

What Would High-Speed Rail Mean for Hunting in Eastern Ontario?

A research brief for hunters, landowners, and outfitters in the proposed Alto corridors

Who This Is For

This document is for hunters, landowners, and outfitters in either of the proposed Alto corridors who want to understand how a proposed High-Speed Rail route would affect hunting access, deer and bear populations, and the landscape that makes these areas some of Ontario's best hunting destinations.

What a High-Speed Rail Line Does to Hunting Country

Alto HSR is not a commuter line or freight track. It runs at up to 300 km/h on a dedicated, fenced corridor. The impacts on hunting land and wildlife are significantly more severe than any existing rail line in the region.

THE FENCING FACT

At 300 km/h, continuous exclusion fencing is required along the full length of the right-of-way — this is international HSR standard practice. This is not a track you can cross at a farm lane. If the line crosses your property, your land is permanently divided. You cannot legally cross the right-of-way to retrieve a downed animal, access a stand on the far side, or move between woodlots you own on either side of the line.

Impact on Deer Populations

Fragmentation Reduces Carrying Capacity

When a rail corridor bisects a deer population's territory, part of the habitat is lost and the remainder is degraded. Populations on either side become isolated over time, losing genetic diversity. Research consistently documents reduced deer densities in fragmented habitat.

Impact on Seasonal Movement

Migration Routes Are Severed

White-tailed deer, black bear, moose, and turkey all use seasonal movement corridors, between summer range and winter yarding, between feeding and bedding habitat, and for breeding dispersal. A fenced east-west barrier cuts north-south movement, compressing animals into smaller effective ranges.

Impact on Bear Hunting

Bears Need Large, Connected Ranges

Adult male black bears in Ontario typically range across very large home territories. A linear barrier bisecting bear habitat reduces functional range and disrupts dispersal of young males, which is a key mechanism for maintaining healthy population density across the landscape [26].

WHAT THE MNRF DATA SHOWS

The Ontario Ministry of Natural Resources and Forestry (MNRF) conducts ongoing black bear population monitoring using DNA hair-trap surveys across Wildlife Management Units province-wide. Their 2017–2024 provincial density map identifies the area between Algonquin Park and Georgian Bay as having the highest black bear densities in southern Ontario [27].

This matters for corridor comparison: the Highway 7 northern alignment runs through or adjacent to this high-density zone. The impact of adding a new barrier here is incremental rather than transformative, but incremental is not the same as low risk.

The MNRF also publishes WMU-level black bear harvest data as open data (data.ontario.ca). No WMU-level harvest or density comparison has been conducted for the corridors in Alto's consultation materials, this is a gap that should be required before route selection [28].

Research on existing highway corridors confirms that black bears experience measurable population-level fragmentation even alongside long-established roads. A genetic pedigree study of black bears along BC Highway 3 and US Highway 2 found detectable fragmentation across both corridors, with reduced cross-highway movement compared to expected rates [29]. The claim that bears have "adapted" to existing infrastructure is not supported by the peer-reviewed literature; the more accurate framing is that adding a new impermeable HSR barrier has incremental rather than transformative effect on a landscape already partially fragmented by Highway 7.

Impact on Construction Period

8–10 Years of Disruption First

Construction of a rail corridor requires clearing, blasting through Shield rock, access roads, and constant heavy equipment. Research shows significant disruption of deer movement for multiple years during construction, often extending a kilometre or more on either side of the work zone.

Impact on Trail Access

The Cataraqui Trail Would Be Severed

The 104 km Cataraqui Trail, a segment of the Trans-Canada Trail through South Frontenac and Frontenac Counties, runs directly through the proposed southern corridor. This trail is used by hunters for accessing Crown land and remote woodlots on foot or ATV.

The Southern Corridor: Impacts on Core Deer and Bear Habitat

The proposed southern corridor runs through South Frontenac Township and Rideau Lakes Township, directly across the UNESCO-designated Frontenac Arch Biosphere Reserve. For hunters, this is one of the most significant geographic factors in the route discussion.

THE FRONTENAC ARCH

The Frontenac Arch is a key part of the primary north-south wildlife movement corridor in eastern North America — the land bridge connecting Algonquin Provincial Park to the Adirondack Mountains in New York State. It is described by the Nature Conservancy of Canada as “one of the most important forest corridors east of the Rocky Mountains.” It is home to deer, black bear, fisher, eastern wolf, and moose. The southern rail route runs directly across this corridor at its narrowest point, not alongside it. A permanent east-west barrier cutting a north-south wildlife corridor represents one of the most significant infrastructure impacts on wildlife connectivity in this region [8].

