

Management Update

Using Young Bulls in Multi-sire Breeding Pastures

As we enter the fall breeding season for herds that plan September and October calving, questions about the bull-battery often arise. Producers often ask about the use of young bulls in the same breeding pasture with older, larger bulls. In most instances, this is a practice that should be discouraged if at all possible. Young bulls will normally lose the battle of deciding who is the dominant individual in the breeding pasture. Ranchers report that in some cases young bulls that have been severely "whipped" are less aggressive breeders after that incident. Australian data on multi-sire pastures have shown that some young bulls gain a dominant role as they mature and then will breed a larger percentage of the cows. Other

bulls will not gain that dominant status, and only breed a very small percentage of the cows in a multi-sire pasture. The best solution is to always place young bulls with young bulls and mature bulls with mature bulls in the breeding pasture. In some situations, the rancher may choose to use the mature bulls in the first two-thirds of the breeding season, and then rotate in the young bulls. This allows the young bulls to gain one to two months of additional age and sexual maturity. In addition the young bulls should have considerably fewer cows in heat at the end of the breeding season as the mature bulls will have bred the bulk of the cows or heifers. The young bulls will be in the breeding season only a few weeks and should not be as "run down" or in poor body condition at the conclusion of the breeding season.

Also a commonly asked question is the cow to bull ratio for young bulls. The old rule of thumb is to place the young bull with about as many cows as his age in months. Therefore the true "yearling" would only be exposed to 12 or 13 females. If he is a year and a half old (18 months), then he should be able to breed 15 - 18 cows. By the time the bull is two years of age, he should be able to breed 24 or 25 cows. Realize that tremendous variability exists between bulls. Some are capable of breeding many more cows than what is suggested here. AND sadly enough, a few bulls will fail when mated to a very few cows. Hopefully, a breeding soundness exam and close observation during the first part of the breeding season will identify those potential failures. *Source: Dr. Glenn Selk, OSU Extension Animal Reproduction Specialist*

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Trouble-Shooting Reproductive Failure

With fall preg-checking season well underway, some herd owners are surely pleased with their results. Meanwhile, others are looking for bred females to purchase. The goal shouldn't be to have 100% of your cows bred each year. Herds at or near 100% pregnant year after year generally represent one of two situations -- a very extended calving season or overfeeding. Neither option is cost-effective for overall herd profitability. Financial analysis indicates a pregnancy percentage of 90-95% in 65 days is both achievable and likely most profitable. If your herd is below this level, some investigation by you and your herd-health veterinarian is needed.

When I investigate a reproductive problem, I break it into the following categories: For bull problems, it's Breeding Soundness Exam (BSE), overuse, or lack of libido. For cow problems, I look at nutrition, environment, disease and genetics.

Bull problems

When a large percentage of cows are open, my first thought is generally a bull problem. With a national annual average of about 10% of bulls failing their BSE, an annual BSE on every bull before turnout is a must. Nearly every year I've been in practice, I've seen a group of cows all open due to a sterile bull. It's an easy situation to figure out.

Another bull problem is simply overuse. My rule of thumb for Midwest herds is you need a month of bull age for every cow in a 65-day breeding season. If you have 100 cows in a group, you need "100 months of bull" to breed them. This means three bulls

at three years of age, or two bulls at four years of age, would be adequate bull power. We know some bulls can service more than 50 cows in a breeding season, but 50 cows to a bull is our upper limit.

We also know using bulls of greatly differing ages doesn't work well. Having a yearling bull in the pasture with a three- and four-year-old adds up to 100 months, but the yearling will likely get no cows bred due to dominance issues by the older bulls.

The final bull problem is lack of libido. These bulls generally get some cows bred but not enough. To diagnose this problem, place a group of open cows with the bull(s) in question. If the bull lies down in the shade when a cow is in heat, he's asking to leave the herd.

Cow problems

Nutrition tends to be the most common reason for a less-than-desirable pregnancy percentage; the most common nutritional problem is lack of Body Condition Score (BCS) before calving. This is primarily an energy deficiency. The period between weaning and the third trimester of pregnancy is the most cost-effective time to improve BCS. A good BCS prior to calving is key to breeding back in a timely fashion.

If thin cows are over-represented in the open pen, you may already have the answer. If your younger cows are over-represented, it can be the same problem. Mature cows that calve too thin (below BCS 5) are at higher risk of being open, compared to cows in good BCS. Young cows are also at increased risk of being open as they need additional energy for skeletal growth. If you have a cow both young and thin, she's at a severe disadvantage.

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Post-calving cows need 45% more energy and 40% more protein than a pre-partum cow. Be sure not to short-change cows at this critical time. Mineral and vitamin deficiencies also can reduce pregnancy percentage. While phosphorus deficiency historically was listed as a cause of reproductive failure, it's now very rare as most all cows are adequately supplemented with phosphorus. Other elements that can cause reproductive failure include deficiencies of selenium, vitamin E, cobalt, copper, iodine and manganese. Check with your nutritionist, Extension beef specialist or herd-health veterinarian for requirements in your area.

Environment

A cow herd out of synch with what's going on in the environment can pose problems. The biggest concern is an overly productive cow in an average or poorer environment. We don't want high-maintenance cows weighing 1,700 lbs. trying to get rebred while grazing infected fescue.

Heat stress can also affect reproduction. It can cause reduced embryo viability early in pregnancy, as well as reduced sperm quality and breeding activity by the bull.

Disease

When disease causes reproductive failure, other manifestations of the same disease are generally seen. Abortions, early embryonic death, calves born weak or dead, and calves that die soon after birth are common manifestations. Most disease factors don't simply cause an increase in the percentage of open cows. This is another area where you need to get your herd-health veterinarian involved early in the course of the problem.

Genetics

There are differences in the inherent fertility of different beef breeds. Research also indicates an increase in pregnancy rate in crossbred vs. purebred cows. If you can't attain the pregnancy rate you desire, there may be an underlying genetic component.

If your herd's fall pregnancy results look good, then congratulations. If it's less than desirable, work with your beef team to get to the bottom of the problem. This time next year, you can be reflecting on a job well done.

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