George Mercer Award John Stachowicz¹, Heather Fried², Richard Osman³, Robert Whitlatch²

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John Stachowicz

Richard Osman

The Mercer Award recognizes an outstanding ecological research paper published by one or more "younger" researchers (under 40 at the time of pub-

lication). The 2004 Award is for the authors of "Biodiversity, Invasion Resistance, and Marine Ecosystem Function: Reconciling Pattern and Process" (John J. Stachowicz, Heather Fried, Richard W. Osman and Robert B. Whitlatch; Ecology 83:2575-2590)

The connection between structure and function within ecosystems is a grand challenge for ecologists, and understanding the role of invasive species in that context is critical for management and conservation. John Stachowicz, Heather Fried and their colleagues have conducted



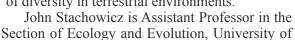
Heather Fried

one of the very few studies in marine environments that explicitly test effects of diversity on ecosystem function. It contains elegant field experiments using sessile marine invertebrates that are well-linked to surveys conducted in natural habitats of Long Island Sound,

with clear articulation of complex results. This work also addresses an issue of key practical importance – the degree to which diversity per se affects invasion resistance. Increased diversity led to a heightened resistance

to invasion, primarily because more speciose assemblages utilized more of the available limiting resource (attachment space) and buffered against temporal fluctuations in resource use by individual species. The research is particularly elegant because species-specific effects on invasibility are

dissected from the impacts of community level diversity, and the mechanism of the diversity effect is identified. The Stachowicz et al. work is a seminal contribution that will stimulate many further studies in marine systems, as well as comparisons to ongoing, more mature efforts that are exploring the functional consequences of diversity in terrestrial environments.



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Robert Whitlatch

Distinguished Service Citation Award Subcommittee: Steve Heard (Chair), Sally Holbrook, James Morris, Jean Richardson, Andy Sih, Ellen Simms, and Mike Willig