Range Improvements and Returns to the Private Land Operator in the Intermountain Area

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Highlight

Ranchers are squeezed by spiraling inflation—yet the price for the meat they produce is the same as 20 years ago. Some means for meeting this problem are discussed, including range improvements and range management.

My formal education in Business Management and Economics left me lacking a schooling in Range Management, a lack that I have sincerely been trying to make up for during the last 25 years. But, with this background I have figured and figured and I still come up with the fact that ranching is the hardest way to make money of any way I know.

It is a glamorous, historically fabled, or popular industry that is now trying to excuse its lack of return by saying that it is "a way of life" as though that excused it from having to make a profit or give a fair return on the money invested.

For the last few years, particularly, we have found the industry ever more invaded by the doctors, lawyers, and chiefs of industry who have made their money in other fields and are coming into the cattle business to "play cowboy"—coupled with the fact that they feel that ownership of land is the best hedge against inflation.

Despite a few, and I do mean very few exceptions, nobody in the livestock industry is making money although they are getting by and that's about the best you can say for it. Well, how are they getting by? Some ranchers can carry on by living on their "fat"

which means they do not do the maintenance and certainly add nothing new that they cannot pay for out of the immediate cash flow. It may mean refinancing over longer terms, despite higher interest rate. There are several good, old ranches that are carrying on because they have been able to refinance and spread their fixed payments over a longer time. Also, a lot of them are gradually going backward and for the first time they are starting to get operating loans that carry them through from year to year. Many of the ranchers see these operating loans as a regular thing now, and expect them to continue. Another way of getting by is to purchase additional range or permits on long terms. This increases their income, and although you can show with a pencil where this land may not be a good investment because of the poor return, it does let them pay for it over such a long period of time that they can get by. Some get along with no return on investment and very little return on their labor, if any.

Recreation has been helping them get by. This "fringe" income from hunters, fishermen or the like must not be discounted. In fact, some ranchers have found it so profitable, especially compared with their livestock operations, they have gone into the recreation business more and more. On the ranch with which I am now associated, we had a total of over 2,000 deer hunters last fall, that we charged $2.50 each. I wish I could tell you that this was net income but we did not break even. Coupled with the usual expense of having people come in like this and the vandalism, we have gotten a fine start of Canadian thistle throughout the range from bedding and horse feed brought in that I see no way of ever eliminating.

Agricultural Conservation Program payments which ranchers receive for specified conservation efforts must be considered a direct benefit. Another definite fringe item might be the fact that some ranchers are making a little money by selling horses—and some cattle ranches, who have never seen a sheep before, are now selling a few lambs to improve their income picture, and vice versa.

One way ranchers carry on is to sell parts of their land. The obvious sell-off is home sites for recreationists. Many of the old ranches are selling other speculative sites that they might have near urban areas whereby they recover some of their capital plus its appreciation. But, we must not overlook the fact that many fine ranches are being sold in their entirety because the economic factors are just too tough to buck.

Sadly, the way many ranchers have been able to carry on is by, frankly, a lower standard of living. There can be no doubting the fact that lots of our ranchers today live on an increasingly poorer standard. The obvious inequities of increased cost of labor, machinery, supplies and everything that is purchased along with the fact that the ranchers product, meat, shows no appreciation in the last 20 years has become the "Gordian Knot" that is facing everyone in the industry.

The opportunities to solve these problems are not too numerous despite all of the study and hard work that a rancher can do. Don't think the ranchers haven't tried to be up to date and progressive, but the problems of "cash flow" and raising capital to take advantage of the progressive things in life has nearly pushed them to the wall.

For example, the chances for improvement and profit in animal husbandry have been pretty well worked over. Performance testing has been utilized and is being utilized more all the time. It is well known and each rancher is trying his best to work it into his program. Nearly every rancher now has a health control program to reduce his losses. They start out with a comprehensive program of vaccination, cleanliness, and proper feed the year round to get the very most out of their livestock. Others use breeding programs such as pregnancy testing to eliminate the shy or non-breeders and systems of consistently calving two-

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year-olds rather than to go longer without some sort of income from the heifers. Many hire veterinarians on a consulting basis to come in and help them with these programs.

All of the things I have mentioned are obvious and sometimes desperate attempts to produce more pounds of meat, economically. However, it seems to me, that the one place that comparatively little has been done is in the field of Range Management. Frankly although this science is more difficult to demonstrate and requires more hard-to-get capital, the opportunities for economic betterment are larger than in any other field of ranching. Outlays for range improvement are not just “dead” capital outlays like machinery but they actually return more than any other ranch expenditure to-day.

We may start by mentioning re-seeding. This makes better feed at the weakest season on the ranch. In the Intermountain area we find the Spring and Fall ranges are probably the weakest and so most of the seeding in this area has been to crested wheatgrass, to extend the grazing season on both ends. Others such as Russian wild rye are good, too. By re-seeding the depleted sagebrush areas, three to five times more feed is being produced on many of the ranges. On this ranch where I work, crested wheatgrass seedings are increasing the current production by more than 800 lb/acre at an out-of-pocket cost of $3.28 and year after year these continue to add pounds of meat to our production. The meadows are being improved in certain areas throughout the West the same way and probably just as dramatically.

Improving these ranges has enabled many of us to “flush” the stock and breed better and heavier livestock too. Another factor we have found that is of measurable benefit is our stock milk better when put on these seeded ranges. No doubt, one of the biggest improvements that will come in the years ahead is genetic changes in these grasses to match the productivity increases of hybrid corn and other cereals, because as you very well know, there has been comparatively little done with the grasses we have at hand to seed these ranges.

