

Scaling Up Camera Trap Surveys to Inform Regional Wildlife Conservation

May 5-6, 2020

<https://cmiae.org/event/scaling-up-camera-trap-surveys-to-inform-regional-wildlife-conservation/>

Invited & Keynote speakers

Jorge A. Ahumada, Senior Wildlife conservation scientist & Executive Director – [Wildlife Insights](#), [Moore Centre for Science, Conservation International](#), Arlington, VA, USA.

Senior conservation professional with more than 20 years of experience in environmental science, conservation, and management of large diverse programs in Latin America and globally. Jorge is known for his design and implementation of multi-institutional partnership collaborations with governments, non-government organizations, and companies. Jorge has a deep passion for nature and wildlife, he looks forward to connecting with us and sharing his depth of knowledge and experience with the use of camera trap networks for wildlife conservation. He will present a talk titled “How a new technology platform can put camera trap data to work for conservation.”

Roland Kays, BSc, PhD, Research Associate Professor, North Carolina State University, Head of the Biodiversity Lab, NC Museum of Natural Sciences

Referred to fondly as “Mr. Camera Trap,” Roland is a zoologist with a broad interest in ecology and conservation, especially of mammals. He studies research questions that are scientifically interesting but also have real-world relevance through educational or conservation value. Roland is an expert in using new technologies to study free-ranging animals, especially to track their movement with GPS tags and camera traps. He combines this high-tech work with traditional methods, collecting data through field work and studies of museum collections.

Cole Burton, PhD, Canada Research Chair in Terrestrial Mammal Conservation, University of British Columbia, [WildCo Lab](#). *Scaling up insights from camera trapping in western Canada with the WildCAM network*

Camera traps are a powerful survey tool with potential to provide standardized data on wildlife populations and communities across large spatial scales. The WildCAM network was formed to promote collaboration, rigour, and synthesis of camera trap research and practice in western Canada. There is an abundance of camera trap studies underway in

British Columbia and Alberta, generating new insights on methodological approaches and management applications. This talk will highlight several projects being pursued by members and collaborators of UBC's Wildlife Coexistence Lab, and outline a vision for linking projects to scale up insights and support adaptive wildlife management at regional scales.

Emily Chow & Holger Bohm, BC FLNRORD. *Kootenay remote camera wildlife monitoring project*

The Kootenay Remote Camera Wildlife Monitoring Project is an ongoing wildlife monitoring project in the East Kootenay Region of British Columbia and is a partnership between Government of BC and Dr. Adam Ford at UBCO. The main objective of the project is to monitor trends in large mammal occupancy over time. The regional wildlife and habitat biologists monitor trends for these large mammals to ensure sustainable use of harvested species and to develop or refine management objectives for all species and habitats in a changing landscape. Stakeholders and First Nations in the Kootenay Region have repeatedly called for multispecies monitoring and early detection of changes in distribution and population size. The purpose of this project is to help meet this societal demand for science-based management of the Kootenay Region's most celebrated wildlife species.

Kim Dawe, PhD, Quest University Canada. *Monitoring dynamics of mammal intensity of use in outdoor recreation hot spots in the Sea to Sky Corridor*

Recreational use of natural environments is increasing across the globe coinciding with increases in human-wildlife conflicts that pose human safety risks. Recreational use also displaces wildlife spatially and temporally and may lead to species-specific avoidance of high-quality habitats, and changes in species interactions across landscapes with high human presence. At the same time, wildlife in montane environments, particularly bears and ungulates, undergo seasonal elevational shifts in response to plant emergence and snow cover dynamics, which are expected to change with climate change.

These dynamics create challenges for both conservation and recreation use management across small (local) and large (regional) scales.

The Sea to Sky Mammal Monitoring Project has been operating since 2017 and includes study areas throughout the Sea to Sky corridor. The program is intentionally designed to scale up from local management scales, where questions on visitor use management, recreation management, and human-wildlife encounter risk can be answered, to regional scales, where the impact of recreational use on mammal intensity of use through time and space can be understood.

This design supports community-based engagement in funding support to encourage localized interests in continued monitoring. Combined with a volunteer program to facilitate camera checks, the goal of the program is to continue to monitor human and wildlife use dynamics over the long-term, to inform local and regional management planning.

Jason Fisher, BScH, MSc, PhD, Adjunct Professor, University of Victoria. *The Changing Face of Mammal Communities on the East Slopes of the Rocky Mountains*

Our climate and our landscapes are changing rapidly, and mountain systems feel these changes most keenly. In the Canadian Rocky Mountains, extensive energy development, forest harvesting, recreation, and transportation accumulate and are creeping up the mountain slopes. How do these multiple impacts affect mountain mammal communities? We used data from multiple camera trap studies to investigate how mammal distributions and populations are changing on the slopes of the mountains. Climate change plays a role, but landscape change appears more immediate and pressing, affecting how species interact with one another and persist. We show how camera trap networks provides insights into entire mammal communities, and highlight opportunities to research Mountain mammals into the future.