

Daniel J. Larkin

Plant Science and Conservation
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EDUCATION

Ph.D. Botany, University of Wisconsin–Madison, 2006
B.A. Biology, University of California, Santa Cruz, 1998

PROFESSIONAL APPOINTMENTS

Associate Conservation Scientist, Chicago Botanic Garden (CBG)	2013–
Adjunct Assistant Professor, Illinois Institute of Technology (IIT), Landscape Architecture	2009–
Adjunct Assistant Professor, Northwestern University (NU), Plant Biology & Conservation (PBC)	2008–
David Byron Smith Family Curator of Native Habitats, CBG	2008–
Assistant Conservation Scientist, CBG	2008–2012
Postdoctoral Fellow, Loyola University Chicago (LUC), Department of Biology	2006–2008

PUBLICATIONS

Google Scholar page: <http://scholar.google.com/citations?user=RURaDw0AAAAJ>

Journal Articles

Larkin, DJ, JF Steffen, RM Gentile, and CR Zirbel. 2013. Ecosystem changes following restoration of a buckthorn-invaded woodland. *Restoration Ecology*. doi: 10.1111/rec.12016

Steffen, JF, J Palinscar, FM Funk, and DJ Larkin. 2012. Activity and diversity of Collembola (Insecta) and mites (Acari) in the litter of a degraded Midwestern oak woodland. *The Great Lakes Entomologist* 45:1–18.

Larkin, DJ, SC Lishawa, and NC Tuchman. 2012. Appropriation of nitrogen by the invasive cattail *Typha × glauca*. *Aquatic Botany* 100:62–66.

Larkin, DJ. 2012. Lengths and correlates of lag phases in upper-Midwest plant invasions. *Biological Invasions* 14:827–838.

Larkin, DJ, MJ Freyman, SC Lishawa, P Geddes, and NC Tuchman. 2012. Mechanisms of dominance by the invasive hybrid cattail *Typha × glauca*. *Biological Invasions* 14:65–77.

Mitchell, ME, SC Lishawa, P Geddes, DJ Larkin, D Treering, and NC Tuchman. 2011. Time-dependent impacts of cattail invasion in a Great Lakes coastal wetland complex. *Wetlands* 31:1143–1149.

Tonietto, R, J Fant, J Ascher, K Ellis, and D Larkin. 2011. A comparison of bee communities of Chicago green roofs, parks and prairies. *Landscape and Urban Planning* 103:102–108.

Tuchman, NC, DJ Larkin, P Geddes, R Wildova, KJ Jankowski, and DE Goldberg. 2009. Patterns of environmental change associated with *Typha × glauca* invasion in a Great Lakes coastal wetland. *Wetlands* 29:964–975.

- Larkin, DJ, JM West, and JB Zedler. 2009. Created pools increase food availability for fishes in a restored salt marsh. *Ecological Engineering* 35:65–74.
- Larkin, DJ, SP Madon, JM West, and JB Zedler. 2008. Topographic heterogeneity influences fish use of an experimentally restored tidal marsh. *Ecological Applications* 18:483–496.
- Larkin, DJ, and RS Tjeerdema. 2000. Fate and effects of Diazinon. *Reviews of Environmental Contamination and Toxicology* 166:49–82.

Book Chapters

- Larkin, DJ. In press, invited essay. Wetland heterogeneity. *Encyclopedia of Wetlands* Vol. 1: Structure and Function. CM Finlayson, ed. Springer.
- Zedler, JB, CL Bonin, DJ Larkin, and A Varty. 2008. Salt marshes. *Encyclopedia of Ecology*, SE Jorgensen and BD Fath, eds. Elsevier, Oxford, pp. 3132–3141.
- Larkin, DJ, G Vivian-Smith, and JB Zedler. 2006. Topographic heterogeneity: Theory and ecological restoration. *Foundations of Restoration Ecology*, DA Falk, MA Palmer, and JB Zedler, eds. Island Press: Washington, DC, pp. 142–164.

