

Frequently Asked Questions: What to Know When ReWilding / Naturalizing Your Lawn

A Community Resource Compiled by the Ecological Design Lab

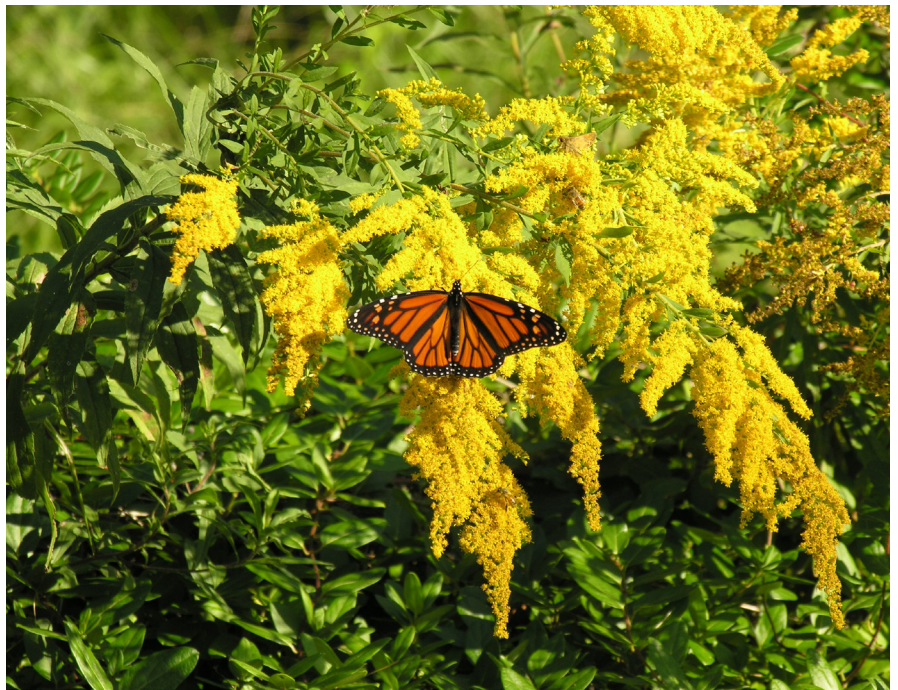


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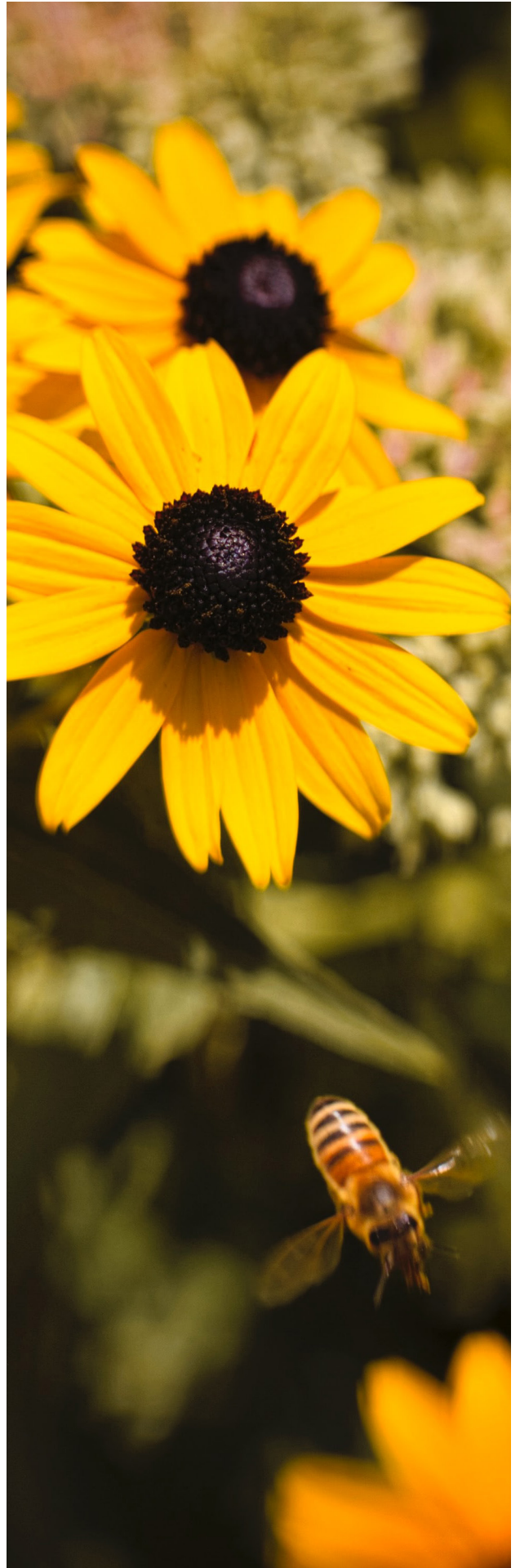


Introduction

This Frequently Asked Questions (FAQ) resource is intended to promote an understanding of how municipal property standards and bylaws work and to address some common barriers such bylaws may pose to natural gardens. This FAQ offers advice on how to respond to bylaw enforcement constructively.

