

# Ethan White's Curriculum Vitae

## Contact

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## Education

2005 PhD Biology (with distinction), University of New Mexico

1998 BA Biology (*magna cum laude*), Colorado College

## Research and Professional Experience

2015- Associate Professor, Dept. Wildlife Ecology & Conservation, University of Florida

2012- Senior Scientist, Sevilleta Long-Term Ecological Research Station

2012-2015 Associate Professor, Dept. of Biology and Ecology Center, Utah State University

2007-2012 Assistant Professor, Dept. of Biology and Ecology Center, Utah State University

2005-2007 NSF Postdoctoral Fellow in Biological Informatics, Univ. of AZ & U.C. Merced

## Fellowships and Awards

Moore Foundation Investigator in Data-Driven Discovery 2014-2019

NSF CAREER 'Young Investigators' Award 2010-2015

NSF Postdoctoral Fellowship in Biological Informatics 2005-2007

NSF Graduate Research Fellowship 2000-2005

University of New Mexico Biocomplexity Fellowship 2002-2004

Richard G. Beidleman Award 1998 (Colorado College)

Phi Beta Kappa 1998

## Publications

Publication Impact: Impact Story, Google Scholar (citations = 2717, h-index = 26)

[OA]: The published paper is open access (or at least free to read)

[OA version]: Link to an open or free version of the paper if the published version is not open access

\*\*undergraduate, \*graduate student, +postdoc

## Journal Articles

Xiao, X.\*, J.P. O'Dwyer, and E.P. White. 2016. Comparing process-based and constraint-based approaches for modeling macroecological patterns. *Ecology* 97:1228-1238. <https://doi.org/10.1890/15-0962.1> [OA, Code, Preprint]

- Mislan, K.A.S., J.M. Heer, and E.P. White. 2016. Elevating the status of code in ecology. *Trends in Ecology and Evolution* 31: 4-7 <http://dx.doi.org/10.1016/j.tree.2015.11.006> [OA, Code, Data, Preprint]
- Xiao, X.\*, K.J. Locey\*, and E.P. White. 2015. A process-independent explanation for the general form of Taylor's Law. *American Naturalist* 186:E51-E60. <http://dx.doi.org/10.1086/682050> [OA, Code, Data, Preprint]
- White, E.P. 2015. Some thoughts on best publishing practices for scientific software. *Ideas in Ecology and Evolution* 8:55-57. <http://dx.doi.org/10.4033/iee.2015.8.9.c> [OA]
- McGlinn, D.J.+, X. Xiao\*, J. Kitzes and E.P. White. 2015. Exploring spatially explicit predictions of the Maximum Entropy Theory of Ecology. *Global Ecology and Biogeography* 24:675-684. <http://dx.doi.org/10.1111/geb.12295> [OA, Code, Preprint]
- Teal, T.K., K.A. Cranston, H. Lapp, E.P. White, G. Wilson, K. Ram, A. Pawlik. 2015. Data Carpentry: Workshops to Increase Data Literacy for Researchers. *International Journal of Digital Curation* 10:135-143. <http://dx.doi.org/10.2218/ijdc.v10i1.351> [OA]
- Xiao, X.\*, D.J. McGlinn+, and E.P. White. 2015. A strong test of the Maximum Entropy Theory of Ecology. *American Naturalist* 185:E70-E80. <http://dx.doi.org/10.1086/679576> [OA, Code, Data, Preprint]
- Wilson, G., D.A. Aruliah, C.T. Brown, N.P. Chue Hong, M. Davis, R.T. Guy, S.H.D. Haddock, K. Huff, I. Mitchell, M. Plumbley, B. Waugh, E.P. White, and P. Wilson. 2014. Best Practices for Scientific Computing. *PLOS Biology*. 12:e1001745. <http://doi.org/10.1371/journal.pbio.1001745> [OA, Preprint, *Top 1% of articles for online impact*]
- McGlinn, D.J.+, X. Xiao\*, and E.P. White. 2013. An empirical comparison of four variants of a universal species-area relationship. *PeerJ* 1:e212. <http://doi.org/10.7717/peerj.212> [OA, Code, Preprint]
- Locey, K.J.\* and E.P. White. 2013. How species richness and total abundance constrain the distribution of abundance. *Ecology Letters*. 16:1177-1185. <http://doi.org/10.1111/ele.12154> [OA version, Code]
- White, E.P., E. Baldrige\*, Z.T. Brym\*, K.J. Locey\*, D.J. McGlinn+, S.R. Supp\*. 2013. Nine simple ways to make it easier to (re)use your data. *Ideas in Ecology and Evolution* 6(2):1-10. <http://doi.org/10.4033/iee.2013.6b.6.f> [OA, Preprint, *PeerJ Pick 2014*]
- Desjardins-Proulx P., E.P. White, J.J. Adamson, K. Ram, T. Poisot, and D. Gravel. 2013. The case for open preprints in biology. *PLOS Biology* 11:e1001563. <http://doi.org/10.1371/journal.pbio.1001563> [OA, Preprint, *Featured discussion in PLOS Biology, Top 1% of articles for online impact*]
- Morris, B.D.\*\* and E.P. White. 2013. The EcoData Retriever: improving access to existing ecological data. *PLOS ONE* 8:e65848. <http://doi.org/doi:10.1371/journal.pone.0065848> [OA, Software]
- Coyle, J.R., A.H. Hurlbert, and E.P. White. 2013. Opposing mechanisms drive diversity patterns of core and occasional bird species. *American Naturalist* 181:E83-E90. <http://doi.org/10.1086/669903> [OA, Code, Data]
- Supp, S.R.\*, X. Xiao\*, S.K.M. Ernest, and E.P. White. 2012. Experimental evidence suggests that macroecological patterns are determined primarily by species richness and total abundance. *Ecology* 93:2505-2511. <http://doi.org/10.1890/12-0370.1> [OA, Code, Data, *Top 4 Articles in Ecology in year following publication*]
- White, E.P., K.M. Thibault+, and X. Xiao\*. 2012. Characterizing species-abundance distributions across taxa and ecosystems using a simple maximum entropy model. *Ecology* 93:1772-1778. <http://doi.org/10.1890/11-2177.1> [OA, Code, Data, *White and Thibault contributed equally to this work*]

