Graze 300 Days a Year



Arkansas forage specialists offer five-step plan to 300-day grazing program.

by AUSTIN BLACK

Imagine feeding hay for only 65 days each year. Not only does the scenario save time and money, it's a lot easier to do than people think. Professors from the University of Arkansas Animal Science Department have developed a plan to graze 300 days a year.

John Jennings, University of Arkansas (UA) forage professor, began research with his team in 2008 to find ways producers could improve their bottom lines. With record-high production costs, they wanted to find a way to maximize the use of forage. The team discovered producers spend, on average, six to nine 40-hour weeks growing, harvesting and feeding hay. Their study shows producers can spend time managing forage and only need hay for about two months a year. This results in more efficient time management and big cost savings.

Putting their research into practice, the team conducted more than 150 on-farm demonstrations in Arkansas. Producers enrolled in the program saved more than \$300,000 as a group.

Jennings' program has five steps to manage current forage resources and maximize grazing opportunity.

"The key of a 300-day grazing program is working with producers on forage already on hand. In most cases, the forage is already there; it just needs better management," he says.

Step No. 1: Inventory your current forage base

This step helps producers determine what forage is present on their operation.

"Inventory is a real simple process," Jennings says. Producers can use a notepad or get an inventory sheet from the UA Extension to record what is in their pasture. This includes grass, legumes, weeds and bare ground.

Pick a section of pasture and walk across the section in a straight line, Jennings advises. "About every fifth step, look at the toe of your boot and see what's there. Mark it on the sheet." The total calculation is a percentage based on 100 data points in the pasture. For pastures of 10 acres or less, Jennings says to collect 50 data points. In this case, the tally for each item is multiplied by two to get a percentage. The practice gives producers a snapshot picture of their available forage. If a variety of forage is present, it may be necessary to take inventory at different times of the year.

"If you have a mixture of grasses and legumes, do it in the springtime and again in the summer," he says.

Doing inventory helps determine what forage is available and how to manage each pasture. It also helps producers plan grazing for each season.

"If you have fescue and lespedeza both in a field in the springtime, you won't see lespedeza until the summer," Jennings says. "Manage it one way in the springtime to get lespedeza to grow in the summer."

Step No. 2: Establish management practice to increase seasonal grazing

Before planting new forages, producers should manage to increase the use of current resources.

"If you're not doing rotational grazing, start, especially in a drought situation," Jennings says, noting managed grazing doesn't have to be intensive — any form of rotational grazing keeps grass growing longer. "It keeps forage available."

Stockpiling fescue or Bermuda grass is an easy way to extend grazing. Jennings says producers can use this method to graze Bermuda grass from mid-fall to mid-December.

"It's not growing then, but it's still good forage," he says. Cattle can graze fescue from December through February.

Extended grazing through the winter reduces the amount of hay needed. Combining stockpiled grass with proper hay storage and feeding reduces that amount even more. Jennings said hay stored on the ground soaks up water and starts to rot the longer it sits. A 20% loss of hay can result. His studies show hay that's covered or stored in barns has just less than 10% loss.

The best way to reduce waste when feeding hay is to use a ring or feeder and move it every time you feed.

"It helps protect the hay and spreads nutrients in that hay all over the field," Jennings says. In the trial demonstrations, he found a 4-foot (ft.) × 5-ft. round bale will have almost 100 pounds (lb.) of 17-17-17 nitrogen, phosphorus and potassium (NPK) value.

"That's a valuable resource. If we move that around, it can help improve fertility on poorer ground," he says.

If producers decide to unroll their hay, it's important to ensure cattle eat it quickly. Jennings found unrolling hay resulted in a 24% loss of hay due to waste. A solution to this method is to unroll a bale and stretch a hot wire down the middle of the hay pile. Jennings says cows reach under the hot wire to eat the hay but don't walk all over and waste it.

Unrolling bales in a different place each time spreads nutrients across the field. If weather is good, producers can unroll three or four bales at one time, then just move the wire when it's time to feed.

Feeding hay in different spots spreads nutrients across the pasture. However, those nutrients often aren't enough to maintain proper fertility for continued forage growth. Jennings says producers should fertilize specific pastures for each grazing season rather than all at once. This helps extend grazing without creating too much grass at one time. It's important to fertilize for fall stockpiling.

"Don't put it all out at once, but have a plan to manage forage growth for each season," Jennings says.

Step No. 3: Add complementary forages to fill in seasonal gaps

"Complementary forages add grazing rather than substitute for what we already have," Jennings says. The goal of a 300-day grazing program is to provide forage through as much of the fall and winter as possible. It's also ensuring grazing opportunity during summer droughts. Jennings says producers should consider warmseason grasses, forage brassicas and winter annuals.

"For fescue, producers may need to add Bermuda grass, crabgrass or lespedeza for summer pastures," Jennings says. Winter annual forages include wheat and ryegrass, among other small grains.

Forage brassicas should be planted no later than Sept. 15. The first week of September is the target date. They can provide grazing from late October into December. Stockpiled Bermuda grass can be grazed from mid-October through Christmas. If winter annuals are planted early, grazing can start in November.

The goal of complementary forages is to fill in the gaps and continue grazing as long as possible.

"You don't have to plant every field to all these—just enough for the particular season needed," Jennings advises. Producers may only need to extend grazing for a month in the fall with a few

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turnips, or they may need enough winter annuals for two months of grazing during the winter

"Look at the different seasons, and see what options fit and how," he says.

Step No. 4: Plan ahead for forage and grazing practices

Producers should start their 300-day grazing program by planning one season ahead. "Once they get experience, plan for a full year," Jennings says. Often, the timing and method doesn't change much year to year. The key is knowing when forages will grow, what forage gaps are present and having a plan beforehand.

"Planning for a pasture crop is just like planning a hay crop. Almost everyone can plan for a hay crop, but now they have to do it each season of the year," Jennings says. "One of the biggest things is changing the mind-set from cutting and baling hay to grazing as much as possible."

Step No. 5: Monitor and adjust as needed

Watch how pastures handle grazing and if adjustments are needed to maximize grazing opportunity.

"Keep simple notes on a calendar," Jennings said. Producers should note how many cows they grazed on stockpiled forages and for how long. This helps with planning and adjusting for next year. Recording forage type, pasture condition, number of days grazed and body condition score of cows in the winter will help future management.

"Keep track of what you did and the results so if it works out well you can repeat it," Jennings says. "If it didn't work out, understand why so you can manage differently."



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