The Tennessee Beef Heifer Development Program is a tool for addressing the goal to "incentivize the repopulation of the beef herd."

Action 3.1 of the Governor's Rural Challenge

Specific aims of the program are to:

- 1. Increase the opportunity for custom replacement heifer development.
- 2. Demonstrate proper heifer development to beef cattle producers in Tennessee.
- 3. Increase the implementation of heifer development practices that will result in optimum reproductive efficiency as mature cows.
- 4. Demonstrate management techniques necessary for replacement heifers to reach target weights and breed successfully.
- 5. Demonstrate methods of evaluating heifers for disposition, performance, and reproductive traits.

Implementation of these practices through custom heifer developers will provide access to more productive replacement females and allow for more rapid expansion of the state's cow herd. It will also improve the longevity of these females, decreasing turnover and providing for exponential improvement in genetics and associated revenue generation.

LOCATION

The Middle Tennessee AgResearch & Education Center at Lewisburg, TN

RULES AND REGULATIONS

- 1. The program will be administered by University of Tennessee, Institute of Agriculture employees with assistance of an advisory committee composed of UTIA personnel, representative of the Tennessee Department of Agriculture, representative of Tennessee Farmer's Cooperative, representative of Tennessee Farm Bureau, representative of the Tennessee Cattleman's Association and a representative of the Tennessee Beef Cattle Improvement Council.
- 2. Heifers must be owned by consignor for at least 60 days prior to delivery. All purchased heifers must be accompanied with an affidavit indicating the name and address of the original breeder and birth dates of the heifers.
- 3. Heifers must have known sire (registration number required). If from multi-sire breeding groups, include all sire registration numbers.
- 4. Heifers may be commercial or registered. Registered heifers must be accompanied with a copy of registration papers at delivery.
- 5. Heifers must be individually and permanently identified. Heifers will be re-tagged at delivery.
- 6. A minimum weight per day of age (WDA) of 2.4 lbs. is required.
- 7. A maximum of ten heifers per consignor will be accepted unless additional space is available.
- 8. Heifers will be pre-screened, prior to delivery, by program administrators or University of Tennessee personnel to ensure that they meet the program requirements as described in this document.
- 9. Priority for space will be given to Tennessee residents but heifers from bordering states will be accepted if space is available.

10. If nominations exceed available space, program administrators will select heifers that will be admitted based on program fit and regional distribution. Owners will be informed soon after selection is complete.

HEALTH

- 1. All heifers must be in good health at delivery.
- 2. A sound health program is extremely important. Immunity is developed only if calves are properly vaccinated without stress. Proper handling and administration of vaccines will afford better results. Initial vaccinations must be given prior to weaning and will be repeated at weaning.

The following management must be completed prior to delivery:

- Dehorned and healed
- Dewormed
- Vaccinated for:
- IBR/BVD/PI3/BRSV
- 7 or 8-way Clostridial
- 3. Heifers will be tested on arrival for Bovine Viral Leukosis (BLV), Persistently Infected Bovine Viral Diarrhea (PI-BVD), and Anaplasmosis. Any heifer found to be positive will be removed from the program.

NUTRITIONAL MANAGEMENT

Heifers will be maintained on standing forage, hay or haylage and supplement designed for optimum growth. A grazing plan that includes cool season perennials and annuals and warm season perennials will compose a majority of the nutritional program. Heifers will be fed to weigh approximately 65% of their projected mature weight at the beginning breeding.

REPRODUCTIVE MANAGEMENT

Heifers will be evaluated for pelvic area and reproductive tract score prior to breeding. Estrus will be synchronized, and heifers exposed to a single timed artificial insemination (AI). Estrus detection and an additional AI will be conducted if needed for the remainder of a 45-day breeding season. A clean-up bull (Angus Only) is an option after (2) AI services, but a third round of AI, if needed, is default. Selection of AI sires will be performed by the program's administrator working with the advisory committee. Sires requested beyond committee selections must qualify under Tennessee Agriculture Enhancement program sire genetic requirements. Calving ease will be a high priority for sire selection. Pregnancy will be diagnosed approximately 30 days after the end of the breeding season via ultrasonography.

REMOVAL OF HEIFERS

Heifers will be removed from the program for any of the following reasons:

- a. Unruly disposition
- b. Chronic or acute health conditions as diagnosed by a licensed veterinarian.
- c. Failure to meet or exceed required pelvic area (150 cm2) or reproductive tract score (2) prior

to breeding.

d. Not pregnant at the end of the breeding season.

MARKETING OPTIONS

Consignors will have the option to market bred heifers through an associated sale or maintain ownership and use the heifer as a replacement in their own herd. Sale expenses will be divided equally among heifers marketed through an associated sale. Open heifers or heifers that are removed from the project prior to completion can be picked up by the consignor or marketed by the program administrators. Payment of prorated fees will be due prior to delivery or will be deducted from sales receipt if marketed by program administrators.

REPORTS

Consignors will be provided with an initial report 2-4 weeks after delivery, a mid-term report, and a final report after the heifers are sold or returned.

COST

Cost is \$875 per head. This does not include sale expenses. Actual cost will depend on price of supplemental feed and will be determined at entry deadline. Cost for heifers exiting the program early will be prorated based on actual time on site.

LIABILITY

Consignors are encouraged to purchase insurance on their heifers for the period of time they will be enrolled in the program (many farm insurance providers have policy riders for this type of arrangement). Any liability of the University to Consignors and third parties for any claims, damages, losses or costs arising out of or related to acts performed by the University under this agreement are governed by the Tennessee Claim Commission; Tennessee Code.