South Nation Conservation
de la Nation Sud

Pollinator Habitat Stewardship

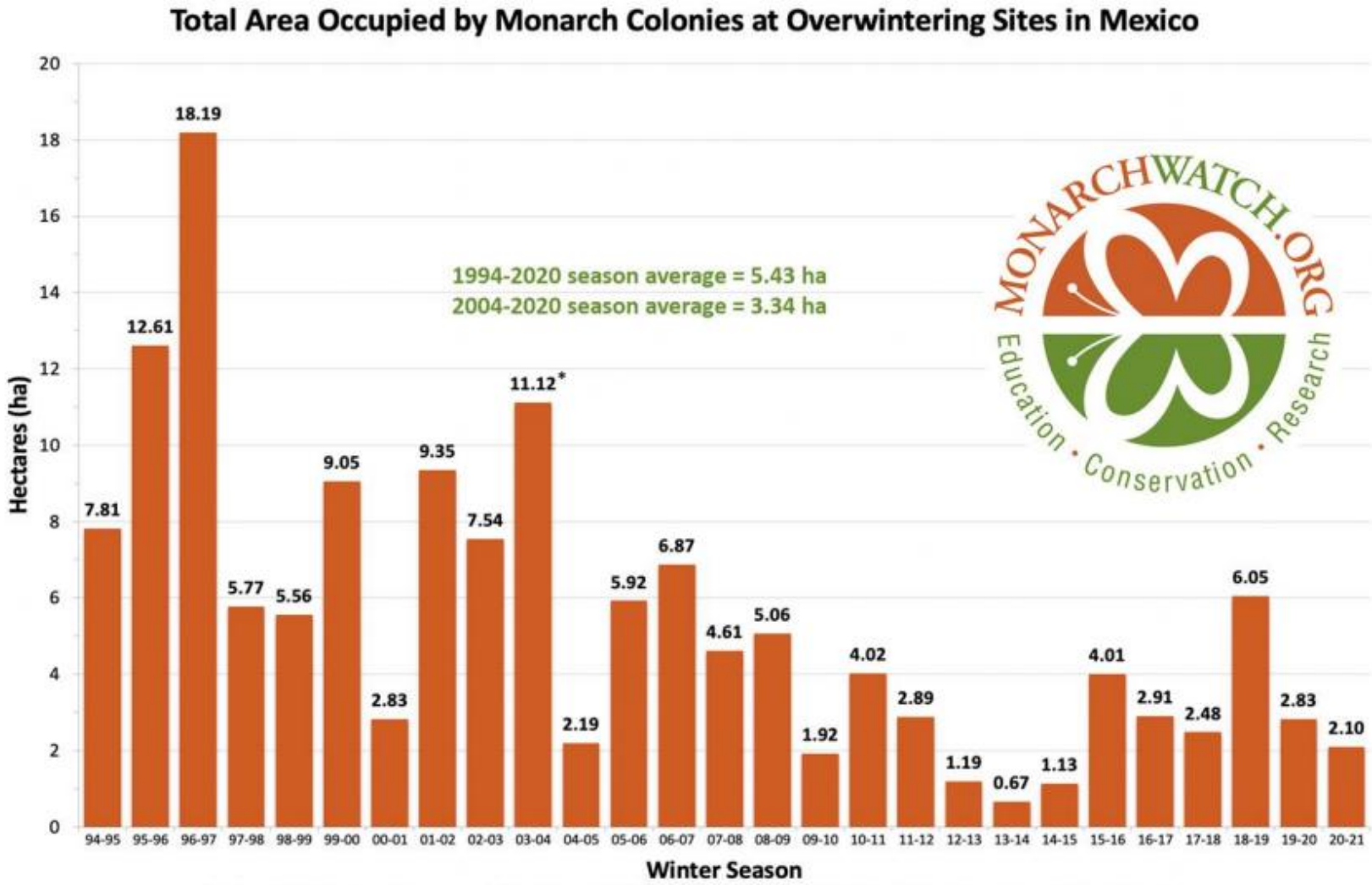
North Grenville Environment Committee

April 28, 2025





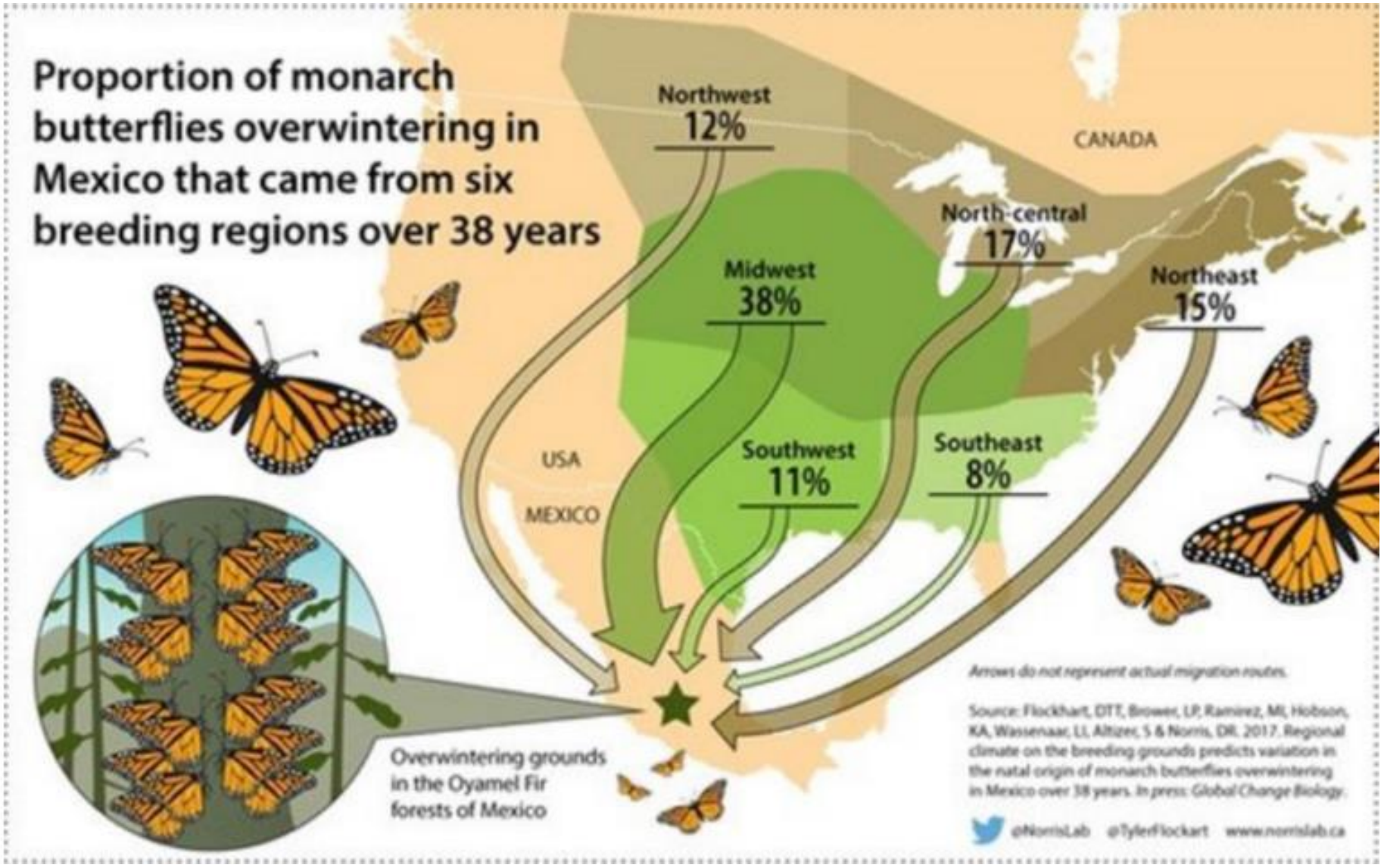
Prompted by Monarch Declines



Data for 1994-2003 collected by personnel of the Monarch Butterfly Biosphere Reserve (MBBR) of the National Commission of Natural Protected Areas (CONANP) in Mexico. Data for 2004-2019 collected by World Wildlife Fund Mexico in coordination with the Directorate of the MBBR.