- Thibault, K.M., S. Supp, M. Giffen, E.P. White, S.K.M. Ernest. 2011. Species composition and abundance of mammalian communities. *Ecology* 92:2316. <http://doi.org/10.1890/11-0262.1> [OA]
- Xiao, X., White, E.P., M.B. Hooten, and S.L. Durham. 2011. On the use of log-transformation vs. nonlinear regression for analyzing biological power-laws. *Ecology* 92: 1887-1894. <http://doi.org/10.1890/11-0538.1> [OA, Code, Data]
- Stegen, J.C., N.G. Swenson, B.J. Enquist, E.P. White, O.L. Phillips, P.M. Jorgensen, M.D. Weiser, A.M. Mendoza, and P. Nunez Vargas. 2011. Variation in above-ground forest biomass across broad climatic gradients. *Global Ecology and Biogeography* 20:744-754. <http://doi.org/10.1111/j.1466-8238.2010.00645.x>
- Locey, K.J. and E.P. White. 2011. Simple structural differences between coding and noncoding DNA. *PLOS One* 6:e14651. <http://doi.org/10.1371/journal.pone.0014651> [OA]
- Thibault, K.M., E.P. White, A.H. Hurlbert, and S.K.M. Ernest. 2011. Multimodality in the individual size distribution of bird communities. *Global Ecology and Biogeography* 20:145-153. <http://doi.org/10.1111/j.1466-8238.2010.00576.x>
- White, E.P., S.K.M. Ernest, P.B. Adler, A.H. Hurlbert, S.K. Lyons. 2010. Integrating spatial and temporal approaches to understanding species richness. *Philosophical Transactions of the Royal Society B* 365:3633-3643. <http://doi.org/10.1098/rstb.2010.0280> [OA]
- White, E.P. and A.H. Hurlbert. 2010. The combined influence of the local environment and regional enrichment on bird species richness. *American Naturalist* 172:E35-E43. <http://doi.org/10.1086/649578> [OA]
- Supp, S.R. and E.P. White. 2010. Measures of journal quality should separate reviews from original research. *Ideas in Ecology and Evolution* 3:16-19. <http://doi.org/10.4033/iee.2010.3.4.c> [OA]
- Thibault, K.M., S.K.M. Ernest, E.P. White, J.H. Brown, and J.R. Goheen. 2010. Long-term insights into the influence of precipitation on community dynamics in desert rodents. *Journal of Mammalogy* 91:787-797. <http://doi.org/10.1644/09-MAMM-S-142.1>
- Price, C.A., K. Ogle, E.P. White, and J.S. Weitz. 2009. Evaluating allometric scaling models in biology using hierarchical Bayesian approaches. *Ecology Letters* 12:641-651. <http://doi.org/10.1111/j.1461-0248.2009.01316.x> [OA]
- Ernest, S.K.M., E.P. White and J.H. Brown. 2009. Changes in a tropical forest support metabolic zero-sum dynamics. *Ecology Letters* 12:507-515. <http://doi.org/10.1111/j.1461-0248.2009.01305.x> [OA Version]
- Morlon, H., E.P. White, R.S. Etienne, J.L. Green, A. Ostling, D. Alonso, B.J. Enquist, F. He, A.H. Hurlbert, A.E. Magurran, B.A. Maurer, B.J. McGill, H. Olff, D. Storch, and T. Zillio. 2009. Taking species abundance distributions beyond individuals. *Ecology Letters* 12:488-501. <http://doi.org/10.1111/j.1461-0248.2009.01318.x> [OA Version]
- White, E.P., B.J. Enquist, and J.L. Green. 2008. On estimating the exponent of power-law frequency distributions. *Ecology* 89:905-912. <http://doi.org/10.1890/07-1288.1> [OA]
- Ernest, S.K.M., J.H. Brown, K.M. Thibault, E.P. White, and J.R. Goheen. 2008. Zero-sum dynamics, the niche, and metacommunities: a temporal perspective on community assembly. *American Naturalist* 172:E257-E269. <http://doi.org/10.1086/592402> [OA]
- Stegen, J.C. and E.P. White. 2008. On the relationship between mass and diameter distributions in tree communities. *Ecology Letters* 11:1287-1293. <http://doi.org/10.1111/j.1461-0248.2008.01242.x> [OA Version]

White, E.P., S.K.M. Ernest, A.J. Kerkhoff, and B.J. Enquist. 2007. Relationships between body size and abundance in ecology. *Trends in Ecology and Evolution* 22:323-330. <http://doi.org/10.1016/j.tree.2007.03.007> [OA Version]

