

**Curriculum vitae**  
**Kristina J. Bartowitz**

PhD Candidate

Department of Forest, Rangeland, and Fire Sciences

University of Idaho, Moscow, ID 83844

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**Professional Preparation**

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- University of Idaho, Natural Resources May 2022  
*Dissertation title:* “Understanding consequences and predicting future impacts of climate change, wildfire, and land management on forest carbon cycling in western US forests”  
PhD advisor: Dr. Tara Hudiburg  
Dissertation committee: Dr. Crystal Kolden, Dr. Philip Higuera, Dr. John Abatzoglou
- University of Wisconsin-Madison, Conservation Biology & Sustainable Development MS 2015  
*Thesis title:* “Invasive exotic shrub (*Rhamnus cathartica*) alters the timing and magnitude of post-dispersal seed predation of native and exotic species”  
MS advisor: Dr. John Orrock  
Thesis committee: Dr. Adena Rissman, Dr. Donald Waller
- University of Wisconsin-Madison, Zoology and Environmental Studies BS 2012  
*Research title:* “Elevational migration of bird species in five life zones in Monteverde, Costa Rica as a result of directional climate change”

**Professional Experience**

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Senior Manager, Forest Carbon	American Forests	Washington D.C.	2022-present
NSF INTERN	Nature Conservancy/UIDaho	Seattle, WA	2020
Graduate Research Assistant	University of Idaho	Moscow, ID	2017-2022
Conservation Biologist	Pacific Biodiversity Institute	Winthrop, WA	2015-2017
USFS Biological Technician	United States Forest Service	Winthrop, WA	2016

**Honors and Awards**

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University of Idaho Alumni Award for Excellence	2021
AGU Voice For Science – Science Policy	2021
Outstanding PhD Student-UIDaho Dept. of Forest, Rangeland, and Fire Sciences	2019-2020
ESA Graduate Student Policy Award	2019
ESA Student Travel Award	2019
Mandzak Travel Award	2019
NEON Science Summit Travel Award	2019
UIDaho College of Natural Resources Research Grant	2018
Mazamas Foundation Research Grant	2018
SEAL Foundation Research Grant	2018
UIDaho GPSA Travel Award	2017-2019, 2021
CAB Alliance Travel Award	2015
John Jefferson Davis Travel Award	2014
Nelson Institute for Environmental Studies Travel Grant	2014
Community Environmental Scholars Program Scholarship	2012
Lila Burton Draper Scholarship	2008-2012

### **Grants (Total awarded: ~\$ 176,926)**

USDA-NIFA Predoctoral Fellowship (\$112,520)	2021
NSF INTERN Graduate Award (\$54,406)	2020
UIdaho Berklund Graduate Research Fellowship (\$10,000)	2019

### **Publications (Citations: 81, H-index: 5, as of 12/17/2021)**

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**Bartowitz, K.J.**, E.S. Walsh, J.E. Stenzel, C.A. Kolden, and T.W. Hudiburg. Accepted. Forest carbon emission sources are not equal: putting fire, harvest, and fossil fuel emissions in context. *Frontiers In Forests and Global Change*.

R. Muthukrishnan, K. Hayes, **K.J. Bartowitz**, M. Cattau, B. Harvey, Y. Lin, and C. Lunch. 2022. Accepted. Harnessing NEON to evaluate ecological tipping points: opportunities, challenges, and approaches. *Ecosphere*.

R.C. Nagy, J.K. Balch, E.K. Bissell, M.E. Cattau, N.F. Glenn, ... **K.J. Bartowitz** ... + 114 authors. 2021. Harnessing the NEON Data Revolution to Advance Open Environmental Science with a Diverse and Data-Capable Community. *Ecosphere*. <https://doi.org/10.1002/ecs2.3833>

Case, M.J., B. Johnson, **K. J. Bartowitz**, and T.W. Hudiburg. 2021. Forests of the future. Climate change impacts and implications for carbon storage in the Pacific Northwest. *Forest Ecology and Management*. <https://doi.org/10.1016/j.foreco.2020.118886>

**Bartowitz, K. J.**, P.E. Higuera, B.N. Shuman, K.K. McLaughlan, and T.W. Hudiburg. 2019. Post-Fire Carbon Dynamics in Subalpine Forests of the Rocky Mountains. *Fire*, 2(4), 58. <https://doi.org/10.3390/fire2040058>

Stenzel, J.E., **K.J. Bartowitz**, M.D. Hartman, J.A. Lutz, C.A. Kolden, A.M.S. Smith, B.E. Law, M.E. Swanson, A.J. Larson, W.J. Parton, and T.W. Hudiburg. 2019. Fixing a snag in estimating carbon emissions from wildfire. *Global Change Biology*. <https://doi.org/10.1111/gcb.14716>