* Represents colony sizes measured in November of 2003 before the colonies consolidated. Measures obtained in January 2004 indicated the population was much smaller, possibly 8-9 hectares. CT

Canada's Role in Recovery

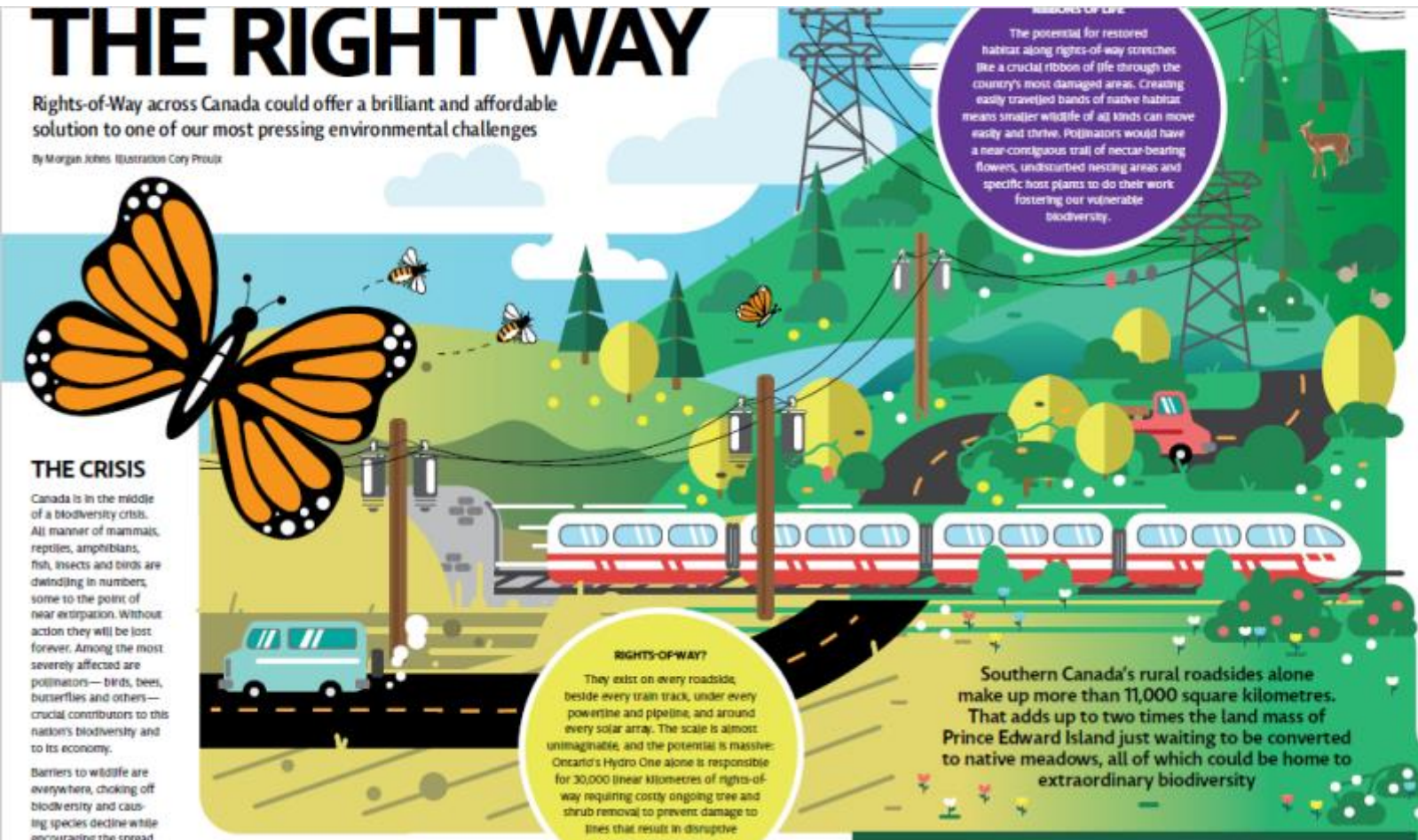


Opportunity is Everywhere

THE RIGHT WAY

Rights-of-Way across Canada could offer a brilliant and affordable solution to one of our most pressing environmental challenges

By Morgan Johns Illustration Cory Proulx



THE CRISIS

Canada is in the middle of a biodiversity crisis. All manner of mammals, reptiles, amphibians, fish, insects and birds are dwindling in numbers, some to the point of near extirpation. Without action they will be lost forever. Among the most severely affected are pollinators — birds, bees, butterflies and others — crucial contributors to this nation's biodiversity and to its economy.

Barriers to wildlife are everywhere, choking off biodiversity and causing species decline while encouraging the spread of invasives. Crucial wetlands and grasslands, essential to biodiversity in the Canadian south, are being wiped out: agribusiness, forestry, industrial development and urban expansion are gobbling up crucial habitat.

RIBBONS OF LIFE

The potential for restored habitat along rights-of-way stretches like a crucial ribbon of life through the country's most damaged areas. Creating easily travelled bands of native habitat means smaller wildlife of all kinds can move easily and thrive. Pollinators would have a near-contiguous trail of nectar-bearing flowers, undisturbed nesting areas and specific host plants to do their work fostering our vulnerable biodiversity.

