

DISTRIBUTION OF ENCHYTRAEIDAE.—The enchytraeid collections on which this report is based are of particular interest because of the fact that nothing has hitherto been known concerning this group in the region visited by the Expedition. In fact, the entire arctic portion of the North American continent is practically unknown territory with regard to this group of animals, although, as will be mentioned later, there is reason to believe that it is abundantly represented there. Eisen (1872: 122-123) reported *Lumbricillus profugus* (Eisen), under the name *Enchytraeus pigustecheri* Ratzel, from Godhavn, Greenland. According to Michaelsen (1900: 82), O. Fabricius (1870) reported *Lumbricillus minutus* (Mull.), under the name *Lumbricus minutus*, from Greenland, but the exact locality was apparently not given. Ude (1896: 27) recorded the occurrence of *Enchytraeus albidus* Heule (*Enchytraeus rejdoeski* Eisen) at Karajak, Greenland. Emery (1898), Moore (1899), and Welch (1917b) made studies on *Mesenchytraeus salifugus* (Emery) collected in Alaska on and in the general vicinity of Mount St. Elias. Eisen (1905) studied the collections of the Harriman Alaska Expedition on the west coast of Alaska, the vicinity of Port Clarence being the northern limit. No other records occur in the literature, and it thus appears that the Canadian Arctic Expedition collections present the first indications of the enchytraeid fauna existing in the vast territory between the west coast of Greenland and Bering strait.

It will be noted that the representatives of the genus *Heuba* comprise a considerable part of the collections. Ude (1901: 19) has already pointed out that *Heuba* is especially well represented in the arctic region. The other genera appearing in the Canadian Arctic Expedition collections are also known from other parts of the far north. The common occurrence of *Mesenchytraeus* in the high latitudes has been pointed out by Ude (1901: 23), and on the snow-fields and glaciers of high altitudes by Emery (1898), Moore (1899), and Welch (1916: 1917b).

The arctic Canadian enchytraeid fauna, as indicated by the collections of the Canadian Arctic Expedition, shows a similarity to that of arctic Europe and Asia which is worthy of special mention. As nearly as specific identifications have been possible, all of the species represented by sexually mature material, exclusive of new forms, are known from arctic Eurasia, four having been originally described from that region. Two species (*Heuba nasuta* and *Lumbricillus lineatus*) are apparently cosmopolitan.

While the list of enchytraeids taken by this Expedition is not extensive, and while the collections were not made in an exhaustive manner, the results confirm previous conclusions concerning the geographical relations of this family, viz., that the group is preeminently northern in its distribution. Such Arctic regions as have been examined yield evidence of a rich enchytraeid fauna. The abundance of some of these worms reported by earlier collectors is an indication of their successful adjustment to the rigid conditions of the environment. There is every indication that future collections will show the Enchytraeidae to be one of the most prevalent and most widely distributed of the groups of animals occupying the north frigid zone.