## Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Devils Tower Bat Roost and Habitat Assessment

Discipline: Natural

Type of Project: Research/Technical Assistance

Funding Agency: National Park Service

Other Partners/Cooperators: University of Wyoming

Student Participation: No

**Effective Dates:** 6/6/2016 to 3/31/2017

Funding Amount: \$18,730

## Investigators and Agency Representative:

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Project Abstract: University of Wyoming WYNDD will continue a bat roost identification and habitat study at Devils Tower National Monument (DETO), primarily focused on the northern long-eared bat (Myotis septentrionalis). This project was begun in 2015 under task agreement P15AC00931, and this new task agreement is being initiated to continue and expand the project with additional mist netting sessions, under a new principal investigator. Seven male bats were tagged and tracked in 2015, and with more netting sessions in more locations added in 2016, WYNDD hopes to tag female bats and track them to maternity roosts. Determining the location of maternity roosts at DETO would greatly aid in protection and recovery efforts for M. septentrionalis, which was recently listed as threatened under the Endangered Species Act in 2015.

To determine where bats are roosting in the monument and quantify characteristics of these roosts, WYNDD will capture bats, determine their reproductive status (age, sex, and breeding status), and radio tag up to 18 northern long-eared bats. These bats will then be tracked to potential roost sites. Depending on capture rates and success, other bat species may also be tagged. WYNDD will also participate in the 2016 Devils Tower National Monument Bat Festival, a public event aimed at educating visitors on the importance of bats and their habitat, the threat of white nose syndrome, and bat science and management. The project fulfills a public purpose by engaging the local community and park visitors in shared environmental stewardship. It also promotes the public's understanding of the bats of DETO, and contributes to the knowledge base on a threatened and understudied mammal.

**Keywords:** northern long-eared bat, roost identification and habitat study, Devils Tower National Monument, University of Wyoming, Wyoming Natural Diversity Database (WYNDD)