

This document summarizes a 2009 guide from the OMNRF, to give insight into the province's moose management strategy. Comments/recommendations are made below.

Moose Population Objective Setting Guidelines

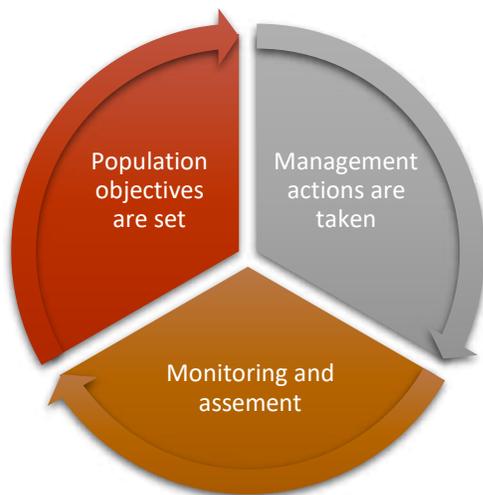
A **Moose Population Objective** is the desired population range for moose across a broader *Cervid Ecological Zone* and desired distribution across the smaller *Wildlife Management Unit* scale.

These guidelines are a process of determining a moose population objective that takes **ecological** goals into account, at different **management scales**, and supports a variety of sustainable **social, cultural, and economic benefits and activities**.

General Approach to Guide the Development of New Moose Population Objectives:

1. **Ecological:** consider broader ecosystems, and maintain their natural processes and functions
2. **Strategic management scales:** CEZ and WMU guide decision making at their respective scales
3. **Coordinated:** population objectives are coordinated across WMUs to achieve broader objectives across the CEZ
4. **Integrated:** population objectives are integrated with other land use planning
5. **Transparent:** consulting with public and stakeholders, clearly communicating development, implementation, and results
6. **Adaptive:** adaptive management approach is taken (see Figure 1)

Figure 1: Adaptive Management Approach



Establishing Moose Population Objectives in Ontario is a 3-Step Process:

1. Determining the **Ecological Population Range**
2. Determining the **Socio-Economic Range**
3. Setting the **Specific Population Objective**

Ecological Population Range: The range within which moose fulfill their natural role within the ecosystem. The moose population staying within the identified Ecological Population Range is the first sign that management is working. Considers the following:

1. **Habitat Suitability** – estimate potential moose density for a given area.

2. **Other Cervid Factors** – identify specific cervid management focus for CEZ and WMU. Example – moose should be managed to a low density (10 or fewer moose/100km²) in areas where caribou are the primary focus of management.
3. **Moose Ecosystem Interactions** – determining a population range where moose fulfill their natural role for predator and vegetation species and where moose densities limit disease while maximizing successful breeding.

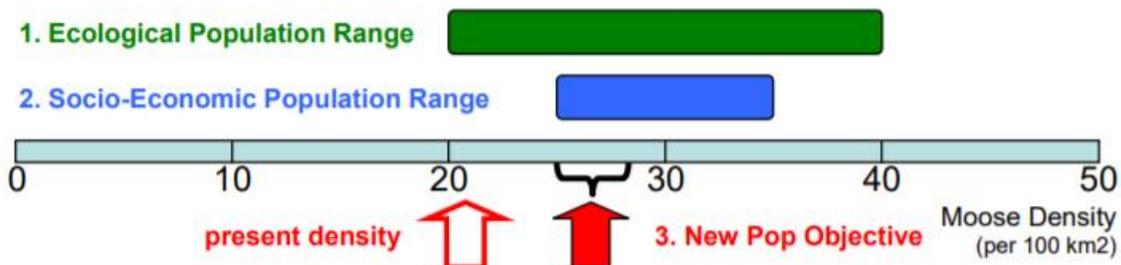
Socio-Economic Population Range: A critical component of the population objective, which should be informed by input from public and stakeholders. Determined through consideration given to:

1. **Stakeholder (including Indigenous Peoples) interests** – recreational interests related to hunting and viewing, cultural and spiritual interests and knowledge, socio-economic interests.
2. **Activities** – hunting and harvest, viewing and other inherent benefits (spiritual and cultural) and economic benefits. **Moose Harvest** – there is no single population density that will always provide ideal moose harvest. Local trends such as hunter success rates can assist in estimating the best population range for harvest.
3. **Areas Accessibility** – distinguishing large remote areas from road accessible areas can help identify where most moose related activities are practiced. Should also be aware of different user groups, where these activities are practiced, and the location of the moose population.

Note: Where moose cause a significant conflict with people (e.g., vehicle collisions) it *may* be appropriate to consider a reduced population density. However, problems are usually restricted to a specific location, and other strategies may be developed to reduce the conflict.

Specific Population Objective: The range of moose densities that is intended, over time, to provide the optimal mix of socio-economic benefits within the ecologically sustainable bounds of the population. Coordination of CEZ and WMU objectives and public involvement are all important.

Figure 2: Process for establishing moose population objectives in Ontario (from OMNR 2009, page 3)



Achieving Moose Population Objectives

Population objectives should be examined relative to population trends to assess success. Ongoing evaluation is key. Local moose managers need to determine whether there are any other factors affecting the population that should be addressed.

Methods of assessment: Aerial surveys should be considered in addition to other available population trend information.

Report the following values:

- **Moose number** (estimated moose population, bull:cow ratios, recruitment rates)
 - **Moose densities**
 - o Moose/total landscape area they use (land and water moose range)
 - o Moose/total landscape area they use minus water (land only moose range)
 - o Moose/area that can support 10+ moose/100km² (main moose range) – moose are an important part of the ecosystem in these areas and need to be at densities where they fulfill their ecological role.
-

Comments/Recommendations

1. Include a method of assessment other than aerial inventories or more thorough methods to confirm results of aerial inventories.
2. Develop specific and rigid requirements for public/stakeholder consultation to determine the socio-economic population range, including requirements for consultation with Indigenous Peoples.
3. Expand upon methods for determining the specific population objective – this is the most important step, where ecological and social considerations meet, but it is unclear how each should be weighed against the other.

Prepared By: Elena McCulloch

Date: March 12, 2021