

Lesley W. Atwood

PROFESSIONAL EXPERIENCE

2019-Present	Consultant, The Nature Conservancy
2019-Present	Advisor, AgEvidence Webtool Development
2017-2019	Postdoctoral Scholar for Managing Soil Carbon Working Group, SNAPP-NCEAS
2011-2017	Agroecology Research Assistant, University of New Hampshire
2011	Agroecology Lab Manager, University of New Hampshire
2008-2010	Community Agriculture Research Assistant, Michigan State University
2006-2008	Wildlife Ecology and Conservation Lab Manager, University of Florida WFREC
2005	Resident Naturalist, Ecological San Luis & Research Station, Costa Rica

EDUCATION

2011-2017	PhD in Agroecology, Natural Resources and Earth Systems Sciences Program, University of New Hampshire
2008-2010	MSc in Community, Food & Agricultural Systems with an Ecological Food and Farming Specialization, Michigan State University
2001-2005	BSc in Ecology, University of Georgia

OPENSOURCE DATABASE

Lesley W. Atwood and Stephen A. Wood. 2020. [AgEvidence: Agro-environmental responses of conservation agricultural practices in the US Midwest published from 1980 to 2020](#). Knowledge Network for Biocomplexity. [doi:10.5063/Z31X15](#).

WEB TOOL

[AgEvidence: the impact of agricultural practices on crops and the environment](#)

PEER REVIEWED PUBLICATIONS

12. Bradford, M.A., C.J. Carey, **L. Atwood**, D. Bossio, E.P. Fenichel, S. Gennet, J. Fargione, J.R.B. Fisher, E. Fuller, D.A. Kane, J. Lehmann, E.E. Oldfield, E.M. Ordway, J. Rudek, J. Sanderman, and S.A. Wood (2019). Soil carbon science for policy and practice. *Nature Sustainability* 2: 1070-1072.
11. **Atwood, L.W.**, D.A. Mortensen, R.T. Koide, and R.G. Smith (2018). Evidence for multi-trophic effects of pesticide seed treatments on non-targeted soil fauna. *Soil Biology and Biochemistry* 125: 144-155.
10. Hunter, M.C., R.G. Smith, M.E. Schipanski, **L.W. Atwood**, and D.A. Mortensen (2017). Agriculture in 2050: Recalibrating targets for sustainable intensification. *Bioscience* 67(4): 386-391.
9. Nettles, R., J. Watkins, K. Ricks, M. Boyer, M. Licht, **L.W. Atwood**, M. Peoples, R.G. Smith, D.A. Mortensen, and R.T. Koide (2016). Influence of pesticide seed treatments on rhizosphere fungal and bacterial communities and leaf fungal endophyte communities in maize and soybean. *Applied Soil Ecology* 102: 61-69.
8. Smith, R.G., **L.W. Atwood**, M.B. Morris, D.A. Mortensen, and R.T. Koide (2016). Evidence for indirect effects of pesticide seed treatments on weed seed banks in maize and soybean. *Agriculture, Ecosystems and Environment* 216: 269-273.
7. Williams, A., D.A. Kane, P.M. Ewing, **L.W. Atwood**, A. Jilling, M. Li, Y. Lou, A.S. Davis, A.S. Grandy, S.C. Huerd, M.C. Hunter, R.T. Koide, D.A. Mortensen, R.G. Smith, S.S. Snapp, K.A. Spokas,

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A.C. Yannarell, and N.R. Jordan (2016). Soil functional zone management: a vehicle for enhancing production and soil ecosystem services in row-crop agroecosystems. *Frontiers in Plant Science* 7: 65.

6. Smith, R.G., **L.W. Atwood**, F.W. Pollnac, and N.D. Warren (2015). Cover-crop species as distinct biotic filters in weed community assembly. *Weed Science* 63: 282-295.
5. Thetford, M., D.L. Miller, **L.W. Atwood**, and B.O. Ballard (2015) Microsite and rooting depth are more important than water-holding gel for establishment of restoration plantings of *Illex vomitoria* on barrier islands in the Gulf of Mexico. *Native Plants Journal* 16: 77-86.
4. Smith, R.G., **L.W. Atwood**, and N.D. Warren (2014). Increased productivity of a cover crop mixture is not associated with enhanced agroecosystem services. *PLoS ONE* 9(5): e97351.
3. Smith, R.G., A.S. Davis, N.R. Jordan, **L.W. Atwood**, A.B. Daly, A.S. Grandy, M.C. Hunter, R.T. Koide, D.A. Mortensen, P. Ewing, D. Kane, M. Li, Y. Lou, S.S. Snapp, K.A. Spokas, and A.C. Yannarell (2014). Structural equation modeling facilitates transdisciplinary research on agriculture and climate change. *Crop Science* 54: 475-483.
2. Miller, D.L., M. Thetford, J. Dupree, and **L.W. Atwood** (2014). Influence of seasonal changes and shifting substrate on survival of restoration plantings of *Schizachyrium maritimum* (Gulf Bluestem) on Santa Rosa Island, Florida. *Journal of Coastal Research* 30: 237-247.
1. Miller, D.L., M. Thetford, and **L.W. Atwood** (2013). Effect of polyacrylamide gel on woody plant establishment in barrier island swales. *Natural Areas Journal* 33: 395-403.

