

RANGE CATTLE

Management



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Foreword

At an annual meeting of the then Oregon Cattle and Horse Raisers Association (present Oregon Cattlemen's Association), former president Herman Oliver of John Day, one of the most progressive of the State's range livestock operators, delivered an address covering important factors in range cattle management. This address contained so much valuable subject matter based on sound application of proved scientific principles that there was insistent demand for its wider distribution. Accordingly, the Federal Cooperative Extension Service of Oregon State College was pleased to include the material presented in its regular series of bulletins, in the belief that it was a valuable and scientific contribution to informative literature on livestock production.

Because of heavy demand, this bulletin is out of print. Request was made of Mr. Oliver for a revision, which is somewhat more comprehensive than the original bulletin, with discussion of later developments in range management.

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RANGE CATTLE *Management*

by

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What constitutes a successful livestock operation? To be well qualified in the art of livestock production, a stockman should know:

- ▶ Ranch management
- ▶ Range management
- ▶ Livestock management
- ▶ Feed requirements
- ▶ What constitutes a good animal
- ▶ Good marketing procedures.

These points are so intermingled and depend so much on circumstances and each other that perhaps they should be lumped together and called "good livestock knowledge with good cow sense."

To be successful in operating a livestock plant or any other kind of business, a man must devote his knowledge and energy to that business. He should look at it as a long range program and plan accordingly.

I believe that to succeed one must be adapted to his particular type of business. The one who fails missed his calling somewhere along the line but he might have succeeded in some other business. Sometime in life opportunity knocks at the door of every person. If he grasps that opportunity and is adapted to what has presented itself, he will be successful.

Business operators come under three categories: the successful, the



FIGURE 1. Wild meadow hay in stacks, with irrigation water stored in the hills.

failures, and those who just get by. A portion of the last group could be more prosperous, but seem content just to make a living. They have the ability, but not the incentive to go farther.

Every livestock-producing section has its advantages and disadvantages. Areas with long winter-feeding periods require more capital for hay-producing lands. This in turn results in more taxes, more irrigating, and more expense in putting up and feeding hay. All this takes more managerial ability than the type of ranch that can pasture out all year. The former type of livestock country seems more stable than the sections with year-round grazing. Many of the latter are confronted with

wide swings in forage production from year to year. If moisture conditions are favorable, the year-round grazing areas succeed, but there is always the element of uncertainty.

Considering all kinds of farming, I believe the raising of cattle requires more planning, good sound judgment, and farsightedness than do most others. The production of livestock is not like raising wheat, corn, potatoes, or other crops grown and harvested within a year. While raising such crops requires work and good management, coupled with knowledge of good farming practices, such operations do not require several years to produce a marketable crop.

Range Management Practices

The first thing to think about in raising livestock is *feed*. A livestock owner perennially short of feed is an ex-livestock man quite soon. He has a factory, but no raw material. A man who has to buy feed can succeed only in boom times. It matters not whether the livestock plant is in a location where there are severe winter months, or in a milder climate with year-round grazing.

Livestock eat every day. Therefore, the year-round feed program must be recognized. A weakness anywhere can be fatal. There must be enough hay to feed through the winter season with spring, summer, and fall ranges to balance out the operation. Since this is the foundation of a good livestock plant, good judgment should be exercised—which is only another name for good management.

Ranges and pastures must not be grazed to the extent that roots and crowns are weakened. They should be

managed so there is always ample feed, thereby conserving the stand and vigor of grasses, and maintaining the carry-



FIGURE 2. Spreader ditches add to range production.

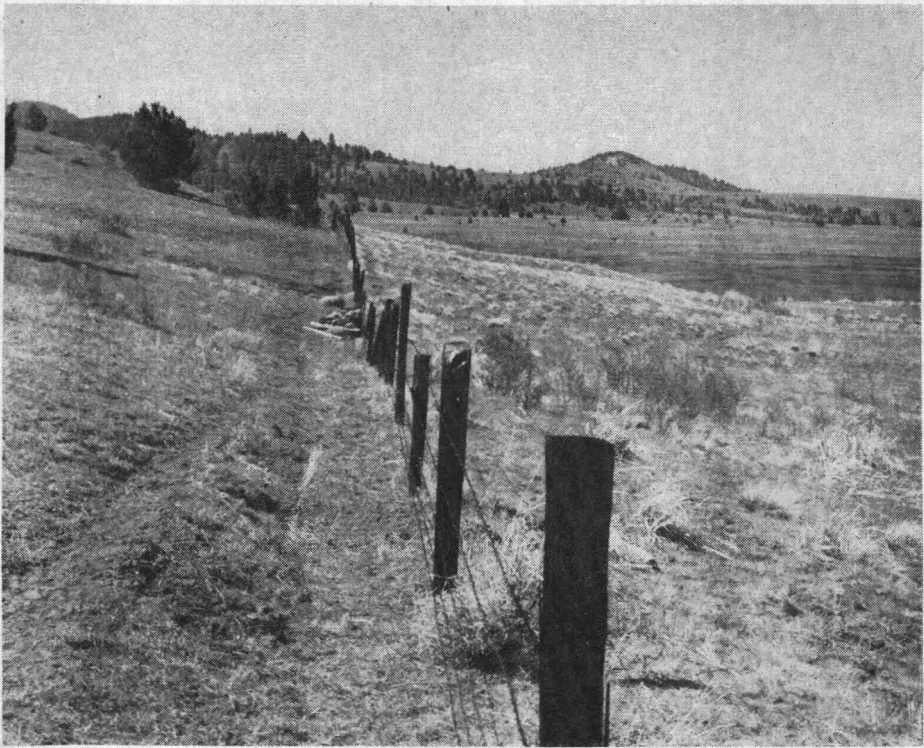


FIGURE 3. Fence line photo depicts good and questionable range management.

