

# Heifer Development at Teague Diversified

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The goal of the heifer development program at Teague Diversified is to assist heifers to become low-cost cows that are well matched to their production and market environments. There are several important challenges to consider when developing heifers out of the ranch environment:

- Setting the proper hurdles to ensure only those heifers that meet the needs of the individual ranch become pregnant
- Getting as many of the proper heifers bred as early in the breeding season as possible
- Breeding the heifers to bulls that are well suited to the environment of the ranch, from both a labor and market standpoint
- Accomplishing these goals in a cost-effective manner

## Setting the Proper Hurdles

Not all heifers produced from a cowherd will develop into low-cost, problem-free females. Weeding out future problems as early as possible helps to ensure low-cost production.

After weaning, heifers are sent to our grow yard where they are individually weighed, body-condition scored, vaccinated for respiratory disease, evaluated for structural soundness, and poured for external parasites. Heifers are placed on feed for 30 to 60 days and fed to gain 1.5 lb per day. This period allows us to get heifers off to a good start and ensures supervision of all animals for health concerns.

After 30 to 60 days, heifers are moved to fields of aftermath feed for 90 to 120 days. On aftermath feed, heifers receive mineral and protein supplementation to ensure gain of .5 to 1 lb per day.

Heifers return to the feedlot 60 to 90 days before breeding, depending on a predetermined breeding date. Once back in the feedlot, heifers are reweighed and body-condition scored, evaluated for structural unsoundness, and placed on a ration to gain adequate weight to reach a target of 65% of their mature weight 30 days pre-breeding. At this time, initial culling decisions are made based on size, condition, and average daily gain. Heifers that come in off aftermath feed in good weight and condition are likely to be heifers that turn into easy-fleshing, low-cost cows.

Forty days pre-breeding, heifers are individually weighed and body-condition scored, vaccinated for respiratory and reproductive diseases, reproductive-tract scored, and measured for pelvic size. Heifers that are not in satisfactory body condition, are not cycling, or have inadequate pelvic size are culled at this time.

## Getting Heifers Pregnant

All heifers that have met the criteria placed on them are synchronized for breeding by using the MGA–prostaglandin program. Heifers are fed MGA for 14 days, taking care to ensure each heifer receives 1.0 mg of MGA per head per day. Adequate bunk space is provided so that all heifers can eat at the bunk simultaneously. Heifers are fed at the same time each day to ensure a consistent level of MGA in their systems; and heifers are limit-fed at 75% of their previous feed intake, split into two feedings with MGA concentrated in the first feeding to ensure rapid, complete consumption of the MGA by each heifer.

After MGA removal, heifers are monitored closely for heat to determine whether the indicated time of prostaglandin administration (17 days

following MGA removal) is correct for each individual group of heifers. Twenty-four hours after prostaglandin injection, heifers are monitored constantly during daylight hours for onset of estrus. Upon onset of standing heat, heifers are immediately sorted away from the group and put into a “hot” pen to ensure a dominant heifer is not controlling heats of less-dominant heifers in the synchronized group. Heifers are bred 12 hours after the onset of standing heat in a quiet facility designed especially for artificial insemination, then moved to a quiet after-breeding pen until they can go back to their home pens.

Heifers are monitored for standing heat until 72 hours post-prostaglandin injection; next the decision is made whether to mass-inseminate, or continue breeding by heat only. This decision is based on the number of heifers not yet observed to be in heat, semen cost, and date the heifers are to be returned to the ranch. If heifers are mass-inseminated, they are again monitored for standing heat until they are returned home and bred appropriately.

### **Selection of Bulls**

We assist ranches in selecting bulls for their heifers based on individual ranch goals. Bulls are generally selected based on calving ease, growth, and semen cost. Decisions about calving ease are based on constraints of heifer size, pelvic size, and labor availability at calving. Only bulls with high-accuracy EPDs are used. Production traits of bulls are evaluated by setting maximum constraints on birth weight and mature size, then selecting for maximum production within these constraints. Semen is purchased in volume to ensure low cost.

### **After Breeding**

We are completely flexible as to timing of the heifers’ return to the ranch, because we understand the costs associated with an extended feedyard

stay, particularly with the added cost of the grass growing at home. The majority of heifers return to their home ranch approximately 4 to 6 days post-breeding, because research indicates this is the safest time for transport to reduce embryonic loss without having to wait 30 to 40 days post-breeding.

Some groups of heifers do not return home immediately. Instead, they are monitored daily for heat and bred artificially for the entire breeding season. However, for most ranching scenarios, the costs associated with this program make it inappropriate and disadvantageous.

Teague Diversified also purchases and maintains a high-quality, yearling virgin bull battery selected stringently for use on heifers. We can offer a producer the alternative of putting heifers on our grass, exposed to our bull battery for a predetermined breeding season length. Heifers then can be pregnancy-tested and sent home as the producers desire.

### **Meeting the Challenges of Feedyard Heifer Development**

Development of heifers off-ranch can provide the most cost-effective solution to one of the most important projects a ranch undertakes to ensure profitability of its cowherd. In the wrong scenario, however, heifer development (particularly in the feedyard) can become costly and actually disadvantageous to the longevity of a profitable cow.

With today’s genetics for growth, very few heifers would fall out of a program if they were fed solely in the feedyard from weaning to breeding. Before we had large amounts of aftermath feed available to us and had to keep heifers in the feedyard the entire time, we found it extremely difficult to keep heifers from getting too big too early—and entirely too fat to go home for satisfactory gain on grass, even on bulky low-quality

feedstuffs. We hope that, in addressing this challenge and utilizing aftermath feed as we do, we not only eliminate heifers who get a “free ride” in

in the feedlot but recognize a heifer’s own ability to forage and gain on minimal supplementation, which is what we expect her to do as a profitable low-cost cow.

**NOTES:**