
PAIGE E. COPENHAVER-PARRY

Department of Biology
 George Fox University
 Newberg, OR 97132
 Phone: 503-554-2708 • Email: pparry@georgefox.edu
 Web: <http://www.paigecopenhaver.com>

EDUCATION

- 2012-2016 Ph.D., Department of Botany and Program in Ecology, University of Wyoming
 Advisor: Daniel Tinker
Scale-dependent contributions of abiotic and biotic factors to tree species composition patterns in the US Rocky Mountains
- 2009-2011 B.S., Department of Biology and Chemistry, George Fox University
 Advisor: Donald Powers
Energetic cost of ejaculate production in red-sided garter snakes

PROFESSIONAL EXPERIENCE

- 2016-present **Assistant Professor of Biology**
 Department of Biology, George Fox University
- 2015-2016 **Instructor**
 University of Wyoming Life Sciences Program
- 2015 **Biology Instructor**
 Upward Bound Math Science Program
- 2012 **Conservation Project Assistant**
 Washington Department of Ecology, Conservation Corps
- 2010-2011 **Research Assistant**
 Department of Biology and Chemistry, George Fox University

PUBLICATIONS

6. **Copenhaver-Parry, P.E.** & D.M. Bell. 2017. Species interactions weakly modify climate-induced co-occurrence patterns. *Journal of Vegetation Science*. *In press*.
5. **Copenhaver-Parry, P.E.**, B.N. Shuman & D.B. Tinker. 2017. Towards an improved conceptual understanding of North American tree distributions. *Ecosphere* 8:e01853.
4. **Copenhaver-Parry, P.E.**, S.E. Albeke & D.B. Tinker. 2016. Do community-level models account for the effects of biotic interactions? A comparison of community-level and species distribution modeling of Rocky Mountain conifers. *Plant Ecology* 217:533-547
3. ***Copenhaver-Parry, P.E.** & E. Cannon. 2016. The relative influences of climate and competition on tree growth along montane ecotones in the Rocky Mountains. *Oecologia*. 182: 13-25.
2. Friesen, C.R., D.R. Powers, **P.E. Copenhaver** & R.T. Mason. 2015. Size-dependence in non-sperm ejaculate production is reflected in daily energy expenditure and resting metabolic rate. *Journal of Experimental Biology* 218: 1410-1418.
1. **Copenhaver, P.E.** & D.B. Tinker 2014. Stand density and age affect tree-level structural and functional characteristics of post-fire lodgepole pine in Yellowstone National Park. *Forest Ecology and Management* 320:138-148.

* co-authored by undergraduate mentee(s) of P. Copenhaver-Parry

MANUSCRIPTS IN PREPARATION

1. **Copenhaver-Parry, P.E.**, M.V. Talluto, M.V. & C.J. Carroll. 2018. Cross-scale integration of recruitment and range dynamics in a changing climate. *Proceedings of the National Academy of Sciences*.
2. **Copenhaver-Parry, P.E.** & K. Zhu. 2018. Range-level projections of population dynamics in western forests. *Global Ecology and Biogeography*.
3. *Stephens, E.Z., C.P. Murar & **P.E. Copenhaver-Parry**. 2018. Spatial and temporal variability in seedling establishment indicate complex climate change responses in western forests. *Forest Ecology and Management*.

PRESENTATIONS

12. ***Copenhaver-Parry, P.E.** Seeing the forest for the trees: Using multi-scale inference to understand Western tree distributions. Lewis and Clark College Biology Seminar Series: September 2017.
11. **Copenhaver-Parry, P.E.**, M.V. Talluto, C.J.W. Carroll & P.H. Martin. Multi-scale inference of seedling range dynamics in Rocky Mountain Forests. Ecological Society of America Annual Meeting: August 2017.
10. **Parry, P.E.** & D.M. Bell. Disentangling local and regional influences on Rocky Mountain tree distributions with a Joint Species Distribution Model. Oregon Academy of Sciences: February 2017.
9. **Copenhaver, P.E.**, D.M. Bell & D.B. Tinker. Using co-occurrence patterns within a Bayesian Joint Species Distribution Model to disentangle the effects of climate and biotic interactions on the distributions of Rocky Mountain Trees. Ecological Society of America Annual Meeting: August 2015.
8. **Copenhaver, P.E.** Growth variation and diversity maintenance in a successional montane tree community. Front Range Student Ecology Symposium: February 25, 2015.
7. **Copenhaver, P.E.** Growth variation and diversity maintenance in a successional montane tree community. University of Wyoming Program in Ecology Student Research Symposium: February 20, 2015.
6. ***Copenhaver, P.E.**, D.M. Bell & S.E. Albeke. Evaluating Ecological Interactions across Spatial Scales. Wyoming Geographic Information Sciences Center Seminar Series: November 14, 2014.
5. ***Copenhaver, P.E.** Evaluating Interactions across Scales. Colorado State University Forest Ecology Seminar: November 5, 2014
4. **Copenhaver, P.E.**, D.B. Tinker, S.E. Albeke & D.M. Bell. Modelling the joint species distribution: simultaneous predictions of current distributions of three sympatric conifer species in the Central Rocky Mountains. Ecological Society of America Annual Meeting: August 2014.
3. **Copenhaver, P.E.** and Tinker, D.B. Structural and functional characteristics of young, post-fire lodgepole pine in Yellowstone National Park. University of Wyoming Botany Department Seminar Series; September 13, 2013.

