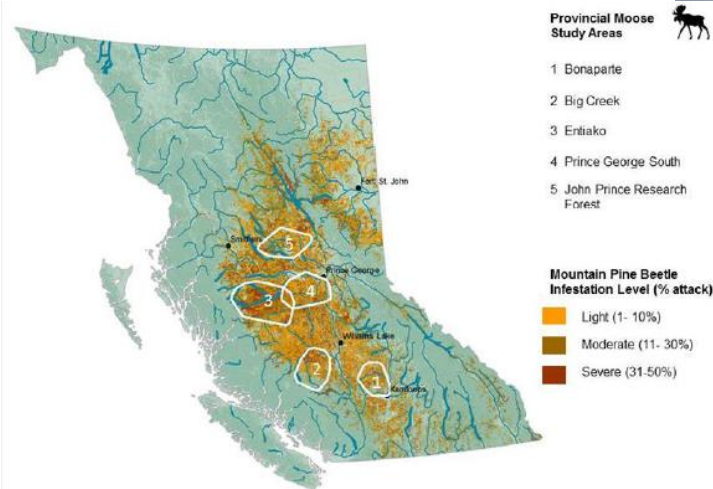


Update on Provincial Moose Research in the Omineca Region

A comprehensive 5-year moose study that investigates recent moose population declines in B.C.'s interior is underway. Inventory work conducted by wildlife biologists in 2011/12 indicated that moose densities in some areas of British Columbia's interior have declined, while they were stable in other areas. The study will help determine what factors contributed to the declines and what can be done to reverse them.



Areas where moose are monitored for survival and habitat use. Currently (Dec 2016) there are 205 collared moose in the five study areas.

This Provincial Moose Research Project has 5 study areas spreading from Tezzeron Lake near Fort St. James south to the Bonaparte region northwest of Kamloops, with 2 related study areas in north-central BC. These study areas were specifically chosen to ensure that a range of landscape features, including the forest age, the amount of pine-beetle infestation and associated salvage logging and road building, are examined. The study will investigate:



Cow moose after beina fitted with a GPS collar.

- What factors influence cow moose survival, such as hunting, predation, parasites and diseases
 - How does forestry-related changes to the landscape (logging and road building) influence cow moose survival
 - What are the seasonal movements and distribution of moose populations in these areas.

Moose Captures in Prince George South and John Prince Research Forest

Currently there 40 collared cow moose in the Prince George South (PGS) area and 36 in John Prince Research Forest (JPRF). The capture crew applies an eartag and a collar and takes a variety of samples from each cow moose to assess the age, health and body condition of the cows. The combined experience of the capture crew ensures that the handling time was minimal. The capture and handling protocol was approved by the Ministry Animal Care Committee.



Photo: Chris Procter

Aerial darting of a cow moose. 336 cow moose have been collared in the Provincial Research Project (Feb 2012-Dec 2016); 203 aerial darting and 133 by aerial netgunning.



Photo: Mike Bridger

The capture team hard at work. Once immobilized, the collar is fitted and samples are collected. Samples help us understand pregnancy rates and prevalence of parasites and disease. The capture crew blindfolds the moose to help minimize stress.

The moose that were collared were in fair to good body condition. Cows with calves generally had lower fat stores than cows without calves; this is expected because of the energetic demands of producing milk. There were no outward signs of disease, with only a minor amount of hair loss on some animals probably associated with early stages of winter tick infestations.

Mortality Site Investigations

Mortality site investigations are a key component of this study. Collars that don't move for 6 hours notify biologists by email. Biologists immediately investigate to determine why the moose died and what may have led to the death. For example, a moose in poor body condition killed by wolves may have been selected for predation because she was already in poor body condition and thus, easier to kill.

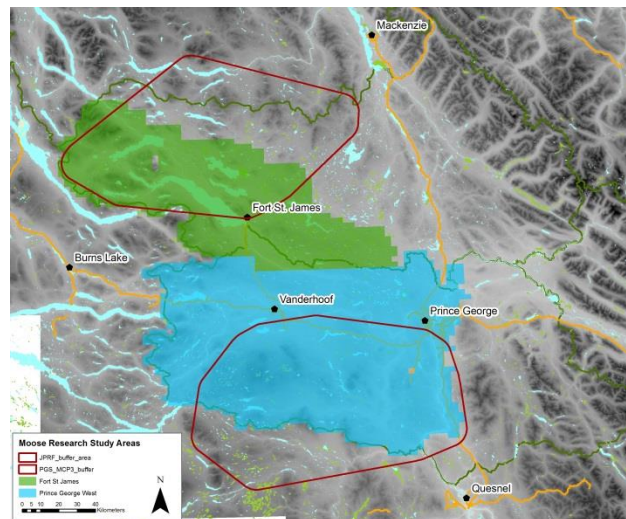
So far, 9 collared cow moose have died in the PGS study area. Probable causes of death were: 4 from apparent starvation, 3 from predation, and 2 from unlicensed hunting. 5 collared cow moose have died in the JPRF study area: 4 from predation and 1 from unlicensed hunting.

What's Next in Prince George South and John Prince Research Forest?

Mortalities will continue to be investigated and habitat use will be monitored. Locations of collared moose are sent daily to biologists. Biologists can then determine on a daily basis not only whether the moose is still alive, but also how they are using the habitats available on the land. In the winter of 2016/2017, biologists are planning to deploy a total of 22 collars on cow moose in these 2 study areas.



The GPS-collar tells biologists the location of the moose mortality. Biologists visit the site as soon as possible to determine cause of death and collect samples.



Prince George South and John Prince Research Forest (red polygons) are currently 2 of 5 study areas within the Provincial Moose Research Project. A survey is being conducted over the winter of 2016/17 that will provide an updated estimate of the number of moose in these areas (blue and green areas are the related survey areas).

Harvesting Collared Moose

You can legally harvest a collared moose. If you harvest a moose with a collar and/or ear tag, please follow the instructions on the tag - call the RAPP line (1-877-952 RAPP (7277); this number is on the tag). We want to ensure that there is no risk to human health - the meat is not edible if the moose was harvested within 30 days of being immobilized for collaring. If you shoot a collared animal, please return the ear tag and collar to the nearest ministry office and let biologists know where you harvested the moose.

To ensure the safety of hunters, and anyone that may eat the meat of collared moose, call the RAPP line, 1-877-952 RAPP (7277), before eating any part of a collared moose.

Moose Winter Tick Surveillance

The BC Wildlife Health Program is continuing the Winter Tick Surveillance project that began in 2015. It is simple: anyone who sees a moose during a certain time of year should note any hair loss it has and report it; hair loss occurs when moose rub because of the ticks. From February to late April, all observations of moose (with and without hairloss or ticks) should be reported. Provincial staff will send out survey forms in the new year. These observations are important to provincial moose management as it allows us to develop an index of moose tick infestation through time. Your assistance is greatly appreciated.



Varying amounts of tick infestation observed on moose in British Columbia. From February to late-April, the BC Wildlife Health Program is asking for all observations of moose winter tick to be recorded (survey forms to be sent out in early 2017).

For questions regarding the Provincial Moose Research Project, please contact Regional Wildlife Biologists:

Michael Klaczek, Shelley Marshall, or Morgan Anderson at 250-614-7400 or via email (Michael.Klaczek@gov.bc.ca, Shelley.Marshall@gov.bc.ca, Morgan.Anderson@gov.bc.ca).