



Checkpoint[®]

Management & Nutrition
Tips For Beef Producers



APPROACH HERD REDUCTION DECISIONS WITH AN EYE TO THE FUTURE

Pundits started calling this year's weather, the "worst Midwest drought in a quarter century" back in early July. And, it hasn't improved much since then.

Many areas went for weeks, even months, with little or no rain. Pastures turned brown. Crops became unfit for harvest. And, feed prices soared. Things got so bad that the federal government declared more than half of the counties in the United States natural disaster areas in early August.

As a result, many cattle ranchers, seeing few alternatives, began culling animals from their herds, even though feeder cattle prices had plummeted.

But, according to Scott Brown, agricultural economist at the University of Missouri, it's not too early to be thinking about strategies to capitalize on potentially higher prices in 2014, maybe even in 2013.

In a recent interview with *CheckPoint*[®] newsletter, Brown said, "It's important for cattle producers to pay attention to trends, keep an open mind and think long-term when making decisions about culling or retaining animals."

Because it's been such an unusual year, climate-wise, Brown advised cattle producers to think about new marketing strategies, rather than operating the same way they would during a more typical year.

That goes for those still contemplating the culling decision, too.

"I encourage producers to consider all their options, including identifying all possible sources for silage and hay, and even evaluating holding onto cattle in the feedlot to take advantage of potentially higher prices in the spring," he stated. "Everybody is selling feeder calves right now. Plus, feedlots are paying record highs for corn, so that drives feeder prices down further. If you are selling now, you are probably selling at the roughest period."

"If it's possible to hold on to part of those cattle or retain part ownership instead, you might be able to sell fed cattle more profitably in early 2013, especially if crops turn out to be better than anticipated," he explained. "Whatever strategy you choose, make sure it reduces your risk to the current weather-induced market volatility."

At the same time, Brown acknowledged, "If you don't have feed, you have to start culling sooner rather than later." But, he added, too often in the heat of the moment, "producers make hasty decisions

without looking broadly enough at the options and without thinking about where they want their herd to be 2-5 years down the road."

If producers do need to reduce herd size, Brown says it's critical to make smart culling decisions. What has each cow done for you? Which are the top performers and which are not, from a financial standpoint? Accurate, complete records—on such things as calf weaning weights, number of times a cow has been open and the kinds of premiums a cow's calves have delivered—can go a long way in determining which cows should go first, and in enhancing the future quality of your herd.

Further, Brown recommends keeping records of which animals you cull and when, as there may be disaster assistance available to cattle producers retroactively.

"If I have to make culling decisions today, I'd do anything I could do to get that herd turned around quickly," Brown explained. "I take the strategy that 2012 was horrendous, but if we have good rains and corn crop in 2013, we could be back in the \$5 corn range. And, we'll be working through the glut of feeder calves on the market today. All that means calves will be worth a lot more in the fall of 2013. And, the spring of 2014 we could see feeder calves at extreme record levels."

That's why it's important to make choices that provide the most opportunity to get rebuilt as soon as possible, Brown elaborated.

"If I have to sell a few more cows right now, I would try to hold onto young heifers that I could add to the breeding herd right away if prices recover," he said. "A heifer gives me the opportunity to rebuild quickly because I can breed her, but she will require less feed today than a mature cow."

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patented Intake Modifying Technology[®], causing cattle to eat what they need based on the quality of forage available. Contact your dealer, identified on the back of this issue of *CheckPoint*[®] newsletter, today.

Reuters, July 11, 2012. <http://www.reuters.com/article/2012/07/11/usa-crops-idUSL2E8IB26120120711>
<http://www.bloomberg.com/news/2012-08-01/drought-disaster-declaration-widened-to-cover-half-u-s-counties.html>



FEEDING GRAIN EARLY MAXIMIZES GENETIC MARBLING POTENTIAL

Every cattle producer strives for maximum carcass quality—and profitability. It starts with carefully engineering genetics to create a herd with the potential for well-marbled meat that grades choice or prime.

But thoughtful breeding is just one piece in the marbling puzzle. It establishes the potential for quality, but how the animal is cared for and fed determines whether it actually reaches that potential.

Health maintenance is a critical component in the race for carcass quality, as are management and environmental factors, such as heat, cold and stress. Nutrition is the other key.

In that realm, research and experience have drawn a clear relationship between feeding protocols—specifically high grain diets—and enhanced marbling.

Dr. Ron Scott, director of Beef Research and Development at the Purina Animal Nutrition Center in Gray Summit, MO, told *CheckPoint*® newsletter recently how that occurs.

