

## Managing Native Grass Forages

Patrick Keyser, Professor and Director, Center for Native Grasslands Management

### Pastures and Drought – Looking Forward

Many areas in the Mid-South are experiencing drought –with many in severe drought – that is worsening with no relief in sight. These dry conditions limit options for forage managers now, but it is worth looking forward and considering steps that can position you to better handle future droughts.

One thing that comes to mind is the importance of drought-hardy perennials. Annuals, warm- and cool-season, are valuable tools and will, no doubt, play a role in recovery strategies for many producers. But perennials are a more reliable option for providing forage than annuals. When spring rains are not timely, desirable summer annuals like crabgrass will not grow. Similarly, species like annual bluegrass or seeded stands of wheat and rye cannot develop in the fall without timely rain.

A second thing that comes to mind is that so many of our pastures in this region have taken a beating from successive droughts over the past decade. One result is that we no longer have vigorous, strong cool-season pastures. Tall fescue is our most drought-tolerant cool-season option, but many of our “fescue” pastures no longer have good stands. Instead, we have an abundance of annuals, low quality warm-season grasses, and weeds. Renovation of tall fescue pastures whenever the current drought breaks can help correct this problem.

Third, we need drought-hardy PERENNIAL warm-season forages. Without reliable, high quality summer pastures, we put much greater stress on our cool-season pastures by continued grazing through hot, dry summers. This is a time when cool-season pastures need to be rested. Providing a perennial warm-season complement to tall fescue will improve forage during this period. It will also allow for better management of both pastures and, in turn, improved sward condition.

Our most drought tolerant option for summer pasture are native grasses such as, switchgrass, indiagrass, and big bluestem. These plants have very deep root systems (10 or more feet deep) and can access water not available to other grasses. In addition, warm-season species have inherently greater drought tolerance than cool-season grasses because of their physiology. As you evaluate your pastures in coming months, consider converting those that have not been able to maintain reliable tall fescue during the repeated droughts of recent years. Such droughty sites are a good option for native warm-season grasses because of their adaption to such conditions.

Developing perennial pastures on a foundation of drought-hardy species for both the cool (tall fescue) and warm-season (natives) will put you in a stronger position to handle future droughts. A good target for the warm-season natives would be approximately 30% of your pasture base. Such a combination will allow each forage to produce when it is at its best and enable the other to remain vigorous.

For more information see *Establishing Native warm-season grasses for livestock forage in the Mid-South* (SP731-B) and *Grazing Native Warm-season Grasses in the Mid-South* (SP731-C) at [extension.tennessee.edu/publications/Pages/default.aspx](http://extension.tennessee.edu/publications/Pages/default.aspx).