

## Goat Care 101

This is a description of how I manage my goats. There are lots of “right ways” to raise goats, and I don’t claim to be an expert, but I have learned some things (usually the hard way!) that may help novice goat owners avoid having to make all the same mistakes I did. When in doubt, consult your vet.

### Worms

One of the biggest threats to your goats’ health is from internal parasites, primarily the Barberpole Worm, *Haemonchus Contortus*. Worming properly is key to keeping worms under control. The worst mistake you can make is to underdose, which results in the wormer killing only the weakest worms, leaving the more resistant ones to multiply.

How do you know if your goat is wormy? The Barberpole feeds on your goat’s blood, by attaching itself in her digestive tract. Thus, if there is a heavy enough infestation, the goat becomes anemic from loss of blood. An anemic goat’s inner eyelids will be pale pink to white, while in a goat that is not anemic, they will be dark reddish pink. Wormy goats also sometimes develop a swelling under the jaw called “bottle jaw,” which will generally be most obvious in the evening after the goat has had her head down grazing all day, and may also lose weight but have a pot belly, and develop rough or thinning hair. Very pale inner eyelids and/or bottle jaw are indications of a very serious worm infestation that needs immediate treatment. Don’t let your goats get to that point!

When do you worm? Some folks stick to a regular quarterly or even monthly schedule and worm every goat at those times whether they need it or not. We prefer to worm on a more *ad hoc* basis, with a few exceptions. The only times everyone gets wormed is just before we put the does in with the bucks for breeding, about 3-4 weeks before kidding when we do the prenatal vaccination boosters, and on the day a doe kids. Aside from that, we evaluate goats individually and worm only those whose eyelid color indicates a heavy worm load. If a particular goat regularly shows up in the “needs worming” category when others are healthy, he or she is subject to culling. Worm resistance is hereditary, and if it is poor, we don’t want to pass that along.

My usual wormer is pour-on Cydectin, a stinky purple product made to be poured down the back of cattle. Do not pour it on goats—that doesn’t work, as they don’t absorb it through their skin like cows do. Use a drench syringe to give it orally, squirting it way in the back of the goat’s mouth so they can’t as easily spit it back in your face. I dose the pour-on Cydectin at 1cc/10 pounds of body weight of the goat. Since I can’t weigh each goat as I’m working, I estimate weight generously, as it is much better to overdose than to underdose with most wormers. For example, I dose adult does as if they all weigh 200 pounds, when actually there are only a few that big. Exception: Levamisole (brand name Prohibit) is toxic if overdosed, so if you choose to use it, get an accurate weight on your goats, follow the instructions carefully, and have a syringe or 2 of Atropine drawn up on hand in case a goat has a bad reaction. Another caution: I don’t recommend using the Cydectin sheep drench. It contains a very weak concentration of the active ingredient Moxidectin, so you’d practically have to drown your goat to get enough in her to do any good.

Cydectin does not kill tape worms, so I occasionally alternate and use Synanthic instead if I have seen evidence of tapes in goat pellets (little white segments that look sort of like rice). Tapeworms don't suck the goat's blood; they eat its food. Goat tape worms are a different species than dog or cat tapeworms, so products for pets are not appropriate for goats.

There are other kinds of worms that can infect goats, but they are less common. When in doubt, take a fresh fecal sample to your vet and ask them to examine it under the microscope to tell you exactly what you need to treat.

## **Feed**

Depending on how much land you have per goat, what's growing there, and what season it is, your goat will need supplemental feeding at some times of the year. Goats are naturally browsers like deer, rather than grazers like cattle. They enjoy some plants you would not expect anything to eat, such as poison ivy, and will readily eat thorny plants like mesquite and roses. They will graze if there is no browse available. Coastal Bermuda is way down the list of goat favorites, however, so that beautiful pasture that cows and horses love is not what you need for goats. They'd much prefer a stickery thicket of shrubs and vines!

We feed our goats hay year-round, though much more so in the winter when there is nothing green growing. The basic hay we use is haygrazer, a sorghum/sudan hybrid with long wide leaves and relatively coarse stems. They are also very fond of oat hay, which is hard to find commercially. Mine don't like coastal hay at all, and basically treat it as bedding. Alfalfa is the very favorite, but we use that only for special situations like sick animals that need to be tempted to eat and does that are heavily pregnant or nursing triplets or more and need all the calories and protein they can get. Be very cautious about feeding more than a handful of alfalfa to bucks and wethers, as it is high in calcium and so can contribute to their developing urinary calculi (rather like human bladder/kidney stones).

