



Al Martin HCTF Conservation Scholarship Recipient 2025



Shannon Werden

Shannon Werden (She/her, they/them) is a MSc student at Thompson Rivers University working under the co-supervision of Dr. Karl Larsen and Dr. Joanna Bugar in collaboration with the Mesocarnivore Conservation Science Team at the B.C. Ministry of Water, Land and Resource Stewardship. She also holds a BSc (Honours) Wildlife and Fisheries degree from the University of Northern British Columbia and a Recreation, Fish, and Wildlife diploma from Selkirk College. Shannon's research is conducted in the Cariboo region of British Columbia within the traditional territories of the Esk'etemc, Williams Lake First Nation, and Stswecem'c Xget'tem First Nations, and her project is examining stweleléqw (fishers/ *Pekania pennanti*) and their reproduction, habitat and den tree requirements.

There are two populations of fishers in the province, and Shannon's research focuses on the Columbian population, which is genetically distinct and isolated from the rest of the fishers in North America. This population is provincially Red-listed, with fewer kits per litter and lower denning rates than other populations. Historic overharvesting for the fur trade and widespread habitat loss have compounded these challenges. Fishers depend on mature, intact forests and are the province's largest cavity tree users, as females give birth and raise kits in large, decayed trees—making them especially vulnerable to deforestation and habitat fragmentation.

Shannon has spent extensive time in the Cariboo backcountry tracking radio-tagged fishers in the Columbian population to calculate their homeranges and investigate whether habitat within these areas could be affecting their low reproductive rates. By monitoring females during the denning season (March - June), she has examined litter sizes, denning rates, and den tree selection. Denning trees take over 100 years to form due to the amount of decay needed for the specific cavity requirements of a female, so protecting them is critical for fisher conservation.

Shannon's lifelong passion for wildlife conservation extends into her spare time, where she enjoys hiking, camping, and exploring B.C.'s forests, and she is grateful to have combined these interests with her academic work. Her research will broaden understanding of fishers in B.C. and help inform provincial forest management policies aimed at recovering the imperilled Columbian population.



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