

**Chloe Howarth**

Title: Variation in western rattlesnake (*Crotalus oreganus*) migratory tactics in British Columbia

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BC's western rattlesnakes undertake small-scale seasonal migrations annually between their overwintering hibernacula (dens), and their summer feeding and mating grounds. Recent work on rattlesnake migration in BC has revealed an apparent dichotomy in migratory tactics between and within populations in regard to migratory parameters like net displacement, path tortuosity, habitat selection, and thermal landscape preference. Currently, we lack a large-scale analysis confirming this potential dichotomy across rattlesnakes' range in BC, as studies to date primarily address a single study site and are often focused on only one or a few migratory parameters. I will be conducting a movement meta-analysis, using a large database of existing radio-telemetry data and spatial analysis tools, in order to establish where and how differing migratory phenotypes appear linked to site, landscape characteristics, and coarse scale habitat features across BC. Further, there is extensive work investigating adult rattlesnake movements and migrations, and a handful of studies have looked at the first movements of neonates after they're born, but we currently lack knowledge on how migration patterns and habitat use by juveniles varies from that of adults. Using radio-telemetry at a field site on the Osoyoos Indian Reserve near Osoyoos, BC, I aim to address the development of migration tactics in young snakes by comparing the spring movements of juveniles and adults from the same hibernaculum. I will also assess juvenile rattlesnake habitat selection by comparing used and available habitats.