Ethan White's Curriculum Vitae

Contact

Email: ethanwhite@ufl.edu Twitter: @ethanwhite Website: ethanwhite.org

Mail: Department of Wildlife Ecology & Conservation, University of Florida, 110 Newins-Ziegler Hall, PO

Box 110430, Gainesville, FL 32603

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 = 2431, h-index = 25)

[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.*, K.J. Locey*, E.P. White. 2015. A process-independent explanation for the general form of Taylor's Law. American Naturalist. 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. Baldridge*, 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 [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

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. Sibley, 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)

Xiao, X.*, J.P. O'Dwyer, E.P. White. 2015. Comparing process-based and constraint-based approaches for modeling macroecological patterns. arXiv:1502.02767

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

Mislan, K.A.S., J.M. Heer, E.P. White. 2015. Elevating the status of code in ecology. bioRxiv doi: http://dx.doi.org/10.1101/027110

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

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. Pls: A.H. Hurlbert and E.P.White. 2014-2016.

National Science Foundation (DEB-0953694). CAREER: Advancing macroecology using informatics and entropy maximization. PI: E.P. White. 2010-2015. 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

EcoData Retriever: tool for easy acquisition of public ecological datasets. By B.D. Morris and E.P. White. https://github.com/weecology/retriever [Highly recommended and highly cited, latest release downloaded over 250 times]

METE: Python-based tool for fitting and modeling the Maximum Entropy Theory of Ecology. By E.P. White, K.M. Thibault, X. Xiao, D.J. McGlinn and S. Supp. https://github.com/weecology/METE [Highly recommended]

Invited Seminars

Talk Impact: Impact Story

"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, and Working Groups

- "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 Baldridge 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), and NRF (South Africa)

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

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

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). Lead Vertebrate Ecologist at NEON.

Daniel McGlinn (2011-2014). Starting as an Assistant Professor at the College of Charleston in Fall 2014.

Graduate Students

Kenneth Locey (PhD; 2008-2013). Postdoctoral researcher at Indiana University.

Xiao Xiao (PhD; 2008-2014). Postdoctoral research at University of Maine. USU College of Science Diversity Fellow.

Elita Baldridge (PhD; 2010-2015). Independent scientist.

Kristina Riemer (PhD; 2013-present) Sergio Marconi (PhD; 2015-present) Shawn Taylor (PhD; 2015-present)

Undergraduate Researchers

Ben Morris (2010-2012; NSF REU Summer 2011, Awarded an NSF Graduate Research Fellowship). Data Platform Engineer at Machine Zone, Inc.

Clayton Bingham (2009-2010). Graduate student at Univ. of Southern California.

Mikaelle Giffen (2008-2009)

Graduate Student Committees

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)

Presentations

Talk Impact: Impact Story

*undergraduate, *graduate student, +postdoc

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]

Baldridge, 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.