



How to Raise Nubian Goats for Milk

The most popular of the dairy goat breeds, the floppy-eared Nubian is friendly and personable.

The versatile Nubian goat ranks as one of the most difficult animals to photograph—unless you're shooting for an extreme close-up of its cute nose. Walk into a well-socialized goat herd's pasture and you're immediately mobbed by inquisitive, friendly, floppy-eared creatures, all vying to be the first to mouth your camera lens or untie your shoelaces. One deep look into those eyes with their horizontal pupils and you know you're dealing with an intelligent and personable member of the hobby farm.

Origins of Nubian Goats

Although the breed derives its name from a desert region in North Africa, the present-day Nubian goat developed in Britain through crossings of English goats with exotic bucks that came off British ships returning from Africa, India and the Middle East. Imported into the United States during the early 1900s, the Nubian goat has since become the most popular of the dairy-goat breeds. In 2002, the American Dairy Goat Association, which registers some 40,000 goats annually, had already registered nearly 16,000 Nubian goats through the third quarter. It's no wonder ... who could resist such a handsome and affectionate animal, one that can devour blackberries, grace a show ring, be trained to pack or pull a cart, and—last but not least—serve as a source of fresh dairy products?

With its Roman-nosed profile and pendulous, Bassett Hound ears, the Nubian is easily distinguished from the other five dairy-goat breeds officially recognized by the American Dairy Goat Association. Its short, glossy fur comes in a variety of solid colors and patterns, from nearly pure black or brown to white-spotted. Although outstripped as the top milk producer by the Saanen goat breed, this breed produces a creamy milk with a butterfat content of between 4 and 5 percent—ideal for making cheese, yogurt and soap.

"They're often referred to as the 'Jersey' of the dairy-goat world," says Susy Carpenter, who raises Nubians and produces goat-milk soap at Narrow Way Farms in Chehalis, Wash. "We've tried milk from individual goats of other breeds, and find we like the Nubian milk best. The relatively high butterfat content contributes to the delicious taste."

Common goat lore paints the breed as headstrong, but Carpenter has found her Nubians to be friendly and easy to train; their medium size and hardiness make them excellent family-dairy animals. Even her children, the youngest who's 9, can handle and milk the goats. Like many Nubian-goat enthusiasts, Carpenter enjoys their fun personalities, the varied colors that add even more excitement to an already eventful kidding season and—of course—those adorable ears.

A few caveats to keep in mind: Although not extremely loud, Nubians can be "talkative," especially during breeding season and at weaning time. Those undoubtedly cute ears can be a liability during frigid winters, when they hang into water troughs and freeze. Finally, like most goats, Nubians are natural escape artists.

"Goats are smart, curious and destructive, so fencing should be strong," says Michelle Stone, an award-winning cheese maker who raises dairy goats at Drinking Swamp Farm in Haynesville, Va. "However, a goat will almost always find a way out, no matter what type of fencing is used!"

Dairy-goat Husbandry

Given proper care, adequate space and a balanced ration, Nubian goats tend to be healthy animals. Dairy goats thrive on quality alfalfa or clover hay and concentrated goat feed with a relatively high protein content. (Check out feeds formulated especially for dairy goats.) They must also receive a loose mineral/salt mix and have fresh water available at all times. Consult your veterinarian to find out if your goats need a selenium supplement in parts of the country where this mineral is deficient.

Dairy goats require less space than other hooved livestock, another plus for the small-scale farmer. Large expanses of lush grass pasture aren't essential, as these nomadic animals prefer browsing on a variety of plants and woody shrubs, like blackberry and salal, rather than grazing. Keep in mind, however, that certain plants, such as daisies and chamomile, can give their milk a bad taste; that means managing goat enclosures to eliminate milk-tainting plants, along with toxic weeds, like tansy ragwort.

Despite their hardiness, goats are susceptible to chilling and pneumonia and need adequate protection from the elements in the form of clean, dry, ventilated and well-bedded housing—whether it's a simple shelter or more elaborate barn structure. Many goat owners clean their animals' enclosures daily, while others adopt a deep-litter system, regularly



layering fresh straw over the old substrate and manure, which is then mucked out during the summer. In winter, this underlying manure pack creates heat and can help prevent barn flooding during rainy periods.

