The Gulf of Alaska Groundfish Committee met on February 18 and 19, 1963, at the offices of the Japanese Fisheries Agency, following the 1963 interim meeting of the Commission in Tokyo.

The participants were: Japan: T. Hanaoka, Y. Fukuda, K. Ozaki

United States: D.L. Alverson

Canada: K.S. Ketchen (Chairman)

Secretariat: M. Miyake

II. TERMS OF REFERENCE. At the sixth in camera session of the Ninth Annual Meeting (Seattle, November 16, 1962) the Commission appointed a small committee of scientists to advise on the kinds of information that would be required to assess the effects on halibut of the proposed Japanese trawl fishery for other species of groundfish in the Gulf of Alaska.

The Committee conducted a preliminary discussion of the requirements, at the time of the Annual Meeting (as reported in Doc. 592), and subsequently exchanged views by correspondence. This exchange formed the basis for further discussion in Tokyo.

III. INTRODUCTION. In accordance with the understanding reached at the 1962 interim meeting of the Commission in Honolulu, Japan plans to conduct a limited commercial trawling operation during 1963 in the Gulf of Alaska (waters south and east of the Alaska Peninsula). One trawler, licensed to operate during the period January to April is already at sea. Four vessels, as yet to be selected, will be licensed to fish later in the year. Vessel licenses are issued on the condition that records are kept in accordance with instructions issued by the Fisheries Agency of Japan.

The Committee has reviewed the types of information needed to appraise the results of Japanese trawling in the Gulf of Alaska.
mendations in this regard are contained in Section IV, below, together with comments on the need for observers and procedure for reporting results to the Commission. Section V summarizes tentative research plans of the three countries and Section VI outlines some additional information required by the Committee for further study of the inter-relationships of halibut and other groundfish.

IV. DOCUMENTATION OF THE JAPANESE TRAWLING OPERATION.

1. Statistical records

It is recommended that the following items of information be included in the fishing records:

(a) Name of vessel
(b) Name of Captain
(c) Date (day, month, year)
(d) Type of trawl gear used
(e) Location, start of drag (Long., Lat.)
(f) Depth of fishing (meters)
(g) Duration of drag (min., hrs.)
(h) Total weight of catch (Kg.), per drag
(i) Numbers of halibut caught and discarded, per drag
(j) Weight of other flounders, by drag, by species (see 2(a), below)
(k) Weight of roundfish, by drag, by species (see 2(b), below)
(l) Weight and/or numbers of invertebrates (see 2(c), below)

With reference to item (i) above, Japanese scientists agreed that information on weight of halibut, in addition to numbers, is desirable. However, accurate data may be difficult to obtain, since the halibut must be returned to the sea as quickly as possible.

2. Information on species composition

Japanese scientists indicated that fishermen aboard the vessels which are scheduled to conduct experimental commercial trawling in the Gulf of Alaska may have difficulty in identifying groundfish species which are unfamiliar to them. It was noted that in shrimp fishing operations, accurate information on species composition is hard to obtain without special sampling by trained personnel. The same problem may be involved in keeping separate records of rockfish (Sebastodes), particularly those species which are superficially similar.

The United States Bureau of Commercial Fisheries has prepared a reference book containing illustrations of species of groundfish and crustacea common to the Gulf of Alaska. Four copies have been submitted to the Japanese Fisheries Agency for placement aboard the vessels which are expected to operate in that region later this year. This should solve some of the difficulty of species identification.
Shown below is a list of species which the Committee feels should be distinguished in the catch records. Japanese scientists stated that an effort would be made to collect as much detail on these as possible.

(a) **Flounders** (other than halibut)

- Turbot
- Flathead sole
- Rex sole
- Dover sole
- Rock sole
- Other

(b) **Roundfish**

- Cod
- Pollack
- Black cod
- Pacific ocean perch
- Rougheye rockfish
- Spiny cheek rockfish
- Other rockfish
- Rattails
- Sharks, skates
- Other fishes

(c) **Invertebrates**

- Pink shrimp
- Sidestripe shrimp
- Other shrimps
- King crab
- Tanner crab
- Other crabs
- Other invertebrates

3. **Reports of observers**

The Committee discussed the prospect of placing trained personnel aboard the four Japanese trawlers to collect information supplementary to that contained in fishing log-book records. Japanese scientists reported that the four vessels licensed to fish in the Gulf of Alaska had yet to be named, and
hence no information was available on accommodation for observers. Furthermore, because of personnel limitations and previous commitments pertaining to Bering Sea, it was uncertain whether Japan would be able to place trained observers aboard the Gulf of Alaska vessels. Likewise, no assurance could be given that observers would be available from the United States and Canada.¹

The Committee agreed that, in the event observers become available (even for brief periods), they should follow a reasonably standardized system of reporting in order to facilitate later consolidation and analysis.