In addition to addressing common legal and policy questions about cultivating a natural garden, this resource will provide information on pollinator plants native to Ontario, address misconceptions about goldenrod and bust myths about ticks.

Answers are based on research the Ecological Design Lab has conducted across many municipalities across Ontario, Canada and the US. It is not intended as legal advice. Please refer to the Toolkit for Planners and the Model Bylaw posted on the Ecological Design Lab website for further information.



What are your rights? What to do when a Bylaw Officer visits your property?

Can I grow a natural garden?

Growing a natural garden is a great way to enhance and support native species and urban biodiversity. In 1996, the court case *Bell v. Toronto (City)* found below set a precedent that naturalized gardens are an expression of personal environmental beliefs and values that are protected under the Charter. Therefore, naturalized gardens have become an acceptable form of self-expression, and individuals may be exempt from municipal bylaws around yard maintenance and those that refer to weeds and grass. The revised (2022) Toronto bylaw has recognized the constitutional right to grow naturalized gardens and no longer requires an exemption from the bylaw to do so. However, some municipalities do require those who want “natural gardens” to apply for a “natural garden exemption”. Requirements for the exemption vary by municipality and usually involve filling out a form and explaining your intentions and maintenance plans.

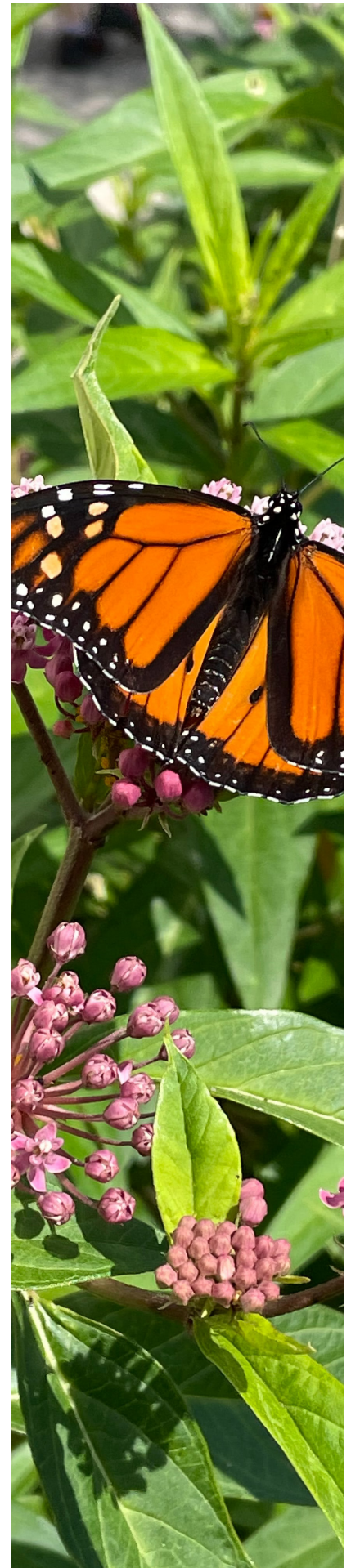
Can I grow a natural garden on my boulevard?

Boulevards are municipally-owned land, however, a legal precedent was set protecting Douglas Counter’s naturalized boulevard garden establishing the right to cultivate public land under the Charter. This decision was upheld by the Ontario Court of Appeals, on the basis of protecting the rights of citizens to express their environmental values on public boulevards. Planting on public land requires certain municipal permissions and assurance that the site will not interfere with underground utility lines. Gardeners of boulevards must be mindful of maintaining lines of sight, keeping fire hydrants unobstructed and removing all designated noxious weeds. If there are areas maintained as turfgrass or lawn on boulevards, the municipality’s height provisions for lawns, often maximum height of 20cm, will apply.

A bylaw officer came to visit my property. What should I do?

Bylaw officers deal with various property issues and are rarely trained to identify plants. We recommend you take an advocacy and education approach: use the opportunity to politely share the benefits of your garden with the bylaw officer, and explain what you have planted and why. In particular, emphasize the importance of the garden to you. If you don't have turfgrass, say so, and point out how and why your garden is not a "lawn". You can also ask why the officer is visiting. Ask if any health and safety issues have been identified and ask the officer to be specific about these concerns. If someone has complained, ask about the nature of the complaint. If the complaint concerns "weeds", ask the officer to specifically identify which weeds are offending and ask them to point them out. If the complaint is about appearance or aesthetics (and the officer uses words such as "messy", "overgrown", "unkempt", "neglected" etc) you can respond that bylaw enforcement is restricted to matters of health and safety and re-direct to those issues. Take notes and ask for the officer's card.

