Recipients of the 2011 Ecological Society of America Awards

E. Lucy Braun Award

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, she 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 recipient of the 2011 Braun Award was Joseph Fader for his poster entitled, *An empirical test of the aggregation model of coexistence and consequences for coexistence of containerdwelling* Aedes *mosquitoes*, at the 2010 ESA meeting in Pittsburgh.

This work is based on Fader's masters research at Illinois State University under the supervision of Steve Juliano. He received his Bachelor's degrees in biology and psychology from St. Louis University in 2007. The goal of Fader's project was to test the often invoked, but less commonly tested, hypothesis that aggregation of a superior competitor might enable coexistence of a poorer competitor. In this case, the inferior competitor was a native mosquito, Aedes aegyptii, and the superior competitor was an invasive congener, A. albopictus. The invasive A. albopictus has displaced A. aegypti in many areas in southern Florida, although in certain locations the species coexist. Fader first documented that both species were more aggregated intraspecifically than

interspecifically. Then, he conducted a lab experiment on how the outcome of competition changed with aggregation and found that the fitness of the native did indeed increase with increasing aggregation by the superior competitor, the invader. These results are consistent with a significant role for aggregation in coexistence.

The judges enjoyed Fader's mix of observations and manipulative experiments, and were greatly enthusiastic about his ability to speak and engage his audience with confidence and clarity.

Joseph Fader Culture Technician Hubbs-Sea World Research Institute

"Learn from others. Find someone with your dream job (or as close as possible). Learn everything you can about how they got there and use that as an inspiration and guide in finding your own path."

My mother is an artist/designer and my father an accountant. Although I am the first scientist in my family, I am very fortunate that I am always supported no matter what I do. Overall I have been very fortunate, but I did struggle mightily to figure out what I wanted to do with my life. Like many biology majors I entered college as a pre-med student. Although never truly passionate about this path, it seemed like the best option and I stuck it out for a long time. Thankfully, I eventually discovered that there were many possible careers for someone with an interest and background in biology, and I determined that I was most passionate about ecology and conservation issues, not medicine.

I had my first taste of research at SLU conducting



behavioral studies with African brown house snakes. I did my master's thesis at Illinois State University where I studied the invasive mosquito Aedes albopictus and mechanisms of coexistence with the resident *Aedes aegypti* in the southeast US. After completing my master's, I moved to southern California and volunteered for several organizations to get involved with conservation work and some public education/ outreach. I get to be outside and near or on the ocean every day, taking care of animals in beautiful southern California. What's not to love?!? It's also rewarding knowing that the fish we raise will contribute to a healthier ocean by enhancing wild populations of a heavily fished species.

My undergraduate evolution professor, Rob Wood, at Saint Louis University, inspired me to consider, and ultimately pursue, graduate school and a career in research. Although his research interests (phylogenetics) were much different than my own, Dr. Wood's passion for his work and enthusiasm for teaching and mentoring inspired me to discover and pursue what I was truly passionate about. Whether or not they remember me for it, I hope I can inspire others to care a little bit more about each other and about our planet, and to live life accordingly.

Murray F. Buell Award

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 Buell award for 2011 was Jenny Talbot, for her presentation entitled, *Does lignin composition control litter decay rates*, given at the 2010 ESA meeting in Pittsburgh.

This research was part of her dissertation at the University of California, Irvine under the supervision of Kathleen Treseder. Talbot received her B.A. in Chemistry from Boston University in 2004. She investigated whether and how the chemical composition of lignin affects rates of litter decomposition. To do this, she took a tool more often used in molecular biology labs than ecology, *Arabidopsis* mutants, and used it in field experiments. She compared the wild type and three



mutants that differed in aspects of lignin structure in a field litter decomposition study. She found that structural changes in the syringyl and 5-hydroxyguaiacyl subunits had no effect on decomposition rates relative to wild type litter, while plants upregulated in the synthesis of cinnamylaldehydes decomposed faster than wild type plants. These comparisons enabled new hypotheses about the biochemical mechanisms that determine decomposition rates in the field. The Buell judges were very impressed by Talbot's ability to concisely explain her complicated experiment. She presented potentially difficult concepts clearly and confidently in an outstanding presentation.

