

Stanford



Jeffrey Smith

Ph.D. Student in Biology, admitted Autumn 2015

Bio

BIO

I am currently a fourth year PhD candidate in the Biology Department at Stanford University, working both with the Stanford Center for Conservation Biology and the Natural Capital Project on understanding the impacts of human land use on biodiversity. My empirical work focuses principally on insect biodiversity in southern Costa Rica. In addition to this field work, I employ a variety of spatial modelling techniques to extrapolate local findings to regional and global patterns of diversity.

Prior to starting at Stanford, I obtained a Masters of Environmental Science from the Yale School of Forestry and Environmental Studies, where I worked with Dr. Os Schmitz to determine how New England old-field arthropod food webs varied along a suburban-forest gradient. I received my Bachelor of Science (in Ecology and Environmental Science) from the University of Delaware. While there I researched biological control of invasive weeds and restoration ecology with Dr. Judy Hough-Goldstein.

HONORS AND AWARDS

- Graduate Research Fellow, National Science Foundation (2014-2019)

EDUCATION AND CERTIFICATIONS

- BS, University of Delaware , Ecology, Environmental Science (2013)
- MESc, Yale School of Forestry and Environmental Studies (2015)

Research & Scholarship

LAB AFFILIATIONS

- Gretchen Daily, Center for Conservation Biology (9/1/2015)

Publications

PUBLICATIONS

- **Predator community composition is linked to soil carbon retention across a human land use gradient** *ECOLOGY*
Schmitz, O. J., Buchkowski, R. W., Smith, J. R., Telthorst, M., Rosenblatt, A. E.
2017; 98 (5): 1256-1265
- **Cascading ecological effects of landscape moderated arthropod diversity** *OIKOS*
Smith, J. R., Schmitz, O. J.
2016; 125 (9): 1261-1272
- **Spatially-explicit models of global tree density** *SCIENTIFIC DATA*
Glick, H. B., Bettigole, C., Maynard, D. S., Covey, K. R., Smith, J. R., Crowther, T. W.

2016; 3

- **Mapping tree density at a global scale** *NATURE*
Crowther, T. W., Glick, H. B., Covey, K. R., Bettigole, C., Maynard, D. S., Thomas, S. M., Smith, J. R., Hintler, G., Duguid, M. C., Amatulli, G., Tuanmu, M., Jetz, W., Salas, et al
2015; 525 (7568): 201-?
- **Untangling the fungal niche: the trait-based approach** *FRONTIERS IN MICROBIOLOGY*
Crowther, T. W., Maynard, D. S., Crowther, T. R., Peccia, J., Smith, J. R., Bradford, M. A.
2014; 5
- **Impact of herbivory on mile-a-minute weed (*Persicaria perfoliata*) seed production and viability** *BIOLOGICAL CONTROL*
Smith, J. R., Hough-Goldstein, J.
2014; 76: 60-64
- **Potential Impact of *Halyomorpha halys* (Hemiptera: Pentatomidae) on Grape Production in the Finger Lakes Region of New York** *JOURNAL OF ENTOMOLOGICAL SCIENCE*
Smith, J. R., Hesler, S. P., Loeb, G. M.
2014; 49 (3): 290-303
- **Variable Seed Viability of Mile-a-Minute Weed (Devil's Tearthumb, *Persicaria perfoliata*)** *INVASIVE PLANT SCIENCE AND MANAGEMENT*
Smith, J. R., Hough-Goldstein, J., Lake, E. C.
2014; 7 (1): 107-112
- **Phototaxis, Host Cues, and Host-Plant Finding in a Monophagous Weevil, *Rhinoncomimus latipes*** *JOURNAL OF INSECT BEHAVIOR*
Smith, J. R., Hough-Goldstein, J.
2013; 26 (1): 109-119