**Dr. Jeff Garnas**, Assistant Professor of Forest of Forest Ecosystem Health, University of New Hampshire, Dept. of Natural Resources and the Environment, James Hall, Durham, NH 03824, <u>Jeff.Garnas@unh.edu</u>

# **Professional preparation**

University of Colorado	Boulder, CO	Psychology BA	1997	
University of Maine	Orono, ME	Ecology and Evolution	on MS	2005
Dartmouth College	Hanover, NH	Ecology and Evolution	on PHD	2009

# Appointments

2016 - Assistant Professor of Forest Ecosystem Health, University of New Hampshire, Department of Natural Resources and the Environment, Durham, NH

2016 - Extraordinary Faculty, University of Pretoria, Forestry and Agricultural Biotechnology Institute (FABI), Department of Zoology and Entomology, Pretoria, South Africa

2010 - 2016 Sr. Lecturer, University of Pretoria, Forestry and Agricultural Biotechnology Institute (FABI), Department of Zoology and Entomology, Pretoria, South Africa

### **Research interests**

- Evolutionary ecology in forested ecosystems, especially as related to novel interactions between native and introduced insects and microbes.
- Population and community ecology of forest insects, fungi and trees with specific focus on the European woodwasp, *Sirex noctilio*, and other bark and wood boring insects
- Population genetics of forest insects; reconstructing and understanding patterns and consequences of complex global movement and spread of invasive species

### **Selected publications**

Wingfield M, Garnas J, Hajek Ann, Hurley B, de Beer Z, Taerum S. Novel and co-evolved associations between insects and microorganisms as drivers of forest pestilence. Biological Invasions. 2016; 18(4):1045-1056.

- Garnas J, Auger-Rozenberg M, Roques A, Bertelsmeier Cleo, Wingfield MJ., Saccaggi DL., Roy HE., Slippers B. Complex patterns of global spread in invasive insects: eco-evolutionary and management consequences. Biological Invasions. 2016; 18(4):935-952.
- Garnas J, Houston D, Ayres M, Evans C. Disease ontogeny overshadows effects of climate and species interactions on population dynamics in a nonnative forest disease complex. Ecography. 2012; 35(5):412-421.
- Garnas J, Ayres M, Liebhold A, Evans C. Subcontinental impacts of an invasive tree disease on forest structure and dynamics. Journal of Ecology. 2011; 99:532-541.
- Garnas J, Houston D, Twery M, Ayres M, Evans C. Inferring controls on the epidemiology of beech bark disease from spatial patterning of disease organisms. Agricultural and Forest Entomology. 2013; 15(2):146-156.
- Garnas J, Hurley B, Slippers B, Wingfield M. Biological control of forest plantation pests in an interconnected world requires greater international focus. International Journal of Pest Management. 2012; 58(3):211-223.
- Dukes J, Pontius J, Orwig D, Garnas J, Rodgers V, Brazee N, Cooke B, Theoharides K, Stange E, Harrington R, Ehrenfeld Joan, Gurevitch J, Lerdau M, Stinson K, Wick R, Ayres M. Responses of insect pests, pathogens, and invasive plant species to climate change in the forests of northeastern North America: What can we predict?. Canadian Journal of Forest Research. 2009 February; 39(2):231-248.

# Synergistic activities

- Adjunct faculty position at the University of Pretoria, South Africa, with the golad to facilitate ongoing student and faculty exchange and knowledge transfer between Africa and the United States.
- Service on the management team of the Tree Protection Cooperative Program with the goal of promoting and maintaining native and plantation tree health in South Africa.
- Regular field site visits to small and large tree growers in rural South Africa; participation in organized training sessions on forest insect pest and diseases (~3-5 per year, 2010-2016).