Walsh, E.S., K.T. Vierling, E. Strand, **K.J. Bartowitz**, and T.W. Hudiburg. 2019. Climate change, woodpeckers, and forests: Current trends and future modeling needs. *Ecology and Evolution*. 9(4), 2305-2319. <https://doi.org/10.1002/ece3.4876>

**Bartowitz, K.J.** and J.L. Orrock. 2016. Invasive exotic shrub (*Rhamnus cathartica*) alters the timing and magnitude of post-dispersal seed predation of native and exotic species. *Journal of Vegetation Science*. 27(4), 789-799. <https://doi.org/10.1111/jvs.12397>

#### *In Prep*

**Bartowitz, K.J.**, J.E. Stenzel, P. Buotte, and T.W. Hudiburg. In Prep. Predicted forest resilience and wildfire under climate change in Northern Rockies forests.

**Bartowitz, K.J.** and T.W. Hudiburg. In Prep. Large-scale forest protection preserves and enhances carbon stocks in the forests managed under the Northwest Forest Plan

### **Presentations (\*\* indicates mentored student author)**

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#### Oral Presentations:

**Bartowitz, K.J.**, Stenzel, J.E., Buotte, P., & Hudiburg, T. W. 2019. Implications of Land Management and Disturbances on the Carbon Sink Potential of Western US Coniferous Forests: Northwest Forest Plan Case Study. AGU Fall Meeting, San Francisco, CA.

**Bartowitz, K.J.** and P. Morrison. 2017. Resiliency of wildlife to a mega-fire in the North Cascades. Ecological Society of America, Portland, OR.

**Bartowitz, K.J.** and P. Morrison. 2016. Response and resiliency of western gray squirrels (*Sciurus griseus*) to climate change and large-scale disturbance in the North Cascades. MtnClim Conference, Leavenworth, WA.

**Bartowitz, K.J.** 2015. University of Wisconsin Central Africa Initiative recruitment talk. CAB Alliance Professional Development Workshop, Franceville, Gabon.

**Bartowitz, K.J.** 2014. Common buckthorn (*Rhamnus cathartica*) and small mammal seed predators. Riveredge Nature Center Research Symposium. Saukville, WI.

**Bartowitz, K.J.** 2011 Elevational migration of bird species in five life zones in Monteverde as a result of directional climate change. University of Wisconsin Undergraduate Research Symposium Madison, WI.

Poster Presentations:

**Bartowitz, K.J.,** E.S. Walsh, J.E. Stenzel, C.A. Kolden, and T.W. Hudiburg. 2021. Western US forest fire carbon emissions continue to be a fraction of fossil fuel emissions. AGU Fall Meeting. New Orleans, LA

Mathias, J., **K.J. Bartowitz**, L. Hicke, N. Srodes, and T.W. Hudiburg. 2021. Integration of multiple data streams reveals the impact of environmental change on northern Rocky Mountain forests. AGU Fall Meeting. New Orleans, LA.

**Bartowitz, K.J.,** M.J. Case, and T.W. Hudiburg. 2020. Consequences of climate change, land management, and disturbances on the carbon sink of Pacific Northwest Forests. Ecological Society of America. Virtual due to COVID-19.

**Bartowitz, K.J.,** J.E. Stenzel, and T.W. Hudiburg. 2019 Post-fire resiliency in western US forests: carbon consequences of forest management, fire suppression, and wildfire. Ecological Society of America. Louisville, KY.

**Bartowitz, K.J.,** P.E. Higuera, M.C. Parish, B.N. Shuman, and T.W. Hudiburg. 2018. Carbon consequences of fire-regime variability in Rocky Mountain subalpine forests over millennia. AGU Fall Meeting. Washington, DC.

J. Poe\*\*, **K.J. Bartowitz**, J. Stenzel, and T. Hudiburg. 2019. Modeled vs Measured NPP: Are Global Satellite Estimates of Forest NPP Appropriate Across the Terrain of Northern Rocky Mountain Forests? Idaho Conference for Undergraduate Research, Boise, ID.

**Bartowitz, K.J.** and T.W. Hudiburg. 2018. Influence of climate change and wildfires on forest ecosystem dynamics in the western US. 2018 Graduate Climate Conference, Packwood, WA.

Morrison, P. and **K.J. Bartowitz**. 2016. Vegetation resiliency and recovery following large-scale wildfire in the lower Methow Valley, WA. MtnClim Conference, Leavenworth, WA.

**Bartowitz, K.J.** and J.L. Orrock. 2014. Indirect impacts of *R. cathartica* invasion on small mammal seed predators. Ecological Society of America Conference, Invasion poster session. Sacramento, CA.

**Bartowitz, K.J.** 2012. Characterizing phytoplankton and parasitic fungal communities of the Columbia River coastal margin. Nelson Institute Earth Day Conference, Poster Session. Madison, WI.

