

## Long-Term Research in Elk Population Dynamics, Migration, and Predator- Prey Dynamics

### PhD Assistantship in Wildlife Biology at the University of Montana

I am anticipating having one position in Fall 2019 for 1 PhD project focused on long-term research on elk population dynamics in a partially migratory system, elk-bison-wolf dynamics, and wolf-elk predator-prey dynamics. This is part of an NSF-funded Long-term Research in Environmental Biology (LTREB). The PhD student will work with long-term datasets on wolves, elk, vegetation and climate change collected in the Ya Ha Tinda ecosystem, Banff National Park, from 2002 to the present. The study area is also the site of a recent Parks Canada Bison [re-introduction program](#), so there are opportunities for elk-wolf-bison modeling and empirical analyses working closely with Parks Canada collaborators. The exact nature of the research focus for this PhD student is intellectually quite open, and would be well-suited to students with spatial, dynamic, and empirical modeling and field skill sets.

**The Ya Ha Tinda Elk Project:** We have collected long-term data on over 250 individually marked adult female elk, including survival, reproduction, and migration. We have also collected data from over 30 GPS collared wolves since 2002. See <http://yahatinda.biology.ualberta.ca> for more information about the study area and project. The project is highly collaborative in nature, jointly lead by Dr. Mark Hebblewhite (University of Montana) and [Dr. Evelyn Merrill](#) (University of Alberta) together with Alberta Fish and Wildlife and Parks Canada, Banff National Park. There are opportunities to take courses or be in residence at the University of Alberta, for example.

**Qualifications:** M.Sc./M.A. in wildlife biology, ecology, conservation biology, or related field; outstanding work ethic; exceptional quantitative skills and motivation; field experience in ungulate or predator ecology preferred; experience with analyses of GPS movement data from animals; demonstrated excellence in oral and written communication and interpersonal skills; demonstrated experience working with wildlife management agencies. Experience with statistical modeling, programming, R, JAGS, GIS analyses, remote sensing, scientific writing, and spatial modeling an asset.

**How to apply:** send cover letter summarizing interest and relevant experience, resume/CV, unofficial transcripts, GRE scores, and contact information (including phone and email - letters not required at initial screening stage) for 3 references to Dr. Mark Hebblewhite ([mark.hebblewhite@umontana.edu](mailto:mark.hebblewhite@umontana.edu)), Wildlife Biology Program, College of Forestry and Conservation, University of Montana, Missoula, MT, USA, 59812. See [here](#) for more information about ongoing projects in my lab. The position is anticipated to start, pending funding, in Fall 2019. While the University of Montana Wildlife Biology Program application deadline is Jan 15, 2019, late applications will be considered with review of applications starting February 25, 2019.