

# Winter 2025 Cape Breton Moose Survey

## Summary

An aerial moose population survey was undertaken from February 20 to 25, 2025.

This survey was a cooperative operation led by the Nova Scotia Department of Natural Resources, and included Parks Canada, the Kwi'mu'kw Maw-Klusuaqn, Unama'ki Institute of Natural Resources and the Confederacy of Mainland Mi'kmaq. The study area covered all five of Nova Scotia's Moose Management Zones and Cape Breton Highlands National Park.

Distance sampling was the survey method used to estimate the moose population. This method involves flying transect lines across an area and recording the number of animals observed and their locations. The distance sampling method corrects for the fact that the percentage of animals detected decreases the farther the animals are away from the helicopter. Biologists from other jurisdictions prefer this survey method because it calculates moose density estimates, calf/cow ratios, and adult sex ratios of the moose population within each region surveyed.

Moose, an animal native to Cape Breton, were extirpated from the island prior to the 1940s. In the late 1940s, 18 moose were released to Cape Breton Highlands National Park. Over time, moose numbers increased, and animals spread across most of western Cape Breton. The spruce budworm outbreak in the 1970s led to over-browsing and likely contributed to the abnormal forest succession that occurred in the central highlands, replacing softwood forests with grassland "moose savannah."

Survey results over the last 10 years show that the moose population has declined significantly from highs observed in the early 2000s (about 5000 - 8000 animals). The Greater Highlands Ecosystem is made up of the Cape Breton Highlands National Park, as well as Moose Management Zones 1, 2, 5, and most of 3 (<https://novascotia.ca/natr/draws/moosedraw/mmzones.asp>).

The moose population estimates from 2015 to 2025 in the Greater Highlands Ecosystem are:

| Survey Year | Population estimates |
|-------------|----------------------|
| 2015        | 4777 (+/- 939)       |
| 2019        | 1298 (+/-385)        |
| 2020        | 2158 (+/- 617)       |
| 2023        | 1552 (+/- 667)       |
| 2024        | 850 (+/- 679)        |
| 2025        | 1900 (+/- 586)       |

The population declined between 2015 and 2019 and has remained low in the four subsequent surveys, despite conservation measures including a bull-only hunt in 2023 and the closure of the bear season during the moose season starting in 2020. Moose are not equally distributed across the landscape. In 2025, moose densities were 0.35 moose/km<sup>2</sup> in Moose Management Zone 1 and 5, 0.58 moose/km<sup>2</sup> in Moose Management Zone 2, 0.21 moose/km<sup>2</sup> in Moose Management Zone 3, 0.03 moose/km<sup>2</sup> in Moose Management Zone 4 and 0.63 moose/km<sup>2</sup> in Cape Breton Highlands National Park.

Information obtained from aerial surveys, biological samples, and reported harvest data from licensed harvesters along with traditional knowledge provided by Mi'kmaw harvesters all contribute important information to inform management decisions. Recommendations on moose management are made jointly by representatives of the Province and the Assembly of Nova Scotia Mi'kmaw Chiefs.

Based on survey results which show the moose population in Cape Breton has been low since 2019, there was further substantial population decline in 2024, the Province announced a three-year pause on the non-Indigenous moose hunt and the Mi'kmaq also paused their traditional hunt. With the population remaining low in 2025, the Province and the Mi'kmaq confirm that there will be no moose hunting again this year. The Province is committed to working with partners to understand the cause of the decline, to continue ongoing population monitoring, and to identifying conservation measures that will support the recovery of the population, such that a harvest can be reinstituted in the near future.

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