

Right on Time

Thinking ahead means a Georgia producer's pastures are just right.

Story & photos by **Becky Mills**, field editor

On a dry June day, Ted and Patsy Hughes drove their Mule UTV up to a wire gate, opened it and watched their cows and calves file through to the next pie-shaped paddock. In no time flat, the herd scattered out and the only sound was their munching on fresh ryegrass, fescue, Bermuda grass and clover.

The couple's story, at least the grazing part, started in 1968. While

Patsy raised their children, worked off the farm as a bookkeeper, and helped on the farm, Ted concentrated on building and fine-tuning their Comer, Ga., cattle operation.

As part of that, University of Georgia–Athens (UGA) extension forage agronomist Elvis Beaty helped plan Hughes' grazing system, featuring small paddocks and frequent rotations.



► Ted Hughes' Angus-cross cattle usually have access to fresh forage every two or three days. **Inset photo:** ► Comer, Ga., cattleman Ted Hughes was ahead of his time with small pastures and frequent rotations.

“He said I was 35 to 50 years ahead of my time,” Hughes, now 73, recalls.

“Dr. Beatty said we were going to have more people and less land. We had to figure out how to use the land without destroying it. He also said he wanted to use my land as a laboratory. That’s when we started a rotational-grazing program.”

For starters, Hughes took a 40-acre pasture in his original 93-acre farm and used poly wire to divide it in half.

Then he divided those halves in half again, and again.

“Water and shade were the big drawbacks. We only had one pond,” says Hughes.

“You have to have a plan,” he emphasizes. “Dr. Beatty told me to figure out what I wanted to do and work toward that plan.”

In 1980, he leased another 60 acres and built another pond. With the additional water source, he was able to build more paddocks, but this time he designed them in a wagon-wheel shape, patterned after a game preserve he read about in South Africa, so they could all reach the pond.

Now, the cattle are fenced away from the ponds and he has six water stations scattered across 140 acres of owned land and their 60-acre leased farm. One rectangular water trough supplies two paddocks for the bulls. The other water troughs supply anywhere from four to nine paddocks for a total of 28 paddocks.

The troughs, with the exception of the one in the bull paddocks, are in the center of a hub. The fences go out like spokes of a wheel. Each 75-foot (ft.) by 75-ft. hub has 100 tons of rock around and under the tank. The Natural Resources Conservation Service (NRCS) provided cost share and technical assistance to Hughes for the watering systems.

Ahead of his time or not, Hughes is sold on his system.

“It puts me in charge of the grass instead of the cattle,” he says.

Rotating benefits

With help from NRCS Grassland Conservationist Philip Brown, Hughes says, “I’ve learned so much about how to grow and harvest grass.” Now, he usually moves his 54 commercial cows every two and a half days, or when they have grazed the forages down to a height of 3 to 4 inches (in.).

“Dr. Beatty was grazing it down to 1 or 2 inches, but it was as new to him as it was to me,” Hughes explains. However, he also says, “The answer to almost every question is, ‘It depends.’ There are so many variables, including rainfall, cattle numbers and temperature.”

The frequent rotations also mean the nutrients in the cow manure are spread out more evenly, rather than concentrated around a water trough or shade.

“People ask me how often I drag my pastures,” says Hughes. “I don’t. I heard Dr. Bonsma (Jan Bonsma, a South African animal scientist) speak. He said if you see manure stacking up, you have a nutritional problem. Manure should splatter when it hits the ground.”

Hughes usually doesn’t even have to supplement his cows. They do get salt and minerals, fed from a mineral feeder mounted on a tire and moved with the Mule. At the suggestion of NRCS’s Brown, the mineral feeders are placed on the opposite end of the paddock from the water trough, so cows don’t congregate in either place. This way they graze more evenly over the entire paddock, spreading nutrients as they graze.

After he weans his calves, he supplements them during the preconditioning and backgrounding period with a commercial ration. Actual weaning weights for the spring-born calves are around 640 pounds (lb.) for the steers and 600 lb. for the heifers. He holds the

►Below: Patsy Hughes raised children, helped on the farm and ran a bookkeeping service.

calves until they reach around 850 lb. before he markets them. He also supplements his replacement heifers with around 1% of their body weight per head per day. Both the weaned calves and replacement heifers are on separate grazing hubs from the cows.

He does have hay custom-cut, around 200 rolls per year, from paddocks with extra forage.



“This past year I fed 70 to 80 rolls,” he says. His hay is usually ryegrass, fescue and clover.

