

Stephen Alfred Forbes

Stephen Alfred Forbes (1844 – 1930) was a founder of aquatic ecosystem science as well as a dominant figure in the rise of American ecology. His publications are striking for their merger of extensive field observations with conceptual insights. While already famous as an economic entomologist, Forbes undertook studies of massive fish mortality in Lake Mendota, Wisconsin. He showed the connection of algae blooms and lake physics to fish kills, and embarked on a remarkable research program into the ecology of lakes and rivers. Many of his insights about lake ecology were collected in an influential paper, "The lake as a microcosm" (Forbes 1887). Notable for both conceptual creativity and the use of innovative quantitative methods, his work foreshadowed the ecosystem concept as well as modern ideas of behavioral ecology and food web dynamics.

Forbes believed that ecological knowledge was fundamental for human well-being. He never discriminated between basic and applied ecological science. He served as State Entomologist for Illinois, Director of the Illinois State Laboratory of Natural History, chairman of the Department of Zoology at the University of Illinois, founder of the Illinois Biological Station, and Chief of the Illinois Natural History Survey. He was elected to the National Academy of Sciences in 1918. As President of the Ecological Society of America in 1921, he championed the practical uses of basic ecological science for the betterment of humankind.

References

Crocker, R.A. 2001. *Stephen Forbes and the Rise of American Ecology*. Smithsonian Institution Press, Washington D.C.

Forbes, S.A. 1887. The lake as a microcosm. Bull. Sci. Assoc., Peoria, Illinois pp 77-87. Reprinted in Illinois Nat. Hist. Survey Bulletin 15, art. 9,537-550.