

## A Fresh Look at Native Summer Forages

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The third week of July was busy and productive for the Virginia Forage and Grassland Council. In fact, after the two summer field days and 3 professional trainings on native summer forages, many peoples' eyes were opened to the true opportunities offered by these underutilized grasses.

Dr. Pat Keyser, invited speaker and Director of the Center for Native Grasslands Management, captured the attention of producers and professionals as he presented research and demonstration results from the past 10 years. <http://nativegrasses.utk.edu/index.htm>

He set the stage emphasizing that in 5 out of 10 years the Southeastern United States suffers significant heat and drought resulting in forage shortages and expensive hay feeding in the summer for many livestock producers. This combination of excessive heat and dry weather does not mix with cool-season perennial grass mixes that are grown in most of Virginia's pastures.

"Based on these facts, most livestock producers in the region have a true need for cost effective, productive summer forages. The good news is we have a very viable tool, but most producers know very little about it," explained Keyser.

The forages Dr. Keyser was talking about include switchgrass, big bluestem, little bluestem, Indiangrass and eastern gamagrass. Historically these grasses have been promoted as good wildlife habitat, but their value as a nutritious forage source has been overlooked, in part because of concerns about being difficult to establish and manage compared to cool-season forages.

Well, Dr. Keyser debunked these myths all across the state during that mid-July tour. For the skeptics in the audience, and there were plenty, he backed up his words with research results.

*Myth #1: It takes 2-3 years to get a good stand of native warm season grasses established.*

Debunked: "In Tennessee and Kentucky, we have an 80-95% success rate of establishing these grasses in one season." The failures are usually directly related to either drought or excessive rainfall after planting, leading to unusually heavy weed competition. To be successful, you must have excellent weed control, which begins by killing the existing sod the fall before planting. Early planting can also help ensure successful stands. Technically you can seed these grasses between mid-February and mid-July. Historically, agronomists have waited until the soils are warm and spring weeds can be controlled before planting. This puts you into June or July. Shifting 60 days earlier puts seed in the ground late March to early April. This still gives enough time to for an early spring herbicide application to kill the leftover fescue and winter weeds while also putting seed in the ground in time to benefit from spring rains. This results in late spring germination with a high probability of success. By the second year, you can expect a 2.0-2.5 ton per acre yield which is similar to most well-established fescue hay fields.



Dr. Pat Keyser explains that native summer forages offer tremendous production potential when you need it most.

*Myth # 2: Native warm season grasses don't have the nutritional quality to meet the needs of my livestock compared to what I get from cool-season grasses.*

Debunked: Any forage loses nutritional value if you let it get too mature before harvesting or grazing with livestock. Many of the producers and some researchers using these forages wait too long before turning livestock into these fields. Instead of waiting until cool-season grasses have played out to graze these grasses, turn the livestock in when the native grass is actively growing in mid-May. They are best grazed rotationally, keeping canopies between about 12 and 30" tall, depending on which species you are grazing. The old rule of thumb, "take half -leave half" certainly applies to these tall-growing species. These are deep rooted perennials and with 1-4 weeks recovery time (depending on time of summer), they are ready to graze again. Dr. Keyser's research shows average daily gains on the native warm season grasses ranging between 1.5 – 2.5 lbs. per day on weaned steers over a 112-day summer grazing season from late spring through summer. This is far superior to the 0.8 lb. per day gain shown on livestock grazing endophyte infected tall fescue during the same timeframe!

*Myth #3: These grasses are hard to manage and are not resilient when grazed.*

Debunked: "Native grass can take a beating, but they cannot take a persistent beating and abuse over time. We used to think only the top 10% of producers could manage these grasses, but from what I have seen and experienced myself in the last 10 years, I am convinced that the top 50% of livestock producers can successfully do this over the long term." Start grazing when the grasses are still vegetative, don't graze below 12 inches, and rotate through them to graze multiple times per summer once it has regrown. Don't leave the whole herd on this warm-season grass continuously as a sacrifice lot, no forage will sustain under those conditions.

*Myth #4: You can't graze it between April 15 and August 15<sup>th</sup> if you want it to serve as productive habitat for ground nesting birds like the Northern Bobwhite Quail.*

Debunked: Even by grazing these native grasses during the historically protected "nesting season" we see very little impact to the ground nesting birds. The tall structure of these bunch grasses usually results in 12-18" stubble height after grazing which is more than enough cover to provide concealment and protection for many of the ground-nesting species, even the Northern Bobwhite quail. If left un-grazed to preserve just for wildlife, we often see the stands get too thick for the birds to maneuver through resulting in an overall negative effect on wildlife. Keyser emphasized, "Grazing animals and ground nesting birds work together...quail are adapted to live in a world of herbivores."



Cattle grazing switchgrass on a hot July afternoon, while bobwhite quail called in the background.

The statewide tour visited farms in Charlotte, Madison and Augusta counties where these grasses had been planted and grazed between 10 and 25 years. The grass stands were healthy, the livestock were in great condition and the producers were happy. The host farmer testimonies to those in attendance and the ability to see the cattle grazing these forages in their prime, truly resonated with the crowd. Dr. Keyser's visit across Virginia sparked interest with producers to take a fresh look at these native summer forages for production first and wildlife benefits second. Producers left these pasture walks excited about the upcoming USDA program opportunities starting this fall for establishing native grasses on working lands.