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EDUCATION

- 2014 Ph.D. in Ecology, University of North Carolina at Chapel Hill, “Community assembly and vegetation patterns across space and time in the longleaf pine ecosystem” (advisors: Robert Peet & Alan Weakley)
2006 B.S. in Biology, Environmental Studies minor, magna cum laude, College of Charleston

PROFESSIONAL EMPLOYMENT

- June 2014 - Present: Postdoctoral Research Associate at the University of Wyoming, Laramie, WY (advisors: William Lauenroth & John Bradford)
August - December 2016: Instructor at the University of Wyoming, Laramie, WY
Instructor of record – Ecosystem Ecology
August - December 2015: Instructor at the University of Wyoming, Laramie, WY
Instructor of record – Vegetation Ecology Lab
January - May 2014: Adjunct Instructor at High Point University, High Point, NC
Instructor of record – Introduction to Biology and Environmental Science Labs

PUBLICATIONS

Peer-reviewed Publications (14 papers since 2014)

- In Press Rottler, C.M., I.C. Burke, **K.A. Palmquist**, J.B. Bradford & W.K. Lauenroth. Reclamation after oil and gas development does not speed up succession or plant community recovery in big sagebrush ecosystems in Wyoming. *Restoration Ecology*.
In Press Peet, R.K., **K.A. Palmquist**, T.R. Wentworth, M.P. Schafale, A.S. Weakley & M.T. Lee. Carolina Vegetation Survey: an initiative to improve regional implementation of the U.S. National Vegetation Classification. *Phytocoenologia* (*invited paper*).
2017 Pennington, V.E., **K.A. Palmquist**, J.B. Bradford & W.K. Lauenroth. Climate and soil texture influence patterns of forb species richness and composition in big sagebrush plant communities across their spatial extent in the western US. *Plant Ecology*. doi: [10.1007/s11258-017-0743-9](https://doi.org/10.1007/s11258-017-0743-9).
2016 **Palmquist, K.A.**, D.R. Schlaepfer, J.B. Bradford & W.K. Lauenroth. Spatial and ecological variation in dryland ecohydrological response to climate change: Implications for management. *Ecosphere* 7(11): 1-20.
2016 Pennington, V.E., D.R. Schlaepfer, J.L. Beck, J.B. Bradford, **K.A. Palmquist** & W.K. Lauenroth. Sagebrush, greater sage-grouse, and the occurrence and importance of forbs. *Western North American Naturalist* 76(3): 298-312.

- 2016 **Palmquist, K.A.**, D.R. Schlaepfer, J.B. Bradford & W.K. Lauenroth. Mid-latitude shrub steppe plant communities: Climate change consequences for soil water resources. Ecology 97(9): 2342-2354.
- 2016 Lopez, B.L., K.R. Burgio, M.B. Carlucci, **K.A. Palmquist**, A. Parada, V.P. Weinberger & A.H. Hulbert. A new framework for inferring community assembly processes using phylogenetic information, relevant traits and environmental gradients. One Ecosystem 1 (e9501): 1-24.
- 2016 Tessel, S.M., **K.A. Palmquist** & R.K. Peet. Species-Area Relationships. In Oxford Bibliographies Online: Ecology. Ed. David Gibson. New York: Oxford University Press.
- 2016 **Palmquist, K.A.**, R. K. Peet & S.C. Carr. Xeric longleaf pine vegetation of the Atlantic and East Gulf Coast Coastal Plain: an evaluation and revision of Associations within the U.S. National Vegetation Classification. Proceedings of the US National Vegetation Classification 1(1): 1-70.
- 2015 Mitchell, S.M, **K.A. Palmquist**, S. Cohen & N.L. Christensen. Patterns of vegetation composition and diversity in pine-dominated ecosystems of the lower Coastal Plain of North Carolina: Implications for ecosystem restoration. Forest Ecology and Management 356: 64-73.
- 2015 Martyn, T., C.W. Beltz, **K.A. Palmquist**, V.E. Pennington, C.M. Rottler & W.K. Lauenroth. Daubenmire versus line-point intercept: a response to Thacker et al. (2015). Rangelands 37(4): 158-160.
- 2015 **Palmquist, K.A.**, R.K. Peet & S.R. Mitchell. Scale-dependent responses of longleaf pine vegetation to fire frequency and environmental context across two decades. Journal of Ecology 103: 998-1008.
- 2014 **Palmquist, K.A.**, R.K. Peet & A.S. Weakley. Reduced fire frequency and long-term drought drive species loss in one of the most species-rich longleaf pine savannas in the United States. Journal of Vegetation Science 25: 1426-1437.
- 2014 Coyle, J.R., F.W. Halliday, B.E. Lopez, **K.A. Palmquist**, P.A. Wilfahrt & A.H. Hurlbert. Using trait and phylogenetic diversity to evaluate the generality of the stress-dominance hypothesis in eastern North American tree communities. Ecography 37: 1-13.

