

CURRICULUM VITAE

Robert G. Ahern

Department of Entomology
Michigan State University
204 Center for Integrated Plant Systems
East Lansing, MI 48824
Phone: 517-432-5282
Email: rga@umd.edu

Education

Doctor of Philosophy, Entomology, University of Maryland, 2007
Advisor: Michael J. Raupp
Master of Science, Entomology, University of Wyoming, 2000
Advisor: Michael J. Brewer
Bachelor of Science, Zoology, Miami University, 1996
Advisor: Thomas O. Crist

Professional Experience

Visiting Research Associate, 2007-present: Michigan State University, East Lansing, MI
Graduate Research Assistant, 2001-2007: University of Maryland, College Park, MD
Peace Corps Volunteer, 2000-2001: El Jocotillo, Guatemala.
Graduate Research Assistant, 1998-2000: University of Wyoming, Laramie, WY.
Environmental Educator, 1996-1998: Cuyahoga Valley Environmental Education Center.
Undergraduate Research Assistant, 1995-1996: Miami University, Oxford, Ohio.

Teaching

Instructor, 2008: Graduate Seminar- Invasive Species Ecology and Management.
Teaching Assistant in Entomology, 2004-2005: Entomology for non-science majors.
Teaching Assistant in Biology, 2003: Biology of extinct animals.
Teaching Assistant in Biology, 2002-2003: Honors Ecology, evolution, and diversity.
Teaching Assistant in Biology, 2001: Ecology, evolution, and diversity.

Awards and Honors

Gahan Regents Fellowship (2005-2007)
University of Maryland College of Life and Chemical Sciences Travel Award (2006)
Allen L. Steinhauer Award for Excellence in Teaching (2005)
CSIRO Australia- 7th International Aphid Symposium Travel Award (2005)
Entomological Society of America-National Science Foundation International Travel Award
(2004)
University of Wyoming Faculty Grant-in-Aid (2000)
Graduate School of the University of Wyoming Travel Funds (1999)
Miami University Grant for Undergraduate Research (1996)

Refereed Publications

Ahern, R. G., D. J. Hawthorne, and M. J. Raupp. Reduced genetic and phenotypic variation in *Adelges cooleyi*, an insect pest introduced to the eastern United States. Accepted to Biological Invasions.
Raupp, M., **R. Ahern**, B. Onken, R. Reardon, S. Bealmear, J. Docola, P. Wolfe II, and P. Becker. Efficacy of foliar applications, trunk injections, and soil drenches in reducing

populations of elongate hemlock scale on eastern hemlock. Submitted to Journal of Arboriculture and Urban Forestry.

- Frank, S., **R. Ahern**, and M. Raupp. 2007. Does imidacloprid reduce defoliation by Japanese beetles on linden for more than one growing season? *Journal of Arboriculture* 33: 392-396.
- Ahern, R. G.**, S. D. Frank, and M. J. Raupp. 2005. Comparison of exclusion and imidacloprid for reduction of oviposition damage to young trees by periodical cicadas (Hemiptera: Cicadidae). *Journal of Economic Entomology* 98: 2133-2136.
- Raupp, M. J., R. E. Webb, A. Szczepaniec, D. Booth, and **R. G. Ahern**. 2004. Incidence, abundance, and severity of mites on hemlocks following applications of imidicloprid. *Journal of Arboriculture* 30(2): 108-113.
- Ahern, R. G.** and M. J. Brewer. 2002. Presence of two aphid parasitoids (Hymenoptera: Aphelinidae, Braconidae) in simple and diverse wheat production systems and adjacent grassland of the North American Great Plains. *Agriculture, Ecosystems and Environment* 92: 201-210.
- Brewer, M. J., D. J. Nelson, **R. G. Ahern**, J. D. Donahue, and D. R. Prokrym. 2001. Recovery and range of expansion of parasitoids (Hymenoptera: Aphelinidae and Braconidae) released for biological control of *Diuraphis noxia* (Homoptera: Aphididae) in Wyoming. *Environmental Entomology* 30: 578-588.
- Ahern, R. G.** 2000. Conservation biological control through agroecosystem diversification: the interaction of Russian wheat aphid, hymenopteran parasitoids, and wheat production. M.S. thesis, University of Wyoming, Laramie, WY.
- T. O. Crist and **R. G. Ahern**. 1999. Effect of habitat patch size and temperature on the distribution and abundance of ground beetles (Coleoptera: Carabidae) in an old field. *Environmental Entomology* 28:681-689.

