

# **Bylaws for Biodiversity:**

## **Barriers and Opportunities for Naturalized Gardens on Private Property**

*(A Review of Municipal Policies,  
Codes and Enforcement Practices in Canada)*

**Ecological Design Lab at Toronto Metropolitan University**

**Published: July 19, 2024**

## Attributions:

**Published:** July 19, 2024

### Ecological Design Lab at Toronto Metropolitan University

**Author Citation:** Lister, NM., Careri, S., Johnson, L., Samuels, B., with Asif, S., Caetano-Macdonell, C., Chiefari, C., Nash, R., and F. O’Toole, (2024). *Bylaws for Biodiversity: Barriers and Opportunities for Naturalized Gardens on Private Property (A Review of Municipal Policies, Codes and Enforcement Practices in Canada)*. Planning & Policy Report in the Bylaws for Biodiversity Series, Ecological Design Lab at Toronto Metropolitan University, July 19. <https://doi.org/10.5281/zenodo.12822505>

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**Acknowledgments:** This report is the third in the Bylaws for Biodiversity series, supported by the Ecological Design Lab at Toronto Metropolitan University (TMU). The work grew out of the Advanced Graduate Planning Studio (PL8110, Winter 2024) at TMU’s School of Urban & Regional Planning working in partnership with the David Suzuki Foundation (via Colleen Cirillo and Jode Roberts), supervised by Prof. Nina-Marie Lister. The draft report benefited from expert peer review and editorial assistance from Colleen Crillo of the David Suzuki Foundation, Lorraine Johnson, and Brendon Samuels. Special thanks to Douglas Counter, Kayla Bryne, David Donnelly, Ethan Ling, Albert Paschkowiak, the David Suzuki Foundation’s Butterfly Rangers, and many municipal staff members who contributed expertise and answered fact-checking inquiries.

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## Summary:

*This report has evolved from a project undertaken by graduate planning students in the [School of Urban and Regional Planning](#) at the [Toronto Metropolitan University \(TMU\)](#), as part of the Advanced Graduate Planning Studio course (PL8110) and was supervised by Professor [Nina-Marie Lister](#), MCIP, RPP, Hon. ASLA in the winter term 2024. The report is part of the [Bylaws for Biodiversity](#) series which is supported and undertaken by the [Ecological Design Lab](#) at TMU.*

In the midst of a [global biodiversity crisis](#), all levels of government in Canada have made [commitments to the protection of nature](#). Habitat loss is one of the primary causes of biodiversity decline, and thus, strategies to protect nature must focus on the protection, recovery, and restoration of habitat. Increasingly, municipalities in Canada are implementing policy reforms to advance biodiversity strategies on public and private lands, such as through updating zoning bylaws and municipal codes aimed at facilitating “naturalization” or recovery and restoration of habitat. However, despite these strategies and reforms, there remain contradictions between biodiversity goals and existing municipal policies, most noticeably in property maintenance bylaws, resulting in enforcement actions taken against naturalized gardens on private properties.

Landscaping techniques that support biodiversity on private property have grown in popularity over the last two decades. For example, these practices include naturalized lawns, pollinator patches, habitat gardens, rain gardens, rewilded meadows and xeriscaping<sup>1</sup>. Such approaches, generally referred to as ‘naturalized gardens’ or ‘habitat gardens,’ have been identified as protected by the right to expression of a personal belief system under the Canadian Charter of Rights and Freedoms. However, many existing municipal bylaws are outdated in this context and pose barriers to the cultivation of naturalized gardens on private property. Municipal bylaws using vague terms such as “grass” and “weeds” without definitions as particulars can make prohibitions difficult for law enforcement officers to enforce and for the public to understand. If such bylaws are misapplied, or incorrectly enforced, not only does it diminish the cultivation of biodiversity, but it also introduces risk of the municipality infringing upon the right of individual residents’ right to cultivate a naturalized garden and express their personal beliefs and relationships to nature through their garden practices.

**This project examines the current public policy landscape in Canada with respect to biodiversity strategies and regulation of gardens and landscaping on private property through municipal codes and bylaws.** A main objective of this project is to identify areas for improvement and to inform the development of a solutions-oriented toolkit to aid in the design of evidence-based and reproducible bylaw enforcement mechanisms.

<sup>1</sup> Examples of environmental conservation and education initiatives for naturalized gardens: [Project Swallowtail](#), [DSF Butterfly Ranger Program](#), [Carolinian Canada](#), and [NCC Native Gardening 101](#)

To achieve this objective, this study was informed by a review of relevant biodiversity and climate literatures, and a comparison of selected municipal policies aimed at supporting biodiversity on public lands with zoning bylaws related to garden, yard and lot maintenance on private properties. This included a review of relevant municipal case law, existing policies and bylaws, and recent policy reforms that have altered the substance and enforcement of municipal bylaws, as well as periodic fact-checking conversations with identified subject matter experts.

The findings presented in this report are informed by data that were previously collected by the David Suzuki Foundation (DSF) in 2023. The DSF survey invited gardeners to self-report and share any experiences with property standards bylaws applicable in their municipality. The data were analyzed to identify where inconsistencies exist between municipal bylaw enforcement practices and local bylaws. The data are summarized in this report, across seven selected municipalities spanning four Canadian provinces: the City of Toronto (“Toronto”), City of Hamilton (“Hamilton”), City of London (“London”), Prince Edward County (“PEC”), Town of Fredericton (“Fredericton”), Town of Lunenburg (“Lunenburg”), and City of Saskatoon (“Saskatoon”).

The review found that Toronto, Hamilton, and London are implementing strategies intended to protect biodiversity and combat climate change. In the City of Toronto, these strategies include, but are not limited to, (among others) [Toronto Biodiversity Strategy \(2019\)](#), the [Toronto Ravine Strategy \(2017\)](#), as well as the [Toronto Strategic Forest Management Plan \(2013\)](#). The City of Hamilton and the City of London, have similar strategies either adopted or in the process there of. This includes [Hamilton’s Biodiversity Action Plan \(2024\)](#), and [Hamilton’s Climate Action Strategy \(2022\)](#), as well as [London’s Urban Forest Strategy \(2014\)](#) and the Environmental Policies of the [City of London Official Plan \(2022\)](#). To help achieve these environmental frameworks, in a similar manner, the City of Toronto has also implemented [Green Development Standards](#) (initially developed in 2007, updated to version 4 in 2022) prioritizing the use of sustainable methods of construction. Following Toronto’s lead, both the cities of London and Hamilton are currently in the process of drafting their own Green Development Standards. These environmentally-friendly policies have provided precedents for bylaw reform, as well the development of similar policies across other municipalities in Ontario and throughout Canada.

Next, the policy scan revealed that municipalities across Canada continue to enforce bylaws applicable to landscaping on private property that vary widely across jurisdictions and often pose conflicts with other municipal policies and strategies. A growing number of municipalities are modernizing their bylaws with language that is more specific, reproducible in enforcement, and generally permissive of naturalization. The research team analyzed and compared the contents of [Toronto’s Turfgrass and Prohibited Plants Bylaw](#), [Hamilton’s Bylaw No. 10-118](#), and [London’s Yard and Lot Maintenance Bylaw PW-15](#), all of which set standards for property maintenance, including vegetation height restrictions and prohibitions on certain plant species, with monetary penalties for non-compliance.

