

INTRODUCTION TO GOAT HERD HEALTH:

BY DR KELLY FLANAGAN

VACCINATIONS

Annual vaccines help prevent the development of serious disease in your herd. The vaccine commonly known as “CDT” or “CD&T” is a vaccination for *Clostridium perfringens* type C + D and tetanus. The cost of vaccinating is minor compared with treating the disease or paying to replace a loved one in your herd. Please ask call us for more information on creating an annual schedule for your herd. Additional vaccines are optional for prevention of Rabies, Caseous lymphadenitis, and Pneumonia.

Vaccine	Disease Protected Against	When to Give
CDT	Erienteroxemia and Tetanus	Does: Fourth month of pregnancy Kids: 1 month old and one month later All: Booster annually

BASIC MAINTENANCE

Hoof trimming is as needed every 3 to 6 months. This can be needed in shorter intervals if we had a heavy rainfall. Veterinary exams should be at least once a year. At Wayside Animal Hospital, our doctor will provide an overall health assessment including FAMANCHA Scoring, rumen function, body condition, and more!

NUTRITION

Goats are a browsing species; they have a very wide appetite for good things and bad things! They are not good “lawn mowers” as they are sometimes advertised to be. A recommended diet is grass hay (such as coastal or timothy) at 2% of body weight in pounds per day. For example, 1 lb hay would supply a 50 lbs animal. Legumes (such as alfalfa or peanut hay) can be fed in moderation. It is best to feed hay off the ground in slow feeder hay nets/hay feeders as this will limit hay wasting. Hay wasting (hay left on the ground or on stall floors) can grow mold and intestinal parasites. Please limit or feed no grain to mature pets (avoid “all stock grain or cattle feed” titles). It is highly recommended to avoid a high portion of alfalfa for castrated males (whethers) as this can increase likelihood for urinary stones. Treats are acceptable on a limited basis. Goats can become obese very quickly. Timothy hay pellets are the safest things to feed as treats. When looking for a vitamin/mineral supplement, look for a species-specific only type (“Goat/caprine only”).

GASTROINTESTINAL PARASITES

There are many different types of gastrointestinal parasites. The 2 most important are *Haemonchus contortus* the barber pole worm, and *Teladorsagia* species. As adults these 2 roundworms live in the abomasum (the 4th stomach). The adult worms pass eggs that are

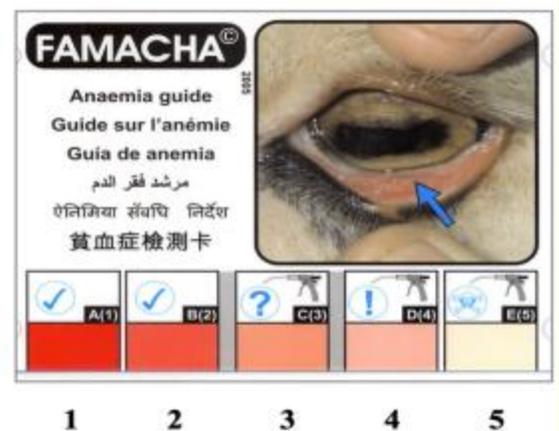
passed out in the feces into the grass. In the grass the eggs hatch into larvae that crawl up the grass. The animal then eats the grass with the larvae that develop into adult worms in the stomach. The whole cycle takes at least 21 days. The larvae live 3 inches from the ground on the grass, therefore, long pasture will have relatively fewer larvae than short pasture. Goats are naturally browsers and this is one of the reasons they are more susceptible to parasites compared to other species. If the weather is too hot (Summer in the South) the larvae can 'hide' in the wall of the stomach until conditions outside are better for development. Due to this, parasites can survive from year to year. In warm winters, and cooler summers the worms will survive in the pasture. Haemonchus worms predominantly suck blood and anemia is the main result of infestation. Anemia can be monitored by the color of the membranes of the eye.

