Virginia Cooperative Extension
Virginia Tech • Virginia State University

Hoof Issues in Sheep and Goats

Authored by Dahlia O'Brien, Professor and Extension Small Ruminant Specialist, Cooperative Extension, Virginia State University; and Stephan Wildeus, Professor and Research Scientist, Agricultural Research Station, Virginia State University

Introduction

If you raise goats and sheep and live in an area where it rains often or have pastures that don't drain well, then you've likely had to deal with hoof problems in your herd/flock. Hoof issues and diseases can affect productivity by impacting the health and well-being of your animals. This is why it is important to check hooves regularly for signs of disease and overgrowth. Lameness is often a symptom of hoof disease and should never be ignored. Some hoof diseases that result in lameness include bluetongue, foot abscess, laminitis (founder), sore mouth (contagious ecthyma), and foot-and-mouth disease. However, while these diseases are very serious and can result in animal death, foot rot and foot scald occur much more frequently, and treatment costs and losses in production can result in many producers becoming frustrated and leaving the industry.

Foot Rot

Foot rot is caused by two anaerobic (exist only in the absence of oxygen) bacteria, *Fusobacterium necrophorum* and *Dichelobacter nodosus,* and is very contagious. Infected animals spread the bacteria by contaminating manure, bedding, pastures, and equipment. These bacteria are present wherever you have grazing sheep and goats. Animals with foot rot usually present with limping (Figure 1) and lameness, and often graze on their front knees (Figure 2). Even though foot rot is not deadly, it can result in reduced overall performance in a herd/flock due to the animal's inability to move and obtain adequate nutrients from feed and forage. On inspection, foot rot presents with a foul, rotten odor and soft, bloody, or pus-filled areas of the sole (Figure 3). It is best to treat the entire herd when/if foot rot is detected in a few animals. Trimming overgrown hooves (Figure 4) will prevent the packing of mud and manure and reduce the chance of survival of these anaerobic bacteria. Additionally, soaking the hooves in a 10% zinc/copper sulfate solution for at least 15 minutes once weekly for several weeks following trimming will further help control or eradicate this issue.

Figure 1. Limping Myotonic goat kid (not bearing weight on front right hoof; Virginia State University, 2025)

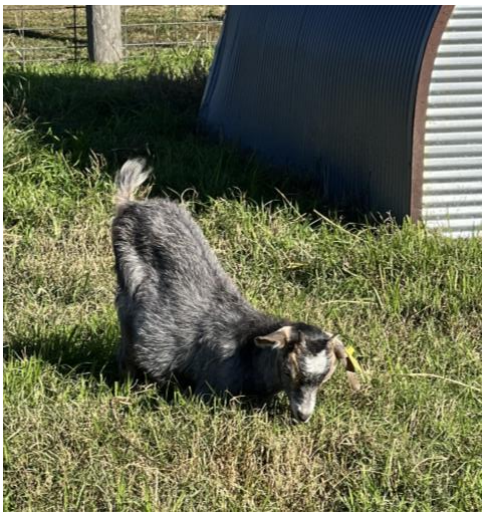

Figure 2. Meat goat kid on front knees due to hoof issues (Virginia State University, 2025)

At Virginia State University, we've found that regularly checking larger groups of sheep or goats for signs of overgrown hooves or limping—and only trimming and treating the animals that need it—helps save time and effort. This approach reduces workload and avoids treating the entire group at once.

Figure 3. St. Croix ewe with foot rot (Virginia State University, 2025)

Figure 4. Overgrown hooves (Virginia State University, 2025)

Hoof growth is influenced not only by soil moisture, nutrition, and management but also by breed and genetics. Therefore, culling individuals that show susceptibility to foot rot by requiring multiple trims and year-round treatment is a good idea.

Foot Scald

Foot rot and foot scald are distinct conditions. Foot scald refers to irritation and inflammation occurring between the toes of sheep or goats, often leading to the development of lesions. It is primarily caused by the anaerobic bacteria *Fusobacterium necrophorum.* Foot scald is not contagious; however, if left untreated, it can lead to foot rot. On inspection between the hooves, foot scald can appear white, red, or swollen, and it is generally sensitive to touch (Figure 5). The animal will kick and bleat when a hoof is held for close inspection. Foot scald is generally treated with a topical solution of zinc sulfate or Koppertox® after the removal of any mud, stones, or manure.

Figure 5. Irritation and inflammation between hooves (Reprinted with permission from Susan Schoenian, University of Maryland, 2021).

Hoof Trimming

Whether you raise sheep or goats, or both, learning to trim their hooves properly is an essential management skill. When trimming, it is vital to have a good hoof trimmer/shears. A new/sharp hoof trimmer can result in deep unintentional cuts into the hoof or injury to the individual trimming, so care should always be taken. On the other hand, a dull hoof trimmer will make the task longer and less efficient. To trim hooves, secure the animal by flipping onto the rump (sheep) or the side (goat), use a harness, milking stand, or tilt table (electric or manual), or have a helper. Inspect the hoof carefully and start by removing any mud/manure from the sole or between the hooves. Trim overgrown hoof wall,

sole, toe, and heel carefully without cutting too deeply. See Figure 6 for the parts of a sheep/goat's hoof. If the hoof is trimmed aggressively and huge chunks are removed at a time, the hoof will bleed. The general rule is to stop once you see any pink. Cutting too deeply will not help the healing process but might facilitate the spread of the bacteria that cause foot rot. Most animals will simply have overgrown hooves. However, if foot scald or foot rot is observed, treat as described previously. A video on hoof trimming can be found at the QR link below (Figure 7).

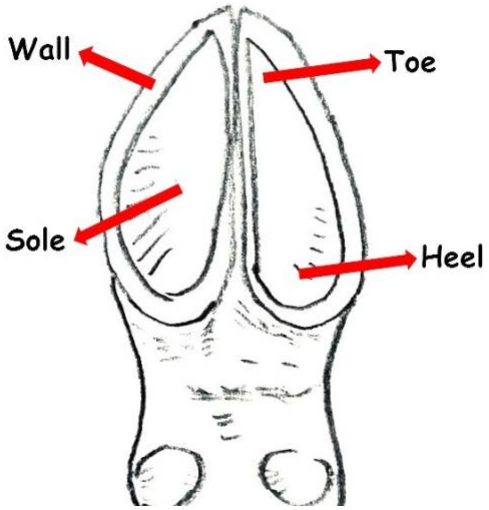

Figure 6. Parts of a sheep/goat's hoof (reprinted with permission from Dahlia O'Brien, Virginia State University, 2025).

Figure 7. QR link to video – How to trim sheep: goat hooves (https://www.youtube.com/watch?v=3aF6CgSNEbI&list=PLHFHaKgV4IGSKZu6fz88caRD_oEGQAD4v&index=4&t=7s)

Visit Virginia Cooperative Extension: ext.vt.edu

Virginia Cooperative Extension is a partnership of Virginia Tech, Virginia State University, the U.S. Department of Agriculture (USDA), and local governments, and is an equal opportunity employer. For the full non-discrimination statement, please visit ext.vt.edu/accessibility.

2025 APSC-239NP