

Claud D. Evans

Okemah, Oklahoma

Summary of Operation:

■ 150 to 250 Spanish goats for cashmere and meat

■ 240 acres pasture for grazing and hay

On-farm goat research

■Angus cattle

Problems Addressed

<u>Shear shock and overgrazing</u>. Variably cold and dry conditions in central Oklahoma present significant challenges to goat farmers raising their animals on open pasture. By combing his goats for cashmere fiber, Claud Evans has reduced the risk of injuries typically caused by animals huddling together for warmth after shearing. Evans' pasture management provides balanced nutrition, reduces his goats' risk of parasite infection and prevents overgrazing.

<u>Lowering labor requirements and input costs</u>. With his full-time work as a veterinarian and other offfarm responsibilities, Evans has limited time to devote to farm work. By implementing low-cost strategies that rely on natural systems rather than purchased inputs to maintain good herd health, and by improving his herd through selective breeding, Evans has been able to manage his operation successfully part time.

Background

Evans acquired his agricultural background through a variety of experiences, including working for corporate agribusiness, learning to raise Angus cattle in the late 1960s, and owning and managing his own veterinary clinic in Okfuskee County since 1983.

Evans' interest in raising goats was sparked 12 years ago by a presentation given at his local Chamber of Commerce about Langston University's Institute for Goat Research. The institute investigates nutrition requirements, low-input forage systems and animal selection for dairy, meat and cashmere-producing goats. The research appealed to Evans, who was particularly intrigued by the market potential for cashmere.

Ever since the first group of 160 Spanish doelins—young females—with genes for cashmere arrived on his farm, Evans' management style has involved careful scrutiny of his animals. His operation has focused on selective breeding, the use of preventive health care methods, and developing on-farm goat research projects.

The land Evans farms has been in his wife Elayne's family for three generations; Elayne's grandparents raised vegetable crops and her parents, Angus cattle.



Veterinarian, farmer and inventor Claud Evans designed a rake to efficiently harvest cashmere from goats.

Focal Point of Operation-

On-farm research and preventive health care Evans spent a year visiting ranches and talking with farmers in southwest Texas before purchasing his initial herd of cashmere-producing goats. Before long, Evans realized he would have to alter his management style to account for the cooler Oklahoma climate.

In Texas, ranchers sheared in January or February. "That first season [in Oklahoma]," Evans said, "it seemed like every time we'd go and shear, we'd get an ice storm."

Living on open pasture with minimal shelters, his goats would stack on top of each other trying to stay warm. The results were "disastrous," Evans says, and all too common in his area, since "most people don't have housing for their goats."

Evans sought advice from Langston University extension. They suggested that he stagger his shearing throughout the spring months. Applying their advice, Evans came up with the idea for his first goat research project. Rather than accepting the common wisdom that goats grow their coats from September 21 to December 21, Evans decided to research the timing of goat hair growth.

Evans sheared one side of each animal in February. In subsequent months, Evans sheared four-inch wide strips off the other side of the animal, keeping track of the amounts of cashmere fiber collected each time. He was able to confirm his hypothesis that some of his animals exhibited a longer period of hair growth than others. With the data, Evans also developed a "hair holding index" for each of his animals that he consults during selective breeding to improve the consistency, length and yield of cashmere fiber from his herd.

In 1998, Evans initiated another three-year study, this time with support from a SARE producer grant, Langston University, and Oklahoma State University Extension, that investigated combing and shearing techniques in obtaining cashmere fiber.

They sheared half of each goat and combed the other half. Over three years, Evans found that combing yielded 73 to 93 percent cashmere, by weight, while shearing yielded 15 to 21 percent cashmere. Evans concluded that the practice of combing minimizes an animal's risk of shear shock, because it removes the fine cashmere fibers while leaving intact guard hairs that protect goats against the weather. Compared to shearing, combing also yielded a much cleaner fiber, closer to the quality of market-ready cashmere, and eliminated "second cuts," short fibers of lesser value that are produced by repeat shearing of the same spot.

"We've switched over completely to combing our goats [to obtain cashmere fiber]" Evans says. Evans uses a comb he designed especially for his research, a "fiber rake," that enables him to efficiently comb his herd of goats.

Economics and Profitability

Evans has tried to minimize his farm costs. With careful monitoring of his pastures and herd size to prevent overgrazing, Evans has been able to limit supplemental feeding of his goats mostly to winter months.

