Dan Hammond Fish Creek Farm 32741 Ascot Rd, Grey Eagle, MN 56336 320-285-7583—DDHammond@landolakes.com

What do you do when you find out you have OPP in your flock? Sell all and start over, or try to save as much of twenty years of genetics as you can? I made the decision

to save.



Up until about 2010 I had been happy with a flock that gave and raised twins, and even triplets, until they were ten or eleven years old with little help from me.

But by 2011, three years after bringing in a new ram, I started to have to help with births and some

lambs didn't have any desire to nurse; they seemed to be born too weak. The ewes had some runny noses and occasional coughing but it all cleared up in the spring once they got outside.

2012's lambing had a bunch of bottle lambs, a ewe died while lambing and a third of the lambs just died. I had tried different treatments suggested by local non-sheep-enthused vets, but with no luck.

So 2013's lamb crop had up to half of the lambs die, and the rest didn't grow very fast. Many were bottle lambs and one died at three-and-a-half weeks. So when they finally had enough weight in February they all went to market. I started to think about leaving sheep; it just wasn't fun anymore.

That's when I heard about the OPP trial; it sounded like what was happening in my flock. With almost all positive for OPP it was easy to segregate the two negatives: one ewe and my ram. I wanted to replace positive ewes as fast as possible so all ewe lambs from positive ewes were weaned at four weeks of age and kept separate from the rest of the flock.

During 2014 half of the positive ewes were culled along with a positive ewe lamb. For 2015 I culled the rest of the positive ewes after lambing, along with three more of the 2014 ewe lambs that tested positive. In 2016 and 2017 two separate sets of tests gave me four negative tests in all so I could say I am test-negative and I made it.

Things that had to be done to control the spread of the virus were to have a 9 to 10 foot separation between positive and negative animals, and always work the negative animals first. Luckily my ram is still negative. He worked the negative ewes first, then the positives. He tested negative before going back to the negative ewes.

This has been extra work but what's life without a good challenge. That's why we farm.

- Columbia x Dorset: ewes homebred; rams purchased
- Symptoms: hard udder, little or no milk, weight loss despite good appetite, chronic unresponsive pneumonia, coughing, snotty noses, lagging behind flock
- Lamb February/March; cold closed barn; ewes on pasture in season; lambs raised indoors with free access to dry lot (no pasture)
- Baseline: 27 adult ewes, 96% positive (and the lone holdout was positive on the next test); OPPv likely introduced via a purchased ram; flock had been less than 1% infected when first tested in 2001
- · Potential replacements tested during the trial, several weaned as early as 4 weeks of age:
 - 2013: None tested (all shipped to market prior to start of trial)
 - 2014: 1 of 17 (6%) test-pos @ 5-7 mo, and 3 more turned positive by 2015
 - 2015: 10 of 10 (100%) test-negative @ 7 mo
 - 2016: 3 of 3 (100%) test-negative @ 5 mo
 - 2017: 21 of 21 (100%) **test-negative** @ 1-3 years of age (2017-born lambs were not tested since this was the 3rd consecutive negative test for all adults)
- All test-positives were gone from the premises by May 2015
- To minimize the opportunity for horizontal transmission, owner elected to wean lambs from this heavily infected flock at 4 weeks of age; half of the original ewes were culled in 2014, the rest in 2015
- Turning over the entire flock so quickly while using only two rams resulted in some loss of genetic diversity, but this can easily be remedied now that the flock is clear of virus
- Ram suspected as infection source had been purchased in 2008 at 9 months of age, exhibited symptoms intermittently (weight loss, "summer pneumonia") and died suddenly at 2 years of age
- This was the first flock in which we observed some elevated test results, one just above cutoff, in young ewes approaching estrus; these were re-tested as a precaution, with all strongly negative months later