

# NOBLE NEWS & VIEWS



**FORAGES**

## Hay Alternative: Are You Ready to Graze Bermudagrass in Winter?



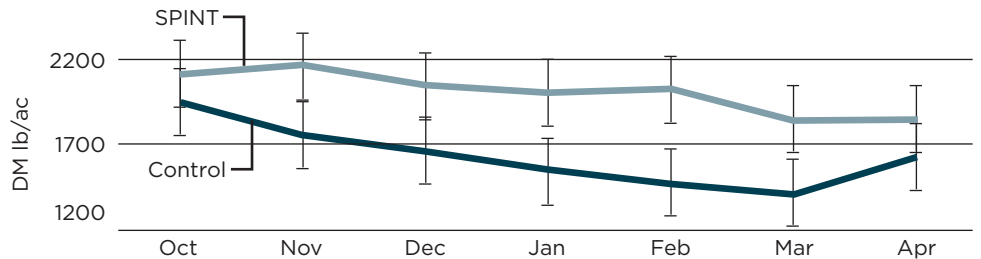
by James Rogers, Ph.D.,  
Noble Research Institute  
associate professor |  
jkrogers@noble.org

**F**rom a forage standpoint, 2020 has been a good year.

While some areas of the southern Great Plains have experienced below normal rainfall, south-central Oklahoma and north-central Texas have received average-to-above-average rainfall. Cooler temperatures have increased cool-season annual production. As we enter the summer months, it may be difficult to think about the fall and winter feeding period for beef cattle. However, it is not too early.

First, you should ask yourself a question: How do you think about fall and winter cow herd maintenance? Do you think about it as a feeding period or a grazing period? We know that the majority of the cost of maintaining a beef cow through a year is incurred with feed and hay during the winter months. Extending the grazing period is one way we can help reduce those costs.

The figure below is a comparison of forage availability between a bermudagrass stockpile plus bermudagrass interseeded with wheat system (SPINT) compared to the control, which was spring-fertilized bermudagrass. This data is summarized across the four years of our cow-calf study.



### THE RESEARCH

We recently completed a cow-calf study here at Noble with the objective to evaluate forage systems that reduce winter feeding. We took known practices of grazing season extension (bermudagrass stockpile and winter annuals interseeded into bermudagrass) and put them together into one system. This was compared to a control: bermudagrass was fertilized in the spring then hay and range cubes were fed through the fall and winter when pasture became short.

For the SPINT (bermudagrass interseeded with wheat system) system, we added nitrogen for stockpile accumulation (50 pounds nitrogen per acre) and for wheat growth (60 pounds nitrogen per acre) in the wheat interseed, which resulted in greater forage mass through the winter compared to our control. For future work, we would like to look at alternatives to nitrogen in these systems to further reduce input costs. We are currently in the process of fully analyzing the data and applying an economic analysis of the results. Once this is completed, we'll share additional results in a future article.

*Story continues on next page*

**STEPS TO CONSIDER BEFORE IMPLEMENTING THE APPROACH**

The grazing extension approach we used as part of our research could be broken apart depending upon your forage needs and equipment availability. We have developed the following series of “go or no go” steps that you can use when considering whether to implement a similar grazing extension season approach. A “go” on each step will not guarantee success but will reduce risks.

**START HERE**



**1. DO YOU HAVE AN APPROPRIATE STOCKING RATE FOR YOUR PROPERTY?**

**If yes,** proceed to number 2.

**If no,** determine the appropriate stocking rate for the property. If overstocked, hay feeding may be required to fill a forage deficit gap prior to stockpile or interseed forage availability.

**3. DO YOU HAVE AN APPROPRIATE AREA TO STOCKPILE OR INTERSEED?**

Is the area fenced? Do you have enough land area? The area should be well drained and have an available source of water. You will need an area that cattle can be excluded from to allow forage to accumulate for winter grazing. A rule of thumb for land area is 1 acre per cow for stockpile and 1 acre per cow for interseed. This means that during the deferment period of stockpile accumulation, you will need adequate forage available to carry your cattle.

**If yes,** proceed to number 4.

**If no,** wait one year in order to develop an area to implement the practice on.



**2. DO YOU HAVE ANY DEFICIENCIES IN YOUR SOIL THAT WOULD LIMIT A RESPONSE TO FERTILIZER?**

**If no,** proceed to number 3.

**If yes,** soil test now. This system, as we implemented it, requires nitrogen input. Soil test now in the areas you wish to stockpile or interseed. Testing now will allow you to plan for deficiency corrections or develop an alternative plan.



**4. DO YOU HAVE A GOOD SOLID STAND OF BERMUDAGRASS THAT WILL HOLD CATTLE UP DURING WET PERIODS?**

**If yes,** proceed to number 5.

**If no,** consider other areas to implement grazing season extension practices or delay one year to increase stand density. If the stand is thin, stockpile yield may be too low to produce many grazing days. In addition, if the stand is thin and open, cattle may bog down during wet periods.



**5. DO YOU HAVE THE EQUIPMENT FOR INTERSEEDING? INTERSEEDING A COOL-SEASON ANNUAL LIKE OATS OR WHEAT INTO BERMUDAGRASS SOD REQUIRES A NO-TILL DRILL AND TRACTOR.**

**If yes,** continue to number 6.

**If no,** consider other grazing season extension practices. Stockpile and interseeding are not linked together, and you can do one without the other. If equipment is not available to interseed, you can still stockpile. You may also consider adding annual ryegrass to your bermudagrass, which can be successfully established with broadcast seeding — eliminating the need for interseeding equipment. Annual ryegrass will not provide early grazing like wheat, triticale, cereal rye or oats, but it is very dependable in the spring and provides grazing prior to bermudagrass in the spring.

**6. DO YOU HAVE A BACKUP PLAN?**

**If yes,** proceed to number 7.

**If no,** stop. This is a “no go.” During our cow-calf study, we reduced the number of feeding days. We also reduced our hay and range cube feedings during the trial. In some years, we were able to push through without feeding hay on some replications. However, we always had hay and feed on hand for insurance if things did not go as planned. Weather is a big factor in the success of stockpiling and interseeding. If the weather does not cooperate, you need to have a backup plan.

**7. ARE YOU WILLING TO EXPERIMENT?**

**If yes,** then you are ready to give this a try. I advise folks to go slow at first to reduce risk. Have a good backup plan in place.

**If no,** this may not be for you right now. Take some time to observe others and ask questions.

As mentioned previously, there are many alternatives to what we did in our study to extend the grazing season. Stockpile only, stockpile plus annual ryegrass, tall fescue stockpile in place of bermudagrass in areas where tall fescue is adapted, and nativegrass as a standing hay are all examples. Develop a system that works for you. 🐮