

PHILIP G. HAHN

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Division of Biological Sciences
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PROFESSIONAL APPOINTMENTS

Jan. 2020 Assistant Professor, Dept. of Entomology and Nematology, University of Florida

EDUCATION AND PREPARATION

2015-present	Post-doc	University of Montana	Advisor: John Maron
2015	Ph.D. in Zoology	University of Wisconsin-Madison	Advisor: John Orrock
2010	M.S. in Env. Sci.	University of Wisconsin-Green Bay	Advisor: Matt Dornbush
2007	B.S. in Biology	University of Wisconsin-Oshkosh	

FUNDING

2019-2023 NSF DEB: Understanding intraspecific variation in plant defense across resource gradients. \$547,709.

2018-2019 MPG Ranch: Testing interactions between plant-soil feedback and competition across resource gradients. (PI's: P.G. Hahn with J.L. Maron and Y. Lekberg), \$111,036.

2015-2018 MPG Ranch Post-doctoral fellowship: Abiotic and biotic effects on plant defense in milkweeds, \$226,016.

2014-2015 NSF Doctoral Dissertation Improvement Grant: Disentangling the roles of neighboring plant density and palatability in providing associational defense against herbivores within different habitat types, \$19,565.

2011 The Noland Fund, University of Wisconsin-Madison: Does plant diversity provide associational resistance to generalist herbivores? \$3,032.

2008-2009 Barbara Hauxhurst Cofrin Graduate Research Fellowship in Environmental Science and Policy, University of Wisconsin-Green Bay, ~\$25,000.

PUBLICATIONS

19. Shelef, O.*, **P.G. Hahn***, Z. Getman-Pickering, and A. Martinez-Medina. Coming to common ground: the challenges of applying ecological theory developed aboveground to rhizosphere interactions. *Frontiers in Ecology and Evolution* 7:58.
*Denotes equal contribution
18. **Hahn, P.G.**, A.A. Agrawal, K. Sussman[†], and J.L. Maron. 2019. Population variation, environmental gradients, and the evolutionary ecology of plant defense. *American Naturalist*, 193: 20-34. [†] mentored student
17. **Hahn, P.G.**, L. Bullington, B. Larkin, K. LaFlamme, J.L. Maron and Y. Lekberg. 2018. Effects of short- and long-term variation in resource conditions on soil fungal communities and plant responses to soil biota. *Frontiers in Plant Science* 9:1605.

