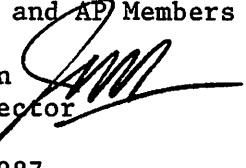


M E M O R A N D U M

TO: Council, SSC, and AP Members

FROM: Jim H. Branson  
Executive Director 

DATE: December 2, 1987

SUBJECT: Interim Action Committee report on changing sablefish season.

ACTION REQUIRED

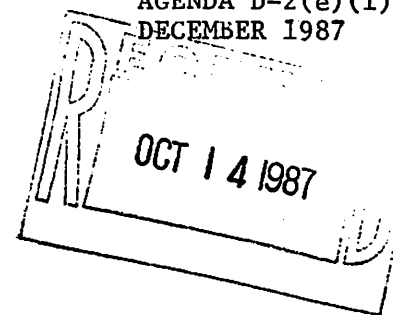
Information only at this meeting. Discuss a proposal to delay the sablefish longline season to coincide with the first halibut opening.

BACKGROUND

Mark Hutton submitted a request in October for the Council to take emergency action to change the opening of the Gulf of Alaska sablefish longline fishery to immediately follow or coincide with the first halibut opening. Mr. Hutton's justification for the request is that a conservation problem exists because of the high incidental catch of halibut in the sablefish fishery when it opens on April 1. He also submitted an amendment proposal for consideration in this year's cycle but it could not be implemented until 1989. Mr. Hutton requests Council action to change the season in 1988, to be followed by the amendment. A letter from Mr. Hutton providing additional background information is included in your notebooks as item D-2(e)(1).

On October 13, 1987 the Interim Action Committee teleconferenced to discuss the emergency request. They decided to put the proposal on this meeting's agenda for discussion and on the January agenda for final decision. The Council is also scheduled to take action on groundfish amendment proposals in January.

At the request of the Committee the International Pacific Halibut Commission prepared a summary of halibut bycatch mortality in the sablefish fishery; it is item D-2(e)(2). The summary identifies known reports of bycatch rates in the DAP and foreign fisheries, average size of halibut caught in the sablefish fishery, estimates of bycatch and bycatch mortality in the DAP fishery, and estimates of halibut savings by delaying the sablefish opening in the Gulf of Alaska.



MEMO TO: Jim Branson, Executive Director  
North Pacific Fishery Management Council

FROM: Mark I. Hutton

SUBJECT: Background information and data supporting request for an  
emergency change in the sablefish season, to conserve halibut  
stocks.

DATE: October 12, 1987

The incidental catch of halibut during the early (April) sablefish fishery is far greater than reported and continues to pose a serious conservation threat to halibut stocks if not addressed immediately. The solution is simple, and in fact reaches into pages of our management past where the sablefish fishery followed the halibut openers and started around May 1.

The purpose of this memo is to present and explain the data which supports the emergency request to change the sablefish season to reduce the incidental catch of halibut. This memo is organized into six (short) sections:

1. Fishing data; telephone interviews, highest incidental halibut catch rates, average incidental halibut catch rates;
2. Halibut abundance by area;
3. Supporting literature;
4. Important depth data relative to sablefish and halibut stocks;
5. Other contributing factors and potential conflicts and
6. Recommendations

## SECTION 1 Boat Data

In all, 8 longline boats were interviewed by telephone. The boat names will be given to Jim Branson, but identified here as boats A-H.

| <u>Boat</u> | <u>Area</u> | <u>Most Halibut/Skate</u> | <u>Avg Halibut/Skate</u> |
|-------------|-------------|---------------------------|--------------------------|
| A           | W/Y         | 570/ 10 skates            | 1-3                      |
| B           | W/Y         | 20,000 lbs/ day           | 1-2                      |
| C           | W/Y         | 10,000 lbs/ 20 skates     | 1-2                      |
| D           | W/Y         | 10,000 lbs/ 20 skates     | 1-2                      |
| E           | W/Y         | 5,000 lbs/ day            | 0-1                      |
| F           | W/Y         | 100/ skate                | 1-3                      |
| G           | <u>1/</u>   | high                      | no estimate              |
| H           | <u>1/</u>   | high                      | no estimate              |

1/ No numerical data. Stated they "sifted" through the halibut to catch large sablefish in W/Y, Central and Western areas.

The council document shows that the percent of halibut caught during the sablefish fishery was 1.2%. This is ridiculous. That assumes only 400,000 lbs. of halibut were caught during the sablefish fishery. Based on a phone conversation with Greg Williams, IPHC (October 8) he said the 1.2% was based on foreign observer data and 1 sample from Kodiak. If you consider the following average or conservative multipliers it leads you into numbers that are unacceptable.

