26	111	0.234	1,585
1968	326	162	714	0.227	1,436
1969	936	600	2,422	0.248	3,774
1970	1,414	1,155	4,698	0.246	5,751
1971	1,617	1,175	5,679	0.207	7,815
1972	2,988	2,359	11,879	0.199	15,015
1973	3,398	2,281	10,550	0.216	15,716
1974	2,636	2,203	11,523	0.191	13,787
1975	2,123	1,702	9,015	0.189	11,245
1976	2,019	1,740	8,630	0.202	10,014
1977	1,365	1,162	8,717	0.133	10,240
1978	969	917	17,098*	0.054*	*
			KODIAK		
1966	1,849	0	--	--	--
1967	1,572	75	739	0.101	15,489
1968	1,340	659	3,431	0.192	6,976
1969	3,262	2,058	8,608	0.239	13,643
1970	5,255	4,461	15,726	0.267	19,703
1971	5,393	3,985	19,243	0.207	26,042
1972	7,792	4,971	23,651	0.210	37,072
1973	6,140	4,130	19,300	0.214	28,692
1974	3,820	2,768	14,899	0.186	20,561
1975	3,801	2,378	13,110	0.181	20,955
1976	3,309	2,166	11,848	0.183	18,100
1977	3,008	2,621	19,664	0.133	35,228
1978	1,927	1,746	12,868	0.136	14,169
			YAKUTAT		
1966	33	0	--	--	--
1967	1,633	212	1,296	0.164	9,982
1968	5,580	3,120	11,916	0.262	21,311
1969	6,791	5,126	21,538	0.238	28,533
1970	8,248	6,924	27,159	0.255	32,352
1971	7,515	6,288	28,179	0.223	33,677
1972	9,965	6,984	33,988	0.205	48,495
1973	7,340	5,448	26,366	0.207	35,522
1974	6,528	5,040	26,328	0.191	34,101
1975	5,696	4,583	24,599	0.186	30,573
1976	5,757	4,682	23,840	0.196	29,314
1977	5,013	4,834	33,970	0.142	35,228
1978	2,613	2,555	18,603	0.137	19,073
			SOUTHEASTERN		
1966	19	0	--	--	--
1967	862	217	720	0.301	2,860
1968	7,224	6,364	25,958	0.245	29,466
1969	7,064	6,169	26,835	0.230	30,728
1970	7,808	6,805	29,681	0.229	34,405
1971	8,695	7,737	37,980	0.204	42,683
1972	11,012	9,311	44,844	0.208	53,036
1973	6,527	5,949	29,327	0.203	32,176
1974	7,377	6,574	33,653	0.195	37,764
1975	6,358	5,604	30,417	0.184	34,510
1976	6,648	5,409	28,717	0.191	34,701
1977	3,730	3,586	25,749	0.139	26,703
1978	28	0	0	--	--

* PRIOR TO 1979, JAPANESE LONGLINERS WERE NOT PERMITTED TO FISH IN DEPTHS SHALLOWER THAN 500 M. IN 1979, SOME LONGLINERS WERE PERMITTED TO FISH IN WATERS SHALLOWER THAN 500 M FOR PACIFIC COD -- THEREFORE, THE TOTAL FISHING EFFORT NO LONGER REFLECTS EFFECT ON SABLEFISH.

Table 3.--Indices of blackcod abundance in the Gulf of Alaska, 1967-1978 (Docs. 2080 and 2110).

A. CPUE (kg per 10 hachi) by Japanese and United States scientists

Year	Shumagin	Chirikof	Kodiak	Yakutat	Southeastern	Shumagin-Southeastern
1967	184	234	175	175	301	212
1968	153	226	272	282	257	263
1969	239	246	239	238	229	235
1970	221	245	266	255	229	246
1971	177	206	207	223	204	207
1972	220	198	210	203	207	208
1973	214	216	213	206	203	209
1974	181	191	185	191	195	190
1975	154	188	181	186	184	177
1976	165	201	182	196	191	186
1977	144	133	133	142	139	139
1978	*	*	136	137	---	137

B. CPUE (m.t. per boat-day, standardized on 376 hachi per boat-day) by Japanese scientists

Year	Gulf of Alaska
1967	7.97
1968	9.90
1969	8.82
1970	9.22
1971	7.80
1972	7.82
1973	7.85
1974	7.12
1975	6.66
1976	6.98
1977	5.22

Footnotes: * Prior to 1978, Japanese Longliners were not permitted to fish in depths shallower than 500m. In 1978, some of these Longliners were permitted to fish in waters shallower than 500m for Pacific Cod. Therefore, the total Longline fishing effort no longer reflects total effort on sablefish.

