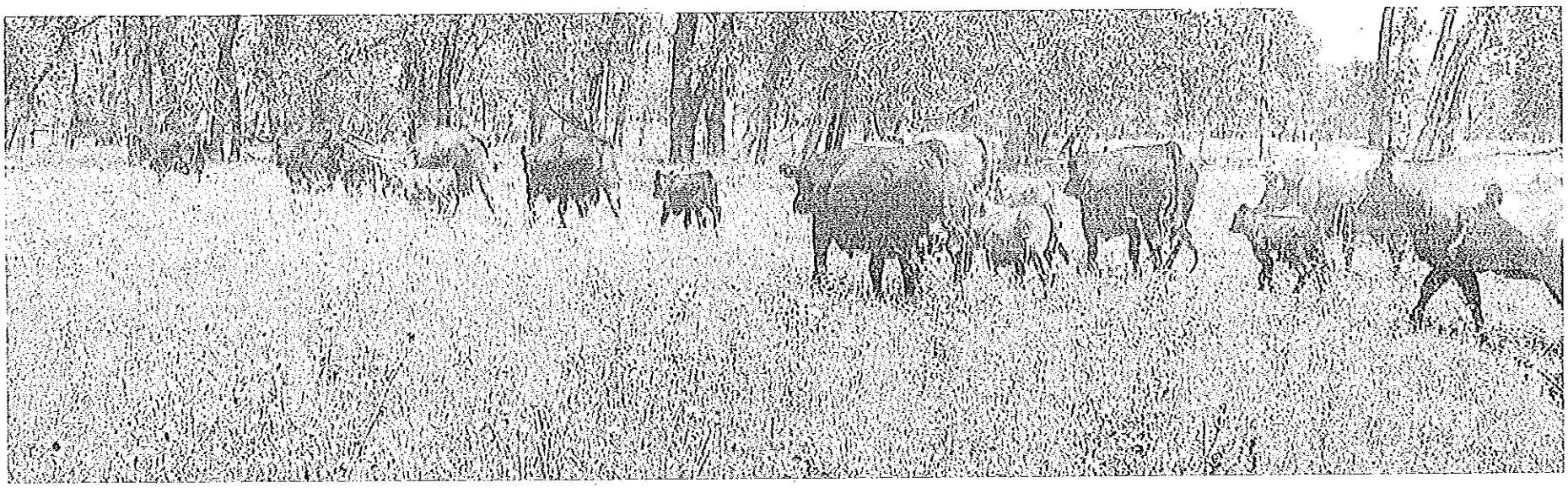
Better test rather than guess

on minerals for cow herd



Journal photo calendar contest entry.

By Jill Seiler
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Beef cows, especially the "easy keepers," seem to make a living on a wide mix of forages across the country and for most of the year. Trouble in the form of mineral and vitamin deficiencies could lurk below that outward appearance, costing hundreds of dollars in production losses.

That's according to Jeffery Hall of Utah's State Diagnostic Lab, in remarks at this year's Cattle Industry Convention in Phoenix, Ariz. The leading concerns nationwide, copper and selenium deficiencies, can cause white muscle disease and weaken immune function to let in pneumonia, diarrhea and other diseases. Other potential shortages may relate to zinc, manganese or vitamins A and E.

"Most of the time it's due to inadequate intake," Hall said. "Most of the forages that our cattle run on are not at high enough concentrations to optimize productivity within those animal systems."

His nationwide copper deficiency tests found 53 percent to 70 percent of cattle short on copper, with a need to supplement seen in every state.

It's not the lack of these micronutrients that directly cause sickness, but the effect on immune and reproductive systems, all starting in the third trimester of pregnancy. That's when a cow passes some of her mineral and vitamin stores to her calf, to use in those first 90 days of a milk diet that does not contain significant trace minerals.

"That allows the calf to be born with really good body reserves to where its immune system is running good the day it hits the ground, and it keeps it in a healthier state for a longer period of time when its predominant intake is milk," Hall said.

Calves with compromised immune systems struggle to fight off diseases or maintain optimum growth. Many of the ranchers Hall worked with have seen increases in average weaned weight, from 25 pounds or so when correcting mild deficiencies to as much as 80 pounds after correcting a severe deficiency, the boost including more live calves to wean.

However, left unchecked, "deficiency actually causes a long-term production loss," Hall said.

On the cow side, even correcting mild mineral deficiencies can gain a 2- to 4-point increase in the percentage of cows bred back. Hall shoots for 95 percent there and said falling short means money left on the table.

"If you have to sell a cow after she has her first calf, even though you have the sale of that calf and the salvage value of selling that open cow, you've effectively lost close to $600 because of the year-and-a-half to two years it took to develop that cow before you got her first calf on the ground," Hall said.

Although a casual inspection out the pickup window may show no problems, he suggested testing to "find out exactly what's going on." Then realize, because forage quality is different across the country, every producer has to make a different decision about what is best for his or her herd.

Those working to produce high-quality beef, especially when calving outside of a forage grazing season, should feed mineral supplements based on test results. Animals under less stress from disease pressure tend to produce higher quality carcasses, he noted.

"The biggest thing is, as you correct these problems and you put overall healthier animals into the next stage of the development phase, these healthier animals gain better, they're more profitable all the way up the chain and they also tend to marble out better, so you end up with better carcass characteristics and quality," Hall said.