

North Pacific Fishery Management Council

CHAIRMAN

Mr. Elmer Rasmuson
P.O. Box 600
Anchorage, Alaska 99501

EXECUTIVE OFFICE

Suite 32, 333 West 4th Avenue
Post Office Mall Building
Phone: 907-274-4563
Mailing Address: P.O. Box 3136DT
Anchorage, Alaska 99510

NOTE: 9/14/77

Agenda Item of the August 1977 NPFMC Meeting in Kodiak:

"Report of the Halbut Working Group to the North Pacific
Fishery Council" Executive Summary

is on file in the Halibut File: 200-02.5

REPORT OF THE HALIBUT WORKING GROUP
TO THE
NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

EXECUTIVE SUMMARY

The Halibut Working Group was established by the North Pacific Fishery Management Council on recommendation of its Chairman on March 22, 1977 and was instructed to examine the various options of managing the halibut fishery. Membership in the group consisted of Lee Alverson, Gordon Jensen, Harold Lokken, Steve Pennoyer, and Bernard Skud. Ed Huizer, Don McKernan, Chuck Meacham and Al Pruter participated at times also. Harold Lokken was designated as Chairman.

Five meetings of the Group were held as follows:

Seattle, Washington, April 15, 1977

Seattle, Washington, May 11, 1977

Anchorage, Alaska, July 12, 1977

Seattle, Washington, August 4, 1977

Seattle, Washington, August 16, 1977

The Seattle meetings were held at the Northwest and Alaska Fisheries Center while the Anchorage meeting was held at the office of the North Pacific Fishery Management Council.

The main body of the report includes detailed material on the life history of halibut, its fishery and management, a discussion of alternative management institutions and allocation schemes, and a summary of other Canadian and United States fishery issues.

LIFE HISTORY

Pacific halibut are found around the north rim of the Pacific from northern California to Hokkaido, Japan. Male halibut mature at 7 to 8 years of age, while

females mature at an average age of 12. Mature halibut migrate many hundreds of miles to spawn and after spawning return to their feeding grounds. Mature halibut concentrate on spawning grounds at depths from 100-250 fathoms. Spawning occurs annually. Major spawning sites where halibut have been densely concentrated include Cape St. James, Frederick Island and North Island in British Columbia and Yakutat, "W" grounds, and Portlock Bank in Alaska. In the Gulf of Alaska area after spawning, eggs and larvae and post-larvae are transported many hundreds of miles by the Alaskan Stream which flows counterclockwise in the Gulf of the Alaska Peninsula, the Aleutians, and into the Bering Sea. In the British Columbia area, drift bottle experiments suggest that the eggs and larvae and post-larvae are carried both north from the Queen Charlotte Sound area into Alaska and to waters south of Cape Flattery. Spawning is more extensive in the Gulf of Alaska area than in the waters of British Columbia. The relative importance of spawning off Canada and off the United States to the maintenance of the total halibut resource or to those segments of the resource in either countries' fishing zone cannot be determined from the data presently available.

COMMERCIAL FISHERY

The commercial fishery for halibut began off Cape Flattery, Washington in 1888. The fishery expanded north and west and by 1920 extended as far as Unimak Pass, Alaska. At first, large vessels were employed but, in the last 20 or 30 years, many small vessels gradually entered the fishery. In 1975, over 3,000 small one- and two-man boats were employed for some part of the season. However, their catches consisted of less than 20% of the total caught by all vessels. Gear used was primarily longlines set on the bottom but halibut also are taken by trollers towing lures from a moving boat. Both U.S. and Canadian vessels participated in the fishery since its beginning.

The overall commercial halibut catch from its beginning in 1888 rose to a high of around 69 million pounds in 1915, then declined to a low of 43 million pounds in 1931. A 3-month closed season was established in 1924, when the International Pacific Halibut Commission (IPHC) was assigned the responsibility of managing the halibut fishery for the U.S. and Canada. Management areas were established in 1932 with quotas in each totalling 46 million pounds overall. The catch was then built up following the application of rigid conservation restrictions to a high of 75 million pounds in 1962. Stock abundance began declining in the late 1950's and, with the advent of large scale foreign trawling in the 1960's, the abundance declined drastically. Catch quotas were severely reduced in the 1970's and the catch reached a low of 21 million pounds in 1974. The figures given include setline catches only. Incidental catches by foreign trawlers peaked at about 16 million pounds (round weight) in the Bering Sea in 1971 but have fallen off since then. In the Gulf of Alaska and south, the incidental catch by foreign and domestic trawlers averaged about 9 million pounds annually during the early 1970's.

Since 1926, Canada has taken 36% of the halibut catch and the U.S. has taken 64%. The U.S. catch off British Columbia since 1930 has been as high as 8 million pounds but has been less than 1 million since 1967 and less than 500,000 pounds since 1971. The Canadian catch off Alaska peaked during the 1960's and was as high as 24 million pounds but has been less than 5 million since 1974.