ing capacity. Better still, endeavor to increase the production of grazing areas whenever possible. *Always consider pounds of beef rather than numbers of cattle.* A good productive range will always turn off more pounds of beef than a range going downhill.

We have often heard the expression "grass is flesh." This is very true. It is the reason why a livestock operator should be conscientious in his range management. On many grazing areas the acres producing grasses are rough, and the terrain does not permit the grass to be harvested in any manner except by grazing livestock.

On grazing areas where the terrain is hilly and rough, it would be a great advantage to the livestock if fences were removed from the section lines

and rebuilt to follow the contours of the land. This could also be accomplished among neighbors by the exchange of acres for grazing purposes. This change would make the range more accessible to water, feed, and salt. Water development and proper placement of salt add to better utilization of ranges.

The time to begin grazing spring pastures should be considered. Give the ground an opportunity to settle, and permit the grass to get a good start before grazing begins. Grass should have sufficient growth to keep ahead of the animals. Much of what is known as "over-grazing" is actually brought about by grazing too early.

Controlled grazing produces good results for two major reasons; namely,

the conservation of soil and the conservation of water. Proper grazing retards erosion, and that in turn gets the water into the soil instead of into the sea. Once soil is eroded into the large streams and oceans, it is gone forever. Protection of soil is the very foundation of our existence. A landowner once said to a soil expert who was endeavoring to demonstrate to him the importance of soil conservation, "You can't tell me anything about soil. I have already worn out three farms!" Wise grazing methods will conserve soil and water.

There are areas, involving considerable acreage, where much can be accomplished through water spreading, utilizing the early runoff. How often

in the summer we see parched ranges, and remember the surplus of water in each drainage that spring. Range lands, producing feeds that can be harvested only by livestock, supply the most economical pounds of meat that can be produced. The livestock business makes its greatest progress during the summer months on good grass range.

Since the economy of the West and its livestock industry are tied largely to its vast acres of range land, and since many of these acres would be hard or nearly impossible to reseed, it is very important that livestock operators practice good range management. A good range can be kept good forever, but once badly hurt, healing may be too expensive or even impossible.

Winter Feed



FIGURE 4. Draining meadows for increased production and winter sanitation is very desirable.

Hay production is most important. Manage hay and other crop lands to secure the greatest production possible by raising feed best adapted to the soil. Crop land management may include clearing, drainage, leveling, proper distribution of water, use of adapted varieties, and in some cases the use of commercial fertilizers. Trampling may injure the alfalfa stand—especially in late fall or winter. Spring pasturing of any meadow, either wild or tame, will

reduce the tonnage of hay produced that season. As soon as the frost is out of the soil and meadows begin to "green up," livestock should be removed. All these practices add to tonnage produced.

Time of harvesting and manner of handling of hay crop need special attention to conserve the highest feeding value. Since protein is the most essential part of a range operator's feed, all

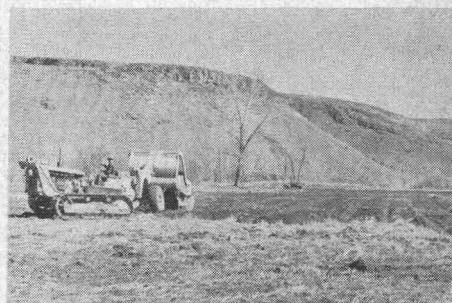


FIGURE 5. Land leveling for top hay production and ease of irrigation.

