JENNA E. MORRIS

Postdoctoral Scholar, University of Washington | Seattle, WA | jemorris@uw.edu

EDUCATION

PhD, Environmental and Forest Sciences, University of Washington

2021-2025

Dissertation: Post-fire fuels, carbon, and vegetation dynamics in wet temperate forests: implications for future fire and management in the Pacific Northwest

MS, Environmental and Forest Sciences, University of Washington

2018-2020

Thesis: Cutting a course: examining the effects of historical thinning treatments on directing forest response to bark beetle outbreaks

BS, Biology and Environmental Studies, Whitworth University

2013-2017

Honors: summa cum laude

RESEARCH & PROFESSIONAL EXPERIENCE

Postdoctoral Scholar, Simulation Modeling

2025-present

School of Environmental and Forest Sciences, University of Washington, Seattle, WA

Collaborating with Dr. Brian J. Harvey and resource managers throughout the Pacific Northwest to understand how fire regimes and forest resilience to fire are changing with climate and land management using iLand.

Graduate Research Assistant, PhD

2021-2025

School of Environmental and Forest Sciences, University of Washington, Seattle, WA

Completed PhD dissertation with Dr. Brian J. Harvey exploring post-fire carbon dynamics and reburn potential in northwestern Cascadia forests under a warming climate using both empirical and simulation modeling approaches.

Graduate Research Assistant, MS

2018-2020

School of Environmental and Forest Sciences, University of Washington, Seattle, WA

Completed MS thesis with Dr. Brian J. Harvey examining the effects of past management on forest resilience, fire hazard, and carbon storage following a severe mountain pine beetle outbreak in the Colorado Rocky Mountains.

Temporary Field Technician I, Botany

2017

National Ecological Observatory Network, Domain 10/13, Boulder, CO

Performed field data collection on ecological aspects (diversity, biomass, phenology, structure) of terrestrial flora in prairie, agricultural, forested, and alpine ecosystems of northern Colorado.

Undergraduate Research Assistant

2014-2017

Biology Department, Whitworth University, Spokane, WA

Conducted independent research assessing the dominant factors influencing land surface phenology in the Inland Northwest for six semesters under the mentorship of Dr. Grant Casady.

Summer Research Assistant – sage-grouse brooding habitat

2016, 2015

Biology Department, Whitworth University, Spokane, WA

Collected field data (radio telemetry, vegetation surveys) on sage-grouse brooding habitat in central Washington as part of two summer internships with Dr. Grant Casady. (<u>link</u>)

Summer Research Assistant – land surface phenology

2014

Biology Department, Whitworth University, Spokane, WA

Participated in research (fieldwork, remote sensing) on phenology of Inland Northwest forests as part of a summer internship with Dr. Grant Casady.

RESEARCH GRANTS & FELLOWSHIPS

Collaborative Research in Earth System Science and Technology (CRESST) Award [\$92K – Co-PI] 2025–2026 Simulating post-fire forest trajectories under future climate and management scenarios in priority landscapes across the western Cascades

Joint Fire Science Program Graduate Research Innovation (GRIN) Award [\$24K – Co-PI] 2023–2024 Stand-level drivers and management impacts on trajectories of reburn potential in western Cascadia

USGS Northwest Climate Adaptation Science Center Research Fellowship [\$48K – Fellow] 2022–2023 Post-fire forest trajectories in western Cascadia: simulating vegetation, reburn potential, and user-defined management scenarios under changing climate

UW College of the Environment Graduate Research Opportunity Enhancement (GROE) Fellowship 2019–2020 [3 quarters graduate tuition + stipend]

UW School of Environmental and Forest Sciences Jesse L. Riffe Family Endowed Fellowship 2018–2019 [3 quarters graduate tuition + stipend]

TEACHING EXPERIENCE

School of Environmental and Forest Sciences, University of Washington

Pre-doctoral Teaching Associate II – ESRM 101: Forests, Fires & Society winter 2024

Biology Department, Whitworth University

Laboratory Teaching Assistant – BIO 141: Organismal Diversity spring 2017
Laboratory Teaching Assistant – BIO 140: Genes, Cells & Evolution fall 2014

INVITED GUEST LECTURES

Morris, JE. 2025. Disturbances in the Pacific Northwest. *ESRM 201: Sustaining Pacific Northwest Ecosystems*, University of Washington, Seattle, WA. Nov 4.

