

Sofia Saenz Kruszka

School of Environmental and Forest Sciences, University of Washington

EDUCATION

- 2023 – present **M.S.**, Environmental and Forest Sciences, University of Washington,
Expected completion: June 2026
- 2017 – 2021 **B.S.**, Ecology, Evolution, and Biodiversity, Food and the Environment,
University of Michigan
Graduated with Distinction

ACADEMIC EXPERIENCE

- AU 2023 – SP 2025 **Graduate research assistantship**, School of Environment and Forest
Sciences, University of Washington
- AU 2025 – SP 2026 **SEFS fellowship**, School of Environment and Forest Sciences, University of
Washington

RESEARCH EXPERIENCE

- 2022 – 2023 **Assistant research scientist**, School of Environment and Forest Sciences,
University of Washington. Advisor Brian J. Harvey.
*Parameterized and began calibration of the agent-based forest landscape modeling
program iLand for Pacific Northwest (USA) forests. Other duties included data entry
and spatial data analysis for other projects.*
- 2021 **Field technician**, School of Environment and Forest Sciences, University of
Washington. Advisor Brian J. Harvey.
*Sampled and established pre-and post-fire long-term monitoring plots in
northwestern.*
- 2017 – 2020 **Undergraduate research assistant**, Department of Ecology, Evolution, and
Biodiversity, College of Literature, Science, and the Arts, University of Michigan.
Advisor Nyeema C. Harris.
*Field and wet lab research studying North American and African mesocarnivores
and their parasites. Learned camera trapping, fecal flotation, and DNA extraction
from tissue samples.*
- 2019 **Summer research and field intern**, Harvard Forest. Advisor Audrey Barker-
Plotkin.
*Data collection and analysis studying drivers of oak tree mortality post-insect
disturbance. Additional data collection for Hemlock Hospice long-term monitoring
plots.*

RESEARCH GRANTS, FELLOWSHIPS, AWARDS, AND HONORS

2025 – 2026	UW School of Environment and Forest Sciences Morten J. Lauridsen, Jr. Endowed Scholarship (3 quarters graduate tuition + stipend)
2025	School of Environment and Forest Sciences Graduate Student of the Year
2024	University of Washington College of the Environment Integral Environmental Big Data Research Fund (\$3,866)
2020	University of Michigan J.T. Slater Award (\$1,000)
2019	National Science Foundation Research Experience for Undergraduates Award (\$10,000)

PUBLICATIONS

Thom, D, Rammer, W, Albrich, K, Braziunas, KH, Dobor, L, Dollinger, C, Hansen, WD, Harvey, BJ, Hlásny, T, Hoecker, TJ, Honkaniemi, J, Keeton, WS, Kobayashi, Y, **Kruszka, SS**, Mori, A, Morris, JE, Peters-Collae, S, Ratajczak, Z, Simensen, T, Storms, I, Suzuki, KF, Taylor, AR, Turner, MG, Willis, S, Seidl, R. 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

PRESENTATIONS (*POSTER)

Sofia Saenz Kruszka, Kristin H. Braziunas, Skye Greenler, Kerry Kemp, Tom DeMeo, Brian J. Harvey. Projecting management, fire, and climate change effects in a dry forest landscape.

Presented at the 11th Annual Association for Fire Ecology and Management meeting. Dec 2025.

***Sofia Saenz Kruszka**, Jenna E. Morris, Kristin H. Braziunas, Brian J. Harvey. Parameterizing five Pacific Northwest (USA) tree species in a process-based landscape simulation model.

Presented at the Ecological Society of America Annual meeting. Aug 2023.

***Sofia Kruszka**, Anna Pasek, Lucy White, Sarika Mahimkar, Cameron Craig. Reducing invasive seed viability through composting and other heat treatments.

Presented at the Stewardship Network Conference in East Lansing. Jan 2020.

Sofia Kruszka, Audrey Barker-Plotkin. Quantifying death: Characterizing patterns of oak tree mortality in North-Central Massachusetts in the aftermath of the most recent spongy moth (*Lymantria dispar dispar*) outbreak.

Presented at the Harvard Forest Summer Student Symposium. Aug 2019.

***Sofia S. Kruszka**, Beatriz Aguilar, Dr. Nyeema C. Harris. Spatial variation in the intestinal parasite community of raccoons (*Procyon lotor*) across three distinct anthropogenic zones in Michigan.

Presented at the Ecological Society of America Annual meeting. Aug 2018.

SELECTED PROFESSIONAL ACTIVITIES AND OUTREACH

2025	Invited participant, ‘2025 Washington Fire Science and Management Field Workshop,’ Washington State Department of Natural Resources and Northwest Fire Science Consortium
2024	‘Introduction to iLand.’ Workshop on using the individual-based forest landscape and disturbance model iLand, Co-organizer and presenter, Tulalip Tribes of Washington
2024 – 2025	Graduate student committee member, College of the Environment Inclusive Excellence Committee, University of Washington
2023	Doris Duke Conservation Scholars Program Mentor, University of Washington
2020	Volunteer research assistant, Department of Ecology, Evolution, and Biodiversity, College of Literature, Science, and the Arts, University of Michigan

SPECIAL SKILLS

- ◆ **Scripting languages:** Bash, Python, JavaScript
- ◆ **Data analysis and statistical languages:** R, Julia
- ◆ **Computing and tools:** SSH, UW Hyak
- ◆ **Laboratory:** PCR, DNA extraction from fecal tissue, microscopy, fecal flotation
- ◆ **Field:** tree inventory, camera trap deployment, Composite Burn Index (CBI), Brown’s transects for downed woody material inventory.
- ◆ **Spanish** (speaking for 27 years)

