

Maintaining Herd Productivity During Drought

Drought always presents unique and difficult management situations. Most farmers are caught somewhat by surprise by the size, scope and severity of drought. Getting off to a late start in managing through any drought would completely alter the normal approach to forage and nutritional management.

- Feeding through drought usually is not an economically viable option. For hay feeding to make economic sense, cattle prices would have to be high. In most situations, the most economical option is to reduce herd size so supplemental forage will not have to be purchased or fed.
- Reduce your herd size to what your resources will support. Critically evaluate the physical attributes of the individual cows. Consider culling those cows with bad physical attributes – udders, legs, eyes, etc. Cull the cows on their reproduction efficiency. Palpate the herd and cull the open cows. Look at your records and cull those cows who have not calved every 12 months or are extremes (too early or too late) in your breeding and calving season.
- Critically evaluate replacement heifers. Decide what is the minimum number of heifers needed next year and sell the rest.
- Evaluate the bulls. If they are getting old and need to be replaced, sell them now and plan on purchasing a better bull before next breeding season.

Environmental/Stress Management

Managing through a drought requires implementing practices that help reduce stress. This includes nutritional and environmental factors, which lead to increased energy requirements of cows and calves.

- Fencing off watering areas that become boggy will reduce energy required to maintain production. This only works when there are other sources of water available.
- Hauling water is an expense that cannot be supported for long. There is also the risk of

having weaker cows bog down and die before they are discovered. When water supplies are depleted it is time to liquidate. Minimize exposure to increased health risks by reducing access to stagnant watering areas.

- Allow cattle access to shade, normally a problem only on operations with a high percentage of “improved” pastures.
- Heifers and calves are not able to compete with mature cattle for pasture or supplemental feed. Drought feed is costly and it is important to feed only those animals that really need it. Segregating animals gives each group a better chance of getting needed feed supplies.
- Manage cows to maintain a body condition score (BCS) of 4 or above on mature cows and 5 on two- and three-year-old cows. Cull early and allow cows to maintain condition on standing forage. Thin cows are more susceptible to parasites.

Health Management

- Continue to protect cows and calves against clostridial diseases (blackleg). As cattle graze on shorter and shorter forage the chance of picking up soil-borne pathogens increases. Blackleg, leptospirosis and anthrax are just a few of the diseases that occur with greater frequency during drought.
- Check with veterinarians in the local area to get a history on diseases of concern.
- Chances of leptospirosis increases as watering areas dry up. Cattle and wildlife are forced into more concentrated areas and the chance of spread between species increases.
- Protect against the reproductive diseases – campylobacter fetus (vibrio), brucellosis, haemophilus somnus, trichomoniasis, IBR and BVD to name a few.

- Cattle at all ages are affected by a diversity of internal and external parasites. Parasites, both internal and external, need to be monitored and controlled as needed.
- Sell replacement heifers and any other cow that will not wean a calf in this production year. If a place can be found to hold these cattle economically there may be justification for retaining ownership.

Nutritional Management Strategies

- The key to successful forage management during drought is to cull and reduce the number of animals early enough and go deep enough to provide adequate forage for the remaining cow herd.
- Keep cows that are least susceptible to nutritional stress caused by poor forage conditions. This will be mid-aged cows between 4 and 10 years of age. At lower body condition scores (BCS 3 and 4) cows of this age will average 35 percent and 20 percent higher conception rates than first and second calf cows, respectively, as shown in Table 1.
- Decreased milking ability and lighter calves at weaning are reasons older cows have higher conception rates at any given BCS. If condition can be maintained on second-calf cows they can also be kept in the herd.
- Cull first-calf heifers next. There are two primary reasons. These two groups of cattle are normally the most expensive to develop and maintain and have the lowest production potential. When feed is expensive and cattle are cheap, cost can be reduced dramatically by moving these cattle.
- Always manage the forage base to allow adequate consumption and efficient use of marginal precipitation. Cows need to consume forage at the rate of 2 to 3 percent of their body weight to have a chance of maintaining acceptable production and reproductive performance. This will be a constant battle until the drought breaks, requiring constant monitoring and periodic adjusting to prevent decline in range condition and cow performance.
- Minerals will need to be provided to cattle during periods of drought. Do not stop supplementing phosphorus! Phosphorus has a major impact on reproductive performance.

Table 1. Body Condition Score at Palpation by Age Group (Parity)

Parity	BCS 3	BCS 4	BCS 5	BCS 6	BCS 7	All
1	40%	50%	70%	82%	83%	63%
2	43%	79%	89%	100%	100%	77%
3-10	71%	86%	92%	97%	95%	91%
> 10	100%	92%	97%	100%	100%	97%
All	54%	76%	89%	94%	94%	84%

(Wiske, Herd, 1995)

This information was adapted from a fact sheet written by Diego M. Gimenez, Jr., Extension Animal Scientist.