

WINTER MANAGEMENT OF WEANER CALVES

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The wintering of weaner calves can be an important part of beef cattle management in terms of net income to an operation. Winter management of calves should begin with good weaning practices such as weaning calves before summer gains drop below 0.75 pounds a day, moving calves out of sight of their mothers and feeding to gain 1 to 1.5 pounds a day following weaning. These practices can reduce problems in the subsequent wintering period.

Before starting a wintering program feed resources should be evaluated. The economic prospects of increasing income or decreasing losses by maintaining ownership of the calves rather than selling the calves as weaners should also be considered. In most situations maintaining ownership of calves through the winter can increase returns that can be applied toward the investment to maintaining the cow herd. Maintaining ownership of the calf can provide more flexibility in an operation.

The management of steers and heifers that will be sold should be different from the replacement heifers. Whether the calves will be sold as yearlings in the spring or run on range or pasture next summer should be considered in the feeding management.

Figure 1 shows the relationship of rate of gain to cost per pound of gain. The curve for cost per pound of gain decreases sharply to about 1.5 pounds a day. Table 1 shows return above feed cost for calves being fed to gain at 0.4, 1.0, 1.6 and 2.0 pounds a day. The calves in the examples were 350 pounds and were wintered on cottonseed meal, barley and meadow hay to achieve the desired gains (Table 2) for 180 days. Traditionally, heavier calves have brought less per pound so adjustments were made in calculating value of gain. The value of gain for the animals gaining at 0.4, 1.0, 1.6 and 2.0 pounds a day was 45¢, 44¢, 43¢ and 41¢, respectively. Calves that gained at 0.4 pounds showed a loss of \$12.60. When the daily gain was increased from 0.4 to 1.0 pounds, return over feed cost was increased by \$27.00 per head (\$-12.60 vs. \$14.40). Returns over feed costs were increased \$23.04 (\$14.40 vs. \$37.40) when gains were increased from 1.0 to 1.6 pounds a day. The return over feed cost for calves fed at 2.0 pounds a day was \$45.00 which was \$7.56 more than for calves gaining at 1.6 pounds a day. These results clearly show that wintering calves at 1.5 pounds a day or more will increase returns under certain feed and cattle price situations.

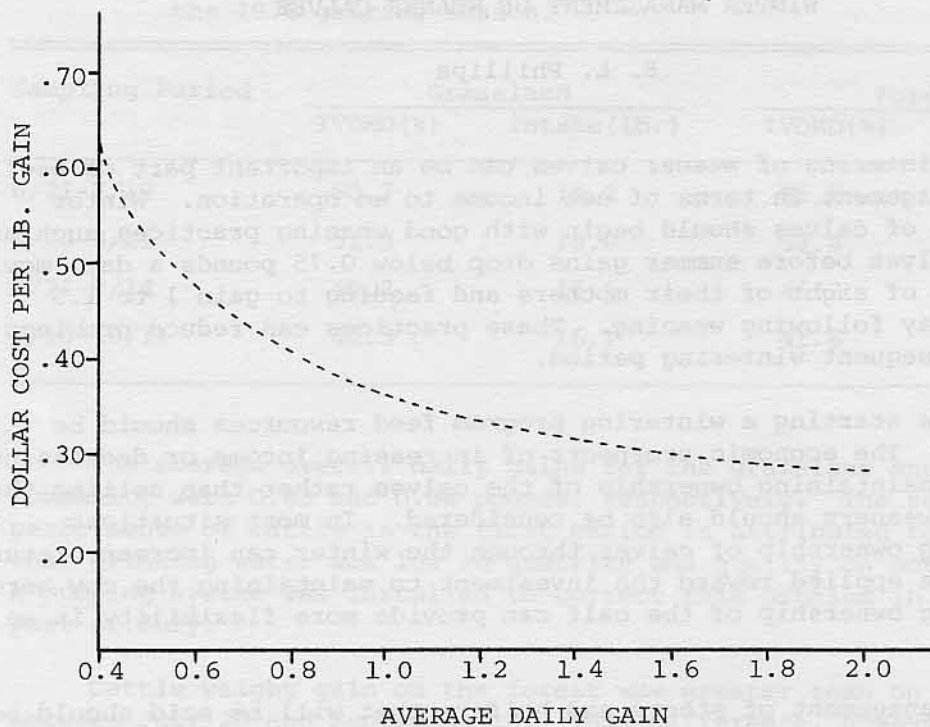


Figure 1. The relationship of cost per pound of gain to rate of gain. (Data taken from OSU Technical Bulletin 56.)

Table 1. The gain, feed cost and return over feed cost for a 350 pound calf wintered at four levels for 180 days.