Publications in Preparation

- Ahern, R. G.**, D. J. Hawthorne, and M. J. Raupp. Phylogeography of a specialist insect, *Adelges cooleyi* (Hemiptera: Adelgidae): historical and contemporary processes shape the distribution of population genetic variation. In revision for resubmission to *Molecular Ecology*.
- Ahern, R. G.**, D. J. Hawthorne, and M. J. Raupp. Distribution of genetic variation in a host-alternating insect pest, *Adelges cooleyi* (Hemiptera: Adelgidae), within and between primary and secondary hosts. In preparation for *Molecular Ecology* (85% complete).
- Ahern, R. G.** and M. J. Raupp. Response of natural enemies to chemical control of elongate hemlock scale on eastern hemlock. In preparation *Journal of Arboriculture and Urban Forestry* (research complete).
- Ahern, R. G.**, D. W. Schemske, A. A. Reznicek, D. A. Landis. Factors affecting the distribution of nonindigenous plants: the role of time, habitat availability, and biological traits. In preparation for *Diversity and Distributions* (65% complete).

Non-refereed Publications

- Raupp, M. **R. Ahern**, B. Onken, R. Reardon, S. Bealmear, J. Docola, P. Wolf, P. Becker, T. McIntyre, K. Laskowski, and R. Webb. 2008. Comparing HWA and EHS control in ornamental and forest hemlocks. *Proceedings of the 4th Hemlock Woolly Adelgid Symposium*.
- Ahern, R. G.** and M. J. Raupp. 2005. Stepping up to the scale. *Groundwork*, October edition.
- Ahern, R. G.**, M. J. Raupp, and S. R. Bealmear. 2004. Effects of systemic insecticides, a growth regulator, and oil on elongate hemlock scale and associated natural enemies on eastern

hemlock. Proceedings, 3rd Symposium on Hemlock Woolly Adelgid in the Eastern United States.

- Ahern, R.**, H. Lemke, K. Bejleri, and M. Raupp. 2004. Periodical cicada, information for landscape professionals and nurseries. Information sheet, Maryland Cooperative Extension.
- Frank, S., **R. Ahern**, and M. Raupp. 2004. Periodical cicada, protecting susceptible trees with mesh netting. Information sheet, Maryland Cooperative Extension.

Invited Presentations

- Ahern, R. G.**, D. W. Schemske, A. A. Reznicek, D. A. Landis. 2008. Spread of nonindigenous plants in the landscape: the role of time, habitat availability, and biological traits. Michigan State University Invasive Species Symposium.
- Ahern, R. G.** 2008. Lessons learned from a real sucker: genetic and phenotypic variation in an introduced insect pest. Michigan State University Department of Entomology Colloquium.
- Ahern, R. G.**, D. A. Landis, and D. W. Schemske. 2008. Nonindigenous plants and insects: inter-related challenges in managed systems. North Central Branch, Entomological Society of America.
- Ahern, R. G.**, and D. A. Landis. 2008. The Michigan State University Invasive Species Initiative. Tribal Geospatial Gathering, Michigan Tribal GIS Group.
- Ahern, R. G.**, and D. A. Landis. 2008. The Michigan State University Invasive Species Initiative. The Office of the Great Lakes, Michigan's Call to Action on Aquatic Invasive Species.
- Ahern, R. G.** and D. A. Landis. 2008. A list of nonindigenous biota in Michigan. Integrating Invasive Plant Species Data in the Midwest: Solutions for Data Collection and Management.
- M. J. Raupp and **R. G. Ahern**. 2008. Comparing HWA and EHS control in ornamental and forest hemlocks. 4th Hemlock Woolly Adelgid Symposium.
- Ahern, R. G.**, D. J. Hawthorne, and M. J. Raupp. 2007. Reduced genetic and phenotypic variation in Cooley spruce gall adelgid, *Adelges cooleyi* (Hemiptera: Adelgidae), an insect pest introduced to the eastern United States. 3rd International Conservation Genetics Symposium. (Declined to attend)
- Ahern, R. G.**, and D. J. Hawthorne. 2007. Prospecting for diversity: Detecting recent divergence by high-resolution genotyping. Eastern Branch, Entomological Society of America.
- Ahern, R. G.**, M. J. Raupp. 2006. Effects of systemic insecticides, a growth regulator, and oil on elongate hemlock scale and associated natural enemies on eastern hemlock. Eastern Branch, Entomological Society of America
- Ahern, R. G.**, M. J. Raupp, and S. R. Bealmear. 2005. Effects of systemic insecticides, a growth regulator, and oil on elongate hemlock scale and associated natural enemies on eastern hemlock. International Society of Arboriculture, Michigan Chapter Winter Conference.
- Ahern, R. G.**, S. D. Frank, and M. J. Raupp. 2005. Brood X: Can sustainable, non-chemical control methods reduce damage by periodical cicadas? International Society of Arboriculture, Michigan Chapter Winter Conference.

