

Moose Resource Report

Wildlife Management Unit 65

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.

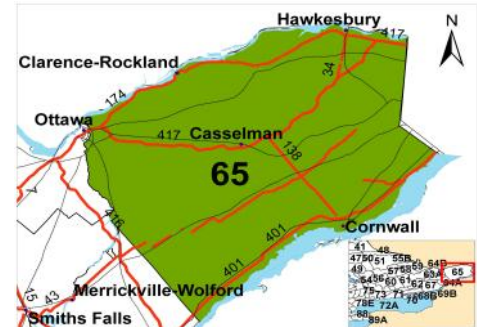


WMU 65 Description

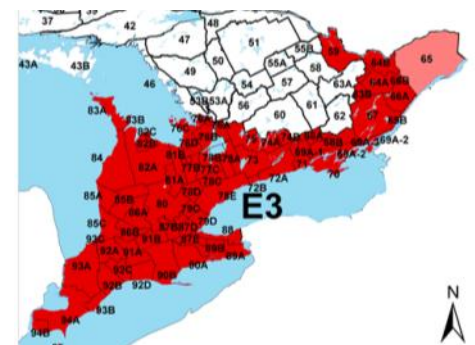
Wildlife Management Unit (WMU) 65 is located in eastern Ontario. The unit includes the United Counties of Stormont, Dundas and Glengarry, the United Counties of Prescott and Russell, and the portion of the City of Ottawa east of the Rideau River. It covers an area more than 6,400 square kilometres in size, much of which is privately owned. WMU 65 is part of Cervid Ecological Zone (CEZ) E₃.

Cervid Ecological Zone E₃

White-tailed deer is the main cervid species living in this zone, but there are also small numbers of moose and elk. White-tailed deer are managed to maintain a high density population, keeping in mind the potential for human-deer conflicts and also the potential impact they may have on species at risk habitats in some areas. Moose are currently managed to maintain a low density population in this CEZ. The ministry's management objective is to maintain densities of the different cervid species which reflect natural ecological conditions.



Map of WMU 65



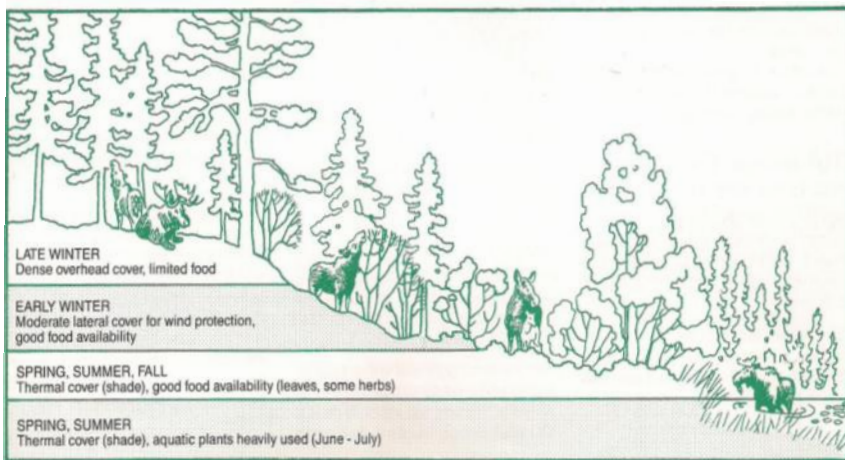
Map of Cervid Ecological Zone E₃

ontario.ca/moose

Moose Habitat Suitability

WMU 65 is located in the Great Lakes-St. Lawrence Forest region. Upland forests are dominated by sugar maple, beech and yellow birch, with red maple, basswood, white pine, white ash, white birch, trembling aspen, white elm, bur oak and red oak associates. Deciduous swamps are common and are typically dominated by white cedar, black ash, and silver maple. There are a few large organic deposits, most notably Mer Bleue Bog and Alfred Bog, where conifers such as white cedar, larch, balsam fir, and black spruce predominate with balsam poplar, black ash, willows, and red maple associates.

Two hundred years of settlement and development has resulted in significant fragmentation of the forest cover within WMU 65. The moose population in WMU 65 occupies discrete 'islands' of habitat and is not directly connected to populations in the typical moose range to the north and west.



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 65

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 2010, resulted in a total population estimate of 127 moose (Figure 1). This translates to an overall density of approximately 17 moose per 100 km² of moose habitat; however, densities vary significantly among the habitat fragments across the unit. In 2010 the population was composed of 31 per cent bulls, 40 per cent cows and 29 per cent calves.

The minimum desired calf recruitment each year is at least 30 calves per 100 cows to help ensure the population is maintained. Estimates of calf recruitment in recent years have averaged more than 60 calves per 100 cows indicating excellent recruitment.

