



# Icelandic Sheep Breeders of North America

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## Don't Let Rot Get a Foot in Your Door!

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Flock management that focuses on prevention is one of the key ingredients to operations that result in maximizing profits and making the best use of the Shepherd's time. There is no place that this is truer than in prevention of foot rot.

If you listen to shepherds describing some of their most expensive and time consuming flock management problems to solve, invariably foot rot is near the top of the list. I have listened to some real horror stories about the lengths that some have had to go to get this insidious problem controlled. Hearing these tales of frustration from other shepherds is one of the things that has driven us to institute an aggressive prevention program that up until now has been 100% effective.

Contagious hoof rot is an age-old malady of sheep and is currently a major production problem in many areas of the United States. Hoof rot is generally more prevalent in temperate climates and has become a widespread concern to western producers. Our ranch is in the Willamette Valley in Oregon where the wet climate can offer a particularly good environment for the bacteria to thrive.

Lameness is usually the most obvious sign of contagious foot rot in sheep, although not all sheep with early infections become lame. It may occur in more than one foot at the same time. The first visible lesion is a moist reddened area between the toes. Subsequently the infection spreads under the sole of the hoof, causing the undermining and separation of the horn tissues. A characteristic foul odor from the foot is common in hoof rot.

Foot rot is caused by an interaction involving two types of bacteria that grow in the areas of the foot where oxygen is excluded. The first organism is *Fusobacterium necrophorum*. It is a normal inhabitant of soil and sheep manure and is always present where sheep are raised. There is nothing you can do to prevent this from being present in your soil. *Dichelobacter nodosus* is the one necessary for transmission and is the one critical to avoid coming onto your property. Please note the key word is "avoid." Once this bacteria is on your property, the task of controlling foot rot becomes immensely more difficult and more chancey. The focus of this article is for those breeders who are not yet facing the difficulty or those people who's very hard work have managed to eliminate this bacteria.

I have tried to detail the steps we have taken to avoid the introduction of the transmission bacteria *Dichelobacter nodosus* onto our ranch. You may see some practices here that seem cumbersome and overkill. It is my belief that they are far easier to deal with than with the problem if it does find its way onto your property.

Human Foot Transmission

We require that anyone coming onto our farm wear our boots (currently we are experimenting with disposable boots that slip over one's shoes) before stepping foot on any area that the sheep will travel. These offending bacteria can easily be born on the shoes/boots of visitors that come from infected ground. Unknowingly they may transfer these bacteria into your soil where it can reside in moist ground until picked up on the hoof of one of your animals. We keep a variety of sizes of boots and require that all visitors wear them.

Some people may say that they don't use their shoes or boots in areas of their farm that have animals. We still require them to wear our boots. No exceptions. We have found people very cooperative when we've explained the reasons. There have been some occasions where the number of visitors has exceeded the pairs of boots we have. In those cases, we have people go through a foot bath of zinc sulfate and water mixture.

#### Animal Foot Transmission

Whenever one of our animals leaves the farm, we drench the foot in a solution of zinc sulfate prior to allowing the animal to step foot back onto our property. On Return, we quarantine the animals for eight weeks until we are assured that they are free of hoof rot or any other diseases that they may have picked up on their journey.

We would not ever buy an animal that we knew to have foot rot. However, we use the same drenching and quarantine process for bringing new animals onto our farm. We repeatedly trim hooves and examine carefully for any evidence. We repeat the drenching during this phase to give ourselves further assurance.

These two steps have been effective in avoiding foot rot on our farm. Although this does take some time in explaining to visitors and in the quarantining for movement of animals onto the property, it is our belief that this is a lot less work and expense than trying to cope with the problem once you get it.

**\*Note:** For those who might be dealing with foot rot problems, some producers have found success in adding extra zinc mineral to their sheep's mineral mix. It's possible extra zinc could help in prevention of the disease. Please check with a nutritionist about how much to mix.