Most importantly, follow up with an email after the visit and emphasize that your garden is intentional, environmental and natural. Following up provides an opportunity to indicate if you are addressing any health and safety issues and, if necessary, ask for clarification on these concerns. Similarly, if the officer raised the presence of weeds as an issue, address those species specifically and note if the officer was unable to identify the offending plants. If the officer noted aesthetic concern by making comments on your garden's appearance, you can be clear that these are arbitrary judgments and bylaw enforcement must be about matters that are measurable, specific and confined to health and safety. By-law enforcement should not be based on aesthetics. You may also wish to emphasize that you are aware you have a constitutional right to express your environmental values through your garden, see *Bell v. Toronto (City)*.



Municipal Bylaws and Property Standards

What is a bylaw? What is property standards bylaw? What is a Weeds and Grass Bylaw?

Bylaws are the rules a municipality sets to govern the way lands and properties are managed and used. A property standards bylaw will vary by municipality. It is a set of rules determined by the city for acceptable maintenance of buildings and private properties. Some municipalities have specific bylaws for property maintenance that refer to weeds and grass. For example, the Toronto property standards bylaw outlines that grass cannot exceed 20cm and that shrubs should not be 'overgrown'. Property owners may be threatened with fines and legal action for violating these bylaw standards.

What does the Toronto bylaw say? What about other municipalities?

In January 2022, the Toronto Bylaw was updated and the new Turfgrass & Prohibited Plants Bylaw outlines that:

- Turfgrass must be cut when the growth exceeds 20 centimeters;
- Land must be kept free of prohibited plants (noxious and invasive species) listed under the bylaw;
- Plants cannot obstruct sidewalks or roadways;
- Plants cannot restrict driver and pedestrian sight lines at intersections, driveways, sidewalks, walkways, or visibility to all traffic control devices; and,
- The bylaw does not require an exemption to cultivate a naturalized garden.



The Grass and Weeds Bylaw in Fredericton states that:

“A yard shall (a) be properly graded to ensure rapid drainage of storm water there from to prevent ponding therein or the entry of water into a basement or cellar;
(b) be kept reasonably clean and free from rubbish or other debris and from objects, holes, excavations or other conditions that might create a health, fire or accident hazard; and
(c) be maintained free of rag weed, poison ivy, poison sumac and other noxious plants.”

Within the town of Smith Falls a section of their property standards bylaws pertaining to yards states that:

“(1) Yards shall be maintained in a neat and tidy condition and free of:
(a) rubbish, garbage, brush, waste, litter and debris.
(b) growth of grass or weeds in excess of 20 cm (8”);
(c) dead, decayed or damaged trees or other growth and the branches and limbs there of which create an unsafe condition;”

These vague use of the terms like grass, weeds and debris leave lots of room for subjective interpretation by bylaw officers and council. See the violation served by this municipality to the natural garden of Beth and Craig Sinclair and how these passionate gardeners resisted [here](#).

Do I have to cut my grass?

This depends on how “grass” is defined, and what types of grasses you are growing in your garden. In fact, most municipalities don’t define “grass” and this is problematic because there are more than 12,000 species of grasses (or graminoids to use the botanical term). Most property standards bylaws and/or grass and weeds bylaws refer to “grass” generically, and we can assume this applies to turfgrasses, which are those species used for lawns and which are meant to be kept short and clipped to create an even “turf”. But few are this specific. Most bylaws include maximum height requirements for grasses grown as a lawn. The exact height requirements for grass can differ based on the specific bylaws of your city. It is common to see municipalities require that grass height must be kept below a maximum height of 20cm or 8 in.

What are Noxious Weeds?

Noxious weeds are defined in law, specifically under the Ontario Weed Control Act. The Schedule of Noxious Weeds is a list of 25 plants identified by the Ministry of Agriculture, Food and Rural Affairs, which:

- Are difficult to manage on agricultural land and may hinder crop yields;
- Negatively affect the health and well-being of livestock; or
- Poses a risk to the health and well-being of agriculture workers.

Familiar examples of noxious weeds on the current list include; poison ivy, poison hemlock and ragweed. The Ministry of Agriculture, Food and Rural Affairs occasionally will update the list according to the latest evidence using current science. For example, common milkweed (*Asclepias*) was removed from the list in 2015 as it is recognized as an important host plant for the monarch butterfly. See OMAFRA's updates and questions.

Do I need to mow a buffer strip between my natural garden and the sidewalk?

