

# JENNA E. MORRIS

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<https://depts.washington.edu/bjhlab/>

## EDUCATION

**PhD, Environmental and Forest Sciences**, University of Washington 2021–2024 (expected)

Dissertation: *Post-fire fuels, carbon, and vegetation trajectories in moist temperate forests: implications for future fire and management*

**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

**Graduate Research Assistant, PhD** 2021–

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

Working on PhD dissertation with Dr. Brian 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 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.

**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. ([link](#))

**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.

## PUBLICATIONS

### PEER-REVIEWED ARTICLES

- 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*. <https://doi.org/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*. <https://doi.org/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. <https://doi.org/10.1007/s10980-022-01553-2>
- Rodman, KC, RA Andrus, AR Carlson, TA Carter, TB Chapman, JD Coop, PJ Fornwalt, NS Gill, BJ Harvey, AE Hoffman, KC Kelsey, D Kulakowski, DC Laughlin, **JE Morris**, JF Negron, KM Nigro, GS Pappas, MD Redmond, CC Rhoades, ME Rocca, ZH Schapira, JS Sibold, CS Stevens-Rumann, TT Veblen, J Wang, X Zhang, and SJ Hart. 2022. Rocky Mountain forests are poised to recover following recent bark beetle outbreaks, but with altered composition. *Journal of Ecology*. <https://doi.org/10.1111/jec.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. <https://doi.org/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. <https://doi.org/10.1002/ecs2.3236>

### OTHER PUBLICATIONS

- UW Climate Impacts Group. *In prep*. Northwest Climate State of Knowledge Synthesis. ([link](#))
- Contributing author, *King County (WA) Wildfire Risk Reduction Strategy* – Section 2: Understanding the challenge: wildfire potential in western Washington. 2022. ([link](#))
- Seeing the forest for the (dead) trees. 2020. *Engage Science Blog*. ([link](#))

### IN PREP, REVIEW, OR REVISION

- Rangel-Parra, LK, MM Laughlin, **JE Morris**, DC Donato, JS Halofsky, and BJ Harvey. *In prep*. Laying the groundwork: post-fire complex early-seral forest community trajectories in western Cascadia.
- Morris, JE**, MM Laughlin, LK Rangel-Parra, DC Donato, JS Halofsky, and BJ Harvey. *In prep*. Post-fire fuels and aboveground carbon dynamics in northwestern Cascadia forests.
- Morris, JE**, MM Laughlin, LK Rangel-Parra, DC Donato, JS Halofsky, and BJ Harvey. *In prep*. Drivers of reburn potential in northwestern Cascadia forests.
- Morris, JE**, SS Kruszka, MM Laughlin, LK Rangel-Parra, DC Donato, JS Halofsky, and BJ Harvey. *In prep*. Tradeoffs and opportunities for managing post-fire forest trajectories in northwestern Cascadia under changing climate.
- Kruszka, SS, **JE Morris**, KH Braziunas, and BJ Harvey. *In prep*. Parameterizing six Pacific Northwest (USA) tree species in a process-based forest landscape simulation model.

## FUNDED RESEARCH GRANTS & FELLOWSHIPS

Joint Fire Science Program Graduate Research Innovation (GRIN) Award [\$24K – Co-PI] <i>Stand-level drivers and management impacts on trajectories of reburn potential in western Cascadia</i>	2023–2024
USGS Northwest Climate Adaptation Science Center Research Fellowship [\$48K – Fellow] <i>Post-fire forest trajectories in western Cascadia: simulating vegetation, reburn potential, and user-defined management scenarios under changing climate</i>	2022–2023
UW College of the Environment Graduate Research Opportunity Enhancement Fellowship [3 quarters graduate tuition + stipend]	2019–2020
UW School of Environmental and Forest Sciences Jesse L. Riffe Family Endowed Fellowship [3 quarters graduate tuition + stipend]	2018–2019

## SELECTED PRESENTATIONS

(†INVITED, \*POSTER)

- †**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, 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.** 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. ([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 10<sup>th</sup> International Fire 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.** 2021. Carbon consequences and reburn potential following forest fires in western Cascadia: influence of stand age and burn severity. *Association for Fire Ecology 9<sup>th</sup> International Fire 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.

## HONORS & AWARDS

1 <sup>st</sup> Place, Student Poster Contest [\$100] – <i>Association for Fire Ecology</i>	2023, 2021
Travel & Meeting Fund Award [\$674] – <i>UW College of the Environment</i>	2023
Graduate School Conference Presentation Award [\$300] – <i>University of Washington</i>	2023
Director’s Office Student Travel Fund [\$500] – <i>UW School of Environmental and Forest Sciences</i>	2023
Travel, Research, and Educational Experience (TREE) Grant [\$315] – <i>Association for Fire Ecology</i>	2021
Student Section Real/Brown Travel Grant [\$60] – <i>Ecological Society of America</i>	2020
Travel Grant [\$200] – <i>Graduate &amp; Professional Student Senate, University of Washington</i>	2019
Director’s Office Student Travel Fund [\$300] – <i>UW School of Environmental and Forest Sciences</i>	2019
Xi Sigma Pi National Forestry Honors Society – <i>University of Washington</i>	2019
National Merit Scholarship [\$8K]	2013–2017
Departmental Achievement Scholarship [\$3K] – <i>Biology Department, Whitworth University</i>	2014–2017
Research Student of the Year – <i>Biology Department, Whitworth University</i>	2016
Writing Competition Award [\$200] – <i>Biology Department, Whitworth University</i>	2016

## 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 autumn 2014

## INVITED GUEST LECTURES

**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

## SERVICE & OUTREACH ACTIVITIES

### *School of Environmental and Forest Sciences, University of Washington*

Graduate Student Representative – Faculty Meetings	2023–current
Invited Panelist – Graduate Student Orientation	2023, 2021, 2020, 2019
Graduate Student Representative – Faculty Curriculum Committee	2021–2022
Committee Member – Search Committee, 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

### *Other*

Volunteer, Fire Ecology and Management Congress – <i>Association for Fire Ecology</i>	2021
Volunteer, LTEP Program – <i>USFS Forestry Sciences Laboratory, Olympia, WA</i>	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](#))

## PROFESSIONAL MEMBERSHIPS

Association for Fire Ecology (AFE); Ecological Society of America (ESA); North American Regional Association – International Association for Landscape Ecology (IALE-NA); Northwest Scientific Association (NWSA)