STOCK COMPONENTS AND TRANSBOUNDARY MOVEMENTS

Although adult halibut tagged and recovered in the summer may migrate long distances, most are recovered in the general vicinity in which they were tagged. Migrants from the Bering Sea and western Alaska generally move to the south and

east, the longest migration was 2,000 miles from the Aleutian Islands to Coos Bay, Oregon. Apparently, the southeasterly movement is compensatory or reciprocal to the northerly and westward drift of halibut eggs and larvae. In summer experiments, the percentage of recoveries from halibut tagged in Alaska and recovered in British Columbia generally is less than 10%, suggesting that transboundary movements are limited. In contrast, tagging results from winter experiments and experiments with juvenile halibut show that movements are more extensive than in the summer and that transboundary migrations in excess of 30% are not unusual. In accordance with Public Law 94-265, the intermingling of stock components is a factor that must be considered by the Council in arriving at decisions regarding the management of halibut.

CONTEMPORARY MANAGEMENT PROCESS

The Halibut Commission was established by Canadian-U.S. treaty and regulations imposed on the fishery in 1924. There are now three Canadian and three American Commissioners and a staff of 22 persons. During the summer, the staff is augmented by 16 temporary employees. Expenses of the Commission are borne equally by the two countries, each contribute approximately \$400,000 at the present time. Contact with the industry is maintained through a Conference Board consisting of representatives of both fishermen and vessel owners in most ports where the halibut fishery is important. The Commission meets with the Conference Board during its annual meeting when the Commission takes final action on recommendations to the two governments for halibut regulations for the ensuing year. Regulatory decisions are made in the presence of an Advisory Group of Conference Board members and processors.

The Treaty specifies that the halibut stocks should be developed and maintained to allow the maximum sustained yield. The Halibut Commission is authorized

to (a) divide the Convention waters into areas, (b) establish one or more open or closed seasons as to each area, (c) at any time regulate incidental catches of halibut by anyone, (d) prohibit departure of vessels for halibut fishing, (e) regulate fishing appliances, (f) provide for licensing of vessels for statistical purposes, and (g) close areas where concentrations of immature halibut occur. The Commission has no enforcement authority. This is vested in the two governments. The results of conservation measures in the halibut fishery are slow to appear, primarily because most halibut are not recruited to the setline fishery until they are 8 years or older.

Under the existing Treaty, IPHC has jurisdiction over the Canadian and United States setline fishery for halibut and can prohibit retention of incidentally-caught halibut in other Canadian and U.S. fisheries, but has no jurisdiction over foreign fisheries and cannot control practices in the domestic fishery to reduce the incidental catch of halibut. Conservation measures to protect halibut have been instituted through Canadian and United States Government negotiations in INPFC and in bilateral arrangements with Japan and the U.S.S.R. With the advent of extended fisheries jurisdiction, Canada and the U.S. now have control of both foreign and domestic trawl fisheries off their coasts.

Expanding domestic trawl fisheries could further impact the halibut resource if not regulated to minimize incidental harvests of juvenile halibut. In the U.S., Council management plans will dictate the direction of this development and, therefore, will have an effect on the future of the halibut resource.

ALTERNATIVE MANAGEMENT INSTITUTIONS

The following options appear to be the most realistic of those discussed by the Working Group:

A. Retain IPHC with Modifications:

1. U.S. Commissioners on IPHC to be appointed from membership of Pacific Council and/or North Pacific Council.
2. Area of jurisdiction could be modified.
3. Duration of IPHC could be limited subject to possible renewal.
4. Canadian participation in United States zone could be phased out in a period of time. U.S. fishing in Canadian zone would be subject to a similar phase-out.
5. Other than having membership on IPHC, the North Pacific Council would have input into halibut management through modification of U.S. enabling legislation to require consideration of the Council's views before the Secretary of State or the Secretary of Commerce approved the recommendations of IPHC.
6. Enforcement should be by the host country in its own economic zone.

B. Abolish IPHC:

1. Research and management of halibut (R and M) by U.S. Government, State of Alaska and/or the North Pacific Council.
2. Organize a Pacific Canadian-United States fisheries commission to have some measure of jurisdiction over specified transboundary stocks. This jurisdiction could either be management or consultative.
3. Canadian participation in the halibut fishery in the U.S. zone could be subject to a time phase-out.
4. If IPHC is abolished, research functions should be maintained to make use of research in progress.

Various alternative allocation schemes can be used either with or without retention of IPHC. It seems less likely that IPHC would be abolished if free access is adopted and less likely it would be retained under a system of no access.

OTHER CANADIAN-U.S. FISHERIES ISSUES

Other fisheries in which Canada and the U.S. interact probably will be considered in any U.S.-Canadian agreement on halibut. These fisheries generally fall into four categories: (a) U.S. fisheries in the Canadian zone; (b) Canadian fisheries in the U.S. zone; (c) U.S. interception of Canadian stocks in the U.S. zone;

and (d) Canadian interception of U.S. stocks in the Canadian zone. The specific fisheries are discussed in the report and it appears that each country has the option of eliminating the other's fishery units zone, but has little control over interceptions in the other country's zone.

CONCLUSION

The Halibut Working Group has made no attempt to prioritize the list of options as it considered the Group's function to be one of fact-finding only. The information submitted herein is that which the Group believes should be considered by the North Pacific Fishery Management Council in determining its position on future management of the North Pacific halibut resource.