The primary objective of the observers' reports should be to assess the effect on halibut of trawling for other groundfish. Various other kinds of information should be collected to aid in the later interpretation of log-book records. If experienced personnel are available, they should endeavour to cover the following items in as much detail as possible:

(a) Description of fishing gear, including information on cod-end mesh size.
(b) Description of methods of fishing and of fish detection.
(c) Description of methods of handling catches once on deck, and methods of estimating composition and weight of catches.
(d) Remarks on the extent to which procedure aboard the vessel restricts the effectiveness of observation and sampling.
(e) Remarks on the procedure followed in discarding incidentally-caught halibut.
(f) Observations on the numbers and condition of discarded halibut, preferably by categories:
   (i) Apparently good condition - fish swims rapidly downward upon release; no external signs of injury.
   (ii) Apparently poor condition - fish swims near the surface, or descends slowly; external signs of injury.
   (iii) Moribund or dead - fish shows no activity when returned to the water.
(g) Sampling of incidentally-caught halibut for length and sex composition, whenever observations on viability are not required.
(h) Sampling of groundfish other than halibut. From time to time, depending on working conditions aboard the vessel, it would be desirable not only to record general remarks on the size composition of species listed under Section IV 2, above, but also to collect length measurements and materials for age determination.

¹The United States has provided one observer to accompany the single Japanese vessel licensed to fish in the Gulf of Alaska between January and April, 1963.
4. Procedure for processing of catch records

Japanese scientists stated that the catch records of vessels licensed to fish in the Gulf of Alaska will be transferred to I.B.M. cards. These will provide detailed information drag by drag. However, for purposes of analysis and reporting it will likely be necessary to consolidate the records by statistical areas, measuring one degree of longitude by thirty minutes of latitude. A six-digit system of coding statistical areas is to be followed, in accordance with a suggestion made by the Secretariat (memorandum of January 14, 1963). The system is regarded to be tentative, pending appraisal of the 1963 results.

The Fisheries Agency of Japan will be responsible for the analysis of the catch records and will prepare reports for study by the Committee. A report on the January to April, 1963, operation (one trawler) is expected to be available in time for the 1963 Annual Meeting of the Commission in Vancouver. However, results of fishing by the four vessels licensed to operate in the spring, summer and autumn will not be available until later, since these vessels (or their mothership, based in Bering Sea) are not expected to return to Japan before the end of October.

V. REVIEW OF RESEARCH VESSEL PLANS FOR 1963. The Committee reviewed research vessel plans of the three countries to determine what prospects there were for obtaining additional information on the interrelationships of halibut and other groundfish in the Gulf of Alaska.

1. Japan

There is a tentative plan to charter a trawler for research in the Gulf of Alaska during the period April to August, 1963. However, this may have to be abandoned in view of the heavy demand for investigations in the Bering Sea.

In anticipation that the United States and Canada may find it possible to invite Japanese biologists to join research vessels of those countries, the Japanese government has approved a budget for travel expenses of two persons to North America. This arrangement is contingent upon reciprocal action by the other countries.

2. United States

According to present plans, the United States does not expect to have a research vessel in the Gulf of Alaska in the summer of 1963. However, during the months of May and June, the vessel John N. Cobb will be used to experiment with various designs of off-the-bottom (ocean perch) trawls in waters adjacent to the State of Washington and southern British Columbia.
3. Canada

The new research trawler G.B. Reed is scheduled to operate in the region of the Gulf of Alaska east of Kodiak Island. Two periods have been assigned: June 17 to July 21 and August 26 to September 30, but this schedule is only tentative. It is proposed to examine several important grounds (including the Portlock Bank region) and to place special emphasis on Sebastodes alutus (Pacific Ocean perch) and crustacea. Detailed observations will be made on incidental catches of halibut.

At the present time, plans of the three countries are too uncertain to permit consideration of coordinated research. As vessel schedules become more definite, it is possible that arrangements could be made by correspondence to rendezvous for a short-term exchange of observers.

4. International Pacific Halibut Commission

It is understood that the IPHC trawl survey program in the eastern part of the Gulf of Alaska will come to an end before the spring of 1963. At the beginning of the winter of 1963-64 a vessel will be chartered to carry out halibut tagging in waters just south of the Alaska Peninsula and along the Bering Sea edge (see Doc. 596, Appendix 18, p. 4).

VI. REQUESTS FOR ADDITIONAL INFORMATION.

1. Trawl survey results

At the 1962 interim meeting of the Commission in Honolulu, the Committee reviewed results of trawl surveys in the Gulf of Alaska, as obtained by the International Pacific Halibut Commission and the United States Bureau of Commercial Fisheries during 1961 and the early part of 1962 (INPFC Doc. 540, Appendix 6). By the time of the Annual Meeting in Seattle, results of another survey conducted by IPHC during the period June to August, 1962 (Doc. 562) were available and these were reviewed and summarized in the Committee's report of November 12, 1962 (Doc. 577).

It is understood that IPHC has conducted still further surveys of the region east of Kodiak Island since August, 1962. The Committee therefore recommends that the governments of Canada and the United States arrange to have the results available for study prior to the 1963 Annual Meeting in Vancouver.

2. Information on the North American longline fishery

Japanese scientists would like to obtain some information on (a) the numbers of undersized halibut, and (b) the amounts of other species, caught and discarded by Canadian and United States longline vessels in the Gulf of Alaska. Canadian and United States scientists stated that such data are unlikely to be contained in log-book records, but might be available from the operations of tagging vessels. The request will be transmitted to the International Pacific Halibut Commission for consideration.