
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
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“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.