Hurlbert, A.H., and E.P. White. 2007. Ecological correlates of geographic range occupancy in North American birds. *Global Ecology and Biogeography* 16:764-773. <http://doi.org/10.1111/j.1466-8238.2007.00335.x> [OA Version]

McGill, B.J., R. Etienne, J. Gray, D. Alonso, M. Anderson, H. Benecha, M. Dornelas, B.J. Enquist, J.L. Green, F. He, A.H. Hurlbert, A.E. Magurran, P. Marquet, B. Maurer, A. Ostling, C. Soykan, K. Ugland, and E.P. White. 2007. Species abundance distributions: moving beyond single prediction theories to integration within an ecological framework. *Ecology Letters* 10:995-1015. <http://doi.org/10.1111/j.1461-0248.2007.01094.x> [OA]

McClain, C.R., E.P. White, and A.H. Hurlbert. 2007. Challenges in the application of geometric constraint models. *Global Ecology and Biogeography* 16:257-264. <http://doi.org/10.1111/j.1466-8238.2007.00286.x> [OA Version]

White, E.P., and M.A. Gilchrist. 2007. Effects of population level aggregation, autocorrelation, and interspecific association on the species-time relationship in two desert communities. *Evolutionary Ecology Research* 9:1329-1347. [OA Version]

Savage, V.M., E.P. White, M.E. Moses, S.K.M. Ernest, B.J. Enquist, and E.L. Charnov. 2006. Comment on "The Illusion of Invariant Quantities in Life Histories". *Science* 312:198b. <http://doi.org/10.1126/science.1123679> [OA]

Goheen, J.R., E.P. White, S.K.M. Ernest, and J.H. Brown. 2006. Intra-guild compensation regulates species richness in desert rodents: reply. *Ecology* 87:2121-2125. [http://doi.org/10.1890/0012-9658\(2006\)87\[2121:ICRSRI\]2.0.CO;2](http://doi.org/10.1890/0012-9658(2006)87[2121:ICRSRI]2.0.CO;2) [OA Version]

White, E.P., P.B. Adler, W.K. Lauenroth, R.A. Gill, D. Greenberg, D.M. Kaufman, A. Rassweiler, J.A. Rusak, M.D. Smith, J.R. Steinbeck, R.B. Waide and J. Yao. 2006. A comparison of the species-time relationship across ecosystems and taxonomic groups. *Oikos* 112:185-195. <http://doi.org/10.1111/j.0030-1299.2006.14223.x> [OA Version, *Top 10 most cited paper in Oikos in 2006.*]

Adler, P.B., E.P. White, W.K. Lauenroth, D.M. Kaufman, A. Rassweiler, and J.A. Rusak. 2005. Evidence for a general species-time-area relationship. *Ecology* 86:2032-2039. <http://doi.org/10.1890/05-0067> [OA Version]

Goheen, J.R., E.P. White, S.K.M. Ernest, and J.H. Brown. 2005. Intra-guild compensation regulates species richness in desert rodents. *Ecology* 86:567-573. <http://doi.org/10.1890/04-1475>

Hurlbert, A.H., and E.P. White. 2005. Disparity between range map and survey based analyses of species richness: patterns, processes, and implications. *Ecology Letters* 8:319-327. <http://doi.org/10.1111/j.1461-0248.2005.00726.x>

White, E.P., S.K.M. Ernest, and K.M. Thibault. 2004. Tradeoffs in community properties through time in a desert rodent community. *American Naturalist* 164:670-676. <http://doi.org/10.1086/424766> [OA Version]

Thibault, K.M., E.P. White, and S.K.M. Ernest. 2004. Temporal dynamics in the structure and composition of a desert rodent community. *Ecology* 85:2649-2655. <http://doi.org/10.1890/04-0321>

White, E.P. 2004. Two-phase species-time relationships in North American land birds. *Ecology Letters* 7:329-336. <http://doi.org/10.1111/j.1461-0248.2004.00581.x> [OA Version]

Lyons, S.K., F.A. Smith, P.J. Wagner, E.P. White, and J.H. Brown. 2004. Was a 'hyperdisease' responsible for the late Pleistocene megafaunal extinction? *Ecology Letters* 7:859-868. <http://doi.org/10.1111/j.1461-0248.2004.00643.x>

White, E.P. 2004. Factors affecting bat house occupancy in Colorado. *The Southwestern Naturalist* 49:344-349. [http://doi.org/10.1894/0038-4909\(2004\)049<0344:FABHOI>2.0.CO;2](http://doi.org/10.1894/0038-4909(2004)049<0344:FABHOI>2.0.CO;2)

Ernest, S.K.M., B.J. Enquist, J.H. Brown, E.L. Charnov, J.F. Gillooly, V.M. Savage, E.P. White, F.A. Smith, E.A. Hadly, J.P. Haskell, S.K. Lyons, B.A. Maurer, K.J. Niklas, and B. Tiffney. 2003. Thermodynamic and metabolic effects on the scaling of production and population energy use. *Ecology Letters* 6:990-995. <http://doi.org/10.1046/j.1461-0248.2003.00526.x>

Allen, A.P., and E.P. White. 2003. Interactive effects of range size and plot area on species-area relationships. *Evolutionary Ecology Research* 5:493-499.

White, E.P., and S.D. Gehrt. 2001. Effects of recording media on echolocation data from broad band bat detectors. *Wildlife Society Bulletin* 29:974-978.