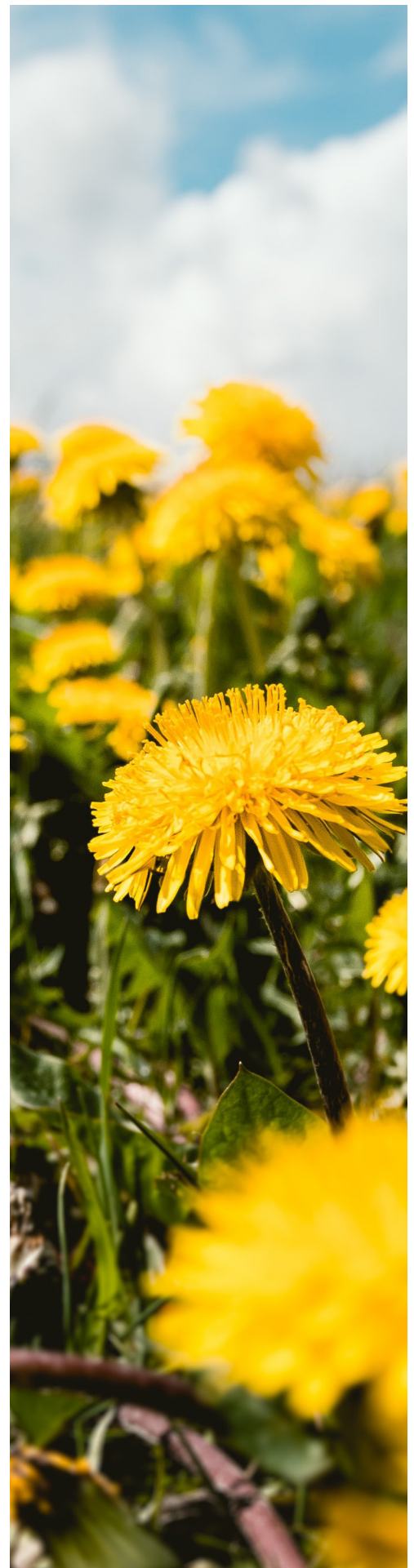
This answer will vary based on your municipality and the plants in your garden. Some municipalities do not differentiate between the allowance of the entire yard and the piece of property buffering the sidewalk. Other municipalities, like Chatham-Kent, require a mown buffer strip between a naturalized yard and the sidewalk. This mown buffer strip applies to all plants, not just turfgrass. The allowances for buffer strips may vary across municipalities and have different standards for the type of vegetation abutting the sidewalk.

Does the bylaw only apply to front yards, or does it apply to back yards as well?

Municipal bylaws on property standards apply to all private property, including the front as well as back yards.

Are dandelions allowed?

Yes. For example, Toronto's list of prohibited plants is restricted to noxious or invasive species and dandelions do not belong to either of these categories. A dandelion is simply a perennial flowering plant.



Debunking Myths around Naturalized Gardens

Concern:

Naturalized yards are fire hazards.

Clarification:

This concern stems from the belief that tall grasses and wildflower stems are flammable. However, according to the U.S. Forest Services, grass fires can only last for about 20 seconds. For a fire to damage a house, it must burn for 7.5 minutes, and has to be within 4 feet of the house. Usually, these fires would not have sufficient embers that could be carried by wind to cause any serious damage. Even in the arid west, native perennials are often still fire resistant as they remain mostly green all year.

Concern:

Naturalized yards attract vermin.

Clarification:

While not a zoological term, “vermin” often refers to unwanted species which can be vectors of disease, such as rats, or can be potentially venomous, such as snakes. Rats are often attracted to sources of human-produced food like corn, grain, pet food, and food scraps, not necessarily the rich vegetation found in natural yards. Snakes may find habitat within both natural and monoculture turf yards, but can add value by eating other, true pests such as mice, harmful insects, and slugs.

Concern:

Naturalized yards host mosquitoes.

Clarification:

Mosquitoes are attracted to stagnant water, not naturalized yards. Stagnant water is actually more often a problem in monoculture turf grasses which are not as good at soaking up water during heavy rains as natural yards.

Concern:

Naturalized lawns worsen seasonal allergies.

Clarification:

Hay fever is caused by wind-borne pollens, and some flowering plants are pollinated by insects, not wind. Although ragweed sometimes causes hay fever, other plants such as the ones utilized in monoculture turf lawns (Kentucky bluegrass, Bermuda grass, and Timothy) also cause allergies. Many native plant species such as perennials and other native grass species do not have wind-borne pollen, reducing their capacity to induce allergies.

Concern:

Naturalized lawns may decrease property values if they are messy and unattractive.

Clarification:

This is not always the case. In fact, naturalized landscaping can sometimes even increase property values. Developers often highlight such landscaping in new developments, and will charge a premium for them. Woodland corridors can also increase the natural features of a community and make it unique. Given the ongoing housing crisis in multiple jurisdictions, the promotion of equitable housing access is also often a higher priority and differentiator than maintaining high property values.

Concern:

Naturalized yards require too much time and maintenance.

Clarification:

All types of yards require time and maintenance, and any change requires an additional investment of time or money. In 2020, the average American spent an average of over 16 minutes a day on lawn and garden care from May to December. In some cases, alternatives to monoculture turf grass require less maintenance work. For instance, clover lawns can be a more sustainable option than monoculture turf grass but do not require the same amount of mowing or watering. Maintenance can also be a rewarding experience, and many people find pleasure in gardening.



