Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: NPS Manager's Short Course on Wildlife Diseases

Discipline:NaturalType of Project:EducationFunding Agency:National Park ServiceOther Partners/Cooperators:University of WyomingEffective Dates:9/1/2009-12/31/2010Funding Amount:\$30,000

Investigators and Agency Representative:

NPS Contact: Margaret A. Wild, National Park Service, Biological Resource Management Division, 1201 Oakridge Drive, Suite 200, Fort Collins, CO 80525, 970-225-3593, margaret_wild@nps.gov

Investigator: Todd Cornish, Wyoming State Veterinary Laboratory, 1174 Snowy Range Road, University of Wyoming, Laramie, WY 82070, 307-742-6638; TCornish@uwyo.edu

Project Abstract: Wildlife diseases are a growing concern for wildlife managers, including those in the National Park System. Many wildlife diseases, such as chronic wasting disease, avian influenza, West Nile virus, and chytrid fungus, are emerging issues that were not widely recognized even a few years ago. Further, the complexity of managing the more established diseases, such as sylvatic plague, pasteurellosis, rabies, and brucellosis has increased due to concerns over protection of native wildlife populations, and the interactions of diseases between wildlife, livestock, and humans. Although wildlife diseases are "hot topic" items for many NPS managers, access to information and expertise can be limited.

The University of Wyoming College of Agriculture and Wyoming State Veterinary Laboratory have considerable expertise in wildlife diseases. The University offers a class to students in wildlife disease that is taught by Dr. Todd Cornish. Department staff, including Drs. Frank Galey, Donald O'Toole, Todd Cornish, and Shannon Swist, possesses the expertise that will be required to modify this university class into a short course targeted to wildlife professionals. The staff also has access to a number of leading experts in specific diseases that could be recruited as teaching contributors. Collaboration with the University of Wyoming provides a unique opportunity for accessing specialized expertise, university educators, and a template for a wildlife disease class that would prove useful to educating and informing NPS managers. The short course proposed here will focus on the basics of wildlife disease transmission and ecology. Special attention will be paid to zoonotic diseases. Based on the quality of the product, NPS manager response, availability of funds, and university interest, an advanced class in population ecology of wildlife diseases may be pursued to more fully meet the needs of NPS managers.

Outcomes with Completion Dates: Curriculum and learning objectives for a disease management short course, Securing outside subject matter experts for guest lectures (at least 4 individuals), Timely communication and coordination with NPS/BRMD representative throughout the project, Implementation of one wildlife disease short course for NPS managers in Laramie, WY, including both classroom and laboratory instruction. Completion by December 31, 2010.

Keywords: wildlife disease, short course, National Park Service, managers, Biological Resource Management Division, chronic wasting disease, West Nile virus, avian flu