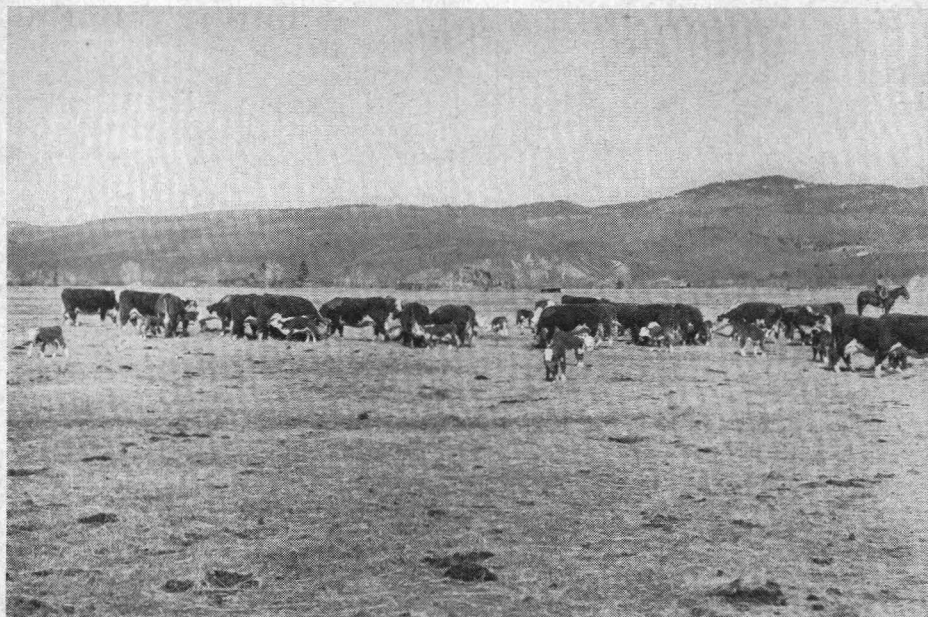


FIGURE 6. Well-wintered cows produce strong, vigorous calves.

hay crop and pasture management should be geared to maximum protein production. Letting any kind of hay, more especially alfalfa, get over-ripe, or letting it bleach after it is mowed, causes it to lose precious vitamins and nutrients.

If more hay is produced than is needed, some of the tillable land could be used profitably for irrigated pastures, thereby relieving the load on the hill grazing land. One acre may produce as much feed as 50 to 100 acres of dry, rocky hill land.

Winter Feeding

In the transition from fall grazing to winter feeding, the cattle should not be left too long on short pasture. This may save some hay but there is danger of the stock losing flesh. Maintaining their weight in the late fall or early winter is important. Letting cattle get thin before putting them on feed is not an economical procedure, as more feed is required after they are put on their winter rations in order to maintain their vigor. Strong, vigorous, well-wintered cows pay a big dividend

in a larger percentage of early calves the following year.

Too much emphasis cannot be placed on the winter care of livestock. They are at that time at the mercy of the owner, especially if confined in enclosures.

Feeding the hay crop requires thought and planning. Frequent changes of feed grounds help. The stock relish the feed better, hay is saved, and manure is spread more evenly. Feed racks can be used effec-



FIGURE 7. Year-round feed and good management make for a uniform calf crop.

tively in wet, slushy weather, thereby saving hay and getting better results. It may be said of "rack feeding" that fertilizer is lost to the meadows. This is easily overcome by the use of mechanized equipment that most every rancher has today. This fertilizer can be moved to sections of the tillable land *where it is most needed.*

Feed lots located where shelter is available in the form of brush, trees, or artificially provided windbreaks, add much to efficient feed use. Free and easy access to clean water is important. Salt is an essential part of an animal's diet and should be before them at all times. Feeding minerals, especially phosphorus, in some sections is a good

practice. There are areas where certain other required minerals have been depleted from the soil. These should be added to keep the animals thrifty.

Separate cattle into groups for feeding

Classification of cattle for winter feeding is a good policy. Yearling heifers, as well as 2-year-olds, should be fed in separate fields where they will not be crowded away from feed, or pushed around by more mature cows. Should there be some older or thin cows in the mature group, it is good practice to feed them separately.

Sanitation and disease control

Clean drinking water and clean feeding grounds are especially important during calving because of better sanitation for newborn calves. Cleanliness in barn lots and around feed racks aids in the thrift of livestock and proves helpful in keeping down disease.

Animals, like humans, are subject to diseases and one must be on the alert at all times to try to avoid them or, if contacted, control them in the early stage. There are certain types of diseases, such as Bangs, that can completely destroy profits within the year or, if not controlled, can put the operator out of business.

Uniform Calves Important

A good calf crop is very necessary. To have a large percentage delivered within a period of 60 days adds to the efficiency of caring for the mother and the offspring at a time when attention is needed. It also produces a uniform calf crop which, when grown to marketable age and offered for sale, will be more attractive and demand a better

price. Uniformity in age also will be an advantage in the marketing of yearlings and 2-year-olds. This may not be easy in the larger grazing areas where many users are involved, but much progress could be made with better cooperation among breeders using the ranges.

Taxes and other fixed high costs

have just about outlawed catch-as-catch-can calving methods. If only half the cows have calves, the cost of each calf is nearly twice as high as need be, and the chance for profit is almost zero.

Care of the sire

One effective way to bring about a high calving percentage is to see that the sires have proper care throughout their resting period. During this period keep the sire on ample feed. During the winter months, if the hay is not of top grade, add some type of protein concentrates so that when the time comes for his service, he will be in good thrifty condition. He should not be too fat, but strong and vigorous. This is especially helpful for the 2-year and older bulls that have seen service during the previous breeding season.

A well-kept sire adds to the thrift and vigor of the newborn calf, as well as to the percentage of calves. As soon as breeding season is over, remove the bulls from the breeding herd for the rest period preparatory to the next breeding season.

Care of cows

In order to get a high calving percentage and have calves come in as short a period as possible, cows should be free of Bangs disease and should be in a good thrifty condition and gaining during the breeding season. Reserve pastures and ranges so fresh feed is available at the beginning and through the breeding period. Select the smoothest and highest producing grazing areas such as seeded acres for that purpose. It also is very important to make sure there is an ample number of good sound bulls with each cow herd. Where the operator pasture-breeds, it is good practice to rotate bulls.

