MAINTENANCE OF MOOSE COLLARS TO SUPPORT UNBC RESEARCH PROJECT

MOOSE ID: YELLOW 0-793 COLLAR ID: GSM 18354

Moose Mortality Investigation #1, April 7 2016 Report by: Sonja Leverkus PhD RPBio Shifting Mosaics Consulting, Fort Nelson BC Canada





SUMMARY

Moose ID: Yellow 0-793

Collar type: Vertex Vectronics

Sex: Female

Area found: Moose 18354 was found south east of Clarke Lake in the Clarke Core Area

Frequency: 153.990

Cause of death: Wolves

Date of death: Unknown

Date of investigation: April 7, 2016

Investigation team: Sonja Leverkus, Eva Needlay, Harrison Dickie, flown by Cameron Allan of Qwest Helicopters.



Figure 1. Moose collar 18354, found less than 51m from kill site.



BACKGROUND

- We received notification of the potential kill on April 6th and our field team assembled and deployed on April 7th 2016.
- The movement of the animal was limited in the days prior to the investigation.
- There was one collared female moose (15-5593, GSM18344) close to Old Fort that was investigated while on the way to Moose 18354 in the Clarke Lake area.

METHODS

The last known point of the collar was used to provide the location to travel to via helicopter from Fort Nelson. Aerial telemetry techniques were used, and the kill site was visually spotted from the helicopter along a cutline. The BC Moose Research Mortality Investigation Form from Ministry of Forests, Lands, and Natural Resources sampling protocol was followed to obtain samples from the remains of moose 18354.

RESULTS AND DISCUSSION

The kill site was located north of a powerline on a cutline that runs northward, south east of Clarke Lake, situated in a spruce dominated forest. Snow was still present at the location and varied in depth from 15 to 40 cm, melted in pockets 25 to 40 cm deep.

The collar was found via handheld telemetry 51m from the kill site at UTM 10 V 553191, 649851, still mostly intact (fig 1). A search around the kill site and collar location was conducted which found wolf tracks and scat. There was wolf hair tangled within the prickly rose bushes. All that remained of the moose at the site was a jaw bone, ear, leg, a hoof and bone fragments. The jaw bone and ear were collected, labeled, and delivered to BC FLNRO on June 2nd 2016.

Wolf predation is the likely cause of death due to the amount of wolf tracks, scat, and hair found at the site and the small amount of moose remains left at the kill site. It appeared that ravens had also been present at the kill site with body parts and bone fragments scatted throughout the immediate area. There were moose pellets along the cutline and powerline with obvious browsing on shrubs.

Prior to investigating GSM18354, we tracked Moose 18344 (frequency 153.720; 15-5592) and found her to be in the big timber southwest of Old Fort, on the south side of the Muskwa River. It appeared that she may still be pregnant. MOOSE MORTALITY GSM18354/ 15-5608 April 7 2016



FIGURES



Figure 2. Kill site on cutline north of powerline with view north towards a cutblock.



Figure 3. Kill site located on the cutline.





Figure 4. Kill site on cutline with Eva Needlay and Harrison Dickie for scale.



Figure 5. The jaw bone was collected and bagged.





Figure 6. Significant presence of wolves was noted as tracks were abundant.

APPENDIX A - INVESTIGATION MAP



Map 1. Collar location in proximity to Fort Nelson and Clarke Lake.