Who Stays Who Goes?

Experience reveals that shipping open 2-year-olds may not always be the most economical option.

by **Heather Smith Thomas**

all is usually the time of year beef producers evaluate the cow herd and make culling decisions, basing those judgments, in part, upon the quality of the current year's calves and on factors revealed during fall processing and pregnancy checks.

In times of low prices or drought, stockmen cull harder to generate enough income to pay the bills or to reduce numbers to more closely match a diminished feed supply. Those culling decisions are crucial to the future of the cow herd. Producers should use them to help shape and improve the herd with better genetics, not sacrifice opportunities and long-term goals using a fire-sale mentality.

Cattlemen need a plan to make the best

decisions, and culling should be based on several factors. Pregnancy may not be the only — or the most important — consideration. At preg-checking time, closely examine every cow for sound udders, teats, eyes, feet, general health and body condition. Then have a plan for the ones you decide to sell.

Marketability

Selling culls without a plan costs many producers a lot of money, says Clyde Lane, animal scientist at the University of Tennessee. It's not economical to sell a good, older cow while she's still producing top-quality calves, but you should sell her before she starts going downhill.



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Lane cautions against waiting until a cow has serious physical problems that will reduce her market value. Sell before she has bad teeth or becomes too thin or crippled. Keep close track of every cow. Some are slipping in production by age 10 or 12, while others will be highly productive until their late teens.

He recommends picking cows to cull before vaccinating and treating for internal parasites, lice and grubs. Those procedures cost money and carry a withdrawal time before the treated animal can be sold for slaughter. If the final criterion is whether she is open, do all your treatments after the veterinarian pronounces her pregnant. Handle cull animals with care when sorting and hauling to prevent bruising that can reduce carcass quality.

Lane suggests cull cows be sold at some time other than peak marketing periods. Holding off until the seasonal market strengthens allows the cows to put on cheap weight gains if a producer has the feed resources to retain them a little longer.

If you are going to add weight to cull cows before selling, it may be profitable to deworm them or even implant them, says Larry Corah, vice president for supply development at Certified Angus Beef LLC (CAB). He says that several research studies show cull cows have "an excellent response to the traditional implants used with heifers."

In addition, Kansas State University research has shown an excellent response when the testosterone implant is used in combination with an estrogen implant in cull cows. If a cull has foot rot, pinkeye, respiratory problems or another ailment, it generally pays to keep and treat the cow, not selling her until she is healthy.

As Casey Kelley, market analyst for Cattle-Fax, explains, cull cow and bull marketing accounts for 10%-25% of the annual income for an average beef cattle operation. That clearly will affect the yearly profit or loss of any ranch.

"Historically, prudent marketing of cull cows has been remarkably consistent in improving the bottom line because it capitalizes on the distinct seasonal nature of the slaughter cow market," Kelley says. Selling the culls when the market is strongest can make the rancher money, even if additional feed must be purchased, unless feed costs are unusually high.

Open, young cows

The big dilemma at preg-check is whether to sell an open, young cow. Agricultural experts have said to cull *any* open cows, but sometimes this is not the wisest option, especially in a period of herd



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cutbacks due to drought. It is better to get rid of problem older cows than to cull just the open ones.

If feed was short during the breeding season, the young cow that was nutritionally stressed during lactation may not have cycled. A good, young cow with a bright future probably should stay in the herd even if she's open. This is the time to get rid of the real culls instead.

If the ranch needs to generate cash flow and cut back the herd to save on feed costs or to get numbers more in line with reduced fall and winter feed supplies, that is an opportunity to sell any cow that makes your job harder.

Fertility is an important factor in the future of the cow herd, and breeding back is something that always should be looked at closely. But all too often ranchers who automatically cull every open young cow are throwing away part of their best genetics.

Matt Cherni, veterinarian for Wyoming's Padlock Ranch, which manages 12,000 cows on native-grass pastures, sees every cow in the fall at preg-check. A couple of years ago, he said that, after 12 years of preg-testing, he finally "woke up to the fact that we are washing out some of our best cows in their first two years in the herd."