If at all practicable, breed yearling heifers in pastures by themselves. For best results, 2-year-old heifers with calf by side should have ample feed throughout the entire season in order that they will grow, as well as produce milk to insure good growth of the calves. Heifers in good thrifty condition are more certain to get with calf for the next year.

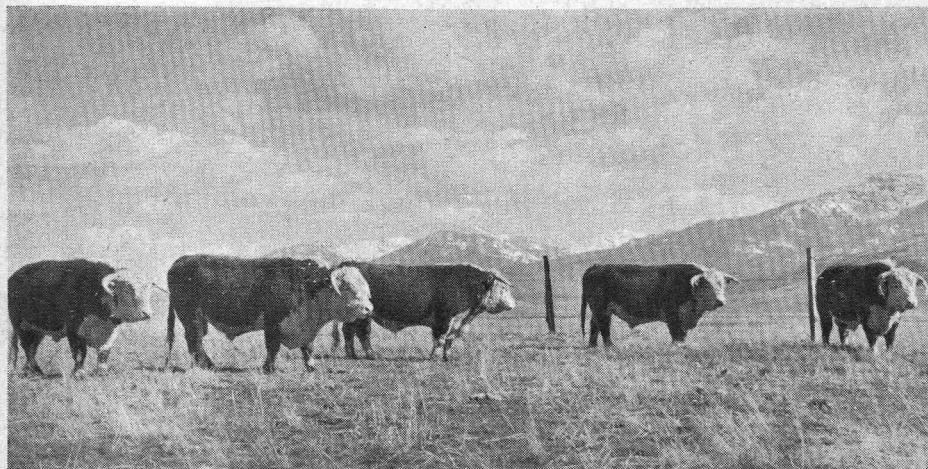


FIGURE 8. Rugged, proved range bulls. Sires that will produce top-gaining, high quality calves.

--- Outline for Go

Organization and Inventory of Basic Herd

- A. List total number of cattle by classes.
- B. List bulls and ages for future reference.
- C. Classify herd by age:
 - One-year-old heifers
 - Two-year-old heifers
 - Three-year-old heifers
 - Four-year-old cows and older
 - Heifer calves
 - Steer calves
 - Yearling steers

From the above information, together with assurance of a favorable calf crop, an operator is in a position to do sound planning as to the number he can sell and still maintain his operating herd.

This is where a well-thought-out culling program becomes profitable, taking into consideration whether the operator plans to keep his weaners until spring, sell at that time, or run them through the summer on grass.

Winter Management

- A. Keep plenty of winter feed on hand (hay and concentrates).
- B. Spray for lice and grubs.
- C. Clip shoulder brands for ages and other identification.
- D. Classify cattle for specialized winter feeding, such as a separate lot for weaner calves, etc.

Feeding

- A. Do not allow cattle to shrink, but endeavor to *hold* weight during feeding period.
- B. Results of wise feeding program include:
 - Increased percentage of calves
 - Thrifty, vigorous calves.
 - Positive influence on milk supply.
 - Well-wintered cows strongly affect the following year's calf crop.

Calving

- A. Use fields or lots that are clean and with as much shelter as possible.
- B. Give close attention at all times to cow and calf.

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- Quite often a little care at the right time will save the life of a new-born calf.

- Watch for calf ailments.

C. Do not let too many calves remain in drop bunch.

D. Brand all animals.

- See that branding corrals are clean and in good condition.

- Check branding irons to see if life of metal still remains.

- Handle calves with much care.

E. Check all fences and gates. Make proper placement of salt before cattle are turned out.

F. See that calves are well mothered up, both at turning out time, and when moving to summer range to avoid orphans.

G. Where cattle are pastured through the summer and flies are bad, spray for control. Rotate pasture often, if available.

Turning Out

A. If pasture is available, sort the sale or cull cows out before they go on range.

B. Classify cattle as nearly as possible, if certain types or ages of bulls are to be used on individual groups.

C. Reserve the better pasture for breeding purposes.

D. Make sure all bulls are strong and sound when going into service. Observe them from time to time for need of replacement.

Fall Procedure

A. If sale cattle still remain in herd, remove and put on good feed as soon as convenient. Classify as far as practicable. Remove all cripples, and those with cancerous eyes or other inferiorities. Sell them as a group by themselves. Show the most attractive lot first, for the first impression is usually a lasting one.

B. Carefully observe the fall range to see that available feed will maintain weight. Where large herds are involved, do not get too many weaner calves in one lot. Lots should be dry and not too large. Provide plenty of feed and water.

Calving Procedure

Where calving is done on the feed grounds, too much emphasis cannot be placed on the importance of a clean field. This can be brought about by saving a meadow, or feeding area, for the calving period. First, the number of cows in each lot should not be too large. It is also a good practice to move cows and older calves from the calving group in order to keep them on clean ground, to further assist in controlling diseases such as scours, and to cut down the chances of cows getting their calves mixed. Following these practices, and giving close attention during calving, adds to the total calving percentage.



FIGURE 9. Rack-fed, 2-year-old heifers with calves. Note scale and uniformity of heifers.

