Alien invasions and the game of hide and seek in Patagonia

The introduction, establishment and spread of alien species is a major threat to biodiversity and the provision of ecosystem services for human wellbeing. In order to reduce further loss of biodiversity and maintain productive and sustainable ecosystems, understanding the ecological mechanisms underlying species invasions and avoiding potentially harmful effects on native communities is urgently needed, but largely lacking. We here demonstrate, by means of hydroacoustics and advanced spatial modelling, how native fish species as a result of previous exposure to native predators may successfully respond to invasive novel predators through a complicated game of hide and seek, minimizing spatio-temporal overlap with predators, and potentially facilitating coexistence between native prey species (Galaxiids) and introduced novel predators (Salmonids) in a deep Andean lake, Patagonia.

General information
Publication status: Published
Organisations: University of California at San Diego, Lund University, Universidad Nacional del Comahue
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Publication date: 2012
Peer-reviewed: Yes

Publication information
Journal: PLOS ONE
Volume: 7
Issue number: 10
ISSN (Print): 1932-6203
BFI (2012): BFI-level 1
Scopus rating (2012): CiteScore 4.15 SJR 1.982 SNIP 1.17
Web of Science (2012): Impact factor 3.73
ISI indexed (2012): ISI indexed yes
Keywords: Andean lake Argentina, South America Neotropical region, Lake Gutierrez Argentina, South America Neotropical region, Patagonia Argentina, South America Neotropical region, biodiversity, ecological mechanism, ecosystem provision, habitat selection, prey-predator interaction, species distribution, species invasion, Pisces Vertebrata Chordata Animalia (Animals, Chordates, Fish, Nonhuman Vertebrates, Vertebrates) - Osteichthyes [85206] Oncorhynchus mykiss species rainbow trout common Salmo trutta species brown trout common Salvelinus fontinalis species brook trout common Galaxias maculatus species Galaxias platei species Percichthys trucha species Odontesthes hatcheri species Olivaichthys viedmensis species, 04500, Mathematical biology and statistical methods, 07502, Ecology: environmental biology - General and methods, 07508, Ecology: environmental biology - Animal, 07514, Ecology: environmental biology - Limnology, 10515, Biophysics - Biocybernetics, 62800, Animal distribution, Computational Biology, Ecology, Environmental Sciences, Population Studies, hydroacoustics modeling mathematical and computer techniques, spatial modeling mathematical and computer techniques, Biodiversity, Biogeography, Freshwater Ecology, Models and Simulations, MULTIDISCIPLINARY, GALAXIAS-MACULATUS GALAXIIDAE, PREDATOR-PREY INTERACTIONS, NORTHERN PATAGONIA, MICROLEPIDOTUS AHERINIDAE, SOUTH-AMERICA, COUNT DATA, FISHES, LAKES, SALMONIDS, MODELS
DOIs:
10.1371/journal.pone.0044350
Source: FindIt
Source ID: 235070650
Research output: Contribution to journal › Journal article – Annual report year: 2012 › Research › peer-review