APPENDIX L

PROPOSED AMENDMENTS TO THE GULF OF ALASKA GROUNDFISH EMP AND IMPLEMENTING REGULATIONS FOR 1979

submitted by the Japan Deep Sea Trawlers Association ANCHORAGE - NOVEMBER 30, 1978.

Mr. Chairmar and the members of the Council:

I am Toru Fukui, representative of the Japan Deep Sea
Trawlers Association. Our fishery mission represents all
the fishing enterprises affiliated with the Japan Deep Sea
Trawlers Association that have been operating in the Bering,
Aleutian and the Gulf of Alaskan waters.

Today we are presenting our proposed amendments and comments for the Gulf of Alaska FMP and its implementing regulations. We ask your full attention and consideration to the changes we are recommending.

I would like to thank the Council on behalf of our mission.

TORU FUKUI	SHOSUKE YEUMIYA

HIROMITSU NOMURA

By letter to Mr. Jim Branson dated November 3, 1978, the Japan Deep Sea Trawlers Association proposed six amendments to the Gulf of Alaska groundfish FMP for 1979 which we requested the Council to consider and act upon at the December meeting. However, after a careful review of each proposal and the management plan we have made a couple of revisions. Firstly. we have added a new proposal for an amendment to increase the OY for squid to 3300 mt. Secondly, we have withdrawn our proposal for an amendment to allow a directed trawl fishery for Pacific cod west of 157° W longitude. We feel the existing regulation is reasonable in order to protect this resource for Japanese longline fishermen. Thirdly, we have withdrawn our proposal to relax the regulation requiring the use of pelagic gear only from December 1 to June 1. Recognizing the desire for further protection of the halibut resource, the Japanese trawl industry will make the necessary adjustments in gear and fishing strategy with utmost efforts. we have reserved our request for an increase in the OY for Pacific ocean perch. However, we have offered a comment on the 1978 fishery and its relation to the condition of the resource and fishery for 1979.

Below we have outlined our present proposals for changes in the FMP for 1979 with supporting comments. We request the Council to consider each carefully and take appropriate action which will expedite the implementation of the approved amendments.

1. REDUCE THE NUMBER OF FISHING AREAS FROM FIVE TO THREE
AND RELAX THE REGULATION WHICH REQUIRES A FISHING AREA
BE CLOSED TO ALL FISHERMEN OF ONE NATION ONCE THAT
NATION'S ALLOCATION OF ANY SPECIES OR SPECIES CROUP
IN A MAJOR FISHING AREA IS REACHED. [Sec 611.92 (b) (2)
(ii) (c))

Based upon past foreign catch records, the FMP regulations apportion the OY and TALFF for each species or species group between five fishing areas in order to reduce the possibility of uneven exploitation. Upon its face this management regime would not seem to cause any serious disruptions in foreign fishing operations. However, in addition to the regulation which would require that an area be closed to all vessels of one nation once that nation's allocation for any one species or species group is reached, the distribution of the TALFFs and national allocations among the five areas creates a situation in which full utilization of the national allocation within any one area will be extremely difficult. Basically this is due to low naitonal allocations for certain species which are divided into even smaller amounts among the five management as shown in Table 1. areas,

TABLE 1.

THE ESTIMATED JAPANESE ALLOCATION TO EACH STATISTICAL AREA

	Japanese allocation	on SH	CH	ко	YA	SE
Pollock	232	78	75	56	17	6
POP	4,030	427	427	858	1,286	1,032
Other rock	529	25	25	25	227	227
Flounders	14,898	4,663	1,162	5,289	2,875	909
Sablefish				•		
Atka Mackerel	1,528	269	222	973	64	0
Pacific cod	3,200	883	397	1,405	390	125
Squid	50	9	9	9	9	14
Other species	2,772	757	604	857	352	202
Total	27,239	7,111	2,921	9,472	5,220	2,515

Distribution of proposed Japanese allocation among the 5 statistical areas, based upon rates of distribution calculated from table 63 of the FMP.