WMU 62 & 64A — Core Deer and Bear Country

The southern corridor passes through WMU 62 (Central Frontenac: Shield/limestone transition, known for deer, bear, and turkey) and WMU 64A (Rideau Lakes area: strong deer populations on agricultural-forest edge). These are among the most productive deer hunting units in Eastern Ontario precisely because the habitat is connected.

Frontenac Arch Ecological Corridor — Severs a Conservation-Grade Wildlife Corridor

The Frontenac Arch Biosphere Network, funded by Parks Canada, is actively mapping wildlife linkages through this landscape for bear, fisher, eastern wolf, and at-risk species. A rail line in this location would sever exactly the corridors they are spending money to protect [7].

For black bears specifically, the Frontenac Arch functions as a dispersal corridor for bears moving between the Algonquin Park core population and southern ranges. Research by Obbard et al. (2017) documented that Algonquin bears undertake seasonal forays beyond park boundaries, and that bears traveling outside protected areas face elevated mortality risk [30]. An impermeable east-west barrier across this corridor would compress bear ranges and interrupt the dispersal of young males that maintains genetic connectivity. This connectivity cannot simply be mitigated with underpasses in Shield terrain.

Multi-Generational Hunting Properties at Risk

Much of the best hunting land in South Frontenac and Rideau Lakes has been in families for generations. Expropriation of the right-of-way, or simply the presence of a permanent barrier, fundamentally changes the character and value of these properties. There is currently no guarantee of compensation for lost hunting access.

The Northern Corridor: Two Very Different Sub-Alignments

The northern corridor is not a single route, it covers a wide study area from near Highway 7 to more remote Shield country further north. For hunters, the distinction between these sub-alignments matters significantly.

THE KEY PRINCIPLE

A route running parallel to an existing disturbance, like Highway 7, adds a new barrier to a landscape that is already somewhat fragmented. A route pushed into intact wilderness introduces a barrier into undisturbed territory. Both cause harm, but in different ways and to different species. Neither should be assumed to have low impact on bear populations.

Near Highway 7 Alignment — A New Barrier in High-Density Bear Country

A route through Marmora, Madoc, and Perth would follow landscape already bisected by Highway 7 and hydro corridors. The incremental fragmentation impact of adding a second impermeable barrier is lower than placing a new barrier through pristine country, but the affected bear population in this zone is not low. MNR monitoring data identifies this region (Algonquin-adjacent mixed deciduous forest) as among the highest black bear density areas in southern Ontario [27]. The primary game species are deer and turkey (WMUs 60, 73, 74B), but the bear population in this zone should not be dismissed.

More Remote Northern Alignment — Moose and Elk Country

A more northerly alignment enters WMU 61 (Tudor-Cashel), moose, bear, wolf, and elk-draw country with minimal existing infrastructure. Moose require far larger home ranges than deer and are highly sensitive to rail disturbance. Research shows rail corridors open access routes for predators into previously isolated habitat, depressing ungulate populations for decades.

THE ELK DRAW CONSIDERATION

WMU 61 (Tudor-Cashel) is one of the limited number of Ontario Wildlife Management Units eligible for the elk draw. A rail corridor through or adjacent to this unit would represent a direct threat to the elk herd that draws hunters from across the province. Elk require large, connected, undisturbed ranges and are particularly sensitive to linear infrastructure disturbance during calving and rutting.

Corridor Comparison for Hunters

A practical side-by-side breakdown of the three main route scenarios and their effects on hunting.

