

# Ranch Management

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AS A livestock producer, I am going to write in a general way about range conditions and management. Back in the early days when the hills were covered with waving bunch grasses, little thought was given to the matter of preserving ranges for future generations. If the great value of preserving the grasses had been realized years ago, perhaps the ranges would not have been subjected to the heavy grazing and other abuses which unthinking stockmen have resorted to in order to run a larger number of animals on a given area.

It was only recently that government personnel and farsighted stockmen came to realize the fact that if grazing practices were not changed, in a few years most of the range lands of this western country would be almost denuded of grass and thereafter be of little value to stockmen. If stockmen in the early days had realized that those wonderful stands of grass might some day be destroyed by overgrazing, perhaps they would have exercised better range management.

However, the present generation of stockmen seem more conscious of the importance of range management and are attempting to devise methods of improving carrying capacity. Grazing lands are like livestock; some produce better than others. The better care any range land receives the better returns it will make in improved forage for livestock just as more care of livestock results in better and greater production.

The time of year when the livestock business shows the greatest progress is when the animals are grazing on good ranges. It is then that the stock put on

their cheapest growth and good flesh. Contrast this period with the winter months when the overhead cost really takes place. Back in the days when there was an abundance of free range with waving grasses and no controlled grazing, the livestock operator was only concerned with the problem of having some meadow lands where he could harvest enough hay to carry his stock through the severe part of the winter. He made no provision for spring pasture nor for summer range other than the control of some of the water holes in certain areas. Many operators never owned a ranch where they could put up their own hay but depended on buying feed when needed wherever it could be obtained. The livestock were not off of ranges for long periods and in many cases roamed the open ranges year-long. Almost continuous usage resulted in overgrazing. When the lands were grazed at a time when the ground was soft, many of the perennial grasses were entirely killed out.

This condition brought about the need of doing something about our badly abused ranges. Better range management has been of great value to the overgrazed areas. Then came the task of reseeding depleted ranges. Thanks to the State colleges, the Forest Service, the Grazing Service, and the Soil Conservation Service—many experiments have been conducted and are still being carried on by these agencies to determine the best grasses adapted to the conditions in different sections of the West.

Reseeding of ranges is no easy task. It requires patience and time. It is my

belief that on ranges having a fairly good stand of perennial grasses, it would be a waste of time and money to try to artificially reseed them. However, much improvement could be made on these ranges by strictly controlled grazing, water development, drift fences, good distribution of stock, better salting methods, and rotation grazing. If grass gets a good start on ranges and is not overgrazed, some will be left standing to protect the roots and new growth, and to produce seeds. It is surprising what improvement can be made on a range in a few years in this manner, and the range continues to carry a certain amount of stock while the improvement is under way.

As to reseeding, there are several things to take into consideration:

1. The type of soil in the area in which reseeding is to take place.
2. The kind of grasses best adapted to the soil and the annual rainfall.
3. The character of the range as to brush or rocks.
4. The manner of reseeding if by hand or by drill.
5. The necessity of preliminary ground preparation.
6. Care, if any, of ground after reseeding.
7. The depth which the seed should be sown.
8. Size of area to be seeded at one time.
9. Best time of year to seed.

All of the foregoing points are important when considering a reseeding program, and much discussion could enter into this subject as to what might be right or wrong. The proper procedure for one locality might be infeasible for another place.

I was much interested recently in a panel discussion on this subject which occurred at the annual Feeders' Day Program at the Experiment Station at

Union, Oregon. The panel was made up of men of many years' experience. A summary of the discussion would be about as follows:

1. Controlled burning of sections with a heavy undergrowth of brush and of sections with a heavy growth of cheat-grass eliminated competition for better grasses.

2. Reseeding was successful on areas where soil had been previously plowed and a good firm seed-bed prepared.

3. More or less success was obtained on logged-off and freshly burned areas.

4. Broadcast seeding in general did not prove satisfactory.

5. Controlled grazing was also emphasized; i.e., not to allow too early grazing or overgrazing.

So much for this over-all picture of our ranges from my personal observation, but I would again stress my former statement that range or meadow lands are similar to livestock in that the more care they receive the better the results obtained.

I have never been sorry that I took as a business career that of a livestock producer. I hope to continue in that business for some time to come. I have always thought, and still do, that the livestock business is as sound and promising a business as can be found anywhere in this country of great opportunities. And I believe it is one of the most independent. Surely it requires foresight, long-range planning, and close personal application; but so does any other business if it is to be carried on successfully.

In looking over a livestock operation, four requirements stand out particularly in my mind. These are: (1) the best possible quality of cattle, whatever the breed; (2) ample feed supplies; (3) efficient operational procedures; and (4) marketing the cattle at their highest

value. These are, in a way, interlocking principles. Failure to develop any one of them to the utmost means setting a heavy handicap upon the whole operation.

