Moose Resource Report
Wildlife Management Unit 17

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 17 Description

Wildlife Management Unit (WMU) 17 is located in Nipigon District. The WMU is bounded by the Attwood and Witchwood Rivers on the west, the Ogoki, Kapikotongwa and Little Current Rivers on the south and the Albany River on the east and the 11th baseline on the north.

No unauthorized vehicular traffic is permitted beyond the Ogoki Bridge. The only access permitted, other than by air, is by the Ogoki, Ottertail and Kapikotongwa Rivers.

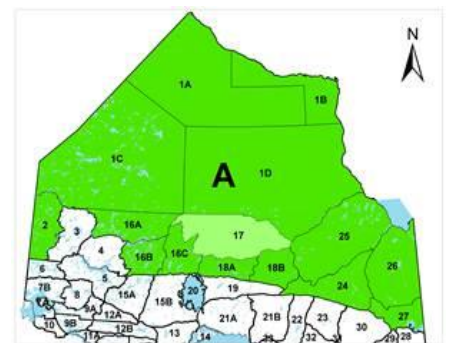WMU 17 has a total area of 29937 km^2 and is part of Cervid Ecological Zone (CEZ) A.

Cervid Ecological Zone A

Woodland caribou with low densities of moose and white-tailed deer live in this zone. For both moose and white-tailed deer, the goal is to maintain low densities through population and habitat management.

A key management objective is to minimize impacts on woodland caribou populations through maintenance or restoration activities. Maintaining naturally low densities of moose and deer that reflect the ecological conditions in this zone is consistent with managing the wildlife community and current provincial caribou and moose policy direction.
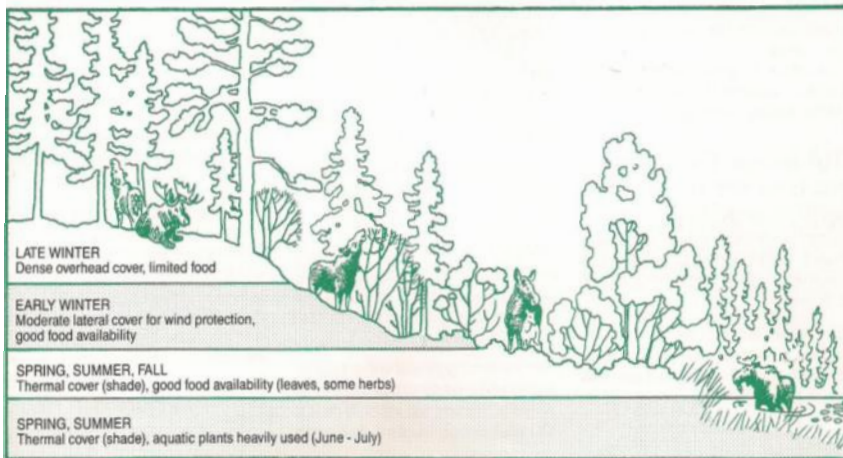

Map of WMU 17

Map of Cervid Ecological Zone A

ontario.ca/moose

Ontario

Moose Habitat Suitability

WMU 17 is located in the boreal forest of northwestern Ontario. Most of the unit is dominated by tree species characteristic of the boreal forest such as black spruce, jack pine and poplar. The northeastern portion of the WMU has a large expanse of wetland.

Landscape habitat analysis modelling estimates the overall mean carrying capacity, or number of moose that the habitat can support in WMU 17 as about 10 moose per 100 km^2. 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 17

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 2014, resulted in a total population estimate of 1200 +/- 17 moose or a density of 4 moose per 100 km² of land area. Due to both the low moose density and hunter effort in the WMU, moose age-sex surveys have not typically been a primary focus of surveys, but rather population abundance surveys.
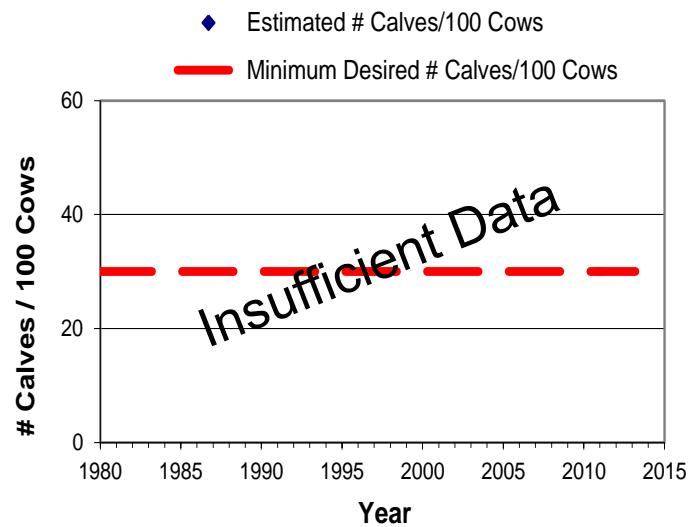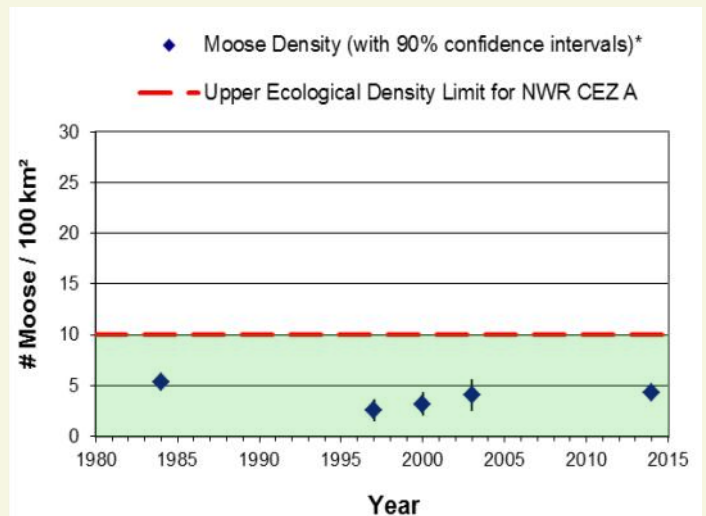

