

Together for Wildlife

Together for Wildlife HCTF Conservation Scholarship Recipient 2026

Madeline Frazer



Madeline Frazer (she/her) is a master's student in Biology at the University of British Columbia – Okanagan (UBCO) where she is working at the intersection of wildlife health, microbial communities, and land management under the co-supervision of Dr. Laura Grieneisen and Dr. Deanna L. Gibson. Her research seeks to understand the effects of herbicide use in forestry on wild mammals by investigating the potential of the chemical glyphosate to disrupt the gut microbiome and accumulate in animal tissues.

Madeline received a bachelor's degree in Wildlife and Wildlands Conservation from Brigham Young University (Utah, USA), where her love for wildlife and the outdoors was augmented with a sense of responsibility to be a good steward and an understanding that ecosystems are deeply intertwined. In her undergraduate Honors thesis, she developed a new method to determine mule deer relatedness using genomic data to better inform harvest management strategies, which showed her that wildlife ecology and behavior can be discovered using the subtle signals hidden in DNA.

Her passion for wildlife conservation and interest in genomic technology led her to UBCO, where her thesis project is part of the larger GROW Alliance (GrowProject.ca) that brings together First Nation communities, hunter, trapper, cattlemen, and wildlife organizations, and researchers across B.C. and Alberta to understand the effects of glyphosate (the main chemical in Roundup® and other herbicides) on B.C.'s plants and animals. Madeline collaborates with researchers Yaelle Sarid-Segal (2025 Together for Wildlife awardee, UNBC) and Kevin Peterson (UNBC) as well as local hunters and trappers to collect fecal samples from voles, mice, weasels, deer, and moose. She will use these fecal samples to understand how exposure to glyphosate changes the gut microbial communities, how those changes may affect the health and behavior of the animals, and the potential consequences on the wider ecosystem. By using advancing genomic technology to non-invasively study animal health and behavior through the lens of the gut microbiome, Madeline hopes to inform improved land management strategies and policies for more sustainable land use that will benefit wildlife and human communities alike.



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