

# Reseed Now?

C. V. PLATH

*Associate Agricultural Economist, Oregon State College, Corvallis, Oregon*

**A**RTIFICIAL range reseeding is considered by many ranchers to be a wise and profitable investment, even under present conditions. Ranchers are finding it imperative to cut costs as much as possible. They also are making each dollar of expenditure produce a maximum of salable product. And, in addition, they are giving serious thought to those investments that will put them in a position to take advantage of maximum profits when, in the future, the cost-price situation is more favorable to ranching. Under these conditions ranchers are discovering that reseeding has a definite, though somewhat limited, part to play in their ranch operations.

## Many are Reseeding

Many ranchers are proceeding with a range reseeding program even under the narrow operating margins of 1953 and 1954. The reasons why they are reseeding under current conditions were brought out in the course of recent interviews.<sup>1</sup> In the fall of 1953, a group of ranchers in eastern Oregon, who are reseeding significant areas of range land, were asked about their range improvement work. They told of the role reseeding is scheduled to play in their ranch operations. They explained why they had gone to the expense of clearing sagebrush, preparing the seedbed, seeding, and protecting the new seeding. They expect it to pay. A few of them know from previous experience that it will.

A majority of these ranchers are

<sup>1</sup> Part of a study conducted as Oregon's contributing research under Regional RMA Project W-16 "Economics of Range Improvement".

reseeding to make their ranch operation more efficient by providing additional forage at a critical period. In eastern Oregon that period of forage shortage is early spring or fall on most ranches. Ample feed in the summer or winter may not be used profitably if there is a critical shortage in April or October. Reseeding provides additional forage at these critical periods thereby making it possible to use the feed resources on the entire ranch more fully. This permits a more efficient production of livestock and results in lower costs per unit of product—a primary goal when margins are narrow. Under these circumstances,

Discussions of costs versus returns of range improvement practices are often not treated realistically for most ranchers. This paper presents a simple method for analyzing the costs and benefits of reseeding and shows the place of this improvement practice under current economic conditions.

reseeding offers many ranchers an economical way to achieve low cost, efficient production, albeit a rather heavy initial investment.

## Reseed or Buy More Range

A few ranchers are reseeding as part of a plan to expand their operations, especially on small, one- or two-man ranches. They realize that as fixed costs (machinery, land, taxes, buildings, family living, etc.) increase, they must spread them over more units of salable product. To sell more meat requires more forage whether fed to better animals, to a higher finish or to more animals. Some ranchers have the

alternative of acquiring more land or of growing more forage on the land now operated; others do not have this choice but must raise more forage per acre. Reseeding is being used for this purpose. Since reseeding requires several years to reach full use in eastern Oregon, the far-sighted ranchers are reseeding now as they plan for future expansion. They expect operating margins to widen and want to have the forage available to make the most of it. In better times, wider margins make *cheap* gains somewhat less important than *total* gains. Hence they feel justified, in their expansion plans, in reseeding some sites that might not warrant the expense solely in the interest of cheap production.

The decision to reseed rather than to buy more range is often guided by such cost calculations as those given in Table 1.

The cost and production figures used in this illustration demonstrate the advantage of reseeding good sites as a means of providing additional forage. The reseeded land must produce about three times as much forage as native range to compete favorably with buying as an alternative. This is easily done on many sites. Now is the time to reseed in anticipation of expansion in the near future.

## Reseed to Rebuild Native Range

More and more ranchers in eastern Oregon are using reseeding as a means of improving their native range. They reseed a limited acreage of good sites representing only a small fraction of their total range. This procedure may require reseeding of only 5 percent of the range to relieve the grazing pressure on the rest of the range so that natural revegetation will occur. Seeding only a few acres holds the expense to a minimum. The risk of failure is also lessened through careful site selection. In addition, since such a small fraction of the total range is

**Table 1. Representative cost items considered in the decision to buy or reseed range land**

Cost Item	Buy	Reseed
	<i>(per acre)</i>	
Investment		
Purchase.....	\$10	\$10
Reseed.....	0	15
Total.....	\$10	\$25
Interest on investment (4%).....	0.40	1.00
Taxes.....	0.08	0.10
Annual cost.....	\$ 0.48	\$ 1.10
Forage, usable air-dry	160 lbs.	500 lbs.
Cost of forage, per ton.....	\$ 6	\$ 4.40

reseeded, better grazing management of the entire range can be accomplished without a reduction in the number of stock. This is an important advantage of this method of improving range land.

The reseeded range, composed of grasses selected for the purpose, can be used earlier and heavier in the spring thus protecting the native range during a critical period of growth. A few ranchers expect to overgraze their reseeded sites so that they may have to be reseeded again in a few years. They figure it is still a cheap way to improve their native range. Other ranchers will use the reseeded sites for fall grazing to permit greater fall regrowth on the native range.

When asked the cost of reseeding selected sites, one rancher replied that he didn't know exactly what it did cost him. He said that even if the costs were \$15 or \$20 per acre on the areas he reseeded, the expense would be less than \$1 per acre for all the land that was being benefited. He knew his range would respond enough to repay that cost within a few years, even with low cattle prices. "I don't charge my fencing to only the land the fence sets on, so why charge seeding only to the reseeded areas? My whole range benefits from the seeding I do on a few good areas."

### Reseeding Won't Always Pay

Narrow operating margins limit the situations in which reseeding will pay for the investment. Under present conditions reseeding may not be a paying proposition even though twice as much forage is produced as a result of the seeding. A rancher in southeastern Oregon reported that he could not afford to reseed now. He has a stabilized ranch operation, his range is in only fair condition but he states that it is not deteriorating under present management, and he is not interested in expanding his ranch. The minimum cash costs of forage from his native range as compared to reseeding are shown in Table 2.

