

ragged fragments of dried skin, and the toes missing. The mouth gapes open, and the head is twisted sideways in an unnatural attitude as if the animal died in a paroxysm. It seems probable that the foot was injured in some manner, possibly by being trampled upon by one of the horses kept in the barn where the cat was found. Finding itself wounded, the creature crawled into the hay and expired.

The writer recalls a similar case of a cat injured on a New England farm. This cat lost a foot in the mowing machine and crawled away to die in a small loft over a shed where it was subsequently found. Whatever was the actual fate of the mummified cat we may only guess, but the excellent specimen remains. Although not a true fossil, at least it is akin to the authentic remains, since it graphically demonstrates the preservation of such classic examples as the Moa skin and feathers from New Zealand caves or the ground-sloth skin and hair from the Americas, both fossils formed by desiccation.

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#### MOUSE OPOSSUM STOWAWAYS ON BANANAS

It seems worth while to add another note relative to finding the small tropical marsupial *Marmosa*, known as the mouse opossum, as a banana stowaway.

Previously, Dr. L. A. Adams<sup>1</sup> recorded finding some of these marsupials, and Professor Geo. Wagner and also Mr. E. R. Warren<sup>2</sup> reported others.

A female with litter was brought to our laboratory on June 14, 1929, indirectly from a grocery store, one of an Akron chain store concern. It had been hiding in a bunch of bananas, quite possibly coming from Central America. I could determine the animal to the genus *Marmosa*, but not to species. This adult female, with total length of 28.5 cm, or 11.2 inches, including the tail which itself was 14.5 cm or 5.7 inches long, was smaller than the measurements given by Anthony for one species *M. isthmica*, and may possibly be the *M. zeledoni* he describes as typical from Central America.<sup>3</sup>

Nearly a dozen young were clinging to the mother, but they were hard to keep count of, unless the mother, who kept well secreted under leaves in a box, was much disturbed. She may have been thus disturbed previous to receiving and again was badly disturbed a week later in attempts to photograph her out in the bright light of the open. She was naturally inactive, secretive, though very much on the alert and seemingly nervous. She would snap viciously with remarkable speed when a hand or instrument was placed within a few inches of her head. The young clung with claws almost anywhere on the fur, but principally ventrally, and occasionally on the tail. A few times one of the young wandered off a few inches. When I approached it closely the mother would grasp it with the claws of one foot and speedily thrust it under her.

It was seemingly impossible to furnish the desired diet or a diet entirely adequate for lactation. The mother ate of bananas regularly, as much as possibly an eighth or a tenth of a banana a day. Following the information previously given that insects were normal food, various insects both dead and live were put near her, but there was no evidence of feeding upon these. Several young died in the early days of the two and a half weeks I had the mother alive in a box. Possibly some young had been abducted, but as I found parts of two bodies in the box it appears certain that the mother ate of her young. No other animals could have entered the box, since it was securely covered with a fine screen. Three young were alive for some days. Then one day only one was left. The next day the mother was gone, undoubtedly escaping after some one had removed her in order to handle her. Later she was found in an open jar of formaldehyde solution. Attempt at feeding the one remaining young with cow's milk was unsuccessful.

It seems of interest to add that the mother made a low, clicking, chirping sound quite uniformly when disturbed.

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### SPECIAL CORRESPONDENCE

#### A BIOLOGICAL SURVEY OF LAKE ERIE

DURING the summers of 1928 and 1929 an extensive biological survey of Lake Erie was carried out through the cooperation of the U. S. Bureau of Fish-

eries, Buffalo Society of Natural Sciences, New York State Conservation Department, the departments of game and fish of Pennsylvania, Ohio and of the government of Ontario, and the Health Department of the City of Buffalo. The primary purpose of this survey was an inquiry into the reasons for the decline in the commercial fishery industry in the lake, and included in its scope the study of various biological,

<sup>1</sup> SCIENCE, February 24, 1928.

<sup>2</sup> SCIENCE, April 20, 1928.