Our grain-based feed is made for us by Callahans in Austin. It is a 16% protein feed, and we use it for everybody from little kids in the creep feeder to does and bucks. There are many good brands of feed available, but the one factor I consider indispensable for bag feed is that it be medicated with Rumensin (generic name monensin). That medication helps prevent coccidiosis, a disease caused by the protozoa *Coccidia*, that can kill baby goats and cause older ones to scour and be basically unthrifty. Rumensin is also a growth enhancer, so kids gain weight faster than they would on the same feed without the medication. I do not like feeds medicated with Decoquinatate, as that can inhibit thiamine production in the goat's body, resulting in goat polio. Caution: Rumensin is extremely toxic to horses and other equines, so you must be very careful if you have horses pastured with or near your goats.

How much grain to feed varies widely. Many folks who are raising commercial goats for the slaughter market and have sufficient grazing available feed little to no grain except possibly to heavily pregnant or nursing does, or during unusually cold spells in winter. Folks raising show goats are at the other extreme, feeding several pounds/head daily. Each goat raiser has to make that choice according to his or her target market and budget. Our baseline feeding is twice a

week, about 2.5 pounds/head each time. That adjusts up or down according to season and what stage of reproduction the goats are in. Our kids are creep fed free choice from about 3 weeks old to weaning.

## **Shelter**

Goats are surprisingly tolerant of weather extremes, provided they have shelter from wind and rain. They will seek shade in the middle of hot days, but rarely experience any health issues related to heat. They absolutely hate to get rained on, and will stampede to the barn when it begins to sprinkle, even in warm weather. It is essential, though, that they have a place to get under cover and out of the wind during cold, rainy weather. Our barns and sheds are mostly 3-sided, with the open side facing south or southeast to catch summer breeze.

## **Fence**

I'm convinced that goats see fences as a challenge to be overcome, and they are amazingly good at finding ways to get through, under or over a fence you thought was goatproof! After much trial and error, we have determined that what works best for us as pasture fencing is 4"x4" woven-wire fencing about 4 feet high, with a strand of barbed wire at the bottom to deter digging and one or more strands above to deter climbing, so that the finished fence is about 5 feet high. Caution: do not use mesh with 6"x6" squares. Yes, it is cheaper, but those squares are big enough for goats to stick their heads through, and not big enough for them to reliably pull their heads back in if they have horns. It can be a goat-killer.

Regular 5-strand barbed wire fences that contain cattle barely even slow goats down. You can contain them, at least temporarily, with about 10 strands of barbed wire, but eventually they will stretch the wire by sticking their heads through to graze on the other side, to the point that some escape. That is also an expensive fence to build. We tried it and have now abandoned that choice.

Bucks are particularly hard on fences, especially when they are in rut. We have finally determined that the safest way to keep them where they belong is to add a strand of very hot electric fence at about knee height (nose high on the goats) offset inside the regular fence in the buck pastures. Buy the strongest charger you can afford; mine says it will charge 30 miles of fence and is being used to surround about 8 acres cross-fenced into 4 sections. The bucks absolutely respect it, so we no longer have trouble with them fighting through the fence, slamming the fence when there are does on the other side, or scrubbing along the fence to scratch their sides. I have not encountered a solar charger that is strong enough for this purpose, so ours is plugged into power in the barn.

## **Vaccinations**

Every goat raiser has his or her own protocol when it comes to vaccinations, from doing nothing (not recommended!) to vaccinating for anything they can find a vaccine for. We are in the middle of that spectrum. All our breeding stock are vaccinated, then boosted annually with 3 products, described below. Does get their annual boosters about 3-4 weeks before they are due to kid, to provide maximum immunity protection to the nursing kids. Kids we keep or sell as

breeding stock are vaccinated with the same 3 products when they reach 3 months old, and boosted 2-3 weeks later. Kids sold as show wethers are vaccinated and boosted on the same schedule, but omit the CL vaccine, since frankly most will not have long enough lives to develop CL. Vaccines are always given sub-cutaneously, never in the muscle.