### **Book Chapters**

Brown, J.H., S.K.M. Ernest, E.P. White. 2014. Introduction to 'Macroecology before Macroecology'. Pages 13-16 in F.A. Smith, J.L. Gittleman, and J.H. Brown, eds. *Foundations of Macroecology*, University of Chicago Press.

White, E.P. 2014. Commentary on Arrhenius (1920). Page 17 in F.A. Smith, J.L. Gittleman, and J.H. Brown, eds. *Foundations of Macroecology*, University of Chicago Press.

White, E.P. 2014. Commentary on Fisher et al. (1943). Page 24 in F.A. Smith, J.L. Gittleman, and J.H. Brown, eds. *Foundations of Macroecology*, University of Chicago Press.

White, E.P., X. Xiao\*, N.J.B. Isaac, and R.M. Sibly. 2012. Methodological tools. Pages 9-20 in J.H. Brown, R.M. Sibly, and A. Kodric-Brown, editors. *Metabolic Ecology*. Wiley-Blackwell. [OA Version]

White, E.P. 2007. Spatiotemporal scaling of species richness: patterns, processes and implications. Pages 325-346 in D. Storch, P.A. Marquet, and J.H. Brown, editors. *Scaling Biodiversity*. Cambridge University Press.

White, E.P., and J.H. Brown. 2005. The template: patterns and processes of spatial variation. Pages 31-47 in G.M. Lovett, C.G. Jones, M.G. Turner and K.C. Weathers, editors. *Ecosystem Function in Heterogeneous Landscapes*. Springer, New York.

Sax, D.F., J.H. Brown, E.P. White, and S.D. Gaines. 2005. Dynamics of species invasions: Insights into the mechanisms that limit species diversity. Pages 447-465 in D.F. Sax, S.D. Gaines, and J.J. Stachowicz, editors. *Species Invasions: Insights to Ecology, Evolution and Biogeography*. Sinauer Associates, Sunderland, MA.

### **Preprints (not yet formally published)**

Baldrige, E.\*, X. Xiao\*, E.P. White. 2015. An extensive comparison of species-abundance distribution models. *bioRxiv* doi: <http://dx.doi.org/10.1101/024802>

## Other publications

White E.P. 2016. Data Management Plan for Moore Investigator in Data Driven Discovery Grant. Research Ideas and Outcomes 2: e10708. <https://doi.org/10.3897/rio.2.e10708>

## Grants and Contracts

Moore Foundation. Investigator in Data-Driven Discovery. PI: E.P. White. 2014-2019. <http://dx.doi.org/10.6084/m9.figshare.1189330>

National Institute of Standards and Technology (NIST). Data Science for Multimodal Plant Identification Task. PIs: Z. Wang and E.P. White. Co PIs: S. Bohlman and P. Grader. 2016-2017.

University of Florida Creative Campus Catalyst Fund. Turning Scientific Data Into Digital SoundScapes. PIs: E.M. Bruna, J.C. Oliverio, and E.P. White. 2015-2016.

National Science Foundation (DEB-1354563). SG: Distinguishing between core and transient species: new insights into the determinants of species richness. PIs: A.H. Hurlbert and E.P. White. 2014-2017.

National Science Foundation (DEB-0953694). CAREER: Advancing macroecology using informatics and entropy maximization. PI: E.P. White. 2010-2016. <http://doi.org/10.6084/m9.figshare.93937>

Amazon Web Services (AWS in Education Research Grant). Synthesizing molecular and ecological neutral theories via genome based simulation. PIs: E.P. White and K.J. Locey. 2011-2013.

National Ecological Observatory Network. Existing terrestrial organismal data survey and secure database interface development. PI: E.P. White. 2012.

National Science Foundation (DEB-0827826). Understanding multimodality in animal size distributions (Research Starter Grant). PI: E.P. White. 2008-2010. <http://doi.org/10.6084/m9.figshare.93939>

National Science Foundation (DBI-0532847). Broad-scale patterns of the distribution of body sizes of individuals in ecological communities (Postdoctoral Fellowship in Biological Informatics). PI: E.P. White. 2005-2007. <http://doi.org/10.6084/m9.figshare.93938>

LTER Network Office workshop grant. Species richness in space and time workshop. PIs: W.K. Lauenroth, E.P. White and P.B. Adler. 2004.

## Software

Software Impact: Impact Story

X. Xiao, K.M. Thibault, D.J. Harris, E. Baldrige, and E.P. White. 2016-present. macroecotools: v0.3. Zenodo. <https://doi.org/10.5281/zenodo.60207>

White, E.P., K.M. Thibault, X. Xiao, D.J. McGlinn and S. Supp. 2014-present. METE - Software for Analyzing the Maximum Entropy Theory of Ecology. figshare. <https://dx.doi.org/10.6084/m9.figshare.815905.v4> [GitHub]

Morris, B.D. and E.P. White. 2013-present. EcoData Retriever: tool for easy acquisition of public ecological datasets. By B.D. Morris and E.P. White. <https://github.com/weecology/retriever>

## Invited Seminars

Talk Impact: Impact Story

“Hot Climate Small Animals? A Data Package Manager & Juggling”. Moore Investigators Symposium. October 27th, 2016. New York University. [Slides]

“Data-intensive forecasting of ecological systems”. University of Wyoming 2015/2016 Botany Distinguished Speaker. May 5th, 2016. University of Wyoming. [Slides]

“Data-intensive forecasting of ecological systems”. Moore Investigators Symposium. October 8th, 2015. University of Washington. [Slides]