Morris, JE. 2024. Wildfires and climate change. *ENVS 392: Intro to Climate Change,* Western Washington University, Virtual. Feb 15.

Morris, JE. 2022. Perspective on grad school. *BIO 312: Vocational Preparation for Biology Grad School,* Whitworth University, Virtual. Oct 12.

Morris, JE and MS Buonanduci. 2021. Biotic disturbances: causes, characteristics, and effects of bark beetle outbreaks. *ESRM 490 / SEFS 501: Forest Community Ecology*, University of Washington, Seattle, WA. Nov 12.

Buonanduci, MS and **JE Morris**. 2021. Biotic disturbances: causes, characteristics, and effects of bark beetle outbreaks. *ESRM 490 / SEFS 501: Forest Community Ecology*, University of Washington, Seattle, WA. May 10.

Morris, JE. 2018. Perspective on grad school. *BIO 312: Vocational Preparation for Biology Grad School,* Whitworth University, Virtual. May 18.

MENTORING EXPERIENCE

School of Environmental and Forest Sciences, University of Washington

Undergraduate Mentor – Career Development Workshop 2024
Undergraduate Capstone Mentor – Environmental Science & Resource Management 2023

Graduate Peer Mentor 2023, 2019–2020

Fieldwork Supervisor & Crew Lead – Disturbance Ecology 2022, 2021, 2019, 2018

PUBLICATIONS

PEER-REVIEWED ARTICLES

- **Morris, JE**, MM Laughlin, LK Rangel-Parra, DC Donato, JS Halofsky, D Butman, and BJ Harvey. *In press*. Pre-fire structure drives variability in post-fire aboveground carbon and fuel profiles in wet temperate forests. *Ecosphere* e70479. DOI: 10.1002/ecs2.70479
- Thom, D, +24 others including **JE Morris**. 2024. Parameters of 150 temperate and boreal tree species and provenances for an individual-based forest landscape and disturbance model. *Data in Brief* 55: 110662. <u>DOI:</u> 10.1016/j.dib.2024.110662
- Laughlin, MM, LK Rangel-Parra, **JE Morris**, DC Donato, JS Halofsky, and BJ Harvey. 2023. Patterns and drivers of early conifer regeneration following stand-replacing wildfire in Pacific Northwest (USA) temperate maritime forests. *Forest Ecology and Management* 549: 121491. DOI: 10.1016/j.foreco.2023.121491
- Morris, JE, MS Buonanduci, MC Agne, MA Battaglia, DC Donato, and BJ Harvey. 2023. Fuel profiles and biomass carbon following bark beetle outbreaks: Insights for disturbance interactions from a historical silvicultural experiment. *Ecosystems* 26(6): 1290–1308. DOI: 10.1007/s10021-023-00833-5
- Buonanduci, MS, **JE Morris**, MC Agne, MA Battaglia, and BJ Harvey. 2023. Fine-scale spatial heterogeneity shapes compensatory responses of a subalpine forest to severe bark beetle outbreak. *Landscape Ecology* 38(1): 253–270. DOI: 10.1007/s10980-022-01553-2
- Rodman, KC, +26 others including **JE Morris**. 2022. Rocky Mountain forests are poised to recover following recent bark beetle outbreaks, but with altered composition. *Journal of Ecology* 110(12): 2929–2949. DOI: 10.1111/1365-2745.13999
- Morris, JE, MS Buonanduci, MC Agne, MA Battaglia, and BJ Harvey. 2022. Does the legacy of historical thinning treatments foster resilience to bark beetle outbreaks in subalpine forests? *Ecological Applications* 32(1): e02474. DOI: 10.1002/eap.2474
- Buonanduci, MS, **JE Morris**, MC Agne, and BJ Harvey. 2020. Neighborhood context mediates probability of host tree mortality in a severe bark beetle outbreak. *Ecosphere* 11(8): e03236. <u>DOI: 10.1002/ecs2.3236</u>

