



Northwest Cashmere Association

Dear Member,

Well, Summer is coming and Spring has sprung, especially for those of us with allergies. Also springing about are the new kids. Kidding season is here. Kids everywhere, on everything. From what I have seen on social media, there are some real future champions being born. Good luck to all who have more kidding to come. . Here at Caprette Cashmere, we breed early and have the kids out in late winter, so we're all done with kidding. Many have been weaned and are growing.

The coming year promises to be interesting and active for us cashmere goat owners. There will be fiber shows and festivals, like Black Sheep Gathering, where our products may be sold. Remember Black Sheep is June 27 through 29 and will be here before you know it. Contact Diana Walker, she will need help to man the booth.

There will be Cashmere Goat shows at the Oregon State Fair, Oregon Flock and Fiber Festival, and California State Fair. The CGA/NWCA Fleece competition will be at the Adirondack Wool and art Festival in September. I hope to have more information on those events in a later letter.

If you, the membership, are interested in promoting your farms and educating people about cashmere, cashmere goats and products made from cashmere, by showing your animals, please let me know, yes or no, and please let me know about which way you would want to register your animals.

Also, I would be very interested in what other events you would like to see the Northwest Cashmere Association do. Please respond to this letter my sending your responses to me at rbfiorica@frontiernet.net,

To keep within our mission to promote education, I was perusing some past issues of Goat Journal, CASHMIRROR, and other publications, here are a few articles about kidding that might interest you. Without meaning to promote the magazine, the Goat Journal has some really good articles on kidding this month. I hope you find the information useful.

Thank you,

Ron Fiorica

Ron Fiorica, President
Northwest Cashmere Association

GOATS AND WATER CONSUMPTION By Cheryl K. Smith

LIKE ALL ANIMALS, GOATS NEED WATER to survive. Water is used to maintain the proper body temperature, eliminate waste products, lubricate joints, and protect tissues throughout the body. Water is stored in cells, lymph, blood, and water in the digestive tract. Goats generally drink 1 to 3 gallons of water per day, although this will vary depending on size, diet, weather, environment, and whether they are lactating. Those on lush pasture can get much of their water from the plants. In hot, dry weather, they require more water. Sixty percent of a goat's weight is water, although some goats that are adapted to a desert climate have a water content of 76% and can store three or four days' worth of water in the rumen. A lack of water — whether from diarrhea, fever, heat, or any other cause — can cause a goat to become dehydrated. Dehydration decreases blood volume, increases heart rate, decreases urination, and causes less milk production. The goat may begin to eat less and may develop hypocalcemia. For bucks and wethers, dehydration can cause urolithiasis (bladder stones). Weakness, weight loss, sunken eyes, decreased urination, and skin changes are all indicators that a goat may be dehydrated. (See sidebar for testing skin for dehydration.) Severe dehydration in a goat will require a veterinarian to give IV fluids. For a less severely dehydrated goat, sterile water or Ringer's lactate can be given very slowly under the skin (SQ) in various locations with a large needle. An online tutorial can be found at [Goat-Link: Goat-Link.com/content/view/207/195/](http://Goat-Link.com/content/view/207/195/). Unlike camels, which can go for long periods of time without drinking and drink up to 30 gallons of water at one time, goats need a regular source of water to function. Camels can lose up to 40% of their body weight without dying. They have oval-shaped blood cells that are elastic and can change shape without adverse effects. Goats have small and fragile red blood cells (erythrocytes). If they drink massive amounts of water, these cells can burst (called hemolysis). Red urine is a sign that this has happened. Excessive hemolysis can cause anemia. A sign that a goat has anemia is that the inside of the eyelids is light in color rather than the bright pink seen in a healthy goat.

Tips to Keep Goats Drinking Water:

- Provide warm to hot water during cold weather, and prevent freezing. If you have electricity in the barn, you can use a heated bucket, otherwise, water may need to be freshened frequently.
- Shade water or add a block of ice during hot weather.
- Change water frequently, so it is always clean and fresh.
- Add apple cider vinegar or molasses to make the water more palatable.
- Provide several different drinking stations so all goats can get access, in case of bullies.
- Feed salty corn chips or spray hay with salty water to encourage drinking by goats prone to urinary calculi. Drinking cold water in the winter or eating snow can cause a

goat's temperature to decrease, which increases energy requirements to maintain the body. Once the rumen is chilled, it can take up to two hours to get back to normal temperature. Water and Lactation Milk is comprised of 90% water, so lactating does need more water. A lactating doe needs an extra quart of water for each pint of milk she produces. Nature takes care of that, in part: oxytocin, which is released when a goat is nursing, can signal her body that she needs to drink more water. As long as she is well and she has access to a good water source, lack of hydration should not be a problem. If you find that a doe's milk production is decreasing drastically, consider her water consumption and whether you can encourage it with some of the tips listed above. If she is eating only dry hay, consider adding some fresh browse to her diet, too. Kids and Water Kids can get all of their nutrition and water from their dam's milk; however, they need to have water available early on for proper rumen development. This is because when a kid drinks from a teat or a nipple, the esophageal groove closes, and the milk bypasses the rumen and goes directly into the abomasum.