*invited speaker

2. **Copenhaver, P.E.** and Powers, D.R. Energy investment in copulatory plug production by large vs. small Red-Sided Garter Snakes (*Thamnophis sirtalis parietalis*). Society for Integrative and Comparative Biology Annual Meeting, Charleston, S.C.; January 3-7, 2012. *Poster presentation.*
1. **Copenhaver, P.E.** and Powers, D.R. Thermal preference and habitat choice in the Rough-Skinned Newt (*Taricha granulosa*). Society for Integrative and Comparative Biology Annual Meeting, Charleston, SC: January 3-7, 2012.

GRANTS AND FELLOWSHIPS

- 2017 **Murdock Charitable Trust Research Start-up Grant**
- 2016 **National Science Foundation Postdoctoral Research Fellowship in Biology**
Multi-scale inference in Rocky Mountain forests: linking recruitment and population dynamics to range dynamics in a changing climate
*declined in favor of faculty position
- 2015 **Wyoming NSF EPSCoR Wyoming Women in Science and Engineering Travel Grant**
Using co-occurrence patterns within a Bayesian Joint Species Distribution Model to disentangle the effects of climate and biotic interactions on the distributions of Rocky Mountain trees
- 2014 **Science Posse Graduate Fellowship**, National Science Foundation
Graduate K-12 teaching fellowship
- 2014 **Wyoming NSF EPSCoR Wyoming Women in Science and Engineering Travel Grant**
Considering Competition: Including interspecific competitive interactions in species
- 2013 **Wyoming NASA Space Grant Consortium Graduate Research Fellowship**
The influence of competitive interactions on future distribution of Rocky Mountain conifers under novel climate conditions
- 2013 **C.L. Porter Summer Fellowship**, University of Wyoming Botany Department
Quantifying competition among Rocky Mountain conifers
- 2011 **Richter Undergraduate Research Fellowship**, George Fox University

TEACHING

- 2017 Ecology, Environmental Science, Statistical Methods in Biology, *George Fox University*
- 2016 Plant Biology, *George Fox University*
- 2015, 2016 Life Science, *University of Wyoming*
- 2015 Biology, Upward Bound Math Science Program, *University of Wyoming*
- 2013 Genetics, Teaching Assistant, *University of Wyoming*
- 2012 General Biology, Teaching Assistant, *University of Wyoming*

MENTORSHIP

- 2017 **Elizah Stephens**, George Fox University
Disentangling the effects of light availability, soil fertility, and biotic interactions on seedling establishment patterns in Rocky Mountain forests.
- 2017 **Christopher Murar**, George Fox University
The relative effects of climate and disturbance on temporal patterns of tree establishment in a mixed-species forest in the Rocky Mountains.
- 2014 **Ellie Cannon**, Kalamazoo College
*Relative effects of climate and competition on annual growth of *Pinus contorta*, *Pinus ponderosa*, and *Pseudotsuga menziesii**

AWARDS AND HONORS

- 2017 **Outstanding Dissertation Award Honorable Mention**, University of Wyoming
 2016 **Knight Fellowship**, Botany Department, University of Wyoming
 2016 **Highlighted Student Paper**, *Oecologia*
 2015 **Graduate Assistantship Award**, Program in Ecology, University of Wyoming
 2014 **Graduate Assistantship Award**, Program in Ecology, University of Wyoming
Declined in favor of NSF fellowship
 2014 **Outstanding Service Award**, Botany Department, University of Wyoming
 2012 **Graduate Assistantship Award**, Botany Department, University of Wyoming
 2009 **Presidential Scholarship**, George Fox University
 2009 **Science Scholarship**, George Fox University

SYNERGISTIC ACTIVITIES

- 2017 Reviewer, *Western North American Naturalist*
 2017 Workshop, Maximum Likelihood Modeling, Colorado State University
 2017 Working group, Species range shifts in a warming world, National Institute for
 Mathematical and Biology Synthesis
 2017 Faculty mentoring network, Quantitative Undergraduate Biology Education Synthesis
 2016 Oral presentation judge, Murdock College Science Research Conference
 2016 Ecology 101 Workshop, George Fox University Evangelical Seminary
 2016 Invited speaker, Boy Scouts of America Troop 265
 2015 Chair, Program in Ecology Outreach Committee, University of Wyoming
 2015 Dendroecology workshop, Wyoming Women in Science Conference
 2015 Dendroecology workshop, Wyoming State Science Fair
 2014-2015 President, Program in Ecology Student Organization, University of Wyoming
 2014-2015 Student Representative to the Faculty, Program in Ecology, University of Wyoming
 2014-2016 Reviewer, *Forest Science*
 2014 Volunteer, Wyoming Women in Science Conference
 2014 Reviewer, *Journal of Forestry*
 2014 NASA special awards judge, Wyoming State Science Fair
 2013 Evolutionary Biologist Search Committee, Botany Department, University of Wyoming
 2013 Dendrology workshop, Biodiversity Institute, University of Wyoming
 2009-2011 Greater Yamhill Watershed Council, Yamhill County, Oregon

PROFESSIONAL MEMBERSHIPS

Ecological Society of America
 American Association for the Advancement of Science
 American Association of University Women
 Oregon Academy of Sciences
 Sigma Delta Epsilon - Graduate Women in Science