Concern and Clarification Chart prepared by TMU Master's of Planning Studio Group for the URBAN BIODIVERSITY: Cultivating Support through Municipal Codes project. Complete work deliverables can be found [here](#).

Understanding the Relationship Ticks have to Biodiversity

A common argument against the cultivation of a natural garden is that these wild areas will increase the presence of ticks and the risk posed by the diseases they carry. The following is an evidenced-based investigation addressing the concerns of tall-grasses and biodiversity in relation to ticks and the proliferation of Lyme disease. This review of literature explores key findings of tick research, please explore these resources for more information.

Lack of biodiversity and the concomitant invasion by non-native plants can increase the rate of transmission of some tick borne diseases (e.g. Lyme disease) (Lerman & D'Amico, 2019). The most widely accepted theory to support this argument is known as the dilution effect (Lerman & D'Amico, 2019; Cary Institute of Ecosystem Studies, 2020; Ostfeld & Keesing, 2012).

The white-footed mouse (*Peromyscus leucopus*) is considered to be the most competent natural reservoir host for spreading Lyme disease onto blacklegged ticks (*Ixodes scapularis*). As such, "any factor that decreases the representation by white-footed mice relative to other hosts in the vertebrate community would reduce the proportion of ticks infected with the Lyme disease spirochete" (Ostfeld & Keesing, 2000, p. 724; Ostfeld & Keesing, 2012), thereby reducing the likeliness of passing the infection onto humans - the dilution effect.

Species-poor communities have disproportionately higher numbers of these mice, therefore providing a greater number of tick meals. This is seen especially in the lack of biodiverse areas that have increased blacklegged tick density resulting from suburbanization and landscape fragmentation (Ostfeld & Keesing, 2000; Talbot, et al., 2019; Roome, et al., 2018).

Increases in biodiversity influences predation, which can decrease the transmission of Lyme disease. As species diversity increases, the number of predators to small mammals (e.g. birds, bats, opossums, foxes, weasels, and owls) such as the white-footed mouse increases as well, predictably decreasing the number of mice and infected hosts (Granter, et al., 2014; Pollinator Pathways, n.d.).





Given that every host species has a different reservoir competence and ability to carry and transmit the pathogen (Lou, et al., 2014), “biodiversity may be fundamentally important in reducing the risk exposure to certain zoonotic diseases” (Ostfeld & Keesing, 2000, p. 723).

As biodiversity is lost, the strong hosts with strong buffering effects to the virus disappear (e.g. Opossums) (Lerman & D’Amico, 2019; Granter, et al., 2014).

Blacklegged ticks that feed on white-footed mice are highly likely to become infected with *Borrelia burgdorferi*, the bacterium that causes Lyme disease, whereas those that feed on other species such as chipmunks, lizards, or ground-dwelling birds and opossums are not (Ostfeld, et al., 2010; Cary Institute of Ecosystem Studies, 2020). This is because other species such as opossums are poor hosts for the pathogen and kill the vast majority of ticks that attempt to feed on them. However, tick-eating species such as opossums are absent for low-diversity forest fragments, opposite to the white footed mouse which thrive when biodiversity is lost (Ostfeld, et al., 2010; Pollinator Pathways, n.d.; Granter, et al., 2014).

A more diverse biotic community also plays a role in reducing nymphal tick infestations as studies have found it in a positive correlation with tree species diversity (Bouchard et al., 2013).

Taller grass does not result in more ticks and instead supports a higher abundance and diversity of native bees. Conversely, frequent lawn mowing can be “consequential for beneficial wildlife such as pollinators, and other ecosystem services associated with urban biodiversity” (Lerman & D’Amico, 2019, p. 3).

Urban greenspace and lawn management deplete lawn floral resources (e.g. nectar and pollen) that pollinators need (Lerman et al., 2018).

“The reduction of maintenance and the establishment of natural (infrequently, rather than intensely, mowed) green spaces and waysides can have a significant impact on mitigating the biodiversity crisis, even in our highly populated and highly degraded areas (low abundance and diversity numbers reported here indicate reduced mowing can lessen the impacts of urbanization but does not cure them) and, at the same time, increase the awareness of ecological problems occurring in urban human populations” (Wastian et al., 2016, p. 60)

Habitat loss has caused a global decline in bees and other pollinator insects. However, natural urban and suburban landscapes (e.g. gardens, lawns, urban parks, etc.) have the capacity to serve as a bee refugia, and support pollinator conservation and biodiversity and must be supported in conservation policy development and pollinator friendly behaviours (Lerman, et al., 2018; Del Toro & Ribbons, 2020; Baldock, 2020).

“Pollinator gardens could positively influence the abundance of pollinators and might mitigate the impact of habitat loss on biodiversity” (Majewska et al., 2018, pp. 370-371) Evidence in data suggests that natural gardens, abundant in native plant species and flowers are associated with greater pollinator abundance, pollinator activity, and overall species richness of various pollinators (e.g. butterflies and bees) (Majewska, 2018; Pardee & Philpott, 2014).

