PETER B. ADLER
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Education

2003	PhD	Colorado State University	Ecology
1994	A.B.	Harvard College	Environmental Studies

Positions Held

2016-present	Professor, Dept. Wildland Resources, Utah State University
2012-2016	Associate professor, Dept. Wildland Resources, Utah State University
2006-2012	Assistant professor, Dept. Wildland Resources, Utah State University
2005-2006	Post-doctoral Fellow, National Center for Ecological Analysis and Synthesis (NCEAS), Santa Barbara, California
2003-2005	NSF Post-doctoral Fellow in Bioinformatics, University of California, Santa Barbara (Advisor: Jonathan Levine)

Awards and Honors

2019	Fulbright Scholar (Argentina)
2019	Fellow, Ecological Society of America
2018	Teacher of the Year, Quinney College of Natural Resources, Utah State University
2017	Clarivate Highly Cited Researcher (top 1% Ecology and Environment)
2015	Eminent Ecologist, Kellogg Biological Station, Michigan State University
2010	Researcher of the Year, College of Natural Resources, Utah State University
2010	Honor Alumnus Award, Graduate Degree Program in Ecology, Colorado State University
2000	Organization of American States, Regular Training Fellow
1998-2001	NSF Graduate Fellowship
1996	U.S. Fulbright Fellowship (Argentina)
1994	Magna cum laude, Harvard College

Teaching

Utah State University:

WILD3800: Wildland Plants and Ecosystems, Utah State University, 47-65 students, 2014-2018
WILD3800: Wildland Ecosystems, Utah State University, 29-39 students, 2007-2010, 2012, 2014
WILD6900: Ecological Dynamics and Forecasting, 13 students, 2018
WILD6770: Community Ecology, Utah State University, 3-16 students, 2007-2010, 2012, 2014-2017
WILD6900: Climate Change Vulnerability Assessment, 4 students, 2012, 2013
WILD6960: Graduate Ecology, Utah State University, guest lectured 4 contact hours, 20-30 students, 2006, 2007

Publications

108 journal articles published or in press, 1 book chapter, 2 scientific correspondences.

Citations: 9842; H-index: 45 (Google Scholar 5/16/2019)

Authorship symbols: ** undergraduate, * graduate, and † post-doctoral advisees

Biodiversity patterns

Adler, P. B., E. W. Seabloom, E. T. Borer, H. Hillebrand, Y. Hautier, A. Hector, W. S. Harpole, L. R. O'Halloran, J. B. Grace, T. M. Anderson, J. D. Bakker, L. A. Biederman, C. S. Brown, Y. M. Buckley, L. B. Calabrese, C.-J. Chu, E. E. Cleland, S. L. Collins, K. L. Cottingham, M. J. Crawley, E. I. Damschen, K. F. Davies, N. M. DeCrappeo, P. A. Fay, J. Firn, P. Frater, E. I. Gasarch, D. S. Gruner, N. Hagenah, J. Hille Ris Lambers, H. Humphries, V. L. Jin, A. D. Kay, K. P. Kirkman, J. A. Klein, J. M. H. Knops, K. J. La Pierre, J. G. Lambrinos, W. Li, A. S. MacDougall, R. L. McCulley, B. A. Melbourne, C. E. Mitchell, J. L. Moore, J. W. Morgan, B. Mortensen, J. L. Orrock, S. M. Prober, D. A. Pyke, A. C. Risch, M. Schuetz, M. D. Smith, C. J. Stevens, L. L. Sullivan, G. Wang, P. D. Wragg, J. P. Wright, and L. H. Yang. 2011. Productivity is a poor predictor of plant species richness. Science 333:1750 –1753.

Adler, P. B. 2004. Neutral models fail to reproduce observed species-time and species-area relationships in Kansas grasslands. Ecology 85: 1265-1272.

Adler, P. B. and W. K. Lauenroth. 2003. The power of time: spatiotemporal scaling of species diversity. Ecology Letters 6: 749-756.

Coexistence

Ellner, S. P., R. Snyder, **P. B. Adler** and G. Hooker. In press. An expanded modern coexistence theory for empirical applications. Ecology Letters.

Adler, **P. B.**, D. Smull*, K. H. Beard, R. T. Choi, T. Furniss, A. Kulmatiski, J. Meiners, A. T. Tredennick†, and K. E. Veblen. 2018. Competition and coexistence in plant communities: intraspecific competition is stronger than interspecific competition. Ecology Letters 21: 1319-1329.

Chu†, C. J. and **P. B. Adler**. 2015. Large niche differences emerge at the recruitment stage to stabilize grassland coexistence. Ecological Monographs 85:373–392.

Adler, P. B., S. P. Ellner and J. M. Levine. 2010. Coexistence in a perennial plant community: an embarrassment of niches. Ecology Letters 13: 1019-1029.

Adler, P. B., HilleRisLambers, J., and J. M. Levine. 2007. A niche for neutrality. Ecology Letters 10: 95-104.

Adler, P. B., HilleRisLambers, J., Kyriakidis, P., Guan, Q., and J. M. Levine. 2006. Climate variability has a stabilizing effect on coexistence of prairie grasses. Proceedings of the National Academy of Sciences 103: 12793-12798.

