The paper honored here is an example of Dr. Vitousek's signature approach to questions of nutrient cycling in ecosystems. His research is characterized by a focus on mechanisms that couple physiological, population, and ecosystem processes. His papers focus at experimental and theoretical levels and deal with local processes as well as global patterns. They present a fresh synthesis of ideas and facts that are at once compelling and, on reflection, provide a robust framework for understanding the interplay of nutrient-use efficiencies in plants, nutrient-supply processes in soils, and global patterns of ecosystems.

Dr. Vitousek is currently Professor of Biological Sciences at Stanford University. He received a B.A. cum laude in political science at Amherst College in 1971 and a Ph.D. in biology from Dartmouth College in 1975. He has worked in the deciduous forests of eastern United States, in pine plantations of the Gulf Coastal Plain, in neotropical rain forests, as well as in the ecosystems of California and Hawaii. Dr. Vitousek was also elected to the National Academy of Sciences this year.

Selection Committee:
Edward A. Johnson, Chair
Carol K. Augspurger
Julie S. Denslow
Eville Gorham
Craig G. Lorimer
William J. Platt
Wayne P. Sousa

MURRAY F. BUELL AWARD

SARAH E. HOBBIE

The 1992 winner of the award is Sarah E. Hobbie for her paper "Increased temperatures in Alaskan tussock tundra result in enhanced net ecosystem CO₂ uptake." Sarah is a doctoral candidate at the University of California—Berkeley, where her advisor is Dr. Terry Chapin. She received her bachelor's degree from Carleton College, Minnesota, and worked in the Limnological Research Center, University of Minnesota, before continuing with her graduate studies.

Receiving honorable mention citations are Catherine E. Pake of the University of Arizona for her paper "Sonoran Desert winter annuals: Spatial and temporal variability can mediate species coexistence," Collette M. St. Mary of the University of California—Santa Barbara for her paper "Determinants of sex allocation in a simultaneous hermaphrodite with paternal care," and Fernando E. Vega of the University of Maryland for his paper "Plant disease effects on plants, and on co-occurring vector and non-vector insect herbivores."

Murray F. Buell ascribed great importance to the participation of students at meetings and to excellence in the presentation of papers. To honor his dedication to the Ecological Society of America and to the younger generation of ecologists this award is presented to a student for the outstanding oral paper presented at the Society's annual meeting.

1992 Student Awards Selection Committee:
Nancy M. Eyster-Smith, Chair
Thomas W. Boutton
Deborah Childs Hayes
Beth Middleton
Kiyoko Miyanishi