

REPORT OF THE TECHNICAL SUB-COMMITTEE
OF THE
INTERNATIONAL GROUND FISH COMMITTEE
Appointed By
The Second Conference on Coordination
Of Fisheries Regulations Between
CANADA
and the
UNITED STATES

Thirteenth Annual Meeting
June 28-30, 1972
Newport, Oregon

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Report of the Technical Sub-Committee of the International Groundfish
Committee appointed by the Second Conference on Coordination
of Fisheries Regulations between Canada and the United States

DATE: June 28-30, 1972

PLACE: Newport, Oregon, U.S.A.

PARTICIPANTS: CANADA

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R.D. Humphreys
R.G. McIndoe (observer)

UNITED STATES

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Oregon

-J.M. Meehan - Chairman
R.L. Demory
J.G. Robinson
M.J. Hosie (observer)
B.O. Forsberg (observer)
R.E. Loeffel (observer)

Washington

-G.S. DiDonato
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-T.A. Dark

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-J.P. Harville (observer)

INTERNATIONAL PACIFIC
HALIBUT COMMISSION

-S.H. Hoag (observer)

I. CALL TO ORDER

The thirteenth annual meeting of the Technical Sub-Committee was called to order at 10:30 AM on June 28 by Chairman J.M. Meehan under instructions set forth by the parent committee in 1959. The business of the meeting was guided according to a prepared agenda (Appendix A).

II. APPOINTMENT OF SECRETARY

J.G. Robinson of Oregon (U.S.A.) was appointed to act as recording secretary for the meeting.

III. APPROVAL OF AGENDA

The agenda was approved essentially as presented with the wording "trawl" fisheries, "trawl" regulations amended to "groundfish" fisheries, "groundfish" regulations.

IV. STATUS OF STOCKS

A. Petrale sole

The United States and Canadian petrale sole catch in 1971 was 8.2 million pounds, an increase of 20% over the 1970 catch of 6.8 million pounds and only 8,000 pounds less than the 1961-70 ten-year average of 8.2 million pounds.

Area 1B, central California coast, was the most productive area with a catch of 2.2 million pounds of petrale sole. Area 3C, lower west coast of Vancouver Island, had a catch of 1.3 million pounds; Area 3A, lower Washington coast, and Area 1C, upper California coast, had respective 1971 petrale sole catches of 1.3 million and 1.1 million pounds. Petrale catches from other areas between Area 1A and 5D ranged from 3,000 to 530,000 pounds.

1. Catch/Effort

a. Canada

The 1971 Canadian catch of petrale sole was 1.1 million pounds.

The petrale sole catch from the stock off the lower west coast of Vancouver Island (Area 3C) in 1971 was 846,000 pounds, about 2.5 times that taken in 1970 and 3 times the mean for the 1961-70 period. Average CPUE, based on the performance of double gear vessels during the period May to August, was 269 lb/hr, about 2.5 times that in 1970 and twice the mean for the preceding

10 years. The improved CPUE in 1971 was due to the abundance of small fish of the 1966 and 1967 year classes in the catch. Above average year classes of petrale sole appear to be associated with relative high sea surface temperatures and greater than usual onshore water transport during the January to March period. During this period in 1966 and 1967, water temperatures were above average as was water level for 1966. In 1967, water level was about average for the period 1940-70.

In 1968 and 1970, sea temperatures were also higher than average during the January to March period. This suggests that there may be four good year classes appear in a period of five years which should result in some resurgence of the petrale sole fishery. However, incoming year classes are being exploited at much younger ages than in early years of the petrale sole fishery. Under these circumstances, even strong year classes may not survive long.

Canadian petrale sole landings from the northern stock (Areas 3D, 5A-5D) by Canadian vessels were 274,000 pounds, slightly higher than the 139,000 pound catch of 1970 but substantially below the mean for the preceding 10 years of 637,000 pounds. The most recent CPUE for the northern stock was 24 lb/hr in 1970, a reflection of a low level of abundance.

b. United States

1) Washington. The 1971 Washington trawl catch of petrale sole totaled 1.1 million pounds. This catch level represents a 37% increase from the very low 1970 landings; however, it remains well below (52%) the past ten-year mean of 2.3 million pounds.

Landings of "southern stock" petrale sole in 1971 totaled 428,000 pounds. This catch is up 62% over the very low 1970 landings of 264,000 pounds but it is still 59% below the past ten-year mean. An upsurge in catches during July and August off Ucluelet accounted for the major part of the increase in the

southern stock landings.

Some increase in Area 3B landings over 1970 occurred; however, the total catch of 223,000 pounds still remains 17% below the past ten-year mean. A total of 97,000 pounds of petrale sole was also landed from Area 3A. Petrale sole catches off the Washington coast occurred throughout the year with individual landings being of small magnitude.

Landings of "northern stock" petrale totaled 344,000 pounds in 1971. This amount is of the same magnitude as in 1970 and remains substantially below the past ten-year mean of 894,000 pounds. Catches and CPUE remained depressed throughout the entire range of the northern stock, i.e., Esteban Deep into Queen Charlotte Sound.

2.) Oregon. The 1971 catch of 2.3 million pounds was 6.7% above the 1970 catch of 2.1 million pounds and 16% above the 10-year mean catch of 2.0 million pounds.