This is also called the FAMACHA method. It is recommended to perform a FAMACHA Score every month to determine the severity of Haemonchus in your herd. Teladorsagia results in loss of protein and damages the wall

causing diarrhea. Both worms will cause decreased gain, poor body condition score and weight loss. Eventually, the protein loss will result in bottle jaw, which is swelling underneath the jaw. All ages of sheep and goats are affected by parasites. Treatment of parasites is with anthelmintics (dewormers).

There are 3 major groups of dewormers, avermectins (ivermectin/Ivomec, moxidectin/Cydectin) which are the clear

dewormers; white dewormers (fenbendazole/Panacur and albendazole/Valbazen); and levamisole (Prohibit) and morantel (Goat dewormer pellet). Treatment should always be initially with a labelled drug. A labelled drug will state the species, dose, the route of treatment (oral, pour on or injectable) and the withdrawal times. The withdrawal times are there to protect food safety.



The following recommendations are some general ways to prevent resistance. A parasite control plan should always be tailored to your animals and climate, and the dewormers that work best in your area.

1. Weigh the animals so they get the correct dose
2. Deworm base on FAMACHA Score (Grades 3, 4, or 5)

3. Deworm in addition with eggs per gram results (McMasters Fecal Egg Count)
 - a. This can be obtained through fecal samples and diagnostic testing with our hospital.

HERD HEALTH DISEASE PREVENTION

Caprine Arthritis Encephalitis (also known as CAE) is a virus that can cause degenerative joint changes (arthritis), firm mammary glands, inability to maintain weight, and loss of production ability in adults. In kids, this virus can cause an encephalitis (inflammation of the brain). It is most commonly transmitted through colostrum from dam (mother) to kid (child). Annual testing is recommended in herds (AGID and cELISA). All kids of positive dams should be raised on a prevention program (heat treatment of colostrum of negative CAE dams). Once a herd is negative, prevent introduction of a positive animal. Always isolate new animals for several weeks prior to introduction.

Caseous Lymphadenitis (also known as CL) is the most common bacterial infection in both sheep and goat. The organism is *Corynebacterium pseudotuberculosis*. It most commonly presents as an abscess (mass) in the lymph nodes of the head, neck, and shoulder. They start as firm swellings that get soft and ripen with time (will open if not lanced). Internal abscesses can also occur located in the abdomen and thorax (displaying common signs of chronic weight loss and systemic disease). When an external abscess is seen, there is a significant risk of internal abscesses. It is a highly infective organism that can be transmitted through inhalation, ingestion or crossed skin (open wound). Water troughs, feedbunks etc can open these abscesses and increase the likelihood of other herd mates to become infected through ingestion. Paired titers are best for diagnosis (blood samples would be collected two weeks apart). Treatments with antibiotics have been used with limited success. Control of CL of a noninfected herd requires isolating new animals, culling animals that develop CL. Once a herd infected, controlling CL requires isolation of affected animals and raising kids on CAE prevention program.

TOXIC PLANTS

Common toxic plants to goats in this area of Georgia are: Azalea, Rhododendron, Laurel, Milkweed, Oleander, Nightshade, Perilla Mint, Crotalaria, Marijuana. There are many others that can cause illness. This is a basic list of common plants found in Georgia.

COMMON VETERINARY CARE

Please call our hospital for an appointment.

1. Diarrhea
2. Weight loss
3. Pink eye problems
4. Coughing, nasal discharge

5. Lumps especially in the areas of lymph nodes (neck, front shoulder, sides of hindquarters)
6. Lameness
7. Hair loss, excessive itching
8. Swollen red mammary gland(s)

EMERGENCY SITUATIONS

Please CALL immediately if any of the following are seen:

Veterinary Phone Number: 706-692-2210

1. Dystocia: difficult birthing if no progression after straining for 30 minutes
2. Straining to urinate (MALES): males will cry out, stretch and/or stop eating. Can be deadly if not resolved.
3. Severe diarrhea (especially in younger animals)
4. Wounds/cuts needing stitching
5. Bloating stomach
6. Tissue hanging from rectum or vulva (rectal, vaginal, uterine prolapse)
7. Unable to walk
8. Pregnant animal not eating, teeth grinding, lethargic, not walking
9. Pressing head into the wall or fence