W. S. Cooper Award

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

The 2011 recipients of the Cooper Award are Margaret Davis, Ruth Shaw, and Julie Etterson for their 2005 paper, Evolutionary responses to changing climate, published in *Ecology*.

In their paper, Margaret Davis and her coauthors present a prescient synthesis of ecological and evolutionary processes in plant populations during periods of rapid climate change. This paper has led the way in breaking down the classic paradigm that evolutionary responses to Quaternary climate change were slow and largely irrelevant. Instead, they present a comprehensive and compelling synthesis of evidence that plant populations can and do evolutionarily adapt to rapid environmental change. Their work offers a clear road map for future progress as we confront



the modern era of rapid environmental change. The work of Davis and her colleagues has, once again, helped identify and clearly outline research questions that will define a research field for a generation to come.

Although the Cooper Award is traditionally given to honor outstanding papers, not careers, this is a fortunate case where both goals can be achieved at once. Dr. Margaret Davis is one of the premier vegetation ecologists of our time. Her pioneering contributions in plant ecology are enormous and varied, and include demonstrating the individualistic responses of plant taxa to Quaternary climate changes, the first estimates of the rate and trajectory of past plant migrations, and advancing the fundamental theory for interpreting vegetation history from fossil pollen records. Her co-authors Ruth Shaw and Julie Etterson are leading population geneticists and have made their own fundamental contributions.

George Mercer Award

The Mercer Award is the oldest of the awards granted by the ESA. It 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 two years.



The winner of the 2011 Mercer Award is Tracy Langkilde for her paper, *Invasive fire ants alter behavior and morphology of native lizards*, published in *Ecology* in 2009.

In this paper, Langkilde elegantly combined field and laboratory experiments with analysis of museum specimens to evaluate how invasive fire ants drive rapid evolutionary change in native lizard populations. In the field, she identified a gradient in years since fire ant invasion and showed that behavior and morphology of lizards depended on the age of the invasion. Langkilde showed that adult lizards from populations with more generations of exposure were more likely to avoid attack through fleeing or twitching. Juveniles, by contrast, responded to fire ants with these behaviors regardless of their evolutionary history with the invader, suggesting that the adult response in long-invaded locations represents the ontogenetic retention of a juvenile behavioral

response. Moreover, both juveniles and adult lizards in geographic locations with a longer history of fire ant invasion had longer hind limbs, a morphological trait beneficial for minimizing attack. Finally, Langkilde used museum collections to show that the geographic variation in hind limb length emerged only after fire ant invasion, supporting her hypothesis of rapid evolutionary change.

This work is exemplary for its combination of careful field work, experiments, and the use of historical data to understand evolutionary responses to novel ecological interactions. The results powerfully demonstrate how adaptation can favor the persistence of native taxa in invaded habitats, an important result for predicting the impact of exotic species.

Tracy Langkilde Assistant Professor Pennsylvania State University Biology

"Follow your passion. Of course, you need to get advice and plan ahead, but don't do something just because it will make you successful, get you funding, earn you a job... Do what you love. That is, after all, why we got into this field."

My family moved from South Africa to Australia when I was nine. I moved away from home to earn my B.S. at James Cook University in Townsville and to be closer to the reef and rainforest. Afterwards, I completed a 9-month honors research degree that is designed to prepare students for a Ph.D. In 2002, I started a Ph.D. at the University of Sydney. Later, I did a 2-year postdoc program across the globe at Yale. Ultimately accepting a tenure track position at Penn State University has allowed me to grow my research program.

