Together for Wildlife HCTF Conservation Fellowship
Recipient 2024

Paige Monteiro

Paige Monteiro is an MSc Student at Simon Fraser University working under the supervision of Dr. David Green in the Centre for Wildlife Ecology Lab and Dr. Scott Flemming with Environment and Climate Change Canada. Paige's research examines the habitat use and foraging ecology of overwintering shorebirds that occupy the rocky intertidal guild.

Growing up on Vancouver Island, Paige developed a deep appreciation for coastal ecosystems and their inhabitants. After completing her B.Sc., she began working for the BC Provincial Government, focusing on a wide array of species at risk, from mustelids to toads. During this time, she discovered her passion for Geographic Information Systems (GIS), particularly in establishing protections for Marbled Murrelets. Paige continued to pursue this interest by starting her master's research, where she applies her GIS skills to study the overwintering ecology of coastal shorebirds.

Paige's research is set in the Salish Sea, an ecoregion with diverse species that has been significantly impacted by human activities and climate change, exemplified by the 2021 heat dome that caused a mass die-off of intertidal invertebrates in coastal British Columbia. Her study focuses on the declining populations of Black Turnstone and Surfbird, migratory shorebirds that breed in Alaska and rely on coastal intertidal zones for foraging. These species are key indicators of ecosystem health and face threats from habitat loss and changes in food sources such as herring spawn. The study aims to identify critical shoreline habitats and understand their overwintering ecology to inform conservation efforts.

To assess habitat use, Paige will analyze space use, movement patterns, habitat characteristics, and site reuse through GPS tracking using both solar-powered (Milsar) and battery-operated (Pinpoint) tags. This includes identifying critical habitat features and comparing used versus available locations. Additionally, she will explore resource partitioning by examining diet and herring spawn utilization through stable isotope analysis and DNA metabarcoding of bird and prey samples. Her approach includes a before-and-after control impact study design, collecting samples pre-and-post herring spawn events to evaluate the dependence on this resource.

By identifying critical habitat and trophic relationships, Paige's research will contribute to future conservation strategies, such as designating protected areas and implementing management plans to safeguard these important bird species and the ecosystems they depend on.

HABITAT CONSERVATION TRUST FOUNDATION | BRITISH COLUMBIA