| Factor | Southern Corridor (S. Frontenac / Rideau Lakes) | Northern — Near Hwy 7 (Marmora / Madoc area) | Northern — Remote (Tudor-Cashel area) |
|------------------------------------|---|---|---------------------------------------|
| Primary game species | Deer, bear, turkey, waterfowl | Deer, bear, turkey | Moose, bear, elk (draw unit) |
| Frontenac Arch | DIRECTLY SEVERED | Not affected | Not affected |
| Existing fragmentation | Low — intact landscape through the Frontenac Arch | Moderate — Hwy 7 present | Low — remote and intact |
| Bear population density (MNR data) | Variable / unknown in fragmented southern ON landscape | HIGH — Algonquin-adjacent zone has highest densities in southern ON [27] | Moderate — remote Shield country |
| Hunter access loss | HIGH — many holdings bisected | Moderate | HIGH — few alternate routes |
| Deer population impact | Severe — core habitat | Moderate | Lower — less deer country |
| Bear connectivity impact | Severe — severs Arch dispersal corridor for Algonquin-origin bears | Serious — new barrier in high-density bear zone | Serious — remote bear country |
| Moose / elk impact | Some present | Moderate | Severe — primary unit |
| Wildlife crossing feasibility | POOR — Shield terrain | Better — some infrastructure | Difficult — remote, costly |
| Overall hunting impact | Severe — deer, bear, connectivity | Moderate-to-serious — new barrier in high-density bear landscape | Severe — different species set |

What Alto’s Consultation Has Not Addressed

Alto has published no assessment of the impact on Wildlife Management Units in the affected corridors. There has been no consultation with the Ontario Ministry of Natural Resources and Forestry on deer or moose population effects, no engagement with the Frontenac Arch Biosphere Network’s ecological corridor mapping, and no WMU-level bear population analysis using the MNR’s publicly available harvest and density data. Hunters and outfitters are well-positioned to raise these questions formally in the consultation record.

Summary

Each corridor poses distinct and serious threats to hunting.

- The southern corridor runs directly across the Frontenac Arch Biosphere Reserve, a key part of the primary north-south wildlife dispersal corridor in eastern North America, with severe consequences for bear connectivity and deer populations.
- A northern route near Highway 7 adds a new impermeable barrier to a landscape that is already fragmented, but does so in an area that MNRF monitoring identifies as high-density bear country. The bear impact is not “moderate” in the sense of low risk, it is incremental rather than transformative relative to existing fragmentation.
- A more remote northern alignment threatens moose, elk, and intact wilderness that currently supports some of the province’s most valued draw hunts.
- In none of these corridors has Alto conducted a WMU-level wildlife impact assessment. All hunters in affected Wildlife Management Units have reason to demand one.

What You Can Do Before April 24, 2026

A written submission to Alto’s consultation creates a formal record. When you write, be specific: state your name, municipality, what you hunt, and how the route would affect your property or access. Vague opposition is easy to dismiss. Specific, factual submissions are harder to ignore.

Submit to Alto Directly

Submit at en.consultation.altotrain.ca. State specifically which WMU you hunt, what species, and how the route affects your land or access. Keep a copy of your submission.

Contact Your MP and MPP

- Scott Reid (Lanark–Frontenac) — scott.reid@parl.gc.ca — 613-257-8130
- Michael Barrett (Leeds–Grenville–Rideau Lakes) — michael.barrett@parl.gc.ca — 613-498-3096
- John Jordan (Lanark–Frontenac–Kingston) — john.jordan@pc.ola.org — 613-284-1630
- Steve Clark (Leeds–Grenville–Thousand Islands and Rideau Lakes) — steve.clark@pc.ola.org — 613-342-9522

Both MPs and MPPs need to hear from hunters specifically. Mention the WMU, the species, and the Frontenac Arch wildlife corridor.

Ask them to press the province to demand an MNRF Wildlife Management Unit assessment before any route is selected.

Contact Your Hunting Association

The Ontario Federation of Anglers and Hunters (OFAH — ofah.org) and local chapters are natural allies. Contact your local OFAH zone representatives (Zones F, G, and H cover Eastern Ontario) and urge them to make a formal submission to the consultation. Ask OFAH to call publicly for an MNRF WMU-level impact assessment before route selection proceeds.

If You Own Property in the Corridor and Ask the Questions That Haven't Been Asked

Document your land, your stand locations, your access routes, and how a rail barrier would affect your ability to hunt your own property. This record matters if expropriation proceedings begin. Contact a property rights lawyer to understand your rights under Bill C-15.

- Has the Ontario Ministry of Natural Resources and Forestry been consulted on WMU impacts?
- Has WMU-level black bear harvest and density data been analyzed for either corridor?
- Has the Frontenac Arch Biosphere Network's corridor mapping been reviewed by Alto?
- Has there been a wildlife corridor connectivity assessment for either route?
- What are the impacts on the WMU 61 elk herd?
- Will wildlife underpasses be required, and who pays for them?
- What compensation exists for hunters who lose access to stands or property?