Finally, the project team conducted a review of the mechanisms used by municipalities to enforce applicable bylaws. This review identified recurring themes of officer discretion, anonymity of complaints, and the burden of proof and appeals processes downloaded to recipients of compliance orders. In general, the judgment of the attending bylaw officer plays a significant role in enforcement outcomes. The process for appealing bylaw orders varies widely between municipalities, with some offering options for appeal upon initial notice, and others following up with a second notice. Ultimately, this patchwork of inconsistent enforcement mechanisms introduces uncertainty in the interpretation and application of bylaws that may open municipalities to legal challenges while impeding progress to support biodiversity.

To address these challenges, this study also focused on the development of a companion document: a research-informed enforcement procedure education toolkit - [Bylaws for Biodiversity: Collaborative Toolkit for Municipalities](#). The toolkit has been strategically tailored to meet the needs of municipal planning and enforcement staff in terms of policy development and implementation respectively, aiming to assist staff and enforcement officials with validating complaints and enable them to take appropriate bylaw-aligned legal action while still respecting an individual’s rights to freedom of expression in their private gardens. The toolkit also aims to support improved public understanding of the bylaw enforcement process, and provides information necessary for individuals to defend a naturalized garden from regulatory overreach and to engage their municipality in bylaw enforcement reform as necessary. As a companion document, the toolkit can be found online at the [Ecological Design Lab](#).



## 1.0 Introduction

### 1.1 Background & Context

There is [increasing international momentum](#) to address challenges associated with habitat loss, climate change, and sustainable development in urban environments. The biodiversity crisis has become a pressing global issue with around [1 million plant and animal species](#) now threatened with extinction. This crisis [transcends the jurisdiction of any single government](#) and necessitates coordinated action across federal, provincial and municipal boundaries. Biodiversity is critical for mitigating and adapting to climate change, as biodiversity enhances the resilience of ecosystems and sustains ecological functions that human civilization depends on for survival. In fact, the United Nations recognizes that biodiversity is our best natural defense against climate change, and a critical provider of “[nature-based solutions](#).” Moreover, [biodiversity also improves quality of life](#) by providing landscapes that benefit human health and promote mental and physical well-being in myriad ways<sup>1</sup>. Cities with extensive green spaces and canopy cover, experience several [environmental benefits](#), including mitigation of air pollution and the urban heat island effect, in addition to improved stormwater infiltration, all of which reduce risks associated with flooding and other extreme weather events.

All levels of governments – international, national and [sub-regional](#) – have made commitments to the protection, recovery and restoration of biodiversity. In 2022, at the Kunming-Montreal COP15 meeting, the new [Global Biodiversity Framework \(GBF\)](#) was signed by almost every nation on earth (except the US and Vatican City), and commits to [protect 30% of earth's lands and waters by 2030](#) (the GBF is also referred to as the 30x30 agreement). Canada is aligned in this commitment having adopted the [2030 Nature Strategy and Nature Accountability Bill](#), and to achieve it will require active engagement by provinces and municipalities, and must also include strategies to achieve biodiversity conservation, protection and support on private lands as well.

Over the last decades, there has been a growing movement in support of backyard and garden biodiversity. Many excellent resources have been developed to demonstrate how to design and implement a habitat garden. Some of these resources encourage gardeners to communicate and signal intent to their neighbors, which may help to mitigate the risk of disputes while raising public awareness of urban habitats.

<sup>1</sup> Brown, J.D. & Fink, H. S. (2022). Planning for Biophilic Cities. PAS Report 602. American Planning Association.



Still, there are tensions around naturalized gardens. Societal norms need to shift not just to support biodiversity, but to respect the constitutionality of others' rights garden according to their beliefs, so long as public and ecological health and safety are not compromised. For instance, public health and safety, as well as ecosystem health, can potentially be harmed by the presence of certain invasive plant species as specified by the [Ontario Weed Control Act \(1990\)](#). Just as gardeners have created signage to educate neighbors and passersby about the intention behind their landscaping, municipalities' changes to their approaches to naturalized gardens through their bylaws and enforcement practices offers opportunities for learning, engagement and advocacy for biodiversity, habitat recovery and urban nature.

Against the backdrop of a [mounting global response to the biodiversity crisis](#), ongoing conflicts are being navigated locally across Canada in response to tensions between existing municipal bylaws regulating landscaping on private property, and the freedom of residents to maintain naturalized gardens that differ from traditional manicured lawn – aesthetics that are implicitly normalized by local regulations. Since the 1990s, disputes over the scope and application of bylaws have highlighted various legal contradictions and outcomes that impact residents' ability to cultivate biodiversity through naturalized gardens. Controversy over enforcement actions taken against habitat gardens has undermined and negated related environmental objectives that are endorsed by municipalities in support of biodiversity and habitat creation on private as well as public land.

The [Canadian Charter of Right and Freedoms, Section 2](#) establishes the following fundamental freedoms: (a) freedom of conscience and religion; (b) freedom of thought, belief, opinion and expression, including freedom of the press and other media of communication. The courts have affirmed that this freedom guaranteed under section 2b of the Charter encompasses the right to cultivate, tend and maintain habitat gardens as a legitimate form of expression. This interpretation was demonstrated by rulings of the Ontario Superior Court of Justice in the cases of [Caledon vs Mik \(1995\)](#) and [Bell vs. Toronto \(City\) \(1996\)](#) which established constitutional protection for the cultivation of naturalized lawns and gardens<sup>2</sup>.

<sup>2</sup> For more detail on these legal interpretations and their context, see:

Damstra, J.R.W. and French, B. 2022. The Courts, the Constitution, and Naturalized Lawns, Jul 19 via Leners, LLP available online at <https://www.leners.ca/lenrx/the-courts-the-constitution-and-naturalized-lawns/>

Damstra, J.R.W. and French, B. 2022 Making Sense of Municipal Regulation of Naturalized Lawns, Jul 14 via Leners LLP, available online at <https://www.leners.ca/lenrx/making-sense-of-municipal-regulation-of-naturalized-lawns/>

In 1996, Sandy Bell challenged the City's Grass and Weeds bylaw, when she was ordered to cut the grass and (undefined) "weeds" in her natural garden which were deemed "excessive", as the bylaw restricted plants to be 20 centimeters or 8 inches in height or lower. Ms. Bell argued that she had cultivated a "wild" garden to express her environmental beliefs, to foster a healthy ecological environment and to foster a nurturing outdoor environment for her child.

The Court found the bylaw infringed on Ms. Bell's Charter-protected freedom of expression under section 2(b), and further, found that the term "excessive" in the bylaw description of prohibited growth was too broad and had the effect of banning "wild" gardens. In 2002, Douglas Counter ([Counter vs City of Toronto](#)) [challenged the City over his habitat garden](#) which extended into the public boulevard. Counter appealed to the Ontario Superior Court of Justice, which in its ruling, acknowledged his right to the freedom of expression of his environmental beliefs though his garden, but argued they were limited; the Court recognized that the City had a responsibility to the public interest and to enforce public safety measures and so ordered Counter to trim the shrubs that obstructed traffic views.

These cases underscore the importance of legal precedents in shaping municipal law pertaining to naturalized gardens. Legally, municipalities must adhere to court rulings in their development, implementation and enforcement of bylaws that apply to landscaping and naturalized gardens on private property. However, this legal context remains widely misunderstood, overlooked, and in certain cases, actively disregarded by municipalities that continue to enforce bylaws through procedures that demonstrably infringe upon the right to freedom of expression. Recourse for some gardeners will be to challenge bylaws in provincial court, as [recent cases](#) demonstrate.

