Eugene P. Odum: Pioneer of Ecosystem Science
1913–2002

Eugene Pleasants Odum was born 17 September 1913 at Lake Sunapee, New Hampshire, where family members vacationed to escape the summer heat of the South. Eugene spent most of his childhood in Chapel Hill, North Carolina. An early interest in natural history; an influential father, Howard W. Odum, who was a well-known sociologist; and collaboration with his brother, Howard Thomas Odum (whose mentor was G. Evelyn Hutchinson), were influences that helped shape his early thinking and professional growth. Odum perceived early on that ecology had great potential for linking the natural and social sciences. Many scholars feel that one of his greatest contributions was in helping to elevate ecology from a subdiscipline of biology to the integrative science that it is today. Based on this perception, he led in the development of a holistic brand of ecology that many called “ecosystem science.” His article entitled “The strategy of ecosystem development,” published in 1969 in *Science* 164: 262–270, provided a refreshing perspective on systems’ development and regulation.

In 1953, Eugene P. Odum published the first edition of *Fundamentals of Ecology*, a book that helped to educate generations of ecologists throughout the world. The second edition, published in 1959 in collaboration with his brother, Howard T. Odum, was wonderfully compelling, was holistic in its approach to both terrestrial and aquatic systems, and helped to establish ecology as a new integrative discipline. The fifth edition of *Fundamentals of Ecology*, co-authored with Gary W. Barrett, is planned to be published in 2003. Odum published a dozen other books and over 200 scientific publications during his illustrious career.

At the University of Georgia, where he spent most of his career, Odum was primarily responsible for the establishment of the Marine Institute on Sapelo Island, the Savannah River Ecology Laboratory, and the Institute of Ecology. The Institute of Ecology today is recognized as one of the leading institutions in the world for training ecologists. Faculty within the Institute of Ecology have played leading roles in the establishment of the NSF-sponsored LTER Coweeta Hydrologic Laboratory research site located in North Carolina, the Horsehoe Bend teaching and research site located near the University of Georgia campus, and the Okefenokee Swamp research site located on the borders of Georgia and Florida. Odum also served on the original scientific advisory committee that explored the establishment of the Joseph W. Jones Research Center at Ichauway, located in southwestern Georgia. (See G. W. Barrett and T. L. Barrett [2001] regarding Odum’s involvement with each of these facilities.)

Odum’s contributions to and interactions with the Ecological Society of America (ESA) are numerous. For example, he was honored by the ESA with the Mercer Award in 1956, served as Society President in 1964–1965, and received ESA’s Eminent Ecologist Award in 1974. More recently, he helped to establish the ESA Eugene P. Odum Award for teaching excellence in ecology education.

Odum received numerous honors during his distinguished career. He was elected a member of the National Academy of Sciences in 1970 and was named an honorary member of the British Ecological Society in 1974. In 1975, Eugene P. Odum received, jointly with his brother Howard T. Odum, the $80,000 international “Institut de la Vie” Prize awarded by the French government. Also in 1975, Odum received the prestigious Tyler Prize for Environmental Achievement, accompanied by a $150,000 cash prize, which he contributed to the University of Georgia Foundation as an endowment for
the Institute of Ecology. In addition to other endowments at the University of Georgia, such as the Odum Chair in Ecology and the Odum Annual Lecture series, he was essential in establishing endowments at the University of North Carolina, the University of Virginia, and the University of Illinois. In 1978, Odum received the Distinguished Service Award from the American Institute of Biological Sciences. In 1987, with his brother Howard, Odum received the Royal Swedish Academy’s Crafoord Prize, which is often considered to be equivalent to the Nobel Prize. Odum has received Distinguished Alumni awards from both of his alma maters, the University of North Carolina (A.B. 1934, A.M. 1936) and the University of Illinois (Ph.D 1939).

The mentor for his doctorate was S. Charles Kendeigh.

Odum remained a vibrant individual and professionally active until his death on 10 August 2002 at the age of 88. Although he officially “retired” in 1984, he continued to publish books and scientific publications, and to give invited lectures at symposia and special events. (See his biography, *Eugene Odum: Ecologist and Environmentalist* by B. J. Craige [2001].) A competitive tennis player in his youth, he became a worthy opponent on the croquet court in his later years. He remained an avid bird watcher and enthusiastic gardener. He was a friend to colleagues and students alike, and a generous individual whose gifts and wisdom will promote ecology beyond his death.

Literature cited


Gary W. Barrett,
*Odum Professor of Ecology*
*Institute of Ecology*
*University of Georgia*
*Athens, GA 30602*
E-mail: gbarrett@sparrow.ecology.uga.edu