Figure 1: Calf recruitment (# Calves per 100 Cows) trends estimated from moose aerial inventories compared to lowest desired level.

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.

Across time, survey estimates indicate the moose population has primarily been within the desired ecological density (0 - 10 moose per 100 km²) for Northwest Region (NWR) CEZ A (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 A)

Moose Management in WMU 17

Harvest Management

There is one moose hunting season in WMU 17. The gun season begins on the Saturday closest to September 17. 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, 57.1 per cent of the licenced harvest is allocated to the resident hunt and 42.9 per cent to the tourist industry.

Harvest Statistics

The estimated number of moose harvested by residents has ranged from a high of 104 to a low of 27 animals (Figure 3). Over the past five years, annual average harvest by residents has been 47 moose with clients of the tourist industry taking 30 moose. Calf harvest makes up about 14 per cent of total licenced resident harvest.
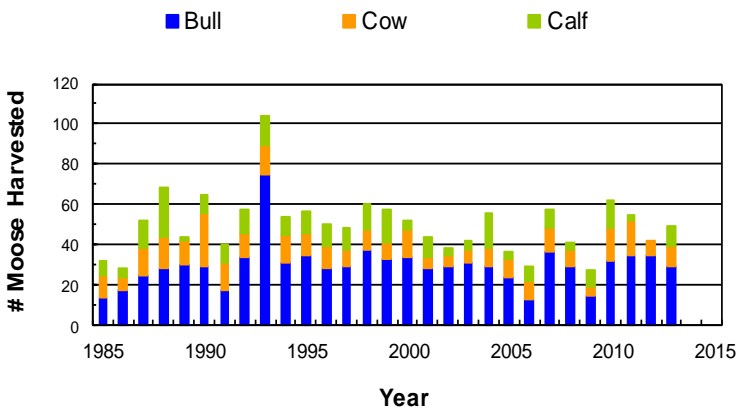
Figure 3: Resident Harvest

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 17 have generally ranged between approximately 7 and 20 per cent. The resident bull tag fill rate for 2013 was 16 per cent and the resident cow tag fill rate was 16 per cent.

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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. Moose aerial inventory information from 2014 informed recent adjustments in tag quotas.

Hunter Interest

Hunter interest (effort) in WMU 17 is low relative to other NWR WMUs. WMU 17 has no road access, but rather only air and water access to reach the moose population in the unit. Hunter applications have generally exceeded the amount of adult moose available for harvest (Figure 4). In 2014, resident gun tag quotas were 121 bull and 100 cow, with 436 Choice 1 draw applicants. There was one adult tag available for every 2 resident hunter applications.

In 2014, there are 19 tourist outfitters that offer adult moose hunting packages.
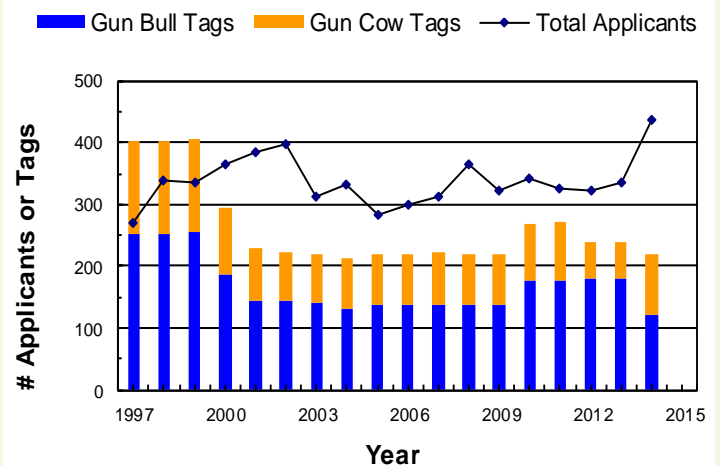
Moose in this unit are also harvested by Aboriginal community members.

Figure 4: Resident Gun Tag Supply