I study how individuals interact with one another and their environment, and how responses to changes



in the environment can shape these interactions. Currently, my primary research focus is understanding how native animals (fence lizards) respond to novel pressures imposed by invasive species (red imported fire ants). Much of this research takes place in the field, so I spend time examining the behavior and physiology of the lizards in their natural environment. I also get to do lab work using physiological and molecular techniques. It has been a really exciting journey, and I can't imagine doing anything else!

I love the variety of my job. I am my own boss, I get to travel to places that most people dream of, and I get paid for it. The ability to follow my passion, communicate it to others, and explore the questions I find most exciting is really rewarding. As a kid I spent a lot of time outdoors camping with my family. I learned to SCUBA dive at fourteen and fell even more in love with the natural world. My early exposure to this new world inspired me to spend my life learning nature's secrets.

Odum Award

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.

The winner of the 2011 Odum Award is Dr. John Moore, Professor of Forest, Rangeland, and Watershed Stewardship, and Director of the Natural Resource Ecology Laboratory at Colorado State University.



Since the 1990s, Dr. Moore has been a national leader in developing ecology education programs with several hallmarks: they involve innovative active learning exercises, located in easily accessible habitats such as backyards or schoolyards, local streams, agricultural ecosystems, as well in national parks. They often focus on helping K–12 teachers provide authentic science experiences to their students, with particular emphasis on outreach to minority and low-income populations.

He has used his highly regarded research in soil food webs to generate engaging labs for students and teachers of all educational levels, by focusing on applied research questions of great impact to human society. Thousands of students and teachers in Colorado have benefited from the many ecology, math, and science education pipeline development educational programs that Dr. Moore has

started and led over the last 16 years. His projects also often involve graduate students, so that he is also training the next generation of ecological researchers and educators on effective ways to bring ecological science to K–12 teachers and students.

As his many emphatic supporters indicate, John Moore has been a national leading force in "rethinking ecology education in an area of global human impact, working effectively across cultural and disciplinary boundaries, and mentoring young ecologists and others in both ecology and education." His educational and research work has taken him from Colorado, to Alaska, to Washington, D.C., to Tanzania and back to the United States. Along the way, he has made a difference for many public school students and teachers, college students, and ecology researchers, by developing educationally focused community partnerships, new instructional models, and pathways for integrating hard science into field-based educational experiences for diverse populations. He continues to teach all how to experience ecology in a variety of ways that are hands-on, authentic, and memorable. The sites might be a prairie, a backyard, a local stream, a schoolyard plot, a national park, or an agricultural ecosystem. Dr. Moore's integration of research and education to focus on soil food web dynamics, impact of climate change on ecosystem processes, and how humans interact with ecosystem function through impact on invasive species distribution, facilitates engaging audiences of varied interests, with the purpose of becoming better environmental stewards.

Sustainability Science Award

The Sustainability Science Award is given to the authors of work published in the past five 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 contribute to addressing these challenges.

This year's award goes to Boris Worm, R. Hilborn, J. K. Baum, T. A. Branch, J. S. Collie, C. Costello, M. J. Fogarty, E. A. Fulton, J. A. Hutchings, S. Jennings, O. P. Jensen, H. K. Lotze, P. M. Mace, T. R. McClanahan, C. Minto, S. R. Palumbi, A. M. Parma, D. Ricard, A. A. Rosenberg, R. Watson, and D. Zeller for their 2009 paper, Rebuilding Global Fisheries, published in Science 325:578–585.

This paper results from a collaboration between scientists who initially had conflicting opinions



about future scenarios for the sustainability of global fisheries and who came together as a working group at NCEAS (the National Center for Ecological Analysis and Synthesis) to resolve a long-standing issue in global food security, sustainability of global fisheries. This diverse group integrated their data, methods, and analyses of the situation to address controversies and form a consensual view.