	.4	1.0	1.6	2.0
350 lb. calf @ 45¢/lb.	\$157.50	\$157.50	\$157.50	\$157.50
Gain (lb.)	72	180	288	360
Value of gain ¹	\$32.40	\$79.20	\$123.84	\$147.60
Feed costs	\$45.00	\$64.80	\$86.40	\$102.60
Return over feed cost	\$-12.60	\$14.40	\$37.44	\$45.00
Spring wt. (lb.)	422	530	638	710
Spring value of calf ¹	\$189.90	\$233.20	\$274.34	\$291.10

¹Value of gain for calves gaining at 0.4, 1.0, 1.6 and 2.0 lb. a day are 45¢, 44¢, 43¢ and 41¢, respectively.

Table 2. Daily ration composition used at four different rates of winter gain.¹

Average Daily Gain	Average Daily Ration Composition & Cost			
	Cottonseed Meal	Barley	Meadow Hay	Cost ²
lb.	lb.	lb.	lb.	\$
0.4	0.5	0.4	7.9	0.25
1.0	0.5	2.5	8.2	0.36
1.6	0.5	5.5	7.3	0.48
2.0	0.5	8.0	6.0	0.57

¹Data used in this table was taken from OSU Technical Bulletin 56, "Optimum Feeding Rate for Wintering Weaner Calves."

²Value of feed per ton: cottonseed meal-\$210; barley-\$95; meadow hay-\$45.

Feeding calves during the winter to gain at 1.5 pounds or more a day provides an opportunity to make adjustments in management to take advantage of market situations and feed resources. When summer feed resources are limited calves wintered to gain at 1.5 pounds a day or more could be sold in the spring with a good return over feed costs. Calves gaining at less than 1.0 pound would show a loss to only a marginal return. Also, calves that gain 1.5 or more pounds a day can be run on good range or pasture the following summer and still return more than calves wintered to gain at 1.0 pound a day or less. Yearlings weighing 800 pounds or more in the spring could be sold to a feedlot or placed in a feedlot with the producer maintaining ownership. Also, calves could be fed a grain supplement and finished on grass.

Replacement heifers should be separated and fed to weigh at least 600 pounds by breeding time in the spring. The standard British beef breeds will breed at 600 pounds but the larger, later maturing introduced breeds will probably need to be larger at breeding. Heifers must be in good condition and gaining weight at breeding time.

The type of feed used in a wintering program will depend on the quality of feed raised on a given ranch and the size of the calves at weaning. Generally, weaner calves do not have the capacity to consume enough low quality roughage to gain at a desired rate without an energy and/or protein supplement. Most of the by-product roughages (grass or cereal straws) are not suitable for wintering weaners. Meadow hay can be used in a wintering program for weaners if an adequate supplement is provided (see Table 2). Most meadow hays are low in protein and energy

when compared to alfalfa hay. Alfalfa or alfalfa-grass hays that are cut in the pre-bloom stage are a good source of protein and energy. A 350 pound calf can consume about 10.5 to 11 pounds of a medium quality alfalfa-grass hay which allows for a growth rate of about 1.5 pounds a day. The same size calf will consume about 12 to 14 pounds of a high quality alfalfa hay and gain 1.5 to 2.0 pounds a day. A full feed of medium quality alfalfa-grass hay plus one pound of barley would provide enough additional energy for 1.75 to 2.0 pounds gain a day. Poorer quality alfalfa hay cut in late bloom is more bulky and lower in TDN. A 350 pound calf could not consume enough of this type of hay to gain at 1.5 pounds a day. The addition of one pound of barley would supply enough energy to provide for a 1.5 pound gain a day. Two pounds of barley and a full feed of hay should produce a 1.75 to 2.0 pound gain a day.

Data used in this table was taken from OSU Technical Bulletin 26 "Optimum Feeding Rates for Growing Weaner Calves."

Value of feed per unit: 1000 lbs. alfalfa hay - 1.00; 1000 lbs. alfalfa-grass hay - 1.00

0.7	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
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Feeding calves during the winter months is a task that requires careful planning and attention to detail. The primary goal is to provide adequate nutrition to support growth and health while minimizing feed costs. This involves selecting high-quality forage and concentrate supplements that meet the specific needs of the calves. Regular monitoring of body condition and intake is essential to adjust feeding levels as needed. Proper management practices, such as providing clean water and shelter, are also critical for ensuring the calves thrive during the winter season.

Replacement heifers should be selected and fed in a way that ensures they reach their target weight and body condition by the time they are bred. This requires a balanced diet that provides sufficient energy and protein for growth. The standard British heifer breed is a good example of a breed that can be raised on a diet of alfalfa and concentrate. However, it is important to note that individual calves may have different requirements, and adjustments should be made accordingly. A well-planned feeding program will help ensure that replacement heifers are healthy and productive when they enter the milking herd.