## 1.2 Purpose: Supporting Biodiversity in Private Naturalized Gardens

*A garden is a planned space, usually outdoors, set aside for the cultivation, display, and enjoyment of plants and other forms of nature. The single feature identifying even the wildest [wild garden](#) is control. The garden can incorporate both natural and artificial materials.*

The practice of landscaping that supports biodiversity on private property has been increasing over the last two decades, with a rise in landscaping strategies that include, but are not limited to: naturalized lawns, pollinator patches, habitat gardens, rain gardens, rewilded meadows and xeriscaping. Such approaches are generally referred to as “naturalized gardens” or “habitat gardens.” However, not all naturalized gardens are intended specifically to provide habitat (although they may do so for some species as a consequence of naturalization).

Some gardens may be created solely to provide pollinators with essential nectar, while others may be designed to help with water retention and filtration, or the cultivation of crops for urban food farming. Regardless of their function, these gardens are carefully planned and often have a combination of native and non-native plant species, and be planted and cultivated to deliver their [intended purpose](#) while simultaneously supporting biodiversity recovery. Of greater significance in this report is the application of the term “garden.” In short, a garden is thoughtfully cultivated, stewarded, and maintained. Not all rewilded or naturalized spaces constitute a garden if they are not maintained. By definition and implication, [“the single feature identifying even the wildest wild garden, is control.”](#) **Thus, a garden entails a duty to landscape care, stewardship responsibility, and is planned or designed and maintained with intention.**

For these reasons and in this context, this report uses the term ‘**naturalized garden**,’ which encompasses a variety of garden types, including habitat gardens. Naturalized garden was preferred due to its frequent occurrence in policy reviews across jurisdictions and in professional-practice conversations with subject matter experts. As the most often-cited term, it has created a common language and (to some extent) a shared understanding across disciplines and jurisdictions regarding all garden types. However, given the recent groundswell<sup>1</sup> of rewilding efforts post-pandemic and, perhaps in response to climate and biodiversity crises, it is noteworthy that the use of the term ‘habitat garden’ is now [rising in popularity](#) and may eventually become the accepted term, as it emphasizes the role of landscape in supporting biodiversity (flora and fauna) through the creation of ecologically beneficial environments.

<sup>1</sup> See Selected Media References that indicate and refer to the groundswell in the natural garden movement

To harmonize existing approaches to bylaw enforcement with [Canada’s Charter of Rights and Freedoms](#) and the imperative to protect, conserve and recover biodiversity, it is necessary to extend available knowledge into communities where it can empower people on the front lines of the biodiversity crisis, including: residents who find themselves needing to defend their naturalized garden, advocates who challenge the legitimacy of existing bylaws, and municipal staff undertaking reforms and updates to bylaws and enforcement procedures.

The objectives of this project are to:

- 1) identify themes across municipal bylaw violations in various municipalities, and
- 2) outline potential improvements to bylaw enforcement procedures. (These are provided in the companion Toolkit document, intended for bylaw enforcement officers and municipal planning staff).

Overall, this project seeks to further nature conservation and environmental stewardship praxis across jurisdictions through the implementation of modernized bylaws. These local regulations of property standards and landscaping should be evidence-based, fair, and legally appropriate, to facilitate naturalized gardens in support of biodiversity on private property.

This report was developed as the parent material for the [Bylaws for Biodiversity: Collaborative Toolkit for Municipalities](#). The Toolkit, developed by the graduate planning students at TMU, is to be read in tandem with this report, and is intended to be used by municipal planning staff and enforcement officials to inform approaches to validating complaints pertaining to natural gardens on private property. Together, these documents enable municipalities to identify and implement strategies to support biodiversity, while also ensuring their process is legally sound, reproducible, and respectful of individuals’ constitutional rights to express their environmental beliefs in their private gardens.

Bylaws that support biodiversity encourage municipal-wide stewardship to conserve, protect and promote natural and designed habitats across private and public landscapes, through the reform of outdated ‘weed and grass’ bylaws.

This project investigates intersections between the interpretation and enforcement of bylaws regulating landscape practices for naturalized gardens on private property. In the context of the Charter-protected freedom to cultivate naturalized gardens as a form of expression of environmental values, this project advances opportunities for private gardens to support biodiversity and better align with municipal public policy initiatives that advance and support biodiversity protection and recovery strategies on public lands.

The outcomes of this research underscore the need for a more consistent approach across governance to the development of bylaws regulating landscape practices on private property, as well as mechanisms to support enforcement of such bylaws. To aid municipalities in this process, the companion document to this report - the research-informed Enforcement Procedure Education Toolkit - provides resources to help align efforts aimed at modernizing bylaws with emergent best practices informed by case law, evidence-based procedures, and the material and information needs of resilient, more biodiverse communities.

Through a combined research approach using a literature review, an analysis of the DSF survey data, an examination of relevant case law, a policy scan, a bylaw review, and fact-checking conversations with SMEs, this research identifies key challenges, and common discrepancies in the enforcement process, as well as potential areas for improvement across select municipalities.

## 2.0 Research Methods

A [mixed-methods qualitative approach](#) to research was used for this project. The research took place in two phases: pre and post to an interim presentation to the research review committee. In the first phase, the research team conducted a [thorough review of literature and case summaries](#), analyzed the 2023 DSF survey data, and spoke with six SMEs in the context of professional [best-practices](#) to gather information and insights about enforcement procedure and the impacts in various municipalities.

In the post-interim phase, the team synthesized the findings from the pre-interim phase and developed the Enforcement Procedure Education Toolkit. The toolkit was designed to assist enforcement officials in validating the complaints and redirecting conversations on applicable regulations. Ultimately, the findings of this study were informed by a comprehensive [literature review](#), preliminary case [law review](#), survey data analysis, initial municipal property standards bylaw review, SME discussions, and a jurisdictional scan to understand the current enforcement regulations of biodiversity bylaws, as well as the enforcement issues within the context of Canadian municipalities.

## 2.1 Survey Data Analysis

A "Grass and Weeds Bylaw Survey" was conducted by the [David Suzuki Foundation](#) in 2023 (see Appendix B) and data were shared with the research team to undertake secondary descriptive analysis. The DSF survey collected information on the experiences of Canadian gardeners pertaining to grass and weeds bylaws in their municipality. This analysis identified key indicators around bylaw complaints and enforcement. In the data review, a simple descriptive statistical analysis was conducted to visualize the (relatively small) dataset and identify patterns (see Appendix B). The research team used a keyword search in the initial scan, and analyzed the data using a generative word cloud qualitative analysis tool.

The survey participants shared information related to bylaw incidents, naturalized and habitat gardens, and their experiences with bylaw enforcement. The data were visualized to present key indicators about location, frequency and causes of bylaw violations. This analysis includes a [frequency distribution](#) of results of bylaw violations against gardeners, which demonstrates a disconnect in the reporting and notice process for municipalities - one that repeatedly prioritizes community complaints (see Appendix B).

Additionally, these charts present the patterns in bylaw enforcement's actions, and the reasons for the defendant's success in fighting the violation cases (see Appendix B. Finally, the small data pool of responses from 45 towns or cities was also visualized to show the trends and frequency of locations. The location data contributed to the student's municipality selection for the jurisdictional scan (see section 2.3.1).

