

Reducing herd size to match one's limited forage and feed resources might be worth considering, but just like any other business decision, it must first be thought out.

Story & photos by Ed Haag

Record-high feed and fuel prices combined with weather-related forage shortages and a questionable market for beef down the road are all making the "C" option more attractive, but before you load up those animals and haul them off to the sale barn, you'd better have a plan, or you might be leaving money on the table.

John Cundiff, professor in the Biological Systems Engineering Department at Virginia Tech, notes that culling of beef cattle in response to the prospect of winter hay shortages is a common practice in his region. He cites, as an example, the severe droughts Virginia farmers experienced in 2007.

"Most people just culled their herds at that point," he says. "They just sold off cattle until they got to the point they could carry the ones they retained through the winter."

Rodney Jones, Kansas State University (K-State) Extension livestock economist, says what happened in Virginia in 2007 is likely to reoccur throughout the U.S. in 2008, but this time the reasons for culling are as much economic as environmental.

"The cost of maintaining cows has just gotten astronomical, and we are going to reduce the size of the U.S. cow herd and also the size of the U.S. livestock industry in adjustment to these high feed costs," Jones says, adding that the problem has been exacerbated by regional environmental conditions. "We have seen extensive flooding in the Midwest and drought in other parts of the country that don't bode well for feed prices this winter."

He says we could see substantial reductions in beef herds by historic standards during the next three or four years. Jones notes that cattle numbers have been dropping since 1996. "Basically, we have been liquidating cows ever since then," he says. "At this point in time, the cards are certainly stacked against it going the other way."

Jones adds that just because other beef

[▶] Tight feed prices mean more cows culled and more in the feedlot.

producers are finding it prudent to thin their herds and the longer-term trend is moving towards fewer animals on the national roster, that doesn't give reason for a beef producer to panic and run for the door.

What are your feed resources?

The best advice Jones has for beef producers considering a major herd reduction or liquidation is to do an honest and realistic assessment of both feed and livestock resources before making a final decision.

"Every beef producer's situation is different from his neighbor's," he says. "The final culling decision will depend entirely on what it is going to cost them to keep that cow for a year," he says. "If they are faced with having absolutely no feed resources whatsoever and they are having to buy a lot of high-priced feed, they probably ought to liquidate pretty hard."

He cites, as an example, regions in the country that have experienced a succession of crop-depleting events, which will have a serious effect on local forage resources through the next several years.

"There are areas in Texas that have been devastated by drought, they don't have enough feed now, and they don't have enough moisture to get anything planted for later," Jones says. "It is going to be awfully expensive for those guys to haul feed in for those cows."

One reason for thoroughly evaluating present and future feed resources is to help a beef producer differentiate between conditions that reflect an ongoing and deepening feed crisis and those conditions that are more temporary in nature.

"For instance, if conditions are such that the producer might have to buy a little feed to get them through a couple months and then get back into a normal routine with a winter pasture, then that could pencil out in the long run," he says.

Cundiff sums up the dilemma and the reality most beef producers face when they have to purchase forage in today's extraordinarily high market.

"You will buy hay if you can do it at a price that will fit into the economics of your operation," he says. "But, if it is too expensive, you will have to sell cattle."

Culling schedule driven by feed inventory

Jones points out that those beef producers who have decided to reduce their herds and have access to some feed resources going into the winter are in a better position to take advantage of seasonal cattle market fluctuations than those who have totally depleted their feed inventory.

"Traditionally, everyone sells their culls



► Beef producers with some winter grazing opportunities have more culling flexibility than those who don't.

between mid-October through December," he says. "That is when prices at the sale barn are lowest."

He adds that those without feed inventory going into the winter have little choice but to sell into that low market, while those who do possess some forage resources have the opportunity to allocate that feed to the animals more likely to command a higher price in the late winter or early spring.

For Jones the first step after deciding to reduce one's herd size is to move as quickly as possible to determine which animals should be culled immediately and which ones have the best potential for generating a better return in February or April.

