

Judy L. Meyer, President 1994-1995



Bob Paine, in composing his biography of Past-President Jane Lubchenco, noted that the exercise wavered dangerously between an obituary and a letter of recommendation. In writing about Judy Meyer, that same precipice looms largely. Her relatively brief career reflects not only professional accomplishment but an obvious commitment (or more likely overcommitment) to our science and the responsibility that an academic ecologist has to both society and the environment. Her personal history provides a glimpse into how such a career and a commitment develop.

Judy Meyer was born and raised in, and escaped from, the suburbs of Milwaukee, Wisconsin. She was educated in suburban public schools and at the University of Michigan. Judy's early years were influenced by the work ethic of her parents. Early on, she excelled academically, although sometimes in unanticipated fields. As a high school senior, she received the Betty Crocker Homemaker of the Year Award. Her other exploits included clarinet playing and, not simultaneously, baton twirling in the marching band (she dropped her ba-

ton on national TV in the annual Macy's Thanksgiving Day Parade). The Macy's Parade incident, and her decision not to pursue a medical career, are about the only times she has failed to meet her parents' expectations.

Judy's post-graduate academic career has been marked by adventure and achievement. Although she started graduate school at the University of Hawaii as a dolphin-hugger, she wound up as a lab-based oceanographer. For her thesis, she studied nutrient-limited growth of marine phytoplankton, spending long nights in front of a chemostat. Her first published paper, based largely on her Master's thesis (Caperon and Meyer 1972, *Deep Sea Research* 19:601-608), was cited as a Science Citation Classic in 1988. Her time in front of the chemostats propelled her into field ecology. After her Master's, she participated in expeditions to Enewetak, Christmas Island, and an equatorial oceanographic cruise. At Enewetak, her Betty Crocker skills were fully utilized when she was hired as chief cook and lab technician during Operation Symbios, a sequel to Eugene Odum's study of coral reef ecosystem function at the same atoll several years earlier. This marked Judy's introduction to team-based ecosystem research.

In 1973, Judy and her ichthyologist husband, Gene Helfman, moved off their 8-m sailboat in the Waikiki boat harbor to Ithaca, New York, where she studied under Gene Likens at Cornell University (Likens was ESA president in 1981; his major professor, Arthur Hasler, was ESA president in 1961; his major professor, Chancey Juday, was ESA president in 1927; Judy's students are continually looking over their shoulders). Her doctoral dissertation focused on phosphorus dynamics in a headwater stream in the Hubbard Brook Experimental Forest in New

Hampshire. This work included winter sampling on snowshoes and cross-country skis, and summer sampling during rising and falling water levels. For years afterwards, she had difficulty sleeping through summer storms.

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Judy has been at the University of Georgia since (before) completing her Ph.D. in 1978, moving deftly through the academic ranks. She was spared much of the anxiety of the academic job market, landing the first job for which she applied (she attributes this to an uncharacteristically relaxed attitude during the interview because she figured, characteristically, that she didn't stand a chance). Her teaching has included both undergraduate and graduate lecture and laboratory classes in limnology, aquatic ecology, stream ecology, and introductory ecology. She recently launched a freshman-level course on the Ecological Basis of Environmental Issues that students can take to fulfill a new requirement in environmental literacy. Judy is the fourth UGA ecologist to become ESA president, following Gene Odum, Frank Golley, and Ron Pulliam.

Judy's primary research interests focus on nutrient dynamics, the transformation and fate of dissolved organic carbon, and the role of microbes in river and stream ecosystems. Her major projects have included investigations of the role that fishes play in transporting nutrients on Caribbean coral reefs, microbial food web dynamics and river-floodplain exchanges in southeastern blackwater rivers, fluxes of methane in wetlands, and nutrient dynamics in headwater streams. More recently, she has become increasingly con-

cerned about aquatic ecosystem degradation and how riparian management practices affect aquatic systems. From this work, she has published more than 70 papers, book chapters, and symposium contributions, 7 of which have appeared in *Ecology*. Judy has had continuous NSF funding since 1979 (she has been PI or co-PI on 23 different NSF-funded projects), and has also received grants from EPA, USDA, and DOE. She has used this funding to support the research of a small army of graduate students, serving as major professor for 11 Ph.D. students, 8 Master's students, and hosting 6 post-docs. From the Meyerfauna cadre she continually demands, "synthesis, synthesis, what does it all mean?"

