

ANNUAL MEETING - JUNE 1955Report of the Scientific Advisers to Panel 3

The Scientific Advisers to Panel 3 held a meeting at St. Andrews, N.B., on December 9. The following were present:

<u>Canada</u>	<u>Spain</u>	<u>United States</u>	<u>ICNAF</u>
W. Templeman (Chairman)	A. Rojo	L. Walford	E.M. Poulsen
J.L. Hart		H. Graham	R.S. Keir
R.W. Ellis		J. Clark	
L.M. Lauzier		L. Scattergood	
W.R. Martin		C. Taylor	
F.D. McCracken		J.P. Wise	
J.E. Paloheimo			
E.J. Sandeman			

Canadian biologists reported on the results of mesh experiments on the Grand Banks and St. Pierre Bank of Subarea 3. These covered-net experiments corroborated previous work with regard to 50% selection points for haddock. A commercial experiment was carried out to test and demonstrate the effect of the  $4\frac{1}{2}$  inch mesh currently used in Subarea 5 on haddock of the Grand Banks. At the time, large numbers of small (33-45 cm.) haddock were being landed in the round condition and while the experiment was not completely conclusive, it was indicated that the small-meshed net caught much larger numbers of these small fish and that the 50% selection point was several centimetres higher than the expected one.

Mr. Rojo reported on haddock and cod measurements obtained during a trip on a Spanish trawler on the Grand Banks in the summer of 1954. The cod-end mesh size was 4.4 inches inside measurement. The haddock average size was 45 cm. and fish below 40 cm. amounting to 19% by number of the catch were discarded at sea. The cod mean size was 55 cm. which was 10 cm. greater than that observed in 1953. Cod were retained down to 38 cm., only 2% being discarded.

Canadian biologists gave an account of haddock ages, sizes, growth and catches since 1946 on the Grand Banks and St. Pierre Bank. These populations of haddock are characterized by extreme differences from year to year in survival of young fish to the bottom stage. In this Subarea there is slower haddock growth than in Subareas 4 and 5. Between 1946 and 1953, Canada has caught about 24% and Spain about 76% of the haddock; the catch by other countries being negligible. During the past year in Canada there has been a new development in the extensive landing of small, round haddock (mostly below  $1\frac{1}{2}$  pounds) which were formerly discarded as too small. Newfoundland, particularly, has landed large quantities of these and has thereby increased her total catch of haddock. A description was given of the great variety of gears used in the cod and haddock fisheries. In Subarea 3, the haddock are typically taken by otter trawl, while well over half the cod catch including almost all the inshore catch is taken by trap and baited hook. The total catch of cod in the Subarea is usually seven or eight times as great as that of haddock.

The problem of assessing the need for a mesh regulation in Subarea 3 was discussed. The development of the haddock fishery in the Subarea is very recent and consequently the background necessary for studies in population dynamics of haddock is incomplete. Information is lacking on the sizes of cod and haddock taken and retained by European ships and most panel members of Subarea 3 were not represented at the present meeting. It was, therefore, decided to defer further consideration of mesh regulation in the Subarea until the March and June meetings.

The group is to carry out the following studies in preparation for the March meeting:

1. Study of natural mortalities of the original nearly virgin stocks of haddock in Subarea 3 in 1946 and 1947.
2. Study of catch per unit of effort data with a view to estimating total mortality of dominant year-classes of haddock.
3. Attempt studies of population dynamics with a view to assessing optimum mesh size.
4. Bring together information on size frequencies of cod in relation to gear in the inshore fishery.

15 December, 1954.

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