



## Feeding Vigortone Mineral For Economic Payback

\$1,230 a ton for Vigortone mineral program. Prices for everything we use to grow beef are dramatically higher this year. To survive in this business we have to reexamine each input to see if it still pays to use it in today's environment.

Potentially, homegrown forage and Vigortone mineral could be the only feeds needed. Forages are good sources of many important minerals, such as calcium, phosphorus, potassium, and sulfur, and the important vitamins A and E, but they are usually deficient in phosphorus, salt, and the trace minerals copper, zinc, and selenium.

Vigortone's program investment in other years was about 7-10% of the total cost of running a cow for one year. Harlan Hughes used \$487 average total production costs per cow in 2005 on his IRM clients that have good records. If we budget 3.2 ounces per day for each cow-calf pair, the Vigortone mineral program is \$45 per year. Even if your cost per cow is only up 15% in 2008 versus 2005, your cost per cow is now \$565 per year. Eight percent of 565 = \$45 — the same relative investment in Vigortone.

How do we justify continuing this mineral program?

Everyone is looking at a lower cost formulation to make the initial cost of the mineral program as cheap as possible, and that has a devastating effect because it costs them more money. As a result, animals grow less efficiently. The cows

have health troubles and do not maintain reproductive efficiency.

As early as the 1970s, researchers found that total digestible nutrients (TDN) went up when a vitamin and mineral premix was added to an artificial rumen full of hay. The rumen microbial ecosystem was able to extract more fiber digestion in the same amount of time. What you have to sell is the product of these bacteria working hard to digest the forage that grows on your ranch. Our ranch trials showed an average increase of 35 pounds extra weaning weight on a Vigortone

mineral program. If we budget just 25 pounds added weaning weight and 3% more cows bred each year, the Vigortone program pays for itself with no added cost to you.

The second example highlights the health benefits of meeting the requirements of copper, selenium, and zinc supplementation. Copper and selenium deficiencies are the most common trace element deficiencies seen

in pastured animals. Vigortone has maintained a forage sample database for a number of years. Looking at the forage samples, only 25% of them would be adequate for copper once you look at the high sulfur, high iron, and the ones that were just deficient in copper. Red blood cell health, collagen development, reproduction, and immunity are just a few of the important roles of copper. Deficiency signs include lighter or faded hair coats, reduced conception rates, severe diarrhea, brittle bones, and reduced immune response. Selenium

*Do you want to risk the ranch that your forage will meet the needs of your cows without a proven mineral supplementation program? Good information is the key to sound management decisions. Management is looking at long-term profitability, cash flow, and minimizing long-term risk. Constant attention to performance in all aspects of production is vital.*

— Steve Pemberton, D.V.M.  
Technical Sales Support

deficiency signs are diarrhea, ill thrift, decreased immunity, retained placenta, infertility, stillborns, and the most known sign of white muscle disease.

90 days of pregnancy and on through the breeding season. Minerals have an important role in fetal development, colostrum quality, newborn calf vigor, immune function in cattle of all ages, and rebreeding of the cow.

<b>Trace Mineral Status Of Grasses In Vigortone Database</b>								
<b>Mineral</b>	<b>Adequate</b>		<b>Deficient</b>		<b>Marginal</b>		<b>Excessive</b>	
	<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>
Iron	1489	(52.0%)	61	(2.1%)	----		562	(20.0%)
Manganese	2230	(78.0%)	75	(2.6%)	546	(19.2%)		
Copper*	1627	(42.0%)	2068	(53.1%)	200	(5.1%)		
Zinc	446	(11.5%)	1393	(35.8%)	2052	(52.7%)		

\*640 of the 1627 forage samples classified as adequate for copper were potentially marginal to deficient in copper due to sulfur and iron excesses.

Only 11% of the total forage samples in the Vigortone database were adequate in zinc to meet the needs of today's brood cow. Zinc plays a role in immune response, enzyme systems, and hoof health. Zinc also plays an important role in DNA, RNA, and protein production. Signs of deficiency include reduced feed intake and reduced weight gain, excessive salivation, rough hair coat, and eventually swelling of the feet and legs. Critical zinc deficiencies result in hair loss, thickening of skin, and lesions around the nose and mouth.

Cattle need mineral year-round, but it is especially critical mineral intake is adequate during the last

Feed testing enables you to make informed management decisions and will help you optimize animal performance. Your local Vigortone area manager is available to help you decide if forage testing will help you be more profitable this year.

When you look at the tag of another mineral, remember that the whole herd has to consume it before any supplementation occurs. Although composition of the mineral supplement is important, lack of intake limits performance more often than improper composition. Any prevention of a deficiency has a large economic payback in terms of increased production, reduced labor, and a high return on investment. Without a Vigortone mineral program, your cattle performance in the areas of health, fertility, feed intake, digestion, and growth may be depressed.