Judy's research from the beginning is notable for its originality and breadth. At UGA, she initiated studies on dissolved organic carbon (DOC) dynamics and trophic significance in disturbed and undisturbed watersheds of the southern Appalachians as well as in blackwater streams of the southeastern Coastal Plain. This led to pioneering work on microbial production and the role of bacteria in stream food webs. The findings, which reflect her ecosystem and global perspective, were summarized and synthesized in *BioScience* ("A blackwater perspective on riverine ecosystems," *BioScience* 40:643-651, 1990) and *Microbial Ecology* ("The microbial loop in flowing waters," *in press*). In addition to continued work in basic stream research, she is pursuing more applied topics, including the effects of riparian management on nutrient and pesticide retention, again bringing a broader perspective to bear on practical problems that have historically received more local emphasis. Based on Judy's track record, we can expect many more significant contributions from her efforts.

Judy's professional service includes membership on the editorial boards of *Biogeochemistry*, *Journal*

of the North American Benthological Society, and *Limnology and Oceanography*. She has served as vice president of ESA and on a host of ESA committees and sections. She is notorious for the brevity of the committee meetings that she chairs. This reputation, and her interest in and concern for aquatic ecosystems, have resulted in service on scientific advisory boards for the Pacific Rivers Council and American Rivers, and she is on the Board of Directors of the Pacific Rivers Council. Governmental agencies have also demanded her time, tapping her for participation on National Science Foundation, Environmental Protection Agency, and National Research Council review and advisory panels, and on numerous advisory boards for the Council on Environmental Quality, U.S. Geological Survey, and NAS/NRC. Her NRC participation includes membership on advisory panels that helped design the National Water Quality Assessment and National Biological Survey programs. Judy is on a first-name basis with most of the commercial pilots that fly between Athens, Georgia and Washington, D.C.

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Her personal view of life is strongly influenced by her Quaker beliefs, centered on tolerance, fairness, and equality. In exercising these beliefs and her concerns for environmental issues, she has served as faculty advisor to UGA Students for Environmental Awareness, as a counselor for Planned Parenthood and for prison inmates, and as a lecturer at local elementary and high schools on environmental issues. These and her professional responsi-

bilities create a continuing conflict with her desire to spend more time with her 12-year-old daughter, Malia, and 9-year-old son, Devon. Judy has never taken a sabbatical and has no spare time in which to do anything; if she did, she would read trashy novels on a rockbound coast somewhere.

Philosophically and scientifically, Judy is committed to interdisciplinary research on ecosystems. She views ecosystem science as the ultimate interdisciplinary science, as much tied to geology, hydrology, chemistry, and meteorology as it is to population and community ecology. She enjoys the role of facilitating team research, an attitude that serves her well as principal investigator of UGA's Long-Term Ecological Research program at Coweeta Hydrologic Laboratory in North Carolina.

As ESA president, Judy intends to keep Society publications and activities at the forefront of emerging scientific and societal issues. She will emphasize the development and application of the best of ecological science for understanding and managing the biosphere. Her agenda for the society includes evaluation of electronic communication and publication, developing funding for an education and human resources program to promote ecological literacy and opportunities for females and minorities, providing accessible information for decision makers on ecological topics, and implementation of programs initiated by her predecessors, including the Sustainable Biosphere Initiative, the new ESA Business Office, and a streamlining of ESA's governance structure.

This shopping list sounds ambitious, but given her past level of commitment and participation, it's difficult to imagine she won't succeed.

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