In comparison to other forms of livestock, goats are relatively easy to care for, maintains Sue MacDougall, a Nubian goat breeder who runs Alchemy Acres in Clinton, Tenn.

“I house mine in a three-sided shed that doesn’t face into the prevailing winds,” she says. “They have access to fresh orchard grass, shade and underbrush. Every goat gets his or her hooves trimmed monthly and here in the moist, hot South, they’re dewormed monthly.”

If you have hard, stony pastures or your acrobatic goats have access to climbing rocks, you can trim hooves less often, though they should still be checked regularly. Deworming frequency will also depend on where you live, along with how many animals occupy enclosures, whether you practice pasture rotation and other factors. Yearly vaccinations, which many goat owners learn to perform themselves, will help prevent diseases like tetanus and enterotoxemia. For advice on deworming and vaccinations, contact a veterinarian experienced with goats in your area.

Finally, you’ll need sturdy, secure fencing, such as woven wire, chainlink or electric “New Zealand”-style fence (minimum of 4 feet high). to contain these mischievous animals and help keep predators and wandering dogs out. For safety’s sake, avoid the dangerous practice of tethering unless you can closely supervise your goat.

Breeding and Freshening Nubian Goats

A female dairy goat, or doe, generally comes into season during late summer through early winter, though the Nubians’ season tends to be longer. Breeding is a brief affair, accomplished during the day or so when a doe is in standing heat and receptive to a buck’s attentions. Keep in mind that bucks require separate quarters and can be tougher on fences than the smaller does. They also emit a powerful odor during the breeding season that attracts female goats but tends to repel humans, so you won’t want to put the buck’s enclosure close to your house or milking area. If you own only a doe or two, housing a buck on the premises isn’t a necessity: for a fee, you can often shuttle your doe to a local breeder who keeps bucks. Artificial insemination, which requires special equipment and training, is another option.

After a successful breeding and an approximate five-month gestation period, an adult doe will usually give birth to two or three (but sometimes four or five) bouncing kids and begin producing milk or “freshen.” At Jim Schott’s Haystack Mountain Dairy in Niwot, Colo., a typical breeding/freshening cycle begins as the does are bred in fall or early winter before their milk supply dries up. The kids arrive during January and are pulled from their dams to be raised separately on pasteurized goat’s milk, a practice that helps prevent the spread of a disease called caprine arthritis encephalitis, or CAE. The does then give milk for about 305 days before the cycle repeats itself.

Milking Nubian Goats

According to the pros, milking is a fairly simple process—that is, once you get the hang of it and your goat learns to cooperate. A healthy animal and a sanitary, dust- and odor-free environment, along with proper technique and the right equipment, will make milking time more productive and lead to tastier dairy products.

“For personal milk consumption or cheese making, the minimum equipment you need is a good udder wash, a pail, a strip cup and strong hands,” says Stone, who admits her own equipment is more elaborate. “I have a milk parlor that holds two milking stands, a belly pail vacuum pump milk machine, running water, and a heater for those cold days.”

Carpenter, who milks her nine goats by hand, also has an efficient set-up. After running her Nubian does up a holding ramp, she slides a gate open to allow three or four animals at a time into the milk parlor, where they race for their elevated stanchions and filled grain buckets. As the animals happily munch their feed while confined in the head gates, Carpenter moves from doe to doe, milking each in approximately 1½ minutes. (Difficult milkers take her three to five minutes.) It looks easy enough: a rhythmic squeezing of the teats from top to bottom that forces milk into the pail. According to Carpenter, milking is also fun and relaxing. Afterward, the goats exit via another door to their pasture.

“For optimum production, you need to milk the goats every 12 hours. After a couple of months, you could switch to once a day, but that will lower the amount of milk the doe produces,” Carpenter explains. “It’s important to keep the milk as clean as possible and handle it carefully. I wash the udder before milking and also milk into a filter to keep the milk clean. Then it goes straight into the refrigerator.”

