



Rangeland Weed Control and Pasture Rejuvenation

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Introduction

Almost half of the total land area of the United States is used for pasture and grazing, and nearly all of this area is infested with weeds. (Monaco et al., 2002). Rangeland pastures worldwide are often invaded by various weed species (Vasquez et al., 2010). These invasions cause significant biological (Christensen et al., 2011) and economic loss (Whitesides, 2004). In the Mountain West region of Utah, cheatgrass, knapweed, medusa head, and hoary cress are just a few of the numerous invaders. Even though weeds are a serious problem and are difficult to control, it is possible to manage weeds (Jones et al., 2010) and restore pasture health and productivity.

Fact Sheet Purpose

The purpose of this fact sheet is to show how rangeland pastures can be rejuvenated through weed control, fertilization, reseeding, and improved management practices.

Steps to Rejuvenation

- Identify reason for reduced productivity.
 - Numerous reasons may exist, such as weed infestation, overgrazing, fire, etc.
- Rectify reason if possible.
 - Weeds may be brought by vehicles, livestock, and wildlife.
- If weeds are the problem, identify weed species.
 - Identify the species; identification is the first step in controlling weeds.

- Find out which method or methods are effective in controlling each weed species.
- If using herbicide treatment, find out which herbicides are most effective for weed control.
- Decide the best time to apply herbicide treatment, as timing is critical.
- Reseeding and/or over-seeding may significantly increase forage production.
 - In many cases native and introduced forage species have been depleted so much that it is necessary to reseed to reach productive levels of forage production.
- Fertilization may be beneficial as well; a soil sample is the best way to know the properties and fertility of the soil.

How to Begin

If you are interested in rejuvenating a pasture infested with weeds, contact your local county weed supervisor or extension agent. They will work with the local county weed board to address invasive weed problems in your county. They will be more than willing to assist you in your efforts to control weeds and improve both public and private pastures. There are financial sources as well to assist agricultural producers with pasture improvement. Contact your local USDA Farm Service office and the State Department of Agriculture for further information.



Figure 1. Before and after treatment of Squarrose Knapweed in Tooele County

Conclusion

Some amazing results have been realized in rangeland pastures through implementing these steps. Animal Unit Months (AUMs) were increased by 200 AUMs on a rangeland pasture in Tooele County (Figure 1). Once the weed problems have been corrected, it is important to take steps to maintain productive pastures. One of the most critical steps is proper grazing practices. When good grazing management is combined with good weed management rangeland pastures can remain at a high level of production, livestock producers can realize profitability, and wildlife species can thrive (Bidwell, 2017).

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Picture Credit

Caldwell, J. R. (2012, 2014). Y Ranch before and after weed treatment.