Evans reserves 25 to 40 acres for grazing, with the remaining 200 acres used for hay and reserve pasture. While he has put in some cross fencing to create separate grazing areas, Evans has found that running guard dogs (Commodore-Great Pyrenees mix) is a cost-effective approach for protecting his herd, though predator birds, such as hawks and owls still present a major threat to his newborn and baby goats.

Evans contracts out his hay cutting and baling. The price, and the amount of hay he sells, varies from year to year, with supply and demand in his area swinging widely.

Evans sells 50 to 100 goats for meat yearly, at auction as well as to individual buyers, and usually receives about \$1 per pound, live weight. Average adult Cashmere males weigh about 140 pounds, and females 85 pounds. Meat sales cluster around holidays such as the 4th of July, Thanksgiving and Easter.

Producing clean cashmere fiber brings extra costs, yet higher potential net returns per animal than meat, Evans says. He obtains about 1/4 to 1/2 pound of cashmere fiber from each of his goats yearly. In the past, Evans sold his "raw" cashmere fiber for \$30 to \$40 per pound to facilities in Texas and Montana that "de-hair"— or separate guard hairs, vegetation and other material from the fine cashmere fibers to derive a "pure," ready-to-spin product. Finished cashmere fiber now sells for more than \$320 per pound retail.

Recently, Evans has retained his raw fiber to figure out how to engineer a "dehairing" unit to produce finished cashmere independently of the processing plants — and obtain better prices by selling directly to retailers. He expects to find markets for finished cashmere easily and hopes to tap local spinning guilds.

Environmental Benefits

Evans' SARE grant also supported his use of rotational pasturing to reduce internal parasite problems and reduce or avoid costly antiparasitic drugs and nutrition supplements. Evans has found that rotational pasturing is an effective part of a preventative health care regimen for his animals.

"Keeping animals well nourished is the most important thing you can do to maximize an animal's potential immunity," he says. Evans has tried to populate his pastures with clovers to provide high-nutrient forage material for his goats. While the goats seem to prefer to graze on vetch and patches of Lespedeza, each winter they eat the hay from the variety of red, yellow hop and arrow leaf clovers. Evans also places vitamin and mineral blocks out on his pastures to boost nutrition levels. Evans keeps his stocking rates as low as possible, watching to prevent his pastures from being overgrazed. He prefers his herd to browse on brush and leaves, as the infected larvae animals pick up off the pasture won't crawl higher than four to six inches.

Evans has noticed that his pastures seem to have improved with careful management over time. "I see a difference in the amount and kind of plants that grow," he says.

In many places, the goats have eliminated or reduced the weed populations so much they eliminated the need for chemical weed control. "We sometimes supplement our pastures with fertilizer, but the goats dropping their pellets as they graze have gradually reduced the need for that," Evans says.

Community and Quality of Life Benefits

Keeping the family farm has meant a lot to Evans and his family. He and his wife, Elayne, still keep a few Angus cattle on the farm for Elayne's father because he enjoys them so much.

In pursuing his on-farm goat research, Evans has formed beneficial relationships with other researchers and farmers involved at OSU, Langston University and elsewhere. Since completing the research, Evans has presented his results on combing all over his region and has answered countless phone inquiries.

With his veterinary work, tending his goats and participating as a member of the Board of Regents for five colleges as well as being on various committees, including a national advisory group to land grant universities and Southern SARE's administrative council, Evans is busy. "What I do with my farming fits into my lifestyle," he says.

Transition Advice

"Saying 'I can't' just is not an option as you

approach and face the challenges of life. You've got to figure out ways to make things happen," Evans says.

This kind of thinking is what drives Evans' efforts to make his farm more successful. Starting out by developing his herd through selective breeding, and learning over time how to ensure the good health of his animals, Evans now focuses on how to reduce costs and add value within his operation.

Having some flexibility to alter his operation has helped protect pastures and gotten him through the droughts. "You have to pay close attention to your numbers of animals. You may have to decrease your herd size, fence off more area for pasture, cut less hay, or provide supplemental feed, all of which will affect your costs," he says.

The Future

Evans plans to farm into his eventual retirement. In the meantime, he looks forward to finding time to engineer the de-hairing unit that will enable him to produce retail-ready cashmere fiber.

"I don't think you ever reach a maximum level with your production," Evans says. "While we have bred our goats to have improved hair growth and have good health, I think we can always look for ways to improve our situation."

Amy Kremen

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Editor's note: New in 2005