<sup>3</sup> Anthony, "Fieldbook of North American Mammals," p. 7.

chemical and physical factors which bear an important relationship to the production of fish. For the successful operation of the program the steamer *Shearwater* was given by the U. S. Bureau of Fisheries, the maintenance of the vessel and salaries of the crew and several scientists generously financed by New York State and one or more specialists contributed by each of the other cooperating institutions.

Operations which were confined to the eastern portion of the lake during the preliminary survey in the season of 1928 were extended in the summer of 1929 to the entire lake. During the period from May to September in 1929 observations were made every month at a large number of selected stations which are shown on the map. These observations embraced

Charles J. Fish, Buffalo Museum of Science, director.  
Charles K. Green, U. S. Coast and Geodetic Survey, hydrographer.

Marie P. Fish, Buffalo Museum of Science, ichthyologist.  
Charles B. Wilson, Westfield Normal School, macroplanktonologist.

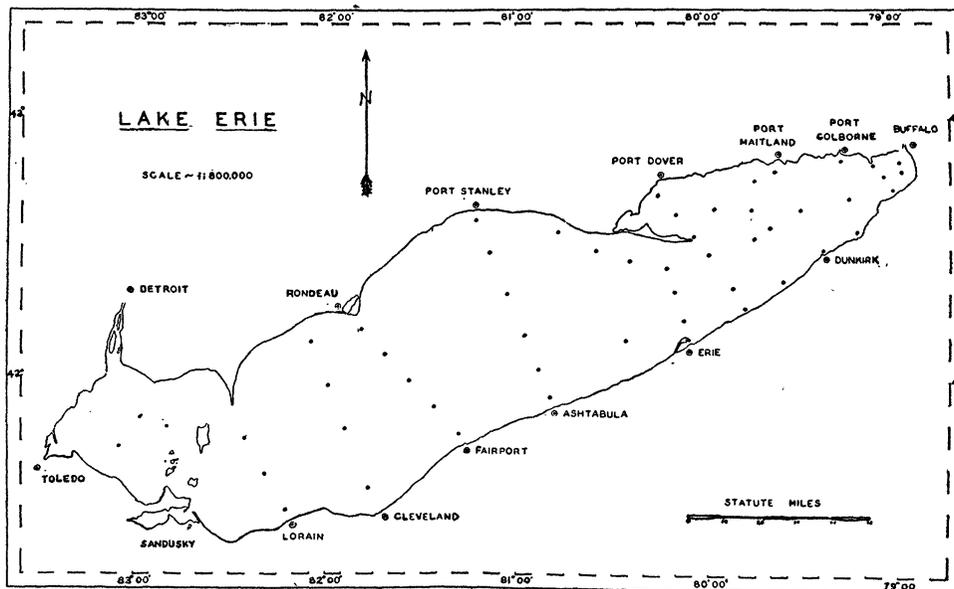
Paul R. Burkholder, Buffalo Museum of Science, microplanktonologist.

Reginald H. Pegrum, University of Buffalo, geologist.

Casimir J. Munter, Ohio State University, chemist.

Arthur H. Loudon, Queens College, scientific assistant.

"A Preliminary Report on the Cooperative Survey of Lake Erie" covering the results obtained in the season of 1928 has been published as a *Bulletin* of the Buffalo Society of Natural Sciences. This report includes a discussion of the program and itinerary,



Map showing location of stations visited monthly by the U. S. F. S. *Shearwater*, summer of 1929

a variety of special studies such as the spawning and growth of young fish, the production of phyto- and zooplankton, the physical hydrography, the chemistry as an index to normal lake conditions and extent of pollution, the lake sediments, etc.

The staff of investigators consisted of the following:

topography, hydrography, bacteriology, chemistry, microplankton, macroplankton and ichthyology. A complete report upon the various phases of the investigation together with summary and conclusions is now in preparation.

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## SCIENTIFIC APPARATUS AND LABORATORY METHODS

### DISPLAYING AND FILING MICROSCOPIC PREPARATIONS

THE method here described has been found most satisfactory after many years of experience with extensive series of demonstration material used in con-

nection with courses in microscopic anatomy. A sketch of that portion of the preparation to be shown, with the necessary legends and explanations, is placed on a 5 x 8 inch cardboard having a drawing surface (Crescent mat board is very satisfactory).