Natural gardens with native plants provide pollinators with the necessities to survive (e.g. nectar, pollen, larval food), including shelter and a habitat for the next generation of pollinators (TRCA, n.d.). Natural patches support pollinator population, whereas manicured landscapes are a desert for pollinators (The David Suzuki Foundation, 2021).



Goldenrod vs Ragweed

Allergen or Pollinator Ally?

Why are goldenrod and ragweed confused?

Ragweed and goldenrod are similarly sized, grow in the same regions and have similar blooming periods from July to October. Ragweed causes hay fever. Their similar blooming period has led to an incorrect association of goldenrod with hay fever symptoms.

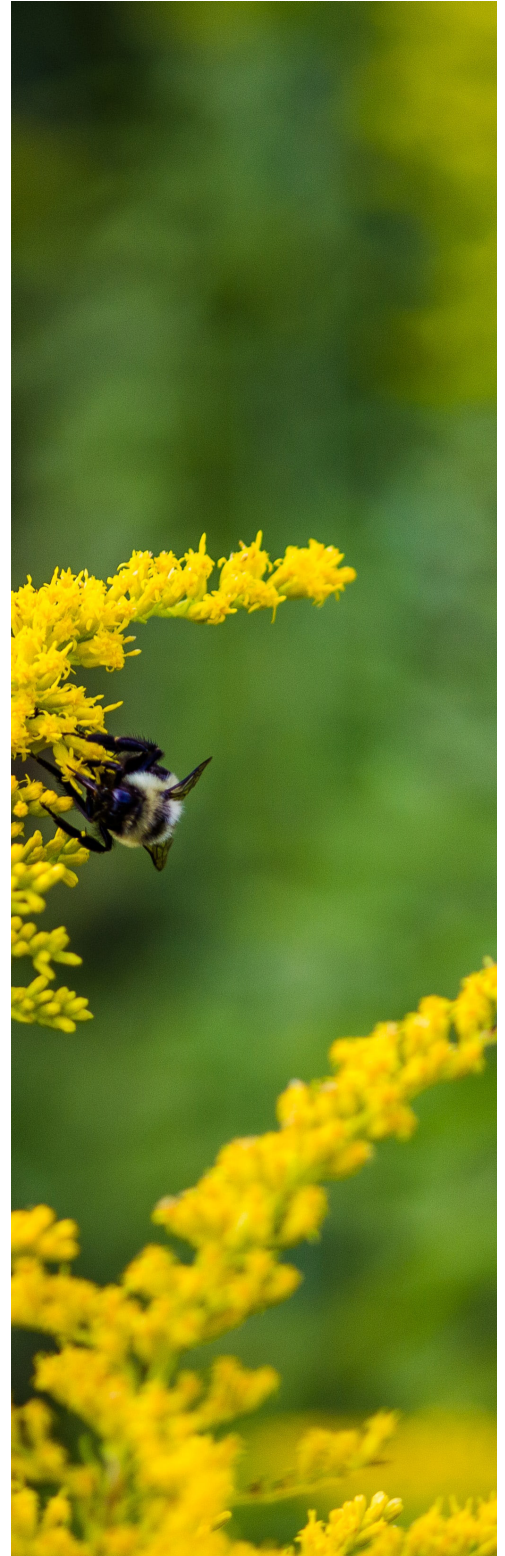
What causes hay fever?

Allergic rhinitis, or hay fever, is an immune response to pollen that can manifest as sneezing, sniffing, congestions, as well as red and itchy eyes. Pollen is essential to the reproductive systems of plants but is transported differently by various plant species. Some plants are pollinated by animals, but most flora, including grass and ragweed are pollinated by the wind. Goldenrod requires pollinators like bees to distribute pollen as it is denser, heavier and not able to be transported by the wind. Alternatively, ragweed pollen is transported by the wind, making it airborne and prone to causing allergic reactions. Ragweed causes half of all cases of pollen-related allergic rhinitis in North America and, unfortunately for us, is very common in southern Ontario.

Why plant goldenrod?

- There are more than 25 species of goldenrod native to Ontario.
- Goldenrod supports more than 100 species of moths and butterflies in their larval stage.
- More than 35 species of bees are specialist feeders on goldenrod pollen.
- Goldenrod blooms in late summer into the fall, and its nectar is an important late-season food source for pollinators.

(Sourced from Get to know Goldenrod, an informative brochure written by Lorraine Johnson with the City of Toronto found [here](#)).



How to tell the difference between ragweed and goldenrod?

The most identifiable difference between goldenrod and ragweed is the colour of their plumes. Goldenrod has plumes of vivid yellow flowers while ragweed's green flowers are more discreet. Goldenrod's inflorescences spread into flat branching clusters at the top of the plant.

The individual flowers are small, about 1/8 of an inch across, each with 8 to 15 petals. Ragweed produces flower spikes 1 to 4 inches long. Ragweed's small, petal-less flowers start green and become yellowish green.



