

## **Supplementing stocker calves**

Cold and wet weather limits the growth of winter pastures, making supplemental feeding a necessity. Because of large fluctuations in forage production, supplementation is almost always needed during the grazing season. Calves should be supplemented with at least a mineral mix containing an ionophore, regardless of forage availability. It is very likely you will experience a period of abundant, limited and no forage for your calves in most winters.

### **Abundant Forage**

In situations when there is plenty of forage, little or no supplementation of grain is needed. Feeding large amounts of grain supplements will only substitute for forage intake. Unfortunately, an abundance of forage throughout the winter seldom occurs. There will almost always be a period of little or no grazing at some point during the winter. Proper stocking rates are important to ensure at least some grazing being available all winter. The recommended initial stocking rate in the fall is 600 to 700 lbs of calf per acre.

You must at least supplement with a mineral mix containing an ionophore. However, feeding supplemental grain in small amounts to stocker calves has been proven to be cost effective in improving daily gains. It is recommended to feed a supplement that includes supplemental minerals, vitamins, and an ionophore such as Rumensin, Bovatec, or Gainpro. An example supplement is listed in the table. Average daily gain was increased by about 0.40 lb per day when this supplement was fed at the rate of 2 lb per head per day. Research has shown the supplement to be equally effective if fed at the rate of two pounds per day or four pounds every other day. Feeding every other day will decrease labor costs and make the supplement even more economical. This supplement is a convenient way to deliver vitamins, minerals and an ionophore to calves, and ensures that calves consume these nutrients every day.

It is recommended to feed the supplement in a pelleted form. This will limit segregation of feedstuffs in the supplement and ensure a more consistent intake of all nutrients. In addition, it is important to provide enough bunk space for all calves to eat at one time. Other feeds such as corn and soyhulls would be equally effective in place of milo and wheat middlings. The feeding rate of 2 lbs per day is not great enough for stocking rates to be increased above normal levels.

### **Limited Forage**

This is a situation you will face every year. There is enough forage to keep calves gaining at the start of the grazing period, but you will run out of grass in the winter unless calves are supplemented. The best use of high levels of energy supplements is to increase stocking density and stretch the forage supply. There are a lot of strategies to use in this situation. If you choose forage, only feed high quality forage such as alfalfa or corn silage. Poorer quality hays fed at high levels will not maintain adequate growth rates. Not everyone is set up to produce and feed silage and the costs of doing so are very high. Thus, most people will feed grain supplements to get through the times of low forage production.

The most economical supplement for most producers is grain or by-product feeds. Mixing 5 to 7 lbs of grain with the mineral/ionophore supplement along with some grazing should keep the calves growing. Calves will use the feed efficiently and convert about 5 to 6 lbs of feed to 1 lb of gain. The most common feeds are corn, soyhulls, wheat middlings, oats, and sorghum. You should buy the least expensive product delivered to the bunk. If you do not mix the feed with a supplement, do not forget to feed a mineral with a high calcium content and one that contains an ionophore.

Feed the calves every day and provide enough bunk space for all calves to eat at once. Hand feeding calves every day has been shown to improve feed efficiency by 33% over using self feeders. Start increasing the feed a couple of weeks before you anticipate running out of pasture to avoid overgrazing and risk the calves losing weight. When feed prices are low, you may want to consider increasing the stocking rate and feeding the calves at about 1% of body weight rate during entire grazing period. This feeding rate can increase stocking rates by approximately 35%.

Some people may feed low quality roughage to try and slow rate of passage and improve digestion. Feeding hay at 2 to 3 lb per day has shown no negative or positive effects on performance. What you do not want to do is feed large amounts of poor quality hay when there is little or no grazing. Hay does not provide enough nutrients to keep the calves gaining at an economical rate. Feeding of poor quality hay must be limited, if fed at all because of reduced performance and increased labor costs.

### **No forage**

Many of you have experienced this scenario this winter. In this situation, you have no choice but to feed the calves in a drylot. You cannot afford to keep calves that are not growing. This is expensive because you have already paid for the grass and now must pay to feed the calf twice. Some producers have large amounts of homegrown feeds or can purchase grains or by-product feeds at a low cost. A variety of roughages and grains can be used to formulate a diet that will keep the calves growing.

Evaluate the cost of gain using grains and by-products versus grazing calves. Cold weather, too little rain, too much rain, and army worms all decrease forage production and increase supplemental feeding costs. In some cases, feeding grains and by-products result in lower costs of gain than grass.

### **Summary**

In most years, the most economical way to stocker calves is to stock at a proper rate and feed a grain, mineral, vitamin, and ionophore mix at about 2 lb per day. During periods of slowed forage growth, calves must be fed high quality feeds at higher rates to maintain adequate growth. Many different grains and by-products can be used. Price is the most important factor in deciding which feed you choose. Project cost of gain of drylot feeding versus grazing calves. If the costs are comparable, it may not be worth the risk to plant winter pasture and hope the weather cooperates. Always request help when planning a supplementation strategy or a dry lot ration.

Composition of supplement

Ingredient	% of ration
Ground sorghum	62.13
Wheat middlings	21.00
Molasses	5.00
Limestone	4.30
Dicalcium phosphate	2.55
Magnesium mica	4.00
Plain white salt	.50
Magnesium oxide	.22
Rumensin 60 pre-mix	.15
Vitamin Trace mineral pre-mix	.10
Vitamin A-60	.05