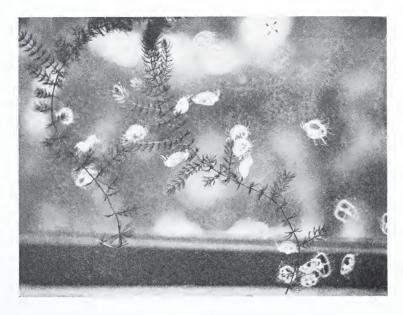
FRESH-WATER MEDUSAE AT TERRE HAUTE, INDIANA

W. P. ALLYN AND L. J. RETTGER

Several references have been made to the occurrence of freshwater medusae in Indiana. Payne (1924) reports medusae taken from Boss Lake, near Elkhart, Indiana, in 1918 and studies were made on the subsequent appearances of these forms following that date. In 1926 the same author was able to complete his studies on the life history of the form and suggested the name, *Craspedacusta ryderi*, the sexual



generation of *Microhydra ryderi*. The medusa stage, however, did not differ materially from that described by Garman (1916) except in regard to size. Garner and Markle (1932) also discovered fresh-water medusae near Richmond, Indiana, and suggest the same species as that of Payne.

Fresh-water medusae were found in large numbers in the vicinity of Terre Haute, Indiana, during August, September, and the first part of October (1932) in an old gravel pit some three miles north of the city. This body of water was totally shut off from the Wabash river and received its water by drainage from the adjacent land. It was approximately 100 yards wide and one-fourth mile long. So far as known it

[&]quot;Proc. Ind. Acad. Sci., vol. 42, 1932 (1933)."

has never been stocked with fish but is used to a great extent by water birds during migration.

The first medusae were found August 20th; other forms were collected as late as October 10th. They seemed to be near the surface of the water on afternoons of calm bright days. It was observed that the animals disappeared from sight almost simultaneously with the appearance of wind-blown ripples on the surface of the water.

Several hundred of these medusae were collected and kept alive in aquaria in the laboratory for some three weeks. Eggs were shed profusely in the water but no development occurred. Examination of some fifty animals indicated that they were all females. This is not inconsistent with Payne's (1924) theory that the hydroids are either male- or female-producing. These medusa females probably arose from female-producing hydroids only that perchance made entrance into this body of water.

The medusa form conformed well to those described by Garman (1916) except in regard to size, the former being larger. Without the life history at hand, it is believed that they belong to the species Craspedacusta ryderi, as suggested by Payne (1926).

References

Garman, H. 1916. The sudden appearance of great numbers of fresh-water medusae in a Kentucky creek. Science, Vol. 44.

Garner, M. R. and Markle, M. S. 1932. The occurrence of freshwater medusae near Richmond, Indiana. Proc. Ind. Acad. Sci., 41, 431-432.

Payne, F. 1924. A study of the fresh-water medusa Craspedacusta ryderi. Jour. Morph., 38, $387_{\rm F}430$.

Payne, F. 1926. Further studies on the life history of Craspedacusta ryderi, a fresh-water hydromedusan. Biol. Bul., 50, 433-443.