

1. USU Extension Grants Final Report
2. Project Leaders:
Matt Palmer (A00015692)
Eric Thacker (A00297845)
3. Project Title:
Livestock Grazing: An Environmentally Friendly and Economical Solution to Maintaining Fire Breaks in Gamble Oak Dominated Sites.
4. Beginning Date and End Date:
Begin June 1, 2016 End May 30, 2017
5. Total Requested Amount: \$10,000

6. Project Summary:

Government Agencies have utilized state and federal funds to clear trees and brush around homes and recreational property to reduce the risk of wildfire damage. In Utah many fire breaks in gamble oak dominated sites are difficult to maintain due to rough terrain. Regeneration of gamble oak and increased production of fine fuels can make the area more vulnerable to wildfire without maintenance actions. Some fire break maintenance options include herbicides and/or mechanical brush removal requiring yearly investments of time and money. These approaches can become a financial burden and very difficult for landowners when public funding sources are depleted. Livestock grazing is another option to maintain fire breaks. With some initial investment on fencing and livestock water developments, the land owners can receive income from livestock grazing fees instead of yearly fire break maintenance expenses. This project was set up to determine the effectiveness and impacts of grazing as a viable option to maintain fuel breaks in oak woodlands.

7. Project Results:

a. Increased Collaboration:

- i. There has been a great increase in collaboration between County Faculty and Campus Faculty. Eric and Matt have worked together in Sanpete County on this project for several days over the last few years. This relationship has continued into other projects including a Sanpete County Rangeland/Grazing tour, Death Camas control research plots and a grazing management plan for Camp Williams.

b. Outcomes and impacts:

- i. We have developed a long-term demonstration site that can be used in the future for tours, and in-service training.
- ii. We have completed the electric fencing of three 60 acre fire break pastures.
- iii. Set up 3 livestock water troughs and supply systems.
- iv. Set up 5 research enclosures
- v. Concluded 2 years of intensive grazing
- vi. Conducted 1 year of rangeland monitoring data

c. Produce and Disseminate Scholarly Materials:

We have presented this project at the UACAA summer meeting and the Restoring the West Conference. We will continue to collect range monitoring information over a 5 year period to document the benefits of grazing on fire break sites. This information will be used to publish a fact sheet and a research paper in the future.

d. Extramural Funds:

We are currently seeking grants to fund the monitoring and publishing of our project results.

8. Presentations:

As stated above we have presented at both the UACAA summer meeting and the Restoring the West Conference. We have also presented information on this project at two local natural resource tours. Sadly, they were not recorded.