## Using Estrus Synchronization Protocols with Natural Service Sires

Frontier Extension District has had a couple of meetings this winter/early spring where we discussed the importance of reproduction efficiency to the cow-calf producer. The two meetings were "The Cattle Reproduction Workshop" and "Beef Cattle AI Refresher." Here we talked about the valuable benefits of artificial insemination (AI) - having older and heavier calves at weaning - typically because the calves were conceived earlier in the breeding season. This wasn't due to AI it was due to synchronization.

AI might not be a good fit for your operation. Perhaps you don't have the time or facilities that will allow you to run the cows through the chute 3, 4 or even 5 times to get a cow bred. But you can still use synchronization protocols to increase the number of cows cycling at the beginning of the breeding season with just one trip through the chute.

Synchronization protocols used for detecting heat and breeding or timed AI should not be used for natural service. Protocols should be adjusted if you are planning to use bulls. One trip through the chute protocols include:

## For Cows:

1) ONE SHOT PROSTAGLANDIN- a shot of prostaglandin should be given to each cow the day the bull is turned out. This should result in 75% of the cycling females to be in heat within the next 5 day period.

## OR

2) DAY 4 PROSTAGLANDIN- Females should be gathered on day 4 following bull turn out and given a shot of prostaglandin. By day 4 bulls should have already bred 15-20% of the cycling females. The remaining cycling females should then come into heat in the next 5 days. IN theory, this would have all the cycling cows in heat during the first 10 days of the breeding season.

## For Heifers:

1) MGA- feed MGA at .5mg/head/day for 14 days. 18-19 Days after the last MGA feeding turn the bulls out to pasture breed the heifers.

Remember the purpose of synchronization is to bring as many females into heat near the beginning of the breeding season as possible, SO, consider your bull power. One mature bull per 15-20 cows should be adequate. All bulls should have previously passed a breeding soundness exam, now would be a good time to have that done by your veterinarian. Yearling and 18 month old bulls that are not experienced shouldn't be used in a natural service synchronization system.

In closing, natural service synchronization is a great tool to help producers get more cows bred early in the breeding season and increase calf weaning weights this fall.