

## OPTIONS FOR CATTLE PRODUCERS DURING A SUMMER DROUGHT

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Much of the Eastern U.S. is experiencing severe drought conditions. This is causing many cattle producers to feed next winter's hay supply and sell light weight calves at a discounted price. Researchers at The Ohio State University have several years of data and experience with managing early-weaning calves as well as alternative ways to feed the cow herd. From 100 to 205 days of age, calves that are fed high-concentrate diets convert 3.5 to 4 pounds of feed to a pound of gain. With the current low price of corn, there is no reason to sell light weight calves at a loss. With corn at \$2.00 per bushel and protein supplement at \$200-250 per ton, the feed cost per pound of gain should be around \$.25-.30/lb. Research at Wooster has shown that early-weaned steers can be fed from 100 days of age until slaughter weight of 1150-1200 pounds at an average age of 340-360 days. In OSU studies, steers have had a feed efficiency overall of 5.0-5.5 lb feed/lb gain, with approximately 85% of cattle grading choice. If cattle producers want to see examples of early-weaned calves, they can visit the Southern Branch Research Farm in Ripley, Ohio or the O.A.R.D.C. Beef Feedlot in Wooster, Ohio. For those people interested in visiting the Southern Branch, John Grimes, OSU Extension, Highland County (937)393-1918 is the project leader for the early-weaning study at the Southern Branch, and Phil Dotson is the manager of Southern Branch. For information concerning diets for early-weaned calves, contact Francis Fluharty or Steve Loerch.

### **Feeding recommendations for early-weaned calves are as follows:**

Start 300-400 lb calves on 4 pounds/head of corn/supplement mix. Commercial protein supplements that contain minerals are the best option to feed with whole-shelled corn. For the first 14 days, the diet should be 16-18% protein to take into account low feed intake. After the calves are consuming close to 2% of their body weight, the protein concentration can be decreased to 14-16% protein.

Give calves hay at 1.0 to 1.5 pounds/head/day, and then top dress the concentrate mix. If hay is not available, pelleted soybean hulls or alfalfa pellets can be used as a source of fiber.

If calves do not eat the mix, weigh back the uneaten concentrate into a large bucket (we use 30 gallon trash cans). If the uneaten feed looks pretty similar to the original mix (no sorting), it can be re-mixed with new concentrate mix so that there is little feed wasted, but be sure that you take into account the pounds of uneaten feed that you are re-feeding.

Don't increase intake by more than 1 pound of concentrate/head/day, even if the feed is cleaned up in a couple of hours. Also, don't feed more than 2 pounds of hay/head/day. The concentrate feed is what allows rapid gains (not hay), but the cattle must be adjusted to the diet slowly.

Keep a feed record book with the daily amounts of concentrate offered, hay offered, concentrate refused, and hay refused. This is the only way to actually know intake. Once the calves are on

feed, expect little or no refused feed. In a properly managed feed bunk, the calves should clean up the feed in approximately 18-24 hours.

From 100 to 205 days of age, calves will consume approximately 2.0-2.5% of their body weight in dry feed daily. Following the normal weaning time (205 days of age), calves should be fed typical finishing diets containing approximately 85% concentrate and 12.5-14.0% protein, and intake will fall to around 2.0% of body weight on a dry matter basis. During the entire feeding period, gains should be approximately 3.0-3.5 lb/day.

An aggressive implant strategy works well for early-weaned calves to assure that animals don't finish at light weights. In OSU studies, steers implanted with an estrogen containing implant at 130 days of age followed by androgen containing implants at 200 and 270 days of age reached .50 inches of backfat at 1160 pounds. The carcasses were acceptable, with 85% grading low choice or higher, 35% of the carcasses in the upper 2/3 of choice, and an average carcass weight of 720 pounds.

### **Feeding the Cow Herd**

Rather than buying expensive hay to feed to the cow herd, consider limit-feeding corn and a commercial supplement with limited amounts of hay. Corn grain is the least expensive harvested feed per unit of digestible energy available to cattle producers in Ohio. Hay has only about half the energy value (calories) as corn grain. When corn is priced at \$2.00/bu, it is worth \$71/ton. This makes the breakeven price for hay on an energy basis about \$36/ton. Research at OSU has found that a 1300 pound cow's requirements can be met by feeding 12 pounds of whole-shelled corn, 2 pounds of commercial supplement, and 3-4 pounds of hay. This results in a feed cost of \$.75-.85 per day. In contrast, if hay costs \$100 per ton (.05/lb) and a 1300 pound cow eats 30 pounds per day, the cost of hay alone is \$1.50. If there is enough pasture to provide roughage to the cow, there is no need for feeding purchased hay, and the cost of feeding concentrate to the cow falls to \$.60-.65 per day. If the calves are early-weaned, the amount of corn fed to the cow can be dropped to 8-10 pounds per day, because the cow is no longer in lactation and doesn't require as much energy. Contact Steve Loerch for further information concerning diets for the cow herd.

Recommendations for starting cows on corn:

1. Take 3-4 days adjusting up the corn and decreasing hay to the 3-4 lb level.
2. Feed intake is being limited, so make sure that cows have enough space so that all cows can eat at once.
3. The protein and mineral supplement should be similar to that used for feedlot cattle fed a high grain diet.
4. Feed corn whole. Our research has shown that whole corn works better than ground corn when daily hay intake is limited to less than 5 pounds.