

JAMIE L. PEELER

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EDUCATION

- Ph.D. **Penn State University, University Park, PA. Expected 2021.** Geography.
Dissertation: Linking landscape context to post-fire forest resilience in the Greater Yellowstone Ecosystem
Advisor: Dr. Erica Smithwick
Certification: Graduate School Teaching Certificate. Expected 2019.
- M.S. **Penn State University, University Park, PA. 2017.** Geography.
Master's paper: Exploring invasibility with species distribution modeling: how does fire promote cheatgrass (*Bromus tectorum*) invasion within lower montane forests?
Advisor: Dr. Erica Smithwick
- B.S. **Duke University, Durham, NC. 2012.** Biology.
Honors thesis: Trait plasticity of tree species in response to changing disturbance regimes in Kruger National Park, South Africa
Advisor: Dr. Justin Wright

RESEARCH INTERESTS

Disturbance dynamics and their effects on ecosystems; fire ecology; forest resilience; landscape ecology; environmental change; causes and consequences of spatial heterogeneity

GRANTS AND FELLOWSHIPS

External

- 2018 National Geographic Support for Women and Dependent Care Opportunity (\$3,585)
2017 National Geographic Early Career Grant (\$5,370)
2017; 2016 NASA Pennsylvania Space Grant Consortium Graduate Research Fellowship (\$10,000)

Internal

- 2018; 2017 C. Gregory Knight Academic Enrichment, Penn State University (\$1,400)
2017; 2016 Center for Landscape Dynamics Graduate Research Award, Penn State University (\$1,995)
2015 Fund for Excellence in Graduate Recruitment, Penn State University (\$5,000)
2010 Undergraduate Scholarship in Marine Science, Duke University Marine Lab (\$1,200)

Pending

- 2019 Society of Women Geographers Evelyn L. Pruitt Fellowship for Dissertation Research (\$12,000)
2018 NSF Doctoral Dissertation Research Improvement Award (\$18,000)

AWARDS AND HONORS

External

- 2017; 2014 Honorable Mention, NSF Graduate Research Fellowship Program

Internal

- 2018 E. Willard Miller Award for Best M.S. Paper, Department of Geography, Penn State University
2017 E. Willard Miller Award for Best M.S. Proposal, Department of Geography, Penn State University
2015 Environmental Scholar, Earth and Environmental Systems Institute, Penn State University

- 2012 Graduation with Distinction, Department of Biology, Duke University
 2012 Excellence in Plant Science, Department of Biology, Duke University
 2010 Rachel Carson Research Scholar, Duke University Marine Lab

PUBLICATIONS

- Peeler JL** and Smithwick EAH. 2018. Exploring invasibility with species distribution modeling: how does fire promote cheatgrass (*Bromus tectorum*) invasion within lower montane forests? *Diversity and Distributions*, 24, 9, 1308-1320.
- Peeler JL** and Menges ES. 2018. Effects of fire history, tree age, and canopy seed bank size on serotiny of sand pine (*Pinus clausa*) in Florida scrub. *Florida Scientist*, 81, 1, 3-11.

PRESENTATIONS

- 2018 Cabeza CA*, **Peeler JL**, and Smithwick EAH. Climate and topographic effect on wildfire burn severity in the Greater Yellowstone Ecosystem. American Geophysical Union Annual Meeting. Washington, DC. *Poster*.
- 2018 **Peeler JL** and Smithwick EAH. Network theory and post-fire landscapes: linking connectivity to forest reorganization in the Greater Yellowstone Ecosystem. US Regional Association of the International Association for Landscape Ecology. Chicago, IL. *Poster*.
- 2017 **Peeler JL** and Smithwick EAH. Exploring invasibility with species distribution modeling: how does fire promote cheatgrass invasion within lower montane forests? Ecological Society of America. Portland, OR. *Talk*.
- 2017 **Peeler JL** and Smithwick EAH. Exploring invasibility with species distribution modeling: how does fire promote cheatgrass invasion within lower montane forests? American Association of Geographer Annual Meeting. Boston, MA. *Talk*.
- 2014 **Peeler JL** and Menges ES. Effects of fire history and tree age on serotiny of sand pine (*Pinus clausa*) in Florida scrub. Research Intern Seminar, Archbold Biological Station. Venus, FL. *Talk*.
- 2014 **Peeler JL** and Menges ES. Effects of fire regime on serotiny of sand pine (*Pinus clausa*) in Florida scrub. Florida Native Plant Society Annual Conference. Fort Myers, FL. *Talk*.
- 2012 **Peeler JL**, Vickers K, and Wright JP. Trait plasticity of tree species in response to changing disturbance regimes in the Kruger National Park. The Distinction in Biology Poster Symposium, Duke University. Durham, NC. *Poster*.
- 2011 **Peeler JL**. Trait plasticity of tree species in response to changing disturbance regimes in the Kruger National Park. REU Student Research Seminar, South Africa National Parks. Skukuza, South Africa. *Talk*.