Another way of returning something to the range operator, and I have to admit it is my favorite, would be spraying. One of the little publicized uses of sprays is to kill poisonous plants such as death camas and larkspur, although the latter is much the more difficult to kill. In one small canyon, more than 500 sheep were killed while lambing due to death camas. After spraying, there has been no loss.

The great obvious benefit however, is to spray sagebrush to improve the grass cover. Over the last 9 years I have been intimately associated with the spraying of more than 35,000 acres and watching the change year by year. The improvement is so manifest and with such absolutely minor disadvantages it is hard not to get too enthusiastic over this method of increasing productivity for the private land operator today. For slightly over $2.00/acre of-pocket expenses, (plus small intangible costs, such as overhead and interest on the investment, and in some cases rent of additional pasture and the difficulties of operating that way for a year or possibly two), the rancher can “turn back the clock” to the by-gone days when the brush was not the problem it is today. Under the varied conditions I have seen, the feed improvement has been from 600 to 3,600 lb/acre and certainly a spray job is good for an absolute minimum of 10 years. In our country we have been averaging more than 800 lb of absolutely top forage per acre every year for 10 years. You just cannot let those opportunities go by.

If the rancher will set this up on a yearly basis to get his range sprayed under the Agricultural Conservation Program, half the $2.00 cost is paid by Uncle Sam. Using the figures I have just given, you will see that over the 10 years a rancher can get 8,000 lb of feed for a dollar of capital outlay—a ton for a quarter. Where can you equal that? This goes along with better feed to make more milk and less trailing. On many ranges we are noticing that the water is clearer in ponds and the springs run more freely where the brush has been killed.

This goes right into another range improvement that will make a valuable return to the operator—that is water improvement. This is simply looked at as the means of getting the most from what you have. Again, the stock do less trailing and there is less abuse around water holes. We cannot overlook the fact that the stock drinking water is better water, and something about which I have said very little is the fact that stock do better where all these improvements are made. This is an indefinable thing but operators know it for a very real benefit that goes along with better range management.

With all of the benefits I have mentioned is better control of our stock. All over the ranges in the west there is a great cry for more fencing, more herding, better salting and even fertilizing the range as means to better handle the stock. All of this is to get the stock on the best feed
at the best time. Now, that must mean best for the stock and best for the range—they must go hand-in-hand.

Many of my friends operating on the public domain who have suffered cuts in their permits in the last 30 years are now, at last, beginning to reap the benefits of these cuts. They are getting more pounds on their livestock as well as the fact that some of them are getting the return of some of these permits on ranges that are improved to a degree not believed possible. These benefits could not come at a more opportune time economically.

If I have sounded pessimistic and a little “hard-nosed” about this industry that I love, it is because I think we would be absolutely foolish to delude ourselves about such a vital thing. You men are close enough to the ranges of your acquaintance that you know we have to love this industry or we would not be in it.

Technical range managers have done much, and can do much more, to help the ranchers of the west to make a go of it. You can assist immeasurably by helping sell stockmen on the principles of range management and particularly the items that will make the most money for them. They certainly need your help.

**Exposure May Influence Grassland Establishment**

**CLAUDE C. DILLON**


**Highlight**

This example of the effect of exposure to grassland establishment can be useful to range management. South exposure sites in this climate will only recover to annual vegetation if perennial plants have been destroyed—that is, within a reasonable period of years. Re-seeding would be an important consideration. Deferred grazing may not be beneficial on south exposure sites, but very desirable on north exposures where an excellent perennial grass stand could develop.

"After 64 years of nonuse, annual plants are the only vegetation on a steep south exposure; the comparable north exposure has a near climax plant community." Eveard Harrison, Soil Scientist with the Soil Conservation Service, brought this to my attention, and later helped me with soils information used in this article.

There is a long earthfill on a railroad track in southeastern Washington built in 1901—according to an inscription on the concrete culvert headwall. This fill is about 80 ft high, and 350 ft long. The railroad track runs due east and west, causing direct north and south exposures on the fill. The location is seven miles west of Prescott, Washington in Walla Walla County on the south side of State Highway 3 D.

The elevation is approximately 1100 ft above sea level; annual precipitation averages 9 inches, with warm dry summers and cool moist winters. Average January temperature is 28 F, July, 71 F, with a mean annual temperature of 49 F. Frost-free season is 140 days. The prevailing winds blow from the southwest.

The railroad fill was built with medium textured silt loam soils classified as Ritzville soil series. The slopes of the north and south exposures are about 65%, according to readings made with a hand level. Soil material was moved in from the fill, so we can assume all the fill was made of the same soil in 1901.

Soil color was checked on the top layer on both exposures, but no difference could be measured. The color-chart reading was 10 YR 3/2 moist and 10 YR 5/2 dry. Reaction was neutral (pH 6.9) on both exposures.

The vegetation was sampled and recorded by visual observation May 18, 1955, at 5:30 p.m. The air temperature was 82 F; and soil temperature at one inch depth was 93 F on the south exposure and 86 F on the north exposure. A light breeze was blowing from the southwest and the sky was partially cloudy. It was two inches to moist soil on the north, and six inches to moist soil on the south slope (moist enough to ball when squeezed tightly in the hand).

The vegetation on exposures was estimated in percent composition by relative weight by following a transect straight south, up the north side of the fill, and then back north, parallel to the railroad track. The vegetation was sampled and recorded by visual observation May 18, 1955, at 5:30 p.m. The air temperature was 82 F; and soil temperature at one inch depth was 93 F on the south exposure and 86 F on the north exposure. A light breeze was blowing from the southwest and the sky was partially cloudy. It was two inches to moist soil on the north, and six inches to moist soil on the south slope (moist enough to ball when squeezed tightly in the hand).

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