Book Chapters

- 2014 Peet, R.K., **K.A. Palmquist** & S.M. Tessel. Herbaceous layer species richness of southeastern forests and woodlands: patterns and causes. In: F.S. Gilliam, ed. *The herbaceous layer in forests of Eastern North America*, Chapter 10, Second edition. Oxford University Press, New York, New York. Pages 255-276.

Technical Reports

- In Press Reeves, M.C., M.E. Manning, J.P. DiBenedetto, **K.A. Palmquist**, W.K. Lauenroth, J.B. Bradford, & D.R. Schlaepfer. 2017. Chapter 7: Effects of climate change on rangeland vegetation. Pg 287-322. In: Halofsky, J.E.; Peterson, D.L.; Dante-Wood, S.K.; Hoang, L.; Ho, J.J.; Joyce, L.A., editors. 2016. Climate change vulnerability and adaptation in the

Northern Rocky Mountains. Gen. Tech. Rep. RMRS-GTR-xxx. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station.

Manuscripts in Review and in Preparation

Palmquist, K.A., T.E. Martyn, D.R. Schlaepfer, J.B. Bradford & W.K. Lauenroth. STEPWAT – a modeling framework for exploring the joint influence of climate change and altered disturbance regimes on dryland plant communities (*in prep*). Target journal: Ecological Modelling.

Palmquist, K.A., R.K. Peet, A.S. Weakley & S.C. Carr. Species richness patterns are shaped by multiple ecological processes across latitude in the longleaf pine ecosystem (*in prep*). Target journal: Global Ecology and Biogeography.

Palmquist, K.A., D.R. Schlaepfer, J.B. Bradford, and W.K. Lauenroth. Understanding the joint influence of climate change and altered disturbance regimes on big sagebrush plant communities rangewide (*in prep*). Target journal: Ecology.

GRANTS AND FELLOWSHIPS (\$291,271)

2016	WWISE travel grant, Wyoming-EPSCoR, University of Wyoming	\$1,000
2015	University of Basel, Switzerland, “Albedo modification impact on global temperate dryland ecosystem water balance” (co-PI)	\$73,612
2015	Biodiversity Institute (BI 15-1), University of Wyoming, “Soil water dynamics and plant biodiversity in big sagebrush ecosystems across space” (lead PI)	\$50,000
2015	US Geological Survey, “Analysis, revision, and documentation of longleaf pine associations of the National Vegetation Classification (Group 007) occurring in the Carolinas, Georgia, and Florida” (co-author)	\$79,955
2015	WWISE travel grant, Wyoming-EPSCoR, University of Wyoming	\$1,600
2015	INBRE Bioinformatics Training Travel Grant, University of Wyoming	\$1,800
2014	International Association for Vegetation Scientist Young Scientist Travel Award	\$2,300
2013	Graduate Professional School Travel Award, University of North Carolina	\$400
2013	Dr. William Coker Fellowship, University of North Carolina	\$11,500
2013	Alma Holland Beers Scholarship, University of North Carolina	\$1,500
2013	North Carolina Native Plant Society Shin Grant	\$1,000
2013	Graduate Student Transportation Grant, University of North Carolina	\$250
2012	US Geological Survey, Subcontract to the University of North Carolina through the Ecological Society of America. “U.S. National Vegetation Classification peer review testing” (co-author)	\$33,054
2012	Alma Holland Beers Scholarship, University of North Carolina	\$1,500
2012	Dr. William Coker Fellowship, University of North Carolina	\$1,500
2012	Caldwell Travel Scholarship, University of North Carolina	\$500
2011	Dr. William Coker Fellowship, University of North Carolina	\$1,850
2010	Alma Holland Beers Scholarship, University of North Carolina	\$2,950
2008	Mrs. Coker Botany Fellowship, University of North Carolina	\$20,000
2005	SURF, Effects of Irrigation Timing and Water Quality on Cotton Physiology and Development, College of Charleston	\$5,000

