

MEGAN SZOJKA

Dept. of Botany & Program in Ecology & Evolution • meganszojka.weebly.com

EDUCATION

PhD in Botany & Ecology | University of Wyoming | Laramie, WY Current
Advisor: Dr. Lauren Shoemaker

MSc in Zoology | University of British Columbia | Vancouver, BC 2020
Thesis: Persistence across habitat boundaries: revealing the demographic fates of failed dispersers in patchy landscapes
Advisor: Dr. Rachel M. Germain
Committee: Dr. Mary O'Connor, Dr. Diane Srivastava, Dr. Jonathan Davies

BSc in Evolutionary Biology | University of Alberta | Edmonton, AB 2017
Thesis: Nesting behavior of Ferruginous hawks (*Buteo regalis*) in their southern Alberta breeding grounds
Advisors: Dr. Janet W. Ng, Dr. Erin M. Bayne

PUBLICATIONS

(*underline = undergraduate mentees*):

In review

Craig, E.F. *, **M. Szojka***, L.G. Shoemaker, and R.M. Germain. Sink populations decouple species occupancy and persistence across a productivity gradient. *Ecology Letters*.
*equal contribution

Slimon, K., **M. Szojka** and R.M. Germain. Environmental variability and the evolution of dispersal and dormancy. *Journal of Ecology*.

Davidson, J., K. McKnight, **M. Szojka**, *et al.* Short-term versus multi-decadal responses of community synchrony, biodiversity, and stability to multiple global change drivers. *Ecology Letters*.

Published

[1] **Szojka, M.** and R.M. Germain. 2024. Dispersal across habitat boundaries: revealing the demographic fates of failed dispersers in patchy landscapes. Accepted at *Ecosphere*.

[2] Collins, C.G., S.C. Elmendorf, J.G. Smith, L. Shoemaker, **M. Szojka**, M. Swift, and K.N. Suding. 2022. Global change re-structures alpine plant communities through interacting abiotic and

biotic effects. Ecology Letters. 25(8):1813-1826.

- [3] Grainger, T.N., A. Senthilnathan, P. Ke, M.A. Barbour, N.T. Jones, J.P. DeLong, S.P. Otto, M.I. O'Connor, K.E. Coblenz, N. Goel⁷, J. Sakarchi², **M. Szojka**, J.M. Levine¹ and R.M. Germain. 2022. An empiricist's guide to using ecological theory. The American Naturalist. 199(1):1-20.
[An Empiricist's Guide to Using Ecological Theory | The American Naturalist \(uchicago.edu\)](https://doi.org/10.1093/aes/199.1.1)
- [4] Mackay, J.*, K. Nikiforuk*, **M. Szojka**¹, C.J. Little, J.R. Fleri & R.M. Germain¹. 2021. Animals connect plant species and resources in a meta-ecosystem. Landscape Ecology <https://doi.org/10.1007/s10980-021-01244-4>
*equal contribution, ¹corresponding authors
- [5] **Szojka, M.**, E.M. Bayne, T.I. Wellicome & J.W. Ng. 2020. The role of sibling competition and parental provisioning on food distribution among Ferruginous Hawk nestlings. Journal of Raptor Research 54(4):376-387.

GRANTS & FELLOWSHIPS (total = \$121,121 CAD)

William A Reiner Award For outstanding progress towards my PhD at the University of Wyoming (900 USD)	2023
Alexander Graham Bell Canada Graduate Scholarship – Doctoral NSERC funding for Ph.D research (105,000 CAD), accepted (PGS-D)	2021-2023
Aven Nelson Fellowship in Systematic Botany Awarded by the Department of Botany at the University of Wyoming (700 USD)	2021
International Student Scholarship Awarded for outstanding international students at the University of Wyoming (1000 USD)	2021
Botany Service Award Nominated and awarded for leading DEI initiatives within at the University of Wyoming (100 USD)	2021
Biodiversity Research: Integrative Training and Education (BRITE) Received funding for collaboration on recreation ecology project with Yellowstone to Yukon Conservation Initiative (6000 CAD)	2020
California Native Plant Society Awarded in support of my MSc Thesis work on persistence of native plants (500 USD)	2019

Henry Hearn Memorial Scholarship in Plant Biology, University of Alberta Awarded for work advancing the field of Plant Biology (1,250 CAD)	2016
Jason Lang Scholarship, University of Alberta Received award annually three separate years for a GPA above 3.5 (3000 CAD)	2014-2017
Alexander Rutherford Scholarship, Gov't of Alberta For high achievement in high school (2500 CAD)	2014

