

WYOMING WILDLIFE

THE FOUNDATION

A Component Fund of the Wyoming Community

Project Status and/or Final Report for Wyoming Wildlife – The Foundation Projects, and Wyoming Governor’s Big Game License (WGBGLC) Projects, please complete the following information. All reports should be typed, clearly labeled and include financial reports and photos (.jpg format). You may scan and e-mail this to Melodee@wycf.org

GRANTEE INFORMATION:

Project Name: Wyoming Range Mule Deer Study - 2012

Name of Organization: University of Wyoming – WY Coop Research Unit

Grant Amount: \$8,500.00 Grant Period: 7.11.12-12.31.14

Report Completed by: Dr. Kevin Monteith

Telephone: 307.766.2322 E-Mail: kmonteit@uwyo.edu

Status Report: Yes No Final Report: Yes No

The information contained in this report, including all attachments, is accurate and complete.


Signature of Executive Director or other authorized signatory:
(Electronic signature acceptable)

21 Dec 12
Date:

NARRATIVE SECTION:

Summarize attainment of original project goals/objectives:

During calendar year 2012, we initiated a 3+ year research project on the nutritional and population ecology of mule deer in the Wyoming Range of western Wyoming. Therefore, research efforts are just getting underway and have involved conducting browse production transects on winter ranges and preparing for subsequent field work. The more intensive monitoring and research efforts will begin in March 2013 when we will capture 35 female mule deer in each of the Big Piney/La Barge and Kemmerer/Evanston winter ranges occupied by Wyoming Range mule deer.

During August 2012, we conducted browse production transects in primary winter habitat for wintering mule deer on both winter ranges. Browse production this year is likely to be a record low for decades as many shrubs were unable to produce any leaders (Fig. 1), and even leaves were stunted in most instances. Furthermore, ephemeral leaf drop had already occurred on most plants by August. Such poor shrub growth was caused by the extremely mild winter and the lowest spring precipitation on record since 1895 (Big Piney weather station).

The extremely low browse production is of great concern for overwintering mule deer that rely on new leader growth of shrubs to meet energetic demands over winter. Consequently, deer will be consuming second and third year growth, which will not meet minimal nutritional demands of deer over winter and is likely to lead to greater hedging of already decadent and hedged shrubs. Given such poor nutrition available, overwinter mortality is likely to be severe, even if the winter is mild. Notably, we also observed surprisingly heavy summer use of important shrubs (Fig. 2), which was likely a result of diet shifts by domestic livestock or other ungulates in response to low herbaceous production.



Fig. 1. Wyoming Big Sagebrush plant in the Big Piney/Labarge winter range in western Wyoming.



Fig. 2. True mountain mahogany plant in the Kemmer/Evanston winter range in western Wyoming. Note the new leader growth already browsed during summer 2012.

What were two major challenges the project or organization faced in implementing its work during the grant period and how were these challenges addressed?

Given that the research for this project has just begun, the major challenge to date has been securing the remaining funding necessary to complete this project as proposed. As of December 2012, we have obtained adequate funds to cover proposed costs for Year 1, and will continue to fundraise to secure the funding needed for the remaining 2 years. Currently, funding partners include, Wyoming Game and Fish Department, Muley Fanatic Foundation, Wyoming Wildlife The Foundation (WGBGLC), Bureau of Land Management, Animal Damage Management Board, Bowhunter's of Wyoming, and Sportsmen for Fish and Wildlife.

Will this project continue beyond the grant period? If so, how?

Please state where and what the measurable impact on this project was (community, county, region or state).

Yes, as mentioned previously, we continue to raise funds for remaining 2 years of study. . Results of this study will have direct implications for setting sustainable population objectives

for the Wyoming Range deer herd, delineate relationships between forage production, utilization and nutrition, and will hold insight for monitoring and management of other mule deer populations throughout the West.

How are you planning to disseminate the results of your work to the general public?

Results from this project will be made available to cooperators and general public through multiple articles published in the peer-reviewed literature and popular press, and a final report. Finally, by way of the public input process of the Wyoming Range Mule Deer Initiative, updates and results of this work will be presented and made available to the general public and interested stakeholders.

FINANCIAL REPORTING:

Include the attachments listed below:

1. Income Statement for the period ending with the project's completion/grant funds being expended.
2. Summary statement listing all expenditures paid with grant proceeds.
3. Copies of all invoices paid with grant proceeds.
4. Please include a reimbursement check with the final report for the balance of any unexpended funds from the grant. Checks should be made out to Wyoming Wildlife – The Foundation and mailed to: P.O. Box 20088, Cheyenne, WY 82003.