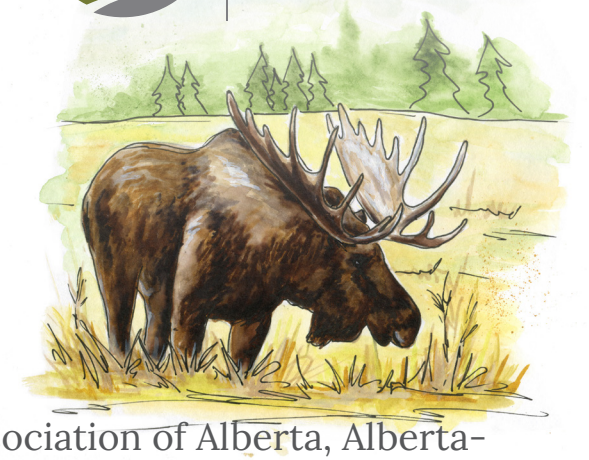
Feb 2026

The Moose Research Initiative

Answering key questions about moose ecology, monitoring, and the influence of forest management practices in Alberta.

fRI Research
Informing Land & Resource Management



Funded by the Forest Resource Improvement Association of Alberta, Alberta-Pacific, Canfor, Millar Western, Tolko, Vanderwell, West Fraser, and Weyerhaeuser.

Theme 1

Moose population size and trend relative to forest management activities and landscape conditions.

Early results

The proportion of mixedwood, wildfire aggregation, harvest aggregation, winter severity, elevation, and proportion of fire are important to moose population sizes. Proportion of harvest was not significant.

Next steps

We'll look for effects of specific forest stand characteristics on populations.

Theme 2

Moose summer and winter ranges in Alberta: Resource Selection Function models and connectivity.

Early results

In west-central Alberta, moose are using different forest ages and types depending on season and spatial scale.

Next steps

We'll analyze moose habitat use in north-east Alberta, and validate our models with independent data and traditional ecological knowledge.

Theme 3

How forest management and climate factors may impact boreal ungulates.

Progress
In the first year of data collection, 180 camera traps and climate sensors deployed at 72 sites in west-central Alberta.

Next steps
Bring back the data for analysis, then do it again at 72 sites in a new area to the east.

Theme 4

Practicality and potential of Copter and Fixed Wing Remotely Piloted Airborne Systems for wildlife surveys, with comparisons of currently employed survey methods.

Early Results
Simulations showed fixed-wing drones with gimbal-mounted cameras are a viable and safe way to survey moose. Early AI models show promise for identifying moose in thermal images.

Next steps
Evaluation of detecting moose under varying levels of canopy cover. Further AI model training.

Theme 5

How forest management strategies impact ungulate populations and habitat supply over time.

Progress
Forcorp's Gabriel Schmid explored the highly variable effects on moose of caribou management strategies in a report and webinar in the fall of 2025.