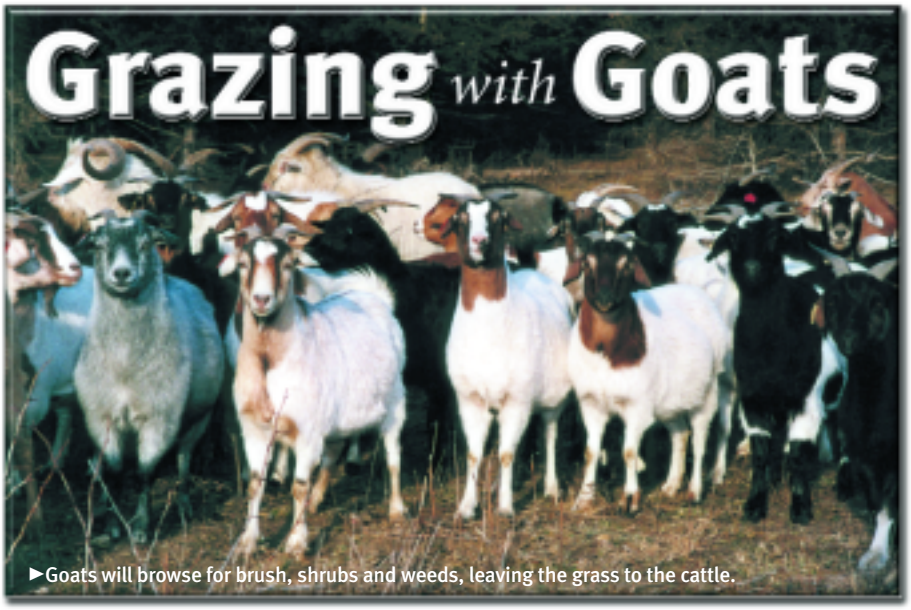
Grazing with Goats



►Goats will browse for brush, shrubs and weeds, leaving the grass to the cattle.

Companion grazing uses goats to control weeds, brush.

Story and photos by ***Stephanie Veldman***

Controlling pastures full of brush or noxious weeds can cause headaches for even the most diligent grazier. Using a companion-grazing system can help control the weeds, brush and shrubs while maximizing returns on pastures. Stocking pastures with species such as goats and cattle together will make more complete use of forages and increase returns per acre.

There are several advantages of companion grazing goats with cattle. Cattle prefer to eat grasses and generally leave brush and weeds alone. Goats are more likely to browse for brush, shrubs and weeds in the pasture, leaving the grass to the cattle.

A paper by John Walker that was printed in the *Sheep Research Journal,* says that across a wide range of studies, "multispecies grazing increased meat production by 24% compared to cattle-only grazing."

►To the right of the fence is the area that the goats graze on Pete Mitts' farm near Savannah, Mo. To the left of the fence is brush that has been left to grow wild. Mitts says that the goats are the most cost-effective tool he has found to control the brush.

Pete Mitts, a cattle producer from Savannah, Mo., has been using goats as a companion species for three years. He has brush problems on his hilly pastures. Clearing the brush with large machinery was just a short-term solution because the brush would grow back within a few years. After mechanically clearing the brush, Mitts brought the goats in to eat the regrowth, slowing the growth of the undesirable plants.

"They seem to be the most economical way I have found to control the brush and take care of the weeds," Mitts says. "First and foremost, though, I am in the cattle business. The goats are just a tool."

Advantages of goats

Mitts runs a commercial cow-calf operation with about 300 head of black and black-baldie cows. He has used a time-controlled grazing system for more than 15 years, dividing his herd into three or four groups.

About three years ago he brought the goats in to control weeds and brush in his pasture. He says that the goats have done a great job keeping the brush back and eating the weeds, and that they are the most cost-effective management tool he has found.

"It doesn't take long to get $50 to $60 out of them for brush control," Mitts says. He adds that using machinery like bulldozers and tree shearers would probably cost a couple hundred dollars per acre to clear the brush, with an additional $10-$15 per acre needed to treat the stumps.