Slightly more than half of the total Oregon catch (1.2 million pounds) came from Area 3A, lower Washington coast.

3.) California. Petrale landings in 1971 of 3.7 million pounds were 8% and 23%, respectively, greater than the 1970 catch of 3.4 million pounds and the 10-year average catch of 3.0 million pounds. Petrale catches were highest in Area 1B, central California coast, where 2.2 million pounds were taken. The catch in Area 1C, upper California coast, totaled 1.1 million pounds. Areas 1B and 1C landings were virtually the same as 1970 landings. The 1971 petrale catch in Area 1A, lower California coast, of 412,000 pounds increased 58% over the 1970 catch of 261,000 pounds. Petrale catches from Oregon waters, Area 2A, by California fishermen decreased to 30,000 pounds from 74,000 pounds taken there in 1970.

The 1971 petrale catch was the best annual catch since the 4.2 million pound catch of 1954. The 1972 catch appears destined to equal or exceed that of 1971.

2. Winter Fishery

There was no distinct winter fishery for petrale sole by Canadian vessels in 1971-72. Catches were less than 70,000 pounds and only one catch of about 1,000 pounds was taken in water deeper than 100 fathoms.

The Washington 1971-72 winter fishery for deep-water spawning petrale sole amounted to 601,000 pounds. Landings from northern stock petrale sole were at a very low level with only 73,000 pounds reported. The "southern stock" petrale, however, supported a significant fishery on the Cape Flattery "Spit" where 528,000 pounds were taken this past winter and an upsurge in landings occurred for this stock as a result.

Winter 1971-72 catches (November-January) of petrale sole in California were 1.4 million pounds. Upward catch trends continue in all areas. The respective catches from Areas 1A, 1B, and 1C were 498,000, 761,000, and 482,000 pounds.

B. Lingcod

Trawl-caught Canadian and United States landings of lingcod totaled 8.3 million pounds in 1971, about the same as in 1970, but 13% below the 1961-70 mean of 9.5 million pounds. Trends in lingcod catch during the 1961 to 1971 period have been generally upward in California and Oregon. In Washington and British Columbia, trends were upward to 1968 and have been downwards since that time. In the latter regions, it is known that some discrete stocks of lingcod are highly susceptible to fishing. The relationship between fishing, stock size, and recruitment has not yet been established for various lingcod stocks off the coast.

1. Canada

Total Canadian trawl catch of lingcod in 1971 was 3.4 million pounds, slightly above that of 1970 and about the same as the mean for the 1961-70 period. A major area of production was Area 3C where catch increased one-third over 1970 and was 25% above the mean for the 1961-70 period. Length-frequency distributions of lingcod for the years 1968-71 from Area 3C suggests that current production is largely dependent on one or more strong year classes and that no new strong year classes have appeared since 1968. Catch per unit of effort of lingcod in Area 3C in 1971 was close to the mean for the preceding 10 years.

In addition to the trawl fishery, there was a Canadian line fishery which landed approximately 2.8 million pounds of lingcod mainly from inshore grounds.

2. United States

a. Washington. Total Washington trawl catch of lingcod in 1971 was 2.0 million pounds, down 22% from 1970 and 52% from the preceding 10 years. Catches from Areas 3C and 5A still comprised the majority of the landings, but catches from those areas were only 30% and 11%, respectively, of the levels in 1961-70.

b. Oregon. Total Oregon trawl catch of lingcod in 1971 was 1.3 million pounds. This was close to a record and was up 35% from 1970 and 41% from catches of 1961-70. The bulk of the catch came from Areas 2B and 3A.

c. California. Total California trawl catch of lingcod in 1971 was 1.7 million pounds which was 27% and 94%, respectively, above the 1970 and 1961-70 average catches and the highest in the history of the fishery. Catches were made primarily in Areas 1B and 1C.

C. Pacific cod

Landings of Pacific cod by Canadian and United States trawlers in 1971 totaled 17.1 million pounds, up 89% from 1970 but 12% less than the 1961-70 mean of 19.5 million pounds. Fluctuations in Pacific cod catch appeared to be caused by fluctuations in strength of incoming year classes. These in turn appear to be the effect of changes in environmental factors rather than the effect of fishing.

1. Canada

A total of 11.0 million pounds of Pacific cod was landed by Canadian trawlers in 1971 and the species was again the dominant feature of British Columbia landings. The Canadian catch was almost twice that of 1970, but 17% less than the 1961-70 mean. Production in 1971 was aided by appearance of a relatively strong 1969 year class which was most evident on grounds off the lower west coast of Vancouver Island. In northern Hecate Strait, both catch and catch/effort have declined in recent years with declining strength of incoming year classes. However, there are indications of improved recruitment in 1972. Suitability of environmental conditions for cod production off British Columbia are estimated from surface seawater temperatures during February. In northern Hecate Strait, water temperatures were lower than usual in four of the past five years (1968-72). Such conditions should result in production of better than average year classes of Pacific cod in those years. It is noteworthy that markets for bait grey cod in Alaska are reported slow because cod are abundantly available to halibut fishermen.

2. United States

a. Washington. Washington trawl catch of Pacific cod totaled 5.6 million pounds in 1971--about twice that of 1970, but close to the mean for 1961-70. Most notable increase in catch and catch/effort occurred on grounds