- Cavalry-9 vaccinates for 9 clostridial diseases, the most common of which are tetanus and enterotoxemia (also called overeaters disease). The initial dose and the boosters are each 1cc, regardless of the size of the goat. A less comprehensive similar vaccine is called CDT.
- Super Poly Bac-B Somnus vaccinates for multiple strains of bacterial pneumonia. The initial dose is 1cc, and the boosters are 1/2cc, also regardless of the size of the goat.
- CL Vaccine from Texas Vet Labs in San Angelo vaccinates for caseous lymphadenitis. This disease, which has no cure, causes abscesses in the goat's lymph glands that eventually burst to spread a thick, cheesy pus that can infect other goats. The initial dose and the boosters are each 1cc, regardless of the size of the goat. Because it is made by the same company that makes the Super Poly pneumonia vaccine, they are compatible and can be combined in the same syringe for administration.

### **What to Keep on Hand**

Here are some recommendations for basic health supplies to have on hand. Inevitably your goat will get sick or hurt at 9:00 pm on a Sunday when nothing is open! These first 5 are inexpensive and essential.

Penicillin. Available OTC. I usually keep a long-acting version such as DuraPen. Used after a "dirty delivery" if you have to go in after mal-presented kids, in case of injuries that could become infected, for scours, and for treatment of a number of other illnesses.

Pepto-Bismol. The first treatment I use for goats that are scouring or bloating. Often a dose or two will clear up the problem, as it is both anti-bacterial and anti-gas. I dose by label instructions, using a drench syringe. If it's unsuccessful, then you can go to stronger stuff.

Tetanus anti-toxin. Available OTC. This is not the same as vaccinations for tetanus. It is used for quick protection in case of injury, not for long-term resistance. Dose is ½ cc given in the muscle, regardless of size of the goat.

Thermometer. An inexpensive digital one from the drug store is fine. Normal goat body temperature ranges from 101.5 to 103.5, and will be affected by ambient temperature. If you have to call the vet, he will want to know if the goat has a fever or abnormally low body temperature.

Wound Kote, Scarlex or other antiseptic product. I use for minor cuts or abrasions, for spraying the burn wounds on wethers being disbudded, and for spraying the castration wound after

banding and removing the sack. Scarlex contains scarlet oil, which also helps repel flies from the wound.

This next group are somewhat less frequently used but I always keep them on hand.

Thiamine (Vitamin B1). Prescription only. Goats that are stressed sometimes fail to produce sufficient thiamine, and that can result in a number of illnesses, most commonly goat polio.

C & D antitoxin. OTC, but not readily available locally. Can be ordered from mail-order livestock supply companies such as Jeffers, Valley Vet, Hoegger, etc. Not the same as vaccines like CDT. It is used to treat severe bloat caused by clostridia types C & D. When you need it, you need it quick to save the goat's life.

Bovi Sera. OTC, but generally must be ordered. This contains antibodies against e.coli, salmonella, bacterial pneumonia, and other diseases. It can be used preventively to avoid disease when you know the goat is going to be stressed, such as by travel, and also to boost the immune response in an already sick animal to help it recover faster. I give a grown goat 15-20 cc SQ every other day when treating an illness. Kids get smaller doses in keeping with their size.

Nuflor. Prescription only. The antibiotic of choice for treating respiratory problems such as pneumonia. I give it SQ for 5 days. Day 1 at 6cc/100 pounds, days 2-5 at 3cc/100 pounds.

Banamine. Prescription only. A pain reliever, fever reducer and smooth muscle relaxant. Dose is 1cc/100 pounds of body weight, usually given IM. It must be used with caution, as prolonged use can damage the liver and kidneys.

Vitamin B12. Prescription only. Used IM in combination with Iron Dextran to help an anemic goat build red blood cells after worming. Also used as an appetite stimulant.

Iron dextran. OTC. See B12 above.

## **Resources**

The single most valuable resource I have found is a Yahoo group called The\_Boer\_Goat. It is free to join, and has thousands of members nationwide and abroad, many of whom are knowledgeable and willing to help when someone has a problem or question. I've saved lots of money and quite a few goats using help from folks there.

There are also quite a few Facebook groups devoted to goats. As a relatively recent Facebook user, I have found them generally more useful for marketing than for help with health issues, but they are certainly a quick way to reach a lot of goat people when you need information. I recently discovered one called Goat Vet Corner, which anyone can join to ask questions, but only veterinarians can respond. Sometimes it isn't as timely as one might like, but at least the response, when you get one, is from a knowledgeable person.

I also subscribe to *Goat Rancher* magazine, which often has useful articles to clip and save. It is available at Tractor Supply if you prefer to try an issue or two before subscribing.

Happy Goating!

Sue Fuller  
Carleton Ranch Boers  
Liberty Hill, TX  
[www.carletonranch.com](http://www.carletonranch.com)  
Facebook: Sue Carleton Fuller