

Use of Hair Sheep in Arkansas

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Introduction

The goat and sheep industry in Arkansas is undergoing significant changes. Many of the changes relate to the dramatic increase in the number of Boer goats over the past 10 to 15 years. Although Boer goats set the standard for muscle among the goat breeds and have received much publicity in recent years, many require more management than some other breeds of sheep and goats. However, surveys indicate that over 50 percent of goat producers view goats as easier to manage than cattle, and many producers think they require little management. Some of these producers become disenchanted with their goats, some sell the goats to other producers and some exit the industry by selling the goats for slaughter. Like all species and breeds of livestock, higher returns on investment can be obtained with greater management, but some producers wish to minimize time and management with their goat enterprise.

When producers are contented with goat production but want to put less time and management into the enterprise, many look for alternatives to the Boer breed. Some switch to other breeds of goats, such as the Kiko and Spanish or brush goats, while other producers switch to hair sheep. Most of these producers are familiar with the wool sheep breeds

but do not want to shear sheep. With the loss of the wool subsidies from the Wool Incentive Program, wool is often viewed as a negative as much as a positive. Sheep shearers are no longer routinely available, and the shearers who are available often charge as much or more than the wool is worth.

Hair sheep have a niche in the small ruminant enterprise because they have good resistance to internal parasites, are fairly heat tolerant and fit well in a year-round forage system. They also are very good breeders, breed almost throughout the year and are good mothers. Overall, they are easier to manage than wool sheep and Boer goats. However, they are not as large as wool breeds of sheep and may not be as pleasing in appearance to some owners as wool breeds. Also, sheep will graze grass better than goats but will not eat brush from a woody area as well as goats.



Katahdin ewe and lamb

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Hair Sheep Breeds

There are “unimproved” and “improved” hair sheep breeds. The strengths of pure hair sheep (Barbados Blackbelly and St. Croix) are reproductive efficiency, parasite resistance, tolerance to heat and lack of wool. Their weaknesses include their conformation, size and rate of gain.



Barbados Blackbelly with lamb



St. Croix ewe

(Compliments of Oklahoma State University)

The improved breeds of hair sheep (Katahdin and Dorper) are intermediate between pure hair sheep and woolled, meat-type breeds in reproduction, muscling and feed efficiency traits. Live weight of a mature ewe in good condition usually ranges from 120 to 160 pounds; a mature ram will weigh 180 to 250 pounds. Average birth weight of twins is about 8 pounds. As in all breeds, there is variation among breeds and in individuals within a breed. The improved breeds grow faster and produce meatier carcasses than the unimproved hair sheep breeds. This is especially true of the Dorper, which is more

heavily muscled than many of our meat-type, woolled breeds and has a growth rate comparable to woolled, sire breeds. Though they are still expected to shed their coats annually, there is considerable variation in coat types. The hair coats of the improved hair sheep breeds contain more woolly fibers, especially the Dorper.



Katahdin ewe with lambs

(Compliments of Katahdin Hair Sheep International)



Rear view of Katahdin sheep

(Compliments of Katahdin Hair Sheep International)



White Dorper sheep and ram kid

The Barbado resulted from crossing the Barbados Blackbelly with the Rambouillet and Mouflon to create an animal with trophy horns for hunting on Texas game ranches.



Barbado ewes and rams
(Compliments of Oklahoma State University)

History of the Breed

Most breeds of hair sheep originated in Africa. Some breeds originated in the dry desert lands of South Africa, and others are from the tropical areas in West Africa and were further developed in the Caribbean. The origins of the breeds determine the characteristics of the breed. A breed from South Africa, e.g., Dorper, offers the ability to survive under harsh, dry desert conditions. The breeds from the Caribbean and West Africa, e.g., Barbados Blackbelly and St. Croix, thrive under the rigors of heat, humidity and parasites. The Katahdin, which was developed in the United States, is somewhat unique in that it can thrive under diverse environmental conditions. Its heritage makes it suitable for hot, humid environments with significant parasite challenges. It was initially developed in Maine, where the northern climate makes it able to adapt to colder climates.



