

# Moose Resource Report

## Wildlife Management Unit 62

### 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](http://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 62 Description

Wildlife Management Unit (WMU) 62 covers an area of approximately 2085 square kilometres, although only a portion of this (550km<sup>2</sup>) is considered to be moose habitat. WMU 62 is the southernmost WMU in Ontario that is managed for moose. WMU 62 is located near the towns of Kaladar and Sharbot Lake. Approximately one third of the land in WMU 62 is Crown Land (mainly in the north portion), with the remainder being large areas of private land. WMU 62 is part of Cervid Ecological Zone (CEZ) D<sub>2</sub>.

### Cervid Ecological Zone D<sub>2</sub>

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

The ministry's management objective for this CEZ 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 62



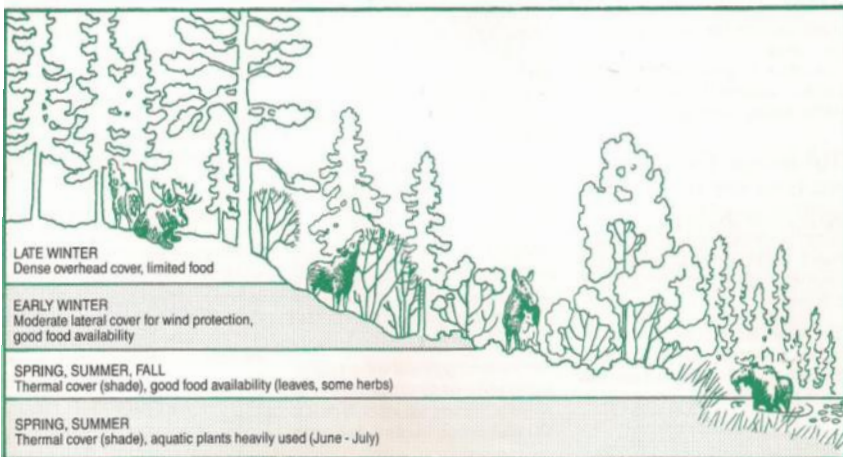
Map of Cervid Ecological Zone D<sub>2</sub>

[ontario.ca/moose](http://ontario.ca/moose)

## Moose Habitat Suitability

The forest in WMU 62 is dominated by tolerant hardwoods, including maple, oak and poplar as well as coniferous forest (pine, hemlock and balsam fir). Hardwoods tend to be found on the hilltops, while conifers (white pine, white and black spruce, balsam fir, and eastern hemlock) tend to be found in the lowland areas and on the side slopes of upland areas. White-tailed deer are more predominant than moose in WMU 62, although the northern portions of the WMU contain good moose habitat, such as aquatic feeding and winter cover areas. The area has abundant ponds, streams and lakes, which provide a large amount of moose aquatic feeding areas. Moose tend to be found in the northern part of the WMU although they have occasionally been observed in the southern parts as well.

Habitat analysis and suitability models suggest that there is very high quality moose habitat in a portion of WMU 62, which would not be the primary limiting factor of the moose population within that habitat. The overall carrying capacity, or number of moose that the habitat can support, is more likely to be limited by other factors such as natural population fluctuations, warmer climates, and changes in habitat due to land use practices.



*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 62

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 moose population in WMU 62 is directly linked to adjacent WMUs 61 and 63 and is considered an expansion of the main herd. As the population exists mainly in the northern portion, it is combined with the WMU 63 survey. The most recent survey, completed in 2008, resulted in a total population estimate of  $27 \pm 6$  moose with a density of 5 moose per 100 km<sup>2</sup> of moose habitat. In 2008 the population was composed of 18% bulls, 56% cows and 26% calves. Calf moose generally experience higher mortality from a variety of sources, including predation and harvest. However, calf recruitment in WMU 62 and most of the southern moose population is maintained. As shown in Figure 1, estimates of calf survival in WMU 62 exceed that threshold.