“On success and working openly in science”. July 7th, 2015. OpenCon Community Webcast. [Video, Slides]

“The value of data-intensive approaches in ecology”. December 4th, 2014. University of Nebraska. [Slides]

“Mechanism, theory, data, and prediction in ecology”. July 22nd, 2014. Gordon Research Conference on Unifying Ecology Across Scale. [Slides]

“The value of data-intensive approaches in ecology”. April 4th, 2014. University of Victoria. [Slides]

“The value of data-intensive approaches in ecology”. February 25th, 2014. University of Florida. [Slides, Video]

“Evaluating a general theory of macroecology”. September 18th, 2013. National Evolutionary Synthesis Center. Duke University. [Slides]

“Evaluating a general theory of macroecology” September 12th, 2013. University of North Carolina, Chapel Hill. [Slides]

“Evaluating a general theory of macroecology” July 10th, 2013. Keynote for the British Ecological Society’s Macroecology Special Interest Group Annual Meeting. [Slides]

“Evaluating a general theory of macroecology using big(ish) data” February 8th, 2013. Michigan State University. [Slides]

“Evaluating a general theory of macroecology using big(ish) data” February 4th, 2013. University of British Columbia. [Slides]

“Frontiers of Macroecological Theory in Three Acts” February 1st, 2013. University of California Berkeley workshop on Frontiers of Macroecological Theory. [Slides]

“A MaxEnt theory for macroecology?” July 25th, 2012. Gordon Research Conference on the Metabolic Basis of Ecology. [Slides]

“Building a bigger macroscope”. June 9th, 2012. University of New Mexico. [Video]

“Understanding ecology at broad scales: macroecology, maximum entropy, and environmental informatics”. February 11th, 2011. University of Maryland.

“Understanding ecology at broad scales using macroecology and ecoinformatics”. March 30th, 2010. University of Wyoming.

“A metabolic zero-sum approach to community ecology?”. March 28th, 2008. Keynote speaker at 21st Annual Colorado College Biology Day, Colorado Springs, Colorado.

## **Invited Workshops, Symposia, Panels, and Working Groups**

- “Moore Investigators in Data-Driven Discovery Symposium”. New York University. 2016. Organizers: Chris Mentzel, Carly Strasser, and Natalie Caulk.
- “Lab Carpentry”. New York University. 2016. Organizers: Casey Greene, Titus Brown, Blair Sullivan. Matt Turk.
- “Mozilla Science Lab Global Sprint”. 2016. Internet. Organizer: Abby Cabunoc Mayes.
- “School of Natural Resources and Environment Publishing Panel”. University of Florida. 2016. Organizer: Richard Tate.
- “Biodiversity Symposium”. 2016. University of Florida. Organizers: UF Office of Sustainability and the UF Biodiversity Institute.
- “Moore Investigators in Data-Driven Discovery Symposium”. University of Washington. 2015. Organizers: Chris Mentzel and Carly Strasser.
- “Moore Data-Driven Discovery Training Club”. University of California, Davis. Organizers: Tracy Teal, Titus Brown, Matthew Turk, Ethan White
- “Ignite Session: Constraints in Ecology”. 98th Annual Meeting of the Ecological Society of America. Organizers: Elita Baldrige and Ethan P. White. [Schedule]
- “Israeli-American Kavli Frontiers of Science Symposium”. University of California Irvine. 2013. Irvine, CA. Organizers: National Academy of Sciences.
- “Frontiers of Macroecological Theory”. University of California Berkeley. 2013. Berkeley, CA. Organizers: John Harte.
- “Synthesizing Deep Time and Recent Community Ecology”. Smithsonian National Museum of Natural History Working Group. 2010-2011. Washington D.C. Organizers: A.K. Behrensmeyer, S.K. Lyons, and W.A. DiMichele.
- “Tools and fresh approaches for species abundance distributions”. National Center for Ecological Analysis and Synthesis Working Group. 2006-2008. Santa Barbara, CA. Organizers: B. McGill, R.S. Etienne, J.S. Gray, and J.L. Green.
- “Scaling Biodiversity”. Santa Fe Institute Workshop. 2004. Prague. (Invited Talk and Participant). Organizers: D. Storch, P.A. Marquet, J.H. Brown, and G.B. West.
- “Species richness in space and time”. LTER sponsored working group. 2004. Albuquerque, NM. Organizers: W.K. Lauenroth, E.P. White, and P.B. Adler.
- “Species richness in space and time”. LTER All Scientists Meeting Workshop. 2003. Seattle, WA. (Invited Talk and Participant). Organizer: W.K. Lauenroth.
- “A Knowledge Network for Biocomplexity”. National Center for Ecological Analysis and Synthesis Working Group. 2001. Organizers: R.Waide, S. Andelman, M.R. Willig.



