

This specimen will be fully described and discussed as soon as the bones have been prepared for study.

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A NEW RECORD FOR FRESH-WATER MEDUSAE IN PENNSYLVANIA

ON August 17, 1937, a single specimen of fresh-water medusa was brought to the writer for identification. In the afternoon of this day approximately 150 jellyfish were collected in an abandoned limestone quarry filled with spring and drainage water, near the village of Almedia, Columbia County, Pennsylvania. This collection, made with a dip net from the shore, was a small part of the population seen. Collections were made at regular intervals until October 25. Residents of the neighborhood who use this pool for bathing report that these animals were noticed several weeks previous to August 17. During this period the density of population varied from several dozen to many thousands. At the height of population density they welled up from the depth of the pool in cloud-like multitudes. This pool is 225 feet wide, 375 feet long, 35 to 90 feet deep, with very abrupt slopes.

The medusae collected in the field ranged from 0.5 mm to 18.0 mm in diameter. No hydroid forms were observed. Live medusae taken to the laboratory survived about four weeks in aquaria supplied with water and Elodea from their natural habitat. The contents of one aquarium in which the medusae had died and disintegrated suddenly became populated with minute medusae and small green hydra. This aquarium had been frequently observed with the hope that the hydroid form might have been brought in on the Elodea. The smallest of these medusae was 0.35 mm in diameter, had eight buds for tentacles, a short manubrium and well-developed velum. Specimens 0.75 mm to 1.00 mm in diameter developed 16 or more tentacles. It is estimated that a total of 250 small medusae were produced in this aquarium during a period of 28 days with a peak population of 100 specimens. Approximately half of these specimens were preserved. Some of the others were isolated with the hope that they might develop to maturity, but without success.

According to Professor Payne these medusae are *Craspedacusta ryderi*.

This is the first locality record for *Craspedacusta* in this section of Pennsylvania.

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NEW EXPOSURES OF ORDOVICIAN BENTONITE IN SOUTHWESTERN VIRGINIA

SEVERAL excellent exposures of bentonite have been uncovered by recent road-building activities on Virginia Highway 64 in Turkey Cove, northeastern Lee County, Virginia. The bentonite beds, which vary in thickness from three inches to two feet, occur in the Lowville and Trenton formations (Middle Ordovician). The rocks have been folded and faulted so that the same bed is exposed more than once. When the writer left the area in early September, 1937, seven exposures at three horizons had already been laid open. Road-building was not complete at that time, however, and new cuts will be made in Lowville and Trenton rocks for another mile or more. Hence it is likely that ten or a dozen sections of bentonite will be available for study by the next field season. The susceptibility of the soft volcanic ash to weathering and relatively rapid removal lends especial interest to these fresh exposures.

In a recent paper on the stratigraphy of Ordovician bentonites in southwestern Virginia, Rosenkrans¹ states that the exposures of bentonite in Lee County are poor, and at the same time that the area is one of great importance in establishing by means of bentonite the stratigraphic relations of the Lowville formation in Tennessee, Kentucky and Virginia. This is the case because the sediments of Lowville age in this area are apparently transitional between the limestone deposits of the interior and the elastic rocks in the eastern part of the Appalachian Valley. The bentonite sections newly exposed in Turkey Cove fill the need expressed by Rosenkrans. It is hoped that they will receive the detailed study to which their excellence and strategic position entitle them.

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SCIENTIFIC BOOKS

GENERAL CATALOGUE OF STARS

General Catalogue of 33,342 Stars. By BENJAMIN BOSS. Carnegie Institution of Washington. 5 vols. Quarto.

THIS publication represents the final five volumes of a general program of work started by Professor Lewis Boss about the time he became director of the Dudley

Observatory at Albany, sixty years ago. Professor Boss's first catalogue of standard stars was published in 1877, and his "Catalogue of 627 Principal Standard Stars, distributed from the north to the south pole and derived from a homogeneous treatment of all available

¹ R. R. Rosenkrans, *Va. Geol. Survey Bull.*, 46-I: 99, 1936.