



2007 William Skinner Cooper Award  
Paul Fine  
and co-authors Italo Mesones and  
Phyllis D. Coley

The William Skinner Cooper Award is given to honor an outstanding contributor to the fields of geobotany, physiographic ecology, plant succession, or the distribution of plants along environmental gradients. The award is for a single contribution in a scientific publication (single or multiple authored). Nominees need not be ESA members and can be of any nationality. This year's recipient is Paul Fine and colleagues for the paper "Herbivores promote habitat specialization by trees in Amazonian forests" (2004, *Science* 305:663-665).

The primary author on the paper, Paul Fine, is a leading young ecologist focusing on plant distributional ecology in the tropics whose work has been published in *Science*, *Ecology*, *Evolution*, and *The American Naturalist*. He is currently an Assistant Professor in the Department of Integrative Biology at the University of California, Berkeley. His co-authors are Italo Mesones, a young expert in Neotropical plant distributions, and Phyllis D. Coley, a distinguished ecologist who has made seminal discoveries in the ecology of plant-herbivore interactions.



The study conducted by Dr. Fine and colleagues was an elegant experiment that determined the roles of natural enemies and substrate in habitat specialization by Neotropical trees on contrasting Amazonian soil types. The study clearly demonstrated that natural enemies play a central role in creating performance trade-offs among species on the different soil types. Further work by Fine and colleagues focused on the diversification of one of the clades used in the 2004 experiment and detailed how soil preferences evolved in one of the dominant families of Neotropical trees (*Evolution* 59:1464-1478). In their *Ecology* paper, Fine and colleagues (*Ecology* 87:S150-S162) presented a detailed investigation of soils and the influence of secondary chemistry on plant-animal interactions that leads to habitat specialization. The body of work in general, and the 2004 paper in particular, is a model study for determining plant ranges and the mechanisms of diversity generation.