Overhead Feed Trough Saves Time In Feeding Steers

By Larkin Langford[1]

It takes a lot of corn silage, properly supplemented, to fatten a steer. Feeding experiments at the Dickinson Experiment Station over the past five winters show that yearling steers require about one and one-half tons of corn silage for each 100 pounds gain between 750 and 1050 pounds body weight.

As with other classes of livestock, the more feed a steer eats each day, the more rapidly he gains. If a steer is to consume a large amount of silage daily, he must have fresh silage available whenever he is hungry. Once-a-day feeding does not meet the animals' needs so well as twice-a-day feeding. One might think that an animal which needs 50 pounds of silage per day would eat that amount just as readily whether it was fed in one portion or two, but such is not the case. Cattle on full feed of corn silage will eat at least 10 per cent more silage when it is fed in two portions, morning and evening, than they will eat when the entire ration is placed in the feeder at once.

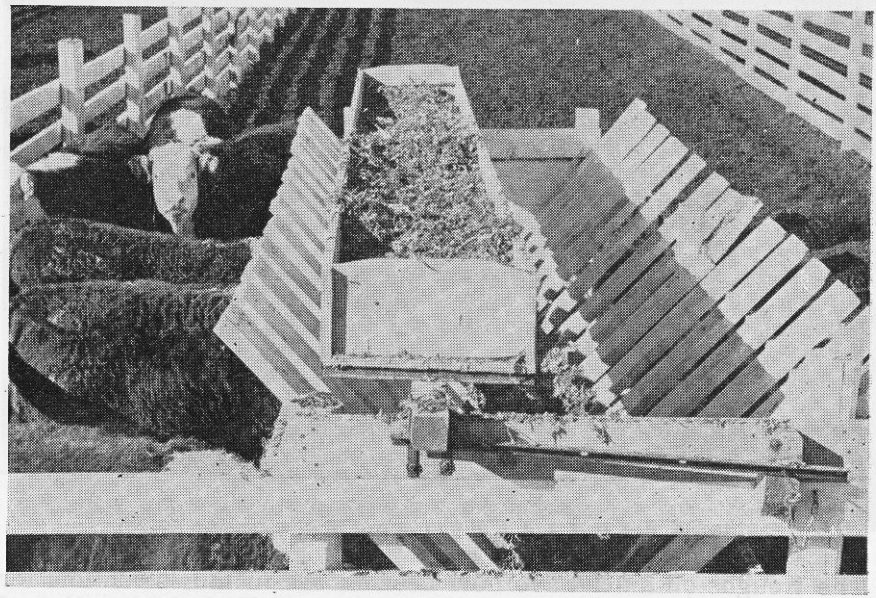

FIGURE 1.—*A trough 20 inches wide, 10 inches deep and 14 feet long holds half a day's ration for 10 big steers.*

Realizing the desirability of twice-a-day feeding, yet hoping to aviod the second trip by the feed bunks with a load of silage, the idea of an overhead trough has been tried at the Dickinson Station.