## **Professional and Community Service**

### **Grant Panels and Reviewing**

National Science Foundation Panelist (2009, 2012)

Review of grant applications for NSF (United States), NSERC (Canada), NRF (South Africa), rOpenSci

### **Board Memberships & Affiliations**

Data Carpentry, Steering Committee (2015-present)

Impactstory, Board of Directors (2014-present)

Public Library of Science, Data Guidelines Board (2015-present)

University of Florida Biodiversity Institute, Advisory Board (2015-present)

Software Carpentry Foundation, Advisory Council (2015-present)

Hypothesis, User Advisory Team (2015-present)

Data Carpentry, Board of Directors (2014-2015)

Software Carpentry, Advisory Board (2012-2014)

### **Editorial Boards**

PeerJ (2012-present)

PLoS ONE (2011-2015)

### **Manuscript Reviewing**

Science, Nature, PNAS, PLOS Biology, Proceedings of the Royal Society B, Ecology, Ecology Letters, American Naturalist, Global Ecology and Biogeography, Journal of Animal Ecology, Journal of Ecology, Oikos, Frontiers in Ecology and the Environment, PLOS One, Bioscience, Bulletin of Mathematical Biology, Functional Ecology, Journal of Biogeography, Journal of Theoretical Biology, Theoretical Population Biology, Cambridge University Press, Acta Oecologica, Folia Geobotanica, Research Letters in Ecology, Geological Society of America

External examiner of Ph.D. Theses: Macquarie University (2008)

### **University Service**

Seminar Committee, Department of Wildlife Ecology and Conservation, University of Florida (2016-2017)

Biodiversity Symposium Participant, University of Florida (2016)

Commencement Marshal, University of Florida (2015)

Advisory Board Member for Biodiversity Institute, University of Florida (2015-present)

Promotion and tenure committees (member), Utah State University (2012-2014)

Adjunct appointment committee (chair), Utah State University (2011)

Faculty search committee (member), Utah State University (2011)

Staff search committee (member), Utah State University (2011)

## **Teaching**

### **Courses Taught**

Data Carpentry for Biologists (2015-present)  
Advanced Programming and Database Management for Biologists (2011-2014)  
Introduction to Programming and Database Management for Biologists (2010-2014)  
Maximum Entropy in Ecology (2011)  
Neutral Theories in Ecology (2010)  
Biogeography (2008, 2009)

### **Workshops run (organized and/or taught)**

Data Carpentry, University of Florida, October 17-18 2016  
Software Carpentry, University of Florida, August 17-18 2016  
Software Carpentry, University of North Carolina, April 11-12 2016  
Software Carpentry, University of Florida, March 23-24 2016  
Software Carpentry, Utah State University, March 2015  
Introduction to Git and Github, Gordon Research Conference on Unifying Ecology Across Scales, July 2014  
Data Carpentry, National Evolutionary Synthesis Center at Duke University, May 2014  
Introduction to Git and Github, Gordon Research Conference on Unifying Ecology Across Scale, July 2014  
Introduction to Git and GitHub, University of North Carolina, April 2014  
Software Carpentry, University of Victoria, April 2014  
Software Carpentry, Ecological Society of American Annual Meeting, August 2013  
Software Carpentry, CUAHSI Water Data Center, July 2013  
Software Carpentry, Utah State University, March 2013  
Software Carpentry, University of British Columbia, February 2013  
Software Carpentry, University of North Carolina, October 2012  
Software Carpentry, Utah State University, April 2012

## **Research Mentoring**

### **Postdoctoral Associates**

Katherine Thibault (2008-2011)

- After finishing: Vertebrate Ecologist at National Ecological Observatory Network
- Currently: Senior Staff Scientist at National Ecological Observatory Network

Daniel McGlinn (2011-2014)

- After finishing: Assistant Professor at the College of Charleston
- Currently: Assistant Professor at the College of Charleston

David Harris (2015-present)

- Moore Data Fellow

## **Graduate Students**

Kenneth Locey (PhD; 2008-2013)

- Utah State University Eccles Fellow
- After graduating: Postdoctoral researcher at Indiana University.
- Currently: Postdoctoral researcher at Indiana University.

Xiao Xiao (PhD; 2008-2014)

- Utah State University Diversity Fellow
- After graduating: Postdoctoral research at University of Maine
- Currently: Postdoctoral research at University of Maine

Elita Baldrige (PhD; 2010-2015)

- Utah State University Dissertation Fellowship recipient
- After graduating: Independent scientist
- Currently: Retired due to chronic illness

Kristina Riemer (PhD; 2013-present)

Sergio Marconi (PhD; 2015-present)

- Fulbright Fellow

Shawn Taylor (PhD; 2015-present)

## **Undergraduate Researchers**

Mikaelle Giffen (2008-2009)

- After graduating: Research Assistant at Quansys Biosciences
- Currently: Biologist I at Fresenius Medical Care

Clayton Bingham (2009-2010)

- After graduating: Founded a startup - LitRoost
- Currently: Senior Data Engineering and Analytics Consultant at Rouse Services and a graduate student at the University of Southern California

Ben Morris (2010-2012)

- NSF Research Experience for Undergraduates student
- After graduating: PhD Student at University of North Carolina; awarded an NSF Graduate Research Fellowship
- Currently: Senior Software Engineer at Machine Zone

Kari Norman (2014-2016)

- Utah State Honors Thesis
- After graduating: PhD student at UC Berkeley
- Currently: PhD student at UC Berkeley

Akash Goel (2016)

- Google Summer of Code student
- After graduating: Software developer at Amazon.
- Currently: After graduating: Software developer at Amazon

## **Graduate Student Committees**

Lauren Gonzalez (PhD), Philippe Desjardins-Proulx (PhD), Erica Christensen (PhD), Martin Schilling (PhD), Zachary Brym (PhD), Jonathan Cardwell (PhD), Amy Croft (PhD), Jonathan Koch (PhD), Peter Mahoney (PhD), Sarah Supp (PhD, 2013, Utah State University), Lori Neuman-Lee (PhD), Daniel Olson (PhD), Gregory Vogel (PhD), Glenda Yenni (PhD, 2013, Utah State University), Chris Feldman (PhD, 2008, Utah State University), Ryan Choi (MS, 2011, Utah State University), Bridget Olson (MS, 2011, Utah State University), Lori Spears (PhD, 2011, Utah State University)

## **Software Development Mentoring**

### **Google Summer of Code**

Organization Administrator for NumFocus umbrella organization. 2015. Helped develop proposal for new NumFocus Google Summer of Code organization and helped run the organization during 2015.

