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Observations on the French cod fishery: Gulf of St. Lawrence and Newfoundland Banks
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An oceanographer from the Institut des Pêches Maritimes participated in a 3-month cruise (February-April 1961) with a French trawler. The present paper gives a preliminary summary of the observations made during the cruise, which covered parts of the Gulf of St. Lawrence, the Newfoundland banks and off Nova Scotia.

I. Fishing Gear; Vessel Type

The trawl used in the fishery was made of nylon; the head-line measured 26 m and the ground-rope 41 m; the size of the meshes of the cod-end was about 60 mm from knot to knot, corresponding to 110-120 mm stretched measure, wet and used.

The trawler had an overall length of 68m, and measured 1,469 gross tons; the engine had 1,600 h. p.

II. Area and Season of Fishery (1 March-18 April)

The fishery (Figure 1) began in March in the region off Cape Ray on the south coast of Newfoundland (Port aux Basques) and in the Bay of St. George. Later in the same month the fishery also covered the Banquereau region. In April fishery was carried out around St. Pierre and Miquelon, between St. Pierre Bank and Green Bank, and finally in the Gulf of St. Lawrence around the Magdalen Islands. The main fishing depth was between 150 and 250 m.

III. Quantities Caught, Yields and Discards

In hauls of 2-3 hours about 2-4 tons of "green cod" (gutted, salted), or 6-12 tons round fresh fish were caught. The largest catches per hour were made in the Gulf of St. Lawrence (Figure 1).

The amount of cod discarded can be estimated at about 5-10% in weight of the total catch. Among other species discarded (about 10% in weight of the total catch) are dogfish, rays and skates, Pleuronectes species, redfish, lumpfish, wolffish.

IV. Biological Observations (detailed data will be published later).

a. Sizes.

The following modal lengths of cod were observed: Division 4R (off Bay of St. George), March - 50 cm; Div. 3Pn (off S. Newfoundland), March - 56 cm; Div. 3Vs (Banquereau), March - 56 cm; Div. 3Ps (St. Pierre & Miquelon, St. Pierre Bank), April - 62 cm; Div. 4T (Magdalen Islands), April - 44 cm.

b. Maturity

The cod caught in March in 4R, and especially in 3Pn, were of a more advanced stage of maturity than those caught in 4Vs (Banquereau), the gonads of the latter being only slightly developed, whereas the former were maturing, some of them were even close to spawning.

In April many of the cod taken in 4T (Magdalen Islands) were still in the developing stage, and decidedly less advanced in maturity than those caught one month earlier off the south coast of Newfoundland (Port aux Basques).

c. Otoliths

A total of 826 otoliths were collected for age determination.

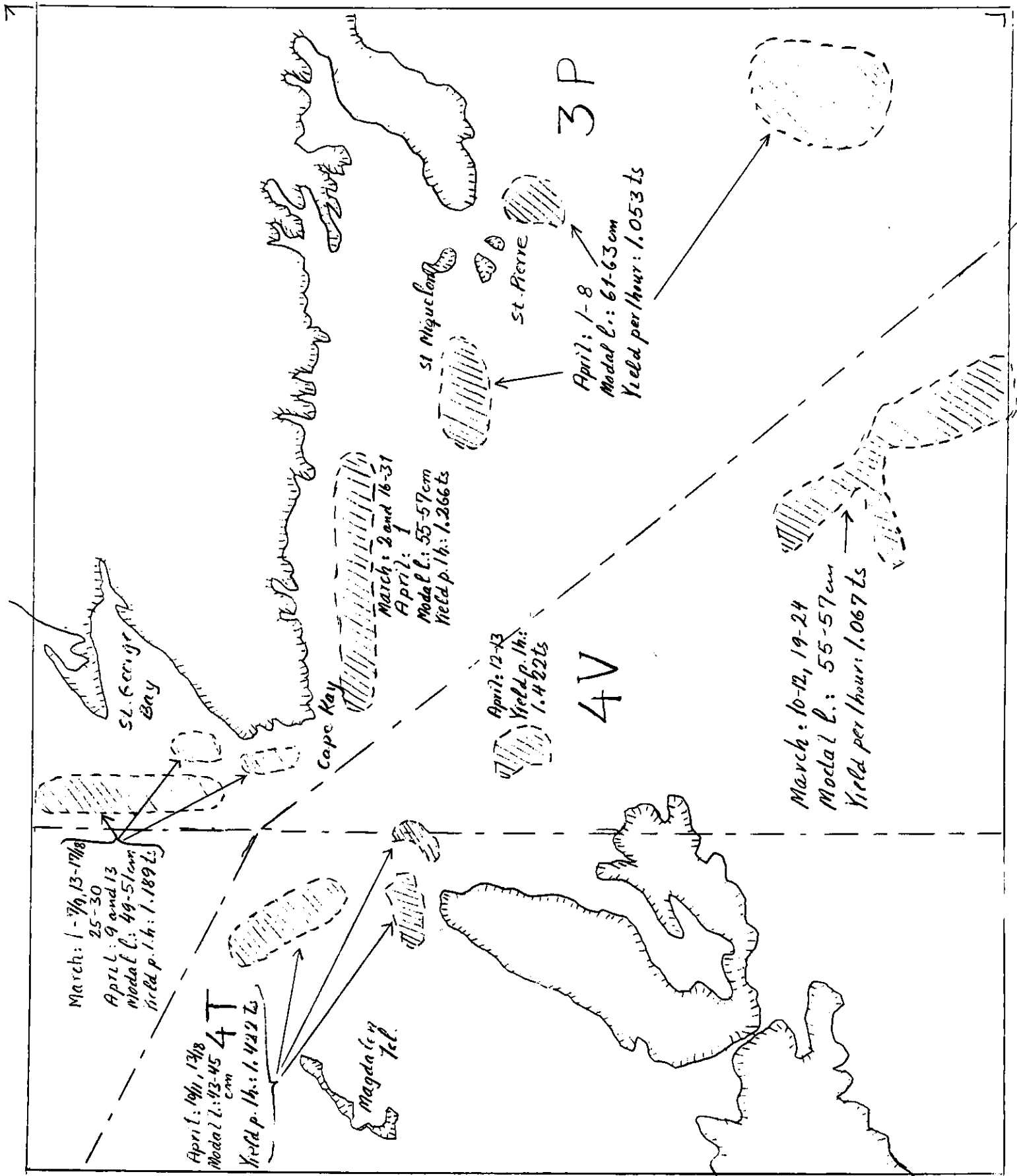


Figure 1 - Results from a cruise with a French deep sea trawler off Newfoundland, Feb. -March 1961; the yields are given in landed salted weights.