

Beef Cattle--Shaping up for Winter

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Many Oregon cattlemen must decide whether to sell some of the basic breeding herd or to buy additional feed for wintering. Complicating the decision is the favorable long-time outlook for beef cattle, and the relatively short supply of available feeds in some areas.

It appears economical to winter as many as possible of the good producing cows and also the desirable heifer replacements. HOW?

Evaluate the available feed supply; then determine how many and what kind of cattle are to be wintered. Cull to the necessary level.

Culling: Eliminating the Nonproductive

Pregnancy testing will help determine the cows to be culled. Cows that are not pregnant this fall will normally not be bred until the breeding season next year. This means two winters before any returns. For example, a 6-year-old cow not pregnant in the fall of 1966, bred during June of 1967, will calve in March of 1968. At weaning time in 1968, her calf will have to weigh 500 pounds at 30 cents per pound in order for her to return \$75 per year. The cow will be 8 years of age by that time and soon be decreasing in productivity. This is a good time to cull open cows of any age that are of inferior quality.

In order to select for early calving cows, select the largest heifers of desirable quality at weaning time. Large calves means that their mothers are productive, and this is one of the best indications of heifer productivity. Identifying calves with their mothers removes most of the guesswork.

In this period of high production costs, it is almost mandatory that heifers be well-grown-out and will calve as two-year-olds. The smaller and later heifer calves should not be retained by operators who desire to calve their heifers at two years of age.

Alternatives would be to sell the small heifers to a feeder for feeding or to some operator who might want to calve them in the fall at about 26 to 30 months of age.

It is a great temptation to keep old cows for just one more calf. As a general rule, cows are going downhill at 9 and 10 years of age. Two good heifer calves can be wintered for about the same cost as for an old cow.

Segregating Cattle

Heifer calves, bred heifers, and possibly two-year-olds should be segregated into groups separate from

the main cow herd. These young cattle are growing, and they need a ration higher in protein than mature cows. When these heifers are fed in groups of their own size and age, they should be able to compete and get adequate feed. Rations can be designed for each of the age groups.

Feeding Replacement Heifer Calves

Requirements for replacement heifers vary, depending on the age at which the heifers are to be bred. If calving at two years of age is the program, then a higher feeding level is necessary throughout the first year of the heifer's life than if she is going to be calved as a three-year-old. Replacement heifers should have the best feed that is available.

Feeding heifers for optimum growth rate and breeding ability is one of the critical problems. Research shows that over-feeding might be even worse than under-feeding.

Heifers should weigh around 650 pounds when bred as yearlings. This gives a target to shoot at so far as heifer development is concerned. Heifers weighing about 400 pounds in October will need to gain at about 1 pound per day during the winter and spring, in order to be of sufficient size for breeding as yearlings. Calves will need a minimum of 300 pounds of good quality dry roughage per month. This should supply at least 150 pounds TDN per month. As these heifers increase in size, their feed requirements will increase.

Feeding Bred Heifers

During their second winter, pregnant heifers should be fed a ration that will maintain their summer weight and also add some gain during the winter. The main objective is to insure adequate growth for the heifer, proper nutrition for the developing calf, and at the same time not get the heifer too fat. The ration should give the heifer a chance to be of good size and in good condition when she calves as a two-year-old. This will also help to assure her rebreeding ability after she has calved the first time.

Wintering Two-Year-Old Heifers

Young cows that have just weaned their first calves are still considerably smaller in size than the mature cows in the herd. If feed is scarce, they should be segregated and fed separately. One of the big problems in the



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cow business is to get a good crop of calves from three-year-old heifers when they have already raised a calf as two-year-olds. Nutrition is the main factor determining reproductive ability. These heifers are still growing, and should have a full feed of hay. The quality of the roughage will determine the advisability of adding a protein supplement. A ration of alfalfa hay with nothing else should do the job. A full feed of native meadow hay also is adequate. If hay is of poor quality, then 1 to 2 pounds of additional protein, such as cottonseed meal, should be supplied.

Wintering the Cow Herd

A mature, dry cow requires a minimum of about 600 pounds of dry roughage or 300 pounds TDN per month during the fall and winter. Adequate energy and protein are essential. If fall pasture is short, supplementary feeding should start before the cattle get thin. A little supplement started while the cattle are on fall pastures will help maintain condition and extend the forage supply. Poor forage or roughage quality will require more supplemental energy, protein, and vitamins.

