

The following letter was sent to the regular contributors and research editor of the "Pipestone Veterinary Services Sheep & Goat News" in June 2014.

It also appeared in the July 2014 issue of "The Shepherd" magazine:

We are writing this letter in response to a number of comments in recent publications of "*Pipestone Veterinary Services Sheep & Goat News*" implying that ovine progressive pneumonia (OPP) is not a concern to the sheep industry. In particular, we would like to address one quote written by Dr. Kennedy in the January 2014 issue where he stated, "[OPP] is not an economic factor in commercial sheep production." Following is a description of what we have experienced first-hand in our sheep operation with regards to OPP. Read and then decide for yourselves if OPP is an economic factor.

Since 1982, we had endured 12 frustrating years of raising an excessive number of bottle lambs, dealing with ewes having poor milk and hard bags, ewes falling out of condition when they should have been entering the prime of their productive years (3-4 years old), and overall poor flock health. We had numerous veterinary visits from two different veterinarians to the farm to try and determine the cause of the poor flock health, but they could not identify a cause. We even depopulated and completely started over with a new flock of all yearling ewes, only to encounter the same problems one lambing season after another. At the advice of a veterinarian, we even consulted with a nutritionist and tried different feed rations and supplements; however, this also failed to solve the problems.

Finally in 1994, almost at the point of being ready to completely get out of the sheep business, we had a third veterinarian come out to the farm. He suggested that we test our flock for OPP as that was likely the cause of our problems. Even though we had been told by both of the previous veterinarians that OPP definitely was NOT the cause of our flock health issues, we felt at this point that we had nothing to lose by testing. A random sampling of our flock showed an 85% OPP infection rate.

With this high of an infection rate, we again decided to depopulate. After a great deal of searching, we found a flock with a high standard of health that had the genetics we wanted in our operation, as well as a low incidence of OPP when a random sampling was tested. We purchased 220 yearling ewes and once more started over. However, this time we began testing for OPP using the AGID test and culled all ewes that tested positive. What a difference! Ewes now had plenty of milk to raise their own lambs. We were amazed by how easy and simple lambing could be without the extra time and effort required to care for bottle lambs.

The second year of testing resulted in 38 positives out of 360 ewes. Feeling the financial crunch of purchasing ewes at replacement cost and then reselling them at cull price (along with the cost of testing), we decided to retain them. We also thought this would tell us if the health issues were really caused by OPP or if we just happened to get ewes with better genetics. Keeping them completely isolated from the negative flock, we lambd them out. Our experience with those 38 positive ewes (all yearlings and 2-year-olds) was a real eye opener and completely persuaded us about the negative effects of OPP. From that group of 38 ewes, we had 22 bottle lambs, 1 down ewe, 2 prolapses, hard bags, poor milk, and slow-growing lambs.

In contrast, that same year the OPP-negative group of 322 ewes had only 9 bottle lambs (from triplets), no down ewes, no prolapses, and no hard bags. The lambing percentage was relatively the same for both groups; however, the milking ability of the OPP-negative group was remarkably better. This confirmed that we had finally found the cause of the hard bags, poor milk, and poor flock health. (*Note comparative data on next page.*)

We continued annually testing our flock and culling all positives. By 2000, we had achieved a flock with a 100% negative status. We have maintained this status since that time, and plan to continue to do whole flock testing every five years to remain negative for OPP.

Following are a few of the flock health improvements that we experienced as a result of eradicating our flock of the OPP virus.

Experienced with 85% infected OPP flock

500 ewes with 140% lamb crop
Average 150-180 bottle lambs year after year
Lambs lethargic due to lack of colostrum
Slow rate of gain due to lack of milk
Numerous down ewes
Ewes dead or extremely thin by age 5

Experienced with OPP-tested negative flock

800 ewes with $\geq 185\%$ lamb crop
Average 20-30 bottle lambs (last year only 14)
Lambs vigorous, up and nursing on their own
Healthy good growing lambs
An old ewe heavy with multiples may go down
Ewes culled at age 10 (most in good condition)

Regarding economic impact, we would like to draw attention to the number of bottle lambs experienced with the two flocks and put the difference between the two into perspective. In our operation, we use one bag of milk replacer per bottle lamb, at a cost this year of \$42.45 per bag.

OPP-Infected Flock

- 500 ewes x 140% = 700 lambs; of these 700 lambs 150 were bottle lambs, or 21% of total lambs
150 bottle lambs x \$42.45 per bag of milk replacer = \$6,367.50
\$6,367.50/500 ewes = **cost of \$12.74/ewe**

OPP-Tested Negative Flock

- 800 ewes x 185% = 1,480 lambs; of these 1,480 lambs 30 were bottle lambs, or 2% of total lambs
30 bottle lambs x \$42.45 per bag of milk replacer = \$1,273.50
\$1,273.50/800 ewes = **cost of \$1.59/ewe**

- Additional cost of OPP-positive ewe versus OPP-negative ewe: \$12.74 – \$1.59 = **\$11.15/ewe**

Now, we ask the question, “Is the cost of \$11.15 per ewe plus the extra labor and equipment needed to handle bottle lambs, slower growing lambs in the feedlot, and the cost of retaining and/or purchasing additional replacement ewes an economic factor in your sheep operation?”

After talking with OPP researchers, our understanding is that stress is a factor in how OPP affects the animal. Our ewes are probably under more stress than sheep in some other operations since we lamb our entire flock of 800 ewes at one time during January and February. The majority of our ewes have their lambs within a three-week period, which causes crowded conditions in the drop area and the need to process pairs very quickly through the lambing jugs.

If one of the goals of the sheep industry is to increase sheep numbers and attract new producers, we need to do all we can to make their first involvement with sheep a positive experience by giving them the facts of sheep diseases frequently encountered, including OPP. I am amazed by how many people say they would never raise sheep again, after a bad experience from their first group of ewes. We need to be open to any and all possibilities that would improve sheep health and promote ease of management so that producers can enjoy raising sheep, as well as earn a well-deserved profit.

Tom & Marilyn Schwebach
Egan, SD