Hughes uses broiler litter for fertilizer. He spreads an average of 150 tons a year on his pastures. While every paddock doesn’t get fertilized every year, he does apply it wherever he harvested hay. He goes by both soil tests and the condition of the paddocks to decide where to spread the rest.

“If you have clover, you don’t have to fertilize a lot,” he comments.

“Clover is good for the plants, the animals and the environment.”

University of Arkansas extension beef specialist Paul Beck agrees, especially on fescue pastures.

“It gives the cattle something else to eat that dilutes out the toxins,” he explains. Most of the original Kentucky 31 fescue contains toxins that can reduce gains and milking ability, increases heat stress, and, in extreme cases, can cause sloughing of hooves and tails.

However, Beck says clover does more than provide a dilution effect. In Arkansas trials, when they added clover to toxic fescue pastures, they got a half-a-pound increase in stocker average daily gains compared to gains on straight toxic-fescue pastures. However, he says when they interseeded clover in nontoxic fescue they still got



►Above: A concrete water trough is in the center of Ted Hughes’ grazing system.

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a half a pound advantage over straight nontoxic fescue.

“My feeling is the clover adds diet quality, more protein and energy,” he says.

When it comes to seeding, Hughes either broadcasts ryegrass seed in the fall on paddocks that have been grazed short, or he hires someone with a no-till drill to drill it in.

He also invests in around 150 lb. of clover seed per year, including Durana clover, a relatively new variety. In the fall and winter, he mounts a small seeder on the back of his Mule.

“If I come to a spot that needs seed, I turn on the seeder. It may not come up for two or three years, but the cows trample it in and spread it,” he says. He also uses a tractor-mounted seeder to broadcast the seed over larger areas.

“I have watched people right around here work themselves to death making hay in the summer and feeding it in the winter. If you spend a little more on fertilizer and seed, you can spend less on hay,” Hughes states.

Managing grass, managing cattle

His whole strategy appears to be working. His pregnancy rates for one round of artificial insemination (AI) are around 60%.

“I always want to do better than I did the year before,”

he says, commenting on his use of AI. “Every year when the calves get on the ground, I want to be able to say that’s the prettiest set of calves I’ve ever had.” Total pregnancy rates for his 75-day season average 85%-90%.

He adds, “I like to get 80% of my calves on the ground from the first estrus cycle. I don’t always do it, but I always want to.”

With his grazing system doing away with much of the cost of supplemental feed, he figures he manages a cow for an out-of-pocket cost of around \$175 per year.

If you’re interested in starting your own rotational-

grazing program, Hughes says, “It is the best thing I ever decided to do. Make a plan. Whatever you’re doing with your pastures, cut them in half. Then cut them in half again until you get them to a manageable size. Don’t get discouraged when your neighbors laugh at you for putting up so many electric fences.

“This is a process,” Hughes continues. “You need to do what works for you. Look at the lay of your land and access to shade and water. There is a way to make it work, but most of the time you have to figure it out yourself. If you see something on somebody else’s farm that you like, you don’t go home and try to build something just like it. Just try to incorporate it into your farm plan.”

This approach is why NRCS’s Brown says Hughes’ grazing system works.

“Ted thinks about it,” says Brown. “He plans out what he wants to do, his goals and objectives, then adapts as needed. That’s what makes a good grazing system.”

He also says the positive effects of almost 50 years of rotational grazing show in Hughes’ forages and soil.

“Whenever you control the frequency and intensity of grazing, you get more vigorous plants, more regrowth, more coverage of the soil and less erosion,” he says.

Brown adds, “The top growth of the plant is equal to the root mass. When the root mass decomposes, it becomes soil organic matter. Ted’s pastures are the only ones I know where you can turn a shovel full of soil and get enough earthworms to go fishing. That is a testament to the root system.”

As far as Beaty’s vision, Hughes says, “I feel like we met his goals. If he was here, I think he would say, ‘You done good.’”

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Editor’s Note: *Becky Mills is a freelance writer and cattlegirl from Cuthbert, Ga.*

Evolution to Angus

Ted Hughes’ grazing program has been a work in progress since he and his wife, Patsy, bought the farm. So has the cattle operation at their Chantilly Farm.

“I always wanted cattle,” says the Comer, Ga., cattleman.

“The first year we had our farm, 1966, we bought a Jersey milk cow. She had a heifer calf we named Rose Bud. We about wore the trailer out putting her on and off. We just couldn’t sell her.”

“Along the way, we used different breeds of bulls, but we settled on Angus. We only use Angus semen, and we clean up with Angus bulls. We have less calving problems with Angus bulls, the cows are better mamas and the calves sell better. The American Angus Association has a tremendous marketing program. Now all our cows are Angus crosses.”