We operate a range or commercial cattle business only. Previous to the year 1929, aside from running a cow herd, we bought annually enough one- and two-year-old steers, which, added to the number we raised, would make from 1000 to 1200 head of steers to be marketed off of grass at three years old. During this period of buying steers from many different breeders, it always developed that we had some of all the different breeds. The practice now is to more nearly operate on a straight breed basis. We realized that different breeds have different habits and characteristics, so in the year the steers were being fitted for market, they were separated as follows. The dairy type and any others showing undesirable qualities were separated from the rest of the herd as these are the first to be noticed by a buyer. They look and sell better if separated from the main bunch and also do not devalue the better quality and more desirable steers. Then the remainder of the steers were classed as to breed: Herefords, Durhams, or Blacks. We found that the steers handled easier, were more contented, fattened faster, and brought higher prices than when all breeds were run together. This method of operation was carried on at a time when feed was more plentiful in our part of the country than it has been for the past 15 to 18 years.

After the depression in the early 30's, we embarked on a different program and policy of operation. We quit buying extra steers and confined our operations to a breeding program and resolved to improve the quality of our cattle and to increase the calving percentages. I could

dwell for quite a while upon quality of livestock as I feel very keenly about this. It is not a question of breed. Any manager will succeed best with the breed he likes. The main point is to have the best quality obtainable within the breed of his choice. On our range we are now running Herefords, but, in earlier days we ran Durhams. In both instances, our efforts were to get the growthiest, smoothest, earliest maturing, and most uniform cattle which we could possibly breed. Good quality cattle eat little if any more than poorer types.

Perhaps two great failings of many cattlemen in this connection are that they do not cull the cow herds closely enough, and all too often they buy cheap bulls to save an immediate cash outlay. These failings may easily become expensive. When cattle have top quality and uniformity, they take on a quicker and easier finish. In short, they make good beef faster.

Our cow herd varies from 1100 to 1200 head. The steers are marketed at two years of age and the surplus heifers as yearlings. Under the conditions in our locality, we have about a 120-day feeding period. We have a good many fenced pastures and, of course, use the meadows extensively in the fall. We also run on the National Forest. Under our conditions, we figure three quarters of a ton of hay for weaners, one ton for yearlings, and one and a half tons for cows. We calve early, beginning on the sixteenth to eighteenth of February with mature cows, and March 1 with heifers, usually having 80 percent of the calves dropped by April 1. Just now, we are taking considerable pride in our calf crop, which is right at 95 percent. The mature cows beat this a little, but the two- and three-year-old heifers run around 94 percent, which brings the average down to 95 percent.

We are calving two-year-olds successfully. There used to be an opinion in our country that calving heifers at this age tended to reduce the size at maturity. It was thought also that the calf crop the following year would be light when the cows were three years old. Our experience does not bear this out. Our two-year-olds always raise a good calf and breed satisfactorily the next year. If there is actually any difference in the size of a bunch of three-year-olds between those that calved at two years old and those that calved at three, it is in favor of the two-year-old calving. We are very careful that our yearlings are bred under good pasture conditions, and we also have them on extra good pasture the next breeding season. We use one bull for every 20 cows and hold back turning on the open range until as late as June 10.

It goes without saying that with this percentage calf crop we are free of Bangs' disease. That is true, but it was not always the case. We were experiencing considerable losses for a number of years and concluded that we had better take this matter in hand if we were going to be successful cattle operators. We then started a testing program. Our herd was tested five times the first year, showing 18 percent reactors. The testing program was followed for five years. On the last test we found one reactor and one suspect. In the fourth year we started calfhooed vaccination and have continued that practice to the present time.

Culling of the breeding herd is very important in improving quality. We have followed the practice of annually culling from 15 to 18 percent of the cows. This might appear to be heavy, but to rapidly improve the quality it is not too severe. Those we cull are dry cows, old cows, those poorly developed, poor milkers, and any undesirable type or cripples. These "out" cows, as we call them, are

kept in good pastures throughout the summer. In early November the calves are weaned and the cows are continued on good green feed. By early December many of them are ready to be shipped, and the remainder are put on hay and grain to finish, which requires from 30 to 50 days. Following this practice a calf is produced and a cow readied for market in a 12-month period. These "out" cows are replaced with careful selections from the top end of the yearling heifers, selecting those of smooth, uniform type, well developed, heavy boned, and good-headed. By this method the quality of the cow herd is improved and kept up. Improvement can be seen from year to year.

For breeding the yearling heifers, the smaller type bulls that may be in the bull herd are selected. During the winter these heifers are fed wild hay in racks and ample amounts are before them at all times. About 30 days before calving time they are given 2 pounds of grain or its equivalent in some other concentrated feed. This grain feeding is continued until they go back on grass. Beginning as yearlings, the heifers are pastured and wintered in straight-aged lots. In the spring when they are three years old, they are mixed with the mature cows.

We keep a close eye on breeding practices with the mature cows also. Of course, we have them divided into lots, and we try to keep special type-variations in like groups. Then we figure out from our herd of bulls the best type to use on each of the mature cow herds. The cows are kept in separate lots on good pasture six weeks before they are mixed for summer grazing. During this six weeks' period the greater percentage are bred the way we want them.

