TSU farms, goats slowly recover from Nashville flood

Rescue efforts, bit of high land save goat research program

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The 2-month-old twins, brother and sister, curl up against each other in the shade of the barn, overlooking the fields where their mother drowned in the flood.

As visitors approach, they let out a startled bleat and gambol away on spindly legs. They're survivors, these baby goats — like everyone else on this university-run farm on the bend of the Cumberland River in Nashville.

"It was bad, but it could have been worse," said Richard Browning, professor of agricultural sciences at Tennessee State University, who nearly lost his own life trying to move the school's research herd to safety. He spent three hours clinging to a haystack, clutching two puppies he'd gone back to rescue from the May 2 flood.

The flood caused an estimated $500,000 in damage to equipment, property and livestock owned by TSU's School of Agriculture. The floodwaters killed livestock, inundated fields with tainted runoff that will take months to clean, swamped the Nashville farm and a second demonstration farm in Cheatham County, and derailed long-term research projects.

"It was horrible. I spent the entire year here taking care of these goats," said graduate student Athumani Mbaga.

Not only did the flood kill the animals in his care, it undercut the careful research he had been conducting — TSU plans to begin cross-breeding four species of goats, searching for species that can best withstand Tennessee's weather and resist threats like intestinal parasites.

The floodwaters were swimming with toxic waste that came to rest in the farm fields. Researchers who had planned to conduct outdoor experiments in organic farming methods are cultivating their plantings in the university greenhouses.

"We have 75 acres of land, and we were reduced to a half-acre and the water was still rising," Browning said. The highest point on the farm was a small hill that became an island, surrounded by floodwaters and populated by 140 unhappy goats and a dozen or so very nervous sheepdogs.

Major losses

The flood killed 105 of the 275 goats on the farm. Many of those that drowned were pregnant or had recently given birth. Twenty-nine of the 65 spring kids drowned.

"We lost a year," said Chandra Reddy, dean of TSU's School of Agriculture and Consumer Sciences, noting that some students will be unable to graduate on time as they work to rebuild their research.

Research program

For the past seven years, TSU has been breeding and studying goats, hoping to help Tennessee farmers breed hardier, healthier stock to meet a growing demand for goat meat. The flood wiped out 40 percent of the herd, and it might have taken them all if Browning and fellow researcher Mozello Byars hadn't waded into the rising waters to herd, coax and carry the goats to higher ground.

"We'll let the fields lie fallow. Let the microbes do their work," Browning said, a slight smile on his lips as he imagined the process of recovery.
their jobs," said professor Dharma Pitchay, a nutritionist who is working on sustainable urban agriculture projects. He walked through a greenhouse crowded with seedlings of bitter melon, calabash, bok choy, blueberries and other organic produce.

**Longterm strategy**

It will take at least a year to restore the herd, reclaim the fields, and get the research back on track. But life is slowly returning to normal. New kids have been born since the flood. The fields are green again, no longer covered with an oily layer of muddy sludge.

"We're still collecting data. We're still operating," Browning said. Goat farmers around the country, anxious for the results of the TSU research, have offered to help replace the breeding stock. "I think we're going to be in pretty good shape."

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With Tennessee State University Professor Richard Browning in the background, a baby goat orphaned in the flood pokes its head through some mesh near its shed at TSU on Tuesday. The goats were brought to this high area of the farm dubbed "goat island" during the high water. (DIPTI VAIDYA / THE TENNESSEAN)