



## Destocking Strategies During Drought

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Producers who have gone through forced liquidations appreciate the complexity of management decisions to be made and fully understand potential financial ramifications. The following discussion will probably be more valuable to producers who infrequently face major herd reductions or those who will face their first in the future. Ranchers with more experience in drought-prone areas can probably add as much or more to this discussion than they get from it.

A primary objective of partial herd reductions is to optimize animal performance of the remaining breeding herd relative to forage supply. There are four primary rules in destocking:

1. The sooner the problem is identified the sooner appropriate actions can be taken.
2. The sooner stocking adjustments are made the less severe the herd reductions will need to be.
3. Maximize available options and minimize long-term negative impacts on the forage resource.
4. During drought maximize the effective use of precipitation by having enough residual forage to capture and utilize limited precipitation and reduce evaporative loss.

### **Common Destocking Mistakes**

There are three common mistakes ranches make when faced with forced liquidation of the breeding herd:

1. Do nothing now in hopes rainfall will occur or additional grazing can be leased until conditions improve.
2. When the decision to reduce stocking is made, the most common strategy is to early wean calves and then hope conditions will improve and cows will not have to be sold.
3. The practice of retaining young cows (less than 4 year old females) at the expense of more productive middle-aged cows (4 to 7 years old), when culling is finally initiated.

Culling spring calves, under six months of age, will not appreciably decrease herd forage demand. Calves only consume 15% to 25% of the forage consumed by their dams. Light weight, early weaned calves have little value when marketed during widespread drought conditions. Use early weaning as a management tool to improve cow condition before calving, not to decrease forage demand.

As stated earlier, many producers try to "hang on" just a little longer in hopes adequate rainfall will occur or additional grazing for the cow herd can be found, so destocking will not be necessary. The longer decisions to decrease stock numbers are delayed the sooner the forage supply will be exhausted. Research in the Rolling Plains has shown that 60% to 80% of the annual forage production on native pastures occurs by the end of July. If the drought were to break and average precipitation occurred from July on, only 20% to 40% of average forage production could be expected. Ranchers who believe they are short on forage relative to livestock demand need to make immediate destocking decisions to balance forage demand and supply. Months of peak forage growth vary among regions of Texas. Contact the local NRCS office or the local county Extension Agent to find out when most forage growth is expected to occur and destock accordingly. "Wait and see" management will decrease both short and long term forage production and availability.

Forage plants have a minimum residue requirement in order to maintain adequate root and above ground growth, ensure plant health, and make effective use of limited precipitation. When the forage base is taken below a certain residue level, ability to recover is severely reduced. More rainfall is needed to sustain forage regrowth in overgrazed pastures when compared to those with adequate standing reserves. When limited amounts of rain are received and no leaf is available to absorb sunlight there will be inefficient utilization of the precipitation. By the time roots can absorb enough moisture to initiate leaf growth there is insufficient moisture left to sustain leaf and root growth. Successful grazing managers always leave sufficient root and leaf tissue for plants to respond to rainfall.

"Hanging on" also raises havoc with marketing options and sale value of cattle. Local markets decline in drought and during periods of high feed prices. Delayed destocking inevitably leads to lower cattle income. Sell cattle early to avoid the inevitable decline in market value.

A commercial ranch generally cannot afford to purchase hay to survive drought or overstocking. Even short term practices such as hay feeding are expensive and are seldom the best alternative. Decreasing forage demand is imperative during drought and requires the sale of breeding livestock! Producers should not cull cattle and use that income to buy feed or forage for the remaining cows. To do so, will cause a ranch to come out of a drought without any cows or money.

### **Destocking Strategies Under Drought Conditions**

The following discussion will focus on what cattle to cull first and why. The first culls should be any spring or summer calving cow that does not have a calf at side. Normal rates of pregnancy loss and calf death loss will result in 5% to 15% of the cow herd meeting these culling criteria. If a cow calved last fall, winter or this spring and lost a calf, sell regardless of age or pregnancy status. This is no time to wait for next year's income. This just accelerates recommended or normally practiced culling procedures. Also included in this first round of culling are replacement heifers that have been purchased or raised but not already in production. During drought, first calf heifers will wean the lightest calves and have the lowest rebreeding potential of any age class. Removing replacement heifers (at a 15% replacement rate), will result in a 7% to 10% reduction in stocking rate and forage demand. Supplemental feed requirements will also be reduced because replacement heifers have high nutrient requirements. At this stage of culling, herd size can be reduced 12% to 25% without impacting this year's weaned calf crop.

Next, cull short-bred fall calving cows and long-bred spring/summer calving cows. Few cows will meet these criteria unless the breeding season was extended last year due to dry conditions. In contrast, 5% to 15% of the cows may be identified as late-bred in herds with extended or year-round calving seasons. Palpation and identification of cows by stage of pregnancy will be required to use this culling practice. At this point, a 15% to 40% reduction in cow numbers can be attained without significantly impacting this year's weaned calf crop.