1-2 halibut/skate @ 30 lbs/halibut  
 50-60 skates hauled / day  
 500 boats (300 Central, 200 Eastern)  
 14-20 days actual fishing

low

30 lbs/skate x 50 skates/day x 500 boats x 14 days = 10,500,000 lbs.

high

60 lbs/skate x 60 skates/day x 500 boats x 20 days = 36,000,000 lbs.

## SECTION 2 Halibut Abundance

Most of the above data is from the West Yakutat area. Post season halibut catch analyses showed improved catches and CPUE for halibut as you move Westward. Boats G & H experienced this in the incidental catch of halibut while fishing sablefish Westward. The point is, the incidental catch of halibut during the sablefish fishery seems to increase in the Western and Central areas, more so than in the Yakutat districts.

## SECTION 3 Literature

Marsh and Cobb (1907) first acknowledge that sablefish and halibut in the early spring inhabit the same grounds. Data from the 1910's reveals several longline trips of 50% sablefish and 50% halibut.

Bracken (1983) cited a 1950 Fish and Wildlife Service memo which recommended closing sablefish until May 1 to "afford protection to sablefish stocks during the winter/spring spawning season and reduce the destruction of halibut taken inadvertently on sablefish gear during the early spring period."

Bracken goes on to report "that subsequent to this action the incidental catch of halibut declined significantly as a result of this action." The May 1 date remained through the time of the FCMA of 1976 at which time the council opened the domestic fishery year round to afford equal treatment between foreign and domestic longliners. Next the 140 degree foreign prohibition was passed.

Kollen (1944) further correlated the high incidence of halibut or sablefish gear to the co-mingling of stocks in late winter and early spring. His analysis of a large collection of log books revealed that "in March considerable" quantities of halibut are taken during sablefish trips. He states the injury to halibut results in a high mortality. Kollen also states that most of the fishermen he talked to thought sablefish shouldn't be fished until May 1. He concludes by stating that the destruction of halibut or sablefish gear during the early spring months is a serious conservation problem.

## SECTION 4 Depth Data

Interviews and personal observations indicate that in April both sablefish and halibut are caught at 250-280 Fathoms. In May the halibut move into shallower waters with sablefish deeper. The separation is not complete but does occur.

## SECTION 5 Other Data

Conservation of halibut stocks seems related to their seasonal and spatial characteristics, which are similar to halibut in April. Another consideration is weather. All fishermen accept the weather, whatever it is, but during the April sablefish fishery there was a storm every 3 days which meant gear could not be tendered every day. Gear not serviced every day greatly contributed to sablefish and halibut mortality. One-third to one-half of the season (days gear was fishing) was spent jogging on the set, not fishing. So while weather isn't a complaint, it is a conservation factor. It appears that the entire sablefish quota can be taken in May well in advance of any other conflict with any other fishery. Effort will be greater in 1988 than it was in 1987.

## SECTION 6 Recommendations

Establish an opening date for the sablefish fishery, all areas, of May 1 or concurrent with the first halibut opener or immediately following the first halibut opener. Anything less, such as allowable incidental quotas will not be effective.

The issue is so important it cannot wait for the 1989 fishery. It must be implemented by the 1988 fishery...6 months away. At stake is a further loss of halibut approaching an amount equal to the directed fishery and an unnecessary loss of sablefish.

DIRECTOR  
DONALD A. MC CAUGHYRAN

P.O. BOX 95009  
SEATTLE, WA 98145-2009

COMMISSIONERS:

RICHARD ELIASON  
SITKA, AK

KARNET E. JONES  
VANCOUVER, B.C.

WALD MC LEOD  
VANCOUVER, B.C.

ROBERT W. MC VEY  
JUNEAU, AK

GEORGE WADE  
SEATTLE, WA

GARY T. WILLIAMSON  
SURREY, B.C.

# INTERNATIONAL PACIFIC HALIBUT COMMISSION

ESTABLISHED BY A CONVENTION BETWEEN CANADA  
AND THE UNITED STATES OF AMERICA

November 12, 1987

NOV 16 1987

|                |             |                             |
|----------------|-------------|-----------------------------|
| TO: _____      | DATE: _____ | TELEPHONE<br>(206) 834-1838 |
| FROM: _____    | _____       | _____                       |
| SUBJECT: _____ | _____       | _____                       |
| _____          | _____       | _____                       |
| _____          | _____       | _____                       |
| _____          | _____       | _____                       |
| _____          | _____       | _____                       |
| _____          | _____       | _____                       |
| _____          | _____       | _____                       |
| _____          | _____       | _____                       |
| _____          | _____       | _____                       |

cc: SD

Mr. Jim H. Branson, Executive Director  
North Pacific Fishery Management Council  
PO Box 103136  
Anchorage, AK 99510

Dear Jim:

As a result of the telephone conference call to discuss Mark Hutton's concern for halibut bycatch in the DAP sablefish fishery, the Council has scheduled for the December meeting a discussion of an emergency regulation proposal to delay the start of the sablefish fishery. We have prepared a brief summary of information for halibut bycatch mortality in the sablefish fishery that may assist the Council in its deliberations.