RIGHTS-OF-WAY?

They exist on every roadside, beside every train track, under every powerline and pipeline, and around every solar array. The scale is almost unimaginable, and the potential is massive: Ontario's Hydro One alone is responsible for 30,000 linear kilometres of rights-of-way requiring costly ongoing tree and shrub removal to prevent damage to lines that result in disruptive power interruptions.

Southern Canada's rural roadsides alone make up more than 11,000 square kilometres. That adds up to two times the land mass of Prince Edward Island just waiting to be converted to native meadows, all of which could be home to extraordinary biodiversity

EFFECTIVE, AFFORDABLE AND READY-TO-IMPLEMENT REMEDIES TO OUR GROWING BIODIVERSITY CRISIS ARE AVAILABLE ON A MASSIVE SCALE. BETTER YET, THEY AREN'T HARD TO ACCESS OR DIFFICULT TO MANAGE BECAUSE

R-O-WS ARE ALL AROUND US

WORKING LANDSCAPES FOR BIODIVERSITY

Native meadows are compatible with the need to manage vegetation along rights-of-way. They create short, stable, low-growth plant communities that require less mowing and less spraying. That saves money, reduces pesticide use and cuts fossil fuel use and greenhouse gas emissions, helping governments and corporations to meet their net-zero carbon targets.

Local ecosystem benefits include flood and drought mitigation, carbon storage, natural snow fencing and helping to keep out alien invasive plants.

Many jurisdictions in the United States have cut costs by converting roadsides to much-needed pollinator habitat. Does your municipality have a plan? Call to find out!

OPPORTUNITY

Rights-of-way are regularly mown, cleared and sprayed to manage vegetation. This creates conditions in which wildlife cannot flourish. Utilities, governments and others spend millions every year keeping these areas clear.

PASSIVE CONVERSION

Allow an area to renaturalize: it will happen over a single growing season, resulting in a mix of native and non-native species and greater biodiversity. And it lowers costs, immediately and for the long term.

Mow less frequently, restricted to early spring or late autumn when pollinator activity is ebbing, allowing hardy native species to return and thrive.

Reintroduce native beneficial predators to manage alien invasive species.

To discourage invasives, use herbicides selectively, plus weed mats, other non-chemical barriers and manual weed pulling — all of which are cheaper, cleaner and safer.

ACTIVE CONVERSION

This approach results in high-quality, low-maintenance natural meadow conditions, providing the greatest possible benefits to biodiversity. It is more costly than passive approaches because it can require several seasons of site preparation, but it's ideal for newly constructed projects.

Plow, bulldoze, grade or dig out existing invasive vegetation.

Over two years, repeatedly spray, dig out or raze invasives to completely clear them.

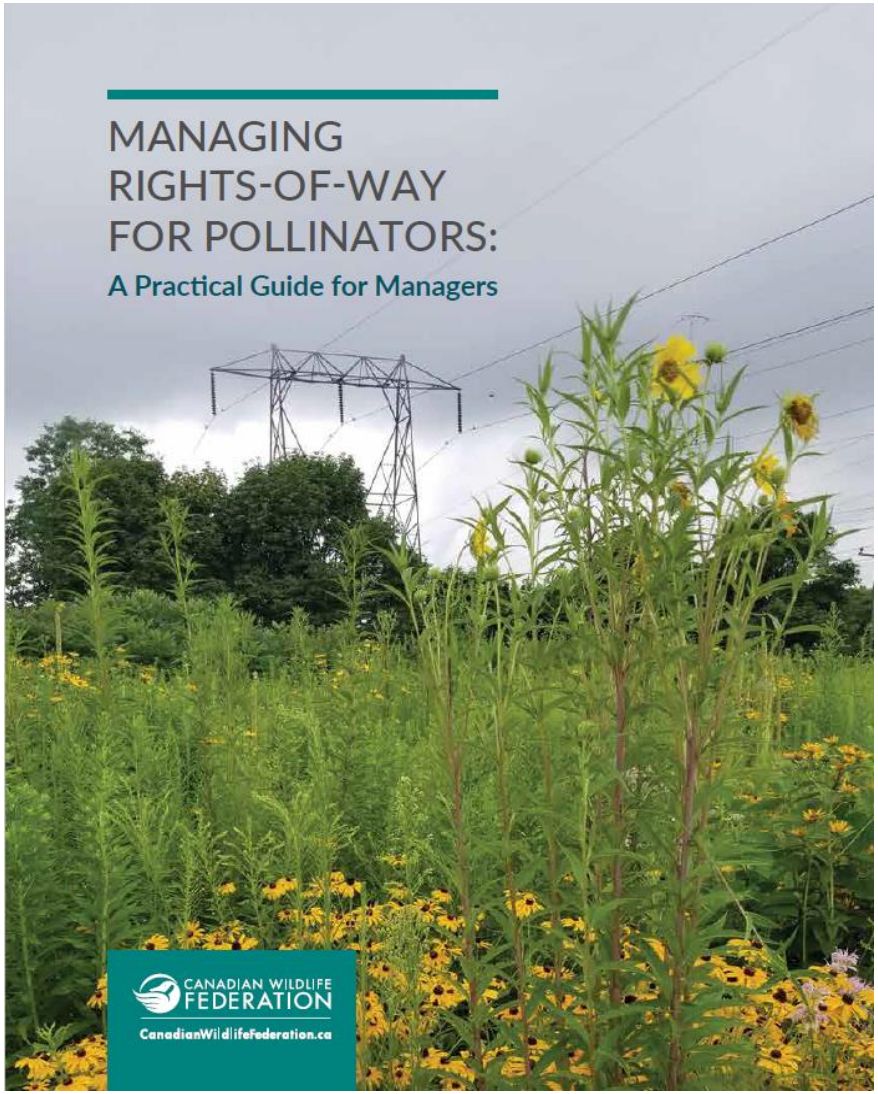
Seed intensively with only native species.