These data indicate that residents' environmental values and beliefs continue to be violated due to enforcement challenges and vague bylaws. The data also suggest that a gap exists in the bylaw enforcement process. This gap was subsequently validated in the literature review, and reflects a lack of municipal understanding of naturalized gardens. This creates barriers for residents who aim to support biodiversity through the cultivation of naturalized gardens on their private property.

## 2.2 Subject Matter Expert Conversations

This study benefited from informed conversations and fact-checking with identified subject matter experts, all of whom are prominent public advocates and professionals engaged in naturalized garden initiatives and related bylaw reform. These fact-checking conversations helped to ensure that the research was accurate and the direction aligned bylaw updates and enforcement. Subject matter experts are listed in Appendix C.

## 2.3 Jurisdictional Scan (Policy and Bylaw Scan and Enforcement Process Review)

### 2.3.1 Municipal Selection

Selection of the municipalities for the jurisdictional scan began by identifying locations that appeared in the initial analysis of the DSF survey data as part of a [data triangulation](#) exercise. Triangulation refers to the use of a mixed-methods research approach using various data sources. In qualitative research of the type used here, different sources can be used and [evaluated for convergence](#) and validity to develop a comprehensive understanding.

The selection of municipalities was based on the location data from the literature review, the survey data, case law, and the SME recommendations.

The following seven municipalities were selected for analysis: In Ontario, the City of Toronto, the City of London, the City of Hamilton, and Prince Edward County, as well as the City of Fredericton (NB), the City of Saskatoon (SK), and Town of Lunenburg (NS). By selecting municipalities from the provinces of Saskatchewan, New Brunswick, and Nova Scotia, the breadth of the analysis was expanded beyond Ontario, and made inclusive of different provincial legislations. The studio team also strategically included municipalities from both peri-urban and urban contexts, investigating differences in bylaw and policy implementation across population size and eco-regions.

After selection, these seven municipalities were reviewed in a jurisdictional scan of municipal policy, bylaw, and municipal enforcement procedures. The [jurisdictional scan](#) summarizes topics of biodiversity on public and private property in the selected municipalities to compare standards and practices based on the record of actions taken in municipalities, and to identify the challenges associated with bylaw implementation and enforcement procedures. Challenges identified include: bylaw enforcement officer training and education; complaint data collection and dissemination throughout municipal departments; and support provided to bylaw amendment and enforcement by city councilors. Factors affecting the prevalence of challenges include whether the municipality is urban or rural, population density, and department size.

## 2.3.2 Policy and Bylaw Review

A [policy review](#) was undertaken across the seven selected municipalities and identified key themes in public policy initiatives for biodiversity across Canada. This provided a greater understanding of the dichotomy that exists between the support from municipalities for biodiversity and naturalization on **public versus private property**. During the subsequent bylaw review, key metrics were pulled from yard maintenance or property standards bylaws, which were selected depending on which of these bylaws regulated grass and / or naturalized yards in each municipality.

The key metrics reviewed for all municipalities included:

- Year the bylaw was enacted
- Whether the bylaw supports or makes mention of naturalized yards
- Height restrictions on turf grass and plant species
- Whether there are prohibited plants listed or mentioned in the bylaws
- Financial penalty for violations

The findings of this review are discussed further in section 3.0.

## 2.3.3 Bylaw Enforcement Review

The bylaw enforcement review was used to fact-check and to investigate bylaw procedures. The analysis of the survey data and conversations with SMEs concluded that the intake process for a complaint is a key step in the bylaw process, and it is important to understand how bylaw enforcement is enacted. This is important given that discrepancies and contradictions can develop between the municipalities' public policies that promote biodiversity contrasted with regulation and policing of naturalized gardens – usually though attempts to regulate appearance and aesthetics of gardens on private property.

The first step in the review was to contact each municipality to request a summary of their enforcement process. This was done to understand how property standards are regulated through enforcement procedures.

In all cases, this information was not available publicly online, which indicates a lack of transparency and likely contributes to confusion reported by residents (both in the DSF data, by SMEs, and in various media reports of natural garden challenges<sup>1</sup>).

One notable finding was that, in accordance with the Municipal Act, the province of Ontario is granted powers of entry to the property or garden, for purposes of inspection, to determine if the property is in compliance with the bylaw, and also includes the powers to search for and seize evidence with a warrant (2001). Importantly, the burden of proof rests on those accused of contravening the bylaw, which differs from the presumption of innocence defined by section 11(d) of Canada's Charter of Rights and Freedoms.

There were also often reports of [problematic double standards of anonymity](#) between the complainant and the subject of the complaint, where the complainant is rarely asked to disclose their identity (there are also privacy policies within municipalities that prevent disclosure of complainants' identity), while the respondent is almost always subjected to [far more public scrutiny](#).

Next, the municipal clerk's offices were contacted by telephone using the public information number. These calls were made to understand and gain clarity about the procedures for receiving complaints (the intake process), and to document the responses of the municipal staff as public information<sup>2</sup>. To represent the findings, the process of enforcement was documented through process map charts (see Figures 1-7). These were used to study procedural similarities and differences between municipalities, and to identify gaps in knowledge about the complaint and enforcement processes. [Process mapping](#) is used to provide a greater clarity about complex systems and supports identification of improvement interventions at the specific process point.

<sup>1</sup> See Selected Media References

<sup>2</sup> Municipal clerks and staff answer such calls from the public as a normal course of their work, so it is important to note that these were not research interviews, but rather fact-checking inquiries into public process

