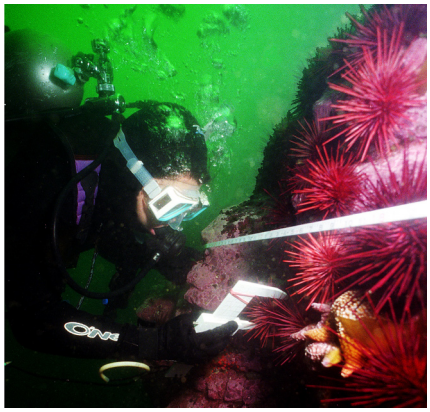

Society Actions

ESA Awards for 2005

Murray F. Buell Award
Sean Menke
University of California, San Diego

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.

The winner of the **Murray F. Buell Award** in 2005 is Sean Menke for his paper "Abiotic factors control invasion by ants at the community scale," which is based on his doctoral research at the University of California, San Diego, under the supervision of David Holway. The Buell judges noted that Sean presented a clear, creative, and well-designed study of the influence of abiotic factors on the ability of the introduced Argentine ant to invade native communities. Judges noted that Sean clearly described the background and motivation for this study based on both natural history and principles of community ecology. In his presentation, in a clear and unforced manner, he described the connection between pure ecology and management. Sean provided a thorough explanation of the factors influencing Argentine ant invasion of communities in California. He took an experimental approach to investigate the problem and determined that water, and indirectly, plants, can influence colonization of habitats by Argentine ants. As Argentine ants increased in abundance, Sean could demonstrate that they were more likely to spread to native habitats and to displace native ants. Based on this research, Sean could predict future sites of invasion as a basis for managing xeric habitats under threat of invasion. Sean received his M.S. in Zoology from the University of Oklahoma in 2002, and his B.A. in Biology from the University of Minnesota–Morris in 1999.

The Buell-Braun Award Selection Committee also selected one student for Honorable Mention for the Buell Award. This recognition was given to Benjamin Houlton of Princeton University for his presentation on "Isotopic constraints on nitrogen acquisition by plant communities across tropical rainforests," which was co-authored by Lars Hedin and Daniel Sigman.

E. Lucy Braun Award
Phoebe L. Zarnetske
Utah State University

E. Lucy Braun was an eminent plant ecologist and the first woman president of the Ecological Society of America. Besides describing and mapping the deciduous forest regions of eastern North America, Lucy Braun served as a dedicated teacher and role model to her students. To honor her, this award is presented to a student for the outstanding poster presentation at the Society's annual meeting.

The 2005 winner of the **E. Lucy Braun Award** is Phoebe L. Zarnetske for her poster "Modeling Forest Bird Species' Habitat with Extant Presence Points and Generated Pseudo-Absence Points in Utah." This work is based on Phoebe's Master's research at Utah State University under the supervision of Thomas Edwards of the USGS Utah Cooperative Fish and Wildlife Research Unit. Judges commented that Phoebe's poster represented a great deal of work on a statistically complex problem; the modeling approach that Phoebe used allowed her to use existing data to extrapolate and generate usable conclusions of direct use to the U.S. Forest Service. Judges who interacted with Phoebe claimed that she provided clear responses to questions that demonstrated her familiarity with the model she developed, and also her awareness of the strengths and weaknesses of the approaches she used in this study. The goal of the project was to model the habitat of management indicator species and estimate their likelihood of occurrence across an extensive landscape. The regression model that Phoebe described used known presence data and generated pseudo-absence points for two bird species. Phoebe concluded that regression models like hers, based on presence and pseudo-absence data, could be powerful tools in habitat modeling and in conservation of species. Phoebe received her B.A. in Biology and Environmental Science from Colby College, Waterville, Maine in 2001.

William S. Cooper Award
Daniel Gavin, Linda Brubaker, and Kenneth Lertzman
University of Washington

The **William S. Cooper Award** is given by the Society in honor of one of the founders of modern plant ecology. It recognizes an outstanding recent contribution in geobotany, physiographic ecology, plant succession, or the distribution of organisms along environmental gradients.

The 2005 recipients are Drs. Daniel Gavin, Linda Brubaker, and Kenneth Lertzman for their paper, "Holocene fire history of a coastal temperate rain forest based on soil charcoal radiocarbon dates," published in *Ecology* in 2003. The paper developed from research done while Daniel Gavin, currently a Research Associate at the University of Vermont, was a graduate student in Linda Brubaker's laboratory at the University of Washington.

