Daijiang Li

Curriculum Vitae

Last updated: January 2019

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Education

2011 – 2016, **Ph.D.** Ecology, Department of Botany, University of Wisconsin–Madison

Committee: Donald M. Waller (chair), Ellen I. Damschen, Thomas J. Givnish, Bret R. Larget, Anthony R. Ives

Dissertation: Long-term shifts in plant species and functional composition of central Wisconsin pine barrens

2013 – 2016, M.S. Biometry, Department of Statistics, University of Wisconsin–Madison

2008 – 2011, M.S. Restoration Ecology, School of Life Science, Sun Yat-sen University, China

2004 – 2008, **B.A.** Ecology, School of Life Science, Yunnan University, China

Professional Appointments

2016 - Present, Postdoctoral Researcher, Biodiversity Informatics, Department of Wildlife Ecology & Conservation, University of Florida

2011 - 2016, Research Assistant, Department of Botany, University of Wisconsin–Madison

2012 - 2014, Teaching Assistant, Department of Botany, University of Wisconsin-Madison

Publications

Published or accepted

- 21. Pedro Albuquerque, Denis Ribeiro do Valle, and **Daijiang Li**. (2019). Bayesian LDA for categorical mixture model clustering. *Knowledge-Based Systems*, 163: 988-995.
- 20. **Daijiang Li**, Timothée Poisot, Donald Waller, and Ben Baiser. (2018). Homogenization of species composition and species association networks are decoupled. *Global Ecology and Biogeography*, 27: 1481-1491.
- 19. Benjamin Baiser and **Daijiang Li**. (2018). Comparing species area relationships for native and exotic species. *Biological Invasions*, 20(12): 3647-3658.
- 18. Lauren Trotta, Benjamin Baiser, Jennifer Possley, **Daijiang Li**, James Lange, Sarah Martin, and Emily Sessa. (2018). Community phylogeny of the globally imperiled pine rockland ecosystem. *American Journal of Botany*, 105(10): 1735-1747.
- 17. **Daijiang Li**, Julie L. Lockwood, and Benjamin Baiser. (2018). Taxonomic and phylogenetic homogenization across US national parks The role of non-native species. Book chapter in *From Biocultural Homogenization to Biocultural Conservation*. Edit by Rozzi et al.
- 16. **Daijiang Li**. (2018). hillR: taxonomic, functional, and phylogenetic diversity and similarity through Hill Numbers. *Journal of Open Source Software*, 3(31), 1041.

- 15. Anthony Ives and **Daijiang Li**. (2018). rr2: An R package to calculate R²s for regression models. *Journal of Open Source Software*, 3(30), 1028.
- 14. Huixuan Liao, Fangfang Huang, **Daijiang Li**, Luyao Kang, Baoming Chen, Ting Zhou, Shaolin Peng. (2018). Soil microbes regulate forest succession in a subtropical ecosystem in China: evidence from a mesocosm experiment. *Plant and Soil*. 430: 277-289.
- 13. Michael Perring et al. (including **Daijiang Li**, 21/30). (2018). How nitrogen deposition affects forest understorey plant community change: towards understanding context. *Environmental Pollution*. 242: 1787-1799.
- 12. **Daijiang Li**, William B. Monahan, and Benjamin Baiser. (2018). Species richness and phylogenetic diversity of native and non-native species respond differently to area and environmental factors. *Diversity and Distributions*. 24: 853-864.
- 11. Emily Sessa, Sally Chambers, **Daijiang Li**, Lauren Trotta, Lorena Endara, Gordon Burleigh, and Benjamin Baiser. (2018). Community assembly of the ferns of Florida. *American Journal of Botany*. 105(3): 1–16.
- 10. Michael P. Perring, et al. (including **Daijiang Li**, 28/42). (2018) Environmental change effects on plant community trajectories depend upon management legacies. *Global Change Biology*. 24:1722–1740.
- 9. **Daijiang Li** and Anthony Ives. (2017). The statistical need to include phylogeny in trait-based analyses of community composition. *Methods in Ecology and Evolution*. 8: 1192–1199.
- 8. **Daijiang Li** and Donald Waller. (2017). Fire exclusion and climate change interact to affect long-term changes in the functional composition of plant communities. *Diversity and Distributions*. 23: 496-506.
- 7. **Daijiang Li**, Anthony Ives, and Donald Waller. (2017). Can functional traits account for phylogenetic signal in community composition? *New Phytologist*. 214: 607-618.
- Kris Verheyen, Pieter De Frenne, ..., Daijiang Li, ..., Markus Bernhardt-Romermann. (2017). Combining biodiversity resurveys across regions to advance global change research. <u>BioScience</u>. 67: 73-83.
- 5. **Daijiang Li** and Donald Waller. (2016). Long-term shifts in the patterns and underlying processes of plant associations in Wisconsin forests. *Global Ecology and Biogeography*. 25: 516–526.
- 4. **Daijiang Li** and Donald Waller. (2015). Drivers of observed biotic homogenization in pine barrens of central Wisconsin. *Ecology*. 96:1030–1041. *Media coverage*: University of Wisconsin–Madison News; also printed in Science Daily, Science blog, UW college of letters and science News, etc.
- 3. **Daijiang Li**, Shaolin Peng, Baoming Chen. (2013). The effects of leaf litter evenness on decomposition depend on which plant functional group is dominant. *Plant and Soil*. 365:1-2, 255-266.
- 2. Baoming Chen, Shaolin Peng, Carla M. D'Antonio, **Daijiang Li**, Wentao Ren. (2013). Non-Additive Effects on Decomposition from Mixing Litter of the Invasive *Mikania micrantha* H.B.K. with Native Plants. *PLoS ONE*. 8(6): e66289.

