

Alaska Department of Fish and Game

October 17, 2019 *Mycoplasma ovipneumoniae* (M. ovi) update

In 2019, reports by Alaskans of sick and dead animals proved particularly helpful to ADF&G's continued monitoring of wildlife populations for disease. The number of Dall's sheep mortalities being found by hunters, other members of the public, and biologists has been within normal bounds. Most observed and harvested sheep appear to be healthy and in good condition. Regardless, we have increased and are considering additional ways to further increase health surveillance of Dall's sheep populations.

On July 8, 2019, a young Dall's sheep ram was found dead in GMU 14C by a pilot and reported to ADF&G. Dr. Tom Lohuis, Region II Wildlife Research Coordinator, and Dave Battle, Anchorage Area Biologist, and conducted a field necropsy that day. There was no evidence of pneumonia, and tests were negative for M. ovi.

On July 29, 2019, a dead Dall's sheep ram was spotted by a pilot in the Tok Management Area (TMA) within GMU 13 and reported to ADF&G. On Aug. 1 Tok Area staff picked up the partially scavenged carcass and shipped the head, heart, lungs, liver, rumen, and a front leg to Fairbanks. On Aug. 2, Dr. Kimberlee Beckmen, Wildlife Health and Disease Surveillance veterinarian, examined the carcass and determined the cause of death was pneumonia. PCR test results were positive for M. ovi.

On August 20, 2019, a dead Dall's sheep ewe and a live lamb were spotted in GMU 12 and reported to ADF&G. Tok Area staff collected the carcass of the ewe and euthanized the lamb. Both carcasses were shipped that day to Fairbanks, and, Dr. Beckmen and team necropsied the animals. The cause of death for the ewe was mastitis and lungworm pneumonia, and test results for both ewe and lamb were negative for M. ovi.

As of October 17, 2019, additional testing of archived samples and many 2019 hunter harvest surveillance samples results have been received from the Washington Animal Disease Diagnostic Laboratory (WADDL). Thirty-two nasal swab samples from sheep harvested in the Tok Management Area were tested. Of these, M. ovi was detected from nasal swabs of five presumably healthy rams, and one that a hunter reported to be coughing and had mucous draining from the nose.

Other than within the Tok Management Area, 283 additional hunter harvested rams were sampled, and M. ovi was detected in three presumably healthy rams from elsewhere in the eastern Alaska range, Talkeetna and Wrangell mountain ranges.

ADF&G wildlife biologists collect tissue samples from animals when opportunities arise such as capture mortalities, hunter harvests, and reported mortalities. These samples are archived, and a variety of tests can be performed years later. In the summer of 2019, ADF&G had 39 archived lung samples from Dall's sheep (24 with and 15 without pneumonia) tested for M. ovi. There was only one positive result – a GMU 20A Dall's sheep lamb that died in 2004 of bronchopneumonia.

We are unlikely to have a complete understanding any time soon of the complicated issue of M. ovi in Alaska. There will be periodic updates as additional results and information becomes available.