

WHAT IS YOUR FEED COST FOR 100 POUNDS OF BEEF? MAYBE THIS WILL HELP.

Feed Cost Nomograph

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Changes in the price and supply of feeds for Arizona cattle-fattening rations sometimes force a substitution of feeds or a change in the proportion of ration components.

Feed costs per 100 pounds gain on yearling steers fattening on rations typical of commercial fattening programs in Arizona, in any of four tested concentrate-roughage proportions, can be almost instantly determined on the nomograph shown on this page.

What is a nomograph?

A nomograph is a chart on which you can read quickly and easily certain wanted results or values. You do this without arithmetical calculation. The figures you want to learn depend on known but variable values.

For example: the nomograph on this page can show you how much money you would spend in feed for 100 pounds of beef at whatever you value the concentrates and roughages that go to producing that beef. This particular nomograph applies to costs of beef put on yearling steers fed rations described below, in four specified proportions of roughages and concentrates.

What are the feeds?

The concentrates are: rolled barley, hehari grain, cottonseed meal, and molasses.

The roughages are: chopped alfalfa, barley hay and barley straw, and cottonseed hulls.

These ingredients can be made into rations with four proportions of roughages to concentrates (as they were in the research feeding) and be applicable to the nomograph. These proportions are, concentrates to roughage: 2 to 1; 1 to 1; 1 to 2; and 1 to 3.

Notice that the rations are those commonly used in Arizona feeding operations. The tested rations were made up so that the protein content was about the same regardless of the concentrate-roughage proportions. It ran about 15 percent.

The total digestible nutrients (TDN) ranged from 67% to 54%, being stepwise lower as the proportion of roughage increased,

The more the feeds or steers differ from those outlined above, the less the value of this particular nomograph. Inasmuch, however, as the feeds and steers used in the tests (made cooperatively by the University of Arizona and the Tovrea Land and Cattle Company in Tovrea feedlots) are typical of Arizona feeding operations, this nomograph may well have fairly general application.

How do you use this nomograph?

On the left scale of the nomograph, locate the figure equal to the cost of 100 pounds of your concentrate mixture. On the right scale locate the cost of one ton of your roughage mixture. Then connect the two values with a ruler.

Now follow the ruler's edge to the vertical line under the concentrate-roughage proportion you are feeding, or expect to feed. At that juncture you will find the feed cost to put 100 pounds on your yearling steers fed in Arizona.

Let's take a "for instance" to check our procedure.

Assume that the concentrate mixture used in the 2:1 ratio costs \$3.00 per 100 pounds; and the roughage mixture costs \$26.00 per ton. When these values on the nomograph are connected by the straightedge, the straightedge crosses the 2:1 line at \$22.25. That, then, is the estimated feed cost of 100 pounds of gain.

Without moving the straightedge, you can read the cost of gain by fitting the same feeding materials into a 1:1, a 1:2, or a 1:3 concentrate-roughage ratio — providing you with an instant cost comparison.

How useful is this nomograph?

Well, it doesn't take the place of complete calculations and "the eye of the master" in any specific situation; it does provide a strong indication of what the costs will be, and is a handy aid in planning and feeding.

