



Contagious Foot Rot

J. D. Bobb

Contagious Foot Rot (CFR) is a disease that continues to plague the sheep industry. It is found in all ages and breeds of sheep in all geographical areas of the United States. This summer has been unusually wet here in the Midwest and conditions are favorable for spread of the disease. Two bacteria are required to cause the disease in sheep, unlike foot rot in cattle that is caused by only one. Both *Bacterioides nodosus* and *Fusobacterium necrophorum* work to destroy the tissue in the hoof and cause acute and chronic lameness.

Scientific literature states that these bacteria will live only about two weeks in the soil and manure, and require the animal host to survive. The *Bacterioides nodosus* bacteria works to invade the soft tissues and then the *Fusobacterium necrophorum* enters and works to destroy the tissue. An entire flock can be put at risk by bringing in one infected sheep. When purchasing a ram, ewe, or even feeder lambs you should keep them quarantined for 30-45 days before mixing with the flock.

The classic CFR infected flock is defined by lame sheep that are often seen grazing or eating on their front knees to prevent walking on their feet. When examining the lame feet you will notice a very sharp and offensive odor, the normal hard horny part of the hoof is infected and literally rotting. The disease will spread rapidly in a flock and if left untreated will affect more than 50% of the animals. CFR will not cause death, however, the infected flock will have weight loss, poor reproductive performance, and is quarantined from movement across state lines.

There is a commercial vaccine available called Footvax that contains ten strains of *Bacterioides nodosus*. In a control program you should give an initial injection followed in six weeks by a booster. Once the first two shots have been given then the flock should be vaccinated every six months. The combination of vaccine along with foot trimming and foot baths is part of an elimination program. Farms that have a large concrete pad where they can isolate any infected sheep and use foot baths along with injectable antibiotics have had some good success in cleaning up flocks of CFR. Antibiotics that have seemed to work range from penicillin, Nuflor, Tetracycline, and Exceed. Foot bath preparations usually use Zinc Sulfate. In the powdered form mix 4 pounds to five gallons of water, we also sell a water soluble form that is much easier to mix and cheaper to ship. Formaldehyde is an alternative that works very well, care must be taken to avoid inhaling the fumes or getting the formaldehyde in the eye.

Even sheep that have been treated can be "Typhoid Mary's", often times the bacteria are in small pockets in the hoof walls or under the rolled edges of the hoof that allow them to survive. Sheep that keep becoming lame after treatment need to be culled from the flock. If the flock has to pass through low or muddy areas you should make trails that allow them to keep their feet dry.

One of the largest risk sheep producer's face by purchasing sheep is the possibility of bringing CFR into their flock. The diagnosis of CFR in a purebred flock that sells seedstock and attends shows and sales is economically devastating due to the fact it may take 3 to 5 years in many cases to clean a flock up and countless hours of trimming and soaking feet.

Straight Talk

Dr. G.F. Kennedy

Sometimes the world stands still. Not often in my life, but on the way to Alaska to spend time this summer, my world does stand still. Deb, Toby and I will be there until September. I am going to take one break for the Minnesota State Fair in late August.

I will still be in touch with my real job and answering phoned sheep questions as well as daily emails. After returning from Sedalia 55-65 degrees will be just fine. Sedalia continues to be a booming success much to the credit of Larry Mead, a real icon in the promotion and development of the purebred sheep industry. I can remember in the early seventies when the entire show and sale was in the sheep barn buying the tallest Suffolk ram in the barn, an Andrus Ram, 32.5 inches.



This year in June I was able to celebrate fifty years in practice, seems like yesterday. The world doesn't stand still, it just moves faster. When you think about it, probably the one thing that stands out is that many of my friends and associates have been around less time than I have practiced.

