Invaders Exploit A Vacant Temporal Niche: Consequences for Communities and Ecosystems

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Abstract:
Accumulating evidence suggests that exotic plant species in many areas have phenology that is distinct from native species. For example, the native shrub-dominated communities of Southern California are becoming increasingly invaded by exotic annual grasses which germinate earlier in the growing season, and under a wider set of environmental conditions, than their native counterparts. This seminar will summarize work showing the costs and benefits of early phenology for both native and invading species, as well as consequences of these invasions for community assembly, and ecosystem responses to environmental changes such as drought.

Bio:
Elsa Cleland did her undergraduate work at Duke University before going on to PhD at Stanford University. In her graduate work she focused on community and ecosystem responses to interacting global changes. During that time she noticed that invasion by exotic plants had large impacts on her findings, and hence she shifted focus in her postdoctoral work to evaluate the environmental and biotic factors that promote invasions, as well as apply those findings to prevent invasion during ecological restoration (work at UC Irvine and the National Center for Ecological Analysis and Synthesis). She founded her lab at UCSD in 2008 where her current focus evaluates the role of seasonal factors in invasion, community assembly, and ecosystem responses to environmental change.