Yearling heifers to be calved as 2-year-olds should be well wintered. Good quality alfalfa is excellent if obtainable and, if not, the best wild hay that was harvested early to retain the maximum amount of protein does very well. Heifers, like weaner calves, should be fed from racks, with hay before them at all times. It is not always necessary to feed concentrates before calving, but the practice is helpful after calving to keep the mothers in a thrifty condition and to stimulate milk production.

Constant attention should be given the heifers during the calving period.

A different method should be followed with the young heifers than with the mature cows, depending on the number involved. Remove young mothers and their offspring from the main bunch as soon as the calves are 2 or 3 days old. Keep in small groups of 15 or 20, until the mothers are certain of knowing their own calves, and the calves recognize their mothers. A young heifer has a greater tendency to lose track of her calf and to take up with another.

Many breeders follow the practice of calving in late winter or early spring, which is a very good procedure where weather permits. There is, however, an element that enters into the picture of early calving, especially where the cow remains on dry feed too long after giving birth to her calf. The cow does not increase her milk flow until she is put on green pasture, but the calf reaches the age where it requires more nourishment.

There are two ways to add to the development of the offspring that will pay off. When the time arrives that the calf does require more feed, but is too young to eat and relish hay, *creep feeding* the calves has advantages. They can be supplied with a supple-

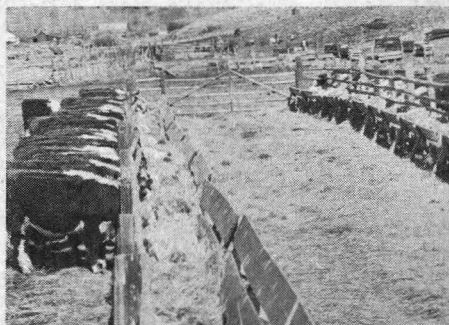


FIGURE 10. Rack feeding adds to top development of weaner calves. Note adjustable panels.

mentary feed that they relish and is digestible. It will add to their growth and development. The other method is to give the mothers of the older calves that require more nourishment a concentrated feed that will increase the milk supply.

Weaning the Calf Crop

The time to wean calves must be governed by their condition, available feed, and weather. When the calf appears to be losing weight, he should be weaned and put on feed that contains ample protein. Young, growing animals require proteins to develop properly. Their growth and development should never be retarded. Weaner calves will do much better when fed from racks where hay is available at all times. Locate feed lots where the ground is dry and is protected by windbreaks. Spring water is most advantageous during winter feeding if it is available.

Another good practice is to sort the steer calves from the heifers and feed in separate lots. It also is good policy to remove the thinner, less developed calves and feed them in separate lots

It is up to the individual operator to determine which practice is best. When good rate of growth and development of calves is continuous from birth, it most certainly pays off whether they are sold as weaners, yearlings, or 2-year-olds.



FIGURE 11. Feed racks placed to take advantage of natural windbreaks.

as was mentioned for older cattle. This provides an opportunity to increase the necessary concentrated feeds to crowd the lighter calves along a little faster.

The practice of letting weaner calves have access to large fields is not advisable. They put in too much time each day exploring, and feeding on old dead stubble with little feed value.

Quality and Profit

Good quality livestock plays a very important part in success. Having made an investment in a livestock plant whether large or small, or whether or not interest is being paid on the investment, there is a fixed overhead in *taxes* and *operating cost*. The goal strived for is *profit*. This goal is reached by raising feed and processing it through high quality, efficient livestock.

The operator strives to produce a high quality feed and naturally expects

to cash in on the product somewhere along the line. Being in the beef production business, he will expect to make this feed go as far as he can and produce the most economical growth and pounds of flesh. This can best be done by processing the feed through cattle with good conformation, efficiency of gain, and high rate of gain. "Eat and grow thin" may be a good motto for humans, but not for cattle. The original investment in taxes, labor, and other overhead, is just the same

whether a *high grade* or low grade animal is produced.

The return from high quality, good doing cattle is far greater than from the poor animal. It costs less to produce a pound of beef from better doing cattle, and a pound of beef from a high quality animal is worth more on every market whether purchased by feeder, packer, or consumer.

The range operator producing ani-

mals covered with some finish, but not having the top fleshing that the consuming public demands, must either finish his own cattle on concentrates or sell them to a feeder. It is just a natural course of good business for the feeder to secure and pay a premium on good quality stock over and above the lower grades. If he buys the lower grades he wants them only at a bargain price.

Bull Selection

The *sire* must be a higher grade animal than the dam if improvement in quality is to be expected. Emphasis is on the sire because *his quality*, being higher than the dam, should show up in the offspring and he has many offspring, not just one. If the dam is of higher quality than the sire, no improvement of the cow herd is possible.

Bull selection is of major importance in an improvement program, for a sire reflects his breeding ability, whether good or bad, on upwards of 20 calves annually. If it is good, you are making progress; if it is bad, you have lost ground, time, and income. A sire becomes a liability if he doesn't produce calves as good as, or of better quality than, the cow herd.

The herd from which the bull is to be selected should be carefully examined. Is the cow herd better than yours? Is the herd uniform and is it a strong breeding herd? Herd sires also should be carefully examined for the same things and should be as strong as, or stronger than, the cow herd. In order to improve your cow herd, you should have in mind where your herd is the weakest. Make sure that the sires and dams of the bulls you select, as well as the individuals selected, are strong where your herd is the weakest.