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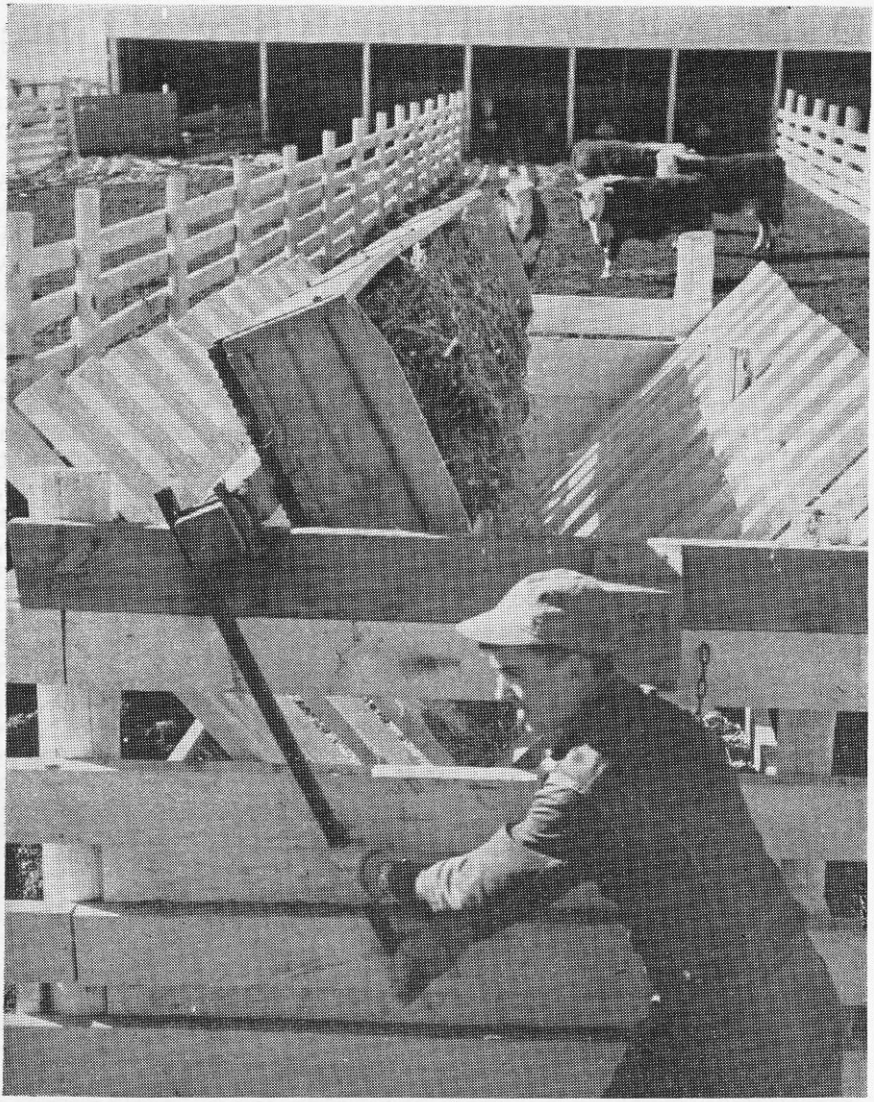

FIGURE 2.—*When it is time for the afternoon feeding one turn of the handle tips the trough and supper's on the table.*

The troughs on axles have now been in use in four steer lots for three years and found to be quite satisfactory. Each day's ration of silage is divided approximately in half; one part is placed in the feed bunk and one part in the trough above. In the afternoon, after the steers have eaten and rested, a man walks by and tips the handle, allowing the other half of the daily ration to drop into the bunk. The steers go right to work with renewed appetites when this fresh feed is dumped before them.

Each feed rack is 16 feet long, more than adequate for 10 large steers in each pen. The overhead trough is only 14 feet long, but could be made longer with the limitation that it must turn over between the ends of the 16 foot rack. The 4 x 4 axle to which the trough is bolted is mounted off the center line of the feeder for two reasons. First, there must be room to drop feed directly into the bunk without hitting the trough and, second, when the trough is turned on its axle the feed spilling over the side should fall in the center of the bunk so it will be equally available to animals on either side. Each trough is 20 inches wide and 10 inches deep, large enough to hold the 250 to 300 pounds of corn silage which constitute half a ration for 10 steers. The trough is allowed to rest against the side of the rack over night in the inverted position to avoid the possibility of catching a load of snow before the next feeding.

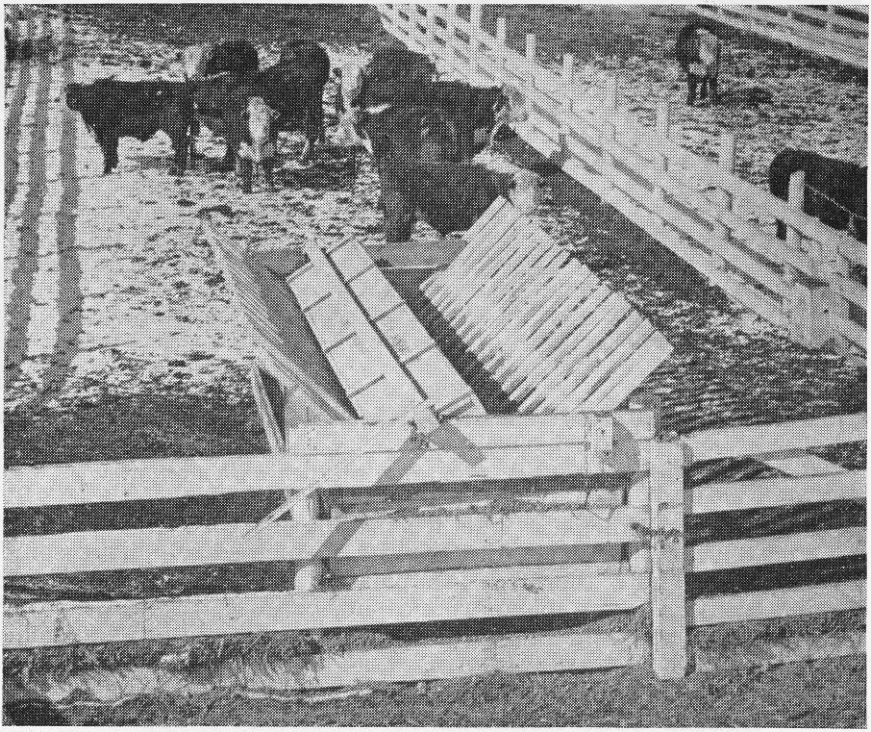

FIGURE 3.—*The trough remains inverted overnight to avoid risk of a possible load of snow.*