Katahdin sheep thrive under diverse environmental conditions. (Compliments of Katahdin Hair Sheep International)

The wild ancestors of today's domestic sheep breeds had long, coarse hair and a short, downy undercoat. Under domestication the coarse hair gradually became wool as the long hair disappeared. Wild sheep, such as the Mouflon (ancestor of the Barbado), do not have wooly coats.

Hair sheep are not a cross between breeds of goats and sheep. The primary difference between hair sheep and wooled sheep is the ratio of hair to wool fibers. Hair sheep have more hair fibers, and wooled sheep have more wool fibers. Hair sheep do not have to be sheared, although there are differences in shedding ability of individual animals. Some hair sheep will appear shaggy since not all of the hair will be shed. Hair sheep also do not need their tails docked, although some producers elect to dock their tails for "improved appearance." Most wooled sheep have their tails docked for improved health and sanitation.

Like the wool breeds of sheep, there is considerable diversity in hair sheep breeds. Much of the differences relate to their origin. Some breeds and animals have short, slick hair coats absent of wool, while others have thicker coats containing a mixture of hair and wool fibers that shed naturally every year. A desirable characteristic of hair sheep is that they tend to grow more wool fibers in cold climates, which allows them to adapt to different climates.

Hair sheep and wooled sheep can be crossed. Hair sheep have the same number of chromosomes as sheep with wool. Usually the offspring will have traits that are intermediate of the two parent breeds.

Advantages of Hair Sheep

There are advantages to raising hair sheep rather than sheep with wool and some of the more muscular breeds of goats. They tend to have a high level of reproduction, with a lambing rate of 150 to 200 percent. Additionally, they are good mothers who care for their young. Hair sheep tend to have a natural resistance to internal parasites and other pests. The resistance developed as they survived in the wilds of Africa. There too they developed a greater tolerance for heat and humidity than some of the traditional sheep and goat breeds.

Hair sheep lambs have a good livability rate. The growth rates of the lambs will not be as great as breeds of wooled sheep since they are not as large. Some individuals and breeds will have better growth

rates than others, which makes it important to select foundation animals suitable to the management system.

Hair sheep, like wooled sheep and goats, can be used for multi-species grazing with cattle, horses and other small ruminants. They are intermediate between goats and wooled sheep in clearing brush and weeds from a field.

Disadvantages of Hair Sheep

Hair sheep breeds are not as suitable for the club lamb market as more stylish breeds of sheep. Some breeds of hair sheep can be heavily muscled but usually are not “pretty” enough to be competitive in strong market lamb shows. They are not as large as most wooled sheep and will not produce as much meat per ewe. Hair sheep do not tend to do as well in cold weather as wooled sheep. They are bred for hot, humid climates, although they can be sustained in colder climates. Although beauty varies with the eye of the individual, many view hair sheep as not as attractive as conventional wool-breed sheep.

Many of the hair sheep breeds tend to finish more like goats, in that they deposit fat around their internal organs before they deposit external fat. This type of fattening suggests they should probably not be

full-fed on a high-energy diet in a feedlot, although more research is needed in this area. Some think hair sheep need to be finished more slowly on a lower-energy, higher-roughage diet.

Summary

Hair sheep may be suitable for many small ruminant producers in Arkansas or for producers who wish to graze small ruminants with another species. If producers are considering hair sheep for a commercial enterprise, they should get as much information about them as possible. Talk with your local county extension agent and producers who have hair sheep in your area. Review information on www.sheepandgoat.com.

Hair sheep are easier to manage than some other types of sheep and goats, in part, because they have increased resistance to internal parasites, are fairly heat tolerant and fit well in year-round forage systems. They also are very good breeders, breed throughout the year and are good mothers. They can be used in multi-species grazing. However, they are not as large as wooled sheep and are not as suitable for a market show project. As with all livestock, hair sheep require adequate management or they may provide negative returns on the investment.

Portions of this publication were adapted from *Sheep 101: Info: What Are Hair Sheep?* by Susan Schoenian and is available on the Maryland Small Ruminant Page at www.sheepandgoat.com.

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