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Grain finishing of beef cattle grazing dry pasture or stubble

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GRAIN FINISHING OF BEEF CATTLE
GRAZING DRY PASTURE OR STUBBLE

WHEAT quotas, poor wool prices and the availability of cheap grain on the farm have stimulated interest in grain finishing of cattle for out-of-season beef production. For many years, animals turned off in the autumn-winter period have brought better prices than those sold in summer, at the end of the pasture flush.

When animals are bought for fattening, much of the profitability of the operation depends on the sale price per pound being higher than the purchase price per pound. With increased interest in this type of production, the purchase price of weaners and stores is likely to rise until more animals become available, and sale prices are likely to fall because the local beef market is limited. At current and foreseeable prices, grain finishing is unlikely to be profitable outside the period from Christmas to August.

Methods

The grain may be fed in a feedlot, where the animal is totally fed, or in the paddock, with roughage provided as dry pasture or stubble. Feedlots are discussed in another article in this issue.

Feeding grain supplements to animals on pasture or stubble saves the cost of handling and processing roughage, which, depending on quality and type of roughage and grain, can be 15 to 50% of the diet.

Confine the cattle to yards and feed them hay in containers such as troughs for a week when they are first weaned or purchased. This prevents damage to fences, allows the animals to adjust to the presence of humans and teaches them to eat from containers. Animals in poor condition should be drenched for worms.

Paddocks should have strong fences with at least one strand of barbed wire. The stocking rate should be high because animals that are accustomed to pasture will continue to eat it in preference to grain, if it is liberally available, continuously. If this happens, they may grow satisfactorily, but not "finish".

*By D. J. BARKER

Feeding grain supplements to cattle on dry pasture or stubble requires less capital than feedlotting and saves the cost of handling and processing roughage.

This article gives the essentials for grain supplementation of dry pasture or stubble but warns that grain finishing is unlikely to be profitable outside the period from Christmas to August.

While the principles of feedlotting generally hold good for stubble and pasture supplementation, this article outlines the main differences between the two systems.

*By Beef Research Officer, Animal Husbandry Section, Animal Division
Tail-end weaners at Wongan Hills Research Station just before sale in July, after being held over the summer and autumn on a supplement of grain and urea, fed to appetite in a stubble paddock. Average live-weight of this group rose from 430 to 640 lb. in 156 days and the animals ate an average of 7\(\frac{1}{2}\) lb. per head per day. They lost weight in January-February while running on wheat stubble without a supplement.

Feeding

Start feeding 3 to 5 months before the intended time of sale. Animals in store condition on stubble will require longer feeding than prime animals or those on better quality roughage. Skill and experience are necessary to bring the animals to suitable condition when prices are highest.

The grain may be fed whole but is more digestible when crushed or rolled. Introduce it gradually over the first three weeks to avoid grain poisoning. Self feeders can not be used during this period unless the grain is mixed with the required proportion of chaffed or milled hay.

Using troughs, the grain can be introduced by starting at 1 lb to 2 lb per head, with the required amount put out daily. The quantity is steadily increased to about 10 lb per head over the three weeks. The animals are then allowed grain at all times to allow the maximum growth rate. Protein additives are not likely to be needed if legume residues are available.

Animals on stubble are more likely to require additional protein. Restriction of the area grazed is not as important on stubble as on the pasture supplement system because the animals readily take to grain if it is placed near the water point.

Faster growing animals require the most protein. An average figure for protein in the cereal grains is:

Wheat—12 to 14 % crude protein
Barley—10 to 12 % crude protein
Oats—7 to 10% crude protein

The protein supplement for faster growing animals can be made by including 5 to 6% meat meal or 8% sweet lupins in the diet; ½% of urea can be used as a substitute for 3% of meat meal or 4% of lupins. Urea must be introduced gradually and first intakes should be less than ½ oz a head a day, thoroughly mixed with the rest of the ration.

The additional protein can be discontinued once the animals reach the fattening stage, or when the season breaks and new pasture grows.

If the grain runs out for more than a day, it must be re-introduced gradually, starting at 5 lb per head per day in troughs or mixed with an equal amount of hay in self feeders.

A mineral supplement is likely to be necessary for animals grazing stubbles; a lick such as the following should be available with both systems.

Rock salt—50 lb
Rock phosphate—50 lb
Copper sulphate—4 oz
Cobalt sulphate—1 oz

Vitamin A should be given at the rate of 1 million I.U. per head every two months after starting on the grain ration, in the feed or as an injection.