The ease with which an allocation for one of these species could be taken by a mistake in fishing strategy could result in a premature closure thereby disrupting normal fishing operations. The entire problem is further compounded by the regulation which limits the national catch to only 25% of the total national allocation between December 1 and June 1.

In the absence of any biological evidence which demonstrates that the stocks are localized to such a degree requiring division of the catch into five fishing areas, we feel the management objectives of the plan can be equally realized with three areas. This could be effectively accomplished by combining Shumagin and Chirikof into one area and Kodiak and Yakutat into one area as suggested previously by the Japanese Longline-Gillnet Association. Based upon past catch records, it is not anticipated that the Japanese fleet would redistribute fishing effort in such a way as to overfish in any one localized area. With three management areas Japanese operational difficulties would be reduced significantly allowing Japanes vessels to adjust their fishing operations in such a manner as to better ...utilize the allocations. In addition to a reduction in the number of fishing areas, we would also request an amendment Sec. 611.92 (b)(2)(ii) of the regulations by giving the Regional Director more discretionary authority in issuing closing orders when any of the applicable catch limitations

are reached. Before issuing a closing order the Regional Director would be able to determine whether or not a closure will serve any legitimate management objective at that time given the circumstances surrounding the fishery.

2. RELAX THE REGULATION WHICH LIMITS THE ALLOWABLE CATCH OF A NATION'S VESSELS TO NO MORE THAN 25% OF THE TOTAL NATIONAL ALLOCATION DURING THE PERIOD BETWEEN DECEMBER 1 AND JUNE 1. [Sec. 611.92 (b)(2) (ii)(E)].

The FMP refers to data from the observer program which indicates a 3% incidence of halibut during the winter and spring in the trawl fishery, [Sec. 8.3.2.1(B)] With a restriction limiting the catch during the winter and spring to no more than 25% of the total FAC, the plan estimates an annual halibut savings of 1,130 mt as compared to a fishery operated. uniformly throughout the year. However, in addition to the regulation requiring the use of pelagic gear only during the same period, the 25% catch restriction seems redundant and unnecessary. The plan notes that if pelagic trawls are used properly, the incidence of halibut is quite low, [Sec. 3.6.2]. Therefore, with assurance from Japanese fishermen that pelagic trawls will be used in the best manner possible to protect the halibut resource, an additional regulation restricting the catch during the winter and spring will only add to the operational difficulties of the foreign fleet. We would request the Council to amend the implementing regulations by removing this restriction.

3. OPENING OF THE AREA BEYOND THE THREE MILE TERRITORIAL SEA BETWEEN 169° AND 170° W LONGITUDE FOR FOREIGN FISHING

The management plan is quite specific in prohibiting foreign fishing landward of 12 miles. However, the corridor between 169°W and 170°W longitude has been a traditional area for foreign fishing and has been left open under previous bilateral agreements.

It is our understanding the Council at the July meeting agreed to consider an amendment which would eliminate this restriction. We would request the Council to again consider and act favorably upon an amendment which would remove the restriction and reopen the area to foreign fishing.

4. INCREASE THE OY FOR SQUID TO 3300 MT.

Experience in the Gulf of Alaska fisheries has demonstrated that squid is not a species for which a directed fishery can be conducted. Squid is taken incidentally only and has accounted for approximately 1% of the total catch. However, because of a low allocation to Japan of only 30mt during 1978, Japanese vessels were forced to avoid fishing grounds where the incidental catch of squid was comparatively high. Seeking new fishing grounds to avoid high incidental catch rates often disrupted the normal pattern of fishing resulting in economic loss to the operation. Japan was able to conduct a normal fishing operation in the Gulf of Alaska only after receiving a 125 mt reallocation of squid in late September, as shown in Figure 1 and by a comparison between Table 2 and 3.