# Enforcement Processes:

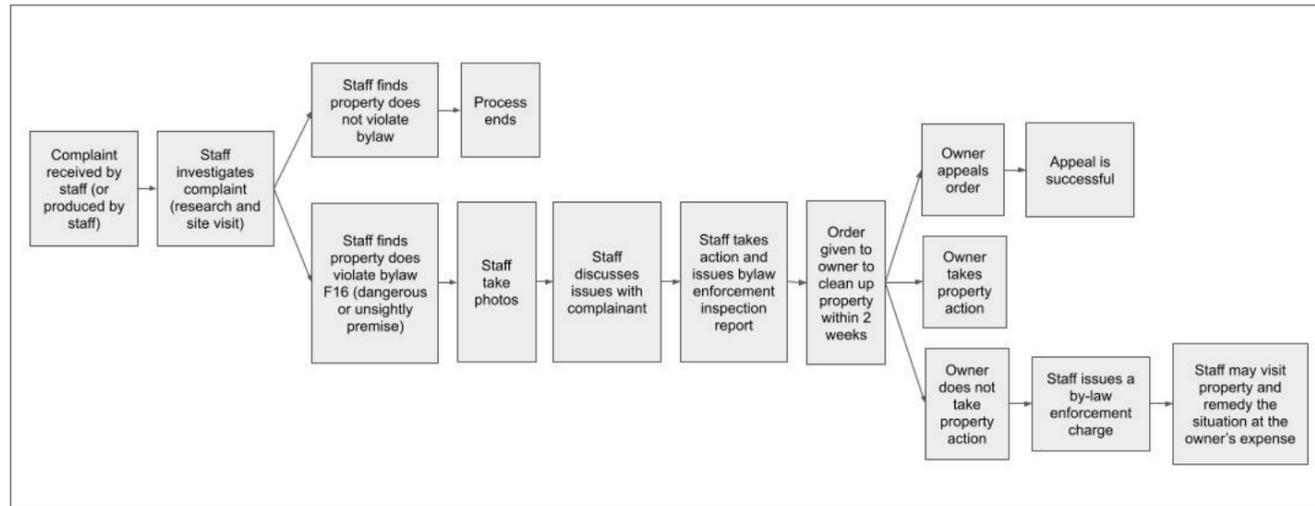


Figure 1: Fredricton Enforcement Process Flowchart

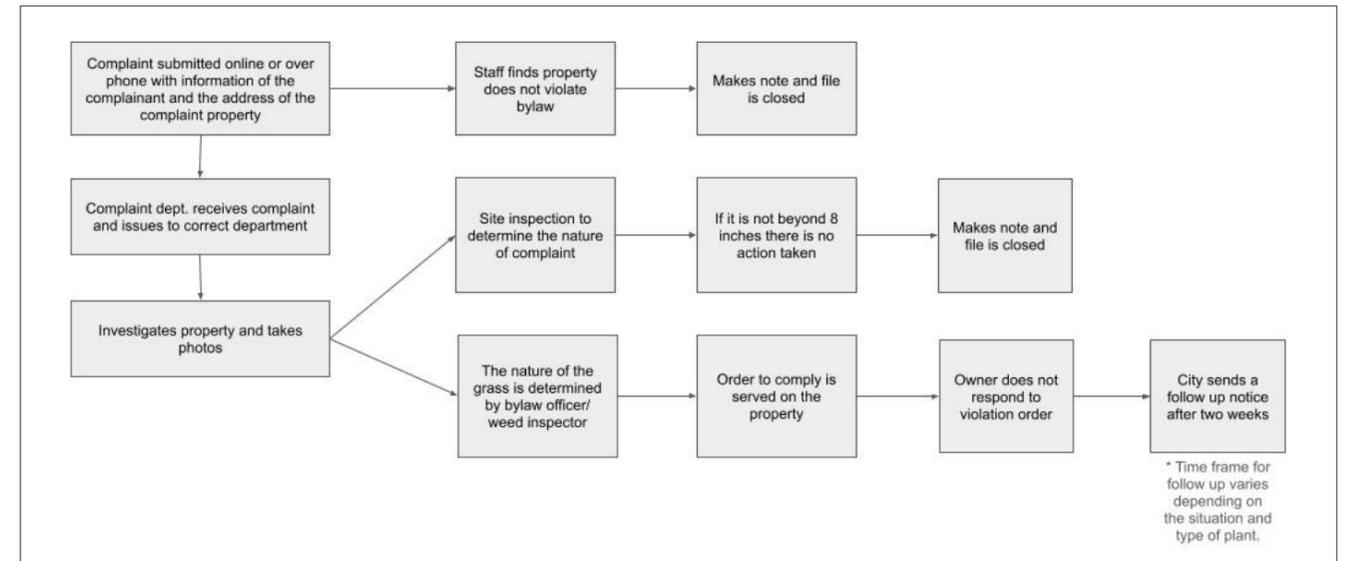


Figure 3: City of Hamilton Enforcement Process Flowchart

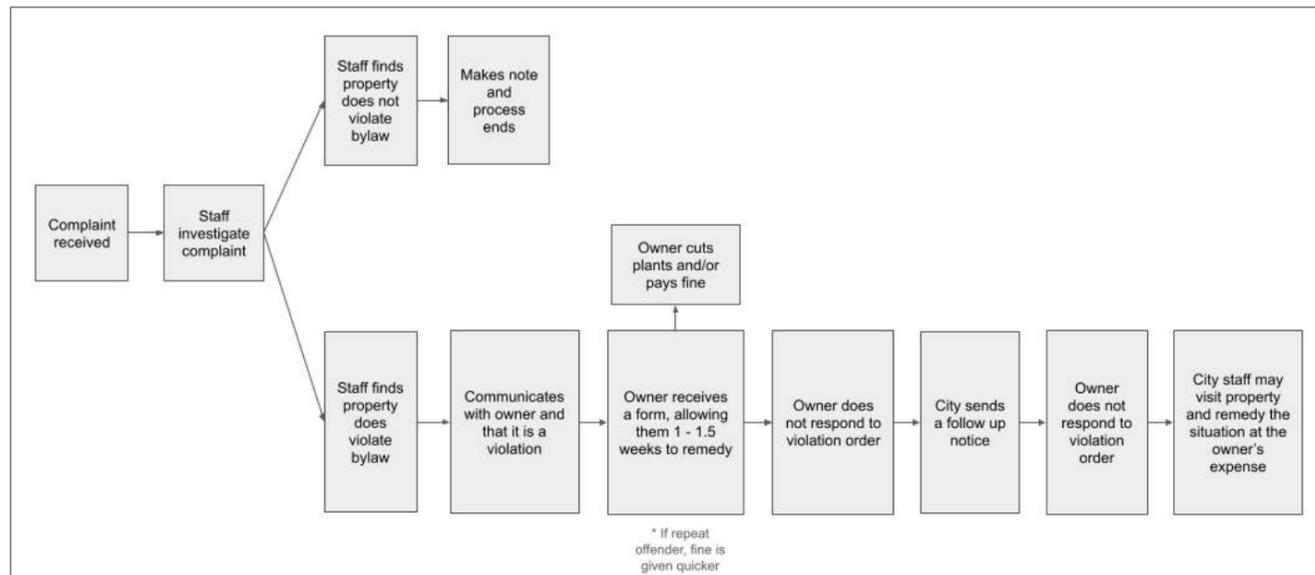


Figure 2: City of London Enforcement Process Flowchart

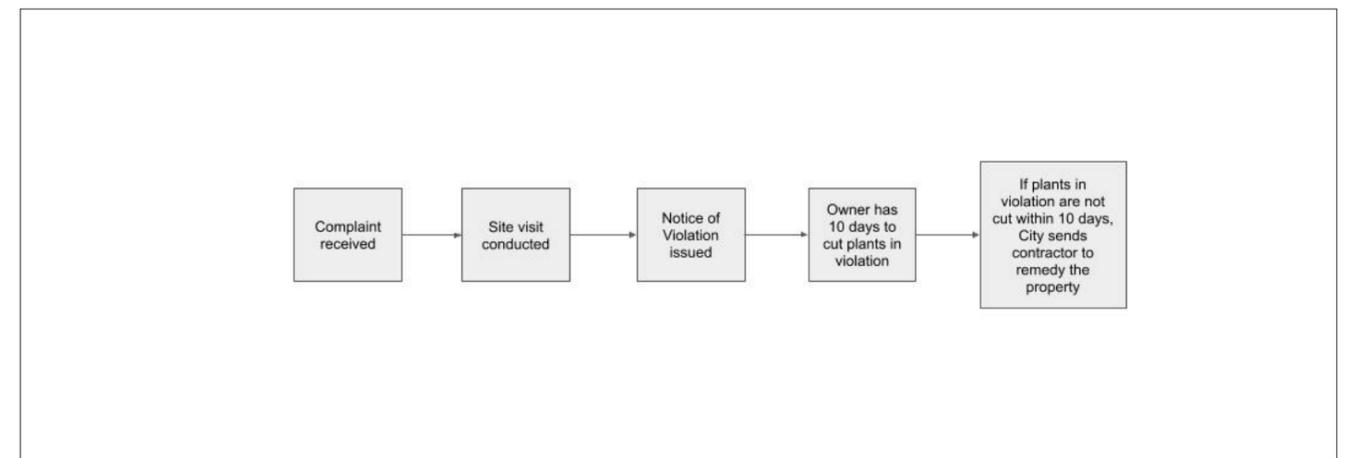


Figure 4: Prince Edward County Enforcement Process Flowchart

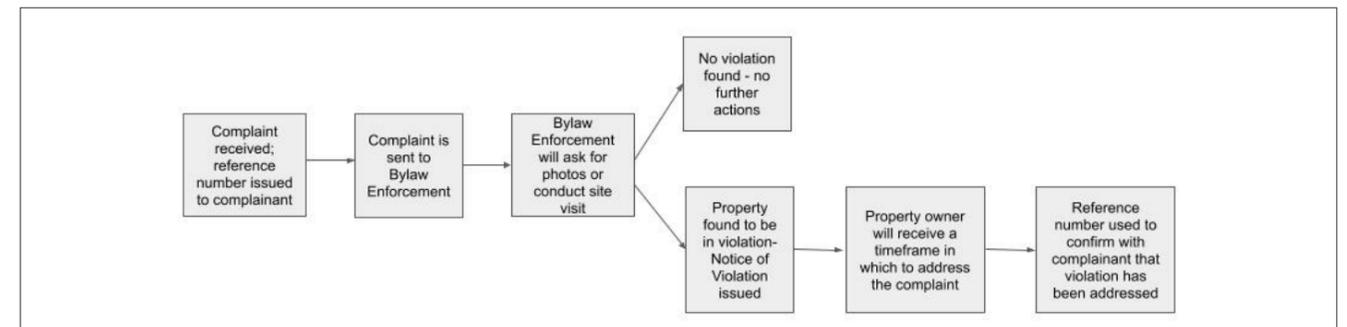


Figure 5: City of Toronto Enforcement Process Flowchart

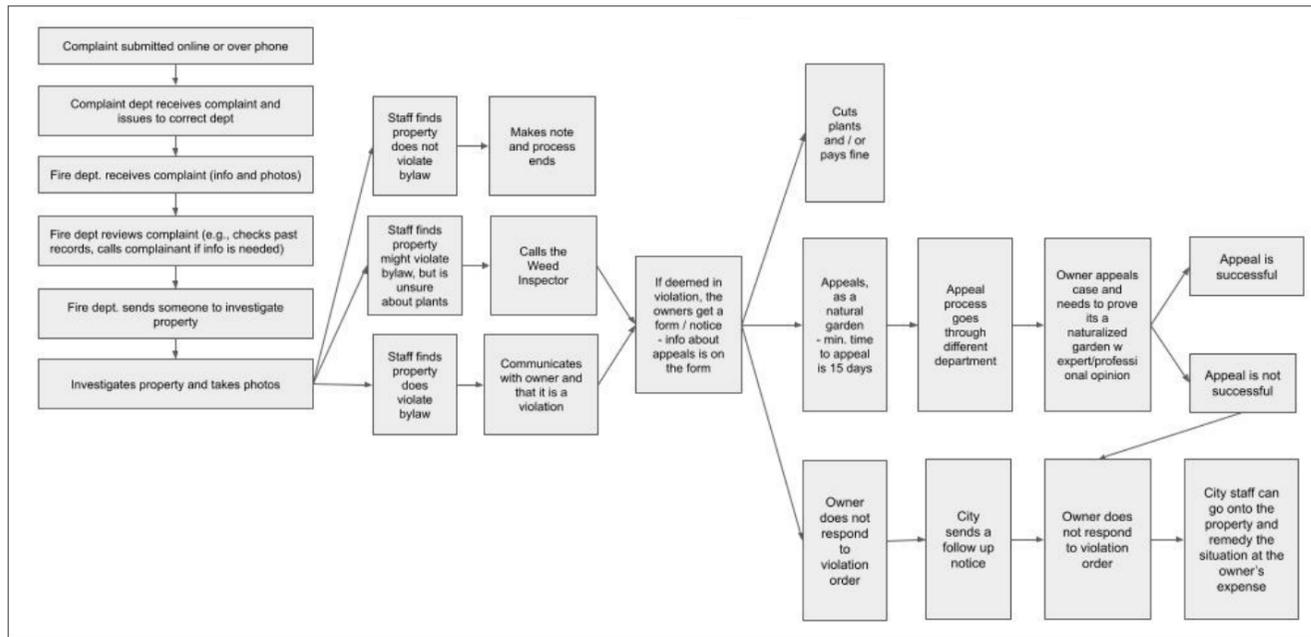


Figure 6: City of Saskatoon Enforcement Process Flowchart

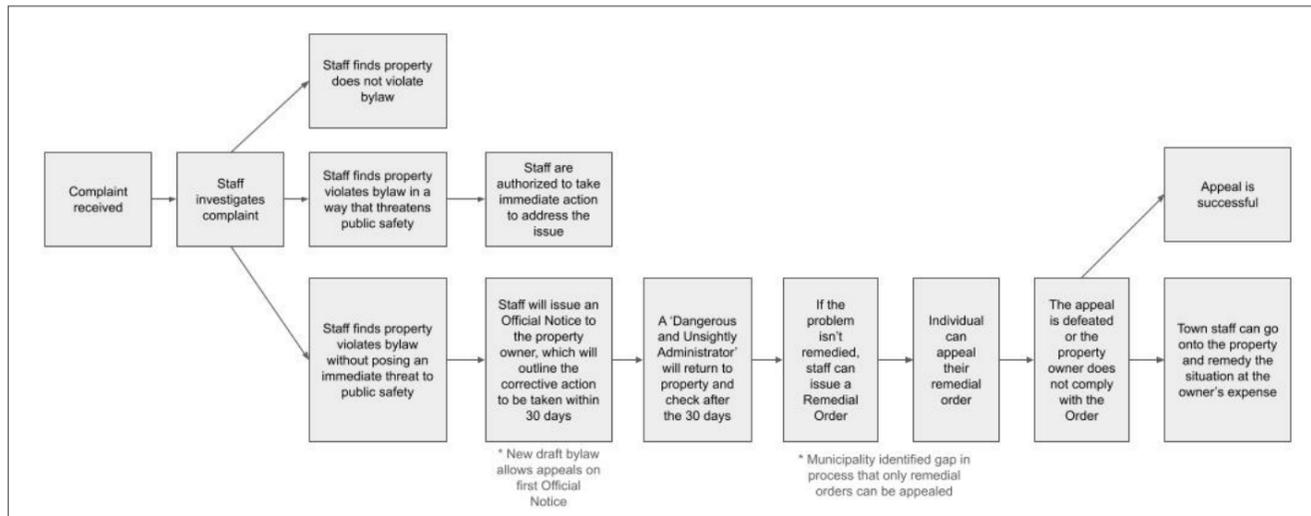


Figure 7: Town of Lunenburg Enforcement Process Flowchart



## 3.0 Analysis & Findings

This section discusses the similarities and differences that exist between public policy initiatives that support biodiversity on public lands, and bylaws that regulate landscaping practices (and naturalized gardens) on private property. The policy scan identifies municipal strategies and initiatives to support biodiversity which generally apply to public lands but which have limited influence on private property. In contrast, municipal bylaws are a local regulatory tool to exercise statutory authority over the land use on private property (for example, in Ontario, under the Municipal Act and the Planning Act). This section aims to identify whether and how municipal bylaws and public policy initiatives align or contradict one another in supporting biodiversity.