Scientific Presentations

- Ahern, R. G.** and D. A. Landis. 2007. A list of nonindigenous biota in Michigan. National Meeting, Entomological Society of America.
- Havill, N. P., **R. G. Ahern**, and R. G. Foottit. 2007. Barcoding the Adelgidae. National Meeting, Entomological Society of America.
- Ahern, R. G.**, M. J. Raupp, D. J. Hawthorne. 2007. Success after a bottleneck: Persistence of an introduced insect with low levels of genetic and phenotypic variation. Eastern Branch, Entomological Society of America.
- Ahern, R. G.**, M. J. Raupp, D. J. Hawthorne. 2006. Phylogeography and population genetics of an introduced insect pest, Cooley spruce gall adelgid (*Adelges cooleyi*). National Meeting, Entomological Society of America.
- Ahern, R. G.**, M. J. Raupp, D. J. Hawthorne. 2006. Molecular tools explain host preference of an introduced insect pest. Eastern Branch, Entomological Society of America.
- Ahern, R. G.**, M. J. Raupp, D. J. Hawthorne. 2005. Identifying source populations of an introduced insect pest and measuring consequences of introduction. National Meeting, Entomological Society of America.
- Ahern, R. G.**, M. J. Raupp, D. J. Hawthorne. 2005. Identification of source populations of an introduced insect pest and consequences of introduction. 7th International Symposium on Aphids.
- Ahern, R. G.**, M. J. Raupp, D. J. Hawthorne. 2005. Identifying source populations of introduced organisms using molecular tools. Eastern Branch, Entomological Society of America.
- Ahern, R. G.**, M. J. Raupp, D. J. Hawthorne. 2004. Identification of source populations of invasive insects: implications for biological control, monitoring & quarantine. XXII International Congress of Entomology.
- Ahern, R. G.**, M. J. Raupp, and S. R. Bealmear. 2004. Effects of systemic insecticides, a growth regulator, and oil on elongate hemlock scale and associated natural enemies on eastern hemlock. 3rd Symposium on Hemlock Woolly Adelgid in the Eastern United States.
- Ahern, R. G.**, S. D. Frank, and M. J. Raupp. 2004. Brood X: Can sustainable, non-chemical control methods reduce damage by periodical cicadas? National Meeting, Entomological Society of America.
- Ahern, R. G.**, S. D. Frank, and M. J. Raupp. 2004. Brood X: Can sustainable, non-chemical control methods reduce damage by periodical cicadas? University of Maryland Bioscience Research and Technology Review Day.
- Ahern, R. G.**, A. Szczepaniec, S. R. Davis, and M. J. Raupp. 2003. Variation in natural enemy and herbivore communities between two urban hemlock (*Tsuga* spp.) stands. Eastern Branch, Entomological Society of America.
- Raupp, M. J., A. Szczepaniec, and **R. Ahern**. 2002. Residual effects of a soil systemic insecticide on sucking arthropod pests and their natural enemies in urban landscapes. National Meeting, Entomological Society of America.
- Ahern, R. G.**, and M. J. Brewer. 1999. Seasonal host use of Russian wheat aphid (Homoptera: Aphididae) by two parasitoids (Hymenoptera: Braconidae and Aphelinidae). National Meeting, Entomological Society of America.

