

Moose Resource Report

Wildlife Management Unit 6

Moose Management in Ontario

In Ontario, the moose population and its habitat is managed using an ecological approach. This approach takes into account a wide range of factors related to moose and uses the best available science and information on moose populations and harvest. Ontario's Cervid Ecological Framework and Moose Management Policy give specific direction on how to manage moose across the province. They can be found online at ontario.ca/moose.

As part of managing moose, an objective is set for the number of moose that should be in an area. Ecological, social, cultural and economic factors related to moose are incorporated when making decisions about harvest allocation and what management actions are needed to help achieve that objective.



WMU 6 Description

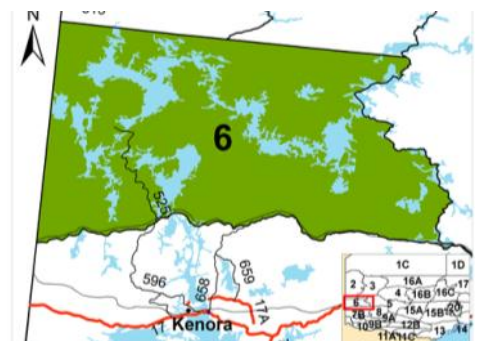
Wildlife Management Unit (WMU) 6 is located in Kenora District, and lies north of the City of Kenora. The northern boundary of the unit intercepts the 7th baseline, the Ontario/Manitoba boundary bounds the WMU to the west, and the Canadian National Railroad line defines the southern boundary of the unit. The eastern WMU boundary goes north from Canyon Lake and intercepts the Wabigoon and English Rivers.

WMU 6 has a total area of 4,777 km² and is part of Cervid Ecological Zone (CEZ) D1.

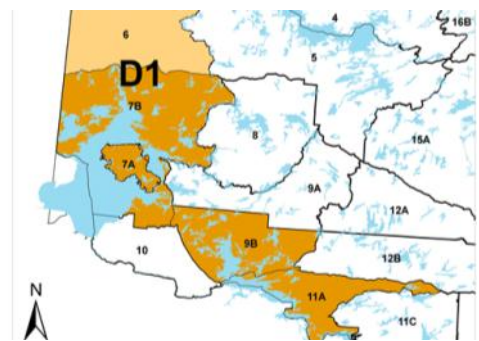
Cervid Ecological Zone D1

Moose and white-tailed deer both live in this zone. For moose, the goal is to maintain a moderate density population with habitat management as appropriate. The habitat of white-tailed deer can be managed as appropriate to maintain a moderate density, particularly winter habitat in the west portion of this zone. Elk are found in parts of this zone and management of their habitat is considered at the local level as needed.

The ministry's cervid management objective is to have moose, white-tailed deer and elk on the same land base, and to maintain densities which reflect natural ecological conditions.



Map of WMU 6



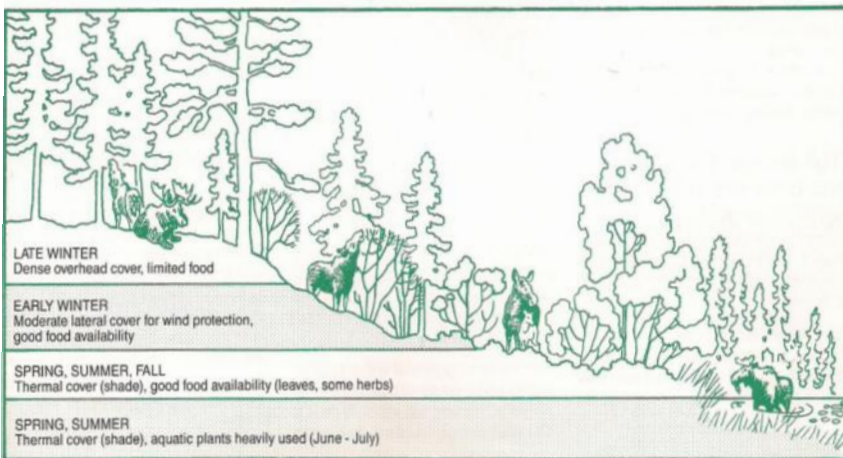
Map of Cervid Ecological Zone D1

ontario.ca/moose

Moose Habitat Suitability

WMU 6 is located primarily within the boreal forest of northwestern Ontario, although some portions of the unit are more representative of the western Great Lakes - St. Lawrence forest. The unit has an abundance of pure conifer stands, as well as hardwood and conifer dominated mixedwood stands. Extensive forest management activities that occurred under the guidance of approved Forest Management Plans, have provided an abundance of good moose habitat. Moose aquatic feeding areas are abundant among the numerous lakes, rivers and beaver ponds.