The paper outlines two critical questions in the debate about sustainability in global fisheries: "(1) how do changes in exploitation rates impact fish populations, communities, and yields, and (2) which solutions have proven successful in rebuilding exploited marine ecosystems?" It identifies a series of "tools" that have been shown to be efficient in managing fisheries and thus provides empirical support for their use in guiding resource management policies.

The authors address the dire situation of many fisheries worldwide, evidence for the plausibility of mutual economic-biodiversity benefits, and the need to consider local socioeconomic and ecological contexts when analyzing management tools that have been shown to be successful at a broader scale. This intensive collective effort exemplifies how we can work across disciplines and stakeholders to resolve problems in sustainability science.

Honorary Member



The ESA's Honorary Member Award is given to a distinguished ecologist who has made exceptional contributions to ecology and whose principal residence and site of ecological research are outside of North America. There are a maximum of 20 Honorary Members at any one time.

The newest Honorary Member of ESA is Professor Marten Scheffer of Wageningen University in The Netherlands.

Dr. Scheffer has led the field of limnology, and contributed ecological theory that has inspired diverse areas of study. For example, his 2001 paper in Nature has been very broadly influential in reinvigorating the study of alternative stable states. After the introduction of alternate states into our field in the 1960s and a burst of research in the 1970s, interest in the concept

tailed off, perhaps because it is so difficult to demonstrate the concept. By the 1990s, however, progress in long-term ecological research, landscape ecology, whole-ecosystem studies, and other branches of ecology brought renewed interest in alternate states. Global environmental problems were more acutely evident and alternate states seemed increasingly relevant. The 2001 paper gathered these currents into a river that stimulated an enormous amount of research on alternate states in recent years. Scheffer himself has continued to make important contributions in this area. Most notably, he led a team of scientists who published a recent synthesis in *Nature* (2009) summarizing progress in devising early-warning signals for regime shifts in complex systems. This area of research is one of the most exciting links between ecological theory and the practical challenges of addressing global changes that has emerged in recent decades.

Scheffer has also made important contributions to the study of social–ecological systems. His 2001 and 2003 papers in *Ecosystems* showed how social interactions, in the context of uncertain scientific information about potential environmental crisis, could drive a wedge through society and block progress. The simple and elegant mechanisms proposed in those papers can explain, for example, U.S. political dynamics surrounding climate change.

Under Scheffer's leadership, the Aquatic Ecology and Water Management Group at Wageningen University has grown to be a powerful force in limnology. His group contributes papers across a wide spectrum of topics, from highly applied aspects of practical limnology, to sophisticated laboratory experiments, to abstract ecological theory.

More recently, Scheffer has led the establishment of the South American Institute for Resilience and Sustainability Studies. A unique feature of SARAS is that its work on sustainability combines the arts and sciences explicitly. The idea is that art can contribute to scientific creativity through its role in idea generation and visualization, and that art is also uniquely powerful in communicating complex ideas to the public. SARAS is a fascinating experiment in interdisciplinarity across a range of perspectives that have rarely been integrated for sustainability studies.

Dr. Marten Scheffer Professor Wageningen University Aquatic Ecology, Ecosystem Ecology, Theoretical Population Biology

"Great new ideas often occur at the crossroads of different fields, and I think it would help science if people would move a bit more."

My parents are musicians. However, my family has seen many generations of scientists and medical doctors. Resultantly, I engage in both science and music. It was almost unavoidable that I would become a biologist. My mother and my great-grandfather taught me about birds and plants, and I have been fascinated by nature ever since. I am inspired by people such as Steve Carpenter and Bjorn Holmgren, both of whom show that you can be a great scientist, but also modest, open-minded, and dedicated to make the world a better place for humans and many other species.



After my masters, I did my "civil service" in a biological station working on breeding bird populations in cities. I then applied for a job as a freshwater ecologist/modeler at the state institute for inland water management. I am now the head of the aquatic ecology and water quality management group at our university. From my background in theoretical ecology, I am now working on understanding how complex systems, such as the brain, a lake, or a financial market, can occasionally go through a drastic transition. Can we understand why that happens? Can we see it coming? Can we prevent it? Or can we stimulate it?