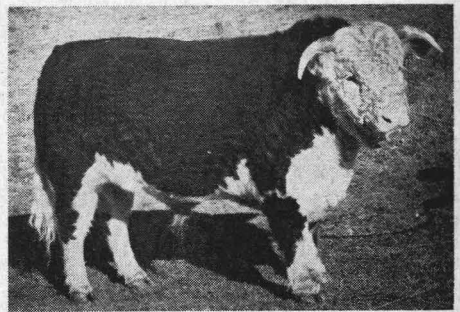


FIGURE 12. Conformation requirements for a top range bull; depth, width, thickness, straight line, heavy quarters, and excellent head.

In selecting individuals, keep in mind just what constitutes a good breeding bull. He should be a high quality individual with good conformation, especially strong in the areas of the high priced cuts; that is, straight top lines, strong back, a good thick loin, a wide long rump, a deep, thick round and twist. He should also be good in all other points as described for an ideal cow. He should have plenty of size for his age; that is, he should be an early maturing, fast gaining individual, that shows promise of siring the same type of calves with a high daily rate of gain. "Like begets like."

Before the final selection, make an examination of other animals in the

herd belonging to the same family. These are some of the things to look for:

- ✓ Do the cows have large calves, indicating good milk production?
- ✓ Does the rest of the family have size for age and efficiency of gain?
- ✓ Do they have the conformation desired?

Desirable Traits of the Brood Cow

In planning the herd improvement program, first have in mind just what constitutes a desirable brood cow. She should have:

1. Character.
2. Scale.
3. Conformation and smoothness with plenty of natural fleshing.
4. Heavy bone.
5. A strong but feminine head.
6. A short neck, well blended into the shoulder.
7. A straight, thick, full top line, wide with plenty of natural thickness throughout.
8. A long, wide rump that carries down wide and full into the twist and hock.
9. A wide, full spring of rib that

It is much easier to make this selection and get the top production bulls in a herd if the purebred breeder has been carrying on a program of production testing. This makes it possible to go through the cow herd record and select bulls from top producing families. A chance good looking bull sometimes shows up in a poor herd, but you can usually bet that his calves will not carry his good appearance.

reaches down into a full, deep heart girth and depth of body.

10. A deep, full flank and a sound, well-attached udder with small, uniform teats.
11. Short, straight legs located on each corner.

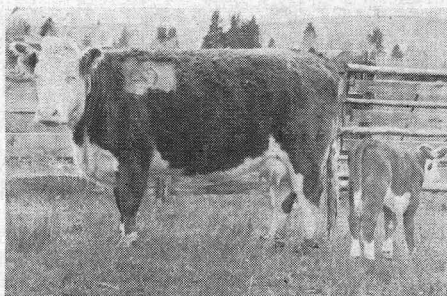


FIGURE 13. This good type range cow and her week-old calf illustrate desirable foundation animal and offspring.

Culling

It is of material assistance in making selections to class cattle by ages, so each age class can be culled to make a more uniform lot. Remove the "undesirables" such as:

1. Fine boned.
2. Small type.
3. Poor milkers.
4. Poorly fleshed.
5. Bad backs and thin rounds.
6. Spoiled udders, exceptionally large teats.
7. Cripples and low producers.

After removing a certain number, if the operator desires to continue on the same operating level, it then becomes necessary to go into the yearling heifers and top out the same number as cows removed, or a few extra, to replace those culled from the breeding herd.

We cannot overemphasize the importance of the culling program. Many an operator can see or select a top quality animal, but just naturally hates to sell off any cow that will have a calf.

You must develop the ability to see the many inherited weaknesses that can enter into a herd, and then it is even more important to have the nerve or backbone to cull these weaknesses from the herd. For instance, how much better off the beef industry would have been if five years ago all breeders had immediately culled cows and sires of dwarf calves and other weaknesses such as crooked legs, weak rounds, weak backs, shallow bodies, weak heart girths, poor feet, etc.

Selecting Replacements

Select replacement heifers from the top grade and high producing cows in the herd. A well-developed calf at weaning time would indicate that the dam is a good milker, which gets the calf off to a good and quick start. This selection program can best be done in the late fall, winter, or early spring, while cattle are still in the feed lots

where careful selection can be made.

This procedure requires some kind of identification, such as a numbering system. With all this information at hand, and by carefully watching the market on the same quality of cattle, the operator is in a more favorable position to realize actual value of sale heifers.

