Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Collaborative Ungulate Habitat and Population Monitoring

Type of Project:Technical AssistanceFunding Agency:National Park ServiceOther Partners/Cooperators:Montana State UniversityEffective Dates:8/1/2008-7/31/2013Funding Amount:\$40,000

Investigators and Agency Representative:

NPS Contact: P.J. White, Yellowstone Center for Resources, POB 168, Yellowstone NP, Wyoming, 82190; (307) 344-2442, PJ_White@nps.gov

Investigator: Robert Garrott, 310 Lewis Hall, Montana State University, Bozeman, MT 59717, (406) 994-2270, rgarrott@montana.edu

Project Abstract:

The Wildlife Resources Team (WRT), a section of the Yellowstone Center for Resources at Yellowstone National Park (YNP), has developed a wide array of partnerships to achieve the broad array of wildlife research and monitoring activities necessary at YNP. As part of these collaborative efforts, WRT has developed a collaborative program with Dr. Robert Garrott at the Department of Ecology, Montana State University (MSU) for the purpose of ungulate habitat and population monitoring at YNP. Ungulate monitoring activities that employees may participate in include wolf-ungulates dynamics in central Yellowstone; mapping of bison trails in central Yellowstone; collection and processing of snow urine samples; monitoring wildlife responses to motorized winter recreation; monitoring snow pack characteristics; ungulate counts and classifications; monitoring of radio-collared elk on the northern range; monitoring of radio-collared pronghorn on the northern range; collection of fecal pellets from bighorn sheep for lungworm monitoring; carcass surveys; and data entry and analyses. NPS cooperators may also participate in analyses of data regarding ungulates. This project has been in place since 2004, with a book on elk and bison to be published in fall 2008.

Outcomes with Completion Dates: All due by July 31, 2013

Annual and Final Reports of collaborative ungulate monitoring activities. All data collected by the student employee(s), and any analyses or reports based on the data, will be delivered to Dr. P.J. White, Yellowstone Center for Resources. Copies of digital databases and analyses created during this project will be provided to Yellowstone National Park personnel in Microsoft Excel or Access for their storage and use. The text, figures, and tables of reports will be submitted on diskette in Word format.

Keywords: ungulate, habitat monitoring, population monitoring, Yellowstone National Park, Montana State University, elk, bison, wolf, bighorn sheep, winter use