The amount of information is very limited, and conclusions must be drawn with caution. For example, Alaska Department of Fish and Game observer data for waters near Kodiak Island are insufficient to apply to the Gulf in general, but strongly indicate DAP longline bycatch rates of halibut are higher than foreign rates currently used in the Gulf of Alaska. However, our summary sets a reasonable range of possibilities that fishermen and others may be able to narrow.

The summary identifies known reports of bycatch rates in the DAP and foreign fisheries and average size of halibut caught in sablefish fisheries, estimates bycatch and bycatch mortality in the DAP fishery, and estimates halibut mortality savings from a delayed sablefish opening in the Gulf of Alaska.

The summary suggests that substantial quantities of halibut mortality occurs in the sablefish fishery, especially prior to May, and that the mortality could be reduced by delaying the sablefish opening. We would support Council action to reduce the halibut bycatch mortality by delaying opening of the sablefish fishery.

Sincerely,  


Donald A. McCaughyran  
Director

RJT:jdf

enc

cc: IPHC Commissioners

INTERNATIONAL PACIFIC HALIBUT COMMISSION

Halibut Bycatch in the DAP Sablefish fishery

November 5, 1987

I. Bycatch Rates

Rates of halibut incidence in the foreign longline fishery in the Gulf of Alaska have been collected by the NMFS Observer Program and by ADF&G for the DAP longline fishery in the Kodiak region. The average halibut incidence (no. per mt) from the 1977-1984 foreign longline fishery operating at depths greater than 500 m (about 275 fathoms) is shown below by month and region:

| Region    | Jan   | Feb    | Mar   | Apr   | May   | Jun   |
|-----------|-------|--------|-------|-------|-------|-------|
| Shumagin  | 1.609 | -      | 3.269 | 0.186 | 4.480 | 0.657 |
| Chirikof  | 0.000 | -      | 1.269 | 0.446 | 0.117 | 0.000 |
| Kodiak    | 0.000 | 17.910 | 4.980 | 0.176 | 0.105 | 0.000 |
| Yakutat   | 0.000 | -      | 0.536 | 0.880 | 3.038 | 0.068 |
| Southeast | -     | -      | -     | -     | -     | -     |

| Region    | Jul   | Aug   | Sep   | Oct   | Nov   | Dec    |
|-----------|-------|-------|-------|-------|-------|--------|
| Shumagin  | 0.000 | 0.000 | 0.037 | 0.350 | 0.531 | 11.614 |
| Chirikof  | 0.315 | 0.000 | 0.000 | 0.000 | 1.752 | 6.073  |
| Kodiak    | 0.000 | 0.022 | 0.000 | 1.401 | 1.064 | 8.273  |
| Yakutat   | 0.235 | 0.000 | 0.055 | 2.351 | 1.393 | 2.815  |
| Southeast | -     | -     | 0.000 | 0.000 | -     | -      |

Incidence rates are generally highest from October through May and lowest from June through September. This is consistent with known migration patterns of halibut: to deep water (greater than 150 fathoms) in November-March for spawning and up into shallow water (less than 125 fathoms) for feeding during May-September. The foreign fishery data shown above indicate an average incidence over all regions and months of 1.7 halibut per mt of sablefish.

Collection of bycatch data from the DAP longline fishery has only recently been initiated. Observations from the sablefish fishery are limited to those taken in the Kodiak region from 2 vessels during June-August, 1984 and 3 vessels during September, 1986-March, 1987. These data are as follows:

| Month/Year | Halibut Incidence<br>(no. per mt) | Source                            |
|------------|-----------------------------------|-----------------------------------|
| 6-8/84     | 0.400                             | ADF&G Informational Leaflet #257  |
| 9/86-3/87  | 20.600                            | ADF&G News Release - May 27, 1987 |

## II. Size Information

In the foreign fishery, observers collected size data from a subsample of the catch. Observers in the DAP fishery have had little success in obtaining size data due to various logistical problems (e.g. inadequate deck space), but did measure halibut caught during two sablefish trips in 1984. Despite the limited amount of data, observer information and anecdotal reports from fishermen suggest that halibut caught incidentally in the DAP fishery are much larger in size than those observed in the foreign fishery:

| Fishery | Period        | Average Size                   |
|---------|---------------|--------------------------------|
| DAP     | June-Aug/84   | 42 lbs (net) or 25 kg (rd.)    |
| DAP     | Sep/86-Mar/87 | not available                  |
| Foreign | Jan/77-Dec/84 | 11.6 lbs (net) or 7.0 kg (rd.) |