Determining the fire history of forest ecosystems is critical to understanding forest dynamics and forecasting ecosystem responses to ongoing and future climate change. Forest ecologists and paleoecologists have devised a number of clever ways to reconstruct fire histories, but they differ in their spatial and temporal resolution and applicability in particular systems. In their paper, Gavin, Brubaker, and Lertzman apply a novel combination of fire-scar analyses and radiocarbon dating of buried charcoal in soils toward reconstruction of fire history in southern British Columbia. Innovative statistical analyses of the charcoal and fire-scar data allowed them to develop an unusually detailed record of fire patterns among landform types. These records reveal evolving patterns of landscape-level fire patterns with Holocene climate change, going from extensive fires spanning multiple landforms in the dry early Holocene to a patchy late Holocene pattern of higher fire frequencies on south-facing slopes. The study sets new standards for paleoecological analyses of fire disturbance, and provides important baselines for scientifically sound management of forest ecosystems in coastal temperate rain forests.

George Mercer Award Daniel Bolnick, Richard Svanback, James Fordyce, Louis Yang, Jeremy Davis, Darrin Hulsey, and Matthew Forister

The **George Mercer Award** is the oldest of the awards granted by the ESA, and is given in memory of a young British ecologist who was killed in action in World War I. The award is given to an author under 40 years of age in recognition of a single outstanding paper in ecology published during the past 2 years.

This year, the Mercer Award honors a paper where all seven co-authors were graduate students at the time of publication. They are Daniel Bolnick, Richard Svanback, James Fordyce, Louis Yang, Jeremy Davis, Darrin Hulsey, and Matthew Forister, who have won the award for their paper, "The ecology of individuals: incidence and implications of individual specialization," published in *The American Naturalist* in 2003. Daniel Bolnick is now an Assistant Professor at the University of Texas.

The paper argues persuasively for the importance of interindividual specialization and niche variation within species, using data assembled from the literature and offering a conceptual framework for describing and thinking about individual niche variation and its consequences. This is not a new idea; in fact, the magnitude and importance of individual variation has been debated for a long time. However, the idea has had relatively little "penetrance" into the way we study ecology, perhaps because empirical and theoretical treatments of interindividual variation have been less than definitive, and even conflicting. The Mercer Award subcommittee noted that Bolnick et al. do a superb and elegant job of articulating why individual niche variation deserves renewed attention, and how one might study it in natural systems.

Several members commented that this kind of paper opens one's eyes to new things to look for in one's own work. Interestingly, several members of the committee also commented that they had not decided exactly if they agreed with all the ideas in the paper—and this seemed a positive indication about the paper and its potential importance! The citation record for this paper is already impressive. ESA commends the authors for turning a graduate reading group into a piece of scholarship that promises to have impact for years to come.

Eugene P. Odum Award
James Porter
University of Georgia

The **Eugene P. Odum Award for Excellence in Ecology Education** recognizes an ecologist for outstanding teaching, research, and mentoring activities, and for demonstrated ability in relating basic ecological principles to human affairs.

This year's recipient of the Odum Award is Dr. James Porter of the University of Georgia. Jim Porter seems to be a natural fit for this award. He spearheaded an effort requiring environmental literacy at the University of Georgia. After this component was added to the curriculum, Dr. Porter set about teaching one of the most important portions of that effort, a nonmajors course with over 400 students per semester. His evaluations from colleagues to students are uniformly glowing. People endeavor not only to get into the class as enrolled students, but also to get a seat in the room as visitors, so that they can hear the lectures. His lectures are variously described as ". . . like an Aztec sacrifice. He rips your heart out with the information he presents"; "a multimedia tour de force"; and "a life-changing experience." One student writes how he did not want to take the course, and how the *Wall Street Journal* said that global warming was baloney. "After Dr. Porter's lecture on this subject, I canceled my subscription to *The Wall Street Journal*." Other students tell how they changed careers based on Dr. Porter's classes, becoming environmental attorneys, scientists, and educators themselves. One colleague further describes Jim as "a teacher who lives his life teaching as if that were all that matters."

Dr. Porter's teaching influence is felt beyond the walls of his classroom. His graduate and undergraduate students have gone on to populate academia, particularly in marine ecology. In addition, his efforts at education have been formally recognized by at least one member of Congress, who was impressed by his many visits to "the Hill" and how much he learned from those interactions.

Jim takes a genuine personal interest in all of his students, and they sense that his concern is real. His intense and passionate style is changing lives. Those lives can, in turn, change the world.

