

[Browse by Day or Program](#) | [Author Index](#) | [Search](#) | [CD Help](#)



Wednesday, August 8, 2007 - 8:00 AM

COS 71-1: Biotic resistance by seed predators could halt plant invasions

Martin A. Nuñez¹, Daniel Simberloff¹, and Maria A. Relva². (1) The University of Tennessee, (2) Universidad del C

Interactions between exotic plants and animals can play a major role in determining the success or failure of plant introductions. Seed predation has been seen as important in explaining biotic resistance to plant invasion, but this hypothesis has rarely been tested. We studied the role of seed predation in forest invasion by exotic plants on Isla Santa Cruz, an island in Patagonia, Argentina. In this area 43 pine species, including 60% of the world's known invasive Pinaceae, were introduced ca. 80 years ago, but exotics were found at relatively high densities only in areas near the original plantings. To test if seed predation limits conifer invasion in this area, we compared seed predation in areas near plantations (colonized by exotics) and far from them (not invaded). Seeds of exotics were preferred over seeds of native species, probably because exotic seeds are larger and therefore more attractive. Predation was more intense in areas far from plantations than in areas close to them, substantially reducing the chances of exotic seed establishment. Using automatic cameras, we found that both rodents and birds were responsible for predation of exotic seeds. This study suggests that native seed predators can be an important component of biological resistance to plant invasion.

[See more of COS 71 - Invasion: Trophic relationships](#)
[See more of Contributed Oral and Poster Abstracts](#)

[See more of The ESA/SER Joint Meeting \(August 5 -- August 10, 2007\)](#)