

Minnesota's OPP Eradication Trial

100% Infected to All Negative, without orphaning? *He did it . . . you can too!*

Judy Lewman and Holly Neaton, DVM

What do you do when the ewe flock you've carefully selected for production turns up 100% test-positive for OPP? Sell all and start over, or try to save as much of twenty years of genetics as you can? As you'll read below Dan Hammond decided to rebuild the flock from within, growing replacements from his prolific Columbia x Dorset ewes.



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

"But 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. Half of the lambs died and the rest didn't grow very fast. Many were bottle lambs. The ewes had some runny noses and occasional coughing but it seemed to clear up in the spring once they got outside.

"I tried different treatments suggested by local vets, but with no luck. So when the lambs finally had enough weight they all went to market. I started to think about leaving sheep; it just wasn't fun anymore."

Soon after, in late 2013, Dan enrolled in Minnesota's OPP Eradication Trial. But other flocks were already testing lambs and all of Dan's had just been shipped. He had some catching up to do, which he did in spades!

By selecting ewe lambs for replacements through the next two lambings Dan was able to build a new test-negative flock before culling all of the original ewes in early 2015. And in June 2016 he reached test-neg status in Minnesota's OPP program with the Board of Animal Health, the first Eradication Trial flock to do so.



Hammond Ewes at Fish Creek Farm in Grey Eagle, MN

The ram suspected as infection source for the Hammond flock had been purchased in 2008 as a nine-month-old lamb, exhibited symptoms intermittently (weight loss, "summer pneumonia") and died suddenly at two years of age. Unfortunately, he was never tested for OPP.

So Dan's advice today for anyone hoping to avoid OPP is *"to test any animal as soon as you get it and keep it in quarantine for at least 60 to 90 days, then have a second test done before turning it into your flock."*

Anyone can eradicate OPP . . . ready to try?

Eradication requires careful planning, persistence, and a significant investment. While there are various paths to success, multiple tests will be needed regardless of the approach. Below are some lessons too often learned the hard way. More info at www.OPPsociety.org

- Good IDs and attention to detail are essential! We have heard too many times of one animal missed when removing positives so they had to start all over again.
- There is definitely genetic influence on how the animals respond to the virus but there needs to be much more research on this. We hope that this happens but meanwhile we believe that the only way to eradicate OPP is to remove the virus from the farm.
- While eradication can be expensive, everyone who has gone through the process has said it was well worth the big cost up front rather than the slow bleeding of money over the years. One producer hoped to purchase clean ewe lambs but couldn't find any for less than \$300. He figured he could run a lot of tests for much less than that and be able to retain the genetics that he's been working on for 10 years.
- Retesting 2-3 months after removal of positives is the quickest way to climb out of the hole, the goal being two consecutive whole-flock negative tests after all positives have been removed. Three or four test rounds are often all that's needed. Not catching early positives allows the virus extra time to spread and you just end up chasing your tail.
- The Elitest® ELISA is essential for success with this new eradication method. While not USDA-licensed, it's the only ELISA for OPP validated to World Organization for Animal Health (OIE) standards. Ironically, the initial work for this test was done by USDA researchers in the early '90s but lack of industry support moved it to Europe.
- To avoid false positive tests in lambs due to maternal antibodies it's best to wean at 6-8 weeks, then wait 60 days before testing. If lambs *must* be tested at weaning, remove any positives immediately, but *be sure to retest the negatives* 2-3 months later! Valuable test-pos animals may be segregated for retesting, but this can become costly over time.
- Retesting early infections in hopes of a better outcome can drive you crazy as the virus mutates, causing the immune response to go up and down. Better to trust the test. The Canadian and European programs don't allow retesting—one strike and they are out.
- OPP is relatively easy because it comes with the sheep and leaves with the sheep. Unlike Johne's or CL, the OPP virus is fragile so it doesn't survive long in the environment.

New OPP program gaining steam in New York!



New York veterinarian and Texel breeder, Dr Judy St Leger, recently retired from a 20-year career with SeaWorld where she served as their Senior Research Associate investigating wildlife issues throughout the world.

Thankfully for us, sheep are Judy's first love and shortly after joining the OPP Society she volunteered to help lead eradication efforts in NY. Interested producers are invited to contact her at judy.st.leger@gmail.com (or) 518-993-4983

Article appeared in the June 2019 issue of 'The Shepherd' magazine.