

A second ichthyological program carried on at the Mt. Desert Island Laboratory during the summer months was continuation study of freshwater fishes, the results of which will be included in a monograph on the early life histories of the fishes of Lake Erie and its tributaries, which the writer is preparing for publication during the early winter. Mr. Vernon S. L. Pate assisted in this work. Over 15,000 larval and postlarval fishes were examined, identified, and described, and thirty-six camera lucida drawings of developmental stages completed.

## 10. ANTARCTIC COLLECTIONS

By R. F. SHROPSHIRE, *Buffalo Museum of Science*

During the summer of 1930, while working with the scientific staff of the Buffalo Museum of Science in their study of Frenchman's Bay and adjacent waters, work was started on material brought back from the Antarctic region.

This material was collected while on the Byrd Antarctic Expedition and can be divided into two groups. First, there is a series of sea water filtrations made between New Zealand and the Bay of Whales, from which it is hoped that some insight into geographic distribution may be obtained. These filtrations were made by passing water from the ship's pump through no. 20 bolting silk filters and preserving the residue.

The second group of material was obtained by melting pieces of ice broken from ice floes in the Antarctic pack ice, and centrifuging the water. So rich is the phytoplankton community in the Antarctic Ocean that when the sea freezes, the ice is often discolored by the tremendous number of individuals frozen into its mass.

The identification of species and the preparation of a taxonomic list of diatoms found frozen in ice was started. In addition to diatoms, an interesting number of copepods were found.

## 11. THE OPALINID CILIATES OF THE GREEN FROG

By ROBERT HEGNER, *The Johns Hopkins University*

All species of American frogs are infected with opalinid ciliates except the green frog and the bull frog. There is one report of an infection in a green frog (Kudo, 1922). Green frogs, tree frogs and leopard frogs were studied during the summer of 1930 in an attempt to answer the following questions:

Do the adult green frogs on Mount Desert Island harbor opalinids? Ten specimens of various ages were examined. No opalinids were found