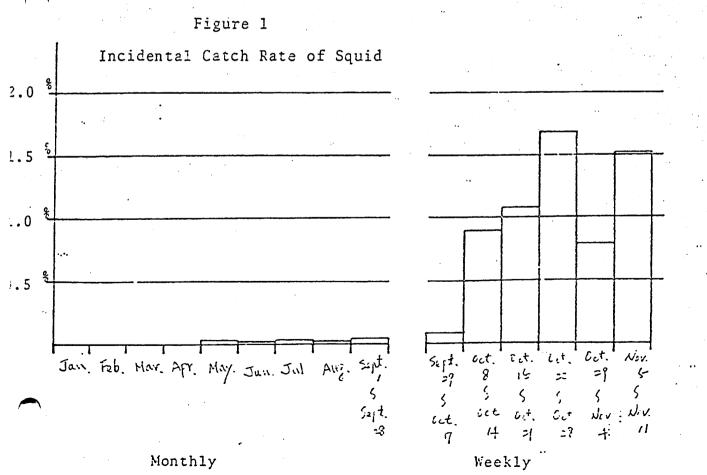


Table 2: Monthly Incidental Catch of squid by the Japanese Fleet in the Gulf of Alaska from Jan. 1, 1978 to Sept. 28, 1978 based upon an Initial Allocation of 30 mt.

			Squid	Catch	by sta	tistic	al area	Total		Catch atch ratio
٠,			SH	CH	KO	YA	SE	of sq		of squid
	Jan Feb			0.1		•		0.0 0.1	2,527.8	
	Mar					0.2		0.2	2,782.9 3,046.6	0.0072
	Apr May		0.3	0.4		0.1	0.1	0.0	3,198.7	7 0.0281
	Jun Jul			0.1	0.7	0.3		2.1	7,116.2 7,601.8	0.0276
	Aug Sept	1		•	2.0	0.3		2.3	6,486.8 5,130.9	
		ept								
	Tota from Jan	1 2	0.3	0.8	5.4	1.3	0.1	7.9	39,451.7	7 0.020
		r Sept	28		•			•		

Table 3: Weekly Incidental Catch of squid by the Japanese Fleet in the Gulf of Alaska from Sept. 29, 1978 to Nov. 11, 1978 based upon the first reallocation of 125 mt on Sept. 28, and the second reallocation of 1,000 mt on October 15.

: s	quid	d Catch by statistical area				Total Catch	Total catch	Catch ratio	
•	SH	СН	КО	ΥA	SE	of squid		of squid	
Sept 29 - 3 Oct 1 - 7 Oct 8 - 14 Oct 15 - 21 Oct 22 - 26		2.0 2.1 5.1 1.2	3.9 7.0 14.4 14.2 6.1	0.2 0.8 1.3 4.3 21.0	2.2 5.6	4.1 13.2 20.5 29.2 29.2	527.5 1,802.1 2,256.7 2,693.1 1,738.0	0.7773 0.7325 0.9084 1.0843 1.6801	
Oct 29 - Nov 4 Nov 5 - 11	0.9	7.2 9.7	1.5	0.5		10.1 14.7	1,260.7 974.8	0.8011	
Total from Sept 29 - Nov 11			49.2 (40%)		7.9 (6%)	121.0 (100%)	11,252.9	1.0600	
Total	8.9	26.1	54.6	29.4	7.9	128.9	50,704.6	0.0140	

Based upon our past experience, squid has accounted for approximately 1% of the total catch in a normal fishing operation.
For this reason we are requesting that the plan be amended to
increase the OY to 3300 mt. This will provide the Japanese trawl
fishery with a reasonable margin of safety in taking squid incidentally. We believe that an increase in the OY to 3300 mt falls
safely within the MSY range which is believed to be greater than
2000 mt.

In addition to an increase in the OY, we are also seeking support from the Council in recommending to the federal government a method for allocating incidental species for each major fishery based upon percentage rates from past experience. A similar method has already been adopted for the domestic trawl fisheies delivering pollock to foreign processing vessels, (43 FR 49033).

