

Types of Cattle to Feed

One of the most advantageous management practices that has been followed by the sharper profit oriented cattle feeders in the past has been the feeding of lower priced feeder cattle. Lower quality feeders have had the potential for higher feedlot returns because of their more favorable price margins and their satisfactory gainability. Five separate experiments at Iowa all showed higher returns over feed from lower priced feeders—averaging a \$25.00 advantage over choice feeders. Work at Michigan and Minnesota has also indicated that such an advantage is possible. Therefore, more Corn Belt feeders should shift to these lower grade cattle to take advantage of this price margin and to help to bring the prices of these feeders more in line with their value. Holstein cattle, so plentiful in the Lake States, offer a good potential supply of lower grade feeders to Northern Corn Belt feeders.

In feeding lower grade cattle, evidence suggests that a high concentrate ration may be used as well as a high roughage one. Thus, the traditional advice given in the Corn Belt to feed low quality feed to low quality feeders is no longer applicable, and has no doubt materially delayed the shift to this type of cattle by Corn Belt producers with high concentrate feeding programs.

Lightweight feeder cattle should continue to be the major weight category fed by Northern feeders—especially those in the Northeastern Corn Belt—because of the lower transportation costs on these feeders as well as the reduced level of direct competition from the large feedlots who are bidding more actively on yearling feeders. But, differences in average returns between calves and yearlings are so small that the change in slaughter price between the two different marketing dates is apt to be the factor which determines whether the yearling program or the calf program is more profitable in a given year. Consequently, a more important consideration is how to spread the risk of both slaughter price and feeder price variability. One technique for doing this is to feed both calves and yearlings.

Another way to spread price risk is to feed some heifers since they finish out sooner than steers. However, since heifers are sold at lighter weights after smaller weight gains they are not as competitive in the Northeastern Corn Belt where high feeder transportation costs coupled with high slaughter cattle prices give the advantage to feeder cattle which can put on more gain and be sold at heavier weights.

Finally, the need for more complete information on the feedlot performance potential of feeders from different geographic areas as well as from different

breeding is very acute. Thus, Corn Belt feeders should encourage the development of as many techniques as possible to obtain such information. For example, production testing by ranchers must be encouraged. Also, research aimed at determining performance differences related to locational source of cattle, breed background, and visual appearances should be stepped up. A final possibility is that Northern cattle feeders pool their experience through some organization—possibly a computer record keeping service—so that a backlog of relevant feedlot performance data can be accumulated for use as a guide in establishing relative bid prices among different types of feeders.

Types of Rations to Feed

High roughage rations were found to be one of the factors responsible for the poorer feedlot performance observed in the Northern Corn Belt. Excess hay or corn cobs in a ration cause slower gains, increase feed requirements, require feeding to heavier weights for similar finish, and reduce dressing percent. These disadvantages begin to accrue when daily hay intake is increased over 3 or 4 pounds per head. (In addition to decreasing feedlot returns, hay production over and above the amount dictated by soil management needs, usually decreases crop income on corn belt farms.)

Ground ear corn is another expensive feed when sufficient hay is raised on the farm to already provide the minimum roughage requirements for the cattle. When adequate hay is already available, the addition of cobs to the ration simply decreases average gains and may actually increase corn grain requirements since cobs will not substitute for corn grain. However, cobs will substitute for hay as the roughage part of the ration, so when hay is not available the cobs in a full feed of ground ear corn can furnish the total roughage requirements of a finishing ration. Thus, one or the other—hay or cobs—might best be eliminated from a finishing ration.

Some combination of corn grain and corn silage is the most practical ration for most large Corn Belt feeders. What proportion of these two ingredients to use depends upon the price of corn, the farm resource situation, the number of lots purchased in one year and the relative profitability of the feeding operation.

As the price of corn moves up it becomes more profitable to use higher silage rations. Thus, higher silage rations should be used more in the Northeastern Corn Belt than in the Northwestern Corn Belt. Under the price projections of this study and efficient feed conversion, a daily concentrate feed equal to 1 percent of the body weight of the cattle was the concentrate