Resolutions of Respect
Ernest Davis Seneca 1937–2015

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Ernest “Ernie” Seneca spent his professional career studying and teaching about marine coastal ecosystems. He earned a BS degree in Forestry in 1959 at Virginia Polytechnic Institute and State University in Blacksburg, Virginia (Virginia Tech) and an MS in Wildlife Management in 1961, also at Virginia Tech. After a brief stint in a temporary position as Biologist with the Virginia Commission of Game and Inland Fisheries in 1961, he served in the United States Army as a Second Lieutenant from 1962 to 1964. In 1964, he began his doctoral studies in physiological plant ecology under the direction of Arthur W. Cooper at North Carolina State University in Raleigh, North Carolina (NCSU). For his dissertation research, he investigated factors influencing seed germination and seedling growth of dune grasses on the North Carolina coast. This research was timely because there were few studies on the behavior of seeds and seedlings of these species in nature.

After completing his Ph.D. in 1967, Ernie remained at NCSU in a post-doctoral position, expanding his seed germination and seedling growth studies to salt marsh species. In 1969 he was appointed to a tenure-track position in Botany and quickly moved through the ranks to Professor in 1978. In 1986 Ernie
became Head of the Department of Botany at NCSU and continued in that position until his retirement in 1994. When he became Department Head, faculty morale was poor and the department was not well regarded at higher administrative levels at NCSU. Ernie restored the department’s faith in itself and its credibility at the university through effective leadership that exemplified fairness, openness, and a high regard for ethical standards. He was proud of his work as Department Head, valuing compliments he received on his administrative style.

Ernie and his graduate students continued and expanded the scope of his work on the physiological ecology of dune and marsh grasses. Working with Dr. W. W. Woodhouse, he studied the use of dune and salt marsh grasses in stabilization of coastal dunes and marshes, as well as artificial substrates such as dredge spoil. His work on dune and marsh stabilization led him more deeply into the applied dimensions of research on the coastal environment. One such study with several coworkers involved determining the environmental impact of a coastal North Carolina nuclear power plant on the productivity of adjacent salt marshes. This work led to additional studies on the physiology and morphology of salt marsh grasses. Another project involved helping to resolve problems associated with highway construction on the North Carolina Outer Banks. Recognition of the importance of his work on dredge spoil stabilization came in 1978 when he and colleague Dr. Steve Broome were awarded a grant to restore marsh vegetation that was destroyed by the Amoco Cadiz oil spill (and subsequent cleanup operations) at Île-Grande, France. Ernie received the Gulf Oil Conservation Award in 1982 for these efforts. He and Broome then extended the techniques applied in France to brackish water marshes in sheltered locations along North Carolina’s Pamlico River. With his students and other associates, Ernie published over 50 papers on coastal habitats and their plant and animal species.

In many ways, teaching was Ernie’s first love. He believed that teaching and mentoring students was what being a university professor meant. He taught basic and graduate courses in plant community ecology and plant geography, in wetland plant identification, and a highly popular course in applied coastal ecology. This latter course was Ernie’s favorite, and his field trips to the coast of North Carolina were eagerly anticipated by his students and colleagues alike. During his career he supervised over a dozen doctoral candidates and at least 20 Master’s students.

Ernie was a true naturalist, a life-long interest expressed in his collections of plants, insects, seashells, and fossils. He enjoyed nature photography, and he shared his love of nature with many students and colleagues who joined him on field trips to natural communities from the middle Atlantic coast to the southern Appalachian Mountains. He also had many interests outside the world of ecology and university teaching and administration. He loved trains, both real and miniature; collected stamps; finished furniture; and enjoyed hunting. He was an accomplished taxidermist, mounting many of the animals he obtained while hunting, including ducks, small mammals, and whole deer and bear. He gave many of these mounts to friends. Following his retirement, Ernie and his wife, Peggy, managed a small-scale cattle operation at their home near Wake Forest and on the farm they owned in the mountains of southwestern Virginia. Together, they enjoyed caring for their cattle and sharing the natural beauty of the area surrounding their Virginia farm.

Seneca married Peggy Ann Tyer in 1960. They had two children, a son Ernest and a daughter Sheila. He is survived by Peggy, Sheila and her husband, a daughter-in-law, two grandchildren, and one great-grandchild. His son Ernest died in 2012—the saddest emotional turmoil that he endured.

With Ernie Seneca’s passing, the field of coastal ecology lost a dedicated teacher, researcher, and practitioner. Those who knew him lost a good friend.