The amount of incidental species which can be received by foreign processing vessels is based upon a percentage derived from past experience in the foreign pollock fisheries.

5. STATUS OF THE 1978 PACIFIC OCEAN PERCH FISHERY

For the 1978 fishery, Table 4 estimates that more than 16,000 mt or 64% of the OY for Pacific ocean perch will remain unharvested by the end of this season. Japanese fishermen were unable to utilize their full allocation for the following two reasons.

Firstly, because of the small allocation to Japan for Pacific ocean perch and other rockfishes, Japanese vessels were forced to avoid areas of high catch rates in order to protect against a premature closure of the trawl fishery. Secondly, the release of the reserve was too late in the season to benefit the fishery.

With only 36% of the total OY being removed from the fishery this year, the biological status of the resource should be improved. We feel this is an important point for the Council to consider in future deliberations on the status of the Pacific ocean perch resource.

Table 4: Estimated Unharvested Portion of OY for P.O.P. in 1978 (from Jan. 1 to Nov. 30), based on Blend Report by NMFS NWAFC. (Unit MT)

			Japan	R.O.K.	U.S.S.R.	Poland	Mexico	Total
((A)	Foreign Allocation	6448.	5001	9023	2428	1000	23900
(1) ((B)	Catch as of Nov. 4	4419	1897.7	554.5	0	. 0	6871.2
		Unharvested portion as of Nov. 4	2029.0	3103.3	8468.5	2428	1000	17028.8
(Average Catch per day from Jan 1 to Nov. 4	14.3	6.2	1.8	0	0	22.3
(Estimated catch from Nov. 5 to Nov. 30 (28 days) based on (D)	371.8	161.2	46.8	0	0	579.8
(2) (F)		4790.8	2058.9	601.3	0	0	7451.0
	•	Estimated Unharvested portion by Nov 30, 1978		2942.1	8421.7	2428	1000	16449
(3) (1		Average catch per day based on 4 week blend catch by NWAFC from Oct 8 to Nov 4		26.3	0	О	0	37.5
C	•	Estimated catch from Nov. 5 to Nov.	291.2 30	736.4	0	0	0	1027.6
(,	J)		4710.2	2634.1	554.5	0	0	7398.8
.(1 		Estimated Unharvested portion by	1737.8	2366.9	8468.5	2428.0	1000.0	16001.2 (64% of
		Nov. 30, 1978	•					(Y0 %F0)

Remark

PROPOSED AMENDMENTS TO THE GULF OF ALASKA GROUNDFISH EMP AND IMPLEMENTING REGULATIONS FOR 1979

submitted by the Japan Deep Sea Trawlers Association
ANCHORAGE - NOVEMBER 30, 1978.

Mr. Chairmar and the members of the Council:

I am Toru Fukui, representative of the Japan Deep Sea
Trawlers Association. Our fishery mission represents all
the fishing enterprises affiliated with the Japan Deep Sea
Trawlers Association that have been operating in the Bering,
Aleutian and the Gulf of Alaskan waters.

Today we are presenting our proposed amendments and comments for the Gulf of Alaska FMP and its implementing regulations. We ask your full attention and consideration to the changes we are recommending.

I would like to thank the Council on behalf of our mission.

TORU FUKUI	 SHOSUKE	IZUMIYA	

HIROMITSU NOMURA

By letter to Mr. Jim Branson dated November 5, 1978, the Japan Deep Sea Trawlers Association proposed six amendments to the Gulf of Alaska groundfish FMP for 1979 which we requested the Council to consider and act upon at the December meeting. However, after a careful review of each proposal and the management plan we have made a couple of revisions. Firstly, we have added a new proposal for an amendment to increase the OY for squid to 3300 mt. Secondly, we have withdrawn our proposal for an amendment to allow a directed trawl fishery for Pacific cod west of 157° W longitude. We feel the existing regulation is reasonable in order to protect this resource for Japanese longline fishermen. Thirdly, we have withdrawn our proposal to relax the regulation requiring the use of pelagic gear only from December 1 to June 1. Recognizing the desire for further protection of the halibut resource, the Japanese trawl industry will make the necessary adjustments in gear and fishing strategy with utmost efforts. we have reserved our request for an increase in the OY for Pacific ocean perch. However, we have offered a comment on the 1978 fishery and its relation to the condition of the resource and fishery for 1979.

