

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Trans-Beringia Muskoxen – Creation of Ecological Baselines in an Era of Arctic Warming, years 1-3

Type of Project: Research
Discipline: Natural Resources
Funding Agency: National Park Service
Other Partners/Cooperators: University of Montana
Effective Dates: 5/1/2012 – 12/31/2018
Funding Amount: \$106,549 [FY14: \$39,010; FY13: \$28,529; FY12: \$39,010]

Investigators and Agency Representative:

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Project Abstract: No standard or baseline exists for Beringian mammals. Cooperator will establish baseline conditions for muskoxen within and between populations over time across both the Chukotka and Alaskan Beringian landscapes in a strong collaborative effort with Russian and American partners. Proposed study areas are CAKR, BELA, and Wrangel Island Zapovednik in Russia. The projects goals are: 1) to gain insights about how climate and other factors affect population change and potential persistence in muskoxen, and 2) to establish ecological baselines. This will be achieved through comparative efforts to understand populations in Chukotka (e. g. Wrangel Island) and eastern Beringia (e. g. WEAR NPS units). Pragmatic on-the-ground approaches will use non-invasive methodology, and concentrate on easily discernible and repeatable metrics associated with body size traits, growth rates, and annual population change.

Outcomes with Completion Dates: Final Report Due December 31, 2018

Keywords: muskoxen, Trans-Beringia, United States, Russia, ecological baselines, climate change, National Park Service, University of Montana, Division of Biological Sciences