



# Livestock Management During Drought

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Droughts are common in Texas and in West Texas there's a better chance than not that a given drought will last for consecutive years. Planning is important because droughts are inevitable. Unfortunately, we usually can not predict when drought will occur, or how long a given one will last. Hence, flexibility in planning becomes crucial.

## **Defining the Problem**

The crux of the problem lies in balancing forage supply to the animal's dry matter demand, as well as their ever-changing diet quality requirements. An initial step should probably involve some sort of a forage inventory. How long that inventory will last will be determined by season (probability of useful precipitation) and animal demand (numbers). This process allows you to reconcile current stock numbers against what current (not average) carrying capacity is. Remember that an animal requires 2 to 3 per-

cent of its body weight per day in dry forage. This would be 20 to 30 lbs. per day for a 1000 lb. cow. The following, discusses some options that might help in matching livestock numbers to forage and supplement resources.

## **Flexibility is the Key**

Obviously, targeting animal demands to perfectly meet forage supply is not possible; but we have to try. This means being able to "shoot" well enough to hit a moving target. A tenet that might help in "aiming" is this: Run the fewest animals that will most effectively harvest the forage and protect the resource. Increasing numbers past this mark will increase risk and cost of gain, while decreasing net profit. Decreasing numbers past this mark protects the resource, but may not generate enough income to service fixed costs. Thus, any potential profit margin is narrowed.

To accomplish flexibility in stocking, consider using "stocker animals" as a percentage of average "year-in, year-out" carrying capacity. This allows "put and take" in both good and bad years. "Stocker" might be weanlings, purchased yearlings, a terminal-cross breeding herd, or old females; anything that is easily liquidated. In some types for stocker programs, seasonal swings between purchase and sale prices will probably require some luck, as well as skill, in marketing. Additionally, a good herd health program should be implemented for stocker animals, especially if they originate from off of the ranch.

### **Livestock Management Strategies**

Adequate body condition prior to parturition is critical for re-breeding success. Cows should have a minimum Body Condition Score (BCS) of 5, with no ribs visible. Ewes should have no backbone or transverse spinal process (between the ribs and pelvis) evident when they are handled with firm finger pressure. Remember, it is easier to maintain or improve condition on a non-lactating animal than it is to try and "feed-up" a thin animal that is also lactating.

When supplementing feedstuffs, sort the herd by production status, dry vs. lactating animals, growing replacement females, first-calf heifers, second-calf heifers, mature females. This will help target scarce supplemental feed dollars where they are most needed.

Controlled calving seasons will greatly aid these objectives, since during a short time span, supplemental nutrients can be "targeted" for cattle in a given stage of production. Furthermore, short calving seasons facilitate feeding a larger amount of supplement, but for a shorter period of time, when compared to long calving seasons.

Short calving seasons also bring ease of management to other drought strategies such as 48 hour calf removal. The practice of 48 hour calf removal has been used successfully to enhance breed-back on cows that are in marginal body condition. It will not work on truly thin cows and should not be used on cows with calves less than 40 days of age. Separate calves from dams for 48 hours and provide clean feed and water. This practice does not require much in the way of cash expenditures.

If cows, ewes, or nannies are in truly poor body condition, then early weaning with supplementation may be another option for improving body condition before the next breeding season. Success will depend on how well they gain after their offspring are weaned. Early weaning can be done with calves, lambs, and kids as young as 2 months of age. Provide clean water and creep feed, possibly with milk replacer included. Try and select a pen or trap where dust will be minimized. Use a planning budget including feed costs, projected weanling value and open vs pregnant female value.

### **Livestock Culling Strategies**

It is critical that de-stocking is done in a timely fashion. Total reductions in livestock numbers will be less severe if some culling begins early. Remaining forage can then be allocated to more valuable animals. Culling begins with the least valuable and/or higher risk animals: that is, those that will not raise an offspring in the current year, or that will not raise one next year, or that are at high risk for re-breeding failure. When selling cull cows, try and do so before they become truly thin and emaciated. There are usually price discounts for these kinds of cows (canner grade; BCS 1-3).

The following system may be useful for making systematic culling decisions:

- ◆ Dry females not raising offspring
- ◆ Cows palpated open
- ◆ Young replacement females (heifers, ewe-lambs, nannie-kids)
- ◆ Cows palpated short-bred
- ◆ Animals with structural or production defects
- ◆ Broken mouth animals with offspring at side
- ◆ Older animals with offspring at side
- ◆ Thin, quality females, with offspring at side
- ◆ Lastly, good condition, mid-aged females (5-8 year-old cows, 3-5 year-old ewes or nannies)

## **Summary**

Here is a general process some ranchers have found useful for dealing with drought in initial and worsening conditions: 1) Move yearlings or replacement heifers to lease grass, or sell; 2) wean calves at lighter weights; 3) supplement only as designated cash reserves will allow, since borrowing money to purchase feed only increases risk; 4) cull cows; 5) liquidate all cattle.

Again, it is critical that de-stocking is done in a timely fashion. Total reductions in livestock numbers will likely be less severe if some culling begins early.

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