COW/CALF CORNER

The Newsletter
From the Oklahoma Cooperative Extension Service

February 29, 2008

In this Issue:

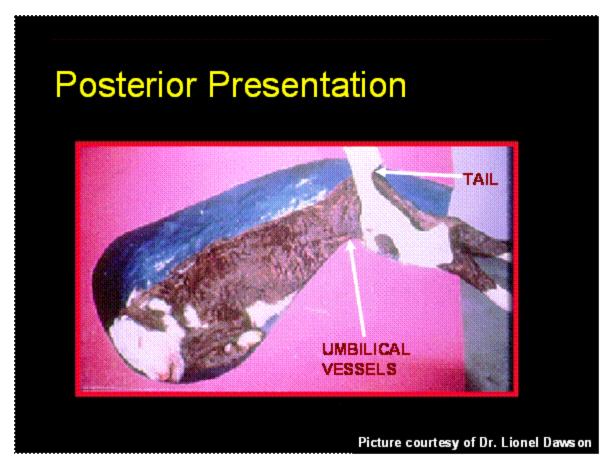
Assisting the Posterior Presentation (Backwards Calf) by Glenn Selk, OSU Extension Animal Reproduction Specialist

Using Young Bulls in Multi-sire Pastures and Cow-to-Bull Ratios Glenn Selk, OSU Extension Animal Reproduction Specialist

Assisting the Posterior Presentation (Backwards Calf)

by Glenn Selk, OSU Extension Animal Reproduction Specialist

Any cow calf producer that has spent several years in the cattle business has had the experience of assisting a cow or heifer deliver a calf that was coming backwards. Understanding the physiology and anatomy of the calf and mother will improve the likelihood of a successful outcome. Study the diagram of the "posterior presentation" shown below.



Note the relative positions of the tailhead of the baby calf and the umbilical cord that connects the calf to the mother's blood supply. As the calf's hips are pulled through the pelvic opening, the baby calf's tail will reach the outer areas of the mother's vaginal opening. Once a person can see the baby calf's tailhead, the umbilical vessels are being compressed against the rim of the mother's pelvic bone. The blood flow, exchanging oxygen and carbon dioxide, between calf and mother is greatly impaired, if not completely clamped off. Research, many years ago, conducted in Europe illustrates how little time it takes to compromise the calf's survivability when the umbilical cord is clamped. These scientists studied the impact of clamping the umbilical cord for 0, 4, 6, or 8 minutes.

Table 1. Impact of clamping of umbilical vessels on calf survivability

Duration of Clamping	Number of Calves	Fate of Calves
0 minutes	5 calves	All of the 5 calves lived
4 minutes	5 calves	4 lived; 1 died
6 minutes	3 calves	3 died
8 minutes	3 calves	3 died

Certainly, if a producer does not feel confident in their abilities to deliver the backward calf, call your veterinarian immediately. Time is of the essence. As producers examine heifers or cows at calving and find a situation where the calf is coming backward, they need to keep this European data in mind. If the calf's hips are not yet through the pelvic opening, they have a little time to locate help and have someone else to aid in the assistance process. Once the cow and the

producer in concert have pushed and pulled the calf's hips through the pelvic opening and the tailhead is apparent, the calf needs to be completely delivered as quickly as possible. The remainder of the delivery should go with less resistance as the hips are usually the toughest part to get through the pelvic opening. The shoulders may provide some resistance. However, some calf rotation and traction being applied as the cow strains will usually produce significant progress. Remember, the completion of the delivery is to be accomplished in about 4 minutes or less. The calf's head and nostrils are in the uterine fluids and cannot breathe until completely delivered. The calf must get oxygen rapidly to offset the hypoxia that it is been subjected to during the delivery. After the calf is delivered, tickle it's nostrils with a straw to cause snorting and inhalation of air to get it started to breathing.

Using Young Bulls in Multi-sire Pastures and Cow-to-Bull Ratios

Glenn Selk, OSU Extension Animal Reproduction Specialist

With spring bull sales in full swing, cow calf operators are assessing their bull batteries and making needed purchases. 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 breed a large 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 for the remainder of his stay at the ranch. 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: "How many cows should be mated to 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.

Oklahoma State University, in compliance with Title VI and VII of the Civil Rights Act of 1964, Executive Order 11246 as amended, Title IX of the Education Amendments of 1972, Americans with Disabilities Act of 1990, and other federal laws and regulations, does not discriminate on

the basis of race, color, national origin, sex, age, religion, disability, or status as a veteran in any of its policies, practices or procedures. This includes but is not limited to admissions, employment, financial aid, and educational services.