

Managing Forage Systems During Drought Georgia Cattleman, June 2001

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While early spring rainfall has been adequate in some parts of the state, precipitation is still below normal for the year and is far below normal when the past three years are considered. Because of the continued dry conditions, producers should consider several management options to help cope with the drought. In this article, I'll review a few of these options.

Managing pastures:

During drought it is still important to pay attention to plant nutrient requirements. Soil test, apply the needed fertilizer, and hope for rain. When rain falls, pastures should be well fed and ready to grow. Occasionally, thunderstorms will produce unexpected precipitation which can delay fertilizer application until much of the potential forage production has been lost. Applying nutrients in advance allows you to take full advantage of the moisture received.

Heavy grazing during drought can severely stress plants. Many tall fescue stands are thinner this year because of plant losses last summer. Stands will not improve until more rain falls or grazing pressure is reduced. To minimize pasture thinning, remove cattle from fescue during hot summer months. Fescue production is normally low during summer and a rest period allows plants to use energy reserves for summer survival and vigorous fall growth. Summer rest is especially important for endophyte-free fescue as grazing throughout dry summers can severely thin stands. If fescue pastures must be stocked during the summer, graze lightly and rotate through pastures if possible. Rotational grazing and a few timely rains will still allow crabgrass to be harvested and provide stressed fescue some rest. When forage is in short supply it is tempting to graze tall fescue pastures throughout the summer. However, heavy summer grazing during dry years will greatly decrease fall forage production and may severely injure the fescue stand.

Summer annuals are an excellent option in dry years. Pearl or browntop millet can be planted in clean tilled fields for summer grazing or hay production. Sorghum-sudan may also be planted, but requires slightly higher soil pH. Summer annuals can take advantage of summer showers and produce good forage yields. If you have a thin fescue stand that is in need of fall renovation, consider planting summer annuals in the pasture for some summer grazing or hay production. Fescue can then be replanted following millet or sorghum-sudan. Be aware that both millet and sorghum-sudan plants can accumulate nitrates during drought, so test hay before feeding and graze pastures cautiously. If summer precipitation limits or prevents hay production, winter annuals are the cattleman's next option. Overseeding small grains into bermudagrass or

bahiagrass sod is a fairly reliable method of producing late-winter and early-spring forage and decreasing hay needs. In early fall, no-till wheat or rye warm season grass sod to provide late winter grazing. Rye is the most cold hardy species and will produce the earliest spring forage, but grazing will still probably not be possible until February or early March. An alternative to wheat and rye is annual ryegrass. Broadcast 25 lb/ac of ryegrass seed on dormant sod or clean tilled land. Ryegrass has a high growth rate in late spring which, if properly managed, can be harvested for hay.

Annual clovers can also be broadcast or no-till seeded into warm season pastures in late fall to provide spring grazing and decrease hay requirements. Crimson clover provides the earliest spring grazing with AU Sunrise and AU Robin varieties producing forage earlier in the spring than Dixie. Arrowleaf clover will produce forage about two months longer than crimson clover and is also fairly drought tolerant.

Managing your supplements:

Alternative or non-traditional feed sources should be considered to help stretch hay and pasture forages. Some of these alternative feeds are already present on many farms, but are not typically grazed. An good example is kudzu. Kudzu has a high nutrient content, but is intolerant to close continuous grazing. Traditional forage supplies can be stretched by feeding inexpensive by-product feedstuffs like poultry litter. To take full advantage of the high nitrogen content of poultry litter it should be mixed in a 80% poultry litter and 20% corn ration. When feeding litter, cattle should be provided with at least five pounds of forage per head to maintain a healthy rumen.

Calves can be creep fed during the summer months to help stretch forage and increase weaning weights. Creep feeding is a management practice which, in normal years, is often unprofitable. Generally calves will respond to creep feeding better when forage is in short supply. This improved response in combination with low grain prices and high cattle prices may make creep feeding an economical option this summer.

Managing your animals:

Reduce stocking rate if you believe forage supply will be limited. This can be done in many ways, but almost all involve selling cattle! First, cull cows that are old, open, in poor condition, or that you generally dislike. This is the chance to get rid of the old cow with cancer eye or the young cow that enjoys chasing you over the fence from time to time. A veterinarian can palpate cows for pregnancy and check for health problems that warrant elimination from the herd. Cows that are not pregnant and have a calf greater than 4 months old are difficult to justify feeding expensive hay especially with high slaughter cow prices.

Because several of the past few years have been dry, you may have already culled your herd heavily. There is another option available to decrease forage requirements. Early weaning calves is a good way to reduce grazing pressure. Drought is a common occurrence in the arid western United States. Many beef producers wean calves early and ship them to the feedlot when forage is limited. Early weaning reduces grazing pressure in two ways: 1) 300-400 lb grazing animals are removed from the pasture and 2) cows stop lactating and eat less forage. Early weaning also increases cow body condition which should improve conception rates and make cows easier to maintain through the fall and winter months. High calf prices also make early weaning a management option. Managing for drought is complex and must take place throughout the calendar year. Be sure to graze properly in the summer and plan ahead for fall, winter and spring forage production so that feeding of expensive hay is minimized.