IN PREP, REVIEW, OR REVISION

- **Morris, JE**, MM Laughlin, LK Rangel-Parra, DC Donato, JS Halofsky, CL Raymond, and BJ Harvey. *In prep*. Drivers of reburn potential in northwestern Cascadia forests.
- **Morris, JE**, S Saenz Kruszka, MM Laughlin, LK Rangel-Parra, KH Braziunas, DC Donato, JS Halofsky, and BJ Harvey. *In prep*. Tradeoffs and opportunities for managing post-fire forest trajectories in northwestern Cascadia under changing climate.

REPORTS & OTHER PUBLICATIONS

- **Morris, JE** and BJ Harvey. 2025. Stand-level drivers and management impacts on trajectories of reburn potential in western Cascadia. Final Report. Joint Fire Science Program Graduate Research Innovation Award Project ID: 23-1-01-15. (link)
- **Morris, JE**, CL Raymond, and BJ Harvey. *In press*. Climate Effects for Forest Ecosystems: Overview. In: The State of Climate Adaptation Science for Ecosystems in the Northwest US. [CL Raymond & EJ Fusco eds.] (<u>link</u>)
- Contributing author, *King County (WA) Wildfire Risk Reduction Strategy* Section 2: Understanding the challenge: wildfire potential in western Washington. 2022. (<u>link</u>)
- Seeing the forest for the (dead) trees. 2020. Engage Science Blog. (link)

PROFESSIONAL MEETINGS

- Morris, JE, MM Laughlin, LK Rangel-Parra, S Saenz Kruszka, KH Braziunas, DC Donato, JS Halofsky, CL Raymond, and BJ Harvey. 2025. Post-fire reburn potential and stand development trajectories of wet temperate forests in northwestern Cascadia, USA. Association for Fire Ecology 11th International Fire Ecology & Management Congress, New Orleans, LA. Dec 2–6. (link)
- *Morris, JE, MM Laughlin, LK Rangel-Parra, DC Donato, JS Halofsky, and BJ Harvey. 2023. Exploring drivers of reburn potential in northwestern Cascadia. *Association for Fire Ecology 10th International Fire Ecology & Management Congress*, Monterey, CA. Dec 4–8. (link)
- Morris, JE, SS Kruszka, MM Laughlin, LK Rangel-Parra, DC Donato, JS Halofsky, and BJ Harvey. 2023. How will forests recover following fire in northwestern Cascadia? *Northwest Climate Conference*, Virtual. Oct 2–4.
- †Morris, JE, SS Kruszka, MM Laughlin, LK Rangel-Parra, DC Donato, JS Halofsky, and BJ Harvey. 2023. Measuring and modeling post-fire forest trajectories in northwestern Cascadia. *Ecological Society of America Annual Meeting*, Portland, OR. Aug 6–11. (link)
- †Morris, JE, MM Laughlin, LK Rangel-Parra, DC Donato, JS Halofsky, and BJ Harvey. 2023. Impacts of forest structure and burn severity on reburn potential in western Cascadia. *Oregon Post-fire Research and Monitoring Symposium*, Corvallis, OR. Feb 7–9. (link)
- *Morris, JE, MM Laughlin, LK Rangel-Parra, DC Donato, JS Halofsky, and BJ Harvey. 2021. Carbon consequences and reburn potential following forest fires in western Cascadia: influence of stand age and burn severity. Association for Fire Ecology 9th International Fire Ecology & Management Congress, Virtual. Nov 30—Dec 3.
- Morris, JE, MS Buonanduci, MC Agne, and BJ Harvey. 2020. Cutting a course: historical thinning treatments direct forest response to mountain pine beetle outbreaks. *Ecological Society of America Annual Meeting*, Virtual. Aug 3–6. (link)
- Morris, JE, MS Buonanduci, MC Agne, and BJ Harvey. 2019. Effects of historical thinning treatments on resistance to mountain pine beetle outbreaks differ between stand- and tree- scales. *US-International Association for Landscape Ecology Annual Meeting*, Fort Collins, CO. April 7–11.
- *Morris, JE and GM Casady. 2017. How do land cover, elevation, and climate drive variability in start of season phenology in the Inland Northwest? *US-International Association for Landscape Ecology Annual Meeting*, Baltimore, MD. April 9–13.
- *Morris, JE and GM Casady. 2015. How does start of season vary between different ecosystems in the Inland Northwest? *National Conference for Undergraduate Research*, Cheney, WA. April.