--- No Foreign Longling was permitted in the Southeastern Area and an eastern part of the Yakutat Area in 1978.

TABLE 4. -- JAPANESE LONGLINE CATCH-EFFORT DATA ON SABLEFISH COLLECTED BY U.S. OBSERVERS IN THE GULF OF ALASKA, 1977-78.

YEAR	AREA	MONTH	DAYS	SETS	HOOKS	AVE. DEPTH (M)	SABLEFISH MT.	PERCENT OF TOTAL CATCH	CATCH PER 1000 HOOKS
1978	SHUMAGIN	4	8	5	111,300	582	13.292	45	.1194
1978	SHUMAGIN	5	2	3	39,360	416	5.171	27	.1314
1978	SHUMAGIN	6	10	10	197,320	452	22.457	13	.1138
1978	SHUMAGIN	7	12	11	229,011	199	5.598	8	.0244
1978	SHUMAGIN	8	8	8	122,520	471	31.798	22	.2595
1978	SHUMAGIN	9	17	15	260,422	179	8.134	6	.0312
1978	SHUMAGIN	10	23	18	309,836	173	.703	0	.0023
1978	SHUMAGIN	11	13	11	164,516	500	57.151	40	.3474
1978	CHIRIKOF	3	8	6	92,400	520	20.043	50	.2169
1978	CHIRIKOF	4	6	7	119,568	493	19.920	54	.1666
1978	CHIRIKOF	5	6	6	120,180	467	14.957	22	.1245
1978	CHIRIKOF	6	2	2	40,500	490	--	--	--
1978	CHIRIKOF	7	19	18	365,574	195	8.406	6	.0230
1978	CHIRIKOF	8	8	7	132,420	534	33.638	30	.2540
1978	CHIRIKOF	9	26	20	366,577	199	2.447	1	.0067
1978	CHIRIKOF	10	33	27	370,678	174	3.207	1	.0087
1978	CHIRIKOF	11	42	44	639,064	203	15.661	3	.0245
1978	KODIAK	1	5	5	60,480	530	13.482	65	.2229
1978	KODIAK	2	1	1	5,400	640	1.360	76	.2519
1978	KODIAK	3	2	3	31,680	640	7.024	31	.2217
1978	KODIAK	4	4	4	66,780	479	10.537	61	.1578
1978	KODIAK	5	20	14	276,060	651	57.683	43	.2090
1978	KODIAK	6	14	12	239,992	590	102.060	38	.4253
1978	KODIAK	8	10	10	178,896	634	35.911	50	.1427
1978	KODIAK	7	8	7	149,098	605	21.269	27	.2007
1978	KODIAK	9	20	15	262,376	739	45.109	27	.1719
1978	KODIAK	10	18.6	14	194,384	649	50.683	35	.2607
1978	KODIAK	11	6	5	57,600	559	21.623	40	.3754

TABLE 4. -- JAPANESE LONGLINE CATCH-EFFORT DATA ON SABLEFISH COLLECTED BY U.S. OBSERVERS IN THE GULF OF ALASKA, 1977-78. (CONT.)

YEAR	AREA	MONTH	DAYS	SETS	HOOKS	AVE. DEPTH (M)	SABLEFISH MT.	PERCENT OF TOTAL CATCH	CATCH PER 1000 HOOKS
1978	YAKUTAT	1	14	14	211,680	649	3.757	81	.0177
1978	YAKUTAT	3	3	3	61,740	603	5.312	66	.0860
1978	YAKUTAT	6	3	4	59,996	455	32.257	45	.5377
1978	YAKUTAT	7	4	4	86,398	677	19.416	35	.2014
1978	YAKUTAT	8	13	12	234,399	681	52.433	55	.2237
1978	YAKUTAT	9	12	13	243,120	646	34.239	44	.1408
1978	YAKUTAT	10	15.5	12	214,400	633	30.391	42	.1417
1978	YAKUTAT	11	3	4	43,200	487	17.420	45	.4032
1977	SHUMAGIN	9	15	13	172,480	663	43.600	58	.2528
1977	SHUMAGIN	10	1	1	18,480	664	1.028	37	.0556
1977	KODIAK	9	9	8	116,920	736	46.058	53	.3939
1977	KODIAK	10	29	22	393,198	770	78.810	65	.2004
1977	YAKUTAT	9	14	12	185,240	758	67.464	77	.3642
1977	YAKUTAT	10	28	18	314,600	718	111.554	64	.3546
1977	SOUTHEASTERN	9	34	32	475,979	689	217.697	89	.4574
1977	SOUTHEASTERN	10	29	19	297,196	715	109.070	77	.3670
1977	CHARLOTTE	9	1	1	160,000	700	5.255	88	.0328

TABLE 4 CATCH RATE INFORMATION ON SABLEFISH AND THE DOMINANT SPECIES TAKEN IN FOREIGN FISHERIES AS COLLECTED BY U.S. OBSERVERS IN THE GULF OF ALASKA, 1977-78.