Encourage Organizations to Advocate

On February 27, 2026, the Ontario Federation of Agriculture (OFA) and l'Union des producteurs agricoles (UPA) jointly called for an immediate suspension of the Alto project, citing impacts on productive farmland and rural communities. The Canadian Federation of Agriculture (CFA) passed a similar resolution at its annual general meeting on February 25. This kind of coordinated organizational advocacy creates formal pressure that individual submissions cannot.

| Organization | Why They Should Advocate | How to Contact |
|--|--|--|
| Ontario Federation of Anglers and Hunters (OFAH) | Canada's largest fish and wildlife conservation organization (100,000+ members, 725 clubs). Mandated to protect hunting heritage and wildlife habitat. WMU-level impacts are squarely within their mission. | ofah.org · Zones F, G, H for Eastern Ontario |
| Frontenac Arch Biosphere Network (FABN) | UNESCO-designated biosphere reserve. Actively mapping wildlife corridors through the Arch for bear, fisher, eastern wolf, and at-risk species. The southern corridor would cross directly through their conservation area. | frontenacarchbiosphere.ca · Gananoque, ON |
| Nature Conservancy of Canada (NCC) | Owens and manages conservation lands in the Frontenac Arch. Has publicly described the Arch as one of the most important forest corridors east of the Rocky Mountains. | natureconservancy.ca · Ontario regional office |
| Cataraqui Region Conservation Authority (CRCA) | Owens and manages the 104 km Cataraqui Trail and nearly 2,000 hectares of protected land in the watershed. | cataraquiconservation.ca · (613) 546-4228 |
| Algonquin to Adirondacks (A2A) Collaborative | Cross-border conservation initiative focused on maintaining the wildlife corridor from Algonquin Park to the Adirondacks — the corridor that runs through the Frontenac Arch. | a2acollaborative.org |
| Ontario Landowners Association (OLA) | Advocates for rural property rights and against government expropriation. Right-of-way acquisition for HSR will affect hundreds of private properties. | ontariolandowners.ca |

What the Research Shows

The following findings from peer-reviewed research and conservation organizations support the analysis in this document.

Barrientos & Borda-de-Água (2017) — Railway Ecology, Springer [1]

“When a population’s territory is bisected by a railway, part of its habitat is lost, and the remainder may be degraded via cascade effects... populations and their gene pools are isolated, significantly weakening the wildlife community.”

De Santo & Smith (1993) — Environmental Management [2]

“In rural districts especially, wildlife migration corridors and dispersal orientation are altered or destroyed. Prudent selection of corridors reduces fragmentation impacts by running parallel to, not through, natural areas.”

Ontario MNR Black Bear Population Density Map (2017–2024) [27]

The MNR’s provincial monitoring data identifies the area between Algonquin Park and Georgian Bay — adjacent to the Highway 7 northern corridor — as having the highest black bear densities in southern Ontario. A route through this zone adds an impermeable barrier to a high-density bear landscape. The impact is incremental relative to existing fragmentation, not low in absolute terms.

Proctor et al. (2020) — Ursus [29]

A genetic pedigree study of black bears across two highway corridors in western Canada found measurable population fragmentation alongside long-established roads, even in landscapes with large contiguous bear populations. Bears do not “adapt” to existing linear barriers in a way that makes additional barriers less harmful.

Obbard et al. (2017) — Ursus [30]

GPS and VHF collar data on 72 black bears from Algonquin Provincial Park documented that bears undertake seasonal forays beyond park boundaries. Bears leaving the park faced elevated mortality risk. The Frontenac Arch is one of the primary landscape features connecting Algonquin-origin bears to southern ranges.

Frontenac Arch Biosphere Network / A2A Collaborative (2025) [7]

“The Frontenac Arch Biosphere Region is vitally important for north-south wildlife movement and gene flow within the Algonquin to Adirondack corridor. Habitat fragmentation is an identified threat requiring active management.”

Nature Conservancy of Canada — Frontenac Arch Natural Area [8]

“The Arch provides habitat for animals with large home ranges, such as fisher, black bear, moose and eastern wolf... one of the most important forest corridors east of the Rocky Mountains.”

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