

Preparing for the Next Drought

Dennis Hancock

Extension Forage Specialist

The University of Georgia

We're far enough into the New Year that most folks are more focused on the upcoming year than what happened last year. But, there are some real lessons to be learned from the severe drought of 2006. It is important to understand that the impact of a drought depends on how your forage and grazing animals are managed before, as well as during a drought. So, developing and sticking to a drought management plan is critical for the next time we have a drought (since it is a case of when, not if).

From a forage management standpoint, there are several keys to preparing for and weathering a drought. First, we need to consider the part of our pastures and hay ground that we rarely see: the roots. Rooting depth and exploration is critical to a plant's ability to survive and recover from drought. The root development of Georgia's primary forage species is limited more by low soil pH and poor soil fertility than any other factor. The roots of most forage species are very sensitive to low soil pH and will not explore acidic soils. This problem is very problematic in our soils whose pH decreases (become more acidic) with soil depth. As a result, these plants are not able to tap into water stored deep in the soil profile. Phosphorus and potassium levels in the soil also are critical to good root development, water relations within the plant, and the storage of survival/recovery sugars in the root and crowns. Thus, pulling the occasional soil sample from your pasture and hayfields will allow you to maintain soil pH and fertility to promote better root exploration and root health.

The second key is to recognize drought stress early. On a recent farm visit, a producer told me his belief is that "we're always only five days from a drought." That is, unfortunately, fairly accurate. Keeping up with the 5-10 day rain forecast is just as important in pasture management as it is to making hay. If rains haven't been regular and it doesn't look like they're in the forecast, it is probably time to start lowering stocking rates by spreading your cattle over more acres. Overgrazing is difficult to avoid during a drought, but overgrazed forage is unable to store the sugars and proteins that it needs for regrowth once the rains finally start falling. In addition, overgrazed pastures are open to rapid weed germination and growth during those first few days after a good "drought-buster." If the drought gets really bad (like last year), it may be best to confine your cattle in a sacrifice area. This way, only a small portion of your pastures becomes damaged. Think ahead and identify a sacrifice area that may already be slated for renovation or is otherwise suitable to be sacrificed.

Thirdly, evaluate the cost-effectiveness of your feeding options. Hay can be an expensive way to carry your herd through a bad drought and drought hay often doesn't have the forage quality to meet the needs of the animals in your system. Supplementation with alternative feed stocks, such as corn gluten feed, soy hulls, cottonseed hulls, etc., can help stretch your hay stocks and improve the quality of the ration. This approach also allows the animals to hold their condition, which can help with pregnancy rates during this stressful period.

Of course, the fallback position is to consider depopulating by culling some animals. Even before you're in the middle of a bad drought, it's worth your time to develop a cull priority list. Though this may feel drastic, carrying open or old animals through a drought is unlikely to be profitable in the long run.

Rather than waiting to figure out how to survive a drought, it is best to plan on having one. Planning for a drought begins well in advance of a bad dry spell. Keep your soil pH and fertility in an optimal range for your dominant forage species. Keep up to date on the weather forecast and adjust your stocking rates according to "what is going to be there" rather than "what is there" so that you limit overgrazing. Consider your feeding options and have a plan in place to stretch your hay while maintaining body condition scores. Finally, follow a priority list when culling so that you focus your feed resources on animals that are good investments. For more information on developing a drought management plan, contact your local University of Georgia Cooperative Extension Service office or visit our website at www.georgiaforages.com.