

Together for Wildlife HCTF Conservation Fellowship Recipient 2023

Lindsay Whitehead

Lindsay is a Master's student at Thompson Rivers University, working under the supervision of Dr. Karl Larsen. Originally from South Africa, Lindsay grew up on a hobby farm in Salmon Arm, B.C. where she pursued a brief career as a competitive equestrian. Lindsay completed an undergraduate degree at Quest University and secured her current graduate position in Spring 2022, simultaneously overcoming her fear of snakes.

In her current role, Lindsay is the manager of the NK'Mip Snake Research program—a collaboration between the Osoyoos Indian Band (OIB), Thompson Rivers University, and Environment and Climate Change Canada (ECCC). This long-running initiative, primarily funded by the Aboriginal Fund for Species at Risk, is based out of the Nk'Mip Desert Cultural Centre. Here Lindsay has the privilege of collaborating closely with the Osoyoos Indian Band, engaging in cultural activities, learning from traditional knowledge, and leading discussions with band youth. As a scholarship recipient, she aims to promote Indigenous-led land stewardship and conservation management while addressing knowledge gaps on herpetofauna survivorship.

Her research focuses on understanding the impact of natural disturbances, particularly wildfires, on the Western rattlesnake population—a blue-listed and threatened species at risk. The Nk'Mip Creek Wildfire in 2021, which spanned approximately 19,000 hectares, burned all known den and rookery locations on the OIB reserve. The project utilizes over 20 years of mark-recapture data and a decade of historical movement data, providing a unique opportunity to investigate survivorship, changes in body condition, and habitat selection of the Western rattlesnake in response to such natural disturbances.

On an average day, Lindsay and her team set out to track 30 telemetered rattlesnakes dispersed across a 450-hectare site on the Osoyoos Indian Reserve. When not engaged in tracking or capturing snakes, Lindsay can be found in the snake lab at the Nk'Mip Desert Cultural Centre, working on innovative outreach ideas, hosting events, or participating in field trips alongside the OIB language house.

Lindsay is grateful for the guidance of her supervisor, Dr. Karl Larsen, and ECCC researcher Dr. Christine Bishop, and the support of the Nk'Mip Desert Cultural Centre Manager Jenna Bower, and her team of field technicians. Lindsay's work at Nk'Mip Snake Research will shed light on the adaptive capacity of rattlesnakes in response to natural disturbances. Lindsay maintains an optimistic outlook for the future of Indigenous land stewardship and conservation, eagerly anticipating the opportunity to further contribute to these efforts in years to come.