The first-calf heifer that weans a good, big, heavy calf is often a little thin in the fall and may be open or may breed back a little late. If she's pregnant, the next year she may bring in another good calf but may not have time to settle for the third one.

As Cherni points out, the best young cows often come up open after their first or second calf because they don't have enough feed energy to meet their demands, especially on a least-cost spring-calving operation.

"We're losing some opportunity by sending these good, young cows down the

road," Cherni says. Perhaps you could replace her with a better heifer, but the heifer is more of a gamble than the proven young cow.

And, Cherni says, "those better genetics — those great EPDs (expected progeny differences) — don't come free. The cow we just culled cost us 80¢ or more to keep back as a breeder heifer, and now we get to turn around and sell her for 35¢. We lost at least \$500 cash on her. We know that she can produce, yet we take a chance on a young heifer, even though — on this ranch — there's a 30% chance she won't work in the long term."

Fertility is part of the genetic package you are trying to produce, especially if you are a seedstock producer, and definitely a factor to take into consideration at culling time. But the 2- and 3-year-olds that are milking hard and producing heavy calves have such a demand on them that coming up open may not be their fault, especially in a dry year.

The time to sort and cull for fertility is at the yearling level, not at 2 and 3 years.

Hard on heifers

The quickest, easiest way to develop genetically fertile cows is to cull the replacement heifers ruthlessly on pregnancy rate, leaving bulls with them for a short breeding season or giving them just one chance to conceive via artificial insemination (AI) and culling any that don't settle. That is the surest way to select for high fertility and to work toward a fertile cow herd.

Of fertility and pregnancy, veterinarian Robert Cope, Salmon, Idaho, offers this rule of thumb: "If a yearling heifer comes up open, it's due to genetics; if a 2-year-old is open, it's due to management — not enough feed for her body demands."

Short breeding season

Commentary by Heather Smith Thomas

In our own Salmon, Idaho, herd, we have short breeding and calving seasons because we breed our cows in April before they go to summer range in May. With only a 32-day breeding period for our yearling heifers and by selling any that come up open, we have inadvertently selected for high fertility in our herd over the past 28 years, and there are few yearlings that end up open after the short breeding season.

Because we have so many pregnant heifers each year, it gives us more flexibility in culling the older cows. We don't have to cull just for old age or pregnancy; we can cull a cow with a bad udder or bad disposition because we have something better to replace her. That has increased the rate of improvement in our herd.

We may give a 2-year-old another chance if she's open after our short breeding season. Those young cows usually go on to become some of the best cows in the herd. We feel we can afford to give a 2-year-old one year off if she'll raise outstanding calves for another 10-12 years. She pays her way better than a pregnant 2-year-old that never comes up open in her life but continues to raise a mediocre calf year after year.

In our operation, we winter the open 2-year-olds on marginal feed. If it's a relatively open winter, they make it on dryland pasture with little or no hay. It doesn't matter if they are thin in the spring, they always breed quickly — since they don't have the drain of lactation demand and are on an increased plane of nutrition in the breeding group. We can afford to keep the high-producing young cow because she soon pays for her "year off" with above-average calves.

In other words, it doesn't pay to give an open yearling a second chance, no matter how good she looks or how good her rate of gain or parents' records. Making excuses for low fertility in yearlings will eventually result in a cow herd with low fertility.

But you can often do well by giving the best 2- and 3-year-olds a second chance because the ones that come up open after a short breeding season are usually the ones that were raising the best calves. A poor milker that puts more of her "groceries" into herself and has a dinky calf will usually cycle and breed back.

Therefore, the rancher who automatically Continued on page 274

Who Stays & Who Goes CONTINUED FROM PAGE 273



►An option to holding open cows from the spring-calving group for a full year is to put the good, young cows into a fall-calving program. The cows would then miss only half a year of production instead of a whole year.

keeps every pregnant 2- or 3-year-old and sells every open young cow is inadvertently selecting for mediocrity. Over time, the cow herd will produce mostly below-average calves because that kind of cow has been retained. There is a point at which cows can milk too much and have trouble maintaining themselves enough to breed back, but with proper EPD selections for milk and rigid culling of yearlings for fertility, the problem takes care of itself.