### 3.1 Policy Scan

The policy scan evaluates strategies and initiatives specific to each municipality that prioritize biodiversity. Based on the information collected, the strategies and initiatives have been categorized into overarching themes that were consistent across all municipalities examined. These themes include:

- Declaration of climate emergency
- Biodiversity support and recovery
- Climate resilience
- Urban forest strategies
- Advocacy for native plant species

The table below illustrates the municipalities that have implemented a strategy or an initiative under each of those themes.

#### ***The City of Toronto***

The City of Toronto has numerous public policy initiatives that aim to enhance biodiversity and strengthen climate resilience including: the [Toronto Biodiversity Strategy \(2019\)](#); [Toronto Ravine Strategy \(2017\)](#); the [Green Streets Technical Guidelines \(2017\)](#); the [Pollinator Protection Strategy \(2018\)](#); and the [Strategic Forest Management Plan \(2013\)](#). These strategies work to support and educate the public about the benefits of biodiversity, and to provide justification for public resources deployed for biodiversity support and recovery strategies.

[Toronto Biodiversity Strategy \(2019\)](#): sets out the goals of the reporting framework to measure local and regional indicators of biodiversity health (p. 46). This document creates action plans for areas of special concern, and monitors progress made towards the goal of protecting and enhancing biodiversity within the City (p. 46).

[Toronto Ravine Strategy \(2017\)](#): identifies ravines as ecological features that connect watersheds, maintain habitat corridors, and enhance biodiversity (p. 6). To protect ravines, the City has outlined guiding principles that protect, invest, connect, partner, and celebrate these ecologically-integral water systems (p. 5). Under each guiding principle, a number of actions are recommended to support the achievement of the objectives identified (p. 18).

[Green Streets Technical Guidelines \(2017\)](#): identifies the importance of green infrastructure on roads and their impact on and benefits to climate resilience. Green infrastructure can be either natural or human-designed and provides benefits (services) which include the mitigation of urban heat island effect, stormwater runoff management and flood mitigation, enhanced air quality, and infiltration of groundwater. To further enhance the City's green infrastructure, priority is placed on the creation of new green infrastructure along with the maintenance of existing green infrastructure.

[Pollinator Protection Strategy \(2018\)](#): demonstrates the importance of biodiversity in Toronto with special attention paid to the role of bees within the food system, and more broadly, in the wider ecosystem. This document operates on three guiding principles: the prioritization of actions that protect native pollinator biodiversity, the enhancement of habitats in urban areas, and community support. Some of the initiatives being undertaken to promote pollinator protection under this strategy include: the redesign of green spaces, the enhancement of urban habitats, and the development of incentive programs to encourage investment in climate resilience and pollinator protection.

[Toronto's Strategic Forest Management Plan \(2013\)](#): identifies strategic goals to protect the City's tree canopy. To do so, the document set out the following six goals: increase in canopy cover, biodiversity, awareness, stewardship promotion, and the overall improvement of monitoring (p. viii). Particular focus is paid to the impact of development on the sustainability of urban forests with certain issues cited as challenges that require creative solutions, e.g., tree density affecting soil volume (p. xi).

#### ***The City of Hamilton***

The City of Hamilton policy scan identified two public strategies reinforcing the importance of biodiversity protection: the [Biodiversity Action Plan \(2024\)](#), the [Climate Action Strategy \(2022\)](#), and the [Draft Urban Forest Strategy \(2020\)](#).

[Draft Biodiversity Action Plan \(2024\)](#): outlines goals to incorporate best practices to protect natural areas and greenspaces through policy and land management, to explore and educate through partnerships, to establish connections between agencies through policies, and to restore biodiversity throughout Hamilton. The plan

further identifies seven key priorities to direct focus on addressing biodiversity threats: the development of an administrative framework to manage on-going and future actions, the enhancement of public awareness on the importance of biodiversity, and the clear consideration of impacts and improvements needed for local biodiversity in all municipal decisions related to development.

[Climate Action Strategy \(2022\)](#): a response after declaring a climate emergency in March, 2019, this document provides guidelines to implement best practices from across the country to better combat climate change.

[Draft Urban Forest Strategy \(2020\)](#): supports the City's urban forest objectives outlined in the Official Plan, and aims to provide guidelines on the protection and care of trees and forests across the City's urban areas, on both public and private lands.

#### **The City of Fredericton**

Fredericton is actively working to strengthen climate resilience and enhance biodiversity by supporting the creation and maintenance of urban forests and green spaces. [The City](#) has noted that "changes in temperature, unpredictable rain and snow, extreme storms, and the spread of invasive species" continue to threaten the ecological well-being of the municipality. To address this, Fredericton is prioritizing the planting of new trees, and partnering with community organizations to do so. The city is also ensuring the treatment of trees that are negatively impacted by invasive species, and discouraging lawn mowing during the month of May to strengthen the population of pollinators - known as the [No Mow May](#) initiative.

Additionally, Fredericton is focused on creating and enhancing green spaces. To achieve this, Fredericton is working to acquire floodplain conservation properties and water-side properties, to be better protected under their care. The City is also actively working to increase the natural inventory available to them, including forests, parks, and wetlands.

[Draft Urban Forest Strategy \(2020\)](#): identifies ways to invest in support for biodiversity by protecting urban forestry within stormwater management, transportation and growth planning, to name a few, and highlights invasive tree and plant species, negatively affecting local biodiversity.

#### **The City of London**

The City of London has several strategies related to biodiversity that were identified by this policy scan: the [London Plan \(2022\)](#), the [Climate Emergency Action Plan \(2022\)](#), and the [Urban Forest Strategy \(2014\)](#).

The [London Plan \(2022\)](#) contains Environmental Policies that outline protections for the Natural Heritage System. Where natural heritage areas occur on privately-owned lands, the City will encourage individual property owners to provide for their protection and conservation using a variety of techniques including stewardship agreements, easements, education programs, land trusts, municipal tax incentives and signage.

[Climate Emergency Action Plan \(2022\)](#) was developed in response to the City's climate emergency declaration. The objectives of the Action Plan are to reach net-zero community greenhouse gas emissions by 2050, and to improve resilience to climate change impacts. Several of the work plans that fall under the action plan are related to natural solutions for climate change, with vegetation and ecosystems, such as wetlands, identified as playing key roles.

[Urban Forest Strategy \(2014\)](#) (slated to be updated in 2024) provides guiding principles to expand and manage the urban forest, to protect and maintain urban forest on public and private lands, to monitor and adjust management of urban forests as needed, and to develop partnerships with communities to achieve urban forestry goals. London also follows an [Invasive Plant Management Strategy \(2020\)](#) which outlines how to manage invasive plant species and limit their impacts on the City's Natural Heritage Systems.

#### **Prince Edward County**

Prince Edward County (PEC) is currently working towards increasing climate resilience and strengthening biodiversity. In order to achieve climate goals, PEC has identified Climate Action within the 10-Year [Community Plan Report and Recommendations for Prince Edward County \(2023\)](#), has adopted educational programs to advance sustainability efforts, and is a Partner for Climate Protection.