1. Bosun Wang, Shaolin Peng, **Daijiang Li**, Ting Zhou. (2009). Research progress on *Merremia boisiana*. *Chinese Journal of Ecology*. 28 (11), 2360-2365.

Manuscripts in review

- 5. **Daijiang Li**, Brian Stucky, John Deck, Benjamin Baiser, and Robert P. Guralnick. The effect of urbanization on plant phenology depends on regional temperature. *In revision at Nature Ecology and Evolution*.
- 4. **Daijiang Li**, Lauren Trotta, Hannah E. Marx, Julie M. Allen, Miao Sun, Douglas E. Soltis, Pamela S. Soltis, Robert P. Guralnick, and Benjamin Baiser. For comparing phylogenetic diversity among communities, go ahead and use synthesis phylogenies. *In revision at Ecology*.
- 3. Ben Baiser et al. (including **Daijiang Li**, 8/18). Ecogeographical Rules and the Macroecology of Food Webs. *In revision at Global Ecology and Biogeography*.
- 2. **Daijiang Li**, Julian Olden, Julie Lockwood, Sydne Record, Michael McKinney, and Benjamin Baiser. Widespread Loss of Spatial Taxonomic, but not Phylogenetic, Diversity in the Anthropocene. *In review at PNAS*.
- 1. Jesse Miller, **Daijiang Li**, Marina Laforgia, Susan Harrison. Functional diversity is a passenger but not driver of drought-related plant diversity losses in annual grasslands. *In review at Journal of Ecology*.

R Packages

- 2. **Daijiang Li**, Matthew Helmus, Russel Dinnage, Anthony Ives. phyr: An R package for model-based phylogenetic analyses. https://github.com/daijiang/phyr.
- Pedro Albuquerque, Denis Valle, and Daijiang Li, Rlda: Bayesian LDA for Mixed-Membership Clustering Analysis. 2017. https://cran.rproject.org/web/packages/Rlda/index.html.

Awards and Grants

- 2016, Ton Damman Award for Best Oral Presentation, \$500, Ecological Society of America Vegetation Section, http://www.esa.org/vegetation2/?page;*d* = 83
- 2015, Student Conference Presentation Grant, \$600. Graduate school, UW-Madison
- 2015, Selected by the Early Career Centennial Mentoring Program (10 early career ecologists total), Ecological Society of America, Centennial Meeting, Baltimore, MD, USA.

 Webpage highlight: http://esa.org/earlycareer/centennial-mentoring-program-at-esa100/
- 2015, The Raper Conference Travel Support, \$400. Department of Botany, UW-Madison
- 2014, The Flora Aeterna Research Grant, \$1,500. Department of Botany, UW-Madison
- 2013, The Flora Aeterna Research Grant, \$5,000. Department of Botany, UW-Madison
- 2013, First prize for excellent papers by graduate students, \$350, Hongda Zhang research fund, Sun Yat-sen University, China

- 2012, Davis Research Grant, \$1,500. Department of Botany, UW-Madison
- 2011, Second award for excellent graduate students, State Key Laboratory of Biocontrol, Sun Yat-sen University, China
- 2009, Excellent prize of presentation in English, Sun Yat-sen University, China
- 2008 2011, Education Scholarship for Graduate Student (Fellowship), Sun Yat-sen University, China
- 2008, Second Award of National Scholarship, Yunnan University, China
- 2006, 2007, Second Award of Donglu Scholarship, Yunnan University, China

