## Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Chronic Wasting Disease (CWD) Evolution Disease Agreement 2010

Type of Project: Research Project Discipline: Natural Ressources Funding Agency: USGS Other Partners/Cooperators: Colorado State University Effective Dates: 7/9/2010 - 8/31/2015 Funding Amount: \$24,534

## Investigators and Agency Representative:

**Investigator:** Colleen Webb, Colorado State University, Fort Collins, CO 80523; Telephone: 970-491-4289; Fax: 970-491-0649; Email: Colleen.Webb@ColoState.edu

USGS Contact: Paul Cross, USGS, Northern Rocky Mountain Science Center, 2327 University Way, Suite 2, Bozeman, MT 59715; Phone: 406-994-6908; Email: pcross@usgs.gov

## Project Abstract:

The objective of this research is to develop an evolutionary ecology framework to investigate possible ultimate outcomes of Chronic Wasting Disease (CWD) infection at the population and landscape scales. Specific objectives include:

1. Review of literature to assess availability of parameters and feasibility of developing a data-driven CWD specific evolutionary ecology model. At the same time, determine reasonable structure for either a data-driven or more theoretical model that would be informative about CWD.

2. Develop appropriate model, analyze possible outcomes predicted by the model and perform sensitivity analysis.

3. Prepare results for publication in a peer-reviewed scientific journal.

## Outcomes with completion dates: August 31, 2015

Keywords: Chronic Wasting Disease (CWD), outcomes, population, landscape scale, modeling, USGS - Northern Rocky Mountain Science Center (NOROCK), Colorado State University