Sustainability Science Award Thomas Dietz, Elinor Ostrom, and Paul Stern

The **Sustainability Science Award** is given annually to the authors of the peer-reviewed paper published in the past 5 years that makes the greatest contribution to the emerging science of ecosystem and regional sustainability through the integration of ecological and social sciences. Unprecedented directional changes in climate, human population, technology, and social and economic institutions are altering the structure and functioning of current ecological and social systems. The Sustainability Science Award recognizes the role that science can play in addressing these challenges.

The subcommittee has selected Thomas Dietz, Elinor Ostrom, and Paul Stern as the 2005 Sustainability Science Award winners for their paper, "The struggle to govern the commons," published in *Science* in 2003. Thomas Dietz is Director of the Environmental Science and Policy Program and Associate Dean of Environmental Science and Policy. Elinor Ostrom is with the Center for the Study of Institutions, Population, and Environmental Change at Indiana University, and Paul Stern is at the Division of Social and Behavioral Sciences and Education at The National Academies in Washington.

This paper provides a groundbreaking synthesis of key concepts from the emerging science of human–environment interactions, linking human institutions to sustainable management of the commons. The challenge they present is to create adaptive governance structures that can link globalization trends with local and regional needs. To meet this challenge, the authors demonstrate how a mix of human institutions (public and private), each operating at different scales, will need to be used in the 21st century to achieve sustainability. In doing so, the authors provide a suite of testable requirements for adaptive commons governance in complex systems, thus setting the stage for new and innovative research in the field of sustainability science.

Corporate Award
Bon Appétit Management Company (BAMCO)
Palo Alto, California

The **Corporate Award** recognizes a corporation, business, division, program, or an individual of a company for its accomplishments in incorporating sound ecological concepts, knowledge, and practices into its planning and operating procedures. This year's winner is the Bon Appétit Management Company (BAMCO). Founded in 1987 in San Francisco, Bon Appétit is an onsite custom restaurant company offering full food service management by providing café and catering services to corporations, colleges and universities, and specialty venues.

Bon Appétit is being recognized for its program known as "Circle of Responsibility." Under this program, Bon Appétit has instituted a variety of socially and environmentally responsible practices, including the following:

- Offering a program that purchases ingredients from local farms or artisans, and that are seasonal and minimally processed;
- offering organic options, which contain at least 95% organically produced ingredients;
- offering options for fair trade, shade-grown, and organic coffees;
- recycling aluminum, glass, and plastics wherever possible;
- observing the guidelines of *Seafood Watch*, a set of guidelines set forth by the Monterey Bay Aquarium for purchasing sustainable seafood choices.

As a major food purchaser in the United States, Bon Appétit has worked with Environmental Defense to take a unique stand on the critical environmental and human health issue of antibiotic resistance, leveraging their purchasing power to influence the way food is raised in the United States. They have adopted the first meat purchasing policy in the United States that prohibits the use of human antibiotics in healthy chickens. They have also extended their policy to pork, beef, and seafood suppliers. Bon Appétit's policy is a unique and effective way to get action on this issue in the face of inaction on other fronts. Because they are a major customer, Bon Appétit's policy requires meat suppliers to pay attention to this issue, and in some cases, make changes to their antibiotics use policies to comply.

Nominators noted that adopting a groundbreaking antibiotics policy is no easy feat and was met with resistance from a number of fronts. The staff, however, were always confident that their CEO, Fedele Baucchio, would back them up on taking a bold stand as long as it was the right thing to do from a business and environmental perspective. This type of support and leadership is unusual and deserves to be commended.

Honorary Member Award
Erkki Haukioja
University of Turku

The ESA's Honorary Member Award recognizes a distinguished ecologist from outside of North America who has made exceptional contributions to the field of ecology. It includes a lifetime membership in the ESA.

The 2005 winner is Dr. Erkki Haukioja. The influence of Professor Haukioja's ideas has been broadly international, not only through his widely cited and highly influential publications, but through leadership in international organizations and personal contacts with colleagues. An integrator of information and ideas across cultures and an open communicator, he is a gracious host and sought-after visitor. He has been a member of the Finnish Academy of Sciences since 1981.

For more than three decades, Professor Haukioja has explored the intricate and tangled complexities of the interactions between Fennoscandian mountain birch and its herbivores. His pioneering work on inducible plant defenses in the 1970s stimulated the establishment of a large and active new area of research, and he has continued to provide intellectual leadership throughout his career. His early appreciation of the role of the host plant in population dynamics of herbivores, and exceptional creativity in testing hypotheses reshaped ecological approaches to studies of plant–herbivore interactions, forest pests, and population dynamics. He has seamlessly integrated the detailed study of mechanisms with the testing of grand hypotheses in a complex model system. Beyond the basic knowledge that they have produced, Professor Haukioja's remarkable breadth of contributions have informed public policy in Finland and elsewhere.