Teaching Experience

- 2018 Spring, Instructor (enrollment: 76 students), Introductory Computer Programming with R, University of Florida
- 2017 August 15, Instructor, Software Carpentry Workshop, University of Florida
- 2017 August 14, Instructor, Data Carpentry Workshop, University of Florida
- 2017 May, Instructor training of Software Carpentry and Data Carpentry, University of Florida
- 2016 Fall, Guest lecturer, Multivariate Statistics for the Life Sciences, University of Florida
- 2016 January 11-12, Helper, Data Carpentry Workshop, UW-Madison
- 2014 August 25-26, Co-instructor, Software Carpentry Bootcamp, UW-Madison
- 2013 Fall, 2012 Fall, Teaching Assistant, Vegetation of Wisconsin (Bot 455), UW-Madison
- 2013 Spring, Teaching Assistant, Introductory Biology (Bio 152), UW-Madison
- 2010 Fall, Teaching Assistant, Restoration Ecology, Sun Yat-sen University, China

Undergraduate Mentoring / Research Training

- 2014, Kelly Wallin, Prepare leaf samples for leaf nutrient analysis
- 2014, David Barfknecht, Collect and measure plant functional traits
- 2014, Madeline Grupper, Prepare leaf samples for leaf nutrient analysis
- 2013, Alex Arena, Collect and measure plant functional traits, plant identification
- 2013, Anna Francke, Research project: changes in overstory structure of pine barrens in Wisconsin from 1958 to 2012

Selected Presentations

- **Daijiang Li**, 2018 March, Quantitative community ecology in an era of global change: Species, Functional Traits, and Phylogeny. *Department of Biological Science, Texas Tech University*, Lubbock, Texas (Invited Oral presentation)
- **Daijiang Li**, William B. Monahan, and Benjamin Baiser, 2017 August, Species-area and phylogenetic diversity-area relationships for native and non-native species. *102th Ecological Society of America Annual Meeting*, Portland, Oregon (Oral presentation)

- **Daijiang Li**, 2016 September, Long-term Community Dynamics of Pine Barrens in Central WI: Species, Functional Traits, and Phylogeny. *Wildlife Ecology and Conservation*, *University of Florida*, Gainesville, Florida (Invited Oral presentation)
- **Daijiang Li**, 2016 March, Long-term Community Dynamics of Pine Barrens in Central WI: Species, Functional Traits, and Phylogeny. *Department of Botany, University of Wisconsin–Madison*, Madison, Wisconsin (Oral presentation)
- Jeremy Ash, **Daijiang Li**, Sarah Johnson, David Rogers, and Donald Waller, 2015 December, Predicting species-environment relationships with functional traits for the understory flora of Wisconsin. *American Geophysical Union*, San Francisco, California (Post)
- **Daijiang Li**, Anthony Ives, Ricardo Kriebel, Ken Cameron, Ken Sytsma, Thomas Givnish, and Donald Waller, 2015 August, Pine barrens in central Wisconsin still phylogentically clustered after 54 years of fire suppression. *100th Ecological Society of America Annual Meeting*, Baltimore, Maryland (Oral presentation; won the best oral presentation award from the Vegetation section of ESA)
- **Daijiang Li**, Donald Waller, 2014 August, Increases in native, not exotic, species plus succession promote biotic homogenization in the sand plain plant communities of central Wisconsin. *99th Ecological Society of America Annual Meeting*, Sacramento, California (Oral presentation)
- **Daijiang Li**, Donald Waller, 2014 March, Long-term dynamics in pine barrens of central Wisconsin. *Wisconsin Ecology Annual Spring Symposium*, Madison, Wisconsin (Oral presentation)

Professional Service and Outreach

- 2018 present. Associate Editor: Ecology and Evolution
- Manuscript reviewer for (certified review record available at https://publons.com/a/719613/):

 Ecography, Ecological Applications, Ecology Letters, Ecoshpere, Global Ecology and Biogeography, Ibis, Journal of Applied Ecology, Journal of Ecology, Nature Scientific Reports, New Phytologist, Plos One, Science
- 2015. Ecology outreach with 3-5 year olds, "Week of the Young Child". University of Wisconsin–Madison School of Human Ecology Pre-School Lab
- 2014. Ecology outreach events at Darwin Day. University of Wisconsin–Madison
- 2013 2014. Student representative of the Biology Colloquium Committee, Botany department, University of Wisconsin–Madison
- 2013 2014. Graduate student Committee, Botany department, University of Wisconsin–Madison
- 2013 Oct. 6-11. Volunteer of the fifth world conference on ecological restoration
- 2012 2013. Department Technical Committee, Botany department, University of Wisconsin–Madison

References

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Dr. Donald. M. Waller (PhD advisor)
John T. Curtis Professor of Department of Botany
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Dr. Anthony R. Ives (Committee member, collaborator) Steenbock Professor of Department of Zoology University of Wisconsin–Madison, 430 Lincoln Drive, Madison, WI 53706 608-262-9226,

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Assistant Professor of Department of Wildlife Ecology and Conservation
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Dr. Robert Guralnick (Postdoc advisor)
Professor of Department of Biology and the Florida Museum of Natural History
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Additional references available upon request.