Options

Every ranch has to handle culling decisions individually. Cherni says some ranchers could solve the culling dilemma by putting their good, young open cows into a fall-calving program, breeding them later in the year instead of waiting until spring. With that system, the cow misses only half a year of production instead of a whole year.

The better-milking cow with the biggest calf is often in that open 2- or 3-year-old group. Cherni says, "Instead of washing her out of a spring-calving system that doesn't fit that cow, maybe you can put her into another system where she does fit. Fall calving may be the least-cost solution for that animal, as well as an economic opportunity for the ranch."

For just a little more investment to pay interest on the money to retain her and an extra month or two of feed, you can keep your numbers up without spending so much to get a replacement heifer into the system.

"If we can cut down the number of

young replacements we have to add, it starts taking a huge expense out of our production costs," Cherni says. Why replace a proven, young cow with an unproven heifer? The fall-calving program also could enable a ranch to produce a second calf crop in the off-season to spread out the marketings or to have long-yearling bulls to sell in a spring production sale instead of just yearlings or 2-year-olds.

Cull heifers wisely

Some of the annual operating cost of any ranch is raising replacement heifers. Those costs can be lowered — not by settling for cheaper, lower-quality animals but by improving their feed efficiency and fertility.

It may be difficult to cut costs on heifers, but a person can work toward genetic selection to make them more efficient and productive. If selecting for high fertility in heifers and trying to make the best culling decisions, it's important to keep in mind a balance between inputs (feed costs) and the type of young cow you want in your herd. You might not want heifers that can perform well only on high-quality feeds.

Jack Whittier, Colorado State University Extension cow-calf specialist, cautions against going overboard on inputs — such as grain — to the point that you've created an artificial environment and can't determine the heifer's true reproductive abilities. Can she make it in the real world without the expensive feed?

But he also emphasizes the importance of

proper heifer development. The heifer must be gaining, sexually mature and in good physical condition to breed. That is easier if you have genetically selected heifers that can produce on natural feeds.

Part of the selection process is weeding out the extremes — the smallest, biggest, fattest, youngest and worst-dispositioned heifers. After you've put them into the breeding program, early culling of any potential problem-heifer is important.

As Whittier points out, you should try to determine the heifer's pregnancy status as soon as possible after breeding. "You have a lot more options on what direction to take with the opens and late-breds," he explains.

Culling equals opportunity

In the long term, a down cycle or drought situation actually can prove to be a time of opportunity, Corah says. Producers need to use that opportunity to position their cattle genetically, shaping the cow herd not only for better reproduction and calving ease but also for genetic potential for feedlot efficiency — tailoring them genetically to produce a product for which the market will pay premiums.

"People have already done a lot of research on the kind of cattle we'll need," Corah says, referring to carcass traits. "And these things can be achieved. Now is the time to make long-term decisions in culling. Evaluate where your herd is today and where it needs to go."

In marketing, he says producers need to watch what is going on in the industry pertaining to the grain, hay and feeder markets and what it might do to the cullcow market.

Producers may need to be prepared to put cull cows on the market if feed costs are high and they can't afford to maintain open cows, he adds, but watch your markets.

"Do you dump your cattle or market them? There is a huge difference in how ranchers sell their cull cows. Timing is important — where and when and whether or not the cows are thin or in good condition," Corah says. "If you are in a position to put some weight on those cows, you can still make some money if you pay attention. Don't be tied into a traditional program, weaning on a certain date, selling culls at a certain time."

Just because you've always done it that way doesn't mean that it's the best way.
Ranchers need to be innovative and creative, looking at the best ways to market their product. And the way you cull your herd and market those culls probably will be a big determining factor in whether you survive the rough times — pricewise or weatherwise.