# **UW Extension Offers Artificial Insemination Schools Across Wyoming**

Marshall, C.L., Extension Educator, University of Wyoming, Fremont County, Lander, WY 82520, cmarshal@uwyo.edu



A.I. school participants palpate cows each afternoon of the schools. Portable custom-made chutes allow schools to take place in various locations and for palpation of up to 16 cows at one time

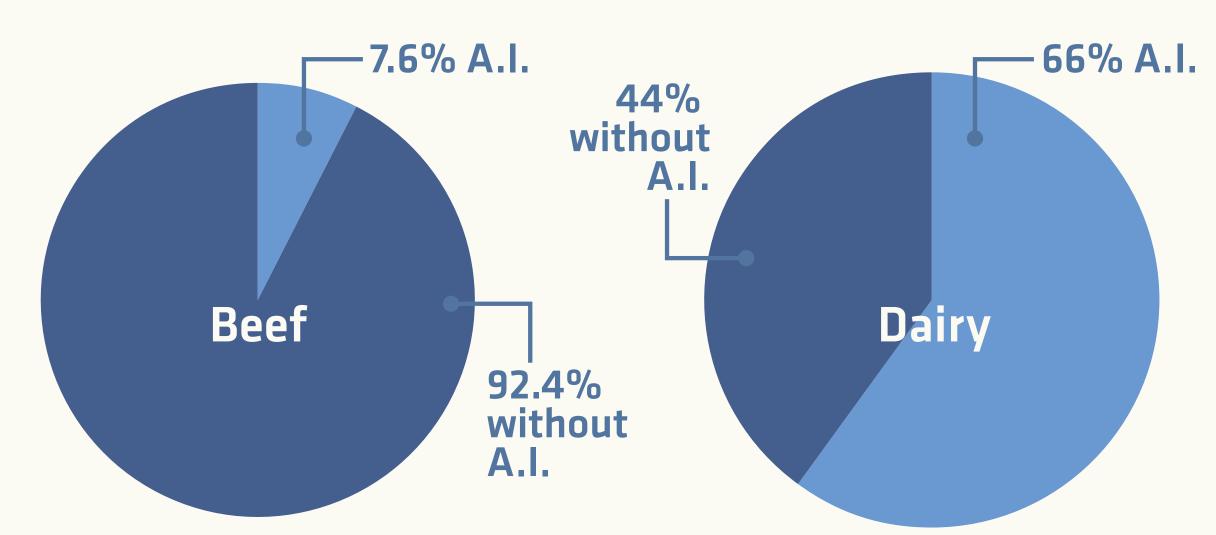
#### How

- 3 days of instruction with hands-on practice and application
- Classroom instruction and demonstrations in the mornings
- Afternoons working with live cattle in portable custom-made palpation chutes
- A.I. schools offered in various locations across
   Wyoming to increase accessibility to cattle producers

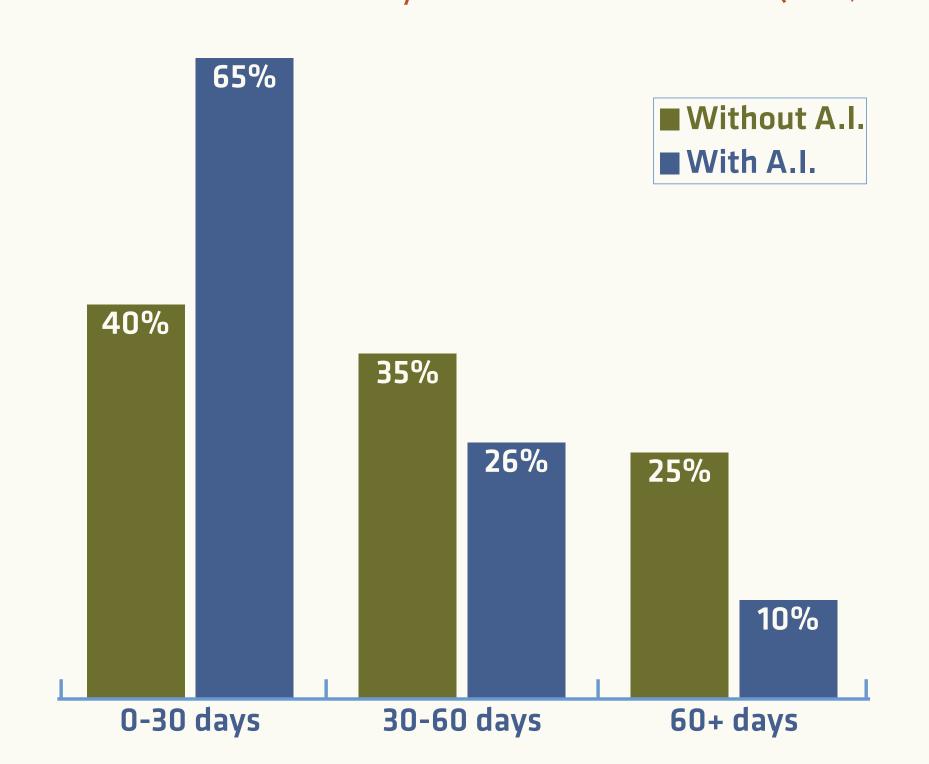
UW Extension educator Chance Marshall assists a student with palpation practice on a Breed'n Betsy visual teaching aid.

#### The Case for Artificial Insemination

- Cattle producers can utilize proven sires with superior genetic merit
- Reduce cattle producers' costs by reducing the number of bulls needed for their operation
- Ability to mate specific sires to individual cows and improve production traits of their herds
- Estrus synchronization protocols allow for more effective use of operation's time and resources



A.I. is the U.S. beef industry's most underutilized tool. Whereas 66% of U.S. dairy cows are bred via A.I. (Hall, 2019)



The expected 90-day calving distribution in the A.I. graph has many advantages. A higher proportion of calves born early in the calving season should indicate higher weaning weights and a more uniform calf crop adding value. Heifer replacements born from fertile dams earlier in the calving season can be obtained with superior genetic merit. Labor resources can be concentrated during calving season. (Wells, 2014)



Doug McClean of Select Sires assists students with loading of insemination guns following a presentation on proper semen handling and A.I. equipment usage.



Students practice passing insemination rods through the cervix on harvested reproductive tracts from slaughtered cows.



## Why Wyoming-based Schools?

- Out-of-state travel and registration fees can be expensive and a barrier for Wyoming cattle producers
- 1,320,000 cattle and calves (USDA NASS, 2018) = 2.28/Wyoming resident
- Cattle are Wyoming's largest agricultural commodity—inventory valued at \$1,682,500,000 (USDA NASS, 2018)



Students practice palpation on day three of the A.I. school on the Flitner Ranch barn outside of Greybull, Wyoming.

Students must pass a rod through a cow's cervix unassisted in order to receive a passing grade

### Results

- 225 graduates since 2017, ages 9–65
- Receive college credit
- Meets Wyoming State Veterinary standards for A.I. technician certification to offer A.I. services commercially
- Increase breeding efficiency due to shorter calving seasons and induced cyclicity of anestrous cattle
- Higher valued calves due to calf crop uniformity and utilization of superior genetics
- Help youth and new producers get started in cattle industry