The most critical time is after the cows have calved. Good nutrition is most important when cows are nursing their calves, so adequate feed is necessary at that time.

Feeding Bulls

Bulls should receive a ration that provides from 25 to 30 pounds of dry matter per day. This ration should be high enough in protein to make sure that each bull gets 1 to 1½ pounds of protein. Bulls should not be allowed to get too fat, but the biggest problem is that bulls are wintered too thin and sometimes are really not ready to go out and do a top job during the breeding season. If bulls are given a feed of fairly good quality hay, additional grain should not be necessary until they are being conditioned for the breeding season. If the hay is of poor quality or is in short supply, then the bulls may need from 3 to 5 pounds of grain per day, along with the ration of roughage.

Preparing Feeds

Grains such as corn, barley, oats, milo, and wheat give the best results when they are rolled, cracked, coarsely ground, or pelleted.

Steam rolling costs about \$5 to \$6 a ton. Grinding, mixing, and pelleting cost around \$10 a ton. Sacking in 100-pound bags runs about another \$4 a ton. If bulk whole barley costs \$53 per ton, by the time it is ready to feed, charges for pelleting and bagging will raise the price to \$67 per ton at the mill. Compare this price with that of pelleted commercial feeds that have already been reinforced with protein, vitamins, and minerals. Also compare it with alfalfa prices. Rolled barley may cost as much as 1.6 times as much as 12 to 14% hay.

Pellets have the advantage of being easy to feed almost anywhere, just by scattering them on the ground. Rolled grain must be fed in bunks, and this is quite a problem where many animals must be fed.

Avoiding the Wintering of Parasites

Weaner calves and yearlings are the cattle most likely to harbor a heavy load of internal parasites. Fall worming for internal parasites should be governed by checking fecal samples. Two or three fecal specimens should be collected and submitted to a laboratory or a veterinarian for parasite evaluation.

Lice and grub control can be accomplished in one operation by treating the cattle with one of the systemic insecticides. One of the pour-on products, such as Cor-Ral, Ruelene, or Ronnel (Korlan), is satisfactory. Follow the directions on the container. Do not give an internal treatment with Phenothiazine at the same time an external treatment is given. Thibenzole is considered safe at any time.

Ronnel, mixed with salt during the pasture season, is giving good control of lice, grubs, and horn flies. Dipping and spraying also are effective against lice. A research report indicates that a heavy infestation of lice caused cattle to lose over 100 pounds in weight during the winter, even when they were being fed an adequate ration.

Some Suitable Wintering Rations for Beef Cattle*

	Alfalfa	Meadow hay	Straw	Corn silage	Cotton seed meal	Barley
	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
Calves 400-500 lbs.						
Ration 1	12	---	---	---	---	---
2	5	8	---	---	---	---
3	6	---	---	12	---	---
4	---	10	---	---	1	1
5	---	10	---	---	---	2
6	---	8	---	---	---	3
Yearlings 700-800 lbs.						
Ration 1	16-18	---	---	---	---	---
2	---	15	---	---	1	1
3	10	---	10	---	---	2
4	8	10	---	---	---	---
5	8	---	---	20	---	---
6	---	10	---	---	1	4
Dry cows 1,000-1,200 lbs. (For lactating cows, add 40-50%)						
Ration 1	20	---	---	---	---	---
2	---	20-25	---	---	---	---
3	10	---	20	---	---	---
4	5	---	20	---	1-2	---
5	10	10	---	25	---	---
6	10	---	---	---	---	---
7	---	15	---	---	1	2-3
8	---	10	---	---	1	5-6
Bulls						
Ration 1	25-30	---	---	---	---	---
2	---	30-35	---	---	---	---
3	15	---	---	30	---	---
4	---	---	30	---	1	5

* These figures can be used as a guide, but quality and protein content of roughage are quite variable.

Proteins, minerals, vitamin A, and available energy are most often deficient in low-quality roughage. Supplements containing these nutrients are particularly important when the winter supply of roughage is limited.

When cattle have been on dry ranges, their vitamin A supply will be rather low. Ordinarily 3 to 5 pounds of good quality alfalfa hay will supply all the vitamin A necessary for young cattle and dry pregnant cows. After calving, the vitamin A requirement is about doubled. Additional vitamin A can be supplied by mixing in a feed supplement or by injection.

Commercial mineral supplements are available, and they are very efficient in supplying animals' needs.