* Denotes presenter other than Peeler JL

TEACHING

- 2017 - 2019 **Graduate writing tutor**, College of Earth and Mineral Sciences, Penn State University
- 2015 - 2019 **Teaching assistant**, Department of Geography, Penn State University
Courses: Introduction to Physical Geography (GEOG 10), Geography of Water Resources (GEOG 431 Web), Global Parks and Sustainability (GEOG 1), Geographic Perspectives on Sustainability and Human-Environment Systems (GEOG 30)
- 2018; 2017 **Instructor of Record**, Department of Geography, Penn State University
Courses: Geography of Water Resources (GEOG 431 Web)
- 2011 - 2012 **Co-director**, Introduction to Experiential Education House Course, Duke University

MENTORING

- 2019 **Mentor**, Undergraduate Research Opportunities Connection, Penn State University
Student and Project Title: Shelby Duncan (Penn State University); Mapping post-fire tree cover using object-based image analysis
- 2018 **Mentor**, NSF Research Experience for Undergraduates in Climate Science, Penn State University
Student and Project Title: Caroline Cabeza (Seattle University); Environmental heterogeneity in post-wildlife landscapes of the Greater Yellowstone Ecosystem

SYNERGISTIC ACTIVITIES

Service for College of Earth and Mineral Sciences, Penn State University

- 2018; 2017 **Co-organizer**, EMS Undergraduate Research Poster Exhibition
- 2018 **Co-organizer**, Professional Development Workshops for Undergraduates
Workshops: Resume, cover letters, and interviews; Creating your scientific poster; Is graduate school right for me?
- 2018 **Co-developer**, Science Communication in Earth and Mineral Sciences
Website: https://guides.libraries.psu.edu/EMS_science_communication

Service for Department of Geography, Penn State University

- 2019 - 2020 **Vice President**, Graduate Students in the Department of Geography
- 2018 - 2019 **Graduate representative**, Coffee Hour Speakers Committee
- 2016 - 2017 **Vice President**, Penn State Chapter of Supporting Women in Geography

Public Outreach

- 2016 - 2019 **Co-organizer and volunteer**, Supporting Young Women in Geography Day
- 2017 - 2019 **Mentor and volunteer**, ENVISION: STEM Career Day for Girls
- 2018 **Volunteer**, Penn State Girl Scout Saturday
- 2016 - 2017 **Volunteer**, Exploration-U: Community Science Night

Membership in Professional Associations

- Ecological Society of America
- US Regional Association of the International Association for Landscape Ecology

FIELD EXPERIENCE

- 2015 **Field technician, Western Forest Initiative**
Supervisors: Dr. Arjan Meddens and Dr. Jim Lutz
 Completed Composite Burn Index surveys to characterize unburned islands within wildfire perimeters in the Pacific Northwest
- 2014 **Fire ecology intern, Tall Timbers Research Station and Land Conservancy**
Supervisor: Dr. Kevin Robertson
 Assisted a biennial census examining interacting effects of wind and fire on a beech-magnolia forest in northern Florida
- 2014 **Research intern, Plant Ecology Lab, Archbold Biological Station**
Supervisor: Dr. Eric Menges
 Designed an independent project that investigated the effects of fire history, tree age, and canopy seed bank size on serotiny of sand pine in central Florida

- 2013 **Field technician, Desert Research Institute**
Supervisor: Dr. Adam Watts
Completed Composite Burn Index surveys to evaluate post-fire mortality trends among pond cypress domes in Big Cypress National Preserve, Florida
- 2012 - 2013 **Field technician, Bioko Biodiversity Protection Program**
Supervisor: Dr. Shaya Honarvar
PIT-tagged and recorded reproductive output data on the nesting leatherback sea turtle population on Bioko Island, Equatorial Guinea
- 2012 **Field technician, Silviculture and Applied Forest Ecology Lab, University of Minnesota**
Supervisor: Mitch Slater
Conducted vegetation surveys to evaluate potential impacts of emerald ash borer on black ash wetlands of northern Minnesota
- 2011 **NSF Research Experience for Undergraduates Participant, Organization for Tropical Studies**
Supervisors: Karen Vickers and Dr. Laurence Kruger
Designed an independent project that highlighted the functional responses of tree species to fire and herbivory in Kruger National Park, South Africa

PROFESSIONAL SKILLS

Wilderness Experience

- 2017 - 2020 Certified Wilderness First Responder (80 hours of training with SOLO)
2009 - 2012 Backpacking leader, Project WILD (Wilderness Initiatives Learning at Duke), Duke University

Software Experience

ArcGIS, R, ENVI, Circuitscape, FRAGSTATS