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Lauren M Smith-Ramesh* (laurensmithramesh@gmail.com). *Food web network properties and the causes and consequences of species invasions.*

Past efforts to understand global patterns of species invasions have focused on the relationship between invasion and native biodiversity, based on the premise that more diverse communities will resist invasion because invaders will be more likely to encounter natural enemies in diverse communities. However, support for a diversity-invasibility relationship has been mixed. Theory suggests that food-web network properties, such as connectance or the distribution of interaction strengths within a food web, may yield key insights into which communities will be most susceptible to invasion. I present empirical case studies and literature syntheses showing that food web properties can predict habitat invasibility and invader impact from local to global scales. (Received February 05, 2017)