The usual suspects

For both Jones and Cundiff, ongoing visual inspections accompanied by written annotations on individual animals are invaluable when it comes time to cull. Specific attention should be paid to the teeth. "Smooth-mouthed" cows with teeth worn down to the gums have difficulty grazing, which can result in poor body condition despite the availability of adequate nutrients in the forage it is trying to consume. Similar conditions can result from teeth being knocked out by blunt force or being lost to gum disease.

Jones notes that the udder is another part of a cow's anatomy that merits close scrutiny at culling time. Its soundness affects milk production, milk consumption and ultimately calf weaning weights. Specific attention should be paid to udder attachment. Weak udder suspension results in pendulous udders that are difficult for a sucking calf to nurse. Similarly, balloon or funnel-shaped

teats are also difficult to nurse and may affect calf milk consumption and weaning weights. Finally, all four quarters should be fully functioning and free of mastitis.

Other visual cues that should be heeded when making culling decisions are overall structural soundness (as lameness is the most common reason for culling), cancer eye, the onset of symptoms of Johne's disease, and vaginal prolapse.

More culling for performance expected

In 1997 the U.S. Department of Agriculture (USDA) National Animal Health Monitoring System (NAHMS) collected data on culling practices in beef cow-calf operations. The NAHMS *Beef '97 Study* involved 2,713 producers from 23 of the leading cow-calf states. This study represented 85.7% of all U.S. beef cows on Jan. 1, 1997, and 77.6% of all U.S. operations with beef cows.

According to the NAHMS data, the four top reasons for culling cows were age or teeth, pregnancy status, economics and poor production. Of the cows culled in 1996, 39.8% were culled because of old age or bad teeth, 24.3% were sold because of pregnancy status and 18.5% were sold for economic reasons (drought, herd reduction or market conditions). Poor production accounted for 5.7% of the cows.

While it is highly likely that economic reasons are a more significant motivator for culling in 2008 than they were in 1996, much of the data gleaned out of the NAHMS study holds true today.

What this information reveals, to producers
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who are involved in liquidating a substantial portion of their herd in 2008, is that once they have culled for age, teeth, health conditions and open animals, the remaining culling decisions will relate to production (performance) and should be based on the individual data retained on each cow.

This is where a comprehensive set of records on each animal is invaluable, Cunduff says. "In order to make the right decisions quickly, you have to be on top of things. Having the history of your cattle at

your fingertips is essential to the process."

Data that will help in the decision-making process include birth date, dam's identification (ID), sire's ID, the calf's birth weight, calving ease score (CEM), health records for the mother cow and calf, weaning weight, and weaning date.

Breeding records on mother cows and heifers should tell whether they have been exposed to natural service or were artificially inseminated (AIed). Data on naturally serviced animals should include bull IDs, female IDs and the breeding season, while data on AIed animals should also specify the date of the insemination.

Important performance criteria

Besides the obvious performance-based culling criteria, such as poor dam milk production, low weaning weights on calves, poor climate adaptation, as well as inappropriate frame size, musculature, conformation and body structure, Jones sees some other criteria as particularly relevant.

Near the top of his list is disposition. Not only do these cattle pose a risk to the owner and his employees, but research has shown that these animals are less profitable. Agitated calves gain less weight than calm ones, and excitable cattle are more likely to produce dark-cutter carcasses, which are subject to severe discounts.

For Jones, another trait that justifies culling and is sometimes overlooked by producers is late calving. Cows that calve late produce nonuniform calves at weaning,

which can, in turn, affect the price received. They are also more labor-intensive and often require special scheduling arrangements.

Difficult-calving cows are also high on Jones' culling list.

"These are particularly labor-intensive with the added risk that you might lose both the calf and the mother cow," he says. "This can add up to the loss of a substantial investment."

Jones notes that once it has been determined which animals will be culled immediately and which ones have the best potential for generating a better return in February or April, every effort possible should be made to sell the fall culled animals prior to the middle of October when market prices for adult cattle usually begin dropping.

Because open animals are rarely worth keeping past the fall, Jones recommends having all cows and heifers pregnancychecked as early as possible so that the animals not carrying calves can be sold before crunch time.

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