TEACHING EXPERIENCE

- 2016 Instructor of record, University of Wyoming, Ecosystem Ecology
2015 Instructor of record, University of Wyoming, Vegetation Ecology Lab
2015 Guest lecturer, University of Wyoming, Vegetation Ecology Lecture
2014 Guest lecturer, University of Wyoming, Ecosystem Ecology
2014 Instructor of record, High Point University, Introduction to Biology Lab and Introduction to Environmental Science Lab
2010-12 Introductory Biology Teaching Assistant, University of North Carolina
2009-10 Ecology and Evolution Teaching Assistant, University of North Carolina
2010 Comparative Vertebrate Anatomy Teaching Assistant, University of North Carolina
2006 Plant Taxonomy Teaching Assistant, College of Charleston

INVITED PRESENTATIONS

- 2013 **Palmquist, K.A.** & R.K. Peet. Small-scale species richness in longleaf pine savannas: patterns and drivers. Botanical Society of America Annual Meeting. New Orleans, LA.
2012 **Palmquist, K.A.**, R.K. Peet, J.M. White & K. Israel. Long-term vegetation change in contrasting North Carolina ecosystems. ESA Annual Meeting, Portland Oregon.
2011 **Palmquist, K.A.**, R.K. Peet & A.S. Weakley. Species richness patterns, compositional shifts, and turnover in the longleaf pine ecosystem across 18 years. College of Charleston Biology Lecture Series, Charleston, SC.

SELECTED PRESENTATIONS (for a complete list, see www.kylepalmquist.org)

- 2016 **Palmquist, K.A.**, W.K. Lauenroth, J.B. Bradford & D.R. Schlaepfer. Spatial and ecological variation in big sagebrush ecohydrological responses to climate change: Implications for management and conservation. ESA Annual Meeting, Fort Lauderdale, FL.
2015 Petrie, M., J. B. Bradford, D.R. Schlaepfer, C. Andrews, **K.A. Palmquist** & W.K. Lauenroth. Validation of the SOILWAT hydrological model for ecosystems in the central and western United States. AGU Annual Meeting, San Francisco, CA.
2015 **Palmquist, K.A.**, W.K. Lauenroth, J.B. Bradford & D.R. Schlaepfer. Climate change impacts on future sagebrush ecohydrology across the western US. ESA Annual Meeting, Baltimore, MD.
2015 **Palmquist, K.A.**, W.K. Lauenroth, J.B. Bradford & D.R. Schlaepfer. Climate change impacts on future ecohydrology in sagebrush ecosystems across the western US. North Central Climate Science Center Meeting, Fort Collins, CO.
2015 **Palmquist, K.A.**, W.K. Lauenroth, J.B. Bradford & D.R. Schlaepfer. Climate change impacts on big sagebrush ecohydrology and vegetation dynamics across the western US. University of Wyoming Botany Seminar Series, Laramie WY.
2014 **Palmquist, K.A.** Fire and spatial scale mediate the strength of deterministic and stochastic processes in longleaf pine woodlands. International Association for Vegetation Science Annual Meeting (IAVS), Perth, Australia.