What I really love most is to discuss new ideas and results with a small group of colleagues or students. Of course drawing on the whiteboard or little sheets of paper is good, but talking while walking for me is even more enjoyable. I have been fortunate to have had no major challenges in my lifetime; I think I have simply been lucky to be in the right place at the right time. Certainly, the interdisciplinary work is challenging, but it's also really fun. Probably the most influential event in my career was the invitation to join the Resilience Alliance, led by Buzz Holling. Steve Carpenter, a fellow aquatic ecologist with similarly broad interests, introduced me there, and it allowed me to meet a broad group of thinkers that really widened my views, especially to social sciences.

Distinguished Service Citation

The Distinguished Service Citation is given to an ecologist for long and distinguished service to the Society, to the larger scientific community, or to the larger purpose of application of ecology in the public welfare.



The 2011 recipient of the Distinguished Service Citation is Dr. Don Strong of the University of California at Davis.

Strong has maintained a distinguished research career, but almost a decade ago he took over as Editor-in-Chief of our society's flagship journal, Ecology. Dr. Strong has put enormous effort over this decade in shepherding this journal through rather tough times, including developing and managing some important, if sometimes controversial, changes in the journal, which involve changes in manuscript length and reviewing protocols. These weren't always easy or popular changes, but there is no doubt they have enabled the journal to maintain its high quality, get rid of backlogs and publication delays, and have substantially increased its efficiency for authors and reviewers. In his oversight of his large and intellectually disparate editorial board, Dr. Strong has maintained a wide breadth of ecological science among the papers published in

Ecology. He has devoted a huge amount of time and personal energy into his oversight of the journal, which serves both the Ecological Society of America, and more broadly the international discipline of ecology and environmental science.

Dr. Donald Strong Professor University of California, Davis Evolution and Ecology

"Do what you want to do."

My mother was nothing but supportive of everything I did. My father was a retired naval officer who became an engineer after WWII. He had hoped that I would go to the Naval Academy or become a businessman. I was bound for the Coast Guard Academy after graduation but my grandmother intervened and talked me out of it. I ended up getting a Masters in ecology and evolution and a Ph.D. in ecology. I spent 18 years as a professor at Florida State University and 20 years working at the University of California, Davis, in the Marine Laboratory and the Department of Evolution and Ecology.

I now do research in two different areas: invasive plants of estuaries and terrestrial food



webs. My work is collaborative, involving lots of students, post docs, and colleagues. My new fascination is teaching Global Change Ecology to undergrads. There have been constant threats in my career from too many interests, going off in too many directions, and too many projects. You got to focus in this business!

My inspirations were a couple of cool high school teachers and college professors who really sparked the fires of interest in ecology for me. My undergrad pals would tease me about missing waves to study or go on field trips. However, I did get a lot of surfing in during the undergrad years. My hope for the future is to keep doing what I do now, forever.

The award that I am receiving this year from the ESA recognizes the success of *Ecology* and *Ecological Monographs* over the past decade. However, this spectacular success is actually owing to the highly professional work of hundreds of subject matter editors, to the special efforts of the people in the Publications Office of the ESA in Ithaca, the intelligent attentions of the Publications Committee, the Governing Board, and the corporate leaders in the ESA's Washington office. ESA publications are a massive effort to which the Editor-in-Chief contributes only one part.

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 peerreviewed 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.

Robert H. MacArthur Award

The Robert H. MacArthur Award is given biannually to an established ecologist in mid-career for



meritorious contributions to ecology, in the expectation of continued outstanding ecological research.Nominees may be from any country and need not be ESA members. The recipient is invited to prepare an address for presentation at the Annual Meeting of the society and for publication in *Ecology*.

