

Forage Wisdom

Veteran cattleman shares pasture management experience.

Story & photos by **Becky Mills**

After 35 years as an Angus breeder, 83-year-young Mitch Powell decided it was finally time to retire. But, there is no reason why his pasture management expertise should retire with him.

The Jamestown, Tenn., producer began keeping a close eye on his pastures when he started a commercial herd in 1961. At the time, he was still working full-time off the farm. When he started his registered herd in 1970, he made cattle his full-time career.

But 1990 was his breakthrough year for forage production. "My county [Extension] agent, George Kilgore, suggested rotational grazing. He wanted me to move my cattle every day. I told him, 'George, you're crazy. I don't want to move cattle every day.'"

Kilgore compromised and suggested rotating the herd once a week. Powell studied



► Rotational grazing gave a boost to the forages and the cattle in Mitch Powell's operation.

his mountain farm for a month, trying to decide on the layout of the paddocks and how to get water to each. He ended up with eight paddocks of about 12 acres each for his 80-cow herd.

Pasture design

University of Georgia forage specialist John Andrae says eight is a good number. "Typically, the more paddocks, the shorter the grazing period and the longer the rest period. There is a good amount of rest in an eight-paddock system."

He adds, "With eight paddocks and above, there is a small, incremental improvement, but big benefits can be gained by changing from one pasture to a minimum of five or six."

He also says many producers worry needlessly about trying to make their paddocks exactly the same size.

"Divide them by carrying capacity," Andrae recommends. Productive areas of your pasture should be divided into smaller paddocks, while areas that don't produce as much forage and can't carry as many cows need to be larger.

Andrae says watering systems are usually the limiting factor in a rotational grazing program. Powell was able to lay pipe and pump fresh water to a trough in each

paddock. He says this was one of the biggest improvements compared to his former system.

"I have a natural pond that I did use for water, but the cows would walk around it and get it muddy. Then they'd get mud on their udders. That caused a problem in the wintertime with calf scours. With my fresh-water system, I have not doctored a calf for bacterial scours," Powell says.

Powell designed his system so a common lane connects all the paddocks and runs to his corral and working facility. He says it made moving or gathering his cows a snap. "I'd just open a gate and holler," he notes.

Grazing guidelines

Although Powell used his county agent's guideline of moving cows to a fresh paddock every week, he adjusted the timing to fit forage growth. "I never wanted to graze it down too close," he remarks.

Deciding how close is too close can be a judgment call. Powell had a mixture of fescue, orchard grass and ladino clover. All three forages have different guidelines for grazing height at the start of the grazing period, as well as when cattle should be moved off the forages.

Andrae suggests going with an average when grazing this mixture of forages. "Start with 8 inches (in.). That is a reasonable target, even if it is on the lower end."

The same goes for the suggested heights for moving cattle off the paddocks. Fescue can be grazed down to 2 or 3 in., while orchard grass can be grazed down to 3-6 in. "I'd move at around 3 inches, but this may change during periods of rapid forage growth," Andrae says.

Powell also has some Dallis grass in the summer. Andrae says, "Rotate faster on warm-season grasses to maintain quality." However, he notes that warm-season grasses



► When Powell converted to a rotational grazing system, he piped fresh water to every paddock.

are also higher yielding than cool-season grasses, which may call for grazing-time adjustments.

Nutrient management

While Andrae says it may take several years in a rotational system before a producer starts seeing the benefits of increased forage production and efficiency of utilization, Powell says he saw immediate results. "The cows always had good, tender new-growth grass and clover available."

To provide both hay and standing forage in the winter, Powell excluded a 30-acre hay field from his normal rotation. After harvesting hay in the summer, he'd put his cows on the field for a few weeks, then take them off the first of September. He fertilized lightly with nitrogen (N), phosphorus (P) and potassium (K) according to soil test results, then left the field out of the rotation until the first part of December. He used polywire to divide the field into three or four paddocks and grazed the stockpiled grass.



► Powell managed his fertilization program around his clover.

"As a rule, I wouldn't have to feed any hay until after the first of the year," he says.

To get his regular paddocks ready for their spring, summer and fall rotations, Powell fertilized them according to soil tests taken in February. However, he adds, "Where I had clover, I'd usually only put down phosphorus and potassium to give the clover a better

chance to grow."

On his hay field, he waited to fertilize until April, right before the grass started its major growth spurt.

He also spot-sprayed for buttercup and thistle in April. "The weeds were easier to kill when they were tender," he says.

When the longtime steward officially retired in September 2005, he had the satisfaction of knowing he left the pastures in better shape than he found them. When the new owner took possession, the cattle had more forage than they could eat. That wasn't the case at the start.

"When I bought this old farm, I don't believe a rabbit could get through it," Powell says.



► Powell is traveling the retirement road now, but that doesn't stop him from sharing his grazing knowledge.



► Powell managed his Angus herd by himself until he retired.

Going it alone

When Mitch Powell made the decision to retire, it was because he wanted to spend more time traveling with his wife, Eileen, not because he couldn't do the work anymore.

Oh, there were times. "A 50-pound (lb.) bag of feed feels like a 100-pound bag," he jokes. But even after having a lung removed in 1992 and a pacemaker installed in 1993, the veteran cattleman looked after his registered herd of up to 80 Angus cows solo. The only exception was when he vaccinated and dewormed them.

"Rotational grazing helped," he says. "I could move cows from a larger pasture to a lane to a corral. I'd graze down one paddock until they were ready to move, then they were easy to get in the lane and in the corral.

"I had good working facilities, too," he says. "I had ample pens to work and cut them, and I had a covered chute. That really helped when I bred AI (artificial insemination)."

Rotational grazing, as well as stockpiling his winter forages, cut down on the amount of hay he had to feed in the winter. When he did feed, he'd find a fresh spot in the pasture and use an unroller to spread out the round bales.

Docile cattle also helped. "I'd always choose bulls with a good disposition, and if a cow looked like she could be wild, I'd send her to the stockyard. Most of the time I could spot a heifer that wasn't going to be a gentle animal," he notes.

He also favored bulls with low-birth-weight expected progeny differences (BW EPDs). "I haven't pulled a calf in three or four years," he says.

Powell did make a few concessions, but not until long after he reached Social Security status. Five years ago, he turned to natural service instead of AI breeding. He also sold his weanling bulls to another producer so he could develop and market them. At the same time, he started selling all of his replacement heifers and cut his herd back to around 50 cows. Still, the octogenarian continued to care for those cows until fall 2005.

"Farming is not just a job or a way to earn a living," he says. "It is a labor of love."