

## George Simmons Jr.



George Simmons Jr., is a Virginia Tech Alumni Distinguished Professor Emeritus, having retired in 2003 as an Alumni Distinguished Professor of Biological Sciences in the College of Science. A member of the Virginia Tech community since 1971, Dr. Simmons continued to teach and advise students until 2014. He taught courses at the freshman, senior, and graduate levels, and provided extensive academic advising to undergraduate students as director of the department's undergraduate advising center, which, under his leadership, received the university's Exemplary Department Award for Academic Advising in 2002.

Dr. Simmons' research in the field of aquatic biology was supported by external funding from the National Science Foundation, Virginia Electric Power, National Oceanic and Atmospheric Administration, the U.S. Army Corps of Engineers, the Virginia Department of Conservation and Recreation, and citizens' groups on Virginia's Eastern Shore. He wrote or co-wrote two books; 25 review papers, book chapters, and symposium papers; and 67 peer-reviewed journal articles.

For 34 years Simmons and his students pursued their interests in aquatic ecology and limnology which included lakes in Virginia and other locations as remote as Antarctica. He and his students also studied groundwater discharge into offshore environments of the continental shelf and coastal waters of Chesapeake Bay, VA and Key Largo, FL. More recently, his research focused on non-point sources of fecal coliform bacteria in the Chesapeake Bay. Simmons was the first ecologist to develop a DNA library of *Escherichia coli* (*E. coli*) from wild animal populations, and humans, from Virginia's Eastern Shore. Once the library was established, he and his students could accurately relate *E. coli* isolates from open water to discrete sources of *E. coli* contamination. This knowledge led to saving many acres of clam growing areas, and opened many additional acres of water to shellfish harvesting.

Simmons taught Freshman Biology for nonscience and science majors for over 40 years at Virginia Tech, as well as, Limnology, Aquatic Ecology, Marine Biology, and Freshman Seminar. He earned numerous teaching awards, including the Sporn Award (1979). He also was a member of the Academy of Teaching Excellence, served as its Chairperson from 1981-82 and was a charter member of the University's Academy of Advising Excellence (2001). In 1992, he received the Excellence in Career Advising Award. Simmons also became a member of the Explorer's Club in 1987 as a result of his Antarctic studies in freshwater lakes. His contributions to the science of Antarctic Lakes was further recognized by having two geographic structures named in his honor: Simmons Valley and Lake Simmons. During his career, he served as Assistant Professor of Zoology (1971-1974), Associate Professor of Zoology (1974-1983), Professor (1983-92), and Alumni Distinguished Professor from 1992 until his retirement in 2003. He also served two terms as an Interim Department Head and served as an assistant to three Heads of the Department from 1971-2003. Simmons received his bachelor's degree from Appalachian State University in 1964 and a Ph.D. from Virginia Tech in 1968.