

Progress in invasion biology: predicting invaders

Cynthia S. Kolar and David M. Lodge

Predicting which species are probable invaders has been a long-standing goal of ecologists, but only recently have quantitative methods been used to achieve such a goal. Although restricted to few taxa, these studies reveal clear relationships between the characteristics of releases and the species involved, and the successful establishment and spread of invaders. For example, the probability of bird establishment increases with the number of individuals released and the number of release events. Also, the probability of plant invasiveness increases if the species has a history of invasion and reproduces vegetatively. These promising quantitative approaches should be more widely applied to allow us to predict patterns of invading species more successfully.