While cattle are penned, carefully inspect all aspects of the cow's anatomy and current production levels. This would include teeth, feet, legs, udders, and calf-at-side. Consult any production or herd records during this process to prevent overlooking cows with marginal production history. If records are not available, a visual assessment of calf-at-side will have to suffice. Be sure to individually identify cows if they are to be commingled after evaluation. Future labor cost can be reduced if cows are sorted into culling groups at this time. Sorted cattle can be moved and marketed without unnecessary stress on the remaining cows. Much of future culling will be based on these characteristics of production soundness.

Continued decline in forage conditions will require culling cows raising the current year's calf crop. While such drastic measures will affect this year's income, culling marginal cows will improve production capability in the remaining herd. Shipping cows with calves is difficult for most producers. Therefore, culling producing cows should be based on historic production records, the current calf-at-side, or soundness. The goal of this culling phase is to remove a sufficient number of cows to ensure adequate forage is available to carry the remaining herd at least through weaning. Short and broken mouth cows should be culled first because they will not have acceptable productivity under drought conditions. The next step would be to cull the genetic bottom of the herd until targeted levels of herd reduction are met. At this stage, the culling priority on 40% to 70% of the cow herd has been established.

Before culling deeper into the productive cow herd, determine whether the remaining cows are bred and consider whether to sell open cow-calf pairs before weaning. If calves weigh 400 pounds or greater consider weaning and selling the calf and open female separately. Calves weighing less than 400 pounds and their dams should be marketed as pairs.

At this point all the easy culling decisions have been made. The wholesale recommendation to wean calves and sell them has not been made. When a ranch is running out of grass, remember, the need is to eliminate cattle that consume the greatest amount of forage; that is the cow, not just the calf. Any calves weaned off marginal cows, that are heavy enough, might be considered for growing to a heavier weight before marketing. This alternative is feasible only when forage is available and/or feeding is cost-effective. Feed must be cheap for retaining ownership of calves to make economic sense. Careful budgeting is needed before the decision is made to retain calves. Above average rainfall received in some areas of the country may make summer grazing available for calves or cows. Exercise extreme caution when selecting and negotiating with unknown entities.

Another consideration is whether to cull the cow herd to the point that enough forage is available to grow calves to the heavier weights that are in demand in the feeder cattle market. Again, only careful budgeting under each ranches' economic and production constraints will identify the most appropriate management strategies.

If animal demands still exceed forage supply, cull cows with the lowest rebreeding potential. When forage supply is severely restricted, these cows will need to be moved no matter what their current production status is. Cows retained need to be able to rebreed for next year's calf crop and the following one as well. Cows that fall into this category are thin (BCS 3 and under) middle-aged cows and thin to moderate (BCS 4 and under) first and second calf cows. Both groups will have lower conception rates and wean lighter calves than cows in better body condition. This process will normally identify up to 10% of the remainder of herd. When cows were sorted on calf quality or pregnancy status, most cows with low rebreeding potential would have been identified for culling.

Further culling will require 8-year-old or older cows to be sold despite condition or current production status. Aged cows will be the first to decline in production potential in the future. Many producers will sell all older cows (6 and over) and keep all replacement heifers, first-, second- and third-calf cattle. By doing so, the most productive animals are sold and cows that will wean the lightest calves and have the lowest rebreeding potential are kept. Age culling will normally identify another 5% to 10% of the cow herd. Many cows in this category will have been culled in previous culling steps.

After the herd is culled to this point, the only cow culling option left is based on uniformity. Sell the smaller and larger end of the cows. Some culling on uniformity can be done a step or two earlier in this strategy outline, but other steps will identify cattle with lower production potential.

Beyond this point, destocking options are limited to selling remaining calves and liquidating the herd. By this time all that will be left is 4- to 7-year-old cows that represent only 10% to 30% of the original cow herd. Most producers will try to purchase feed to keep the nucleus of the breeding herd together. At times a lifetime of work and dedication to building a herd is at stake. From a purely economic standpoint purchasing forage to maintain the remaining cows cannot be justified. There are times when emotions overcome common sense and sound economics. There is nothing wrong with that phenomenon as long as the short term emotions do not jeopardize the long term survival of the ranching enterprise or the economic security of the family.

## **Summary**

Destocking decisions are never easy to make and are seldom made without substantial cost. Drought is an inevitable consequence of ranching in Texas. Management strategies need to include plans for drought so that ranch managers are never caught unprepared. Destocking management requires maximizing the options available to the operation through monitoring current and future forage supplies and animal demand. Early destocking adjustments will be less severe than later adjustments and will afford more marketing flexibility. Destocking strategies outlined earlier are designed to cull cows of least immediate economic benefit and maximize individual animal production in the remaining herd. Integrated financial and management plans are necessary to reduce negative impacts from destocking on cow equity and/or income tax liability. Decisions should not be based solely on equity and tax implications. Potential long-term impacts to the forage base may ultimately cost more than immediate tax liability and losses in equity.