TEST FOR DEHYDRATION To test for dehydration, pinch the skin of the neck in front of the shoulder between your thumb and first finger. If it does not snap back quickly but remains tented, it means that the goat is dehydrated. Rumen development requires that they eat hay (and/or grain) and drink water. When they eat these solid foods or drink from a bucket, the rumen is not bypassed, and fermentation takes place. Anyone who has watched goats in the barn knows that kids emulate what their dams do. Some may even start trying to eat hay or grass and drink water as early as the first week of life. For bottle-fed kids, it is important to make water available in a bucket or pan, along with hay, so they learn how to drink, and can be safely weaned at 8 weeks or older. They should be chewing cud at this point, which means that the rumen is working properly. Lately, a number of new goat owners have reported on Facebook groups that they are giving their weaned kids water in a bottle, or asked if it was all right to do so. The owners didn't think the kids would drink water, or they felt bad because the kids were crying for their bottle. Kids should never be fed water in a bottle. They can get water toxicity and, if fed a large amount, their red blood cells can burst as mentioned above. **Summary** Water is essential to thriving and surviving goats. It is needed for adequate milk production, rumen development, and to keep goats healthy overall. Goat owners can follow some simple steps to ensure that their goats — whether kids, milking does, wethers, or bucks — are drinking the right amount.

HOW MANY GOATS PER ACRE. How much pasture goats need By Tamsin Cooper

ONE OF THE MOST IMPORTANT decisions you make is how many goats to keep on your land. For grazing management, it is key. Base decisions on how your herd will expand, how many kids you will keep, and bear in mind worse case scenarios (poor weather, difficulty selling). Overstocking will not only hit your pocket but will diminish the health and welfare of your animals. But when goats' needs are met, they remain healthy and productive for longer. How many goats per acre are recommended? That is a difficult question because it depends on so many variables: goat size, breed, stage of life, region, climate, landscape, soil quality, pasture condition, plant types, rainfall, and other weather conditions and predictability.

A Goat's Needs

Each goat needs to find enough food to maintain her body weight, plus support reproduction and lactation when bred. Goats consume on average 3.5% of their body weight in dry matter per day, but more when lactating. As hay is around 85% dry matter, it works out at about 4% in dry forage. High-yielding dairy goats may consume 4.5% of their body weight per day. For example, an average 110 lb. goat may eat 4.4 lb. of hay or dry forage a day ($4\% \times 110$), and a 130 lb. Boer goat is estimated to eat 5.2 lb. per day ($4\% \times 130$), but a lactating dairy goat may eat 7.65 lb. ($4.5\% \times 170$). You need to calculate your goat's consumption based on their ideal weight (3.5 body score) rather than when they are under- or overweight. They will consume moister forage in larger quantities: good quality grass in temperate regions is only around 20% dry matter. If your pasture cannot continue to supply such quantities, you can, of course, supplement with hay and minerals. Dairy does need additional concentrates just before birth and during lactation. Pasture provides goats with more than just feed; it allows exercise and mental stimulation. Goats have evolved to seek out and extract the most nutritious plant parts in rugged terrain, for which they are endowed with agile bodies, curious minds, and the urge to use their skills. A featureless barn or run leads to boredom and frustration. For example, in the European Alps, dairy goats roam around two miles over mountainous terrain seeking their favorite plants. This exercise also keeps their hooves in perfect condition. If goats do not have different pastures to explore and forage (and even if they do), they appreciate climbing apparatus and

browsing enrichment (branches, brush) for stimulation and play. Goats, more than sheep, need space to spread out.

Lower-ranking animals need to keep away from dominant individuals. They will not graze near dominants, so they risk losing out on the best quality patches. Not only should supplied feed be spaced so that vulnerable animals get a chance to access it, but paddocks should be large enough for them to graze away from dominants. The issue is more pronounced in herds where new goats have been introduced, as family members are more tolerant.

