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 26 Description

Wildlife Management Unit (WMU) 26 is located in the Cochrane District of the Ministry of Natural Resources (MNR). The unit extends from north of the town of Cochrane to James Bay and from the Abitibi and Moose rivers to the Quebec border in the east. The unit covers an area of approximately 27,750 square kilometres and is part of what is known as 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. The ministry’s management objective is to minimize impacts on woodland caribou populations through maintenance or restoration activities as directed by the Caribou Conservation Plan and associated policies. Maintaining low densities of moose and deer that reflect natural ecological conditions is consistent with managing the wildlife community as per the Caribou Conservation Plan.
Moose Habitat Suitability

WMU 26 is located in the James Bay Lowlands in the northern portion of the unit, and Northern Clay Belt in the southern portion. The habitat is dominated by coniferous forest with areas of mixed woods, pure hardwoods and treed fens and bogs. The main tree species are black spruce, balsam fir, poplar, white birch, tamarack and jack pine.

Using a range of landscape habitat analysis models, the ministry has calculated the overall average carrying capacity, or number of moose that the habitat can support, for the southern half of WMU 26 at about 18 moose per 100 square kilometres. This considers growing season browse, aquatic feeding areas, and both early and late winter habitats.

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.

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 cut over about five to twenty years ago.

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.

Seasonal movements of moose in Ontario

Growing season browse

Early winter habitat

Late winter habitat
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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 1655 +/- 51 moose with a density of 6 moose per 100 square kilometres. In 2010 the population was composed of 41 percent bulls, 37 percent cows, 17 percent calves and 5 percent unknown.

Calf moose generally experience higher mortality from a variety of sources, including predation and harvest. The minimum desired calf recruitment each year is at least 30 calves per 100 cows to help ensure the population is maintained. The estimates of calf recruitment are above the desired minimum threshold (Figure 1).

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 for WMU 26 has remained below the upper limit of the desired ecological density (10 moose per 100 km2) for Cervid Ecological Zone A (Figure 2).
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Harvest Management

There is one regulated moose hunting season in WMU 26. The resident gun season begins on September 17 and continues to October 31 each year. Non-resident gun season starts two days after the resident gun season start date. In WMU 26, the licensed harvest is allocated with 50 percent to the resident hunt and 50 percent to the tourist industry hunt.

Harvest Statistics

The estimated number of moose harvested by residents has ranged from 17 to 86 animals (Figure 3). Over the past five years, annual average harvest by 640 resident hunters (4,600 hunter days) has been 39 moose with clients of the tourist industry taking 29 moose. Calf harvests comprise about 20 percent of total licensed resident harvest.

Adult Validation Tag Quotas

Harvest planning, including adult validation tag quotas, is done annually to reflect the most recent population survey and harvest information. As the moose population recently increased, the number of tags available also increased in the past two years.

Hunter Interest

Hunter interest in WMU 26 is low but growing. About one-third of the unit is remote, making it more challenging for hunters to reach the moose population. As in most of Ontario, the number of hunters interested in hunting this unit greatly exceeds the amount of moose available for harvest. In 2011, resident gun tag quotas were 45 bull and 25 cow, with 708 Choice 1 draw applicants and there was one adult tag available for every 10 resident hunter applicants (Figure 4).

There are 9 tourist outfitters that offer moose hunting packages.

This unit is also where moose are harvested by Aboriginal community members.

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