COUNTRY	VESSEL 1/	AREA 2/	YR	AVE. DEPTH (M)	SABLEFISH RK 3/	SABLEFISH KG/DAY	SABLEFISH KG/HR 4/	SP CAUGHT IN ORDER OF ABUNDANCE 4/
JAPAN	SMALL TRAWL	SHUM	77	201	16	3	0	POP,POL,AF
			78	222	19	16	2	POL,AF,POP
		CHIR	77	284	9	177	20	POL,POP,AF
			78	201	16	7	2	POL,POP,COD
		KOD	77	272	9	232	22	POL,AF,POP
			78	233	12	92	5	POL,POP,AF
		YAK	77	280	9	240	16	POP,AF,SROC
			78	290	11	162	5	POP,POL,AF
		S.E.	77	314	10	81	5	SROC,POP,AF
	LARGE TRAWL	SHUM	78	256	7	173	6	POL,COD,AF
		CHIR	77	255	9	224	24	POL,POP,AF
			78	243	6	460	59	POL,POP,AF
		KOD	77	269	10	6	2	POL,AF,POP
			78	265	3	808	14	POL,COD,SAB
		YAK	77	275	1	1643	170	POP,RSR,HR
		S.E.	77	296	9	466	48	RROC,POP,AF
	LONG-LINER	SHUM	77	663	1	2787	17	SAB,PRAT,RAT
			78	341	3	1673	1	COD,RAT,SAB
		CHIR	78	323	3	1023	1	COD,PRAT,SAB
		KOD	77	761	1	3274	8	SAB,RAT,PRAT
			78	686	2	3429	3	RAT,SAB,PRAT
		YAK	77	734	1	4243	12	SAB,PRAT,RAT
			78	767	1	4417	4	SAB,PRAT,RAT
		S.E.	77	699	1	5186	8	SAB,PRAT,SROC
USSR	LARGE TRAWL	SHUM	77	183	14	12	2	POL,COD,POP
			78	179	-	-	-	POP,POL,AF
		CHIR	77	178	18	3	1	POL,COD,POP
			78	141	21	0	0	POL,AM,COD
		KOD	77	178	16	35	4	POL,AM,COD
			78	119	-	-	-	POL,POP,COD
ROK	LARGE TRAWL	SHUM	78	181	11	72	9	POL,COD,POP
		CHIR	78	275	3	7065	508	POL,AF,SAB

1/ SMALL TRAWLER (<1,500 GRT), LARGE TRAWLER (>1,500 GRT)

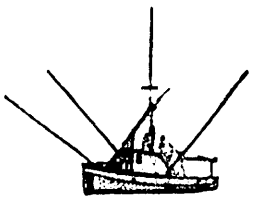
2/ SHUM=SHUMAGIN, CHIR=CHIRIKOF, KOD=KODIAK, YAK=YAKUTAT, S.E.= SOUTH EASTERN.

3/ RANK: ORDER OF SPECIES IN KG OF WEIGHT CAUGHT IN THE TOTAL CATCH

4/ IN THE CASE OF LONGLINERS, CPUE IS IN GM POP 1000 HOOKS POP SET

5/ POP=PACIFIC OCEAN PERCH, POL=POLLOCK, AF= ARROWTOOTH FLOUNDER COD=PACIFIC COD, SROC=SHORTSPINE THORNYHEAD ROCKFISH, SAB= SABLEFISH, RSR=RED STRIPED ROCKFISH, HR=HARLEQUIN ROCKFISH, RROC=ROUGHEYE ROCKFISH, PRAT=PECTORAL RATTAILS, RAT=RATTAILS

AGENDA ITEM G-3 Oct. 79



ALASKA TROLLERS ASSOCIATION

P.O. BOX 5825
KETCHIKAN, ALASKA 99901

September 26, 1979

FILE	ACT. INFO.	ROUTED TO	INITIAL
			3

SEP 28 1979

Council Members
North Pacific Fishery Management Council
P.O. Box 3136 DT
Anchorage, Alaska 99510

Dear Council Members;

The Alaska Trollers Association is very concerned about the effects of trawling on other Southeast Alaska fisheries, salmon, crab, halibut, and sablefish. We are particularly concerned about the effects of bottom trawling on ocean habitat and attendant potential impacts on crab and halibut.

