

Davis suggests that climate matching may be less important for the establishment and spread of invasive species than once thought because "...some species are able to respond genetically to climate change." (p.75). Do you agree that climate mis-alignment between the native and invasive range can be overcome? Is your answer dependent on the stage of invasion?

How should hybridization of native and invasive species be addressed in conservation planning? How much genetic mixing is acceptable or desired? Is retention of native species traits/characteristics sufficient, or should the future evolutionary potential (i.e., the genetic degree of hybridization, regardless of phenotype) play a role when assessing native species persistence? If we focus on community or ecosystem conservation rather than individual species, does the importance or impact of hybridization of native and non-native species change? How might hybridization potential be included in invasion prevention strategies?

Is a probabilistic approach (i.e., risk assessment), whether based solely on species traits, or in combination with other distributional factors, a satisfactory approach for preventing new invasions? If not, what is missing and how could shortcomings be improved?

We have discussed on numerous occasions how invasions are dynamic; both invading species and the recipient environment can change through time. If this is the case, should it become more and more difficult for new invaders to successfully establish in previously heavily invaded areas? To use Tom Stoltgen's phrase, as "the rich get richer" through time, what are the possible scenarios for future invisibility of that site?

Is ensemble modeling a cop-out for our lack of mechanistic understanding of the invasion process?

The concept of "Invasion Pressure" is presented as a tool to integrate three important aspects of invasions: invader traits, the recipient environment, and propagule pressure. The most basic function appears quite simple:  $Y = 1 - (1 - P)^N$ , where Y is the probability of one successful establishment of the particular dispersal event, P is the probability of establishment of the arriving individuals, and N is the number of propagules. Davis then continues in detail about parameter realizations that can result in high (or low) probability of invasion of a particular place at a particular time. Conceptually, that is fine, but let's move to reality. How do we estimate the predictor parameters (N and P) to make this model useful in the real world? How often should the parameters be updated, since a critical assumption of the model is that the recipient environment is invariant in space and time?

What is your reaction to the "invasion cliff"? Is our mechanistic understanding of invasions improved with this mathematical representation?