Pacala is one of the leading ecologists of his generation. His contributions range from sophisticated mathematics and computation to empirical work, evolutionary biology to ecology, plant ecology to animal ecology, and parasite—host interactions to biogeochemical cycles. Pacala's research is broadly based, innovative, and well conceived.

His first major contribution, in neighborhood models of plant competition, has become one of the most influential bodies of research in the plant community literature. He has expanded those ideas to his present work, which seeks to link population

processes and ecosystem dynamics with a focus on global change. In joint work, he has developed a forest growth simulator that is a major advance over competing versions. Further, he has demonstrated through simulation the importance of biodiversity in predicting the responses of ecosystems to increased carbon. He led an effort to examine the potential of carbon sequestration and to develop a sustainable energy policy for the future. His Pacala-Socolow paper on energy wedges is one of the most important papers in environmental science in a decade, and has already had a great effect on efforts to address the fundamental issues of climate change.

Pacala has also led three centers at Princeton, including the Princeton Environmental Institute, which he has taken to new levels. He is committed to building bridges among academia, industry, NGOs, and government. Most recently, with Jane Lubchenco, he created a new institute, Climate Central, which will be a center for information on climate change. Pacala is one of the most important basic, as well as applied, ecologists. No one blends these two components better than he does. He has also trained many leaders of the next generation, like Paul Moorcroft, George Hurtt and Ben Bolker

Dr. Stephen W. Pacala Frederick D. Petrie Professor of Ecology and Director of the Princeton Environmental Institute Princeton University Ecology and Evolutionary Biology

"Read fewer papers, but read each one with intensity."

I am the Frederick D. Petrie Professor of Ecology at Princeton University and Director of the Princeton Environmental Institute. The first job is research and teaching; the second is administrative. I love the research enough to do it on vacation. I also like the teaching, but I dislike the administrative work. I spend a lot of time on public service because I believe in the social contract. Senior people should pay for the curiosity parasitism of their youth.

Throughout my career, I have written a number of pieces that are used by policy makers. Some of my modeling work directly addresses important environmental problems. I do a substantial amount of work on policy with the Federal government and National Academy. I am on the board of the



Environmental Defense Fund and Chairman of the Board of Climate Central.

I spent four years as an undergraduate at Dartmouth majoring in biology (1974-1978). I then spent four years studying at Stanford to earn my doctorate degree (1978-1982). After earning my Ph.D., I spent ten years at the University of Connecticut as an assistant and associate professor (1982-1992). I eventually moved to Princeton as a professor in 1992 and I am still here today. I have no desire for people to remember my life as a scientist. I just hope that my research advances the field and that my teaching enables others to do so. Looking to the future, I would like to help build an analytically tractable and quantitatively accurate mechanistic theory that explains biome structure.

My parents were the first generation in their families to go to college. They supported my choices. I always knew I wanted to be a scientist. I wanted to be an Ichthyologist at 6, then an ornithologist, herpetologist, entomologist, and, by grade eight, an ecologist. I continue to be inspired by all of the young scientists who are building basic research careers yet still find the time to work on pressing environmental problems.

Diversity Award

The Education and Human Resources Committee of the Ecological Society of America established the EHRC Diversity Award to be given annually in recognition of long-standing contributions of an individual towards increasing the diversity of future ecologists through mentoring, teaching, or outreach.



Dr. Ivette Perfecto came to the United States from Puerto Rico in the early 1980's to earn her Ph.D. at the University of Michigan where she is now a professor. Despite being a single mother knowing limited English, she quickly distinguished herself as a talented and insightful ecologist. She has studied the role of biodiversity in agricultural systems in a number of temperate and tropical locations, and has over 80 peer-reviewed journal publications to her name, including multiple publications in Science and Nature. Her publication record provides an interdisciplinary viewpoint on the challenges of conservation in the tropics and explicitly links complex ecological theory, global economics, and popular social justice movements in the context of conservation biology for a lay audience.

