

Eminent Ecologist Award Daniel Simberloff

Daniel Simberloff is not only eminent in ecology today: for many years, he has been the quintessential ecological iconoclast.

Any undergraduate student who has ever had an ecology class is familiar with Dan Simberloff's work. His experimental island biogeography papers with E.O. Wilson are textbook classics, elegant experimental studies that appeared to beautifully confirm the emerging theory of island biogeography. Simberloff rigorously tested a nascent body of theory, which won him the Mercer Award with Wilson in 1971. If he had done nothing else, this work would have assured him lasting prominence. But many ecologists were dismayed by his 1976 *Science* paper, in which he threw stones at his own glass house, arguing that most of the insect turnover in this assemblage was ephemeral and did not therefore confirm the predictions of the theory. Few ecologists among us have the courage to publicly challenge our own paradigm in this way, particularly once it has become widely accepted. As society began to embrace island biogeography and extend it to designing nature reserves, Simberloff was further cast as a *bete noire* when he argued (backed by plenty of empirical data) that large reserves are not always the best conservation option.

In the late 1970's and early 1980's, Dan Simberloff took on the MacArthurian paradigm of competitively structured communities, championing the null models approach in community ecology. In so doing, he forever changed the face of our field. The shock waves from this debate still ripple through ecology. His work forced ecologists to ask: what would these patterns look like if mechanism *x* were not in operation? Boiled down to its essence, his arguments have been summarized as "rely on the data to tell you how nature operates; don't simply find the patterns that you're supposed to find."



His more recent work has been equally notorious. He has written pointed and controversial critiques about the wisdom of biological control, calling attention to the threats imposed by invasive species and raising the specter of "invasional meltdown." His criticisms of biological control gone bad (and his data to support those criticisms) are slowly reaching land managers and the general public. He has become a world expert on the threats imposed by invasive species.

These are just the highlights. In almost every aspect of his research program, he has been a leader and has demanded rigorous tests and critical interpretations of data. His approach — know your organisms, ask interesting questions, and deal with the data rigorously — has been an example for countless numbers of ecologists and has made ecology a better, more quantitative science.