Mitts runs about 300 head of Spanish meat goats on 700 acres where he has the most problem with brush. He says the Spanish goats, a composite goat, are very hardy and are not very big.

He bought his goats from a woman in Montana who put together a starter herd of more than 400 animals for him.

Mitts says that the added value he is now getting from his goats includes selling starter herds, mainly in groups of 25-50, to producers who want to start small. He also sells the goats at a sale barn. "You sell goats just like you sell feeder cattle," he adds. "They have been higher priced per pound than feeder cattle the last few years."

Don Rogers, a commercial cattle producer from Lebo, Kan., has been raising goats for almost seven years. He uses them to control sericea lespedeza, which is considered a noxious weed in Kansas because it is taking over the grasses on native rangelands.

"I am a believer in multi-species grazing, or companion grazing. My philosophy is find out what is there in your pasture, and then put something on it to eat it, rather than spray," Rogers says. "It is cheaper to run the animals on it than it is to spray."

Rogers says that his goats are Spanish goats that he buys in Texas. "They are what we call brush goats," he says. "A lot of the goats that come out of Texas are almost a cousin to a deer. They haven't seen many people, and they are pretty wild when I first get them."

The goats Rogers buys are relatively inexpensive — costing about $40-$50 per head. He says that if a producer is serious about raising good quality goats, the nannies will run anywhere from $60 to $80 per head.

"A lot of mine will be little billies that haven't been cut, or haven't been castrated, so they are cheaper. If you get into the breeding stock, it is just like cattle. Culled cows are cheaper by the head than breeding stock," Rogers says. "If you are going to get into it, you should probably buy younger, better quality stock."

He says that when he was deciding on which species to graze with his cattle, he chose goats rather than sheep because the goats will eat less grass.

"Cows prefer grass first, goats prefer grass last. Cows will eat a little brush, but goats prefer brush," Rogers says. "If you put sheep out there you have to reduce the stocking rate of your cattle. I wanted something that ate the least amount of grass."

Rogers also says that if sheep are used, they need to be sheared every year, which adds more work for the producer.

Managing goats

When managing goats, Rogers says that producers can't think the same way they usually do when managing cattle.

"Having goats around can be a pain," he says. "You can't handle the cattle the way you usually do because the goats are with them. It

is like having a dog underfoot all the time.

"Most of the time they aren't a bother, but if you need to work the cattle, you need a place to sort off the goats," he says.

Goats and cattle can graze together in the same pasture. Rogers says that the different species tend to ignore each other.

The goats are fed about ¼ to ½ pound (lb.) of shelled corn per head per day as supplement during the winter. The corn is fed on the ground in the pasture. "When I feed the shelled corn to the goats, sometimes the cows try to eat it. We try to string the shelled corn out and don't leave piles where the cows can easily eat it."

He also supplements hay, which the cattle will also eat. "You can feed your poorer quality hay to these goats. When we unroll the hay they will dive in and pick the weeds out. They would rather eat the weeds than the other stuff for some reason," Rogers says.

Rogers cautions to feed in a different area of the pasture every day to avoid tearing up the sod.

Mitts says that his goats don't need many extras. His cows graze cornstalks, and the goats eat the shelled corn on the ground that the cattle can't get to. He also keeps a salt block available.

Mitts says that he does occasionally bring his goats to a shelter when the weather gets too cold and windy in the winter.

Rogers also says that fencing is a problem because goats can get through barbed wire. He says that what works best on the open range is five-wire barbed-wire fence with a steel post every rod (5.5 yards). "We have been putting in a high-tensile barb wire right on the ground, and then putting in a 32-inch goat-wire fence to keep the goats in," he says.

"We've tried electric fence, but they give us too much trouble out here on the range. The cattle get into them, the deer get into them, they go dead and the goats are gone."

Producers on smaller acreages or with a smaller deer population may be able to use electric fencing. Mitts says he uses electric fencing and hasn't had much of a problem.

Mitts adds that one of the biggest problems he has found with raising goats is parasites. Intestinal worms can infect the goats if they are not dewormed regularly.

"If they get full of worms you have problems," Rogers says. "So far we are getting by with deworming twice a year, but we try not to crowd them. They won't graze so close to the ground that they are picking up worms out of the manure."