Mentor. 2016. Mentored a Google Summer of Code student, Akash Goel, working on the Data Retriever software project. This student is now a software developer at Amazon.

## **Presentations**

Talk Impact: Impact Story

\*\*undergraduate, \*graduate student, +postdoc

\*Taylor, S., and E.P. White. 2016. Ecological forecasting and scale. Gordon Research Conference on Unifying Ecology Across Scale.

\*Marconi, S., and E.P. White. 2016. Scaling up competition for light from leaf to ecosystem: a new framework to represent intra-crown plasticity for evergreen species. Gordon Research Conference on Unifying Ecology Across Scale.

\*Riemer, K., and E.P. White. 2016. Questioning body size change as a response to climate warming. Gordon Research Conference on Unifying Ecology Across Scale.

White, E.P. 2016. Forecasting in Macroecology. NEON workshop on Operationalizing Ecological Forecasts. USGS Powell Center.

White, E.P. 2015. Data-intensive forecasting of ecological systems. Moore Investigators in Data-Driven Discovery Symposium. University of Washington. [Slides]

White, E.P. 2015. Facilitating data-intensive research in ecology. 100th Annual Meeting of the Ecological Society of America. Baltimore, MD. [Slides, *Invited*]

White, E.P. 2015. Comparing snapshot methods, time series analysis, and simple bench marks for forecasting biodiversity. 100th Annual Meeting of the Ecological Society of America. Baltimore, MD. [Slides, *Invited*]

Hurlbert, A.H., E.P. White, and B. Evans. 2015. Core versus transient species as a general framework for thinking about ecological assemblages. 100th Annual Meeting of the Ecological Society of America. Baltimore, MD. [Slides]

Baldrige, E. and E.P. White. 2015. Ecologist in silico: Facilitating access for chronically ill/disabled ecologists. 100th Annual Meeting of the Ecological Society of America. Baltimore, MD. [Slides]

Norman, K.\*\* and E.P. White. 2015. Biodiversity prioritization: A comparison of data types. 100th Annual Meeting of the Ecological Society of America. Baltimore, MD.

White, E.P., X. Xiao\*, K.M. Thibault, D.J. McGlinn+, J.A. Kitzes. 2013. Evaluating a general theory of macroecology using big data. 98th Annual Meeting of the Ecological Society of America. Minneapolis, MN. [Slides]

White, E.P. 2013. Big data in ecology. 98th Annual Meeting of the Ecological Society of America. Minneapolis, MN. [Slides], [Full Talk w/Slides & Script, *Invited*]

Locey, K.J.\*, and E.P. White. 2013. How species richness and total abundance constrain the distribution of abundance. 98th Annual Meeting of the Ecological Society of America. Minneapolis, MN. [Slides]

McGlinn, D.J.+ and E.P. White. 2013. Connecting the environment to a maximum entropy prediction of the species-abundance distribution across continents and taxa. 98th Annual Meeting of the Ecological Society of America. Minneapolis, MN. [Slides]

White, E.P., X. Xiao\*, D.J. McGlinn+, K.M. Thibault. 2013. Evaluating and using general theories in ecology. Israeli-American Kavli Frontiers of Science Symposium. University of California Irvine. 2013. Irvine, CA. <http://doi.org/10.6084/m9.figshare.719779>

Wolf, P.G., K.E. Mock, E.P. White, H.S. Rai, and B.A. Richardson. 2013. Genotyping-by-Sequencing (GBS) for Population Genomics of Aspen (*Populus tremuloides*). Plant & Animal Genome XXI. San Diego, CA.

Xiao, X.\* and E.P. White. 2012. The adequate currency for community-level energetic constraint based on Maximum Entropy. 97th Annual Meeting of the Ecological Society of America. Austin, TX.

McGlinn, D.+, X. Xiao\*, J. Kitzes, and E.P. White. 2012. Testing the Spatial Predictions of the Maximum Entropy Theory of Ecology. Gordon Research Conference on the Metabolic Basis of Ecology.

Xiao, X.\* and E.P. White. 2012. Testing the individual- and species- level energy distributions of the Maximum Entropy Theory of Ecology (METE). Gordon Research Conference on the Metabolic Basis of Ecology.

E.P. White, B. Morris\*\*, S.K. Morgan Ernest, K.M. Thibault†, A.H. Hurlbert, A.J. Kerkhoff, Z.T. Brym\*. 95th Annual Meeting of the Ecological Society of America. Austin, TX.

J.R. Coyle, A.H. Hurlbert, E.P. White. 95th Annual Meeting of the Ecological Society of America. Austin, TX.

K.M. Thibault+, E.P. White, X. Xiao\*. 95th Annual Meeting of the Ecological Society of America. Austin, TX.

S.R. Supp, X. Xiao\*, S.K.M. Ernest, E.P. White. 95th Annual Meeting of the Ecological Society of America. Austin, TX.

