A "BLOOM" OF FRESH WATER MEDUSAE, CRASPEDACUSTA RYDERI (POTTS) IN KENTUCKY LAKE, TENNESSEE

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On July 24, 1952, a bloom of jellyfish was reported to one of us (Houston) by Mrs. Burton in the waters around her boat dock on Kentucky Lake. This dock is in Burtons Creek a few hundred feet south of Tennessee State Highway 100 at the Alvin C. York Memorial Bridge. Specimens were collected, tentatively identified as *Craspedacusta ryderi* (Potts), and many brought to the biological laboratories of George Peabody College for Teachers for more detailed study.

All of the specimens, which had been collected randomly, were females. They ranged in size from 15 to 18 mm. in diameter in the relaxed state and 10 to 12 mm. in diameter in the contracted state. Four radial canals were conspicuous, each with a long sac-like gonad attached to its proximal half. A prominent, crenulated manubrium projected below the level of the velum. Three varieties of tentacles were present: Four large tentacles, one attached to the ring canal at the end of each radial canal; 12 to 15 medium tentacles in each quadrant, and 5 to 10 short tentacles between each medium tentacle. The total number of tentacles varied between 300 and 500 in each specimen. These descriptive details agree in all particulars to those given by Payne (1923) for Craspedacusta ryderi (Potts).

One other such bloom has been reported by Powers (1938) from Andrew Jackson Lake in Tennessee. This is a privately owned lake, 12 miles west of Knoxville, of 50 to 65 acres in extent and 20 to 30 feet in depth. He collected some 300 specimens, all females, in July. On return trips to the lake he found these jellyfish to decline steadily in numbers until August 4th, after which date no more specimens could be found. He reports the owner as saying this was the third

successive year of their appearance.

Since the time of its discovery in this country by Potts in 1885, C. ryderi has been reported from eight states, the District of Columbia and from the Canal Zone (Bennett, 1932). Powers added the ninth state, Tennessee, and our report extends the range in Tennessee. Neither Powers nor the authors found the hydroid form of this species.

It is interesting that *C. ryderi* seems to appear in numbers only during the month of July, and when they do appear they are predominantly of one sex. In Tennessee this sex has been exclusively female. It is hoped that other investigators in the different regions of Tennessee will watch carefully for these interesting specimens through July as well as through the other months of the year. It is likely that the range will be greatly extended. Such a search will be rewarding, not only because it may extend our knowledge of this

species, but also because these animals, when properly preserved in formalin, make fine specimens for the laboratory study of the characteristics of medusae. In the latter respect we regard them as superior to Gonionemus.

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