

Lewis Hanford Tiffany served the plant sciences with distinction. He had a broad understanding of what biology is all about, and through both research and teaching left the stamp of his intellect and personality on the field. He sought and achieved understanding of the interrelationships of organisms, and their relationships to the total environment. He brought his special touch to the ecology of freshwater systems and embraced the point of view of the ecosystem long before the term or what it encompasses achieved either formality or currency. His research interests throughout his professional career were focused on the algae, and significant contributions were made to knowledge of their ecology, physiology, biogeography, morphology and taxonomy.

He began these pursuits in his native state of Illinois where the rich diversity of algae in the abundant lakes and ponds of the wet prairies stimulated a continuing, life-long research emphasis that made the name Tiffany synonymous with North American freshwater biology. He was a respected and admired scientist in his own country in his own time and was esteemed by the members of his profession, investigators in his special fields of expertise, students and friends on an international scale.

Above all else Dr. Tiffany was a teacher and would want to be remembered as one. Teaching excited and stimulated him and led him to spend large amounts of time in planning courses and devising avenues of instruction which would stimulate the student as well. He was no mere purveyor of facts, but a leader guiding students from observations and experiments to their own satisfying interpretations and conclusions. The goal was always to encourage independent thinking. The reward was the revelation that came to the student who, upon solving a problem, suddenly realized edu-

cation need not be just a matter of absorbing information and knowing answers, but can be a process of logically and accurately arriving at one's own answers.

Just what motivated Dr. Tiffany's interest in teaching is likely never to be known. Because he was engaged in instruction in universities for about four decades, it is possible that he simply thought teaching was one of his major functions deserving considerable time and energy. He liked people, thought students were worthwhile examples, and generously gave his best efforts to their education.

From 1962 to the time of his death on March 16, 1965, Dr. Tiffany was William Deering, Professor of Botany, emeritus at Northwestern University. The beginning was Lawrenceville, Illinois on July 29, 1894. He grew up in southern Illinois and for a time, beginning in 1912, was attracted to public school teaching and then to continuation of his education at Eastern Illinois State Teachers College where he graduated in 1915. In 1949 this college, by then named Eastern Illinois State College, which has stimulated and produced many botanists over the past fifty years, conferred upon Dr. Tiffany the Honorary Pd.D. degree.

World War I briefly interrupted his career, but when it was over he took whatever lessons he had learned as Lieutenant of Field Artillery and resumed more scholarly pursuits, this time at the University of Chicago, where, in 1920, he completed the B.S. degree. Next he moved to the Ohio State University for his M. Sc. degree, in 1921, and the Ph.D. degree in 1923, while also serving as an instructor in the Botany Department, which was then headed by Dr. E.N. Transseau. In 1921, Tiffany was married to Miss Loel Zehner, also from southern Illinois, who survives him and resides in the Lawrenceville area.

By 1932 Tiffany had become Professor of Botany at Ohio State, published his monograph on the algal family *Oedogoniaceae*, and, together with E.N. Transeau and H.C. Sampson, developed what ultimately came to be known as the "Ohio State method" of teaching elementary botany. This integrated laboratory-discussion method, which achieved great popularity at Ohio State and was widely used elsewhere, was molded and continually refined by its three principal proponents who by 1934 had published their "Workbook in General Botany" and, in 1937, "Textbook of Botany" as special tools of their course. Transeau was the leader and wise counselor, Sampson became the dominant force in directing the course, and Tiffany, the slightly junior member of the threesome, was forever the quiet scholar and arbitrator who, working with these strong personalities, learned how to achieve his ends by calm and persistent arbitration. These men shared many bonds over the years including experience at Eastern Illinois, education in the Botany Department of the University of Chicago, their many intimate years at Ohio State and scientific interests which led all either to teach or conduct research and publish in varying degrees in the fields of physiology and ecology. All three of these gentlemen reflected the influence of Henry Chandler Cowles and the innovative contributions he made to American ecology. Transeau achieved eminence in both the fields of ecology and algology and Tiffany, who followed his footsteps, bent his efforts to the algae, but was thoroughly imbued with the importance of ecological principles.