A.H. Hurlbert, Thibault, K.M., E.P. White, and S.K.M. Ernest. 2010. 94th Annual Meeting of the Ecological Society of America. Pittsburgh, PA.

Xiao, X., E.P. White, M. Hooten, and S. Durham. 2010. Gordon Research Conference - Metabolic Basis of Ecology and Evolution, Biddeford, Maine.

A.H. Hurlbert, Thibault, K.M., E.P. White, and S.K.M. Ernest. 2010. Gordon Research Conference – Metabolic Basis of Ecology and Evolution, Biddeford, Maine.

Thibault, K.M., E.P. White, A.H. Hurlbert, and S.K.M. Ernest. 2009. 93rd Annual Meeting of the Ecological Society of America. Albuquerque, NM.

White, E.P., B.J. Enquist, J.C. Stegen, S.C. Stark, and C.A. Price. 2008. 92nd Annual Meeting of the Ecological Society of America. Milwaukee, WI.

Price, C.A., E.P. White, J.S. Weitz, and K. Ogle. 92nd Annual Meeting of the Ecological Society of America. Milwaukee, WI.

Ernest, S.K.M, E.P. White, and J.H. Brown. 2008. 92nd Annual Meeting of the Ecological Society of America. Milwaukee, WI.

White, E.P., B.J. Enquist, J.C. Stegen, S.C. Stark, and C.A. Price. 2008. Gordon Research Conference - Metabolic Basis of Ecology, Biddeford, Maine.

Ernest, S.K.M, E.P. White, and J.H. Brown. 2008. Gordon Research Conference – Metabolic Basis of Ecology, Biddeford, Maine.

White, E.P., A.H. Hurlbert, and S.K.M. Ernest. 2007. Macroecology of avian size distributions. 92nd Annual Meeting of the Ecological Society of America. San Jose, CA.

Ernest, S.K.M, J.H. Brown, J.R. Goheen, K.M. Thibault, and E.P. White. 2007. 87th Annual Meeting of the American Society of Mammalogists. Albuquerque, NM.

White, E.P., B.J. Enquist, S.K.M. Ernest, and J.L. Green. 2006. 91st Annual Meeting of the Ecological Society of America. Memphis, TN.

Ernest, S.K.M, J.H. Brown, J.R. Goheen, K.M. Thibault, and E.P. White. 2006. 91st Annual Meeting of the Ecological Society of America. Memphis, TN.

White, E.P., B.J. Enquist, S.K.M. Ernest, and J.L. Green. 2006. Gordon Research Conference - The Metabolic Basis of Ecology and Evolution. Lewiston, Maine.

Ernest, S.K.M, J.H. Brown, J.R. Goheen, K.M. Thibault, and E.P. White. 2006. Gordon Research Conference - The Metabolic Basis of Ecology and Evolution. Lewiston, Maine.

White, E.P., and M.A. Gilchrist. 2005. 90th Annual Meeting of the Ecological Society of America. Montreal, Canada.

Hurlbert, A.H., and E.P. White. 2005. 90th Annual Meeting of the Ecological Society of America. Montreal, Canada.

Goheen, J.R., E.P. White, S.K.M. Ernest, J.H. Brown, J.F. Merritt, P.L. Meserve, N.A. Slade. 2005. International Biogeography Society Meeting.

Hurlbert, A.H., and E.P. White. 2005. International Biogeography Society Meeting.

White, E.P. 2004. Santa Fe Institute Scaling Biodiversity Workshop. Prague, Czech Republic.

Hurlbert, A.H., and E.P. White. 2004. Southwestern Association of Biologists Annual Meeting. Portal, AZ.

Lyons, S.K., F.A. Smith, P.J. Wagner, E.P. White, and J.H. Brown. 2004. Geological Society of America's Annual Meeting. Denver, CO.

White, E.P, S.K.M. Ernest, and K.M. Thibault. 2004. 89th Annual Meeting of the Ecological Society of America. Portland, OR.

Thibault, K.M., E.P. White, and S.K.M. Ernest. 2004. 89th Annual Meeting of the Ecological Society of America. Portland, OR.

White, E.P., S.K.M. Ernest, and K.M. Thibault. 2004. Gordon Research Conference – Metabolic basis of ecology. Bates College, ME.

Lyons, S.K., F.A. Smith, E.P. White, and J.H. Brown. 2004. American Society of Mammalogists Annual Meeting. Humbolt State University, CA.

White, E. P. 2003. Southwestern Association of Biologists Annual Meeting, Portal, AZ.

White, E. P. 2003. LTER All Scientists Meeting, Seattle, WA.

White, E. P. 2003. 88th Annual Meeting of the Ecological Society of America, Savannah, GA.

Brown, J. H., and E. P. White. 2003. Cary Conference, Millbrook, NY.

White, E. P. 2003. International Society of Biogeography Meeting, Mesquite, NV.

White, E. P. 2002. Southwestern Association of Biologists Annual Meeting, Portal, AZ.

Meehan, T. D., and E. P. White. 2002. Southwestern Association of Biologists Annual Meeting, Portal, AZ.

White, E. P. 2002. 87th Annual Meeting of the Ecological Society of America, Tucson, AZ.

White, E. P. 2002. British Ecological Society's Macroecology Conference, Birmingham, England.

White, E. P. 1998. Guild of Rocky Mountain Population Biologists Annual Meeting, Nederland, CO.

White, E. P. 1997. North American Symposium on Bat Research, University of Arizona, Tucson, AZ.