Perfecto was recently a coordinating lead author

of the International Assessment of Agricultural Science and Technology for Development, an international panel dedicated to producing recommendations to reduce global hunger and improve rural livelihoods in economically and environmentally sustainable manners. She has worked directly with farmers in Michigan and throughout Latin America to study and improve the sustainability of agro-ecological systems.

Within her laboratory, Perfecto has educated, mentored, and fostered a remarkable diversity of students and postdocs for nearly 20 years. Her students have gone on to become university professors, governmental advisors, and environmental advocates. At the same time, she inspires a strong work ethic, high standards of scientific research, and mutual respect among her diverse students and colleagues.

Dr. lvette Perfecto Professor University of Michigan School of Natural Resources and Environment

"Throughout history some of the greatest science was done with a moral compass. The best way forward is to make sure your scientific passion is coupled with a well thought-out moral compass."

I grew up in Puerto Rico. Neither my father nor my mother went to college. My father was a taxi driver. He had to quit high school in order to work to support his brothers and sisters because he was the eldest. He finally got his high school diploma by taking the high school equivalency test. He was an inspiration to me because he was self-taught and placed a high value on education.

Since I was a kid I was fascinated with nature. I loved hiking the trails of El Yunque, our tropical rain forest, and snorkeling in the coral reefs off the coast of Fajardo. Finally, the New World Agriculture and



Ecology Group (NWAEG), a group of ecologists interested in social justice, helped me realize that science is not a neutral, but rather a social, activity that reflects the ideologies of those who do science. Through this group, I met Richard Levins and Richard Lewontin and read their book *The Dialectical Biologist*, which was a very influential book in my formative years as an ecologist.

While I earned my master's degree at the University of Michigan, I was a single mother of a two-yearold boy and my English was still rough. Some professors interpreted my language limitations as a lack of intellectual ability. It took a lot of hard work to prove that I had what it takes to be an academic. While at Michigan I volunteered with a research collective that was investigating the ecology of intercropping systems (polycultures). After this experience, I knew that I wanted to make field-based research my career. My Ph.D. dissertation examined the role of ants as natural enemies of insect pests in the traditional corn/ bean system in Nicaragua. These two years in revolutionary Nicaragua reinforced for me the idea that science should be at the service of the people.

Edward S. Deevey Award

Edward S. Deevey, a founder of modern paleoecology, was a dedicated student advisor who mentored many investigators active in the field of paleoecology today. To honor his memory and to encourage highquality research by graduate students, the Paleoecology Section presents an award for the best oral or poster presentation by a student in paleoecology at the ESA Annual Meeting.



Alex W. Ireland, a Ph.D candidate in the Department of Earth and Environmental Sciences at Lehigh University, is the winner of the 2011 Deevey award for his presentation: "Hydroclimatic variability and basin morphology control terrestrialization in glacial kettles." His presentation was coauthored by Robert Booth. His research investigated the sensitivity of kettlehole ecosystems in northern Wisconsin to abrupt drought-induced transformation, and he presented evidence contrary to prevailing paradigms of terrestrialization.

Mr. Ireland completed a Bachelor of Science from Clarion University in 2007. The Paleoecology Section thanks students who competed for this year's Deevey Award, and we encourage them and others to participate in the 2012 competition, to be held in Portland, Oregon.

ESA Awards Ceremony Photos from the 2011 Annual Meeting in Austin, Texas



Donald Strong receives the Distinguished Service Citation from ESA President Stuart Chapin.



Tracy Langkilde, winner of the 2011 Mercer Award for an outstanding paper in ecology, with President Stuart Chapin.



John Moore receives the Eugene P. Odum Education Award from President Stuart Chapin. On the right is Odum Award Subcommittee member Kenneth Klemow.



Margaret Davis, Ruth Shaw, and Julie Etterson (not shown) receive the William S. Cooper Award from President Stuart Chapin.



Joseph Fader, winner of the E. Lucy Braun Award for best poster presented at the ESA Annual Meeting, with President Stuart Chapin.