**Bartowitz, K.J.** 2012. Characterizing phytoplankton and parasitic fungal communities of the Columbia River coastal margin. University of Wisconsin Undergraduate Research Symposium. Madison, WI.

**Bartowitz, K.J.** 2011 Elevational migration of bird species in five life zones in Monteverde as a result of directional climate change. Nelson Institute Earth Day Conference, Poster Session. Madison, WI.

Outreach Presentations:

**Bartowitz, K.J.** 2020. What's the fate of forest carbon following wildfires in PNW forests? The Nature Conservancy WA. Take 5 For Science Presentations. Seattle, WA.

**Bartowitz, K.J.** 2019. Wildfires, carbon, trees, and soils: sink or source? Rural Roots Science Presentations. Moscow, ID.

Stenzel J.E. and **Bartowitz K.J** (co-presented). 2018. Fire impacts on greenhouse gas emissions: A 'snag' in carbon emissions from fire. Palouse Clearwater Institute Science After Hours. Moscow, ID.

**Bartowitz, K.J.** 2017. Wildlife and forest resiliency following the Carlton Complex Fire. Methow Valley Interpretive Center Last Sunday Talk. Twisp, WA.

**Bartowitz, K.J.** 2015. Indirect effects of common buckthorn (*R. cathartica*) invasion on small mammal seed predators. Science Day Research Symposium, University of Wisconsin Arboretum. Madison, WI.

**Bartowitz, K.J.** 2014. Indirect impacts of *R. cathartica* invasion on small mammal seed predators. Science Day Research Symposium, University of Wisconsin Arboretum. Madison, WI.

Outreach and technical publications:

Case, M., & **Bartowitz, K.J.** 2020. Forest climate impacts and adaptation strategies. The Nature Conservancy Washington Blog Post.

**K.J. Bartowitz** & G. Wooten. 2018. Rare Plant and Vegetation Surveys of Ginkgo Petrified Forest State Park. Pacific Biodiversity Institute, Winthrop, WA.

Morrison, P., & **K.J. Bartowitz.** 2017. Rare Plant and Vegetation Surveys of Riverside State Park. Pacific Biodiversity Institute, Winthrop, WA.

Morrison, P., **K.J. Bartowitz,** & G. Wooten. 2017. Rare Plant and Vegetation Surveys of Steamboat Rock State Park. Pacific Biodiversity Institute, Winthrop, WA.

**Workshops and Trainings**

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Joint UIIdaho – UK Met Office Forest – Climate Modeling Workshop, Devon, UK	2021
Policy Cost-Benefit Analysis workshop, Science and Technology Policy Academy (virtual)	2020
Science and Technology Policy Workshop, Science and Technology Policy Academy (virtual)	2020
Carbon Users workshop, National Ecological Observation Network, Duren, Germany	2019
Science Policy Advocacy training, Ecological Society of America, Washington, D.C.	2019
Science Communications workshop, COMPASS, Moscow, ID	2019
Research workshop, Socio-environmental Synthesis Center (SESYNC), Annapolis, MD	2018

**Teaching Experience**

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*University of Idaho, Moscow, ID:*

Co-instructor, Forest and Climate Interaction workshop for HS teachers	2018-2019
Teaching assistant, Introduction to Ecology	2018

*Pacific Biodiversity Institute, Winthrop, WA:*

Co-instructor, Conservation Science and Leadership Field Course	2016
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*Wingra Elementary School, Madison, WI:*

Outdoor classroom teacher	2014
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*Department of Zoology, University of Wisconsin-Madison:*

Teaching assistant, Animal Biology Laboratory	2013-2014
Teaching assistant, Behavioral Ecology	2014

**Mentoring**

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Undergraduate students mentored:

University of Idaho (2017-present): 4 female, 4 male

Work experience and volunteer projects (2015-present): 3 female, 2 male

University of Wisconsin-Madison (2013-2015): 2 female, 1 male

### **Leadership and outreach activities**

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Local Science Partners American Geophysical Union	2021-present
Natural Systems, Mitigation, and Implementation sub-committee(s) member Resilient Methow- Climate Action Plan Implementation	2020-present
Student Representative American Geophysical Union, Global Environmental Change Section	2020-present
Graduate and Professional Student Association department representative University of Idaho, Moscow, ID	2018-2019
Shared Governance Committee member: Campus Natural Areas Lakeshore Nature Preserve, University of Wisconsin-Madison	2014-2015
Teaching Assistants Association Departmental Steward University of Wisconsin-Madison	2014-2015

Journal review: Global Biogeochemical Cycles, AoB Plants, Biological Invasions, Restoration Ecology

Proposal review: NSF-DEB

### **Professional memberships**

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Ecological Society of America	2014-present
American Geophysical Union	2016-present
American Association for the Advancement of Science	2019-present
National Science Policy Network	2020-present