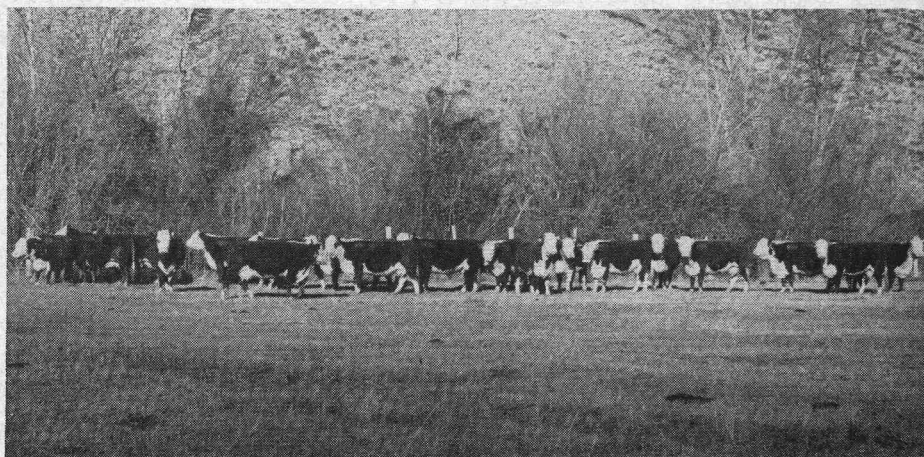


FIGURE 14. Cows selected for conformation and top production. Note uniformity, scale, thickness, straight lines, and well-developed udders.

Grading

The best way to gain the conformation and quality described is through the standard grading system. This grading system is based on Federal market grades of cattle, and gives some clues to the qualities associated with good breeding ability. Grades on individuals give a simple record of each animal's conformation.

Every operator should take full advantage of this grading system as a means of obtaining important information. By following a grading program one can acquaint oneself with the de-

sired conformation that he should be getting in his herd.



FIGURE 15. Shoulder brands show age of cow and give her individual identification.

Identify Your Animals by Brands

The only way to build a top quality herd is to select for the best; that is, the best milk producers, the best gaining ability, and the best conformation. This can be done only by identifying each animal in the breeding herd through a numbering system, in order that producing ability of individual animals may be checked.

One way of numbering cattle is to fire brand on the left shoulder. This is done with a combination of letters and numbers. The letters indicate the year the animal was born; the numbers identify the individual. For example, heifers born in 1950 might be branded as follows: all would have the letter A to indicate the year. Since Oregon Law requires that three digits be used, start with the number 10 so the first heifer would be branded A 10. This is her number for life. If the operator has over 90 head of heifers to brand each year, the letter can be used in different places. For example, it can be placed above, behind, or below the numbers in different ways, such as a

lazy A, with the top part pointing forward or backward.

A system of combination letters and numbers can also indicate the sire and dam of each animal. In small herds, a heifer might carry the same number as her dam so at a glance you could tell her age, dam, and sire. Of course, the heifer's letter would be different from that of its dam. The letter and its position, plus the number, identifies each animal completely.

The numbering system is the key to the improvement program. These identifications can be used in many ways to improve the herd. Record can be made of the best producing cows, so they can be selected to breed to the strongest breeding bulls. Replacement heifers are chosen from such matings. Cows with similar conformation but with production weaknesses can be selected out and bred to bulls that are strong where the cows are weak. Cows can be followed through their production cycle, which results in a selection guide. Year identification is helpful

here, for by just looking at the cow you can give proper consideration to the effect age might have on her production, development, and size for age.

The numbering system also is used in proving new bulls. Records can be made of the cows serviced by new bulls, thereby making it possible to prove the bulls or build a production record. Then, this bull production record can be followed by checking on the development of his calves. This makes it possible to dispose of poor breeding bulls. The numbering system provides a way to keep a record of matings, so you can keep good bulls in the herd much longer. This automatically reduces that portion of overhead that is charged against the operation as bull services, and at the same time continues the service of a top quality sire. Without this information, bulls with good breeding ability often go to slaughter when the owner would be better off if he kept them for 2 or 3 years longer.

A proven sire from 7 to 10 years of age can be used successfully, and will settle upwards of 25 cows with calf in about 45 days, if on good pasture and by himself. When breeding yearling heifers, and more than one bull is required for a given number, it has been my observation that 3- or 4-year-old bulls will settle them with calf in a shorter time than if younger bulls are used.

This numbering system also helps in improving the health of the herd, for records can be made of any abnormality or weakness, such as uterus prolapses, shy breeders, cows that drop weak calves, poor milkers, etc.

It can also be used as a permanent record for Bangs or other disease testing and vaccinating programs. For in-

stance, if the herd is tested for Bangs disease, all reactors can be selected in the field, avoiding putting the entire group through the chute to read ear tag numbers.

Conformation of the cow is not enough on which to base the entire improvement program. Actual production of the cow is of most importance, for a cow with good conformation doesn't always breed true. The primary aim should be to develop a cow herd that can produce the maximum pounds of beef at the usual selling age in as neat a beef package as possible.

The only sure way to get these maximum pounds of beef is to develop a production record on every cow. This is done first by individually identifying each animal. Then by making periodic checks on each cow, one can soon select for the best producers and the best conformation. These checks are made in the spring when the calf is dropped, and again in the fall. Calves are checked shortly after birth on their conformation, size at birth, and uniformity. This information is tied back to both the dam and sire, especially in the case of the heifer replacement herd. The calves are checked again in the fall to determine growth for age, which is primarily a check on milk production of the individual cows. At this time, notes can be taken on the best and poorest milkers. This information can be used both for culling and for selecting for milk production. The poorest milking cows are culled from the herd, and heifers selected from the best milkers.

If surplus heifers are sold as long yearlings, a further selection for maximum production can be made by selecting for growthy, high quality heifers.