Ragweed Plume



Goldenrod Plume

Goldenrod has lance-shaped leaves with pointed tips that attach individually to the stem. Ragweed, on the other hand, has deeply-lobed leaves that almost look like compound leaflets attaching together on a single stem.



Ragweed Leaves



Goldenrod Leaves

How to Start a Naturalized Garden

Why should I consider cultivating a natural garden?

Replacing conventional turf grass with a naturalized lawn including an array of different plant species selected for their ecological richness helps produce many benefits!

Some of these benefits include:

- Increased pollinator habitat
- Increased stormwater filtration & improved water quality
- Increased habitat corridors
- Increased biodiversity
- Reduced use of fertilizers, insecticides, and herbicides
- Reduced water use
- Reduced greenhouse gas emissions
- Cost savings

See more information on the benefits of natural gardens in the Master's of Planning Studio Toolkit [here](#).

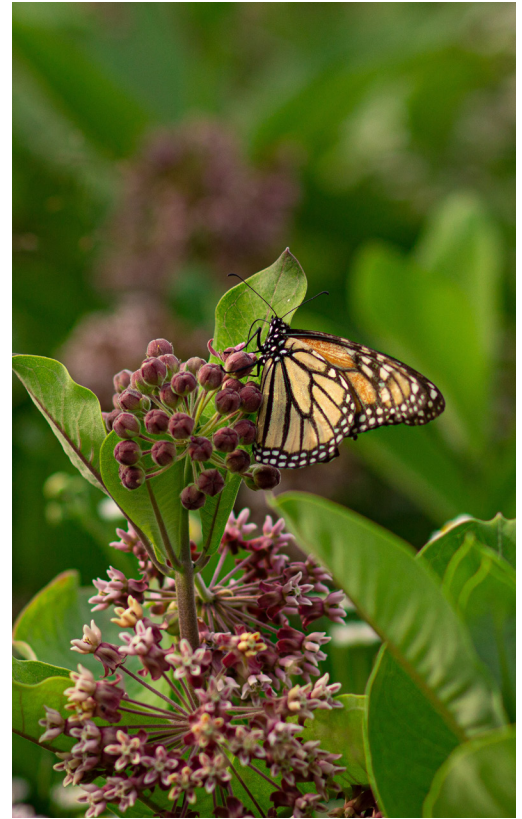
What should I grow?

Cultivating a natural garden can support pollinators by providing necessary habitat. Pollinators can have specific relationships to host plant species at various stages of their life cycles. In other words, not just any old pollen will do for some pollen-specialist bees and butterflies. Goldenrod and asters are significant genera for supporting pollen-specialist bees in North America. In the Eastern United States, asters and goldenrods are known for supporting 26 and 29 respective species of pollen-specialist bees (Droege & Fowler, 2020; Johnson and Colla, 2020).

The following section will explore some of the plant species that support pollen-specialists in North America, this is in addition to the enormous value to generalist pollinator species.

Please note that these are by no means exhaustive lists, more information can be found consulting Pollen specialist bees of the Eastern United States as well as A Garden for the Rusty-Patched Bumblebee: Creating Habitat for Native Pollinators: Ontario and Great Lakes Edition (Droege & Fowler, 2020; Johnson & Colla, 2020).

Common milkweed (*Asclepias syriaca*) has specialist relationships with the larval host for monarch and queen butterflies, milkweed leaf beetle, large milkweed bug, and milkweed tussock, lined ruby tiger, striped garden caterpillar, delicate cynthia, stalk borer, cecropia and unexpected cynthia moths.

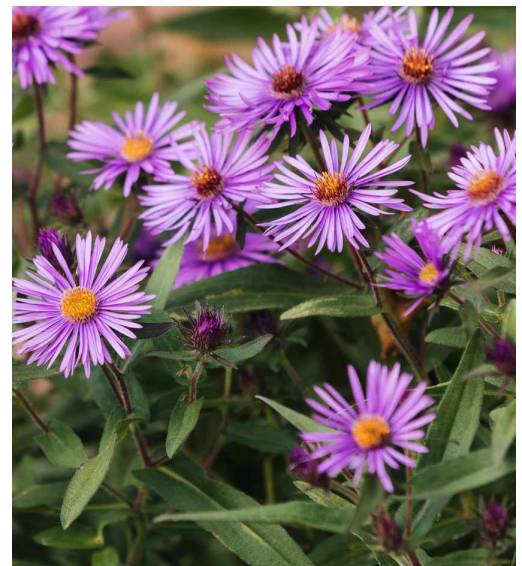


Common milkweed pictured with specialist relationship species monarch butterfly

Lined Ruby Tiger Moth that has a specialist relationship with common milkweed



New England aster (*Symphyotrichum novae-angliae*) has specialist relationships with the following pollinator species: pollen specialist bees *Andrena aliciae*, *Phaneta essexana*, *Melissodes boltoniae*, *Colletes americanus*, *Dianthidium simile* and many more!