Landscape habitat analysis modelling estimates the overall mean carrying capacity, or number of moose that the habitat can support in WMU 6 as about 38 moose per 100 km². This considers the availability of dormant season (early and late winter) browse, growing season forage (i.e., browse and aquatic feeding areas), and both dormant and growing season cover.



Seasonal movements of moose in Ontario



Growing season browse

Moose aquatic feeding areas are generally found in cool water lakes, along medium-sized and shallow rivers and on shallow basins of cold water lakes.



Moose aquatic feeding area

Early winter habitat is primarily made up of mature or over-mature, open canopy, mixed-wood stands with less than 60 per cent tree cover, as well as areas that had been burned or cutover about five to twenty years ago.



Early winter habitat

Late winter habitat consists of denser stands of mature conifer with good overhead cover. Mixed stands made up of less than half mature conifer should also be considered as late winter habitat if pure conifer stands are not available. Upland sites are preferred.



Late winter habitat

Moose Management in WMU 6

Moose management considers the best available knowledge, including scientific, local and Aboriginal traditional knowledge, as well as social, cultural and economic values. It also respects Aboriginal peoples' unique perspectives and practices related to moose management, including the exercise of constitutionally protected Aboriginal and Treaty rights. The ecosystem based management of moose includes the management of populations, harvest and habitat, with consideration of potential stressors, such as climate change, predator-prey interactions and disease.

Population Status and Trends

Managing moose populations requires information on their abundance, distribution, harvest, and recruitment trends. In Ontario, the size of the moose population is estimated on a WMU basis through the use of Moose Aerial Inventories. Inventories use a consistent method across the province for estimating moose populations from an aircraft, and are generally conducted every three to five years.

The most recent survey, completed in 2012, resulted in a population estimate of 325 ± 32 moose or a density of 9 moose per 100 km² of land area. In 2012, the population was composed of approximately 45 per cent bulls, 44 per cent cows and 10 per cent calves.

Calf moose generally experience higher mortality from a variety of sources, including predation and harvest. The minimum desired calf survival each year is at least 30 calves per 100 cows to help ensure the population is maintained. Estimates of calf survival were below this level in both 2007 and 2012 (Figure 1).

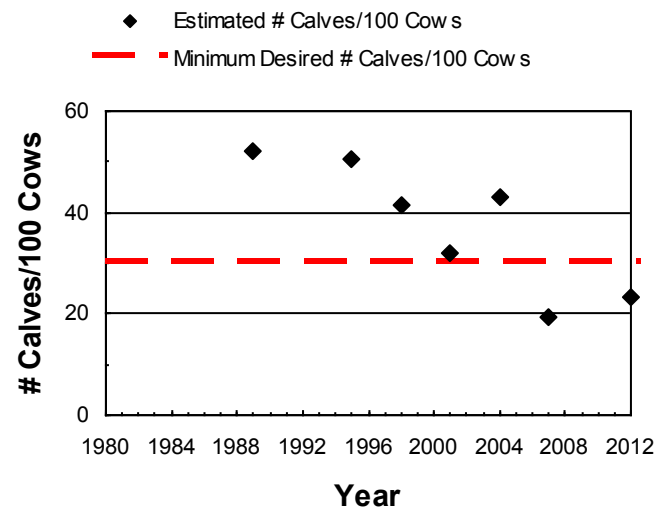


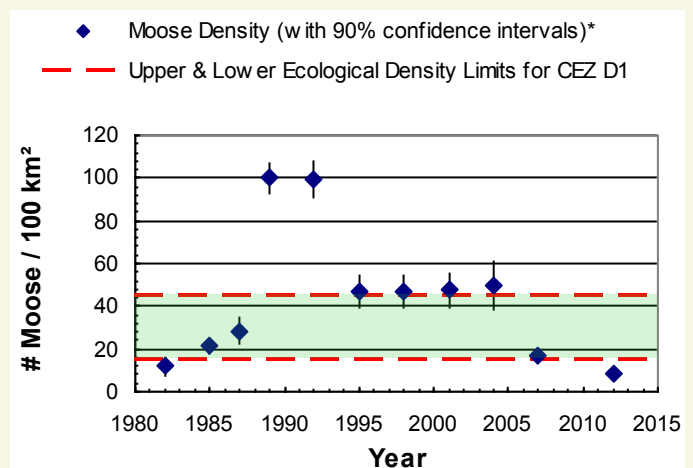
Figure 1: Calf recruitment (# Calves per 100 Cows) trends estimated from moose aerial inventories compared to lowest desired level.

Ecological Population Density

A goal of moose management is to keep the moose density within a range at which they can fulfill their natural role in the ecosystem. The desired ecological population density varies between Cervid Ecological Zones across the province.

