

naturally. He took them from the parent fish before they were deposited, and while he obtained and described the egg and published a drawing of it, no one could say if the features described were normal or not, and it was not possible to say whether or not it possessed buoyancy, and belonged to the pelagic type of ovum. Van Bambeke's account described the egg of the burbot as an extremely small, spherical, translucent ovum, with a pale greenish oil globule, surrounded by a thin coat of protoplasm, the globule being held in a fixed situation, in the yolk matter, by a column, or thick strand, of tenacious protoplasmic material. How does this description compare with the features of the eggs, several hundreds of which were deposited, at the end of January, by the parent fish in the Ottawa Fisheries Museum and examined under moderate powers of the microscope? A study of these eggs yielded this remarkable result, that they have all the features of the typical pelagic eggs which occur abundantly in the ocean where cod, sea-ling and other Gadoids spawn. The burbot's egg is somewhat buoyant, of minute size, extremely transparent, and delicate in structure. As Van Bambeke stated, there is a single large oil-globule, greenish in hue, though almost colorless in transmitted light, but not fixed or held in place by a strand of protoplasm. Now, the burbot is a close relative of the sea-ling (*Molva vulgaris*) and of the sea-cusk (*Brosmius brosme*, Muller), and bears a strong external resemblance to them, having an elongated eel-like body, a flattened head, a small first dorsal fin, and a very long second dorsal and anal fin, as well as a rounded spatulate tail. The sea-ling and sea-cusk produce small pelagic eggs, each of which contains a single large bright oil-globule, that in the ling's egg pale greenish; that in the sea-cusk's egg being terracotta in tint. The egg of the fresh-water ling almost exactly resembles the ovum of its marine relative in all essential features. The ova of the marine ling (*Molva vulgaris*), to quote from the large Scottish monograph (the most elaborate account of fishes' eggs ever published),\* "are less buoyant than some other Gadoids, e.g., *Gadus morrhua* and *G. aglefinus*, and sometimes, though living, sink to the bottom in quiescent water, yet success-

\* Professors McIntosh and Prince, Trans. Roy. Soc., of Edinburgh, Vol. xxxv, Pt. iii, No. 19, p. 668.