

Brush Management: A Now Important Management Practice

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Abstract

The control of increaser native shrubs and trees has become very popular in the past couple of years. With ranchers wanting to increase pasture and livestock production, controlling the growth and spread of trees becomes a must.

Introduction

Brush management is turning into a major role in range science. Brush control, including the control of invasive species, has several benefits. Some ranchers are beginning to notice just how fast these species can encroach or invade. 100 or so years ago, the trees and other brush could only be found in canyons and draws. Now it seems as though the same trees and brush cover the entire pasture or ranch! Ranchers are looking at ways to control this outbreak of increaser native shrubs and tree species. Without proper control, brush and tree species can quickly increase, leading to a decrease in grazing area and increased wildfires.

Brush Management on My Family's Ranch

In my area, and in many places on my family's ranch, one-seed junipers have become a nuisance. Before, these trees could only be found on cap-rocks and up canyons or narrow draws. Now they grow almost every pasture in almost any soil or terrain. They have created a tremendous amount of fuel for wildfires. The Shell Canyon Fire, that occurred north of Kim, burned over 20,000 acres of mostly juniper trees. The fire was devastating at the time, but has since increased pasture production. It also made the ranchers who were affected by the fire, start controlling one-seed juniper trees in some of their other pastures that were not burned.

Ecology of One-Seed Juniper

In southeast Colorado one-seed junipers have encroached on to the deep, productive soils that should be dominated by grasses such as blue grama, western wheatgrass, and galleta. However, due to heavy continuous grazing and the lack of fire, junipers have increased on ecological sites here there should have been only a few scattered trees. One example of this is the Loamy Plains ecological site that occurs on my family’s ranch. The figure below illustrates how the process of one-seed juniper encroachment has occurred, along with the transitions and restoration pathways of which brush management is involved (USDA-NRCS, 2016).

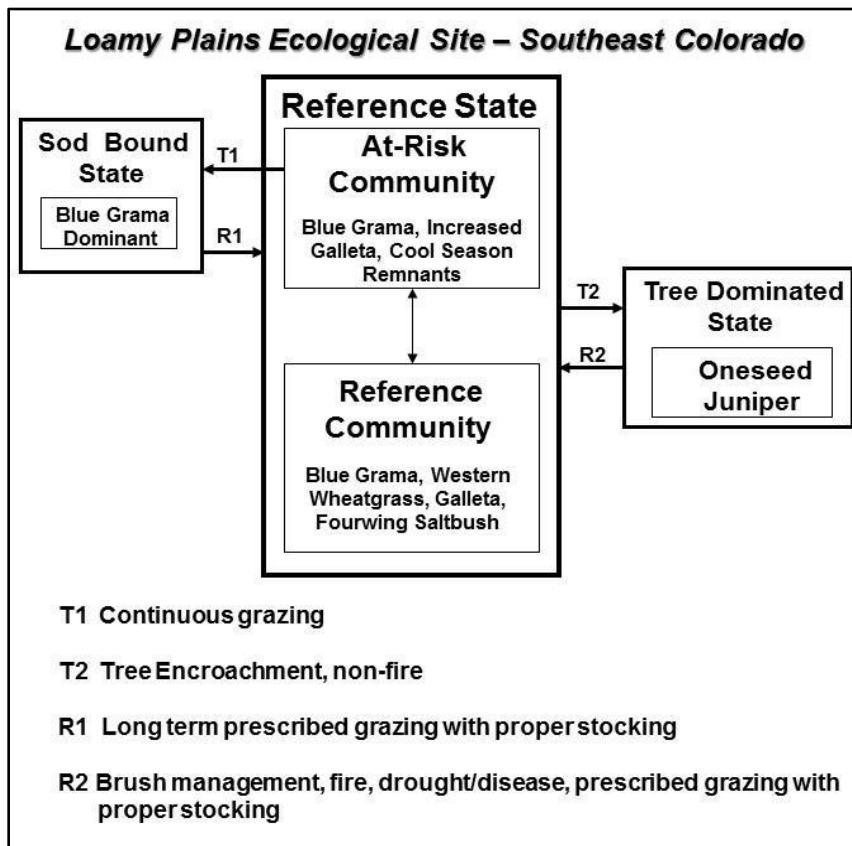


Figure 1. Loamy Plains Ecological Site Description, State and Transition Diagram.

It is important that prescribed grazing is implemented together with any method of brush management. Proper grazing management will ensure that the benefits from the brush management are sustained.

Benefits of Brush Management

This management practice that was once thought to be too expensive to even consider as an option, has gained popularity over past few years. One reason being that with the decrease in brush, species of grass are able to grow and allow ranchers to increase the stocking rate of their pastures. On my family's ranch, two of our pastures stocking rates have been increased four fold. Livestock also become more comfortable in the pasture because they are better able to see predators and other animals. With the increased stocking rate, the rancher is allowed more production, larger calves for example, and with far fewer losses. Also, the chance of wildfire is decreased. The possibility still remains do to the increase in grass, but with the brush cleared, firefighters will be able to reach and contain any fires that may occur. This leads to slower fire growth rates, whereas before , fires grew rapidly and out of control because of inaccessibility caused by brush.

Not only does brush control benefit livestock and ranchers, it benefits the wildlife as well. As mentioned above, the wildlife are better able to see predators, or predators their prey. It also allows them to have access to a wider diversity of plants, which means better nutrition and an increase in population; large body sizes, do to the abundance of forage created; and larger trophies. This could result in additional income for some ranchers due to trophy hunting.

Brush Control Methods in Southeast Colorado

Brush management has become cheaper and more effective in the past few years. Some ranchers prefer setting their pastures ablaze, where some others prefer to clear brush with a loader or bulldozer. Some ranchers have even come up with ways to spray herbicides from airplanes in an attempt to eradicate brush quicker. Power Pellets have also been used as a way to

clear and control one-seed junipers in my area. All of these practices are giving ranchers an opportunity to improve their ranch, their livestock herds, and the wildlife populations that coexist there as well.

Conclusion

In all, brush management helps ranchers increase the productivity of their livestock, and their rangeland, as well as the wildlife that inhabit their ranch. The worry of wildfires is drastically decreased do the lack of fuel after the brush and trees have been controlled. With the proper amount of one-seed juniper trees the ranch looks more appealing to the general public, and if the ranch was to be sold, the openness of the pastures might attract wealthy buyers.

Works Cited

USDA-NRCS, Field Office Technical Guide, Ecological Site Descriptions, MLRA 69, 2016.