
FACTSHEET

June 17 , 2014

Ministry of Forests, Lands and Natural Resource Operations

Provincial overview of moose population estimates for 2014

Summary

During the past winter (2013/14), Ministry of Forests, Lands and Natural Resource Operations regional staff have undertaken 20 moose population surveys. These results, as well as those in 2011/12 and 2012/13, indicate that certain areas of the province are experiencing a decline in moose numbers including the Cariboo, central Omineca, and the North Thompson. It is important to note, however, that moose populations in other areas of the province are stable.

In addition to conducting moose surveys, the ministry has developed a draft provincial moose management framework in cooperation with the BC Wildlife Federation and Guide Outfitters Association of BC.

A comprehensive five-year moose study, launched earlier this year will investigate recent moose population declines in B.C.'s Interior. The study will engage 11 wildlife biologists, one wildlife veterinarian and several other staff over its five-year duration. Over 200 moose will be radio collared, their movements tracked and all mortalities will be investigated to determine cause of death. To learn more about the study visit:

<http://www.newsroom.gov.bc.ca/2014/02/province-launches-comprehensive-moose-study.html>

Province-wide, the decline in some moose populations is not considered to be an immediate conservation concern. However, the 2013/14 survey results mean that hunter opportunities for moose in 2014 will be reduced in certain areas.

This backgrounder summarizes the survey findings in 2013/14 by region along with regional response actions where relevant.

The current (2011) estimate for B.C.'s moose population is 145,000 to 235,000. This number is updated every three years based on a range of information, with the next full update scheduled for later in 2014. For additional information

visit: http://www.env.gov.bc.ca/fw/wildlife/management-issues/docs/2011_Province%20Ungulate%20Numbers%202011_August%2024.pdf

Peace Region

- In the winter of 2013/14, a moose survey was conducted in the Ferrell Creek area (Management Unit 7-35). The moose population increased by 64 per cent from when last surveyed in 1996.
- The moose density in this management unit is well above the recent average for the Province, and bull to cow and calf to cow ratios are above provincial objectives.

Response:

- Ministry staff will continue to monitor the population and assess results. No specific changes to moose regulations in the Peace Region are anticipated as a result of the recent survey.
- The ministry is planning a review of current moose management procedures to inform the development of a Regional Moose Management Plan. The review will involve in-depth consultation with First Nations and other stakeholders.

Omineca Region

- Surveys in 2011/12 and confirmed in 2012/13 showed that moose densities in the southern portion of the region around Prince George have declined by 50 per cent since 2005.
- Populations in the northern and central part of the region have remained relatively stable.
- Although moose surveys in the Prince George area documented a substantial decline, current moose densities are similar to healthy populations in other parts of North America.

Response:

- Ministry staff are working closely with key stakeholders, other wildlife experts and First Nations to investigate the cause for the declines in the Prince George area, and will be examining options to promote recovery of those moose populations. A regional moose management plan is also being developed in close cooperation with stakeholders and local First Nations.
- In 2012, Limited Entry Hunt cow numbers were reduced by 40 per cent from 2011 levels. Starting in 2013, LEH numbers for cow moose were further reduced to 10 per cent of 2011 levels. These lower LEH numbers will be maintained for 2014. This is expected to result in a modest increase (5 to 10 per cent) in moose densities over the next four years.
- For fall 2014, the calf season has been restricted to youth or seniors only, and the season dates shortened from 16 days to 10 days
- A computer population model is being developed to assess possible causes of the moose decline. This work is incorporating inventory results from 1982 to present including the newly acquired inventory data.

Skeena Region

- In 2011/12, a survey of the Bulkley Valley Lakes District confirmed that the moose population had declined from 2004 by 20 per cent. The population, however, is considered to be comparatively healthy, with good calf recruitment and bull to cow ratios above provincial objectives.
- A survey of the Kispiox population in January 2014 provided results very similar to those obtained from the previous survey in 1999. Bull to cow and calf to cow ratios were above provincial objectives.

Response:

- In 2012/13, additional resources for inventory allowed the ministry to determine separate population estimates for moose in Management Units (MU) 6-01 and 6-02 (in the southeast portion of the region), whereas the 1997 estimate was combined. This revealed a roughly even distribution of moose in the area, where previously it was believed the majority (70 per cent) of the moose were in MU 6-01. This resulted in a shift of some licensed harvest opportunities from MU 6-01 to MU 6-02.
- The Lower Skeena and Kispiox surveys confirmed that the population estimates being used to establish harvest rates and quotas is appropriate, and no changes are planned.