Suppress invasive species until the native meadow is established.

Integrated Vegetation Management

- Multi-method control plan
- Management of weeds and brush/trees
- Well-defined goals and objectives
- Supported by Council and implemented by staff

Pollinator Habitat Restoration



- Passive or Active Restoration
- Site selection
- Site preparation is key
- Custom seed mixes
- Maintenance and monitoring

Benefits of ROW Pollinator Habitat

Sowing a pollinator snow fence - 2021

- Reduced maintenance costs
- Erosion protection and flood attenuation
- Living snow fence
- Carbon sequestration
- Wildlife habitat, connectivity

Pollinator Habitat Restoration

Lafleur Road, Township of North Dundas

- 1-acre roadside strip
- Largely parsnip, non-native grasses, and invasive species
- Herbicide, tiller, seeded, rolled, mowed

Pollinator Habitat Restoration – Mill Run CA

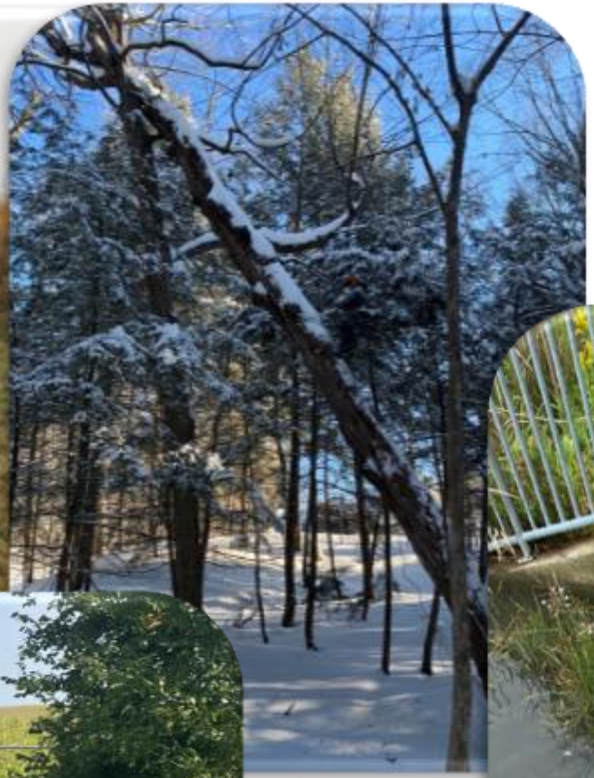
Lessons Learned

- Importance of site preparation
- Chemical control
- Timing of mowing
- Seasonal hydrological conditions
- Short-term pain for long-term gain

Partnerships and Collaboration

- Eastern Ontario ROW Community of Practice
- Canadian Wildlife Federation
- Lanark County
- Conservation Authorities

SNC Municipal Services



Our Local Environment, We're in it Together.

SOUTH NATION
CONSERVATION
DE LA NATION SUD