

Together for Wildlife

Together for Wildlife HCTF Conservation Fellowship Recipient 2023



Megan Winand

Megan Winand is an MSc student at the University of British Columbia under supervisor Dr. Tara Martin, focusing her studies on wetlands, amphibians, and reptiles. She has previously worked as a biologist for Friends of Semiahmoo Bay Society, Ducks Unlimited Canada, and FLNROD. Her research with Conservation Decisions Lab will assess the effectiveness of mitigation translocation in conserving amphibians, alongside her project partner Ducks Unlimited Canada, and the Ministry of Water, Land and Resource Stewardship.

Megan grew up in Elliot Lake, Ontario, a small town in the northern part of the province surrounded by stunning landscapes and breathtaking vistas. After graduating from high school Megan decided to volunteer with ECORANA/T.R.E.E.S to explore potential future career paths in the environmental field. Conducting surveys of rivers for frogs, engaging in small mammal trapping, and mist-netting birds captivated her heart and solidified Megan's passion for this field. Still following this passion Megan's research is focused on the Columbia Spotted Frog.

For over a decade now, the practice of capturing and relocating amphibians and reptiles has been implemented to mitigate the negative consequences of human-induced habitat alteration or destruction. In British Columbia, this conservation strategy is known as 'salvaging,' while globally, it is recognized as mitigation translocation. However, despite its everyday use in BC, there remains uncertainty in its effectiveness. The Columbia Spotted Frog, a species notably impacted by mitigation translocation in BC, is the focal species of her study.

Given the lack of research on this topic in British Columbia, this study provides a first step toward understanding the effectiveness of mitigation translocation for a widespread amphibian species in the region. To do this, each frog will be given a Passive Integrated Transponder, or PIT, tag, to provide unique identification and a radio transmitter, so their movement can be tracked over a period ranging from 3 to 14 weeks. Using PIT tags and capture-mark-recapture methods over a two-year period, Megan will assess post-translocation survival of Columbia Spotted Frogs that have been moved to one of three treatments: 1) control, 2) a wetland that is a short distance away, and 3) a wetland that is a long distance away from the control. Radio transmitters will be assigned to a subset of Frogs in year 1 and tracked over 3 weeks to understand if movement patterns change post-translocation.

Megan's findings will contribute to filling knowledge gaps surrounding the success rate and movement patterns of amphibian's post-translocation, address concerns related to the Best Management Practices for Amphibian and Reptile Salvage in BC; a document used by biologists to carry out a translocation in BC and, provide valuable knowledge to decision-makers for future mitigation translocation of amphibians.



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