I have watched our practice grow from three veterinarians, one full time employee and several part time employees to groups of agri-businesses encompassing fifty companies, over 600 employees including fourteen veterinarians. We now manage 140,000 farmer owned sows that produce 3.5 million pigs fed out by farmers in a five state area. Our studs have 1,750 boar spaces with a capacity to produce 30,000 doses of semen a week. I thought it was time to step back from the managing partner position I was in which required me to either make or be involved in every final decision and accept a lower role where I could continue to do the things I enjoy doing and still be a part of a very vibrant business that developed under my leadership.

My duties today involve less financial risk and decision making at a lower level with the aspects of the companies that I enjoy the most. I still am the managing partner of the Pipestone Artificial Breeders companies. I'm very involved with the sheep portion of our practice, back-up person at our auction market, and a substantial amount of swine work, 15,000 sows.

With all the things we do, sheep are the number two enterprise at the Pipestone Vet Clinic, so let's talk a little about sheep. As many of you know I was in the Suffolk business which I exited when our daughters left home. I made a move to a slower track, Rambouillets, owned a Finn ram and some old fashioned Dorsets as well. I have always enjoyed the sheep and in fact probably the purchase of my first Suffolk sheep was enough diversion that it kept me in practice. I had thought about going back to school. We always did a lot of work with sheep in our practice and when the feed lot lambs left there was a conversion to ewe flocks through the Pipestone program and that is about the time I got involved with my own sheep. Actually to find veterinarians that were interested in sheep was difficult. It has gotten better but in some areas it is much the same today. That is one reason we have been successful. We care about sheep, their health, and their owners.

When Kay died, my world did stand still. I dispersed the Rambouillets and got out of the business. Deb and I got married and life was good again. I took her to Sedalia to show her some of my past. There, a friend of mine was judging Dorpers. I got interested and the rest is history.

Dorpers have never been readily accepted in our part of the country and after a fun experience with the sheep, I am exiting the breed. Our attention has turned to Katahdins. For those of you that are laughing, be careful. I may be the guy that laughs last.

Katahdins, a breed that has been ridiculed by many, including me, and does have some sheep that are too small and spindly has a real place in the industry. In the beginning, I referred to them as a sheep in goat's clothing. But Katahdins are a sheep. In fact a very low maintenance breed that offers multiple birth and out of season lambing. Lambs are very vigorous at birth and the ewes are excellent milkers. Our February group weaned a 240% crop with no lambs on the lamb bar.

What may be their biggest asset when it comes to small farm flocks they don't require shearing. With the difficulties involved in shearing and the price of wool this is certainly an asset. It doesn't take a lot of imagination to figure out the tremendous upside with this breed. There are problems as well and sometimes the best thought out strategy can be your worst enemy.

The first problem I would talk about is in order to qualify for their national sale you need to be in the voluntary scrapie program. If we could have gotten rid of scrapie through inspection, we would have never needed a program. Other aspects of the scrapie program are working, animal identification, premise identification, geno typing, quarantine and disposal of susceptible animals in infected flocks.

If you are presently in the voluntary program if you buy a female of less status than your own you revert to the lesser status. This happened to us once. It won't happen again as I exited the program. This has evolved essentially into a 'good ol boys' club barring entry of new people in the breed.

Addition of RR and QR animals will not introduce the disease and the use of RR rams will result in the elimination of susceptible animals.

Then there is NISP and Lamb Plan. Individual breeders may use this as a tool. Mandatory requirement has no value. Polypay breeders arguing over this program has almost destroyed the breed. Our swine breeding company uses CBV's to elevate genetics. Thousands of animals are recorded to establish values. This company employs more geneticists than the Ag college system combined. They have yet to convince the producer he should pay thirty cents for \$1.80 return. Problem is, they haven't figured out how to capture a six dollar return over the competitors. That has to happen first. Now you tell me a bunch of sheep farmers got it figured out. I don't think so. I being one of those sheep farmers.

There again, pursue the programs if you see an advantage. But the advantage shouldn't be a bureaucratic way to prevent expansion of the breed.

