Black Ink Column #1f
July 2004

Reproductive Efficiency

When you breed or turn out bulls with heifers or cows, you have certain expectations. Ideally, you want each of them to become pregnant, deliver an unassisted, healthy calf and raise it to half its momma's weight six months later.

But since nobody runs cattle in an ideal world, you have to settle for what's possible and profitable. It is not common for those with more than a few cows to wean 100% calf crops, but you might hear it said. Some details are usually left out, starting with a defined inventory of cows.

That's like reporting wheat yields based on unspecified harvested acres rather than planted acres. It may sound better, but it doesn't help you analyze and solve problems, or make more money.

Economic analysis requires a record of how many females had a chance to become pregnant, and what final number actually weaned a calf. This "weaning percentage" is the ratio of weaned calves to cows exposed. For more precision, these numbers should be in pounds rather than head. Either way, in most databases, the top 25% of producers ranked by net income manage no better than about 85%.

You can work on edging that higher, maybe gain 10%, but every producer will reach a point where it is not efficient to attempt further gains on that percentage. Sure, you can get more cows pregnant with a longer breeding season or with multiple artificial inseminations, but at what cost?

No matter how hard you work, reproductive efficiency will not improve unless you work smarter. Nutrition can be the most important key. You may have conflicting goals of raising the weaning percentage while lowering input costs, but it is critical to balance the herd's nutritional needs with its production cycle.

Managing beef cow body condition scores throughout the year can help absorb the bumps in nature, but unexpected change such as drought will require some adjustments. When money is tight, be careful not to cut corners that rob you later.

For example, cutting the winter energy supplement enough to short-change the herd by just one pound might save $10 to $15 per cow. But the net effect can cost twice that much down the road in lost weaning weight and delayed rebreeding.

To improve the weaning percentage, you must lower death loss at calving. Getting cows to rebreed early leads to weaning more pounds of beef per cow. Nutrition is the key to both.

You can't make money by feeding cows more than they need, of course, but needs increase suddenly as calving approaches. Three-fourths of fetal calf growth comes in the last 50 days before calving, so it is critical to boost energy at that time.

Once the calf is on the ground, your focus on rebreeding the cow for next year comes far down her list. She will support her basic needs and activities, put on body weight, build energy reserves, and produce milk for her new calf before any dietary energy goes to restarting her breeding cycle.

That's why many producers try to time the calving season so that peak cow needs coincide with peak forage quality. Where high quality grazing is limited, cow size and milk production must be kept to moderation.

Animal scientists have tried to rank the importance of reproductive efficiency in comparison to growth and carcass traits, suggesting you give at least twice the attention to

reproduction. It is difficult to state an absolute number, but obviously without routine calving, the other traits are moot.

Just as obviously, producing a calf is only part of the profit equation. After weaning, that calf must grow efficiently and, if you want to add value, finish at Choice grade or higher. As you adapt cows to your production environment, culling those that fall out is one form of genetic selection.

Reproductive traits are not highly heritable, and that's one reason you can make excellent progress on growth and carcass traits while edging your weaning percentage higher through focused management and nutrition. You can see there is more to efficiency than keeping score.

It is usually more economical to compromise toward optimum, rather than maximum production figures. After several years of herd and enterprise analysis, you can pursue the goal of maximizing profit while letting production seek its own level.

Next time in *Black Ink*, we'll explore the topic of shrink. Questions? Call toll-free at 877-241-0717 or e-mail cabsteve@aol.com.

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