Other Publications

- Zedler, J, P Zedler, S Glass, B Herrick, J Doherty, M Wegener, and D Larkin. 2011. Unintended negative impacts of construction projects in the Arboretum. *Arboretum Leaflets* 23. URL: <http://uwarboretum.org/publications/leaflets/index.php>
- Zedler, JB, DA Falk, and DJ Larkin. 2007. Upstart views of restoration icons. *Bulletin of the Ecological Society of America* 88:104–112.
- Allen, A, S Kercher, D Larkin, H Morzaria-Luna, and M Peach. 2003. Review of book by Perrow, MR, and AJ Davy, eds. 2002. *Handbook of ecological restoration*. Volume 1: Principles of restoration. Volume 2: Restoration in practice. Cambridge University Press, Cambridge, UK. *Ecology and Society* 7:4.

Submitted Papers

- Price, AL, JB Fant, and DJ Larkin. Ecology of native vs. exotic *Phragmites australis* (common reed) in Chicago-area wetlands. *Wetlands*.

GRANTS

- Pending (invited for full proposal). National Science Foundation (NSF). Collaborative Research: Can phylogenetic community ecology advance ecological restoration? PI, 2013–2018
- Illinois-Indiana Sea Grant (IISG). \$21,000. PhragNet: A cooperative-learning network for adaptive management of *Phragmites*-invaded coastal habitats. PI, 2012–2013
- Bureau of Land Management. \$150,000. Learning from native ‘winners’ in degraded sites on the Colorado Plateau. Co-PI, 2012–2014
- NSF. \$301,307. REU Site: Plant biology & conservation Research Experiences for Undergraduates—From genes to ecosystems. PI, 2011–2014
- U.S. Environmental Protection Agency (USEPA). \$115,712. Enhancing the capacity of wetland programs to assess and manage habitat for secretive-marshbird support. PI, 2010–2012
- IISG. \$10,000. Ecological genetics of *Phragmites australis* invasion in southern Lake Michigan coastal habitats. PI, 2010–2011
- National Fish and Wildlife Foundation. \$45,000. Testing restoration effectiveness under a changing climate. Co-PI, 2010–2011

NSF. \$305,389. MRI: Acquisition of a conservation GIS laboratory. Co-PI, 2009–2012

IISG. \$80,000. How do plant-species invasions affect water-quality services performed by Great Lakes coastal wetlands? Co-PI, 2008–2010

USEPA. \$75,000. Biodiesel education: Green-collar recruiting and environmental education for the next generation. Co-PI, 2008–2010

USEPA. \$10,000. P3 Phase I: Innovative biodiesel production: A solution to the scientific, technical, and educational challenges of sustainability. Co-PI, 2007–2008

TEACHING

Northwestern University

Plant Community Ecology (grad/undergrad)

Field and Laboratory Methods in Plant Biology and Conservation (grad)

Illinois Institute of Technology

Ecology and Materials Workshop I–Plants and Planning (grad/undergrad)

The Morton Arboretum

Wetland Conservation & Management

UW–Madison

Microbes Rule! (freshman non-majors)

Introductory Biology Lab (teaching assistant)

MENTORING

Major Advisor

PhD, all current

Rebecca Barak. TBD

Paul Hartzog. The effects of plant community-composition and restoration on wetland denitrification

Rebecca Tonietto. The effects of tallgrass prairie restoration on native bee communities

MS, current

Jennifer Alyah. Phenology of Chicago-area wildflowers: Are bloom times changing with climate change?

