

George Charles Embody

November 23, 1876 — February 17, 1939

Professor Embody died of heart disease on February 17, 1939, at Daytona Beach, Florida, where he had gone on sabbatic leave.

George Charles Embody was born in Auburn, New York, on November 23, 1876. He was a graduate of Auburn High School and of Colgate University, where he received the bachelor's degree in 1900 and the master's degree in 1901. Although his interest as an undergraduate lay in the field of physical sciences and he held an assistantship in physics at Colgate, a love of the outdoors soon turned him toward biology and natural history. One of his first publications was *Birds of Madison County*. He collected several hundred specimens of birds and mammals which he gave to the Cornell museum in 1938. When he could do so he obtained further training in the biological sciences, in 1906-07 at Johns Hopkins and from 1908 to 1910 at Cornell. Here he held an instructorship in Vertebrate Zoology in 1909-10, and in 1910 took the doctor's degree. Colgate University awarded him the honorary degree of doctor of science in 1924.

Although Dr. Embody is best known for his research, he was not less eminent in teaching, being adept in the art of planting the germ of an idea in a student's mind, nourishing it through the formative stages, and then, by gradual withdrawal, creating an independent scientist in the true Comstock tradition. His teaching began in 1901 at the Delaware Literary Institute; the next year he taught science at Bradford High School in Pennsylvania; then for three years he was professor of Natural Science at Bethel College in Kentucky. After his year at Johns Hopkins he taught at Randolph-Macon College and, after his two years at Cornell, at Butler University as professor of Biology, whence he returned to Cornell in 1911 to remain here as instructor, assistant professor, and after 1920 as professor of Aquiculture. In 1921 he obtained leave of absence to teach at new newly organized College of Fisheries at the University of Washington.

Research led him into many fields, as is often the case with men pioneering in an unexploited area of knowledge. His investigations included birds, the Crustacea, the life history of fishes, the genetics of fishes, fish diseases and nutrition, and a host of field and laboratory studies bearing on the problems of game-fish production. One of his great achievements was the formulation of a standard stocking policy for streams, published in 1927 and widely adopted in the United States and Canada. Fish stocking had been hit-or-miss, often based on political expediency rather than biological principles. The policy that Dr. Embody established insists that an actual survey of stream

conditions must be made before a satisfactory planting program can be adopted. Such an actual survey had been developed, first under Professor Embody's guidance by Dr. W. A. Clemens, who published in 1917 working plans for increasing fish production in the streams of Oneida County, then by Dr. Embody himself in a study of the waters of Tompkins County. The foundations were then laid for a biological survey of the watersheds of New York which has been conducted under the leadership of Dr. Emmeline Moore and is now near completion. Dr. Embody's hatchery on Cascadilla Creek was one of the first experimental stations of its kind on this continent and there he developed many of the modern practices in fish culture. He published some fifty technical papers and reports. He had completed a work on the toxicology of fishes which his son, Daniel R. Embody, is preparing for publication, and he left in manuscript a manual of goldfish culture and a text on general fish culture with particular reference to trout.

He served as field biologist of the New York State Conservation Department for many years as adviser to the hatchery service of that department for the last ten years, and as consultant to the New Jersey Fish and Game Department and to the U. S. Bureau of Fisheries. While on leave in 1932 he was in charge of the California trout investigations under the supervision of the Bureau of Fisheries. Many persons, from the owner of a garden pool or a farm fishpond to the sportsmen of the State, sought his advice.

He was a member of the American Fisheries Society and of its special Committee which drew up a policy of fish culture for North America; in 1918 he received the society's award for original work and in 1924 he was president of the society. He belonged to the American Association for the Advancement of Science, the Genetics Society, the American Society of Ichthyologists and Herpetologists, the Ecological Society of America, and the American Wild Life Institute. He was a member of Delta Kappa Epsilon, Gamma Alpha, Phi Beta Kappa, and Sigma Xi.

As an undergraduate Dr. Embody had excelled in track and field athletics, but such sport soon gave way to his love of sports afield. He was a crack shot and a skillful angler. From early boyhood—when it was a novelty to amateurs—he had been keenly interested in photography, and he learned to use motion pictures to illustrate some of the techniques of fish culture.

His students, many of them following paths which he pointed out to them, will remember his sympathetic and self-sacrificing help. His colleagues will recall his ease and graciousness in the midst of work.