New England Aster, Source (The Spruce / Letícia Almeida, 2022)

Female *Andrena* species



White Panicked Aster (*Symphotrichum lanceolatum*) has specialist relationships with the following pollinator species: pollen specialist bees *Andrena aliciae*, *A. asteris*, *A. asteroides*, *aestivalis*, *P. andrenoides*, *P. compositarum*, *Melissodes boltoniae*, *M. dentiventris*, *M. druriellus*, *M. illatus*, *M. niveus*, *M. subillatus*, *M. trinodis*, *Colletes americanus*, *C. compactus*, *Eucosma robinsonana*, *confused eusarca*, *lost sallow*, *Landryia impositella*, *green leuconycta*, *dark-spotted palthis*, *Phaneta essexan*, and more!



Melissodes dentiventris, Long horned bee, pollen-specialist to the White Panicked Aster, Giff Beaton, 2015

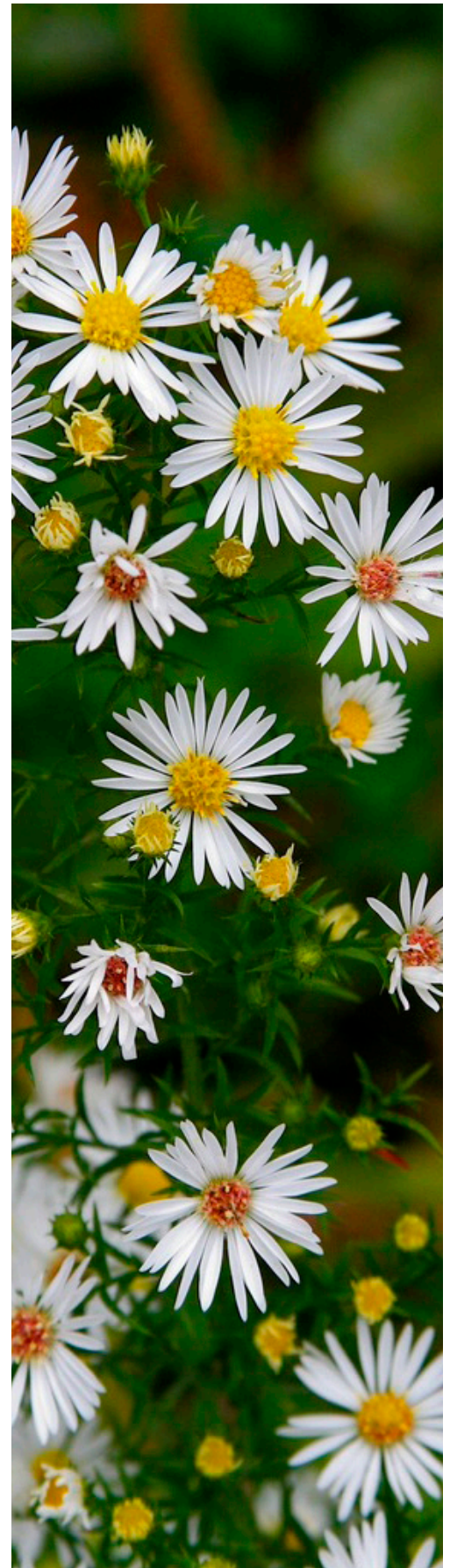
The following are a collection of resources specific to Ontario to assist local gardeners in the planning and caring for a natural garden:

[A Garden for the Rusty-Patched Bumblebee: Creating Habitat for Native Pollinators](#)

This fully-illustrated guide written by Lorraine Johnson highlights more than 300 plant species native to Ontario, along with sample garden designs, and numerous tips for success, *A Garden for the Rusty-Patched Bumblebee* helps gardeners discover the crucial connections between native plants and native pollinators to support their local ecosystems.

[Pollinator Partnership: Canada Planting Guides](#)

The ecoregional planting guides are tailored to specific areas of Canada. These guides contain lists of plant names that will attract pollinators and help you build beautiful pollinator habitat in your own garden.



White Panicked Aster, Plant Study Guide for BBSP iNaturalist

[Planting For Pollinators](#)

Provided by the Toronto Zoo, this resource explores native plants best suited to support pollinator habitat. Information is offered on the bloom period, sunlight and moisture level requirements of these species as well as height and colour of plant to help determine what may be best for you, your garden and your local ecosystem.

[Ontario Invasive Plant Council](#)

Just as important as knowing what to plant is what not to plant. The Ontario Invasive Plant Council has helpful resources for new gardeners on how to identify invasive species and what to do when you come across them.

[Carolinian Canada – Gardening Guide](#)

Carolinian Canada is a network of leaders growing healthy landscapes for a green future in the Carolinian Zone in the spirit and practice of reconciliation.

[In the Zone – Your Garden Can Help Native Species Thrive](#)

In the Zone provides the tools needed for anyone to gradually transform outdoor spaces into healthy habitat for native wildlife.



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