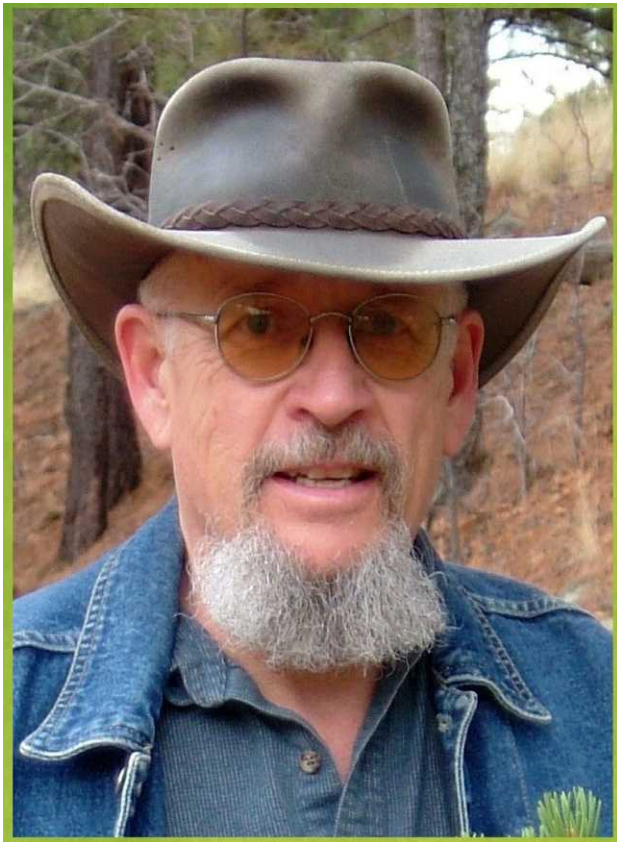


Eminent Ecologist Award

The Eminent Ecologist Award is given in recognition of an outstanding body of ecological work or of sustained contributions of extraordinary merit. It is the highest honor bestowed by the Ecological Society of America.

This year's winner is Professor Tom Whitham of Northern Arizona University.



Dr. Whitham has published over 170 peer-reviewed papers and book chapters. His earliest papers in the late 1970's, stemming from his dissertation, were elegant, indeed one might say "classical" empirical studies of habitat selection and territoriality in gall aphids, published in *Nature*, *Ecology*, and *The American Naturalist*. For this he was awarded the ESA's George Mercer Award in 1980. From those days to the present, he has continued to publish influential papers. He has maintained a sustained focus in his career on how individual variability, both within and among individuals, scales up to much larger areas of ecological organization. His early papers on the ecological implications of somatic mutations broadly stimulated ecologists and evolutionists to focus on the previously largely ignored source of heterogeneity in ecological systems. Dr. Whitham has generated an impressive body of work on specific plant-herbivore systems, such as pinyon pine and cottonwood and their associated insect herbivores, articulating the implications of his perspective on the importance of individual

variation. His studies of how plant hybridization leads to changes in the structure of entire food webs led naturally to his current emphasis on how individual genotypes in foundation species can influence the attributes of entire communities, and indeed ecosystems. This articulation of how genetic variation can be manifest at higher levels of ecological organization is among the most exciting areas of intellectual ferment in evolutionary ecology at present. He has also made important contributions by articulating how his insights into the interface of ecology and genetics have practical implications, for instance in the restoration of natural ecosystems.

Finally, Dr. Whitham has trained and effectively mentored an entire generation of ecologists, and provided an exemplary model of effective collaboration among scientists and disciplines, and in so doing helped contribute to the development of ecological sciences more broadly.

Dr. Thomas G. Whitham
Regents' Professor
Northern Arizona University
Biological Sciences & Merriam-Powell Center for
Environmental Research

“My father, Lloyd Whitham, helped inspire me to become a scientist. He taught me a love of trees and everything associated with them.”

I earned a Bachelor of Science degree in Plant Pathology and Horticulture at Iowa State University in 1969. I then earned my Master of Science degree in Zoology at Ohio State University four years later. In 1978, I earned my Ph.D. in Biology at the University of Utah. I am currently a Regents Professor at Northern Arizona University.

My father, Lloyd Whitham, who was a wholesale nurseryman, had very integrative interests and was an avid lover of nature. He taught me a love of trees and everything associated with them. My great aunt, Daisy Iowa Whitham, was a teacher who received an advanced biology degree in the early 1900s. She gave me my first butterfly net. She also donated the land occupied by the family nursery that was established in 1863 to the Iowa Heritage Program. The abandoned nursery and adjacent oak/hickory forests known as “Whitham Woods” have become a park for research and naturalists. Their actions greatly influenced my interests and profession.

My research focuses on community and ecosystem genetics, which is the study of the genetic-based interactions that occur between species and their abiotic environment in complex communities. The traits of individual plant genotypes can define a much larger community ranging from microbes to vertebrates. This community can then feed back to affect the performance of the individual tree genotype. These relationships allow us to study community stability, biodiversity, and evolution, which in turn have applications for conservation, climate change, and genetic engineering. My work has focused primarily on foundation tree species such as poplars, pines, and eucalypts.