Although it tends to be a controversial topic among goat raisers, most U.S. health authorities recommend pasteurization of the raw milk, a process that involves heating it to destroy potentially health-threatening bacteria. MacDougall, who



favors pasteurizing, considers a home pasteurizer to be an important piece of dairy equipment. Carpenter, on the other hand, feels that—when handled correctly—raw milk is safe and healthy. “We’ve never had any problems,” she says. “The only thing I’ve noticed is we never get sick.”

Dairy Delights

Domestic goats have provided humans with milk since prehistoric times. The ancient Greeks and Romans drank goat’s milk, and goat-milk cheese served as an important component of the ancient Egyptians’ diet. Throughout much of the world, goat’s milk is the dairy drink of choice and for good reason: These tough animals thrive where the rough terrain and vegetation can’t support cattle. Goat-milk cheese is widely enjoyed in Europe and generally comes in two types: fresh, often referred to by the French word for goat, *Chevre*, and aged.

In the United States, goat dairy products have increased in popularity as consumers discover they’re not only tasty, but easier on the human digestive system than products made from cow’s milk. Goat’s milk has smaller fatty-acid chains that break down more easily than the fat globules in cow’s milk. Goat’s milk and cheese also have slightly lower amounts of fat and cholesterol than comparable bovine dairy products. Like cow’s milk, goat’s milk is a good source of calcium, protein and phosphorous. However, be careful if you’re lactose intolerant—this sugar also occurs in goat’s milk.

An increasing number of dairies in our country are producing distinctive goat cheeses to meet the growing demand.

“Our business has increased by an average of 15 percent a year and continues to grow,” says Schott, whose herd of 100 Nubians and Saanens provide the milk he and his family have been using to craft award-winning farmstead cheeses, including flavored chevres and feta, for the past 14 years. It takes 15 pounds of milk to make one pound of cheese, which Schott markets through statewide farmers’ markets, natural food stores, 80 different restaurants and by mail order at his website.

Stone also turned to cheese making after buying Drinking Swamp Farm in early 2002.

“This has been a complete lifestyle change for me. I moved to Virginia from California, moved from the corporate start-up world to farming,” she says. “I make a variety of cheeses, from soft spreadables to traditional hard cheeses, and of course Feta. The cheeses are available to the general public as well as available wholesale.”

Carpenter acquired her first Nubian goats in the interest of providing her children with healthy, hormone-free goat’s milk. When her growing herd started producing more milk than her family could drink, she began casting about for a way to use the excess. Not wanting to deal with food inspections or regulations, she finally hit upon the idea of making soap.

Combining natural ingredients like coconut oil and olive oil with essential oils for fragrance, Carpenter makes and sells about 1,500 to 2,000 bars of creamy Serendipity goat’s-milk soap each year.

“I used to produce more than I do now, but when it began to take over my life and rob time from my other duties as a home-schooling mom and hobby farmer, I decided to cut back,” she says. “I mainly sell the soaps off my web page and out of my home. About two-thirds of my sales are generated from GarlicFest, a local festival held in August.”

MacDougall has found a different market for her extra goat’s milk: over the years she’s built up a clientele of horse, llama, dog and game breeders who purchase goat milk and colostrum to feed hand-reared young. Surplus milk, she notes, can also be fed to chickens, calves and other animals around the farm.

Not surprisingly, the Nubian’s usefulness doesn’t end with dairy products and soap. This breed tends to be more heavily muscled than the Swiss dairy breeds, making them useful for meat animals, as well. Goat meat is leaner than beef and popular with people of Hispanic, Greek, Arabic and African heritage.

MacDougall, who has been raising Nubians for 25 years, uses her animals primarily for breeding purposes. She ships her “babies” throughout the country, where people keep them as show animals, dairy animals or simply for pets. In MacDougall’s opinion, dairy goats like the Nubian are a great investment for the hobby farm.

“It’s possible that the animals can actually turn a profit and at the least pay for themselves,” she praises. “Dairy goats provide a very useful and wholesome product in the milk and meat, and they fit well with other livestock. They’re unsurpassed at providing emotional remuneration: they love the keeper whether or not said keeper has a feed bowl in hand.”



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