

Planning for this winter

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The list of “surefire” ways to make it rain is fairly short. I have observed a strong correlation between rain and washing my car or truck, planning a picnic, or cutting hay. I hope to add to that list by writing an educational article on how to deal with drought, a hay shortage, and what is projected to be a poor winter grazing season. If it works and we get ample rainfall this fall – you are welcome. If it doesn’t – heed this advice, and you will weather the challenge better than most.

The Challenge

This summer will be remembered for its hit-or-miss rain showers. Most areas started with wet soils this spring, but that moisture was fleeting. Through the summer, some areas received rain just as they needed it; but the rain showers were more “miss” than “hit” in many areas. The northern counties of Georgia were especially hard hit. Many producers there have already fed nearly as much hay as they were able to make this year.

To make matters worse, the National Weather Service has observed warmer water in the western Pacific and has predicted a La Niña – the Southern Oscillation phase that is associated with drier-than-normal conditions in the fall and winter. Climatologists think that this year’s La Niña will be a weak one and will probably affect South Georgia and North Florida more than North Georgia. If these projections come true, extending our grazing season with stockpiled tall fescue or bermudagrass may be limited, and our winter grazing potential may also be challenged. Such conditions could place even more pressure on a short hay supply. So Georgia cattlemen need to take steps that will stretch what little hay they have and maximize the winter grazing resources they can grow.

Stockpiling Forage

In order to stockpile some tall fescue or bermudagrass for fall and winter feed, one needs enough rain to grow the forage. If it doesn’t rain, there obviously can be no forage to stockpile. However, a little water goes a long way in both of these forage species. If they get well-timed rain in early to mid-September, they are likely to provide 1,500-2,000 pounds of standing dry

matter (DM)/acre this fall. Keep a close eye on the forecast in early September. If there is a reasonable chance of rain over the course of a few days, consider stockpiling either tall fescue or bermudagrass, so that it can be grazed in November and December. Follow the stockpiling recommendations for tall fescue (<http://bit.ly/stockpileTF>) or bermudagrass (<http://bit.ly/stockpileBG>). Because of the risk of drought, hedge your bets by not putting on more than 50 pounds of N/acre to accumulate the stockpile. Also, be very cautious with toxic endophyte-infected tall fescue (e.g., KY-31) because it will often have high levels of alkaloids following drought stress.

Maximizing Winter Grazing When It’s Dry

One really needs to be ready to take full advantage of soil moisture when it is available during late September and October. One must balance the need to “wait on rain” with the fact that what little soil moisture is available at the appropriate calendar date for planting may be the most soil moisture one will have until it becomes too late to plant. Sometimes it is best to “dust it in” (plant in dry conditions) and take your chances. One thing is certain – it won’t grow if the seed is still in the bag. You might get lucky and have enough soil moisture or get just enough rain to get it to grow.

Be sure to plant as early as recommended this year. Planting early will allow more growth going into the winter. Planting into a conventionally prepared seedbed will also improve early forage production potential; but tillage will result in the loss of soil moisture. Tillage will also result in the loss of soil organic matter, which can help hold moisture. If tillage is necessary, consider using a roller to smooth the soil back down to conserve moisture, and incorporate some poultry litter or other manures to add back some soil organic matter.

The small grains (rye, triticale, wheat, and – to some degree – oats) tend to germinate relatively well in drier conditions. Though annual ryegrass is the most productive winter annual grass, it is sensitive to dry conditions at planting. If a small grain is used, be aware that early plantings are more likely to be hit by Hessian fly and the bird cherry

oat aphid (i.e., the vector for barley yellow dwarf virus). Our conditions are projected to be dry but warm. This increases the risk of insect injury. Consider treating the seed with an insecticide (see <http://bit.ly/ForagePests> for guidance on “Temporary Winter Grazing Insect Control”).

It will be crucial to have ample N applied within two weeks of planting. A shot of 40-60 pounds of N/acre at planting will result in 1,000-1,500 pounds of dry forage/acre before winter. Good early growth ensures that the stand can take full advantage of rainfall when it does come. Be careful to not graze the winter annuals too hard, too early. If hay supplies are extremely short and grazing has to start sooner than one would like, consider using limit grazing or timed grazing.

Stretch Your Hay

There are several strategies one can employ to stretch out hay reserves. One of the best is to use a good hay feeder or unrolling/feeding a small amount at a time. Using a bale feeder that meters out just enough for one day (Fig. 1) or a cone-style hay ring (Fig. 2) can keep hay feeding losses under 5 percent (Table 1). Unrolling round bales or flaking-off rectangular bales and feeding on the ground can also be done with relatively little waste; but it requires that the animals clean it up in less than eight hours to minimize loss.

Restricting access to hay feeding areas can be a useful tool in stretching limited hay supplies. Research out of the Midwest indicated that hay supplies could be stretched by 15 percent when mature cows have their access to hay restricted to eight hours. There was no loss of weight or body condition score unless they were restricted to less than 8 hours. Of course, restricting access to hay requires one to have excellent hay quality. Every bite has to count. So be sure to test the forage quality.

Buying Hay

When you haven't got enough, buying hay is often the most reasonable option. But don't buy problems. In addition to testing for quality, test for high nitrates. It is common in a drought year for hay to exceed 4,500 ppm nitrates, which can kill or induce abortions in some classes of beef cattle. Hay brought onto your farm can also carry invasive weeds. Even if the hay has been sprayed, the producer may have used ineffective herbicides. Similarly, the hay producer may have used herbicides that have a long residual life (e.g., Grazon P+D or GrazonNext, etc.). So it is important to ask your hay provider about their weed control practices. Occasionally, hay may also have poisonous weeds, toxic mold, or other anti-quality factors. So it is important to examine the hay lot to know what you are buying. If something is not right, it is better to look elsewhere.

Finally, know the weight of the bales you are buying. Bales should always be bought on a “per-ton” basis. If the hay seller claims that the bales weigh 1,000 pounds, ask them how they know. If the answer is, “because the baler’s manual says so,” assume that it is 10-20 percent less or get a true weight.


For more tips on how to prepare for a dry fall and winter, visit our website, www.georgiaforages.com. If you have additional forage management questions, visit or contact your local University of Georgia Cooperative Extension office by dialing 1-800-ASK-UGA1. 



Fig. 1. Bale feeders can meter out just enough hay for 1-day and distribute it across the field.



Fig. 2. Cone-style hay rings elevate the bales and minimize hay waste.

Method	Waste, %
<i>Enclosed Feeders</i>	
Cone	2 - 5
Ring	4 - 10
Trailer	10 - 13
Bale Cradle	15 - 20
<i>Fed on the Ground</i>	
Bale feeder	< 5
Unrolled and consumed in < 8 hrs	5 - 12
Unlimited Access over Multiple Days	> 40

Table 1. Range in feeding losses that are typical for different methods of feeding hay.