Below we have outlined our present proposals for changes in the FMP for 1979 with supporting comments. We request the Council to consider each carefully and take appropriate action which will expedite the implementation of the approved amendments.

1. REDUCE THE NUMBER OF FISHING AREAS FROM FIVE TO THREE
AND RELAX THE REGULATION WHICH REQUIRES A FISHING AREA
BE CLOSED TO ALL FISHERMEN OF ONE NATION ONCE THAT
NATION'S ALLOCATION OF ANY SPECIES OR SPECIES CROUP
IN A MAJOR FISHING AREA IS REACHED. [Sec 611.92 (b)(2)
(ii)(c))

Based upon past foreign catch records, the FMP regulations apportion the OY and TALFF for each species or species group between five fishing areas in order to reduce the possibility of uneven exploitation. Upon its face this management regime would not seem to cause any serious disruptions in foreign fishing operations. However, in addition to the regulation which would require that an area be closed to all vessels of one nation once that nation's allocation for any one species or species group is reached, the distribution of the TALFFs and national allocations among the five areas creates a situation in which full utilization of the national allocation within any one area will be extremely difficult. Basically this is due to low naitonal allocations for certain species which are divided into even smaller amounts among the five management areas, as shown in Table 1.

TABLE 1.

THE ESTIMATED JAPANESE ALLOCATION TO EACH STATISTICAL AREA

	Japanese allo	ocation SH	CH	КО	YA	SE
Pollock	232	78	75	56	17	6
POP	4,030	427	427	858	1,286	1,032
Other rock	529	25	25	25	227	227
Flounders	14,898	4,663	1,162	5,289	2,875	909
Sablefish						
Atka Mackerel	1,528	269	222	. 973	64	0
Pacific cod	3,200	883	397	1,405	390	125
Squid	50	9	9	9	9	14
Other species	2,772	757	604	857	352	202
Total	27,239	7,111	2,921	9,472	5,220	2,515

Distribution of proposed Japanese allocation among the 5 statistical areas, based upon rates of distribution calculated from table 63 of the FMP.

The ease with which an allocation for one of these species could be taken by a mistake in fishing strategy could result in a premature closure thereby disrupting normal fishing operations. The entire problem is further compounded by the regulation which limits the national catch to only 25% of the total national allocation between December 1 and June 1.

In the absence of any biological evidence which demonstrates that the stocks are localized to such a degree requiring division of the catch into five fishing areas, we feel the management objectives of the plan can be equally realized with three areas. This could be effectively accomplished by combining Shumagin and Chirikof into one area and Kodiak and Yakutat into one area as suggested previously by the Japanese Longline-Gillnet Association. Based upon past catch records, it is not anticipated that the Japanese fleet would redistribute fishing effort in such a way as to overfish in any one localized area. With three management areas Japanese operational difficulties would be reduced significantly allowing Japanes vessels to adjust their fishing operations in such a manner as to better ...utilize the allocations. In addition to a reduction in the number of fishing areas, we would also request an amendment to Sec. 611.92 (b)(2)(ii) of the regulations by giving the Regional Director more discretionary authority in issuing closing orders when any of the applicable catch limitations

are reached. Before issuing a closing order the Regional Director would be able to determine whether or not a closure will serve any legitimate management objective at that time given the circumstances surrounding the fishery.

2. RELAX THE REGULATION WHICH LIMITS THE ALLOWABLE

CATCH OF A NATION'S VESSELS TO NO MORE THAN 25%

OF THE TOTAL NATIONAL ALLOCATION DURING THE PERIOD

BETWEEN DECEMBER 1 AND JUNE 1. [Sec. 611.92 (b)(2)

(ii)(E)].

