MAINTENANCE OF MOOSE COLLARS TO SUPPORT THE NORTHEAST BC MOOSE RESEARCH PROJECT

Moose mortality investigation no. 2 – May 24, 2015

Moose ID: 15-5599, Collar ID: GSM18326 Prepared by: Ingebjorg Jean Hansen

Summary

Moose ID: 15-5599

Collar Type: Vectronics Vertex

Collar ID: GSM18326

Sex: Female

Area: Clarke

Frequency: 153.180

Cause of death: Dystocia / Obstructed labour

Date of death: May 21 2015



Figure 1. Moose 15-5599 as found May 24 2015

Background:

On May 21, 2015 late in the day, we received notification of mortality by Caslys Consulting Ltd (Caslys). for Moose 15-5599. Caslys observed reduced movement rates since May 19 2015, but no mortality signal from Vectronics was received until May 21 2015. On May 23, we deployed to Fort Nelson and flew to retrieve the collar on May 24 2015. There was no opportunity for First Nations involvement on this investigation as additional personnel required training and landing/flight conditions precluded additional crew members.

Methods:

The mortality site was accessed via helicopter from the Fort Nelson airport. The last known location of the collar was used to set the flight path and aerial telemetry techniques were used to get an exact location of the collar prior to landing. Location and habitat details as well as photographs and biological samples were taken. The sampling protocol followed the BC Moose Research Mortality Investigation Form from the BC Ministry of Forests, Lands and Natural Resources. Wildlife health ID numbers were assigned to each sample and are linked to the moose ID number.

Results and Discussion:

Moose 15-5599 was located by aerial telemetry at 58.615584°, -122.083409°, or UTM 10V 553245, 6497612 in a stunted black spruce bog with low stem density southeast of Clarke Lake. The animal appeared completely intact from the air and ground investigation revealed the carcass had experienced only minor scavenging via ravens, small mammals (e.g. shrews), maggots and carrion beetles. The hind legs of a calf were observed (e.g. the calf was only partially birthed) and an on-site necropsy revealed the likely cause of death to be dystocia or obstructed labour (Fig. 1). There was no measureable underbite (Fig. 2) and the hoof wear appeared normal (Fig. 3). During sampling it was noted that all internal organs appeared healthy with the exception of the liver, which was black in appearance and may indicate infection or hemorrhaging. Examination of the musculature and skeletal system revealed a large bruise on the left-hand side of intercostal muscles of the lower four ribs. A haematoma was observed beneath the visceral membrane and could have resulted from obstructed labour. The cause of the bruise is unknown but could have come from interaction with another large mammal (H. Schwantje pers. comm.). Further examination by provincial wildlife veterinarians is warranted. External appearance and internal measures, such as back fat indicate a relatively healthy body condition. Biological samples taken included the long bone, entire head, kidney (entire + samples), liver samples, intestine samples, and muscle samples. All samples collected were labelled and given health ID numbers (15-5599-1 through 15-5599-10). No samples were taken from the unborn calf but upon removal, despite some decay, it was well-formed and had

a cranial-rump (CR) measurement of 127cm. Pellets were not observed on site but nearby pellets located on the walk out appeared normal.

While there was some post-mortem movement of this collar, the locations remained within a 40m radius circle and the final location received by satellite prior to dispatching to retrieve the collar was only 5m from the actual location of the mortality.

Figures: Moose 15-5599



Figure 1. Moose 15-5599: hind legs of calf (in red circle); obstructed labour



Figure 2. Moose 15-5599: underbite = 0.00mm; incisors meet premaxillary pad



Figure 3. Moose 15-5599: hoof showing normal wear