Stanley Adair Cain 1902–1995

Stanley Adair Cain, the 42nd President of the Ecological Society of America, died on 1 April 1995 at Hillhaven Extended Care Home in Santa Cruz, California, after suffering from Alzheimer's disease for about 12 years.

Stan was born on 19 June 1902 at Deputy, Indiana, to Oliver Ezra and Lillian Whitsitt Cain. He attended Shortridge High School in Indianapolis, which had a college-preparatory orientation and where his teachers in zoology, botany, and physical science encouraged direct field experience. He then enrolled at Butler University, from which he received a B.S. in 1924, having been stimulated by R. C. Friesner to concentrate on field botany. This interest led him quite naturally to the University of Chicago and to association with H. C. Cowles, G. D. Fuller, W. C. Allee, and A. E. Emerson. There he earned his M.S. degree (in 1927 with Cowles) and Ph.D. (in 1930 with Fuller). Fieldwork in 1929 and 1930 in the Appalachians resulted in his doctoral dissertation on the heath balds of the Great Smoky Mountains and continued phytosociological investigations of that region over the next decade.

In 1931 he joined the staff of Indiana University and secured support for further fieldwork from the Waterman Institute; during the years 1933–1935 he examined the structure of various forest tracts in Indiana. He had developed a keen interest in methodology to supplement the current emphasis on floristic description, and the use of quantitative techniques characterized many of his subsequent studies. From 1930 to 1935 he edited the Proceedings of the Indiana Academy of Science, of which he became a fellow.

In 1936 the University of Tennessee was looking for an ecologist, and Stan accepted a position on its staff, advancing eventually to Professor of

Botany. Here he gained encouragement and support from L. R. Hesler and A. J. Sharp, whom he found to be "great field people," although they were best known as taxonomists. His association with U.T. continued to 1946, but in 1940 he obtained a year's leave when he was awarded a John Simon Guggenheim Memorial Fellowship, which he used to assemble material for his classic treatise, Foundations of Plant Geography, published in 1944. During his Guggenheim he spent some time at the Alpine Laboratory with F. E. Clements, with whom he enjoyed many stimulating discussions despite considerable disagreement over concepts. He also developed an interest in pollen analysis, recognizing its value to paleoecology and publishing several research papers in that field. In 1944 he served as Botany Editor, and was elected President, of the Tennessee Academy of Science.

In 1945, as a Lieutenant Colonel in the United States Army, Cain served as chief of the scientific section of the American Army University in Biarritz. After his discharge, he spent part of the summer of 1946 at the Arnold Arboretum, on a grant from the National Academy of Sciences. In November 1946 he joined the staff of the Cranbrook Institute of Science at Bloomfield Hills, Michigan. While at Cranbrook, he participated in a research program centered on Sodon Lake, Oakland County, emphasizing plant-animal associations, productivity, pollen sediments, and fossil mollusks. He also taught students at Wayne State University and the University of Michigan at Ann Arbor, were he collaborated with P. Dansereau and with F. C. Evans in studies of old-field vegetation at the Edwin S. George Reserve. At Cranbrook he began to apply his experience in ecology to human affairs; he presented numerous talks to the public on conservation, population problems, and UNESCO. He had, in fact, been instrumental in the founding of



the Nature Conservancy and served as its President in 1950. From this time on, his efforts and concerns were increasingly directed to the issues of ecologically sound management and the preservation of nature.

In 1950, S. T. Dana brought Stan to the University of Michigan's School of Natural Resources as the Charles Lathrop Pack Professor of Conservation. (He was also appointed Professor of Botany in the College of Literature, Science and the Arts.) He established the School's Department of Conservation and served as its Chair for 11 years. His leadership, marked by an openness and availability for consultation, inspired a long line of students, some of whom have become prominent in administrative and academic posts. As the Governor of Michigan's appointee, he served on the State Conservation Commission for 5 years (1959-1965), acting as its Chairman in 1963-1964. In 1955-1956 he was a member of the United Nations Technical Assistance Mission to Brazil, where he collaborated with G. M. de Oliveira Castro in preparing their Manual of Vegetation Analysis, designed to provide field workers with an understanding of the concepts and methods of plant sociology; published in 1959, it is a comprehensive summary of the ideas and techniques that were prevalent at the time.

Stan was given leave from the University of Michigan in 1965 when he was appointed by President Lyndon Johnson as Assistant Secretary of the Interior, with oversight of the Bureau of Commercial Fisheries, the Fish and Wildlife Service, and the National Park Service. Secretary Udall often referred publicly to Stan as "his ecologist," and one of Stan's objectives was to encourage and develop sound conservation practices. He held this position for 4 years, subsequently receiving the Department's Conservation Service Award for his outstanding efforts. In 1968, the ESA fittingly named him Eminent Ecologist, and 2 years later he was elected to the National Academy of Sciences.

On his return to the University of Michigan, Stan developed the Institute of Environmental Quality and served as its first Director. He also continued to teach and advise students until his mandatory retirement in 1972. He then accepted a position as Adjunct Professor at the University of California at Santa Cruz, where he had earlier served as a consultant in the design of the campus. He became chairman of a committee that planned UCSC's College VIII and was instrumental in establishing its interdisciplinary Department of Environmental Studies. He also taught courses in botany and ecology; as he became less able to go into the field he developed an increasing skill in botanical illustration, creating many elegant drawings. He continued to be active in university affairs through the 1970s, but by 1981 he had, in the words of one of his colleagues, "finally begun to settle into retirement."

Cain's roles in ESA were many and varied. He held office as Treasurer (1938–1940), Vice-President (1953–1954), and President (1957–1958), and was a member of the editorial boards of *Ecology* (1932–1934, 1947–1948) and *Ecological Monographs* (1938–1940). He also served

on the following committees: Ecology Study (1960–1964), Meetings (1961), Applied Ecology (1963–1964), Public Affairs (1963–1965), and as chair of Human Ecology (1961). He was the Society's representative to AAAS from 1961 to 1964. In recognition of these offices and his outstanding record of service in the interest of ecology and conservation, ESA named him its Eminent Ecologist in 1968.

The wide range of Stan's participation in national and international scientific organizations was indeed remarkable. He was elected an officer in AAAS (Vice-president), the Soil Conservation Society of America (Vice-president), and the Society for the Study of Evolution (Secretary). He served as a director of Biological Abstracts and as a committee or panel member for the Conservation Foundation, the National Research Council, and the National Science Foundation. His outstanding contributions to botanical science were recognized by the award in 1956 of a Certificate of Merit from the Botanical Society of America, and by his election as a Corresponding Member of the Soci-Phytogeographica Suecana (Stockholm, 1950) and as an Honorary Member of La Real Sociedad Espanola de Historia Natural (Madrid, 1953). The Royal Society of Arts in London named him as a Benjamin Franklin Fellow, and the Wildlife Society honored him with its Aldo Leopold Medal.

In 1940, Stan married Louise Gilbert, whose companionship, understanding, and support he cherished until her death in 1993. Their only child, Stephen Cain, is a star reporter for the Ann Arbor News, and he and his wife have presented Stan and Louise with seven grandchildren.

Stan was a true "Gentleman from Indiana," a man of great personal charm, which he maintained throughout his life. He was unfailingly kind and polite to people and made himself available to students, faculty, and colleagues whenever possible. His intellect, vision, and perspective were widely admired and respected. Everyone who knew him can feel fortunate to have had that contact. In short, he was, as many have said, "just a wonderful guy."

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