Dr. Tiffany's years at Ohio State were marked by a very productive period of teaching and of research which produced a large number of scholarly publications. During that period he completed the manuscript of his charming little book "Algae, the Grass of Many Waters" which was published in 1938. Each summer for many years (1928-36) he was Professor of Algology at the Franz Theodore Stone Laboratory on Gibraltar Island, Lake Erie. There, while pursuing his own research, he indoctrinated a host of students into the mysteries of the algae, and had a major impact on the careers of algologists, who have come to be known as phycologists, and who have contributed importantly to this research field in the United States and many other countries.

In 1937, Dr. Tiffany left the Ohio State University and moved to Evanston, Illinois, where he became Chairman of the Depart-

ment of Botany at Northwestern University. There, while continuing his program of research and publication, he initiated his own program of elementary instruction which resulted in dramatic and gratifying increases in enrollment. He expanded the program of graduate studies, initiated a Ph.D. program and achieved modest increases in professional staff. In 1949, the Departments of Botany and Zoology at Northwestern were merged into a Department of Biological Sciences in which Dr. Tiffany continued to serve as William Deering Professor of Botany, a chair to which he had been appointed in 1945.

Although his years following World War II were marked by periodic illness and continually declining health which hampered his activities, he maintained an active teaching and writing career until 1959 when he found retirement essential. During that period among his contributions were the chapter on ecology in "Manual of Phycology" (1951); "The Algae of Illinois" in 1952 (with M.E. Britton); and co-authorship of the biological textbook "Life" with G.G. Simpson and C. Pittendrigh in 1957.

All of those privileged to know Hanford Tiffany, whether associates, students, subordinates, or just friends, will remember him well for his outstanding personal traits. He was a kindly and gentle man of the highest integrity. He was at peace with himself, understood himself, knew what he wanted, and generally had a fine grasp of how to go about achieving his ends. He was thoughtful and sensitive to the needs of his students and associates and gave with great generosity to solution of their problems and to their advancement.

Dr. Tiffany was a member of a reasonable number of organizations, mostly professional societies, to which he gave time and energy without stint when called upon either for committee work or for the offices with which he was honored. He was a Fellow of the American Association for the Advancement of Science; Fellow of the Ohio Academy of Science (Vice President, 1929) and Business Manager of its Ohio Journal of Science (1920-30). He was a member of the American Society of Plant Physiologists; American Society of Plant Taxonomy; American Society of Naturalists; Botanical Society of America; Ecological Society of America (Editorial Board of Ecology, 1950-52); American Society of Limnology and Oceanography (as Limnological Society, President, 1939); Phycological Society of America (Vice President, 1948 and President, 1949); Honorary Life Member, Illinois

State Academy of Science (Vice President, 1939); Chicago Academy of Science (Board of Governors, 1941-59); American Microscopical Society (Vice President, 1930), President, 1934, Editorial Board from 1956); and The Society of the Sigma Xi. Among other responsibilities and affiliations, Dr. Tiffany was Secretary of the Illinois Board of of Natural Resources and Conservation (1947-59); Assistant Editor (Algae) of Botanical Abstracts (1922-25); Committee on Hydrobiology, National Research Council (1930-35); Editor (with J. Brunel and G. W. Prescott) of "Culturing of Algae"; Committee on International Rules of Nomenclature (1948); Vice President (1954) of the Phycology Section, 8th International Botanical Congress, Paris; Patron of the Smithsonian Institution; Associate in Cryptogamic Botany, the Chicago Natural His-

tory Museum (from 1944); and Honorary Life Member of Centro Italiano de Studi Anglo-Franco-Americani (from 1946).

In his last active years, no doubt Tiffany found much pleasure in revising and expanding "Algae, the Grass of Many Waters" to meet the demand for a second edition. In the Preface to the second edition, published in 1958, he happily stated, "Some readers have expressed considerable delight at reading the book, and there has been a number of requests for the volume since it has been out of print" and then added with characteristic humor and a sense of amazement, "'Curiouser and Curiouser!' cried Alice."

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