16. Maron, J.L., K. Hajek, **P.G. Hahn**‡, and D.E. Pearson. 2018. Rodent seed predators and a dominant grass competitor affect coexistence of co-occurring forb species that vary in seed size. Journal of Ecology 106: 1795-1805.
15. Waller, L.*, **P.G. Hahn***, J.L. Maron and Y. Lekberg. 2018. Trait responses to AM fungi are stronger and more consistent than fixed differences among populations of *Asclepias speciosa*. American Journal of Botany 105: 207-214.
*Denotes equal contribution
14. **Hahn, P.G.** and J.L. Maron. 2018. Plant water stress and previous herbivore damage affect herbivore performance. Ecological Entomology 43: 47-54.
13. Miller, J.E.*, **P.G. Hahn***, E.I. Damschen and J. Brennan†. 2017. Evidence for functional dependence underlying a positive plant-consumer richness relationship. Basic and Applied Ecology 24:94-100. *Denotes equal contribution † mentored student
12. **Hahn, P.G.** and J.L. Orrock. 2016. Ontogenetic responses of four plant species to interactive effects of land-use history, canopy structure and herbivory. Journal of Ecology 104: 1518-1526.
11. **Hahn, P.G.** and J.L. Maron. 2016. A framework for predicting intraspecific variation in plant defense. Trends in Ecology and Evolution 31: 646-656.
10. **Hahn, P.G.** and J.L. Orrock. 2016. Neighbor palatability generates associational effects by altering herbivore foraging behavior. Ecology 97: 2103-2111.
9. **Hahn, P.G.** and J.L. Orrock. 2015. Spatial arrangement of canopy structure and land-use history alters the effect of herbivory on plant growth in a landscape experiment. Ecosphere 10: art193.
8. **Hahn, P.G.** and J.L. Orrock. 2015. Land-use history alters contemporary insect herbivore community composition and decouples plant-herbivore relationships. Journal of Animal Ecology 84: 745-754.
7. **Hahn, P.G.** and J.L. Orrock. 2015. Land-use legacies and present fire regimes interact to mediate herbivory by altering the neighboring plant community. Oikos 124: 497-506.
6. Brudvig, L.A., J.L. Orrock, E.I. Damschen, C.D. Collins, **P.G. Hahn**, W.B. Mattingly, J.W. Veldman, and J.L. Walker. 2014. Land-use history and contemporary management inform an ecological reference model for longleaf pine woodland understory plant communities. PLoS One 9: e86604.
5. **Hahn, P.G.** and J.L. Orrock. 2014. Effects of temperature on seed viability of six Ozark glade herb species and eastern redcedar (*Juniperus virginiana*). American Midland Naturalist 171: 147-152.
4. McGlynn, A.H., **P.G. Hahn**‡ and M.P. Hagan. 2013. The effect of cognitive treatment program for male and female juvenile offenders. International Journal of Offender Therapy and Comparative Criminology 57:1107-1119.
‡P.G. Hahn lead statistical analyses.
3. Dornbush, M.E. and **P.G. Hahn**. 2013. Consumer and establishment limitation contribute more than competitive interactions in sustaining dominance of the exotic herb garlic mustard in a Wisconsin, USA forest. Biological Invasions 15: 2691-2705.

2. **Hahn, P.G.** and M.E. Dornbush. 2012. Exotic consumers interact with exotic plants to mediate native plant survival in a Midwestern forest herb layer. Biological Invasions 14: 449-460.
1. **Hahn, P.G.**, M.L. Draney, and M.E. Dornbush. 2011. Exotic slugs pose a previously unrecognized threat to the herbaceous layer in a Midwestern woodland. Restoration Ecology 19: 786-794.

In review/revision

2. Maron, J.L., K.L. Hajek, **P.G. Hahn**, and D. Pearson. Linear recruitment functions reveal ubiquitous seed-limited recruitment across co-occurring species that vary in seed size (in review).
1. **Hahn, P.G.**, J.L. Orrock, J. Firn, E.T. Borer, C. Brown, E. Lind, E. Seabloom, plus 24 additional co-authors. Herbivore impacts on native and non-native plant richness depend on productivity and shift through time (in review).

INVITED SEMINARS

2016-2019	MPG Ranch Annual Symposium, Missoula, MT
2019	University of Florida, Dept. Entomology and Nematology
2015, 18	University of Montana, OBE Noon Seminar Series
2018	University of Louisiana Lafayette, Biology Seminar Series
2017	Marquette University, Biological Sciences Seminar
2015	University of Wisconsin-Madison, Biology Colloquium
2015	University of Georgia, Savannah River Ecology Lab Seminar Series
2014	Michigan Society of Foresters, U.P. Chapter: Spring Conference

CONFERENCE PRESENTATIONS

2014-2019	Entomological Society of America Annual Meeting (3 oral presentations)
2010-2018	Ecological Society of America Annual Meeting (7 oral presentations, 1 poster)
2017	Gordon Research Conference, Plant-Herbivore Interactions (1 poster)
2012-2014	Wisconsin Ecology Annual Spring Symposium (1 oral presentation, 2 posters)

PEDAGOGICAL TRAINING

2019	Faculty Inquiry Project, Univ. Montana, (1 semester course)
2017	Scientific Teaching, Univ. Montana, (2 day workshop lead by Diane Ebert-May)
2015	The College Classroom, DELTA Program, UW-Madison, (1 semester course)
2013	Entering Mentoring, DELTA Program, UW-Madison, (1 semester course)
2011	Scientific Teaching, DELTA Program, UW-Madison, (1 semester course)

