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.

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