The FMP refers to data from the observer program which indicates a 3% incidence of halibut during the winter and spring in the trawl fishery, [Sec. 8.3.2.1(B)] With a restriction limiting the catch during the winter and spring to no more than 25% of the total FAC, the plan estimates an annual halibut savings of 1,130 mt as compared to a fishery operated uniformly throughout the year. However, in addition to the regulation requiring the use of pelagic gear only during the same period, the 25% catch restriction seems redundant and unnecessary. The plan notes that if pelagic trawls are used properly, the incidence of halibut is quite low, [Sec. 3.6.2]. Therefore, with assurance from Japanese fishermen that pelagic trawls will be used in the best manner possible to protect the halibut resource, an additional regulation restricting the catch during the winter and spring will only add to the operational difficulties of the foreign fleet. We would request the Council to amend the implementing regulations by removing this restriction.

3. OPENING OF THE AREA BEYOND THE THREE MILE TERRITORIAL SEA BETWEEN 169° AND 170° W LONGITUDE FOR FOREIGN FISHING

The management plan is quite specific in prohibiting foreign fishing landward of 12 miles. However, the corridor between 169°W and 170°W longitude has been a traditional area for foreign fishing and has been left open under previous bilateral agreements.

It is our understanding the Council at the July meeting agreed to consider an amendment which would eximinate this restriction. We would request the Council to again consider and act favorably upon an amendment which would remove the restriction and reopen the area to foreign fishing.

4. INCREASE THE OY FOR SQUID TO 3300 MT.

Experience in the Gulf of Alaska fisheries has demonstrated that squid is not a species for which a directed fishery can be conducted. Squid is taken incidentally only and has accounted for approximately 1% of the total catch. However, because of a low allocation to Japan of only 30mt during 1978, Japanese vessels were forced to avoid fishing grounds where the incidental catch of squid was comparatively high. Seeking new fishing grounds to avoid high incidental catch rates often disrupted the normal pattern of fishing resulting in economic loss to the operation. Japan was able to conduct a normal fishing operation in the Gulf of Alaska only after receiving a 125 mt reallocation of squid in late September, as shown in Figure 1 and by a comparison between Table 2 and 3.

Table 2: Monthly Incidental Catch of squid by the Japanese Fleet in the Gulf of Alaska from Jan. 1, 1978 to Sept. 28, 1978 based upon an Initial Allocation of 30 mt.

	Squid (Catch CH	by stat	ristica YA	al area	Total catch of squid	Total catch	of squid
Jan Feb Mar Apr May Jun Jul Aug Sept 1Sept	0.3	0.1	0.7 1.8 0.9 2.0	0.2 0.1 0.3 0.1 0.3	0.1	0.0 0.1 0.2 0.0 0.9 1.1 2.1 1.2	2,527.8 1,560.2 2,782.9 3,046.6 3,198.7 7,116.2 7,601.8 6,486.8 5,130.9	0.0064 0.0072 0.0281 0.0155 0.0276 0.0185
Total from Jan 1 Sep	0.3 et 28	0.8	5.4	1.3	0.1	7.9	39,451.7	0.020

Table 3: Weekly Incidental Catch of squid by the Japanese Fleet in the Gulf of Alaska from Sept. 29, 1978 to Nov. 11, 1978 based upon the first reallocation of 125 mt on Sept. 28, and the second reallocation of 1,000 mt on October 15.

