

# Rotational Grazing Benefits Pastures

By Bonnie Coblenz

Rotational grazing may sound like a way to get a cow dizzy, but this method of forage management gives producers the highest efficiency from their pastures.

Stan Pace, agronomic crops agent in Wiggins with the Mississippi State University Extension Service, said using rotational grazing can increase efficiency to as much as 75 percent compared with conventional grazing's 30 percent to 35 percent efficiency.

"Cows are selective grazers, just like people. They'll eat butter beans and leave the beets," Pace said.

"When put in a selective forage situation, they'll overgraze some spots and undergraze others. Over time, you will have poor-quality grass and less total forage production."

Rotational grazing places cows on limited acreage for a short period of time before they are moved to the next area of limited acreage.

Pace set up a demonstration of rotational grazing in Hancock County. He divided a 25-acre field in half and then subdivided the 12.5 acres into seven paddocks of about 1.7 acres each. Paddocks were created using temporary electric fences.

"They're very easy to move and work with after the setup," Pace said.

Twenty-five mature cows are rotated through the seven paddocks, spending three or four days in each area, depending on the condition of the forage. The other half of the field has not been used. The cows graze the entire paddock and by day three or four are waiting at the gate to be moved into the next paddock.

Pace said moving the cattle every three or four days yields a 50 percent to 60 percent forage utilization efficiency.

"To increase efficiency to about 75 percent, I'd move them every day," he said.

Forage typically needs 15 to 25 days to rest after it has been grazed. In a selective grazing setting, cows will overgraze some areas and keep the forage an inch tall. This stresses the roots, which cannot recover quickly. Areas that are undergrazed become fibrous and the protein content drops. Cows stop grazing these areas and weeds develop.

James S. (Sammy) Eastridge owns the land Pace used to conduct the demonstration. A retired Army sergeant major, he and his wife now live in Hancock County. He has raised cattle for 25 years since his retirement.

"I think rotational grazing works very well if you don't make your paddocks too small and confine yourself to a daily operation like a dairy,"



Stan Pace

*Mr. and Mrs. Sammy Eastridge have increased the efficiency of their Hancock County cattle operation with rotational grazing.*

Eastridge said. “Moving the cattle every two to three days is all right, but if you make it too intensive, then it’s too confining.”

Eastridge said he feels this management technique has increased his efficiency, and he plans to keep using it. He has another 30-acre pasture he intends to divide into paddocks and put into a rotational grazing system as well.

Deciding how many acres to use, how many cattle to graze and how long between moves is not hard. Pace said a 1,000-pound cow needs about 20 pounds of forage a day, or 2 percent of its body weight. An average bermudagrass field produces 350 pounds of forage per inch height of grass per acre.

A field 10 inches deep in forage has about 3,500 pounds of forage, of which 7 inches or 2,400 pounds can be grazed without harming the grass. Since each cow eats 20 pounds of forage a day, 100 cows can graze for one day on that one acre.

“This system manages the forage instead of managing the cattle,” Pace said. “Moving them every day or every few days also allows the cattle producer to look at them regularly as they walk past while they are being moved.”

While it may sound like a lot of extra work, Pace said

rotational grazing is not difficult to manage once the fields are set up. The cows learn quickly and are ready to move when the field has been grazed. There is additional, one-time work erecting fences, but electric fences simplify this job.

“The biggest challenge is planning around a water system if there’s not a lot of easy water sources,” Pace said. “Funds are available through the National Resource Conservation Service and other organizations to help producers increase the number of water sources they have.”

Richard Watson, Mississippi Agricultural and Forestry Experiment Station forage specialist, said rotational grazing is a long-time, university-recommended practice, but one most producers do not use. Producers have grown accustomed to using stored feeds or processed feeds for livestock, but with recent high prices for these feeds, producers are once again looking at the benefits of rotational grazing.

“Rotational grazing is just a way of managing a resource better, and it improves both the production and quality of forage,” Watson said. “Rotating your animals through pastures can be as simple as dividing one paddock in half and moving the cattle backward and forward.”

Watson said this one change in management can increase productivity by 20 percent to 30 percent.

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