Guarding against predators

Both Mitts and Rogers use llamas as watchdogs to protect the goats from predators. Mitts says his llama works well, but he doesn't see many predators around his area. He had two guard dogs watching the goats when he first purchased them, but sent them with a starter herd that he sold. "I had to go out and feed the dogs every day. The llama eats what the goat eats."

►Llamas are used as watchdogs to protect the goats from predators. Mitts says he hasn't had much of a problem with predators, so he got rid of his two guard dogs and bought a llama. "The llama eats what the goats eat," he says.

Rogers keeps two llamas with his goats, but he doesn't put much stock in their watchdog abilities.

"I have a couple of old Brahman cows in there with the goats and sometimes I think they are a better guard than anything I've got," he adds. "I've always said that guard animals are kind of like hired men. You get good ones, you get bad ones and you get in-between. I think it depends on the individual animal, rather than what they are."

Biosecurity issues

Dan Morrical, professor of animal sciences at Iowa State University (ISU), says that beef producers who are using multispecies grazing, or who are looking at implementing a system, need to be careful. Being aware of the biosecurity issues of bringing a second species onto a farm or ranch is important.

"Johne's disease is one of the diseases that can be transferred from one species to another," Morrical says. "Generally it doesn't happen, but it is a possibility." AJ

Controlling noxious weeds

Sericea lespedeza, which is found all over the United States, is considered noxious in Kansas, where it has spread over rangelands, killing native plants. Goats have been found to graze several species of noxious weeds, helping to control weed populations and prevent them from spreading.

Don Rogers, a commercial cattle producer from Lebo, Kan., has been working with several organizations, including Langston University in Oklahoma, Kansas State University (K-State), the state of Kansas and the U.S. Department of Agriculture (USDA) to conduct studies using goats to control sericea lespedeza.

He started trying to control the sericea in 1988 with spray. "We weren't very happy with the results of the spray, and we were very unhappy with the cost," Rogers says, adding that it cost about $18 per acre. "The control, in my estimation, was spotty, and you have to spray every year."

He was at a field day when he first started thinking about using goats. "I was talking to Paul Ohlenbusch from Kansas State — he is originally from Texas — and he said 'I think those goats will eat that,'" Rogers says.

Cattle won't eat the sericea because of its high tannic acid content, but goats seem to love it.

The first project Rogers was involved with studied the effects on sericea lespedeza when goats grazed it. With the help of Don Patton, who is head of wildlife and parks for the state of Kansas in the Melvern Lake area, Rogers fenced off about 40 acres that was heavily infested with sericea lespedeza.

He says they started with 178 goats on the 40 acres, and every year they decrease the number, because they run out of feed for the goats. This year they are down to 68 goats.

James Mayo, associate professor of biological sciences at Emporia State University (ESU) in Kansas, is doing the plant studies on the sericea. Grazing the goats on the sericea for four years has reduced the number of stems per square meter from 80 to 30. The grass cover in this area has also increased from 37% to 57%.

"Normally what we've tried to do is put enough goats in there, so it doesn't go to seed, to control it," Rogers says.

New projects

Rogers is beginning a new study in 2003 with the USDA to determine the stocking rate for goats. They will be working with 320 acres of pasture.

"Goats are so new to our area that we really don't know — we are just flying by the seat of our pants," Rogers says. "What we are trying to do is [to perform] plant studies and plant counts, trying to determine the pounds of forage per acre on a given site.

"A goat is a ruminant and they are going to probably eat 3%-5% of their body weight every day."

The USDA has done its initial plant counts of the sericea lespedeza, and is getting ready to turn the goats out on the pasture.

The second part of the project that Rogers is currently helping K-State with is intensively stocking a pasture infested with sericea lespedeza with cattle early in the season. The tannins aren't as high in the plants then, and the cattle will graze some of them. After the cattle are removed, they will turn the goats out.

Rogers says, "What we are trying to do is find something to eat it the whole summer so it doesn't go to seed, on the theory that nothing lasts forever. And if it doesn't reproduce, it will eventually die."