The bull is an extremely important animal in improving the herd, more important than the cow. The cow influ-

ences her offspring only; the bull affects upwards of 20 calves each season. Therefore, we are a little cranky on the subject of bull selection. The qualities of a bull, whether good or bad, will be at once reflected in his offspring. If his characteristics are good, there is an immediate improvement in the quality of the herd. If the sire's characteristics are poor, there is either no improvement at all or there is a decline in quality. We do not go out for the strictly small "show type" bulls as we feel they are not large enough for commercial purposes. Instead, we buy the top grade of range bulls. We are very particular when buying bulls to know that they are descended from a cow herd that has good milking qualities. A good milk strain in a breeding herd is very important in calf development. We like bulls of good quality and conformation, with plenty of size, strong backs and loins, plenty of natural fleshing, well-developed rounds, low set, and good heads.

A good policy, and one which we practice, is to remove the bulls from the regular herd of cattle in early October and to pasture and feed them well until the next breeding season. It has been my observation that well-fed bulls are an important factor in getting a high percentage of calves that are strong at birth.

We buy our bulls as yearlings in lots of around 25 head but do not use them until they are two-year-olds. They are wintered separately with plenty of hay and just enough grain so they develop steadily without putting on too much fat. In the early spring, before the regular breeding season opens, the better type and most promising are each bred to four or five cows and a record kept. By this procedure we soon learn which are the top breeding individuals. These are later used with the top-cow lots. It is from

these lots that the larger number of our replacement heifers are taken. Again I want to repeat that a low grade bull at a low price is not a profitable investment. There is no end to the damage a poor bull can do to a herd if he is continued in service.

In order to observe the results from different bulls, the cows in our herds are identified by a shoulder brand. This is in addition to the recorded iron which is used on the hip. A letter is used for each year and since we do not have a cow older than 12 years, we use the first 12 letters of the alphabet and then start over again. Since only 200 heifers are retained each year, we start, for instance, with A-1, A-2, and so on up to A-99. The next 100 head are branded with the figure first, as 1-A, 2-A, and so on. Thus, the letter designates a certain year and the figure indicates the cow's number. The brands are about two inches long and are readily observed. There is also a special mark for the heifer calves from the top herd of cows.

The steers are sold about the middle of September as two-year-olds. They weigh around 1100 to 1140 as they come off of the grass. The entire steer crop is sold each year, therefore, there are no "shorts" or cut-backs to be put in the next year's steer crop.

After the top heifers have been selected for the breeding herd, the remainder are sold off grass in the same manner as the steers and at about the same time. They usually weigh around 700 to 735 pounds.

The question of feed is one which is so obvious that it needs little discussion. Everyone knows well how profits for the year disappear when the hay supply runs out in late winter or early spring before the grass has started. All operating plans, I believe, especially in those areas where winter feeding is necessary, should be based upon having a few stacks of hay

left at turning-out time. Just as important, of course, is provision for ample summer range and fall and spring pastures.

Too much emphasis cannot be placed on the importance of winter care of livestock. They are at the mercy of the owner when confined in small fields, in some cases with little or no natural shelter, with bad feeding conditions and perhaps a rationed amount of feed. During the severe winter months when stock really need care and attention, they should have plenty of feed to maintain their vitality and disease resistance. The young stock then will continue to grow, and the cow will be able to raise a good calf. The young, growing animals, such as weaner calves, should have feed that contains plenty of protein. They grow and develop much better when supplied with such feed. Classing cattle for winter feeding is extremely profitable. For instance, in a bunch of weaner calves, they can easily be classed in three lots: the younger and thinner ones; the in-between kind; and the earlier, better-developed ones. By this method more attention can be given those requiring extra care which is not possible when all are together. This same procedure should also be carried out in the rest of the herd. There are two reasons: it helps the development of those that need it; and it builds up vitality and makes them more disease-resistant. Wind breaks and brush shelter are extremely helpful in the winter care of stock.

Another point of much importance in the wintering of stock is the manner in which the hay crop is handled. It should be cut and cured at the proper time to insure the proper retention of its important nutrients and vitamins. Hay that is baled or put in stacks before it is over-

ripened is high in proteins, high in vitamins, and high in feeding value.

We are very careful not to overgraze our pastures and range allotments. The cattle are rotated between pastures as much as possible, but we cannot always work out an ideal rotation program because of the practical conditions involved. In the fenced pastures, the fences are not always on section lines but run according to contour of the land and relationship to available water. Our practice has been to turn out after the grasses have a good start. One other point we think very important is placing of salt before the cattle are turned out, which then is done in relation to the salt location. Under this plan the cattle are quickly and easily established on the range where wanted.

Of course, there are many other points involved in the actual work of managing a commercial cattle herd. Close personal observation cannot be slighted. Many of the factors in management which contribute to profits result from close observation of little points by the manager, which would entirely escape a foreman or other employee. During all the years of our livestock operation I have given personal supervision to all activities and have never had a foreman.

I have experienced both the ups and downs in the livestock business. Some of the downs have been pretty trying; some of the ups have been pretty encouraging, as has been the case recently. On the whole it has been an exceedingly pleasant experience, and I believe if the young men in this business observe the four major principles which I have pointed out, *quality of stock, feed, sound operation, and marketing cattle at their highest value*, that they, too, will have an enjoyable and reasonably prosperous career.