Ecological Forecasting

Renwick†, K., C. Curtis, A. R. Kleinhesselink, D. Schlaepfer, B. Bradley, C. Aldridge, B. Poulter, and **P. B. Adler**. 2018. Multi-model comparison highlights consistency in predicted effect of warming on a semi-arid shrub. Global Change Biology 24: 424-438.

Tredennick†, A., M. Hooten, C. Aldridge, C. Homer, A. Kleinhesselink*, and **P. B. Adler**. 2016. Forecasting climate change impacts on plant populations over large spatial extents. Ecosphere 7: e01525.

Adler, P. B., H. J. Dalgleish† and S. P. Ellner. 2012. Forecasting community impacts of climate variability and change: When do competitive interactions matter? Journal of Ecology 100: 478-487.

Functional traits

Adler, P. B., A. Fajardo, A. Kleinhesselink*, and N. J. B. Kraft. 2013. Trait-based tests of coexistence mechanisms. Ecology Letters 16: 1294-1306.

Adler, P. B., R. Salguero-Gómez, A. Compagnoni*, J. Hsu*, J. Ray-Mukherjee*, C. Mbeau-Ache, M. Franco. 2014. Functional traits explain variation in plant life history strategies. Proceedings of the National Academy of Sciences USA 111: 740-745.

Adler, P. B., D. G. Milchunas, O. E. Sala, I. C. Burke, and W. K. Lauenroth. 2005. Plant traits and ecosystem grazing effects: comparison of US sagebrush steppe and Patagonian steppe. Ecological Applications 15: 774-792.

Current and Recent Grants

Co-PI: The Wilderness Society, "Challenges and opportunities for adapting management strategies of BLM land in response to climate change." 2018-2019. PI: P. Belmont. $40,000.

Co-PI: USDA-NIFA, "Livestock ranching, rangelands, and resilience: ensuring adaptive capacity in an increasingly variable climate." 2018-2021. PI: K. Suding. $1,260,000 total, $325,000 to USU.

Co-PI: SERDP-Dept. of Defense, "Forecasting dryland ecosystem vulnerability to change: a cross-system assessment of vegetation and process responses to climate change on Department of Defense lands." 2018-2020. PI: S. Ferrenberg. $2,270,301 total, $300,000 to USU.

PI: National Science Foundation,"SG: Quantifying the contribution of plant-soil feedbacks to coexistence in a sagebrush steppe." 2017-2019. Co-author and post-doc: Anny Chung. $150,000.

Co-PI and lead author: North Central Climate Science Center, USGS, "Forecasting changes in sagebrush distribution and abundance under climate change: integration of spatial, temporal, and mechanistic models." 2015-2017. PI: Ben Poulter. $197,400 (to Montana State University).

PI: Great Basin Landscape Conservation Cooperative, USFWS, "Forecasting changes in sagebrush distribution and abundance under climate change: integration of spatial, temporal, and mechanistic models." 2015-1016. $85,000.

PI: National Science Foundation,"Collaborative Research: Integral projection models for populations in varying environments: construction and analysis." 2014-2017. Lead-PI: Stephen Ellner. $289,999 to USU.

PI: National Science Foundation, “CAREER: Forecasting the community impacts of climate change—When do species interactions matters?” 2011-2016. $710,000.

Select Professional Acctivity

Graduate and post-doctoral advising

- Andrew Felton, Post-doctoral, 2018-present
- Anny Chung, Post-doctoral, 2017-present
- Jaqueline Peña, MS, 2016-2018
- Andrew Tredennick, Post-doctoral, 2014-2018
- Danielle Smull, MS, 2014-2017
- Brittany Teller, Post-doctoral, 2014-2016.
- Andrew Kleinhesselink, PhD, 2011-2017.
- Barbara Fernandez-Going, Post-doctoral, 2013-2015.
- Chengjin Chu, Post-doctoral, 2011-2014.
- Aldo Compagnoni, PhD, 2008-2013.
- Ian Ware, MS, 2010-2012.
- Joanna Hsu, MS, 2008-2011.
- Jayanti Ray-Mukherjee, PhD (co-advised), 2006-2010.
- Luke Zachmann, MS, 2007-2010.
- Harmony Dalgleish, Post-doctoral, 2007-2009.

Professional service

- NEON Technical Working Group, Plant Diversity and Phenology (2017-present)
- President (2015-2017) and Vice president (2014-2015), Rangeland Ecology Section, Ecological Society of America
- Coordinated an organized oral session for the 2015 ESA meeting (“From Drought To Deluge: Evolutionary Lessons For Natural Resource Management In An Increasingly Variable World”)
- Coordinated a symposium for the 2015 Society of Range management annual meeting (“Climate Change Vulnerability Assessment Of Sagebrush Steppe Ecosystems”)
- Academic advisor for Rangeland Resources undergraduate majors, 2014-present
- Bureau of Land Management, Central Basin and Range REA Challenges and Opportunities report, contributing author, 2014.
- Great Basin Research and Management Partnership, Coordinating Committee, 2012-2017
- Founding member of the Nutrient Network, a globally distributed network of field experiments subsequently funded as an NSF Research Coordination Network
- Coordinated a symposium for the 2010 Society of Range Management meeting ("Climate change and potential natural vegetation")
- Associate Editor, *Ecology*, 2012-present
- Associate Editor, *Journal of Vegetation Science* 2010-2012
- Member of *Journal of Vegetation Science* Editorial Board 2007-2010
- Member: Ecological Society of America, Society for Range Management