Supplements may be spread over the silage by stepping from the wagon to the trough, thus avoiding the necessity of going into the pen with the cattle. When grain is fed with silage it is preferable to mix protein and mineral supplements with the grain and feed this first, because mixing grain with silage may result in some waste of grain if the silage is not cleaned up.

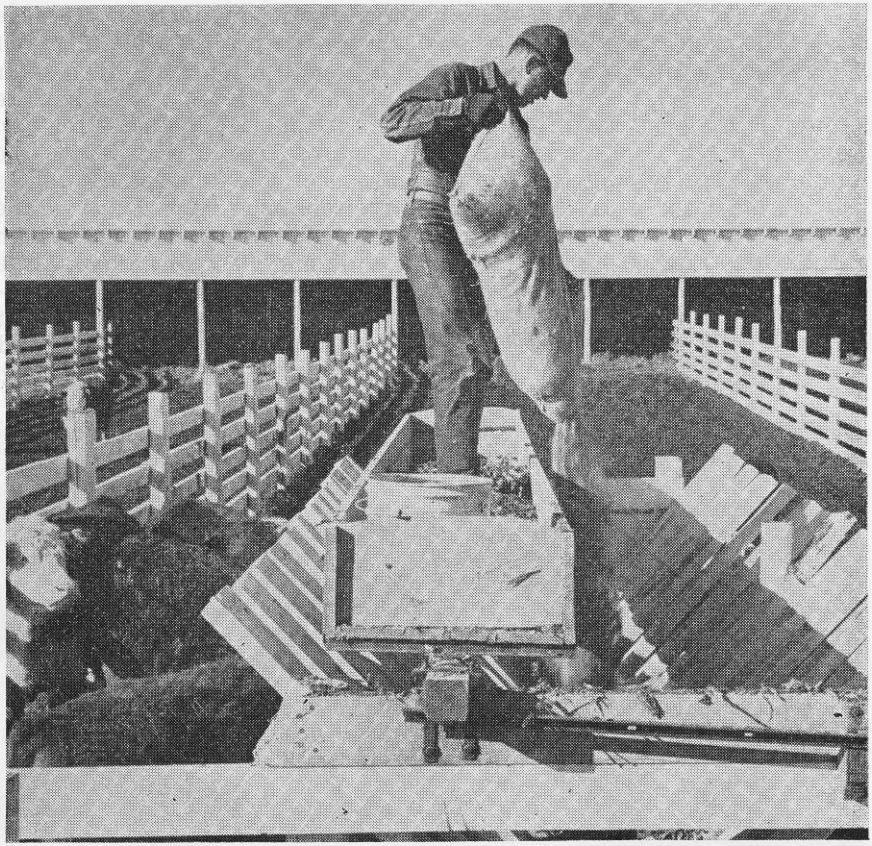

FIGURE 4.—*If your ration calls for a supplement, that can be fed without requiring a man to go into the pen with the animals.*

Visitors sometimes ask whether the silage freezes in the trough on cold days. While it is true that the surface of the silage sometimes freezes and is therefore less palatable, it does not freeze into a solid mass as in an above-ground silo, because it is loose. Fresh silage direct from a pit silo will be eaten more readily in extremely cold weather because it is warm.

HYBRID CORN ACREAGE CONTINUES TO INCREASE

The use of hybrid seed corn continues to increase in North Dakota and throughout the United States. Of the total corn acreage planted in the state in 1955, 64.5 per cent was planted with hybrid seed. This compares with 61 per cent in 1954. The actual acreage planted with hybrid seed in 1955 was estimated at 849,000 acres compared with 765,000 acres in 1954 and 656,000 acres in 1953. The greatest use of hybrid seed corn was in the east central and southeastern counties where up to 90 per cent of the acreage was planted with hybrids. In the remainder of the state hybrid seed was used on slightly over half the acreage.

Corn planted with hybrid seed in the United States increased 1,404 thousand acres in 1955, according to the Crop Reporting Board.