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## **Drought Management to Get Through the Crisis**

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The entire state of North Carolina is under drought conditions, resulting in poor pasture conditions, reduced drinking water supplies, and a critical hay shortage. In past droughts we have moved a lot of hay into the state in a relief effort, but due to the regional nature of this drought, pasture conditions and hay supplies are also critical in surrounding states.

Getting through this kind of major drought takes planning. Pushing the problem into the back of your mind and hoping it will get better may lead to a need to liquidate a major portion of your herd this winter. A good plan will help you get to next year with the core of your herd intact and in good condition so you can grow back into a herd that is even better than the one you started with.

If you have not already done so, I encourage you to get with your livestock extension agent and develop a plan for the coming fall and winter period. Extension agents have the background, training, and support to help you develop a reasonable plan. Cooperative Extension is in the business of educating producers to help them do a better job with their livestock. Cooperative Extension also works closely with other agencies in state government and producer associations to deliver thoughtful, comprehensive programs. Your local Cooperative Extension office is your front door to many ongoing efforts to help you deal with this difficult situation, so give them a call and/or pay them a visit.

A drought management plan includes 1) Steps to limit the impact of short-term drought, 2) A strategy to deal with a severe ongoing drought, and 3) A strategy for recovery once the drought is over. This article will deal mostly with the second component, dealing with a severe, ongoing drought, because that is where we are now across most of the region.

The major items you need to think about now are; 1) culling strategies, 2) making the most of forages available, and 3) alternative methods of winter feeding.

### **Culling strategies**

The first thing you need to think about is making a prioritized list of cows so that culling can be an organized process.

- 1) Cows should be pregnancy tested, and any open cows or cows with major defects such as a bad temperament, chronic lameness, eye problems, or udder problems should be culled immediately.
- 2) Inspect the teeth of remaining cows so that you know the number of effective years each cow has left. Cows with broken teeth or badly worn teeth should be high on the culling list.
- 3) Cows that calve late and/or produce light calves should be next on the list to be culled. If you have cattle working coming up, make sure you check the cows closely for the above characteristics and assign them a “culling priority score”.

\*Or contact your local center of North Carolina Cooperative Extension.

Depending on the severity of the drought and your feed situation, you can use this culling list to sell cows in an orderly fashion. One decision you need to make is how many cows you will keep no matter what to rebuild in the future. Typically, this group includes the replacement heifers and the productive young to middle-aged cows free of any of the defects listed above.

It is important that you get the best price for your cows. Carrying a lot of cows to the sale barn is probably not the best approach, especially for young and middle-aged cows that are bred or that have a calf at side. Talk to a marketing specialist and make an effective marketing plan. There are strong markets for cows outside of the region, so make sure you consider that marketing option. Regardless of how you decide to sell the cows, do it before they lose body condition and a lot of their potential value.

## **Make the most of grown forages**

Grow as much of your own forage as you can this fall and make the best use of it possible. Fertilizer is expensive this year, but compared to the cost of feed, grass grown on your farm and harvested by the cows is still going to be your best value. Be prepared to fertilize stands of fescue or bermudagrass in early September, assuming moisture is available.

Fertilize fescue or bermudagrass with 60 to 75 pounds of nitrogen, plus any other nutrients called for by a soil test. Allow the grass to reach at least 8 inches in height before grazing, or allow it to stockpile for grazing later in the winter. For dry cows, either the fescue or bermudagrass will work with only a mineral supplement. For lactating cows, fescue will generally support them with only the mineral; on bermudagrass, you will likely need to feed a little bit of energy supplement.

If your fields are still bone dry come September 1, do not fertilize bermudagrass, but continue watching the weather and be prepared to fertilize fescue. If moisture comes about the first of October, it will still pay to fertilize fescue but reduce nitrogen to 50 pounds per acre. By October 15, it is too late to expect a good response from fescue, so save your fertilizer money for purchasing feed.