SELECTED PRESENTATIONS

L.W. Atwood, S.A. Wood, and E. Fuller, [AgEvidence Webinar](https://youtu.be/EJK1GGQkQ-A). The Nature Conservancy, October 2020. <https://youtu.be/EJK1GGQkQ-A>

L.W. Atwood (invited talk), *Managing the soil food web: The case of pesticide seed treatments*. Soils Matters Conference, NRCS & New England Soil Science Society, Concord, New Hampshire, April 2017.

L.W. Atwood (invited talk), *Managing the soil food web: Opportunities and Unintended Consequences*. National Organic Farmers Association – New Hampshire, Manchester, New Hampshire, January 2017.

L.W. Atwood, D.A. Mortenson, R.T. Koide, & R.G. Smith (poster). *Effects of soil functional zonal management and cover crops on soil faunal communities in annual row-cropping systems*. Soil Biology and Biochemistry Division, Soil Science Society of America conference, Phoenix, Arizona, November 2016.

L. W. Atwood (invited talk), R.G. Smith, D.A. Mortensen, & R.T. Koide. *Disrupting the network? Assessing the impacts of pesticide seed treatments on multi-trophic interactions in the soil system*. Entomological Society of America and Tri-Societies Joint Conference, Minneapolis, Minnesota. November 2015.

L. W. Atwood, R.G. Smith, D.A. Mortensen, & R.T. Koide. *Effects of pesticide seed treatments on soil food webs in agroecosystems*. Ecological Society of America Conference, Baltimore, Maryland. August 2015.

L. W. Atwood, R.G. Smith, R.T. Koide, & D.A. Mortensen. *Effects of pesticide seed treatments on rhizosphere food web composition and function in agroecosystems*. Ecological Society of America. Sacramento, California. August 2014.

L. Atwood & R.G. Smith. *Zonal tillage boosts crop yields, but has little effect on above-ground litter decomposition*. Ecological Society of America Conference, Minneapolis, Minnesota. August 2013.

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L. Atwood, J. Bingen, & G.W. Bird. *Does the Source of Agricultural Management Advice Influence Growers' Perceptions of Problematic Weeds?* Weed Science Society of America Conference, Waikoloa, Hawaii, February 2012.

R.G. Smith & L. Atwood. *Assessing the Role of "Relatedness" in Suppression of Weeds by Cover Crops: A Surrogate Weed Approach.* Weed Science Society of America Conference, Waikoloa, Hawaii, February 2012.

L. Atwood, J. Bingen, & G.W. Bird. *Feeding the Crop or Feeding the Soil? Soil Quality Indicators used by Farmers in Michigan's Thumb Region, USA.* 19th World Congress of Soil Science, Brisbane, Australia, August 2010.

L. Atwood. *GM-Crops, Agro-Chemicals, and Soil Quality: Perspectives from Michigan's Large-Scale Commercial Farmers.* Agriculture, Food and Human Values Society Conference, Indiana University, Bloomington, June 2010.

L. Atwood & J. Bingen. *Interpretations of Soil Quality: Michigan Organic and Conventional Farmers.* Michigan Organic Reporting Session, Poster Competition, East Lansing, Michigan, March 2010.

L. Atwood. *Farming in Costa Rica: A Survey of Farmers in the San Luis Valley.* University of Georgia's Institute of Ecology Graduate Symposium, Athens, Georgia, May 2005.

GRANTS, FELLOWSHIPS, & AWARDS

2017	Clark Soil Biology Scholarship , Soil Science Society of America
2016	First Place Award , Soil Biology & Biochemistry Division's Poster Competition, Soil Science Society of America
2016	First Place & People's Choice Awards , 3 Minute Thesis Competition, University of New Hampshire
2014-2016	USDA NIFA Pre-Doctoral Fellowship , Effects of pesticide seed treatments on soil food web composition and function in agroecosystems
2013-2015	NE-SARE Graduate Student Grant , Responses of soil faunal food webs to pesticide seed treatments
2013	Annie's Sustainable Agriculture Scholarship , Commitment to Sustainable Agriculture
2011 & 2013	Travel Grant , University of New Hampshire Graduate School
2011	Ruth E. Farrington Fund Award , Dept. of Natural Resources and the Environment, University of New Hampshire
2010	Wilford Gardner IUSS Congress Fellowship for the World Congress of Soil Science conference held in Brisbane, Australia
2010	International Travel Grant , Michigan State University Graduate School
2009-2010	Ecological Food & Farming Specialization Fellowship , Michigan State University
2009 & 2010	Conference Grant , College of Agriculture and Natural Resources, Michigan State University

SELECTED LEADERSHIP AND SERVICE ACTIVITIES

2013-2016	UNH Women in Science Co-Coordinator , University of New Hampshire
2013-2016	Science Fair Judge , Rye Elementary School, New Hampshire
2014- 2016	Science Fair Judge , Nottingham Elementary School, New Hampshire
2014	Oral Session Co-Organizer , <i>Rhizosphere Interactions: An Exploration of Patterns Across Systems</i> , Ecological Society of America
2013-2015	Undergraduate Research Mentor , University of New Hampshire
2013-2015	Organizer & Moderator , Women in Science Seminar Series, University of New Hampshire

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2010	Farm Volunteer , World Wide Organization of Organic Farms, Australia
2010	Conference Co-Organizer , Michigan Organic Food and Farm Alliance
2010	Symposium Organizer , CARRS Graduate Research Symposium, Michigan State University
2009-2010	Graduate Student Organization President , CARRS Department, Michigan State University
2008-2009	After-school Garden Program Volunteer , Northwest Initiative Community Organization, Michigan
2004-2005	Farm Volunteer , Full Moon Farm, Georgia