Planning Your Space

There are various factors to bear in mind at the planning stage:

- Carrying capacity is the maximum number of goats the land can support long-term without losing soil health, moisture retention, forage quality, and quantity. You need to allow forage to renew after grazing, avoiding the loss of favorite species and the encroachment of less palatable plants.
- The stocking rate is the amount of land per head over the whole year, and this should allow each animal to achieve adequate nutrition and avoid parasites.
- Stocking density is the space within each paddock or grazing area per head. This should allow enough personal space to avoid conflict and access to feed for all but small enough to encourage intake of various plants, rather than just the favorites. It isn't easy to estimate these numbers for land and conditions that can be so variable. The key is to remain flexible. Start with a small herd and observe how much they eat over the year. Observe which areas they favor and which plants they leave. You should then use a rotational system to allow plants to recover before grazing again, especially those most heavily grazed. Once midgrass has been reduced to 4 inches, goats need to move to a new pasture to allow renewal and avoid parasites. In drier areas and taller plants, forage remaining will need to be higher. They should less heavily graze native rangeland species. However, they need less maintenance than introduced grasses if grazed carefully. The most effective system is managed rotation of strips of land that the goats enter for a short period before moving to another strip. This prevents goats from continually wearing down a patch of favored plants, which would be their inclination if left in the paddock while the plants regrow. It also encourages them to eat less favored species so that they evenly graze the land. However, the strip must allow goats enough space to browse peacefully.

Small Acreage

If you only have a little land, start small and make at least four paddocks for rotation. You will need at least six weeks to pass (longer in humid climates) before returning the herd to the first pasture. Sometimes homesteaders have some land to clear of brush. Of course, goats are the ideal species for the job. However, we need to consider what the goats will eat once the brush has gone. A few years of overgrazing substantially reduces meadows of diverse flowering plants and bushes, and goats need variety, monotonous grazing as a last resort. If you have less land than can support your goats, you will need to carefully manage it and buy hay and supplements. In a damp, temperate zone of France, Providing cut browse helps to vary your goats' diet. I keep four 130 lb. dry does on half an acre. I have to rotate four pastures to allow forage regrowth. Each paddock (around 5000 sq. ft.) gives them adequate space to wander, forage, and play. I have found that they like a base area around their barn to rest in the sun and socialize. A large tree also makes a good base. As this area erodes, it is a good idea to make provision for a sacrificial area around their shelter in addition to their pastures. This area can be used as a run during seasons when there is little pasture, and they are dependent on hay. Goats prefer to return to this base during the day for rest periods, so access from each paddock is ideal. However, in my region, an acre is estimated to provide 70% of the diet for one to three goats (depending on forage yield). My half acre probably only provides for one goat, so I supplement with purchased meadow hay (about 10 lb. per day and twice that in winter) and browse cut from trees and brambles beyond the paddock boundaries. Together with rotation, the biodiversity of the meadows remains, although the yield is diminished compared to the early years. However, when the does were kidding and being milked, it was a different matter, and I needed more land.

Grazing Management

With greater acreage, you can plan self-sufficiency. It is important to stay within the limits of your carrying capacity so that your activity remains sustainable. Estimate how much forage your land can produce. A soil survey can help to calculate possible yield. Then, consider how much needs to be left for renewal: the forage residue. This usually is 50%, giving rise to the expression, "take half, leave half." But goats will consume only about half the utilizable forage because you feature :: space will lose around half to wastage,

trampling, and insect damage. Your consumable amount will therefore be around a quarter of the projected annual yield of your land, which you divide by your animals' needs over the year. Stocking rates are usually calculated using an animal unit (AU) based on a 1,000 lb. cow and calf consuming 26 lb. of dry forage per day. According to size, type, and life stage, goats vary in forage consumption. Values for goats are generally estimated at 0.17 AU for an average 110 lb. goat (eating 4.4 lb. per day) or 0.2 AU for a Boer goat (5.2 lb. per day), which works out at five or six goats per AU. Your county Extension agent or National Resources Conservation Service may be able to advise you on soil surveys (see www.nrcs.usda.gov/wps/portal/nrcs/main/soils/survey/) and typical stocking rates for your area based on acres per AU. However, you will still need to observe your goats' land usage and adjust accordingly.

Regional Variations

Average stocking rates vary widely in different states, soils, ranges, and climates. For example, in Iowa, one AU needs three to five acres, that is one or two goats per acre on permanent grazing. However, in Texas, where rainfall is often below average, permanent stocking levels must be much lower and forage residue higher to allow for recovery. Remember that changes in range condition can lead to considerable changes in carrying capacity, so base your stocking rates on pessimistic estimates of forage yield. In addition, monitor plant use, rotate frequently and adjust as necessary.