: s	quid	Catch	by sta	tistica	al area	Total Catch	Total catch	Catch ratio
	SH	CH	КО	YA	SE	of squid		of squid %
Sept 29 - 3 Oct 1 - 7 Oct 8 - 14 Oct 15 - 21 Oct 22 - 28		2.0 2.1 5.1 1.2	3.9 7.0 14.4 14.2 6.1	0.2 0.8 1.3 4.3 21.0	2.2 5.6	4.1 13.2 20.5 29.2 29.2	527.5 1,802.1 2,256.7 2,693.1 1,738.0	0.7773 0.7325 0.9084 1.0843 1.6801
Oct 29 - Nov 4 Nov 5 - 11	0.9	7.2	1.5	0.5		10.1	1,260.7 974.8	0.8011
Total from Sept 29 - Nov 11	8.6 (7%)	27.3 (23%)	49.2 (40%)	28.1 (23%)	7.9 (6%)	121.0 (100%)	11,252.9	1.0600
Total	8.9	28.1	54.6	29.4	7.9	128.9	50,704.6	0.0140

Based upon our past experience, squid has accounted for approximately 1% of the total catch in a normal fishing operation.

For this reason we are requesting that the plan be amended to
increase the OY to 3300 mt. This will provide the Japanese trawl
fishery with a reasonable margin of safety in taking squid incidentally. We believe that an increase in the OY to 3300 mt falls
safely within the MSY range which is believed to be greater than
2000 mt.

In addition to an increase in the OY, we are also seeking support from the Council in recommending to the federal government a method for allocating incidental species for each major fishery based upon percentage rates from past experience. A similar method has already been adopted for the domestic trawl fisheies delivering pollock to foreign processing vessels, (43 FR 49033).

The amount of incidental species which can be received by foreign processing vessels is based upon a percentage derived from past experience in the foreign pollock fisheries.

5. STATUS OF THE 1978 PACIFIC OCEAN PERCH FISHERY

For the 1978 fishery, Table 4 estimates that more than 16,000 mt or 64% of the OY for Pacific ocean perch will remain unharvested by the end of this season. Japanese fishermen were unable to utilize their full allocation for the following two reasons.

Firstly, because of the small allocation to Japan for Pacific ocean perch and other rockfishes, Japanese vessels were forced to avoid areas of high catch rates in order to protect against a premature closure of the trawl fishery. Secondly, the release of the reserve was too late in the season to benefit the fishery.

With only 36% of the total OY being removed from the fishery this year, the biological status of the resource should be improved.

We feel this is an important point for the Council to consider in future deliberations on the status of the Pacific ocean perch resource.

Table 4: Estimated Unharvested Portion of OY for P.O.P. in 1978 (from Jan. 1 to Nov. 30), based on Blend Report by NMFS NWAFC. (Unit MT)

			Japan	R.O.K.	U.S.S.R.	Poland	Mexico	Total
	(A)	Foreign Allocation	6448.	5001	9023	2428	1000	23900
(1)	(B)	Catch as of Nov. 4	4419	1897.7	554.5	0	0	6871.2
	(C)	Unharvested portion as of Nov. 4	2029.0	3103.3	8468.5	2428	1000	17028.8
	(D)	Average Catch per day from Jan 1 to Nov. 4	14.3	6.2	1.8	0	0	22.3
	(E)	Estimated catch from Nov. 5 to Nov. 30 (28 days) based on (D)	371.8	161.2	46.8	0	0	579.8
(2)	(F)	Estimated Annual Catch from Jan. 1 to Nov. 30 [(F)=(B)+(E)]	4790.8	2058.9	601.3	0	0	7451.0
	(G)	Estimated Unharvested portion by Nov 30, 1978		2942.1	8421.7	2428	1000	16449
(3)	(H)	Average catch per day based on 4 week blend	11.2	26.3	0	0	0	37.5
		catch by NWAFC from Oct 8 to Nov 4						
	(I)	Estimated catch from Nov. 5 to Nov.	291.2	736.4	0	0	0	1027.6
	(J)	Estimated Annual Catch from Jan. 1 to Nov. 30.		2634.1	554.5	0	0	7898.8
	(K)	Unharvested portion by	1737.8	2366.9	8468.5	2428.0	1000.0	16001.2
		Nov. 30, 1978						(64% of OY)