



Hereford and Red Angus Heifers Recruited for Genomics Research

The University of Missouri is recruiting 2,500 Hereford heifers and 2,500 Red Angus heifers to participate in a heifer puberty and fertility genomic research project. Heifers should be registered Hereford, registered Red Angus, or commercial Hereford or Red Angus. Hereford x Red Angus crossbred heifers targeted for the Premium Red Baldy Program would also be a good fit for the research project. Producers must be willing to work with a trained veterinarian to collect the following data:

- **Reproductive tract scores** collected at a pre-breeding exam 30 to 45 days prior to the start of the breeding season.
- **Pelvic measurements** (height and width) collected at the same pre-breeding exam 30 to 45 days prior to the start of the breeding season.
- **Pregnancy determination using ultrasound** reporting fetal age in days. Ultrasound will need to occur no later than 90 days after the start of the breeding season.

In addition, heifers must have known birth dates and have weights recorded either at a year of age or at the time of pre-breeding exams. Estrus synchronization status (yes or no) and protocol used should also be recorded. Service sires (artificial insemination and natural) should also be reported.

Animals in the study will receive free genomic-enhanced expected progeny differences (GE-EPDs), or in the case of commercial Red Angus, free Red Navigator results. Producers will collect a DNA sample using either a blood card (FTA) or Allflex Tissue Sampling Unit (TSU).

Continuing education is available through the University of Missouri National Center for Applied Reproduction and Genomics to provide veterinarians with training in reproductive tract scoring, pelvic measurements, and pregnancy determination. Producers who do not have a relationship with a trained veterinarian will need University of Missouri professionals to come to their farm to collect trait records. Producers needing University of Missouri assistance to collect trait records will need a sufficiently large group size in order to justify travel to their location. For example, producers outside the state of Missouri will likely need a contemporary group larger than 50 head of heifers. If you are near the borderline of qualifying, please contact Jared Decker or Jordan Thomas. Producers with a history of data collection or experience with research projects will be given priority.

Data collection will continue until June 1, 2022.

Interested producers should email:

Jared Decker
(deckerje@missouri.edu)

Jordan Thomas
(ThomasJor@missouri.edu) and

Helen Yampara-Iquise
(yamparah@missouri.edu).

Please include all three in email correspondence.

In your email, please include:

- Name of farm/ranch
- Address of ranch/farm/working facilities
- Number of heifers to be developed in 2020 (spring or fall)
- Name and contact information of herd veterinarian

Jordan Thomas will need to speak with your veterinarian regarding standards for data collection.

Hereford and Red Angus producers can also call Jared Decker at 573-882-2504 for more information. **HW**