## III. Estimates of Bycatch

Without a comprehensive observer program to monitor bycatch in the DAP sablefish fishery, the bycatch cannot be adequately estimated. We can make some rough estimates, however, using the data previously presented. Assuming the data from the foreign fishery represent a best-case scenario and the DAP fishery data a worst-case scenario, the following computations are made:

1987 Gulf of Alaska Sablefish TQ = 20,000 mt

Longline Allocation = 80% of TQ = 16,000 mt

### Minimum Estimate

(apply average foreign incidence rate and average weight to DAP)

16,000 mt x 1.7 fish/mt = 27,200 fish

27,200 fish x 11.6 lbs/fish = 315,520 lbs

Mortality = 25% x 315,520 lbs = 78,880 lbs (36 mt)

### Maximum Estimate

(apply highest DAP incidence rate and average weight)

16,000 mt x 20.6 fish/mt = 329,600 fish

329,600 fish x 42 lbs = 13.8 million lbs

Mortality = 25% x 13.8 million lbs = 3.5 million lbs (2111 mt)

## IV. Estimated Savings with a May Opening

Monthly sablefish landings (mt) by area for the 1987 Gulf of Alaska DAP longline fishery were obtained from PacFIN and are as follows:



| Jan | Feb | Mar   | Apr    | May   | Jun |        |
|-----|-----|-------|--------|-------|-----|--------|
| 4   | 69  | 32    | 10,905 | 5,811 | 189 |        |
| Jul | Aug | Sep   | Oct    | Nov   | Dec | Total  |
| 89  | 27  | 1,916 | 86     | 0     | 0   | 19,128 |

Landings during January-April totalled 11,010 mt. Diverting this catch to May and later months when halibut bycatch is less would reduce halibut bycatch mortality. Assuming a 25%-75% range in bycatch rate reduction from a later season, the estimated reduction in bycatch mortality would be the status quo bycatch mortality minus the bycatch mortality from the delayed season.

**STATUS QUO BYCATCH MORTALITY:**

(Using highest domestic fishery incidence rate and average weight)

$$11,010 \text{ mt} \times 20.6 \text{ fish/mt} = 226,806 \text{ fish}$$

$$226,806 \text{ fish} \times 42 \text{ lbs/fish} = 9.5 \text{ million lbs}$$

$$\text{Mortality} = 25\% \times 9.5 \text{ million lbs} = 2.4 \text{ million lbs (1448 mt)}$$

**BYCATCH MORTALITY INCURRED BY DELAYING SEASON**

(Using 25% and 75% of highest DAP fishery incidence)

$$11,010 \text{ mt} \times \begin{cases} 15.4 \text{ fish/mt} = 169,554 \text{ fish} \\ 5.2 \text{ fish/mt} = 57,252 \text{ fish} \end{cases}$$

$$\begin{matrix} 169,554 \text{ fish} & | & 7.1 \text{ million lbs} \\ & | \times 42 \text{ lbs/fish} = & | \\ 57,252 \text{ fish} & | & 2.4 \text{ million lbs} \end{matrix}$$

$$\begin{matrix} \text{Range of Mortality} & | & 7.1 \text{ million lbs} = 1.8 \text{ million lbs} \\ \text{in} = 25\% & \times & | \\ \text{a delayed season} & & 2.4 \text{ million lbs} = 0.6 \text{ million lbs} \end{matrix}$$

**CALCULATION OF ESTIMATED SAVINGS**

Estimated Savings = Status Quo - Mortality from Delayed Season

$$\begin{matrix} & & & | & 1.8 \text{ million lbs} \\ = 2.4 \text{ million lbs} & - & & | & \\ & & & | & 0.6 \text{ million lbs} \\ & & & | & \\ & & & | & 0.6 \text{ million lbs (362 mt)} \\ = & & & | & \\ & & & | & 1.8 \text{ million lbs (1086 mt)} \end{matrix}$$

The estimated savings from a delayed season under these assumptions would be in the 0.6-1.8 million pound range, as halibut bycatch would still occur in the fishery, but at a lower rate than during January-April.

#### V. Additional Notes

1. Foreign fishery rates can be expected to be lower than rates in the DAP fishery, as the former was regulated with time/area closures to decrease the bycatch. Currently the DAP fishery begins April 1 in the Gulf and January 1 in the Bering Sea/Aleutian area.

2. Sablefish gear used in the foreign fishery was generally lighter weight than that used in the DAP fishery. As a result, one would expect the average size to be larger in the DAP fishery, as the gear retains the larger fish which would have escaped the lighter gear of the foreign fishery.

3. The average size of halibut observed in the 1984 DAP sablefish fishery, 42 pounds, may be high, as the data were collected during the summer months when halibut are usually shallow. It's likely that the fish remaining in the deep would be the larger fish, thereby increasing the average size over what might be observed in earlier months.