

Georgia Producers Face Long-Lasting Drought

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Drought is a common and expected occurrence in low rainfall climates. In many wheat-growing areas of the western United States and Canada, farmers expect crop failures in some years. To improve the potential for success, one-half of the land is fallowed and weeds are killed with a herbicide to collect soil moisture (around 40 percent of the annual rainfall) to supplement rainfall for the next crop year. Successful cattle producers in these dry areas carefully conserve available range forage and reduce livestock numbers during severe drought periods.

In high-rainfall areas such as the southeastern United States, drought is generally regarded as abnormal, and producers often plan as though each month's average amount of rainfall can be expected to arrive on time. However, if we look at long term weather records, we find that droughts have been a fairly regular phenomenon and occur in no predictable pattern. Climatologists are forecasting that global warming can be expected to create greater fluctuations in weather patterns than in the recent past. More droughts, storms, floods and summer heat are forecast for our region. This will make planning for adequate pasture and hay even more difficult.

The present situation (written in early June)

The last two years of drought and the present one have been difficult for cattle producers in our region. Winter and spring rainfall were low this year. Bermudagrass and bahiagrass growth was poor this spring, resulting in little or no surplus from pastures for haymaking. In most tall fescue areas, the production season was shortened. The result is hay feeding has been common in many areas of the lower southeastern United States at a time when forage supplies are normally at a peak. If the drought persists into mid or late summer, pastures will be grazed hard, and hay will be purchased for cattle.

Pastures on many farms are often overgrazed severely during a long drought. This will not hurt bahiagrass pastures but can temporarily reduce vigor

and stands of hybrid bermudagrass such as Coastal. Endophyte-free tall fescue stands are likely to be depleted by hard grazing but even endophyte-infected tall fescue stands may be thinned and need replanting.

What can be done?

If the drought persists, hay will be expensive to purchase and even low-quality hay will be in demand. Cow-calf producers need to look at other alternatives to maintain their herds.

(1) Cattle producers on western rangeland who commonly experience drought have long used the technique of reducing livestock numbers to conserve limited forage supplies. Weaning calves early and selling them reduces hay and pasture needs. Palpate cows and determine how many open cows are in the herd. Cow prices are good, and this would be an excellent time to sell these 'pets,' reducing hay needs instead of feeding open cows for another year.

(2) In areas where poultry litter is available, consider feeding it along with cheap corn. It is an excellent feed and a better deal than buying high-priced, low-quality hay.

(3) Browntop millet, pearl millet and sorghum-sudangrass are often planted on prepared land during dry years to get an emergency crop of hay. If a few rain showers fall, sometimes hay yields can be good if adequately fertilized. All of these drought-tolerant annual grasses tend to be nitrate accumulators when subjected to drought stress, so be sure to have hay tested for nitrate toxicity before you feed it or you may end up having dead cattle. If you buy hay bales of these grasses, be sure you have a nitrate test to check for toxicity. Another danger during drought is wild cherry trees in pastures or forest areas accessible to cattle. When subjected to drought stress or when limbs are cut or broken off the trees, leaves of this plant wilt and naturally occurring glycosides in the leaves form prussic acid which will quickly kill cattle when they consume even small quantities. Hungry cattle are more likely to eat the leaves of this tree. Leaves of sorghum, sorghum-sudangrass,

and johnsongrass can also cause prussic acid poisoning during drought. Pearl millet and browntop millet do not cause this problem.

(4) If rains come in September, cropland in the Coastal Plain can be planted with browntop millet or pearl millet for good autumn grazing prior to frost.

(5) The most dependable source of winter grazing is planting rye or wheat on prepared land. This can be planted from late September to early October in the Coastal Plain, and during mid-September to early October in the Piedmont and Limestone Valley. Rye is preferred as it will produce earlier forage and grow better in cold weather even though it matures earlier in spring than wheat. There will be a temptation to plant as early as possible, but disease problems can wipe out early planted stands. Treat seed with a fungicide, Vitavax 200 or Thiram, to reduce disease problems. This will not control damping-off (Pythium) disease. On early planted stands in south Georgia, apply only 40 lb. N/acre in November when grazing begins. Since rye or wheat pasture is very high quality and expensive as the sole forage for beef cows, it is cheaper to limit graze cattle for a few hours each day or two on winter annuals while maintaining them on nearby low-quality hay or pasture.

(6) Rye or wheat can be no-till planted on bermudagrass or bahiagrass sods from late October to mid-November but will generally provide little grazing before February.

(7) Annual ryegrass is a wonderful cool-season pasture plant and is easy and cheap to establish but will not provide any autumn grazing unless excellent rains come in October and November.

(8) Overgrazed tall fescue pastures will need September fertilization but may not provide much autumn grazing if stands are weakened or lost during the drought. Careful assessment will be needed as to whether no-till seeding of tall fescue in October or November is needed to thicken the stands. If tall fescue stands are poor, a good crop of winter weeds can be expected.