## Al Martin HCTF Conservation Fellowships Recipient 2022

## Megan Buers

Megan Buers is an MSc student at the University of British Columbia's Okanagan campus under the supervision of Dr. Karen Hodges. She holds a Bachelor of Science in Ecology and Evolutionary Biology from the University of British Columbia.

Over the past four years, Megan has worked as a wildlife research technician on various conservation focused projects across Canada. Through her work experience, she has developed an appreciation for the conservation of

birds and particularly birds of prey. Megan believes that birds of prey have a unique and necessary function in our ecosystems. She is also an enthusiastic advocate for climate change research in ecology and conservation science.

Megan's thesis "are riparian areas thermal refugia for nocturnal forest birds in south central British Columbia?" explores how habitat characteristics of riparian areas may act to provide shelter for wildlife during periods of high heat. Megan's interest in thermal refugia was sparked during the extreme heat event of 2021, where rehabilitation centres were overloaded with overheating young birds of prey. Lowland riparian areas throughout south central British Columbia are home to some of the most threatened species in Canada. Megan believes that understanding how these habitats can act as refugia for wildlife and what affects their ability to act as such will become critical for the persistence of Western Screech-Owls in the landscape. Nighttime temperatures are rising at a faster rate than daytime temperatures and there is little information on how these changes impact nocturnal wildlife. In addition to providing information on nocturnal wildlife's response to temperature fluctuations, this research will benefit a threatened species by looking more closely at habitat requirements.

Megan's work is conducted throughout the Okanagan and Similkameen Valleys with collaboration from BC Nature Trust, the Okanagan Nation Alliance, Regional Districts of Central Okanagan and Okanagan Similkameen. Megan and her team started work in south central BC by looking for owls in the early spring, conducting call playback surveys along predetermined routes. After establishing where owl territories were located, they searched for nests in tree cavities using a specialized camera mounted on a telescopic pole. Most field days comprised collecting regurgitated prey remains (pellets), setting up camera traps at nests for close monitoring of the owls and temperature loggers to monitor changes in air temperature and humidity in riparian and upland environments. As the chicks fledged in early June, Megan and her team trap the young owls to be fitted with continues.



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a radio tag, allowing Megan to follow the owls and determine what habitat is available to young Western Screech-Owls in the area. The goal of the project is to better understand what we need to conserve Western Screech-Owls in British Columbia and increase our understanding of how riparian areas can act as a refuge for wildlife.

In the future, Megan hopes to continue working with species at risk in British Columbia and, in particular, birds of prey. She will continue to advocate for more public outreach and education on habitats and how we can work to protect these habitats through the coming decades.

