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NOTES ON THE HABITS AND DISTRIBUTION OF *TEREDO NAVALIS* ON THE ATLANTIC COAST OF CANADA.¹

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INTRODUCTION.

A specimen of the boring work of the "ship worm," *T. navalis* was recently presented to the Museum of the Canadian Geological Survey by Mr. H. E. Miller, accompanied by notes showing the dates within which the destructive work had been accomplished. Although a considerable literature exists on the destructive work of *Teredo*, records of its habits and work in Canadian waters are sufficiently scarce to justify recording some of the interesting facts which have been communicated to the writer by Mr. H. E. Miller. In the course of his work as an engineer in the Department of Public Works in renewing wharves, piling, and other seashore structures in Prince Edward Island, Mr. Miller has had unusual opportunities to become acquainted with the work of the *Teredo*. The data relating to the habits of the boring mollusc, popularly known as the ship worm, which are recorded in this paper have been supplied chiefly by Mr. Miller.

The distribution of *Teredo navalis* presents some novel features. It affords an example of discontinuous distribution which parallels that of the common oyster in Canadian waters. It is associated with the gulf of St. Lawrence colony of the Acadian fauna, but its distribution varies rather widely, as will be pointed out, from that of some of the other species of this northern Acadian colony.

HABITS.

Considerable human interest attaches to the boring work of the mollusc, *Teredo navalis*, because it is equally capable of destroying wharves, or railway bridges, or sinking ships when precautions to check its ravages are neglected. The depredations of *Teredo* are not confined to any particular parts of the world's coast lines. Its work is well known on the Pacific coast, where the Isopod, *Limnoria tenebrans*, is locally even more destructive.² In Europe an extraordinary increase in the numbers and abundance of *Teredo* at various widely separated periods have several times brought it into very prominent notice. During one of these periodic increases in its numbers—about 1730-32—Holland was imperilled by the threatened destruction of its sea dykes.³

The rapidity with which timbers are frequently destroyed by *Teredo navalis* is shown by the accompanying photograph (fig. 1) of a portion of a beech timber which was 12 inches square when placed in the water. The timber was perfectly sound when placed in the tidal zone just west of the entrance to Charlottetown harbour, Prince Edward Island. The completely honeycombed condition shown in the figure was accomplished in a period of sixteen months. This is a much more rapid rate of

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² Harrington, N. R., and Griffin, B. B. Notes on the distribution and habits of some Puget Sound Invertebrates. Trans., N.Y. Acad. Sci., 1897, pp. 738-9.

³ Van Baumhauer, F. H.—The *Teredo* and its Depredations (translated from Archives of Holland, Vol. I). Popular Science Monthly, Vol. XIII, 1878, pp. 400-410, 545-554.