**Table 2. Comparative costs on native and reseeded range**

Cost Item	Native range	Reseeded range
	<i>(cost per acre per year)</i>	
Reseeding (\$9, written off in 15 years).....	\$ 0.00	\$ 0.60
Taxes.....	.08	.10
Minimum cost....	\$ 0.08	\$ 0.70
Forage, usable air-dry.....	100 lbs.	500 lbs.
Cost per ton of forage.....	\$ 1.60	\$ 2.80

This rancher has concluded that where he is primarily interested in cheap forage, he cannot afford to reseed even though the reseeded land would produce 5 times as much usable forage. The reseeded land would have to produce nearly 10 times as much forage as native range to be profitable for him. This can be done on good sites.

Another rancher with a Forest Service allotment for summer range compared the cost of summer forage on the national forest with reseeding of deeded land. A grazing fee of 60 cents per AUM paid for about 250 pounds of usable, air-dry forage per acre. Assuming that an animal unit requires 800 pounds per month,

3.2 acres are needed per AUM and would cost 18.75 cents for 250 pounds of forage. This is \$1.50 per ton. Forage from reseeding his deeded land would cost him more. He concluded, "I can't afford to reseed my own range now. I'm not interested in a larger herd at this time and so long as I can continue to have my Forest permit, I can't plan to reseed. Some day I may want to expand and then I'll see if the Forest Service will share expenses on seeding some of the land on my summer allotment." He had no critical feed shortage so reseeding had little to offer him until he was ready to plan for more forage for some future expansion of his herd.

### Range Reseeding Has Its Place

Range reseeding is an expensive investment to provide what has historically been considered "cheap" forage. Even when range livestock offered a rather wide operating margin, it was prudent to investigate the possibilities of a pay-out on range reseeding. With narrow operating margins, ranchers are finding it imperative to study the cost-benefit angle as they consider reseeding range land. But it will pay, they report.

Eastern Oregon ranchers point out three situations in which they can reseed now and make it pay:

- (1) Reseed to provide additional forage needed at a critical period of feed shortage, usually early spring or fall. This makes the yearly operation more efficient and results in cheaper gains.
- (2) Reseed now to supply additional forage needed for expansion in the near future. Most ranchers will not expand in the next 2 or 3 years but they know they must plan ahead that far to have the forage available. Reseeding under these conditions needs

to produce only 3 times as much forage to be cheaper than buying more range land.

- (3) Reseed to build up or maintain the native range. Many native ranges will improve through natural revegetation

if the grazing can be lightened and managed more carefully. By reseeding only about 5 percent of their range land, ranchers are providing enough additional forage at critical seasons, especially early

spring, to permit them to manage their grazing so that natural revegetation is improving their native range. This spreads the reseeding costs over the entire range and multiplies the benefits.

## DR. JOHN ERNST WEAVER

Dr. J. E. Weaver was honored by his students at a luncheon during the annual meetings at Omaha. The thirty people in attendance signed a printed testimonial and presented it to Dr. Weaver. Several others who could not attend sent letters commending him on his monumental contributions in Plant Ecology and for helping them while they were students. The following statement from the testimonial expresses the sentiment which prevailed: "You were thoughtful of your students and gave liberally in friendship, encouragement, and even in financial aid. Their concern was yours. We look upon you as one of our greatest and most inspiring teachers."

Dr. Weaver has long been a leader in Plant Ecology. Numbered among his accomplishments are over 85 lengthy scientific articles and eleven books. Even though he retired in 1952 he is continuing his writing. His fame as an author is matched by his fame as a teacher. After joining the University of Nebraska faculty in 1915, he guided 42 students to the degree of Doctor of Philosophy and 50 more to the master's degree. For many years his name has been starred

in "American Men of Science" as one of 100 outstanding American botanists.

One of the many reasons for Dr. Weaver's successful career is that both his teaching and research have contained a mixture of pure science and practical application. His students now hold many responsible positions in land management, as well as in teaching and research. His lifelong study of the prairie divides itself into five major undertakings—each with its practical aspects: the root systems of prairie plants; the plants which compose prairies, where they came from and how they live; the effect of grazing upon prairie plants; the role of native prairie in our effort to conserve the soil; and the effect of drought upon the prairies.

Among the many tributes during the luncheon, two from men who were not Weaver students are worthy of repeating. R. S. Campbell gave him much of the credit for changing Ecology from emphasis on observation to emphasis on quantitative measurements. F. G. Renner indicated that the land management agencies wanted Weaver-trained men because their training in fundamentals

facilitated their doing a better job of practical management. Dr. Weaver's reputation has extended beyond his area of work and his students. It will be long lasting.

Dr. Weaver was born on May 5, 1884, and was reared on a small farm near Red Oak, Iowa. He worked his way through the University of Nebraska and received a B. S. in 1909, A. M. in 1911, and continued studies for one semester at the University of Chicago. He received the Ph.D. from the University of Minnesota in 1916 where he studied under the late F. E. Clements. Dr. Weaver began his teaching career in 1912 as an instructor in Botany at Washington State College. He was promoted to assistant professor the next year. During 1914-15 he was an instructor in Botany at the University of Minnesota. Between 1915 and 1917 he was assistant professor at the University of Nebraska. A full professorship was granted him in 1917; a position he held to retirement in 1952. He married Martha Helen Hasse in 1906 and they have two children: Cornelia Marcia and Robert John.—*Harold F. Heady.*



Dr. J. E. WEAVER, center, at a dinner in his honor during the annual meetings of the Society, Omaha, Nebraska, January 27, 1954. Others from left to right are Drs. DONALD R. CORNELIUS, FRED W. ALBERTSON, HAROLD F. HEADY AND WALTER W. HANSEN.