“Increasing grain intake increases marbling because the grain contains starch, which increases a ruminal volatile fatty acid called propionic acid,” he explained. “That, in turn, generates glucose, which is a precursor for marbling.”

What’s more, early weaning studies at several universities demonstrated that feeding grain earlier in the calf’s life enhances marbling even further.

In these studies, “half the calves were weaned early—as early as 100 days, then placed in a dry lot and started on a high-grain diet,” Scott said. “The other half was on pasture with mama and weaned at the normal time and put on starter or finisher type diets. The early-weaned calves had higher marbling scores.”



Dr. Scott explained that muscle “satellite” cells exist in higher numbers in younger calves. When stimulated by the glucose in a high-grain diet, these muscle cells convert into fat cells, and the process cannot be reversed. So, young calves provide a unique opportunity to actualize marbling potential.

“If you want to increase marbling, you have to create these fat cells within the muscle,” he elaborated. “And, there’s more opportunity to do that the younger the calf is. Granted, marbling is influenced by genetics, but it can also be affected by nutrition. It’s a combination of genetics, nutrition, management and environment that gives you your final marbling score.”

Of course, feeding high-grain diets to young cattle doesn’t come without cautions. An all-grain diet at an early age can cause bloat, acidosis and founder.

To prevent these problems and maximize feed efficiency, Purina created its proprietary Intake Modifying Technology® (IM Technology). Purina feeds, such as Accuration®, that include IM Technology, provide a complete high-grain diet that limits intake. It does this by stimulating cattle to eat smaller, more frequent meals, thus enhancing digestion and eliminating overeating.

Cattlemen have also reported that mothers of early-weaned calves go into winter in better condition; some even say it’s increased the longevity of their cows, Scott said.

Creep feeding, while not as effective as early weaning, can also be used to increase marbling.

“Creep feeding, particularly with high-grain creep feed, gets starch into the calves, but there is less total grain than with early weaning, so the response is not as great,” Scott clarified. “Creep-fed calves are still grazing and getting mama’s milk, so their grain diet is not as concentrated.”

This year might be particularly advantageous for early high-grain diets, depending on each producer’s situation, Scott surmised. When forage and hay are in short supply, early weaning can take pressure off cows and keep them in adequate body condition to breed back. Plus, it can put weight on calves and increase marbling at the same time—and possibly allow producers to retain them until spring when prices may rebound.

“Early weaning and high grain is not for every rancher. It depends on capabilities, as well as local ingredient availability and cost,” he said. “But, Purina dealers and local sales reps can really help by running various scenarios to weigh estimated costs against returns from higher grades.”

“IM Technology makes all that a lot easier because it’s designed to feed high-grain diets so there is confidence and reliability on the intake and conversions they are going to get,” Scott explained. “We can make estimates based on how much feed calves will eat and arrive at a break-even number.”

Dr. Scott says it’s important to note that you can’t take a calf with inferior marbling potential and turn it into a prime carcass. “What we believe you can do is improve cattle with high genetic marbling potential.”

RANCHING IS IN MARVIN DUNCAN'S BLOOD

Like so many cattle producers, Marvin Duncan has been in agriculture all his life. Born and raised in south-central Kansas, he continued to farm “on the side” while he worked in industry.

Then in 1996, his employer, an oil refinery, shut down. So, he and his wife, Yvonne, and their two daughters went into farming full time, running stocker cattle while they built up their herd.

They now maintain 150 registered Angus cattle on 400 acres of cultivated ground and around 1,600 acres of native and cane grass in Winfield, KS. Duncan Angus sells bulls, replacement heifers and calves, as well as milo, wheat, soybeans, alfalfa and hay.

Their pastures “just barely held up” through the summer this year, due to the record drought, according to Marvin. He started feeding hay in early September—about two months earlier than usual.

“We’re still scrambling to make sure we have enough forage for the winter,” Marvin explained. “And we’re looking at ways to cut numbers. With a registered herd, it takes longer to liquidate them. With the quality of genetics I’ve developed, I hate to send them to the sale barn ... I have to find the right buyers.”

One way he will make the culling decision is through reproductive performance. “Anything that doesn’t deliver a live calf this fall will leave,” he asserted.

In the meantime, Marvin is maintaining his herd, using tried-and-true methods.

“We work closely with our veterinarian and keep vaccinations and other protocols up-to-date. Calves get weighed at birth and again at weaning/sorting and at yearling. They also receive two rounds of conditioning shots. Calves that don’t make the grade at yearling are castrated and ear-notched so we know they are not replacements,” he added.

Marvin says they are fortunate to have good ponds and adequate shade, which has been especially helpful during this summer’s triple-digit temperatures.