Key factors affecting natural moose ecology are habitat suitability, other cervid species, natural predators such as wolves and black bears, and climate change.

The moose population in WMU 6 is currently below the desired ecological density (15-45 moose per 100 km²) for CEZ D1 (Figure 2).



* there is a 90% chance the population falls within the range shown

Figure 2: Moose Density (with upper and lower limits of the ecological density for CEZ D1)

Moose Management in WMU 6

Harvest Management

There are two moose hunting seasons in WMU 6. The bow season begins on the Saturday closest to September 17 and continues to the start of the resident gun season on the Saturday closest to October 8. Non-resident gun season starts two days after the resident gun season. Resident gun season closes on December 15 and non-resident gun season on November 15. In this unit, 92 per cent of the licenced harvest is allocated to the resident hunt and 8 per cent to the tourist industry.

Harvest Statistics

The estimated number of moose harvested by residents has ranged from a high of 145 to a low of 4 animals (Figure 3). Over the past five years, annual average harvest by residents has been 15 moose with clients of the tourist industry taking an average of 1 moose. Calf harvest makes up about 12 per cent of total licenced resident harvest.

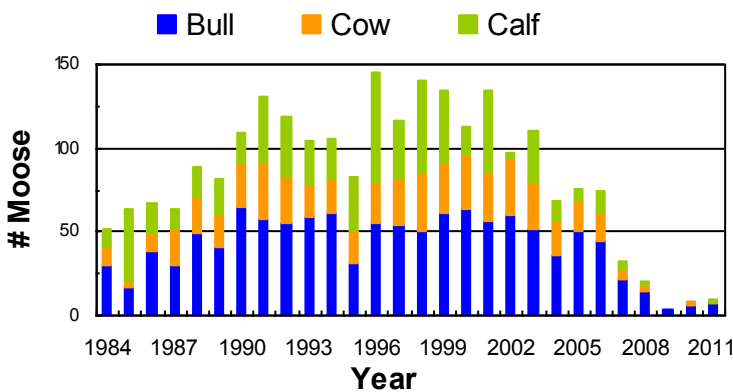


Figure 3: Resident Harvest

In addition to harvest data, information on the past success rates of hunters in filling their moose tags is used when planning the harvest. Estimated tag fill rates for adult moose harvested by residents in WMU 6 have generally ranged between 19 and 46 per cent. The resident bull tag fill rate for 2011 from the gun and bow hunts combined was 15 per cent and the resident cow tag fill rate was 0 per cent.



Report resource abuse. Call the toll free reporting line at any time: 1-877-TIPS-MNR (847-7667)

MNR 51953

© Queen's Printer for Ontario, 2013



Adult Validation Tag Quotas

Harvest planning, including adult validation tag quotas, is done annually to reflect the most recent population survey and harvest information. In response to a declining population trend, validation tag quotas are well below earlier observed levels.

Hunter Interest

Hunter interest (effort) in WMU 6 is low relative to other NWR WMUs as the number of moose in the unit has declined from prior levels. WMU 6 has extensive road access throughout the unit which allows hunters to more readily reach the moose population. As in most of Ontario, the number of hunters interested in hunting in this unit exceeds the amount of adult moose available for harvest (Figure 4). In 2011, resident tag quotas were 44 gun bull, 10 gun cow and 4 bow bull, with 121 Choice 1 draw applicants (111 gun and 10 bow). There was one adult tag available for approximately every 2 resident hunter applications.

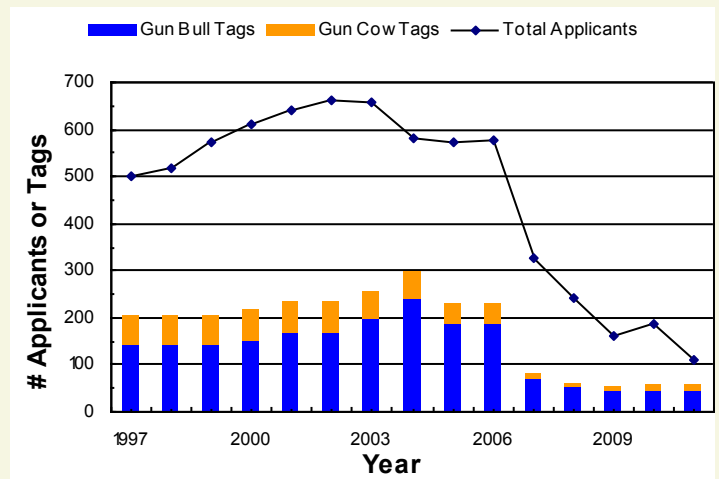


Figure 4: Resident Gun Tag Supply