

Biodiversity Corridor of Baie-D'Urfé

Pilot project



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Biodiversity Corridor

This is a linear green space that stretches from the west of Fritz Park to the north and is under a servitude maintained by Hydro-Québec. On either side of this space are the backyards of mature gardens with dense hedges that shelter birds and small mammals. These hedges serve as essential ecological corridors for many species, allowing them to move safely and promoting local biodiversity.

At the southern end lies a planting area started around 2011 as a butterfly garden, featuring milkweed—a key plant for the survival of the monarch butterfly (*Danaus plexippus*). Monarchs rely entirely on milkweed for their life cycle, as their caterpillars feed exclusively on its leaves. Unfortunately, monarch populations have declined by more than 80% in North America over the past few decades due to habitat loss and pesticide use.

In 2019, a discussion began on creating biodiversity-friendly “no-mow” areas along the Hydro-Québec servitude between Westchester and Cornwall streets. Following a 2020 initiative by a group of residents, a first experimental plot was established to observe how biodiversity evolves when mowing is halted. This type of differentiated management helps recreate natural habitats and supports the return of once-common species, such as native pollinators and insect predators of agricultural pests.

In 2021, a second plot was created with the introduction of a mix of mostly native flowering plant seeds. Agronomists from Aiglon Indigo, the company supplying the wild seeds, were consulted. This site is experimental: one section is left to natural colonization, while the other is restored using a method that introduces native Quebec plant species. Studies have shown that these flowering meadows attract key pollinators such as solitary bees and hoverflies, which play a crucial role in pollination.

We have also examined several aspects of this project, including which plants best adapt to the soil conditions in the plot between Cornwall and Westchester. After two years of wildflower propagation, we found that the seeded plot did not significantly influence the one left to natural colonization. The latter remained dominated by grasses typical of monoculture, which limits the spontaneous establishment of new species. The two plots are about 3.5 meters apart.

In fall 2024, on the recommendation of Aiglon Indigo’s agronomy experts, we asked the Public Works department to mow the area. This measure aims to equalize light distribution in spring, encouraging the growth of slower-growing native plants and strengthening natural competition against invasive species.



Objective:

The main goal of this native wildflower plot is to support local biodiversity by providing habitat for pollinators and other beneficial species. Research shows that well-balanced ecosystems can help regulate pest populations, including ticks, by encouraging the presence of natural predators such as certain bird species and insectivorous small mammals.

Concerns:

1. Ticks

While ticks can be present in any type of vegetation, including lawns and forests, no studies show that flowering meadows promote their spread. In fact, the presence of natural predators such as ground beetles and insectivorous birds may help reduce tick populations. Additionally, the area is designed to be observed from a distance, which further minimizes risk.

2. Invasive Species and Milkweed

Milkweed is not on the Town's list of invasive species. It is a native plant in Quebec and plays a vital ecological role. In addition to supporting monarch butterflies, it attracts a variety of pollinating insects and helps stabilize soils. Its toxic latex deters most herbivores, but some specialized species—such as the monarch—have evolved to tolerate it.

Scientific Conclusion:

The experiments conducted on these plots highlight the importance of rewilding practices to restore urban biodiversity. Differentiated green space management fosters ecosystem resilience by enabling the gradual return of plant and animal species adapted to local conditions. These initiatives also contribute to the natural regulation of harmful insects and the creation of habitats for pollinators, which are essential for the reproduction of many plants and agricultural crops.

The results so far confirm that floral diversification is an effective tool to enhance local biodiversity, although soils initially depleted by grass monoculture may slow the process. In the long term, an integrated management approach—including species monitoring, the gradual removal of dominant low-diversity plants, and the promotion of native species—will help optimize these ecosystems.

By continuing this rewilding initiative, we aim not only to improve local biodiversity but also to inspire similar efforts for the well-being of urban ecosystems. Since spontaneous plants also appear in these plots, the area is monitored regularly. We remain committed to maintaining it in a way that supports both ecological benefits and community safety.