Ryan Disney. Effects of harvest regime on an assemblage of native prairie species grown as a biofuel crop

Samuel Isha. TBD

Erin Vander Stelt. *Isoëtes butleri*: Assessing factors influencing population dynamics in a rare plant

MS, completed

Wesley Glisson, 2012. Effects of plant-community structure and restoration on use of wetlands by secretive marsh birds

Byron Tsang, 2012. Environmental factors affecting woodland legume restoration

Amy Price, 2011. Genetics and ecology of *Phragmites australis* invasion in Chicago-area wetlands

Elizabeth Riley, 2010. Comparison of three common wetland-assessment methods

Committee Member

Katherine Muller, MS x2013

Rebecca Barak, MS 2011

Alicia Foxx, MS x2014

Melissa Gray, MS 2011

Kelly Ksiazek, MS 2011

Courtney Gill, MS 2010

Undergraduate Researchers

Laura Bofill (CBG REU, 2012)

Hannah King (CBG REU, 2012)

Becky Cotteleer (Albion College, 2011)

Evan Eifler (UW-Madison, 2011)

Thea Klein-Mayer (NU thesis, 2011)

Lisa Mithun (NU thesis, 2011)

Allegra Mount (NU thesis, 2011)

Tyr Wiesner-Hanks (NU, 2011)

Jackie Beard (NU, 2010)

Joseph Boyer (CBG, 2010)

Cat Collins (DePaul University, 2010)

Bridgette Moen (CBG REU, 2010)

Dayani Pieri (Oakton Community College, 2010)

Chad Zirbel (CBG REU, 2010)—Winner, best undergraduate presentation award ESA 2011

Rachel Hesselink (CBG REU, 2009)

Max Wilson (NU, 2009)

Michal Olszewski (LUC, 2007–2008)

Jeff Price (UM Biol. Station REU, 2007)

Cindy Stowell (LUC, 2006–2007)

Mike Lucero (San Diego State University, 2004–2005)

Tasi Rodriguez (Point Loma Nazarene University, 2004)

High School Researchers

Rachel Sison (STEM Research, 2012)—Three awards in regional science fair, advanced to state

Vasilios Stefanis (STEM Research, 2010)

Kassandra Altantulkhuur (College First, 2010)

Allan Lane (College First, 2009)

FELLOWSHIPS AND HONORS

- 2007 Science Environment for Ecological Knowledge Early Career Faculty Workshop in Ecoinformatics, National Science Foundation
- 2005–06 HHMI Scientific Teaching Fellow, Wisconsin Program for Scientific Teaching
- 2005 Vilas Travel Fellowship, UW–Madison
- 2003 Honorable Mention, Graduate Research Fellowship, National Science Foundation
- 1998 Honors, College Eight, UC Santa Cruz
- 1998 Honors, Biology, UC Santa Cruz

PRESENTATIONS

Invited Talks

- 2012 Keynote speaker, 2012 STEM Symposium, Malcolm X College
Biology Department, University of Nebraska–Omaha
- 2011 Herbarium Seminar, The Morton Arboretum
Department of Biology, Northeastern Illinois University
Keynote speaker, Golden Apple Teachers' Academy meeting
- 2009 Environmental Engineering, Northwestern University
- 2008 Department of Biology, University of Illinois–Chicago
Plant Science and Conservation, Chicago Botanic Garden
- 2007 βββ Biological Honor Society, Loyola University Chicago
- 2006 Coastal Ecology Branch, US Environmental Protection Agency

Symposia

- 2013 Taking the long view: What can paleo, phylogenetic, and other long-term perspectives tell us about ecological restoration? Society for Ecological Restoration conference (co-author)
Invasive *Phragmites australis*: Mapping and managing to improve wetland ecosystem functions, Society of Wetland Scientists annual meeting (co-author)
- 2012 Applied climate change research, Chicago Wilderness Congress
Tallgrass prairie restoration in the 21st century, The Morton Arboretum
Forest Preserve District of Cook County Science and Research Symposium
- 2011 Chicago Plant Science Symposium
- 2009 Genetics and ecology of cattail invasions: Implications for wetland management, Society of Wetland Scientists annual meeting (co-author)
- 2006 Upstart perspectives on restoration icons, Ecological Society of America annual meeting

