

## SESSIONAL PAPER No. 38a

Three hauls were taken at the next low water on the morning of August 17, yielding the following small gadoids:—

*Haul No. 1.*—Numerous hake.

*Haul No. 2.*—Five pollock, four cod, and four hake.

*Haul No. 3.*—Four hake.

The length frequencies of the twenty-seven small pollock obtained in catches 19 and 29 to 32 are given in table 1.

The length frequencies of the fish caught in the seine catches 19 and 29-32 form rather even curves with a mode at 8 cm. and 9 cm. The mean standard length of these fish, as calculated from measurements made to the nearest millimeter, is 8.7 cm., and the mean total length, as calculated in the same way is 9.7 cm.

The scales of these fish show a series of rings of plates corresponding to the centres of the scales of longer pollock. The number of these rings is from 4 to 10. In no case were the rings of plates close together, indicating winter growth.

In 1913 five small pollock were caught in the shore seine at Sandy Cove, N.S. Their length frequencies were as follows:—

Total lengths.....	7 cm.	8 cm.	9 cm.	Standard lengths.....	7 cm.	8 cm.
Frequency.....	1	1	3	Frequency.....	2	3

The measurements were made to the nearest millimeter, and the mean total length was 8.2 cm. and the mean standard length 7.4 cm.

Seven other small pollock were obtained, five from weirs which had been seined for herring and two caught on hook and line from the station wharf. The length frequencies of these fish are given in table 2, and show that these fish were larger than those caught in the shore seine. Their mean standard length was 12.2 cm. and their mean total length was 13.3 cm. Their scales corresponding to their larger size show a greater number of rings of plates but do not show any winter rings. So far as any importance can be attached to the occurrence of these seven fish, it would seem to indicate that the young, after they attain a certain length, about 11 cm., move into slightly deeper water where they are not caught by the shore seine.

## IV.—THE SECOND YEAR'S GROWTH.

Among the pollock caught in the shore seine at Wilson's beach on August 4, as described in the previous section and grouped together as catch No. 19, eighteen were between 29 and 45 cm. total length. Two of these, specimens No. 660 and No. 661, 29 and 32 cm. total length, show only a single winter ring in their scales. The lengths of these fish at the end of their first winter as calculated from the positions of the winter rings in the scales is shown in table 3.

It is to be noted that these fish are probably large for their age being caught in a shoal with large fish. They constitute, however, the only data the writer has been able to obtain on pollock in their second year's growth. It is hoped in future work to fill this unfortunate gap in the investigations.

## V.—THE THIRD YEAR'S GROWTH.

In all seventy-three pollock in their third year were caught. They were all caught in the shore seine near Wilson's beach, Campobello island, and are included in catches 17 and 19.