

Hydroids of the Canadian Arctic Expedition, 1913-18.

By C. McLEAN FRASER

The number of hydroids collected by the Canadian Arctic Expedition was not large, but along with this collection Mr. Frits Johansen sent some that he collected in Hudson Bay in August, 1920, and some collected at other times, that were found in the Victoria Memorial Museum, Ottawa.

Taken altogether, the collection, although not large, is quite interesting, and as it is all from the north and arctic regions, it is considered in the one report. The largest portion came from Richmond gulf, east coast of Hudson bay, where 17 out of a total of 25 marine species were obtained.

The species represented give support to the distribution theory advanced on previous occasions, i.e. that most of the hydroids of the north temperate seas, in all the families, with the exception of the Plumularidae, which, in any case, is not well represented, have had their origin in some Arctic centre from which there has been a circumpolar distribution and from this distribution, southward along each coast of each continent.

No new species has appeared in the collection. Of the 25 marine species obtained, *Abietinaria greenei* was found only in the Bering sea near the Aleutian islands. Previously, it had not been reported farther north than Vancouver island. Of the remaining 24, only one species had hitherto been found in the Pacific, and not to the eastward. This was *Hydractinia larispina*, obtained from Gabriola pass (20 miles from the Biological Station, Nanaimo, B.C.) in 1921, and just described as a new species. If time of collecting were considered, Bernard harbour would be the original locality.

The species reported farther east and not in the Pacific are *Gonothyrax leoni*, *Muccium beani* and *Selaginopsis alternitheca*. The first two are common species on the eastern Canadian coasts, as well as in European waters, and they have not appeared so very far afield since the former was collected in Hudson strait and the latter in Hudson bay. *Selaginopsis alternitheca* was first reported from Davis strait. The only other appearance until now was in some material collected near Cheticamp, Cape Breton, in 1917.

A table will show the comparative distribution. The Arctic refers largely to the European Arctic, although it includes the Greenland area as well.

Besides the marine material, some specimens of *Hydra* were collected by Mr. Johansen, but they were not in good enough condition for classification. Some of them were obtained in a creek at Bernard harbour, Dolphin and Union strait, August 6, 1915. Johansen's record is as follows: "Attached to the underside of stones in the streaming water were many (fully outstretched ca. 15 mm. long) *Hydra* species of the following colour: suctorial disc at hind end, pale rosa; this colour getting first paler but afterwards increasing in intensity forwards; front end, strongly rosa; the 8 tentacle pale."

Some other specimens were obtained at Konganevik, Alaskan coast, but they were not kept, and the particulars are meagre. His note is as follows: "June 25, 1914. Konganevik (Camden bay), Alaskan arctic coast. In a tundra