Outreach

- 2012 Interagency Private Lands Meeting, Wisconsin Department of Natural Resources
- 2011 Natural Resources Management Team meeting, Chicago Wilderness
Presentation to K-12 teachers, CBG
- 2010 Presentation to CBG members, Lake Forest, IL

Presentation to K-12 teachers, CBG
Presentation to the public, CBG

2007 Douglas Lake Improvement Association, Pellston, MI

Contributed Papers

- 2013 Accepted. Ecological Society of America (ESA) annual meeting
- 2012 ESA annual meeting
Midwest Bird Conservation and Monitoring Workshop (co-author)
Society for Ecological Restoration–Midwest Great Lakes annual meeting (co-author)
Wisconsin Wetlands Association annual meeting (co-author)
- 2011 Natural Areas Conference annual meeting (co-author)
Midwest Bird Conservation and Monitoring Workshop (co-author)
Ecological Society of America annual meeting (co-author, 2 papers)
- 2010 Society for Ecological Restoration–Midwest Great Lakes annual meeting
North American Benthological Society annual meeting (co-author, 2 papers)
- 2009 Society of Wetland Scientists annual meeting (co-author)
North American Benthological Society annual meeting (co-author, 2 papers)
- 2008 North American Benthological Society annual meeting (co-author, 2 papers)
- 2007 American Fisheries Society annual meeting (co-author)
- 2006 Wisconsin Wetlands Association annual meeting
UW–Madison Arboretum Science Day
- 2005 Estuarine Research Federation biennial conference (co-author)
- 2004 Restore America's Estuaries biennial conference

PROFESSIONAL SERVICE

Professional Societies

Chicago Wilderness

Ecological Society of America (Symposium Organizer, 2006 annual meeting)

Society for Ecological Restoration (Poster Judge, 2010 Midwest-Great Lakes annual meeting;
Symposium Organizer, 2013 international meeting)

Society of Wetland Scientists (Planning Team Member and Poster Chair, 2009 annual meeting)

Wisconsin Wetlands Association

Symposia Organized

Taking the long view: what can paleo, phylogenetic, and other long-term perspectives tell us about ecological restoration? Society for Ecological Restoration World Conference, Madison WI, 2013

Fire ecology. Janet Meakin Poor Symposium, CBG, 2012

Upstart perspectives on restoration icons. Ecological Society of America annual meeting, Memphis TN, 2006

Manuscript Reviews

American Midland Naturalist, Archives of Environmental Contamination and Toxicology, BioScience, Ecological Engineering, Estuaries and Coasts, Freshwater Biology, Hydrobiologia, Journal of Wildlife Management, Restoration Ecology, Soil Science Society of America Journal, Wetlands, Wetlands Ecology and Management

Proposal Reviews

NSF panels: Biology REU Sites, Coupled Natural and Human Systems, Graduate Research Fellowship Program, Major Research Instrumentation (2×)

Ad-hoc reviews: NSF Ecosystem Studies; NSF Opportunities for Promoting Understanding through Synthesis (DEB); Institute for Environmental Science and Policy, University of Illinois-Chicago

Conservation and Management

Scientific Advisory Committee, The Nature Conservancy in Illinois

Steering Committee and Research Subcommittee, Great Lakes *Phragmites* Collaborative (USGS/Great Lakes Commission), 2012–

Midwest Marsh Bird Monitoring Working Group (USFWS), lead Research Subcommittee 2012–

Steering Committee and Supervisor of Coordinator, Northeast Illinois Invasive Plant Partnership, a Cooperative Weed Management Area, 2011–

Planning Team, Daniel Burnham Sustainability Conference, Forest Preserve District of Cook County, 2009

Planning Committee, City of Chicago Nature & Wildlife Summit, 2009

Departmental Service

PhD Graduate Admissions Committee, PBC, CBG/NU, 2011–2012

University Sustainability Council, LUC, 2006–2008

Faculty Liaison, Department of Botany, UW–Madison, 2006

Student Representative, Graduate Admissions Committee, Department of Botany, UW–Madison, 2004–2005