Observations of a Rancher on Range Reseeding in Oregon

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This paper will be just what the title implies—the observations of a rancher on range reseeding. As the mind observes what the eye sees, in like manner we will follow no sequence of thought, nor will we try to arrive at any conclusions.

I am a central Oregon rancher. The area in which I live is a high plateau country, elevation from 4,000 to 5,000 feet, soils mostly light volcanic, rainfall from 8 to 12 inches annually, with a short growing season, and a 4 to 5 month hay feeding period.

The ground cover is mostly bunchgrass and sage and rabbitbrush, and bitterbush with juniper and pine timber. Please keep these conditions definitely in mind, because they will influence the observations to follow.

Conditions Alter Cases: For instance, what would apply where I live probably wouldn't work at all on Arizona ranges. Conditions can so vary right in the same locality and on the same ranch as to make it necessary to apply different methods of range management.

Reseeding

Now, for some observations on range reseeding. In speaking of reseeding we have two distinct processes to keep in mind. One is a natural reseeding of range grasses and browse plants through range management. The other is the planting of grasses both native and imported by mechanical means. Of the two methods, the reseeding by natural means, where it can be applied, is by far the best.

I have planted several hundred acres of crested wheatgrass, and it has done a lot of good to increase the carrying capacity and simplify the management of my ranch. I have seeded a good many thousand acres by natural means through range management practices. The latter did not cost nearly so much per acre. The soil did not need to be disturbed, which leaves a more permanent type of cover. I do not wish in any manner to underrate the importance of artificial reseeding. In many instances it is the only manner by which we can bring some of our good producing grasslands back into use.

Reseeding methods change according to sites and soils. Many times when we do not understand why plants respond the way they do, we are standing on the answer.

In the eradication of competitive plants, we could well give controlled burning a lot of serious thought, and when I say controlled, I mean just that. Fire is a terrible master but if properly handled is a wonderful servant.

An observation on seedbed preparation and planting methods: I think the most important thing of all, in light soils, is to have a good firm seedbed. Let's include an adapted legume along with our dry range land grasses.

Plan to stay off the ranges when the ground is soft. Grass grows by inches but it is oft times destroyed by feet.

In all of our range land practices, we should try to work with and not against nature.

In planning range management practices, such as reseeding, water development, fencing, etc., let's do them in such a manner that they will not only protect the grazing resource but make it more practical and economical for the user to handle his livestock. For if we handle our ranges well and put a lot of fat on our cattle, that is fine, but if we lose part of our gain through improper management we might just as well not have grown the grass in the first place. A grass management program should be flexible so it can change with the demands upon the land.

Utilization of Grass

I believe a great part of the thought and effort of the range land managers has been directed toward the growing of grass, and their slogan has been “Let's grow two blades of grass where only one grew before.” We all know that grass is of not much benefit unless it contributes something to the welfare of humanity. Therefore, if we utilize these two blades of grass in such a manner that they do the job of four blades of grass, then we accomplished something as important as growing grass.

No range land manager's observations would be complete unless it included multiple use. Every grassland area should be used to its maximum capabilities within the limits of good conservation practices. These uses should not be confined to any one of the many demands upon them. Every legitimate use should be recognized and given a place according to the production capabilities of the land and the needs of the area.

Everyone knows, and I hope understands, the demands upon our grasslands, so I will not attempt to enumerate them here. There is one use that I believe is oft times not mentioned, and is perhaps overlooked, that I think is very important. It is a use that we can have without taking anything away from the other uses. It is this: The beauty
of the hills, the clearness of our mountain streams, the privilege of enjoying the wild game and seeing the animals in their native habitat, and the value of what all these things contribute to our American way of life.

I wish to make an observation on the value of research. It is amazing how many people know so little about so much. Of all the phases of the range management program research is one of the most important. We need more coordination between the technical and the practical.

One final observation: We, as grassland managers, have a responsibility to humanity. Let us not permit people to lose sight of the importance of our basic resource, which is grass. If I may paraphrase using the famous Biblical quotation, “It will profit us nothing if we win the war against Communism and lose our own top soil.”

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**Aerial Chemical Reduction of Hardwood Brush as a Range Improvement Practice in Arkansas**

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The first treatment of brush by aerial application of chemicals in the State of Arkansas took place in 1951. Since then, many thousands of acres of brushland and potential pine land have been treated with chemicals and restored to high productive use. The use of airplanes for application of chemicals for hardwood control has progressed rapidly in Arkansas during the past seven years. The need for controlling much of Arkansas’ undesirable hardwoods on rangeland created a demand for a quick, practical and economical method of treating the unwanted hardwoods and brush. The advent of chemicals that could be applied from airplanes and helicopters met this need and chemical brush control has become an important improvement practice on Arkansas agricultural land.

The objectives of the landowners have varied. Some have treated undesirable hardwoods in pine lands for pine release, while other landowners treated to eradicate the hardwoods for pasture or cropland development.

**General Information on the Herbicides Used**

The herbicides which are useful in aerial application must be effective in small quantities and must be adaptable to low-volume applications. Both the high-volatile and low-volatile esters of 2,4-D, 2,4,5-T and 2,4,5-TP have been used. The invert formulations of 2,4,5-T are now being used on a trial basis. The high-volatile esters used are methyl, ethyl, propyl, butyl, and pentyl. The low-volatile esters used are isooctyl, butoxy, ethyl, tetrahydrofurfuryl, butoxy propyl, butoxy ethoxy propyl, ethoxy isoxy propyl, propylene glycol, and butyl ether ester. With favorable conditions the 2,4,5-T amine appears to be almost equal to 2,4,5-T ester. However, 2,4,5-T amine does not appear to be as consistent as 2,4,5-T ester.

The plant growth regulators that have been used by farmers in Arkansas are shown in Table 1. The term hormone growth regulators is often used for these substances, but actually this is somewhat misleading, because hormones are generally recog-

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1Paper presented at the 58th annual meeting of the Society of American Foresters, Salt Lake City, Utah, October 1, 1958.