OUTREACH ENGAGEMENTS

- †Morris, JE. 2024. Seeing the forest *and* the trees: a fiery perspective on finding your niche. *Keynote speaker for the Whitworth University Environmental Studies Dinner*, Spokane, WA. Oct 16.
- †Morris, JE. 2024. How will northwestern Cascadia forests recover following fire? Lightning talk for the Northwest Climate Adaptation Science Center's meeting with the USGS Director, Seattle, WA. Mar 4.
- †Morris, JE. 2022. Forests and fire in the Cascades. *Snohomish Conservation District Wildfire Community Preparedness Day*, Darrington, WA. May 7. (link)
- **Morris, JE**. 2020. A great disturbance in the forest. *Town Hall Seattle & University of Washington present UW Engage Science Series*, Seattle, WA. May 7.

PROFESSIONAL HONORS & AWARDS	
1 st Place, Student Poster Contest [\$100] – Association for Fire Ecology	2023, 2021
National Merit Scholarship [\$8K]	2013–2017
Departmental Achievement Scholarship [\$3K] – Biology Department, Whitworth Univers	ity 2014–2017
Research Student of the Year – Biology Department, Whitworth University	2016
Writing Competition Award [\$200] – Biology Department, Whitworth University	2016
TRAVEL GRANTS	
Travel & Meeting Fund Award [\$674] – UW College of the Environment	2023
Graduate School Conference Presentation Award [\$300] – University of Washington	2023
Director's Office Student Travel Fund [\$500] – UW School of Environmental and Forest S	ciences 2023
Travel, Research, and Educational Experience (TREE) Grant [\$315] – Association for Fire	Ecology 2021
Student Section Real/Brown Travel Grant [\$60] – Ecological Society of America	2020
Travel Grant [\$200] – Graduate & Professional Student Senate, University of Washington	2019
Director's Office Student Travel Fund [\$300] – UW School of Environmental and Forest S	ciences 2019
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SERVICE & OUTREACH ACTIVITIES	
School of Environmental and Forest Sciences, University of Washington	
Graduate Student Representative – Faculty Meetings	2023–2024
Invited Panelist – Graduate Student Orientation	2023, 2021, 2020, 2019
Graduate Student Representative – Faculty Curriculum Committee	2021–2022
Committee Member – Search Committee for SEFS Academic Services Director	2021
Pod Member – Unlearning Racism in the Geosciences (URGE)	2021
Facilitator – SEFS Seminar Series	2021
Elected Officer – Graduate Student Council	2019–2020
Co-organizer – Graduate Student Symposium	2020
Volunteer – Carbon Project Workshop	2019
UAW Local 4121, University of Washington	
Postdoc Steward – School of Environmental and Forest Sciences	2025-current
Speaker – Kill the Cuts Town Hall with Rep. Pramila Jayapal	2025
Contract Campaign Captain – Bargaining Campaign for Academic Student Employee	s 2024
Peer Reviewer – Ecol Appl, Ecosystems, For Ecol Manage, Landsc Ecol, Northwest Sci	2024-current
Other	
Contributor, Engaging Communities in Forest Education Workshop – Pacific Education	on Institute 2024
Volunteer, 9 th International Fire Ecology & Management Congress – Association for	Fire Ecology 2021
Volunteer, LTEP Program – USFS Forestry Sciences Laboratory, Olympia, WA	2018

SELECTED MEDIA COVERAGE

Scorched Earth: Why Washington wildfires are getting bigger. 2021. Seattle KING 5 News. (link)

Wildfires could become more common in western Washington; how will forests handle it? 2021. *Seattle KING 5 News*. (link)

Alumna studies threat to forests. 2019. Whitworth University – Our Stories. (link)