The above dates are for the central Piedmont of North Carolina. As you move south and east in the region use slightly later dates. In the north and west, use slightly earlier dates.

Plant winter annuals, such as rye, wheat, triticale, or ryegrass, either on prepared seedbed or overseeded on warm-season grass pastures. Fertilize these with about 30 pounds of nitrogen (plus other nutrients called for on a soil test) at or shortly after planting, and then fertilize with another 30 pounds per acre again once plants are about 4 to 6 inches tall. These winter annuals will provide some grazing during the late fall and early winter assuming growing conditions are favorable. They will definitely give you an early start to the grazing season next spring.

Once you start grazing the forages you do manage to grow, be as efficient as you can so you minimize waste. Portable fencing and strip-grazing will give you the best results and can stretch that forage out.

## **Alternative winter feeding methods**

A severe drought requires you to do things differently than normal. There is very little excess hay available either in North Carolina or in surrounding states, so your most economical source of feed is not going to be forage. Utilizing concentrates takes a different kind of feeding management. It is likely that our most economical sources of feed this winter will be crop residues, recycled poultry bedding, corn gluten feed, soybean hulls, wheat middlings, cotton gin trash, and other locally available feeds. As you make your feeding plan, do not automatically dismiss things you normally would not feed cows. However, be aware of the limitations of these alternative feeds before you start using them.

**Recycled poultry bedding** (formally called deep-stacked broiler litter) is an approved feed ingredient that has been fed to cows for decades. It is the most economical and widely available hay replacement in this region. Some producers will find the thought of feeding it distasteful and will look for other alternatives. However it can be successfully used. If you are near poultry producers or if you have poultry yourself, you should consider it. Feed 15 to 20 pounds along with some forage and concentrate

to make a balanced ration for brood cows. Stack recycled poultry bedding 6 to 8 feet deep, and allow it to heat for at least 3 weeks before feeding.

**Crop residues**, such as corn stalks, soybean residue, and peanut vines, are potential feeds. They are low in protein and energy so you will need supplementation, but they can be worked into a feeding program. Keep your eyes open for these resources, and get them into a bale as soon as possible after the primary crop is harvested because they will deteriorate each time a rain hits them.

Many soybeans have been damaged severely by the hot temperatures in early August, so there may be opportunities to cut them for a hay crop. This needs to be done before they start to drop leaves. Consider the chemicals used on any crop before the crop residue is harvested, and follow any restrictions. Use of chemicals that state explicitly on the label that the crop residues shall not be fed to livestock prohibits their use as a feed. Other chemicals have a waiting period. Always follow label restrictions. Be sure to read *Harvesting Soybeans for Hay? Consider Prior Use of Chemicals*.

**Alternative sources of concentrate, such as corn gluten feed, soybean hulls, and wheat middlings**, are often the most economical feeds during a drought. Cows can be fed high levels of these feeds, but they need to also be fed some forage to keep their digestive tract working. We recommend at least 4 pounds of hay daily for any animal fed concentrate. This makes planning even more important because you need to start feeding these concentrates long before you run out of hay.

**Other unusual feeds** are available in many areas. Wet ingredients like brewer's grains and vegetable and/or potato processing wastes are some examples. Look around your community and see what alternative feeds might be available. In general, wet feeds can't be moved far due to high transportation cost per unit of feed value.

If you decide you are going to feed alternative sources of concentrate you need to think about feeding management. You will need some kind of feed bunk to put the feed in. Cows cannot eat them effectively off the ground. Plastic barrels cut in half will work, as will large equipment tires with one sidewall cut out and plywood or other material bolted into the bottom. About 24 inches of bunk space will be needed for each cow. Unless you have a feeder wagon, you will need to bag and move concentrates by hand. That can be a lot of labor so make sure you will have help available.

As you plan to get through this critical situation, I will again encourage you to visit your local Cooperative Extension office and get help from your livestock agent. We will be providing them with planning tools and other information so they can help you in the planning process, and they can give you advice as you implement your plan.