TEACHING EXPERIENCE

Co-Instructor

2013	Tropical Ecology & Conservation in Costa Rica, Univ. of Wisconsin-Green Bay
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Teaching assistant

2015	Behavioral Ecology, Zoology 425, University of Wisconsin-Madison
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2013 General Ecology, Botany/Zoology 460, University of Wisconsin-Madison
 2011 General Biology, Biology 152, Lab TA, University of Wisconsin-Madison
 2007-2010 Anatomy and Physiology, Human Biology 204, and Principles of Biology:
 Biology 202 & 203, University of Wisconsin-Green Bay

Guest lectures: General Ecology 460 (Landscape ecology), Behavioral Ecology 425 (Kin selection; Herbivore foraging behavior), Plant Ecology 430 (Plant defense), Plant Physiology 450 (Plant defense), Conservation Science 230 (Extinction).

MENTORED STUDENTS

†co-authored publication; ‡Presented at national conference; *Presented at public symposium

Madeline Damon (2019, Univ. Montana)

Esther Lyon Delsordo (2019, Univ. Montana)

Jake Palmer (2019, Univ. Montana)

Gabby Eaton (2018-19, Univ. Montana)

Marisa Manchilla (2018, Univ. Montana)

*Tallon Hansen (2018, Ecology Project International), *High School Intern*

†*Kira Sussman (2016-17, Univ. Montana), *NSF-EPSCoR undergrad fellowship (\$5,500)*

‡Zachary Parker (2016, Yakima Valley College), *co-advised with Dr. Meghan Fitzgerald*

Toby Brown (2016, Univ. Montana)

*Ethan Neff (2016, International Ecology Project), *High School Intern*

*Brady Anderson (2013-2014, Univ. Wisconsin-Madison)

†*John Brennan (2013-2014, Univ. Wisconsin-Madison)

*Savannah Bartel (2014, Univ. Wisconsin-Madison)

*Roberta Donaldson (2014, Univ. Wisconsin-Madison)

*Nichole Boyea (2011, Univ. Wisconsin-Madison)

*Sarah Gorsline (2011, Univ. Wisconsin-Madison)

Jesse Berger (2008, Univ. Wisconsin-Green Bay)

HONORS AND AWARDS

2012 Graduate Student Peer Mentor Award, UW-Madison

2011 Love of learning award, Phi Kappa Phi

2011 Outstanding Thesis Award, UW-Green Bay

2010 Phi Kappa Phi Honor Society

2010 Student Nominated Teaching Award (*nominee*), UW-Green Bay

SERVICE

2017-2018 Guest Associate Editor, *Frontiers in Ecology & Evolution* and *Frontiers in Plant Sciences*, Research Topic: "As above so below? Belowground interactions and ecological processes." Edited 5 manuscripts.

2009-present Reviewer: (34 peer-reviews) *e.g.*, *American Naturalist*, *Annals of Botany*, *Biology Letters*, *Biological Invasions*, *Ecological Entomology*, *Ecology*, *Journal of Animal Ecology*, *Journal of Ecology*, *Oecologia*, *Oikos*.

2018 Judge for Montana Science Fair

- 2017 Judge for Buell & Braun Student Presentations, ESA 2017
2017 Proposal reviewer for Univ. Montana Collaboration Challenge Research Grant
2011-2013 Co-Chair, Graduate Student Committee, Wisconsin Ecology, UW-Madison
2010-2014 Organizing Committee, Zoology Graduate Student Seminar, UW-Madison
2010 Graduate student representative, Faculty Search Committee, UW-Green Bay

OUTREACH

- 2018 Natural history of milkweeds, Learning module for high school interns, MPG Ranch
2017 Public lecture on monarch and milkweeds, Montana Native Plant Society and Five Valleys Audubon Society Annual Meeting
2016-2017 Planning committee, Monarchs in Missoula with National Wildlife Federation
2014-2015 Outreach coordinator for public science events, Zoology Graduate Student Organization, UW-Madison Dept of Zoology