Although the incidental catch for salmon, crab, and halibut is set at zero, we would like information on by-catch and mortality by trawlers in Southeast. The Southeast Alaska longline sablefishery is flourishing and able to take available stocks. What is the by-catch of sablefish by trawlers?

We strongly urge the Council to set aside more sanctuary areas in Southeast to facilitate and protect the longline sablefishery. We also recommend a limited entry system for trawlers. Thank you for your consideration.

Yours truly,

Sharon Newsome

Sharon Newsome
Executive Secretary

SN/vs

1979 Gulf of Alaska allocations

		JAPAN	U.S.S.R.	REPUBLIC OF KOREA	POLAND	MEXICO	TOTAL
Pacific Cod	Initial	3,200	1,500	100	100	4,400	9,300
	Reallocation #1	1,500	702	200	100	0	2,502
	Reallocation #2	1,500	702	200	100	0	2,502
	Reallocation #3	1,423	640	245	0	0	2,308
	Total	7,623	3,544	745	300	4,400	16,612
Flounders	Initial	14,898	1,402	100	100	100	16,600
	Reallocation #1	2,160	220	25	20	0	2,425
	Reallocation #2	2,160	220	25	20	0	2,425
	Reallocation #3	2,375	995	680	450	100	4,600
	Total	21,593	2,837	830	590	200	26,050
Atka Mackerel	Initial	1,528	16,808	100	764	100	19,300
	Reallocation #1	115	1,190	15	55	0	1,375
	Reallocation #2	115	1,190	15	55	0	1,375
	Reallocation #3	160	1,670	20	90	50	1,990
	Total	1,918	20,858	150	964	150	24,040
Pollock	Initial	232	345	170	53	20,000	20,800
	Reallocation #1	9,901	15,382	6,829	1,338	0	33,450
	Reallocation #2	8,341	12,942	6,829	5,338	0	33,450
	Reallocation #3	12,164	19,003	9,966	7,717	0	48,850
	Total	30,638	47,672	23,794	14,446	20,000	136,550
Pacific Ocean Perch	Initial	4,030	6,028	2,910	943	2,089	16,000
	Reallocation #1	601	838	445	91	0	1,975
	Reallocation #2	601	838	445	91	0	1,975
	Reallocation #3	1,421	0	204	0	0	1,625
	Total	6,653	7,704	4,004	1,125	2,089	21,575
Other Rockfishes	Initial	529	792	382	124	273	2,100
	Reallocation #1	277	390	178	30	0	875
	Reallocation #2	307	390	178	0	0	875
	Reallocation #3	480	20	925	0	0	1,425
	Total	1,593	1,592	1,663	154	273	5,275

1979 Gulf of Alaska Reallocations (Cont'd.)

		JAPAN	U.S.S.R.	REPUBLIC OF KOREA	POLAND	MEXICO	TOTAL
Squid	Initial	50	50	50	50	800	1,000
	Reallocation #1	65	70	60	55	0	250
	Reallocation #2	65	70	60	55	0	250
	Reallocation #3	120	130	110	105	0	465
	Total	300	320	280	265	800	1,965
Other Species	Initial	2,772	4,147	2,002	649	1,430	11,000
	Reallocation #1	365	490	225	95	0	1,175
	Reallocation #2	535	320	225	95	0	1,175
	Reallocation #3	920	550	385	165	0	2,020
	Total	4,592	5,507	2,837	1,004	1,430	15,370
Sablefish	Initial	4,185	100	465	50	100	4,900
	Reallocation #1A	765	0	85	0	0	850
	Reallocation #3	1,090	125	135	0	0	1,350
	Total	6,040	225	685	50	100	7,100
TOTAL	Initial	31,424	31,172	6,279	2,833	29,292	101,000
	Reallocation #1	14,984	19,282	7,977	1,784	0	44,027
	Reallocation #2	13,624	16,672	7,977	5,754	0	44,027
	Reallocation #3	20,153	23,133	12,670	8,527	150	64,633
	Total	80,185	90,259	34,903	18,898	29,442	253,687

Note: All figures are in metric tons.
Reallocation #1 made January 23, 1979.
Reallocation #1A made March 22, 1979.
Reallocation #2 made June 8, 1979.
Reallocation #3 made August , 1979.

August 16, 1979