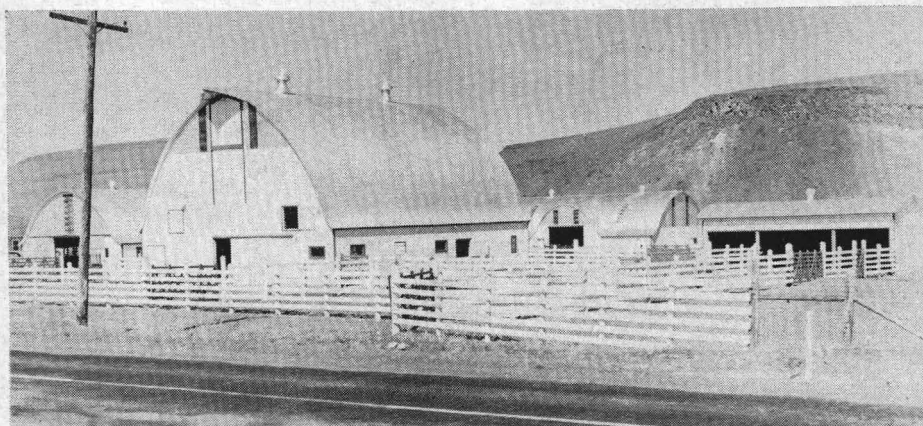


FIGURE 16. Well planned and well constructed corrals add to ease of handling stock.

Proper Handling Important

Proper handling of livestock adds to the growth and weight of animals. On the other hand, anything that tends to irritate, or make the animals nervous or restless, affects their well being. Avoid abuse or rough handling in corrals or shipping points. In this respect, excessive use of the electric prod stick or other "gadgets" should be avoided. Dogs are frequently detrimental to livestock, especially around cows with calves, but are of great help on the range if used properly.

Corrals should be well built, properly partitioned by free swinging gates

with good latches. Chutes should be strong to withstand rough treatment during dehorning and vaccinating. Spraying and loading chutes should be built with easy access from one corral to another, calling for a minimum of effort. Careful handling of livestock in moving, loading into trucks, etc., will conserve their flesh and weight, while careless workmen can in one day take off flesh that will be lost or require days to restore. While these things may seem of minor importance, they do contribute to a successfully managed livestock operation.

Marketing

In order for any feeder-producer to profit in the livestock business, he must be able to do a good job of livestock marketing. First, he must produce animals that are appealing to the eye, and are top producers before and after selling date. Salesmanship is very important in making the best sale possible. Get the top price for the various grades within the herd. Keep in mind

that satisfied customers are your best market outlet. Producing good doing cattle is the answer to return-customers. Many of the best range cattlemen in Oregon sell their feeders to the same man year after year.

In order to properly price the year's sales and properly class the cattle for sale, the operator needs to be thoroughly familiar with the grades

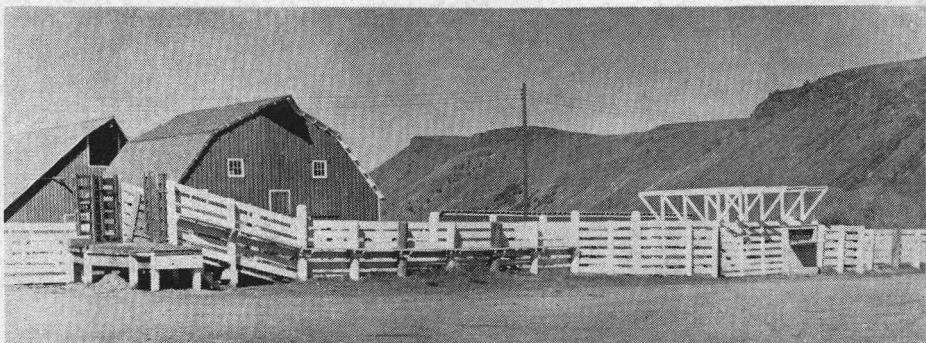


FIGURE 17. Convenient loading chute adjacent to scales.

of cattle. These classifications or grades come under several headings for feeder cattle, such as fancy, choice, good, medium, common, and inferior. Naturally, there is quite a variation between inferior and fancy. If the producer does not know the values of the different grades, he is not likely to get the real market price for his grade or he may turn down a good offer. The only way to take advantage of top production developed into a herd is to build a reputation for having that kind to sell.

The way to secure the real market value of your livestock is first to determine the grades of cattle for sale,

then check the several different markets for their market prices. These quotations are based mainly on grades. Knowing the grades of the cattle being offered for sale, the seller or producer is in a much better position to set an asking price for his cattle.

A good job of marketing is not done just at or during the marketing season. A great deal of long range planning must be done to have a product that is strongly in demand. Likewise, an operator should do much annual planning in order to get the maximum pounds of beef to sell from the forage available without damaging future returns.

CONCLUSION

The pleasure and profit of running a beef operation can be achieved only through closely observing:

1. Intelligent ranch and range management.
2. Production of ample, nutritious feed.
3. Production of high quality stock,

with emphasis on pounds per animal rather than numbers.

4. Production practices that will result in maximum poundage of high grades of beef.
5. Marketing to obtain maximum returns per investment made and effort expended.