His breeding program includes estrus synchronization and artificial insemination (AI), followed by co-mingling cows with “clean-up bulls” for 60 days, then preg-checking at weaning time. The bulls are then put on pasture with Accuration® Feed, he elaborated.

Besides reproductive performance and carcass quality, he breeds for temperament.

“AI bulls have a docility score, and we use that number” he explained. “Any cattle that don’t show good temperament get sent to town. Calm cattle make better carcasses, whereas excitable animals are often dark cutters. Plus, cattle with good temperaments handle better, especially the bulls. I can walk in amongst my bulls and not have to worry about getting run over.”

Another technique he employs to enhance handling is mixing up the methods they utilize.

“We work on foot, horseback or four-wheelers so they get used to all types of handling,” he said. “That makes it easier for



the next person in line—and, hopefully, increases their value.”

Marvin said Purina’s Accuration® Feed has also helped enhance value.

“We’ve been using Accuration® for more than 10 years,” he pointed out. “Ed Crittenton at Two Rivers Coop got me started on it, and I noticed the cattle developed really well. They gained better and put on muscle faster. We’ve been on it ever since.”

He also likes the convenience and economy of Accuration® Feed, which he uses in self-feeders.

“I have feeders on two sides of the pasture so that they will travel. That helps condition bulls better. Accuration® is self-limiting because of its IM Technology,” he remarked.

He also uses Accuration® Feed to make weaning easier by allowing fall calves to get in the bunk and eat with mom. Then, when they fenceline wean, the transition goes much faster.

His relationship with Two Rivers Coop in Arkansas City, KS, is also long term—20 years, to be exact. In addition to purchasing product from them, Marvin has hosted producer workshops for Two Rivers, and regards them as a valuable resource.

“There’s a lot of trust involved, hopefully both ways,” Marvin said. “I respect their opinions and that’s one of my ‘go-to’ places when I need advice.”

All these things have helped Marvin grow his Angus operation into one he is proud of—and rightfully so. There are many bulls within 40 miles that he’s sold over the years, based on reputation, and on a “good balanced set of traits” that includes not only temperament but also weight and milking ability.

Nevertheless, the things Marvin cites as his biggest successes are his marriage of 36 years and his two daughters, Kristy and Diana, who work in the banking industry in neighboring towns.

He loves the whole package that cattle ranching offers.... working outside, being his own boss, managing animals.

“It’s in my blood,” Marvin concluded. “I love calving season and seeing the new babies and all the hard work come to fruition. It’s pretty satisfying.”

SMART WINTER MAINTENANCE WILL HELP ENSURE BULL PERFORMANCE

By Larry Hollis, DVM, M.Ag.

Cattle producers often are so focused on the health and condition of cows over the winter that they forget about the importance of maintaining bulls. But a little attention to those bulls over the next few months will pay big rewards come spring.

Bulls can work off as much as 300 pounds of body weight during breeding season. So, if they are in rough shape when spring arrives, they'll still chase cows, but they'll wear out, especially if they are covering a lot of ground to find cows. If you wait until spring to try to boost bull body condition, you'll have to feed a lot of hay and/or supplement to get them in breeding shape.

It's also a good idea to watch for conditions that can inhibit the bull's speed and movement. Observe bulls over winter months to make sure feet and legs are sound and that they are moving easily. Tend to any problems, such as uneven hooves that require trimming. Older bulls, in particular, are susceptible to this condition. If the hoof wall is not worn off evenly as it grows, the foot isn't level on the ground. This can lead to pain, poor movement and eventually lameness.

Check the bull's eyes periodically to make sure they are clear and bright. Pinkeye, which can occur even in winter, is often forgotten in bulls. However, one of the key ways bulls

detect heat is by observing mounting activity in the pasture, so it's imperative that they see well to be productive.

Make sure bulls are getting their nutritional needs met, too. Adequate Vitamin A, for instance, is required for the production of good sperm.

Keep in mind that you can't just "rough them through the winter." Many times producers make the mistake of cutting back on nutrition when times are tough, but they need to feed a balanced mineral and protein supplement, based on the pasture or hay they are feeding, year-round.

Finally, if a number of cows are coming up open when preg-checked, bulls should be tested for trichomoniasis (trich). Granted, you must pay a veterinarian to perform the test, but it's also quite expensive to feed future non-performing bulls through the winter. There's no reason to keep them and incur the feed costs if they have trich.

Early each spring, of course, a complete breeding soundness exam should be performed on each bull. That includes a physical exam, including a check for conformation and eye health. Each bull should also be sent through a chute so that reproductive organs can be palpated and semen samples taken for evaluation and testing (including the trich test).

Larry Hollis is extension beef veterinarian and professor of beef cattle management and nutrition at Kansas State University.

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