Extension Presentations and Activities

Michigan 4-H Leadership Conference, 2008. Bugs that are bugging us: invasive insects in Michigan.

Potter Park Zoo, 2007. Invasive species in Michigan: background, threats, control, and research.

University of Maryland Jump Start Program, 2006. Crime scene insects: interactive forensic entomology.

Maryland Day, April 2006. Crime scene insects: interactive forensic entomology.

University of Maryland Integrated Pest Management Short Course, 2006. Assisted with laboratories dealing with scale insects, tree pests, and biological control.

University Park Garden Day, April 2005. Ask the bug guy- garden pests and general insect information.

Maryland Turfgrass Council Conference-Field Day, January 2005. Using ornamental plants to suppress insect pests in turf.

Maryland Day, April 2005. Crime scene insects: interactive forensic entomology.

University of Maryland Integrated Pest Management Short Course, 2005. Assisted with laboratories dealing with scale insects, tree pests, and biological control.

Jones Falls Watershed Association, June 2004. Protecting young trees from periodical cicada damage.

United States Physics Team, June 2004. Biology of periodical cicadas.

University Park Women's Civic Group, May 2004. Periodical cicada biology and strategies for protecting landscape trees.

University of Maryland Resident Life, May 2004. Biology of periodical cicadas.

Maryland Day, April 2004. Assisted with insect displays.

University of Maryland Integrated Pest Management Short Course, 2003. Leaf mining insect pests.

Maryland Christmas Tree Growers Association, 2003. Cooley spruce gall adelgids in Maryland Christmas tree plantations.

Prince George's County Master Gardeners, 2003. Introduction to integrated pest management.

Maryland Day, April 2003. Assisted with insect displays.

Lectures

Ahern, R. 2008. Invasive species: ecology, management, and control. Michigan State University

Ahern, R. and B. Kent. 2002. The evolution of social behavior. University of Maryland Principles of Biology II.

Interviews and Appearances

WRC-TV NBC Channel 4

WJLA ABC Channel 7

Washington, DC Channel 13 public television

CNBC Cable television news

WTOP News radio

CBS News radio

WMZQ Country music radio

CNEWS Canadian news agency

West Virginia Register Herald

Professional Memberships

Entomological Society of America, 1998-present

Sigma Xi, 2005-present

Departmental and Professional Service

Organizer, 2008 Michigan State University Invasive Species Symposium

Invited reviewer, Diversity and Distributions: A Journal of Conservation Biogeography, 2007

Moderator, ESA National Meeting Section A. Systematics, Morphology, and Evolution, 2006

4-H Maryland State Science Fair Judge, 2006

Entomological Society of America Eastern Branch Volunteer, yearly 2004-2005

Graduate Student Representative to the Faculty, 2003-2004

Entomology Department Website Development Committee, 2003-2004

Entomology Department Education Center Committee, 2002-2003

University of Maryland Day Volunteer, yearly 2003-2006

Howard Country Public Schools Mathematics, Science and Technology Fair Judge, 2004

Special Training

University of Maryland Hymenoptera short course, 2001

ArcView-GIS, 1999

Professional References- Robert G. Ahern

Dr. Douglas Landis
Professor of Entomology, Co-Director of the MSU Invasive Species Initiative
Post-doctoral Research Advisor
Michigan State University
204 Center for Integrated Plant Systems
East Lansing, MI 48824
Phone: 517-353-1829
Email: landisd@msu.edu

Dr. Michael J. Raupp
Professor of Entomology
Doctoral Dissertation Adviser
Department of Entomology
University of Maryland
4112 Plant Sciences Building
College Park, MD 20742
Phone: 301-405-8478
Email: mraupp@umd.edu

Dr. David J. Hawthorne
Associate Professor of Entomology
Genetics Mentor, Doctoral Dissertation Committee Member
Department of Entomology
University of Maryland
4112 Plant Sciences Building
College Park, MD 20742
Phone: 301-405-2401
Email: djh@umd.edu

Dr. Michael J. Brewer
Associate Professor of Entomology and IPM Coordinator
Master's Thesis Adviser
Michigan State University
B18 Food Safety & Toxicology Building
East Lansing, MI 48824
Phone: 517-353-5134
Email: brewerm@msu.edu