Professor Haukioja has developed one of the premier ecology programs in Scandinavia. He has contributed decades of untiring service to the University of Turku, and the Kevo Subarctic Research Station, which he directed for many years. Professor Haukioja has mentored more than 50 graduate students and post-docs, many of them from outside Finland, who are now making sustained contributions of their own. His success as a mentor and colleague is a credit not only to his keen intellect, broad thinking, and unusually effective application of hypothetico-deductive science, but also to his contagious enthusiasm for natural history and the science of ecology.

Distinguished Service Citation
Jim MacMahon
Utah State University

The **Distinguished Service Citation** is given in recognition of long and distinguished service to the ESA, to the larger scientific community, and to the larger purpose of ecology in the public welfare. We are pleased to present the award this year to Dr. Jim MacMahon of the Utah State University.

Jim's contributions both to ESA and to the field of ecology have been substantial and diverse. He has given a tremendous amount of time, talent, and energy in a way that few of us are able to parallel. This award recognizes the long-term and massive contributions that he has so selflessly offered to the broader community, regionally and nationally, to improve the public profile of ecology and opportunities for ecologists.

Jim became President of the ESA in 1997, a very challenging time for the Society. The budget was in turmoil and ESA had recently moved into a headquarters office in Washington with a new Executive Director and staff. Jim made and articulated the tough decisions that were necessary to set the ESA on its present course of financial solvency, leading to the flexibility to tackle new initiatives. Jim spent an extraordinary amount of personal time working with the existing staff. These were critical times, and Jim did more to keep the Society on an even footing than almost any other President in the ESA's long history.

Jim has long been a leader in foresighted efforts to involve the science of ecology and scientific community with the public welfare. He was a leader in the Sustainable Biosphere Initiative of the Society. He has served for years on the steering committee, insuring that the committee thinks creatively about how the SBI and the ESA leadership can shape ecological sciences. Jim also co-founded the ESA's Annual Fund for the Millennium, the first organized effort for the Society to begin a "development" program. In addition, he has been one of the primary ESA leaders in the field of ecological restoration.

More than most ecologists, Jim spends a great deal of time and effort mentoring people, especially students. He is passionate about ecology and brilliantly communicates this passion to students in the classroom, field, and his writings. Not only does Jim take pride in his mentoring; his students have lavished important awards on him.

Jim MacMahon is one of those rare people who makes a huge contribution almost anonymously, without apparent need of recognition. That is one reason why it is a special pleasure to recognize him with this award.

Eminent Ecologist Award
Lawrence B. Slobodkin
State University of New York at Stony Brook

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. The recipient of the 2005 Eminent Ecologist Award is Professor Lawrence B. Slobodkin of the State University of New York at Stony Brook.

Larry Slobodkin is one of the premier ecologists of our time. He has made lasting contributions to the theoretical and empirical development of ecology. Beyond this, however, many of us have been greatly influenced by the wonderfully original and insightful perspectives that flow from his unfettered mind.

Over the course of his career, Larry Slobodkin published seminal papers that influenced the direction of ecological research, and that attracted scientists across disciplinary fields. His early efforts to model populations of *Daphnia* were instrumental in developing mathematical theory in ecology, and provided the first experimental evidence for the connections between population and ecosystem study. But even though he had a strong role in developing these connections, he never hesitated to comment when he perceived that the theory was not being faithful to the real biology. Some of our best ecologists refer to Larry as both inspirational, and as marching to a different drummer. Larry recognizes fascinating questions, and brings such innovative ideas into routine observations that he forces ecologists to stand back and consider nature from a different angle. His efforts to influence ecologists to take orthogonal views of nature are among his most important contributions. An even broader audience has learned from his forays into the philosophy of ecology and the role of ecological science in public policy.

Another extremely important contribution of lasting impact has been the Department of Ecology and Evolution at SUNY Stony Brook, whose creation Larry spearheaded. Overnight, he created one of the most exciting departments in the world. The legions of ecologists trained at Stony Brook, the students they have mentored, and the many scientists who simply visited that department during the years when Larry was the de facto leader have done much to define and to advance our field. All agree that Larry Slobodkin was not always an easy person, but that he certainly was a great one.