UW EXTENSION OFFERS

Artificial Insemination School

IN BIG HORN COUNTY

Situation

Artificial insemination (AI) has been available to cattle producers for decades, and by utilizing the technique of AI, cattle producers can improve efficiency in many aspects in their operations. Still, only 5% of all beef cattle females are bred via AI and just 13% of operations utilize the technique at all. A 2011 USDA survey indicated the top reasons producers are reluctant to adopt the practice are labor, time, and difficulty of the process.

University of Wyoming Extension educators and specialists collaborated with industry professionals and the Wyoming state veterinarian's office to create an AI school in northern Wyoming that met classroom standards for licensed certification. The classroom portion of the program was hosted in the Big Horn County Extension office outside Greybull. The Flitner Ranch hosted the "hands-on" session of the program in their livestock barn facilities and feedlot.

The three-day course educated beef producers on the AI technique, as well as herd management principles that translate into a successful AI program. Topics such as herd nutrition, herd health, body condition scoring, heat detection, equipment usage and handling, selecting estrus synchronization protocols, and reproductive anatomy and physiology were discussed.

Day 1 included an introduction to cattle AI with instructional videos of the procedure and practice with "hands-on" teaching aids prior to palpation of live cattle. Each participant was able to palpate a life-sized Breed'n Betsy teaching dummy equipped with a replica of the female cow reproductive system. Harvested reproductive tracts from slaughtered cows were also available for participants to practice passing insemination rods through the reproductive tract. Following classroom instruction, live cattle were loaded into the palpation chutes, and participants were able to palpate and attempt the technique.

Day 2 focused on cattle management associated with breeding season and included key considerations on investing in cattle genetics and purchasing semen, the importance of quality nutrition, how the female's body condition affects her reproductive cycle, effective heat detection, and how to be successful with insemination

timing. Following classroom discussion and questions, participants practiced what they had learned with teaching aids and a new set of live cattle.

Day 3 covered more complex topics of heifer development and using estrus synchronization programs. Selecting replacement heifers and managing reproductive hormones were discussed, along with the many estrus synchronization protocols available and how to determine which protocol to apply. The last class consisted of more intense live cattle palpation. To pass the class and receive a completion certificate, participants were required to successfully pass an insemination rod through the cervix of the live heifer and be verified by an instructor.

Impact

Through the AI school, participants learned how a successful reproductive program is crucial to the long-term financial sustainability of cow-calf operations regardless of the level of AI application they choose to implement.

The Greybull AI School had a 100% pass rate by its participants. Ranch owners indicated they plan to use AI to improve the reproductive management of their own herds as soon as possible. Other participants intend to use their new skills in a cattle operation where they are employed. Several participants noted the effectiveness of the hands-on learning opportunities, and one participant wrote, "The most helpful aspect was learning in the classroom and then going and learning out at the barn with the heifers."

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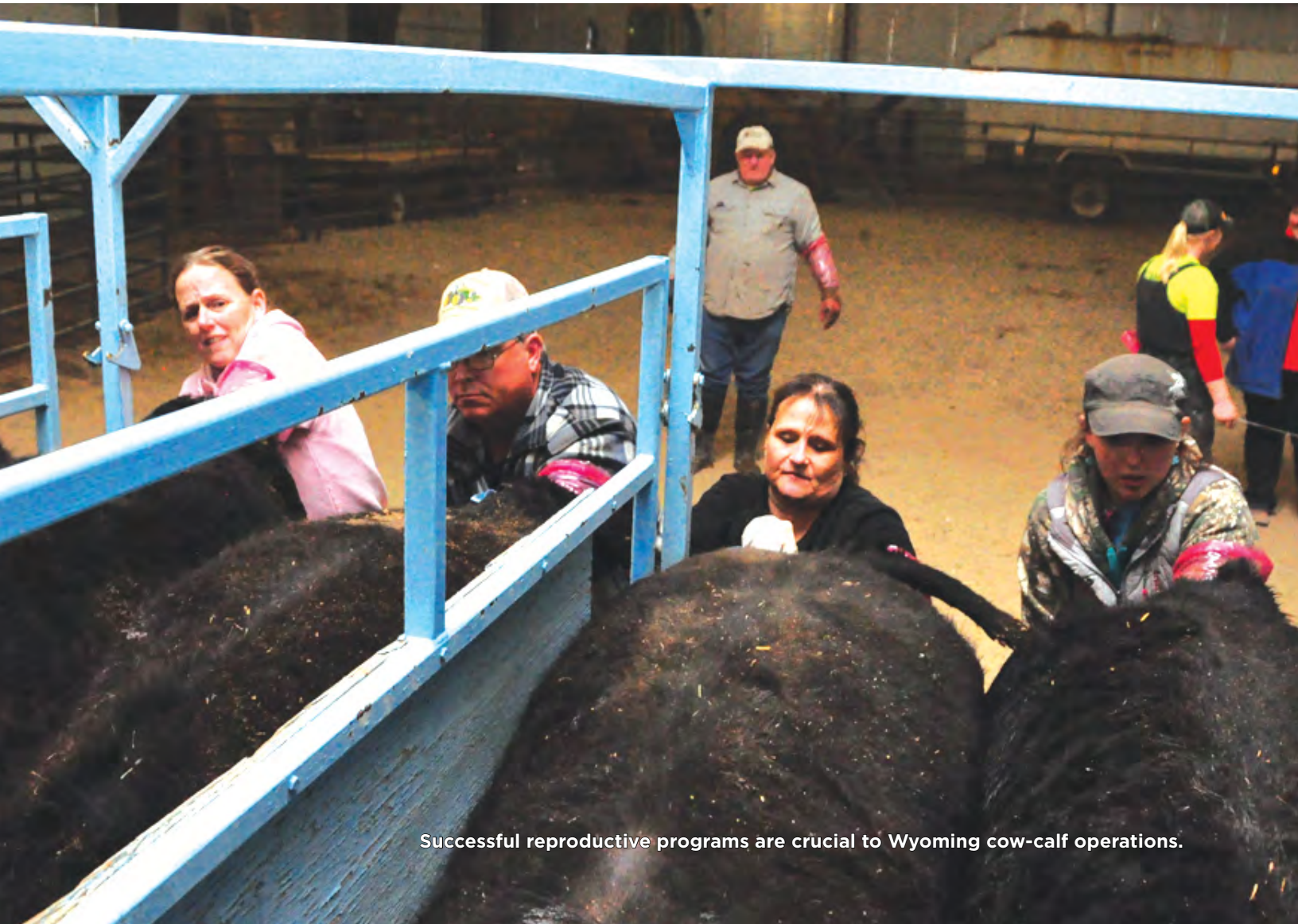

Successful reproductive programs are crucial to Wyoming cow-calf operations.