One guy said, "We don't want to have happen to us what happened to the Suffolks." Did something bad happen to the Suffolks. Last I looked they were doing well in registration numbers and sale value. You can choose what kind of sheep you want to raise but don't turn away interest in your breed by a bunch of meaningless measurements and a bureaucratic disease program.

These comments are meant to be constructive and not mean spirited. I am as excited as I ever have been about any breed of sheep. I see a great future for Katahdin sheep. We should not restrict entry into the breed.

You can check us out at www.wildernessbeachlodge.com and I can be emailed at gkennedy@pipevet.com. I answer sheep questions daily regardless of where I am.

Have a great summer. We expect to and I will see some of you at the Minnesota State fair.

GO VIKINGS!!

Question & Answer with Dr. Kennedy

Question: When do you insert the CIDRS into the ewes before putting out the buck? Also, could you explain how to use them?

Answer: The directions call for inserting them for 5 days and then removing them. We have a long history of leaving them in 12 days, removing them and giving an injection of PG-600 and inserting a ram 24 hours later. We feel this is better. There is an applicator and insertion is relatively easy.

Question: I have a flock of 50 Suffolk and dorset ewes. I was wondering what the best thing to use for flushing them before breeding and how soon I should flush them before breeding? Also, do I flush the rams the same as the ewes? Last year I don't feel that I flushed them properly and did not have a very successful lambing season and I feel that this may have been one reason why. Any advice would be helpful.

Answer: I would feed a pound of shelled corn a day 30 days prior to breeding. Rams should be fed to be in good condition but not too fat. If you don't turn rams out until after labor day you will have better results.

Question: Yesterday I noticed that one of my ewes had lumpy and large udders. It seems to be very sensitive to touch. She has no other signs of a systemic infection that I have noticed. What antibiotic do you recommend?

Answer: Diagnosis would be mastitis. With sheep the infected side seldom if ever, recovers. They usually can raise one or two lambs on one functional side. If both sides are non-functional, I would send her to slaughter. Antibiotic of choice would be Nuflor and 1cc of Penicillin per 10# of body weight. You may substitute LA 200 for Nuflor.

Question: I understand that it is good for 6 months and then I would need to re-vaccinate the sheep. Can the sheep be vaccinated during breeding and pregnancy?

Answer: The vaccine will keep after opening, particularly if you add about 5cc of penicillin to the unused portion. I would use the vaccine for prevention. It will help develop an immunity in an eradication program that includes foot trimming, formaldehyde bath and transfer of lots after foot bath.

Question: In your June sheep letter, on the topic of coccidian, you state that Corid is out, no value doesn't fit. Bovatec as well. Use Deccox in sheep. I have used all three and I think they all work. I have Bovatec added to my finishing ration. Corid, in the powder form is added to the loose salt. Deccox has also been used in loose salt. Is this not the best practice to use?

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Veterinary services, procedures, biologicals, and drugs mentioned in this publication represent the personal opinions and clinical observations of the contributing author. They are in no way intended to be interpreted as recommendations without the consent of the producer's own practicing Veterinarian. We strongly urge that producers establish a patient-client-veterinarian relationship that allows extra-label use when there are no drugs approved for treatment or if approved drugs are not effective. This procedure allows veterinarians to go beyond label directions when "prudent use" is necessary. The limited availability of drugs and biologics in this country is a major factor in restricting the growth of the sheep industry and allowing producers to compete in the world Market place.

Answer: Draxxin in ration or loose salt is the best procedure. Bovatec is not very effective, Corid works in the middle of the cycle and is not very effective for treatment of clinical coccidiosis. Use what you have confidence in that's my approach. I have experienced too many failures with Bovatec and Corid.

Question: My daughter has a 125 pound market lamb that has had a fever. Our vet told us to give him 1cc of banamine but we aren't sure what the withdrawal time is since it isn't labeled for sheep. We want to make sure and keep correct records so we wondered what you would tell your client withdrawal time is on Banamine.

Answer: Flunixin, Meglumine, Banamine, has a four day withdrawal period for cattle, so I believe you would be safe by doubling that period.

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