



GREEN PASTURES Steer Concentrates

continue to help feeders get faster
gains and better feed efficiency!

For Economy And Top Results, Use Our
Number 604, A 65% Hi-Protein Feed
In Free Flowing Granular Form.

FEED LESS — SAVE DOLLARS

Contact any Miller & Bushong service representative
or call us direct at Lancaster 392-2145.



Miller & Bushong, Inc.

Rohrerstown, Pa.

Ph. Lancaster 392-2145

(Area Code 717)

"Finest Service Anywhere"

Winter Feed Costs Of Heifers Studied

Winter feed costs for replacement beef heifers may be reduced by 25 percent by limiting food intake without reducing reproductive ability, according to University of Missouri research.

L. William Eaton, Jr., animal husbandry department researcher, says three studies concerning effects of wintering beef heifers at different levels of feeding have been made.

Within each trial, rations containing three levels of energy — high, medium, and low — were fed.

Eaton notes that based on the studies, it appears that minimum requirements for maintaining the reproductive ability of yearling heifers to be bred in early spring falls somewhere between 43 and 67 pounds per head daily of total digestible nutrients (TDN). This is considerably below the nine pounds of TDN presently recommended, Eaton says.

This lower level of feeding did not produce normal body weight gains and delayed attainment of mature body weight.

The MU research has shown that heifers fed 67 pounds of TDN per head daily from a 65 percent ground ear corn ration will breed and conceive readily.

In the third trial, completed recently, the low level heifers were fed 43 pounds of TDN throughout the experiment. These heifers generally failed to cycle or ovulate during the winter months. However, in the spring and summer, 14 of the 15 heifers eventually cycled and were serviced. Of these, 12 were diagnosed safe in calf, one aborted at 4½ months. Seven of these heifers settled upon first service in April.

All research heifers were fed in drylot with access to shelter. Good environment for heifers may tend to reduce minimum TDN requirements, Eaton points out.

No apparent difference was observed between weaning weights of calves from heifers used in the first of the three trials.

Heifers fed the low energy ration in the second trial received 67 pounds of TDN per head daily until one month before breeding started in April. The ration was then cut to 43 pounds TDN daily.

These heifers made slight weight gains until the feeding level was reduced. They lost weight during the breeding period. At the time most heifers were bred, their weight was seven percent less than the initial average of 721 pounds.

Eaton says, "In general, although heifers in the second trial on the low level ration were in fair condition, they conceived with less difficulty than did heifers fed medium or high energy rations."

SUPPLIER OF ARMS

Pennsylvania was a leading supplier of armaments to the Union Army. The Sharps breech-loading rifle and a carbine-type weapon were developed before 1860 in Pennsylvania. The carbine was turned out at a rate of 1,000 a month, and was probably the best rifle of the Civil War. The Philadelphia Navy Yard built the gunboats necessary to blockade the Confederate coastline. Pennsylvania, in many ways, justified its reputation as the keystone state in the war between the states.