Nass Wildlife Area (Nisga'a Final Agreement), 2011

- Results from the 2010/11 survey indicated that there had been no increase in the moose population since the previous survey in 2007.
- The licensed hunting season in the Nass Wildlife Area was closed in 2012, based on 2010/11 survey results. The season remains closed for the current hunting season.

Response:

- There are no further regulation changes anticipated at this time.
- The province continues to collaborate with the Gitanyow First Nation and Nisga'a Lisims Government to develop a recovery plan for this population and to implement a "managed" First Nations hunt designed to recover the moose population in the Nass Wildlife Area.

Cariboo Region

- In 2013/14 two population surveys were undertaken east of the Fraser River: one in the Quesnel River area, and the other in the Alkali Lake/Dog Creek area south of Williams Lake and west of 100 Mile. Survey results indicated that moose populations has remained stable in the Quesnel River area since 1999, and has increased significantly in the Alkali Lake area since 2001.
- Bull to cow ratios are stable and within provincial objectives, suggesting that the licensed harvest of bull moose has not been responsible for the declines in population.
- Calf to cow ratios were slightly below the regional target of 40 calves to 100 cows in the survey areas west of Williams Lake and in the Quesnel River survey area, but exceeded that regional target in the Alkali Lake survey area.

Response:

- Ministry staff have met and shared the latest survey results, population estimates and management implications with First Nations and stakeholders.
- An independent assessment of the factors influencing moose population dynamics in the Cariboo was conducted in 2013, with focus on areas west of the Fraser River where moose populations have declined substantially. The analyses indicated that the population decline was linked to an apparent increased mortality on cows; especially in some areas. The factors leading to this elevated mortality, however, were not clear.

- These factors are being investigated as part of a comprehensive provincial moose research project now underway. This ongoing research will help inform future management decisions.
- In 2013/14, the allowable annual harvest was decreased based on revised population estimates. This resulted in further reductions of LEH authorizations for resident hunters, as well as additional quota restrictions for guide outfitters.

Thompson Okanagan Region

- Considerable survey work was undertaken in 2013/14 in the region, including:
 - A density survey on the Pennask Plateau (MU 3-12) south of Kamloops which found high moose densities and low bull to cow ratios. The low bull ratios are likely an indication of increased bull harvesting success given high and increasing resource road densities and use of early seral (young vegetation) habitats by moose where they are more visible to hunters.
 - Several composition counts were conducted in the West Fraser, Nicola and North Thompson Game Management Zones. Results indicated good bull to cow and calf to cow ratios in the West Fraser and North Thompson areas, while bull to cow ratios were low in a couple areas in the Nicola area. This is also likely related to high bull harvests associated with increasing road densities and abundance of early seral habitat.
 - In the Okanagan, five density surveys were conducted in 2013/14 of which one was a repeat survey. The repeat survey in MU 8-23 in the Shuswap area found lower than expected moose densities. This was also the case with its neighbouring MU (8-24) relative to habitat-based population estimates. One survey in the North Okanagan exceeded expectations in terms of density, and LEH hunts will be anticipated in the next regulation cycle. The other density surveys in the South Okanagan found moderate moose densities overall but there continues to be low bull to cow ratios in this area.

Response:

- Continue regular engagement with stakeholders and First Nations.
- In the Thompson, a partnership with the Secwepemc Nation is supporting a radio-collaring initiative to examine moose survival and habitat use north of Savona and is part of the comprehensive moose research project underway.
- No changes to the regulations are anticipated in the Thompson at this time.
- In the Okanagan, a shortening of the general open season (GOS) for spike-fork moose is occurring in 2014 with some additional reductions in LEH permits for moose in the southern Okanagan. However, MU 8-21 west of Vernon will have an LEH season offered in 2014, and it's adjacent MU to the north of Vernon (MU8-26) will be given an LEH season in the next regulation cycle due to the higher than expected population numbers and high bull to cow ratios.

Kootenay Region

- Management Units 4-38 and 4-39 were surveyed in January 2014 to update the moose population estimate north of Revelstoke. Since 2003, this population has been managed to a target of 500 moose to determine if lowering moose numbers will lower wolf numbers and thus reduce wolf predation on endangered mountain caribou.
- The 2014 survey estimated a population of 286 moose, which is down 65 per cent from the 2007 estimate (806 moose) and below the target of 500 moose.
- Wolf populations have declined following the moose reduction. The 2014 wolf population estimate was 13-14 for the study area, which is 50 per cent below the 2007 estimate.

Response:

- The annual allowable harvest has been decreased based on the revised population estimate. This will result in fewer bull moose LEH authorizations and guide-outfitter quotas.
- Cow moose LEHs have been reduced to one in all subzones to assist managing the population to the target of 500 moose.