AWARDS

Nominated for Graduate Teaching Award, UBC Submitted by both instructors of Fundamentals of Ecology in recognition of my leadership skills as TA	2018
Research Certificate in Biological Sciences, University of Alberta Awarded in recognition of my engagement towards developing focused research questions during BSc.	2017

PROFESSIONAL EXPERIENCE

Internship Yellowstone to Yukon Conservation Initiative (Y2Y) Principle Investigator: Drs Karine Pigeon & Aerin Jacobs Project: Assessing unsanctioned trail use to manage the ecological effects of recreation in the Kananaskis-Ghost region (Canada)	2020
Ecological Monitoring Attendant, Parks Canada Principle Investigator: Patrick Waters Habitat and trail maintenance in Waterfowl Lakes, Banff National Park	2018
Research Assistant, Kluane Red Squirrel Project Principle Investigator: Dr. Stan Boutin & April Martinig Behavioral differences in juvenile squirrel dispersal across life history strategies (Yukon, Canada)	2017

PRESENTATIONS

- Szojka, M.C., L.G. Shoemaker.** (February 2024). Historic, current, and future effects of climate on species coexistence. Program in Ecology and Evolution Symposium. Laramie, University of Wyoming.
- Szojka, M.C., J. Smith, K. Suding, N. Emery, & L.G. Shoemaker.** (August 2023). Into thin air: The effects of biotic interactions on range expansion of a sub-alpine buttercup. Ecological Society of America. Portland, USA.

Awarded best poster at the Program in Ecology Symposium. **Szojka, M.C.**, J. Smith, K. Suding, N. Emery, & L. G. Shoemaker. (February 2023). Into thin air: The effects of biotic interactions on range expansion of a sub-alpine buttercup. Laramie, University of Wyoming.

Szojka, M.C., J. Smith, K. Suding, N. Emery, & L. G. Shoemaker. (September 2022). Into thin air: The effects of biotic interactions on range expansion of a sub-alpine buttercup. Long-term Ecological Research. Monterey, CA

Szojka, M.C., L. Shoemaker & R. Germain. (August 2022) Scaling of ecological persistence vs transience. Ecological Society of America. Montreal, QC

Szojka, M.C. & R. Germain. (January 2021) Persistence across habitat boundaries. Presentation at American Society of Naturalists.

Szojka, M.C. & R. Germain. (August 2019) Persistence across habitat boundaries. Poster at the Canadian Society of Ecology and Evolution. Fredericton, NB

Szojka, M.C., J. Ng & E. Bayne. (October 2018) The role of sibling competition and parental provisioning on food distribution among Ferruginous hawk nestlings. Presentation at Eco-Evo Meeting. Squamish, BC

Szojka, M.C., J. Ng & E. Bayne. (January 2017) Influence of nestling competition on food distribution in Ferruginous hawks. Presentation at R. E. Peters Biology Conference. Edmonton, AB

MENTORING

Advisor for independent research project, CU Boulder 2021
Emilie Craig: Revealing mechanisms behind productivity-persistence relationship
Resulted in publication in review at *Ecology Letters*.

Advisor on students' NSERC summer grant, UBC 2020
Kately Nikiforuk: behavioral ecology of mega-carnivores influencing seed dispersal
Jenny MacKay: herbivore mediated nutrient flow connecting insular plant communities
Resulted in publication in *Landscape Ecology*.

OUTREACH

Research Interview Video, Beaty Biodiversity Museum 2019
Featured in a community outreach program aimed to spotlight faculty and graduate student research

Blog entry for eNGO Yellowstone to Yukon 2020
Invited author reflecting on my time as an intern with Y2Y

Shepard Symposium for social justice, WY 2021
Volunteered in Laramie, WY, to promote diversity, inclusion & justice for
LGTBQ+ youth.

SERVICE

Editorial Activities 2018-2024
Reviewer, American Naturalist
Reviewer, Ecological Monographs
Reviewer, Ecology (x 3)
Reviewer, Plant Ecology, Journal
Reviewer, Movement Ecology, Journal
Reviewer, Journal of Ecology

Botany Diversity, Equity, and Inclusion Committee, UW 2022-present
Graduate representative for the Botany Department.

Zoology Graduate Student Association, UBC 2019-2020
Appointed by UBC, faculty nomination

Class Mentor, UBC 2019
Acted as mentor and interviewee for LFS 250 & SCIE 113

TEACHING

Discussion Moderator Current
Leads inter-departmental discussion groups, focus on biodiversity research,
women in science, and theoretical ecology

Lab Instructor, Laboratory Investigations in Life Sciences, UBC 2019
Guide classes through the process of hypothesis testing and on the basics of
methods in ecology

Teaching Assistant, Fundamentals of Ecology, UBC 2018-2019
Required instructing field lab sessions, marking research reports, facilitating
lecture activities