AgriLife Experts Say Preserving Angora Goat Genetics Crucial to Breed's Survival

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SAN ANGELO - Preserving Angora goat genetics should not be just a concern, it should be an extremely urgent concern for those interested in the long-term survival of the breed, said a Texas AgriLife Research geneticist.

Dr. Dan Waldron of San Angelo said low Mohair profits, lack of labor, predation and the removal of rangeland from traditional agriculture have made Angoras a rare commodity in recent years. If numbers continue to decline, the viability of the industry will be questionable.

"With our rapidly changing world economic situation, a breed such as the Angora goat, that was once in demand and therefore had a substantial population, can quickly fall out of favor," Waldron said. "This can cause genetic diversity to be lost as ranches switch to a different breed or exit the industry."

The idea of saving seeds and other genetic plant material is not a new concept, but Waldron said many may not realize the same can be done for animals.

Waldron said the U.S. Department of Agriculture's National Animal Germplasm Program is interested in collecting animal germplasm (semen and embryos) to protect the breed against catastrophic loss.

Dr. Harvey Blackburn, the program's coordinator headquartered in Fort Collins, Colo., said the program was established in 1999 and to date has acquired more than a half million samples from approximately 150 livestock breeds. About 300 livestock producers have contributed these samples.

Dr. Frank Craddock, Texas AgriLife Extension Service sheep and goat specialist at San Angelo, said there is still a healthy productive Angora population with substantial genetic diversity in the U.S.

"But, given the dwindling numbers, something such as a weather or disease catastrophe could jeopardize the breed as we know it today," Craddock said.

Craddock said that "banking" plenty of Angora goat genetic material could also help breeders solve future problems with genetic strategies.

"In the future, we may discover the genetic basis for how the Angora goat can be productive on marginal rangelands where many animals could not survive," Craddock said. "We may discover

that Angora goats have a gene that makes them resistant to some as yet unknown disease. If we conserve the genetics, we will have more tools to solve problems with in the future."

If plenty of diverse genetic material is readily available, Waldron and Craddock agreed that problems can usually be fixed fairly quickly. Unfortunately, as is becoming the case with Angora goats, as populations drop, so does the genetic diversity.

Craddock said according to the U.S. Department of Agriculture's National Agricultural Statistics Service, Texas Angora goat numbers have dropped from a million head in 1997 to 120,000 head. The breed's registration numbers have also dropped from 3,148 in 1998 to 1,483 in 2008.

Even at current levels, Waldron said, it would take several decades to recreate a population with sufficient genetic diversity to be sustainable if an industry-wide catastrophe should occur. So taking steps to conserve the animals' genetics is prudent.

"This program is a lot like an insurance policy," he said. "It's something you hope you'll never need, but it's comforting to know you've got it if you do."

Waldron and Craddock encouraged all purebred Angora goat breeders, especially those with registered animals, to participate in the program, and they said the National Animal Germplasm Program is now actively seeking interested Angora goat producers.

"There is no charge to the breeder," Waldron said. "So that actually makes it better than most insurance policies since you'll never be expected to pay an annual premium."

Waldron said Blackburn is scheduled to speak on the effort during the annual Angora Goat Performance Test and Sale Field Day set for July 23 at the AgriLife Research Station at Sonora.

For more information on the germplasm project or the Angora Goat Performance Test, contact Waldron or Craddock at 325-653-4576.

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