

In memoriam

Gordon A. Riley—1911–1985

Gordon Arthur Riley was born in Webb City, Missouri, on 11 June 1911. He graduated from Drury College in 1933; his early biological education led to an M.S. degree from Washington University in experimental embryology. He entered the zoology department at Yale University intending to work with Ross G. Harrison. He became fascinated, however, by the fieldwork in limnology then beginning in the Osborn Zoological Laboratory. He completed his thesis on the copper cycle of small Connecticut lakes, a subject hardly studied by later investigators. He then began a long program on the productivity of fresh and salt waters, becoming fundamentally a biological oceanographer, initially under the tutelage of Albert E. Parr.

Riley remained at Yale until 1965, when he became Professor and Director of the Institute of Oceanography at Dalhousie University. He died in Halifax, Nova Scotia, on 7 October 1985. Most of his research was done in New England, much in collaboration with colleagues at Woods Hole Oceanographic Institution. This work dealt with the basic nature of the plankton, but he later turned his attention to the suspended organic matter or marine snow. His most significant contributions are those resulting from a peculiarly fertile collaboration of Riley with Henry Stommel and Walter Munk. These papers elaborate the idea of the phytoplankton as an association sinking through a turbulent medium which loses nutrients to the photosynthesizing cells. Cells falling through the unilluminated water there give up nutrients which are continually brought into the mixed medium, both sinking and turbulence being essential parts of the process. The development of these concepts constituted a major contribution to biological oceanography, perhaps as important as any in our century.

G. Evelyn Hutchinson
Osborn Memorial Laboratories
Yale University

By coincidence, the article already in press to lead the next issue of *Limnology and Oceanography* is highly pertinent to the concepts outlined above; the subject is indeed still very much alive.

A few additional notes. Dr. Riley was elected to the Royal Society of Canada and took particular delight in this accolade to “a boy from the Ozarks.” After his official retirement, a compilation of his most important works was printed by Dalhousie University, under the editorship of J. S. Wroblewski and including encomia from several professional colleagues (cf. *Limnol. Oceanogr.* 27: 1112). He wrote and circulated privately in 1984 an informal memoir which, as one reader put it recently, “may be an underground bestseller.”

We miss him greatly.

Yvette H. Edmondson