

INTERNATIONAL COMMISSION FOR



THE NORTHWEST ATLANTIC FISHERIES

Document No. 10

ANNUAL MEETING - JUNE 1955

Meeting of Scientific Advisers to Panels 3, 4 and 5
St. John's, Nfld., Canada, March 22-23, 1955.

Special Report on RedfishParticipantsCanada

A.M. Fleming
 J.L. Hart
 B.G.H. Johnson
 A.C. Kohler
 W.R. Martin
 F.D. McCracken
 H.D. Macpherson
 J.E. Paloheimo
 E.J. Sandeman
 H.J. Squires
 T.N. Stewart
 W. Templeman

France

M.J.J. Eude

Portugal

M.J.O. Ruivo

Spain

A. Rojo

United States

J.R. Clark
 H.W. Graham (Chairman)
 G.F. Kelly
 C.C. Taylor
 L.A. Walford
 J.P. Wise

ICNAF

E.M. Poulsen

Mr. Sandeman presented the results of the Newfoundland Station's researches in the Hermitage Bay, Nfld., area. Hermitage Bay is a fjord-like indentation of the Newfoundland coast which formerly was a productive commercial redfishing area, but which was closed to commercial fishing in 1949. Quarterly collections of redfish have been made and hydrographic stations occupied in recent years. The abundance of redfish varies from a high level in the autumn to a very low level in mid-winter. In spite of heavy fishing pressures previous to the closing of the area, the length-frequency distribution of the fish caught remained relatively constant. Some attempts at the age determination of redfish by otolith studies have been made and there is evidence that as many as ten years may elapse between successful year classes.

Similar analyses have been made of the population near Port Saunders and of the Anticosti Island region in the Gulf of St. Lawrence, with similar results.

It is planned to continue these studies.

Mr. Sandeman also presented preliminary results of analyses of age and growth of young redfish with the objective of validating ages of the young fish by scale and/or otolith reading methods.

Dr. Templeman described the "Investigator II" collections on the coast of Labrador near Hamilton Bank. Deep trawling down to 400 fathoms was successfully carried out, and studies made of parasitization by the copepod Sphyrion, along with observations of maturity of female fish. There is evidence from these studies that the vertical and horizontal migrations of redfish are extremely restricted in scope.

Dr. Martin discussed data from collections made by Mr. Steel in the Gulf of St. Lawrence along the Gaspé coast with the "J.J. Cowie" of the Atlantic Biological Station. Correlation was found between the vertical distribution of the euphausiid Meganycitiphanes (an important food organism) and the redfish.

Studies are being carried on of the larval distributions and of the maturity of females.

Mr. Kelly brought U.S. statistics up to date (1954) for the large New England fishery. The total catch from Subarea 5 continues to decrease, that from Subarea 3 remains relatively steady in quantity, while U.S. landings from Subarea 4 have increased in the past year. Abundance appears to be constant in Subarea 5, increasing somewhat in Subarea 4 and dropping markedly in Subarea 3. Size composition of landed fish, as sampled by U.S. technicians, appears to have remained relatively constant in all areas fished.

A discussion ensued as to whether the available data as to catches, abundance, length-frequencies, and age composition of the stocks is sufficient for a population study of the dynamics of the fishery or any of its parts. It was agreed that further studies and/or a new approach is needed, particularly as regards the accurate determination of mortality rates.

The agenda for the Redfish Symposium to be held at Ottawa in June was discussed, and the general opinion was that the subjects of distribution, larval development, gonad development, age determination and growth were of sufficient scope to constitute a full program. The possibility of having a systematist review the taxonomy of the group was mentioned, and it was agreed that such a study would be valuable. The afternoon of Thursday, June 9, was recommended as a date for the symposium.

- THE END -