Photo: MNR Northeast Region

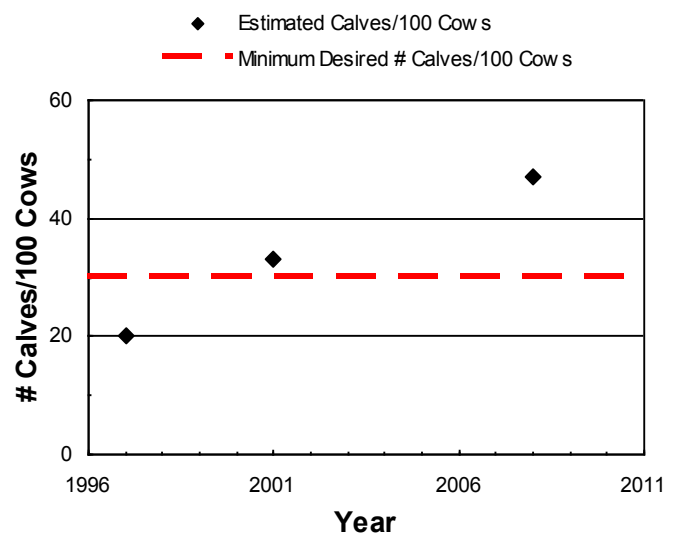


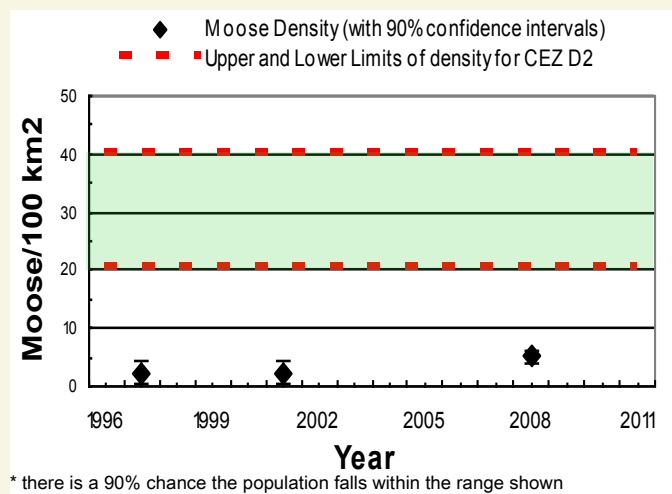
Figure 1: Calf recruitment (# Calves per 100 Cows) trends estimated from moose aerial inventories compared to lowest desired level.

### 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.

Generally, the desired ecological density is 20 - 40 moose per 100 km<sup>2</sup> for Cervid Ecological Zone D2. As WMU 62 is the southernmost moose unit in Ontario, it is not expected to reach this density but may continue to increase as adjacent units increase and disperse into new areas (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 D2)

## Moose Management in WMU 62

### Harvest Management

In WMU 62, the moose hunting season for resident gun hunters extends over six days beginning on the third Monday in October. Currently, there is no open archery season in this unit, although discussions are ongoing about the potential to open a one week archery season. There is no non-resident season in WMU 62 and no tourist industry allocation.

### Harvest Statistics

Harvest in WMU 62 is generally low as the moose population is relatively small and tags have been limited to 10 bulls since 1997. The estimated number of moose harvested by residents has ranged from a high of 11 to a low of 0 in 1997 (Figure 3). The 2011 harvest level was 2 animals, both of which were calves.

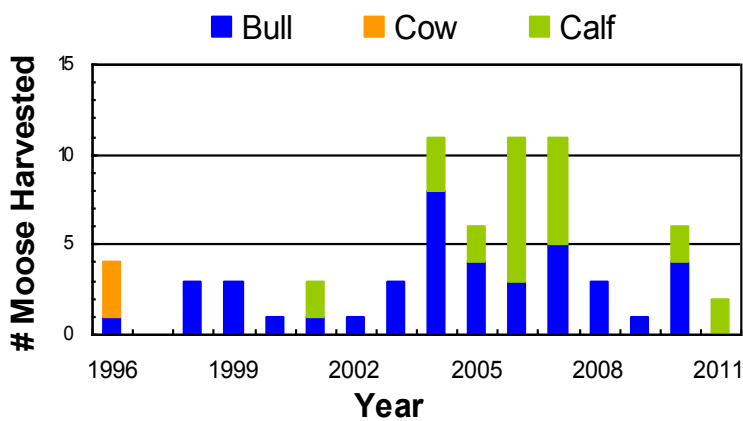


Figure 3: Resident Harvest

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 by residents in WMU 62 have shown considerable variation over the years. Bull tag fill rates have ranged from 0 to 75%. The 2011 bull tag fill rate was 0%.



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. Harvest planning also considers whether the objective is to grow, maintain or reduce the population size. Tag quotas have remained constant in WMU 62 over the last decade, reflecting the relatively low density and the objective to increase the population slightly. For this reason, no cow tags have been allocated since 1997.

### Hunter Interest

Hunter interest in WMU 62 is high relative to the tags available. Applicants have steadily increased over the last decade, despite the stable tag allocation (Figure 4). The number of applicants has more than doubled in the last ten years. The demand for moose tags in WMU 62 is well above the number that can be sustainably issued. In 2011, there was a total of 10 adult (bull) tags for 250 1st choice applicants. Therefore, there is one adult tag for every 25 applicants.

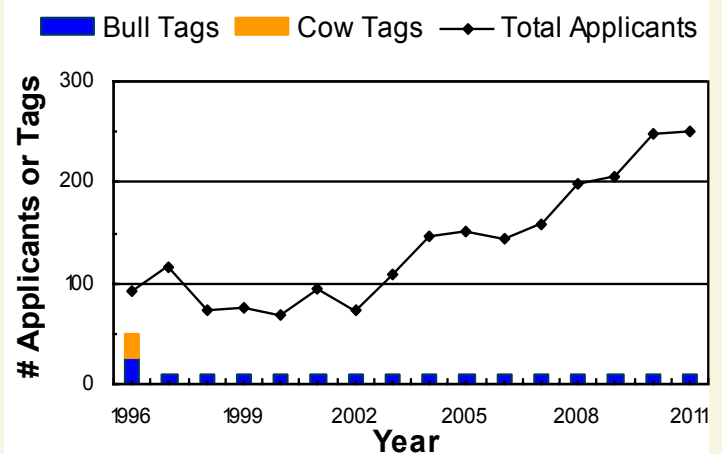


Figure 4: Resident Gun Tag Supply