



Al Martin HCTF Conservation Scholarship Recipient 2025



Larisa Murdoch

Larisa is a Master's student at Thompson Rivers University. Her research in the Thompson region of British Columbia aims to deepen the understanding of the challenges facing California bighorn sheep (*Ovis canadensis californiana*) populations and their impact on survival and reproduction.

One of the primary areas of Larisa's investigation is the behavior of female bighorn sheep during the lambing season. Larisa is investigating whether female bighorn sheep select rugged, steep terrain—known as escape terrain—during the lambing season and how the availability of such terrain influences their ability to give birth and raise their young safely. Additionally, she is exploring whether herds are more successful when they have better access to escape terrain. To analyze this, they are creating a habitat suitability model based on preferred terrain features, combining this with GPS location data from collared individuals to track the sheep's movements and habitat selection patterns.

In addition to studying the habitat choice of female bighorn sheep, Larisa is also studying the impact of cheatgrass on their movement patterns. Cheatgrass is an invasive plant species that is rapidly spreading in the habitats of bighorn sheep. Larisa's research aims to fill this gap by providing baseline data on the relationship between bighorn sheep and cheatgrass, offering critical insights into how this invasive species might be affecting the sheep's ability to thrive.

Larisa aims to provide insights into effective management strategies for conserving bighorn sheep populations, contributing to broader wildlife conservation efforts and habitat management practices. By identifying the specific habitat features that are crucial for the species' reproductive success and survival, she hopes to inform management strategies that can help conserve and restore bighorn sheep populations. This may include habitat restoration initiatives, targeted management of invasive species, and the development of land use policies that prioritize the protection of escape terrain for the sheep.

A key aspect of Larisa's research is the close collaboration with the Skeetchestn and Tk'emlúps Indian Band, whose traditional lands are home to the bighorn sheep populations being studied. These partnerships have been integral to the research design and fieldwork, ensuring that the project aligns with local values and conservation priorities. By working alongside these Indigenous communities, Larisa aims to produce research that not only advances wildlife conservation but also respects and incorporates Indigenous knowledge and stewardship practices.



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