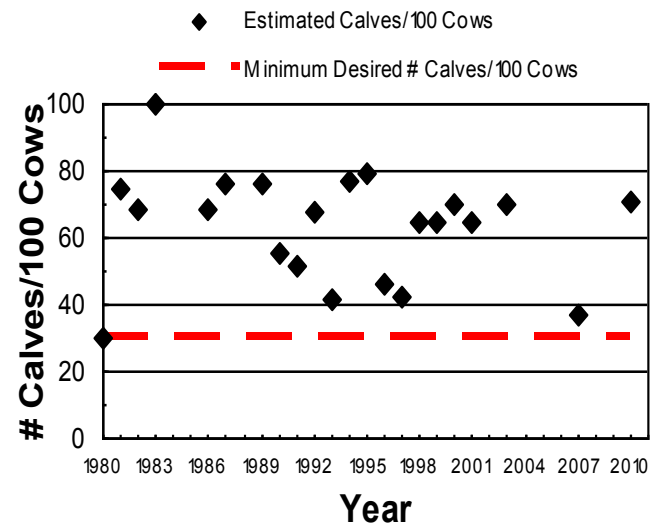


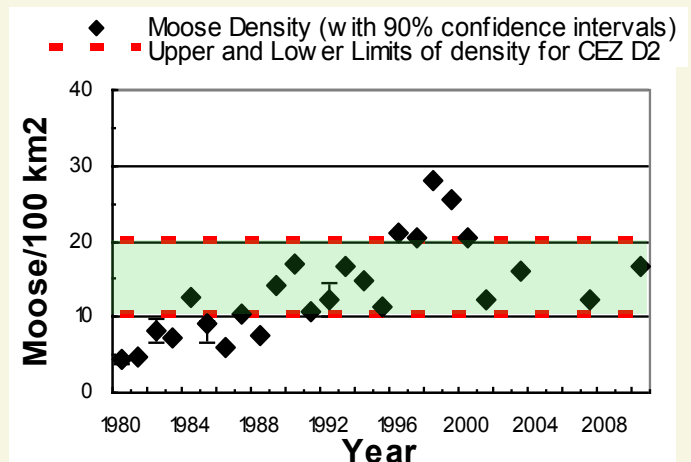
Figure 1: Calf recruitment (# Calves per 100 Cows) trends estimated from moose aerial inventories compared to lowest desired level.

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.

Since the regular moose hunt was initiated in WMU 65 in 2000, the moose population has generally remained within the limits of the desired ecological density (10 - 20 moose per 100 km²) for Cervid Ecological Zone E₃ (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 E₃)

Moose Management in WMU 65

Harvest Management

WMU 65 has a seven-day archery hunt with controlled hunter numbers. The season occurs from October 8th to October 14th of every year. This season is preceded by a special three-day archery season for hunters with mobility impairment. The hunt in WMU 65 is open to Ontario residents only, has a maximum party size of two, requires written landowner permission, and has mandatory harvest reporting. Successful draw applicants may harvest a sex-specific adult moose, or a calf.

Harvest Statistics

The number of moose harvested by residents has generally decreased since 2000. Harvest peaked at 32 animals in 2000 and has been as low as 7 animals in both 2008 and 2009. Calf harvest makes up 25 percent or less of the total licensed harvest.

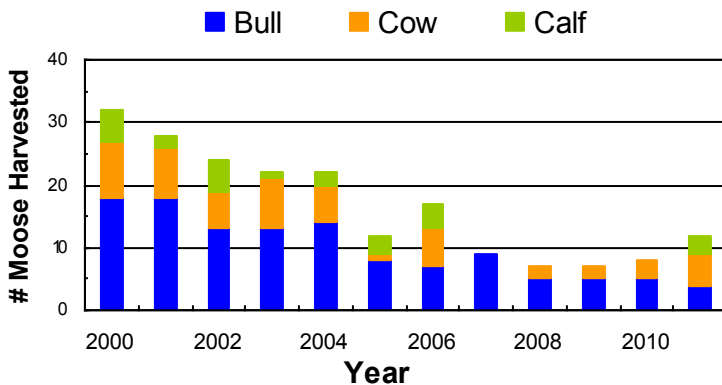


Figure 3: Resident Harvest

In addition to harvest data, information on the past success rates of hunters in filling their moose tags is used when planning the harvest. Tag fill rates for moose harvested in WMU 65 have fluctuated over the years. The bull tag fill rate generally ranges between 20 and 40 percent, while the cow tag fill rate ranges between 0 to 20 percent. In 2011, the bull tag fill rate was 26 percent and the cow tag fill rate was 14 percent.



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

MNR 51953

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Adult Validation Tag Quotas

Harvest planning, including adult validation tag quotas, is done annually to reflect the most recent population survey and harvest information. Based on the results of the 2010 population survey, the harvest management strategy in WMU 65 has shifted from growth to focus on stabilizing the population. Tag quotas have increased as a result of greater planned harvest and recent low tag fill rates.

Hunter Interest

Hunter interest in WMU 65 is relatively low compared to other regions of Ontario, likely related to the restrictions placed on the hunt to ensure sustainability and the extent of private land ownership in the area. The hunt remains important to local hunters; however, and hunter interest exceeds the amount of moose available for harvest. In 2011, there were 328 choice 1 applicants for 20 bull tags and 50 cow tags resulting in an average of one adult tag for every 5 hunter applications. The unit is also an area where moose are harvested by Aboriginal community members.

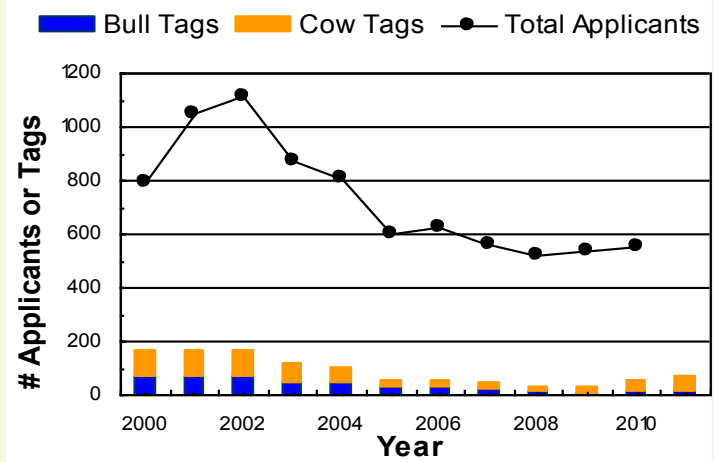


Figure 4: Resident Archery Tag Supply