- 2013 **Palmquist, K.A.**, R.K. Peet & A.S. Weakley. Species diversity patterns are shaped by multiple ecological processes across the range of the longleaf pine (*Pinus palustris* Mill.) ecosystem. ESA Annual Meeting, Minneapolis, MN.
- 2013 Peet, R. K. & **K.A. Palmquist**. The challenges and consequences of use of a large plot database to improve the USNVC classification of *Pinus palustris* savannas of the southeastern Coastal Plain. ESA Annual Meeting, Minneapolis, MN.
- 2013 Peet, R.K., **K.A. Palmquist** & S.M. Tessel. Scale and context dependence of plant species richness in forests and woodlands of southeastern North America. IAVS Annual Meeting, Tartu, Estonia.
- 2012 Coyle, J.R., P. Wilfahrt, **K.A. Palmquist**, B.E. Lopez, F.W. Halliday, K. Becraft, C. Fieseler, C. Hakkenberg, C. Payne, K. Peck, D. Tarasi, C. Urbanowicz, C. Mitchell, R.K. Peet & A.H. Hurlbert. Inference of ecological processes structuring tree communities in Eastern North America using functional and phylogenetic diversity. ESA Annual Meeting, Portland, OR.
- 2012 Lopez, B.E., K.R. Burgio, M.B. Carlucci, **K.A. Palmquist**, A. Parada & P.A. Wilfahrt. A novel conceptual framework for using functional and phylogenetic diversity to identify community assembly processes along environmental gradients. ESA Annual Meeting, Portland, OR.
- 2012 Mitchell, S.R., N. Christensen, J.R. Walters, **K.A. Palmquist**, M. Bertone, and S. Cohen. Soil properties drive differences in taxonomic groups among pine forests of the Atlantic Coastal Plain. ESA Annual Meeting, Portland, OR.
- 2012 **Palmquist, K.A.**, R.K. Peet & A.S. Weakley. Dramatic declines in small-scale species richness in longleaf pine savannas. Association for Southeastern Biologists Annual Meeting, Athens, GA.
- 2010 **Palmquist, K.A.**, R.K. Peet, A.S. Weakley & N.L. Christensen. Quantifying species turnover and compositional shifts of the longleaf pine ecosystem in North Carolina after 18 years. ESA Annual Meeting, Pittsburgh, PA.
- 2010 **Palmquist, K.A.**, R.K. Peet & N.L. Christensen. Species richness over time and space in the longleaf pine ecosystem. IAVS Annual Meeting, Ensenada, Mexico.

AWARDS

- 2016 Own It! Award Nominee, given by WY EPSCoR to honor outstanding women in STEM fields.
- 2013 Eugene P. Odum Award, given by the SE Chapter of the Ecological Society of America for the best oral presentation on ecological research given by a student at the Association for Southeastern Biologists Annual Meeting, \$500
- 2012 University of North Carolina Impact Award, recognizes graduate students whose research contributes to the educational, economic, physical or social well-being of the citizens of North Carolina, \$500

PROFESSIONAL MEMBERSHIPS

2010 - present International Association for Vegetation Science (IAVS)
2007 - present Ecological Society of America

PROFESSIONAL SERVICE

2015 - present IAVS Vegetation Classification Working Group
2015 - present IAVS Young Scientist's Section Steering Committee
2014 - present Reviewer for *Journal of Vegetation Science* (5), *Community Ecology* (1), *American Journal of Botany* (1), *Plant Ecology* (2), *Functional Ecology* (1), *Ecology* (1), *Western North American Naturalist* (3), *Landscape Ecology* (1)
2016 Internal reviewer for the Biodiversity Institute Grants at the University of Wyoming
2015 Judge for the Tom Damman Award, the best student oral presentation in Vegetation Science at the annual meeting of the Ecological Society of America (ESA)
2015 Judge for the Murray F. Buell Award and E. Lucy Braun Award, the best student oral presentation and best student poster presentation at the annual meeting of the ESA
2014 Judge for the Quatterman-Keever Award, the best student poster in ecology at the annual meeting of the Association for Southeastern Biologists
2012 - 2013 UNC CH Biology Graduate Student Association Officer
2011 - 2013 UNC CH Ecology Seminar Series Chair/Committee
2011 Peer reviewer for the US National Vegetation Classification