[10-Year Community Plan Report and Recommendations for Prince Edward County \(2023\)](#): serves as the vision statement for the community. Within the Plan, responding to the climate emergency is identified as in need of being better incorporated into the City's future policies, plans, and programs. Within this document, PEC also identifies climate priorities, the first of which includes taking "strategic actions to address climate change mitigation and adaptation" (p. 11). To achieve this, PEC is aiming to reduce greenhouse gas (GHG) emissions, increase procurement to achieve sustainable purchasing, and enhance the tree canopies located within villages, towns and surrounding rural areas (p. 11).

Educational Programs: PEC is working towards supporting residents and businesses in practicing sustainability (p. 11). To do so, the County intends to invest in electric charging stations for electric vehicles and leverage educational programs to engage community members in sustainable practices (p. 11).

[Partner for Climate Protection \(PCP\)](#): PEC is part of a national network created by the Federation of Canadian Municipalities. The PCP program aims to bring municipalities together to find creative solutions to the shared issue of a changing climate. In order to work together, the PCP program provides municipalities with access to educational resources, networking events, and venues that can be used to hold climate related workshops and meeting.

#### ***The Town of Lunenburg***

The Town of Lunenburg has related biodiversity strategies included in the [Municipal Climate Change Action Plan 2030 \(2015\)](#).

[The Municipal Climate Change Action Plan \(2015\)](#): differs from the Ontario municipalities' action plans in that it primarily focuses on the unexpected rise in sea level, changes to precipitation patterns, floods, and storms, all typically associated with coastal municipalities. This action plan guides preparedness in regards to flood management and emergency planning, as well as the implementation of public education on climate change and the direct impacts on the town.

#### ***The City of Saskatoon***

The City of Saskatoon has adopted the [Climate Action Plan \(2021\)](#), however the strategies outlined do not discuss the support or the protection of plant species on public or private lands. However, the City's [Urban Forest Management Plan \(2021\)](#) does.

[Climate Action Plan \(2021\)](#): unlike the other municipalities scanned during this policy scan, this document consists of two separate strategies: the Low Emissions Community Plan and the Corporate Adaptation Strategy, where the former is specific to carbon emissions and the latter is governance oriented.

[Urban Forest Management Plan \(2021\)](#): addresses the approach of succession planning with native species to introduce native species and grasses in the understory. This program sets out recommendations to improve education around ornamental, edible, invasive native and naturalized trees.

## 3.2 Bylaw Review

#### ***The City of Toronto***

In 2019, the City of Toronto adopted the [Toronto Biodiversity Strategy](#), which included the recommendation to review its Grass and Weeds Bylaw (now referred to as the '[Turfgrass and Prohibited Plants Bylaw](#)') to create better alignment between public policy initiatives and the applicable municipal code. As a result of SME advocacy, as well as stakeholder engagement and consultation, the City of Toronto Municipal Licensing and Standards division submitted a *Report for Action* to the Planning and Housing Committee in 2021, which included the recommendation that the City remove the 'naturalized garden' exemption from the Long Grass and Weeds Bylaw (p.11). Removing naturalized gardens as an exemption was intended to allow for the cultivation of such biodiversity-supporting gardens as-of-right, thereby bringing the municipal bylaw into conformity with the City's public policies and initiatives, such as its Biodiversity Strategy. Despite this positive change, there is still work to be done to ensure that enforcement procedures are appropriate and responsive by bylaw officers educated in plant identification and naturalized landscaping approaches.

Following the update and review process in 2021, the City of Toronto's revised Turfgrass and Prohibited Plants Bylaw, came into effect on January 1, 2022. Under Chapter 489 of the Toronto Municipal Code, the bylaw sets out property standard regulations regarding turfgrass and vegetation located on private property (p. 489-2). This section applies a 20 cm height restriction to turfgrass only, and a requirement that no vegetation can impede traffic sightlines or pedestrian rights-of-way for safety purposes (p. 489-2). Other vegetation is not subject to a height restriction, unless it impedes or poses a risk to public health and safety (p. 489-2). Furthermore, the bylaw lists 10 plants as prohibited in 'Schedule A' all of which are also among the "noxious weeds" listed under the [Ontario Weed Control Act](#). The Prohibited Plants listed are not called "weeds" but are referred to by their common and latin names for specific identification, and were selected due to known human or ecological health and safety risks. This updated bylaw indicates as-of-right support for naturalized gardens.

If a property owner is found to be in violation of the bylaw, the City can levy a fine of up to \$100,000 (p. 489-3). From the date the violation is issued, if the City deems that the offense has continued to occur, a maximum penalty of up to \$10,000 per day can be levied (p. 489-4). While the City of Toronto bylaw implicitly allows naturalized gardens as-of-right, the maximum penalty of \$100,000 may pose a barrier to entry for many new gardeners.

Further, gardeners may be discouraged from naturalizing slowly, through lawn conversion, due to the severity of the penalty, potential confusion about how much mowing is required, or simply the fear of receiving a complaint and violation notice.

### ***The City of Hamilton***

The City of Hamilton enacted [Bylaw No. 10-118](#), which is described as “being a bylaw to regulate exterior property maintenance including vegetation, waste and graffiti” (p. 1). Under the bylaw, the City of Hamilton has placed a height restriction on properties that are 0.4 ha or less of 21cm (8.26 in) on turfgrass and vegetation, not including “ornamental plants; shrubs or trees; cultivated fruits or vegetables; and plants buffering or otherwise protecting a natural feature such as a watercourse” (p. 6). Properties that are 0.4 ha or greater are subject to the same height restrictions on vegetation that is located within 10m of the property line with the same applicable exemptions regarding plant species and proximity to watercourses (p. 6).

Consistent with the provincial Weed Control Act, the City of Hamilton prohibits noxious plants, and requires poison ivy to be treated with herbicide (p. 6). If a property is found to be in violation of the regulations within the bylaw, the City can issue a fine of \$10,000 for the first offense (p. 11). If a property is found to be in violation a second time, the City can issue a fine of up to \$25,000 (p. 11). If the violation is issued to a corporation, the first offense can be fined a maximum of \$50,000, and the second offense can be fined up to \$100,000 (p. 11). The exemption on particular types of plants constitutes some support for garden naturalization, the penalties that can be imposed are significant and can be financially devastating to an individual. As is the case with the City of Toronto’s bylaw, the financial penalty represents a potential barrier to the garden naturalization in Hamilton.

### ***The City of London***

In 2024 the City of London passed the updated [Yard and Lot Maintenance Bylaw PW-15](#) which “requires the owner or occupant of land to clean and clear the land” (para. 1). This replaced a previous version of the bylaw that was identified as posing barriers to garden naturalization on private land and refocused the scope of regulations on matters related to health, safety, and public nuisance.

The current bylaw differentiates between the height limit of turfgrass lawn and other vegetative growth that is not subject to limitation - except for health and safety reasons e.g. within Corner Visibility Triangles or Driveway Visibility Triangles, where the height cannot exceed 20 cm (8 in) and 0.9 m (3 ft) (Sec. 2.3). Vegetative growth refers to a “annual or perennial flower garden, food garden, rain garden, hedge, shrub, plant, vine, and groundcover, but does not include trees or lawn” (Sec. 1.1) Similar to Toronto’s bylaw, the current

bylaw removes a previous requirement for property owners to request an exemption to the bylaw to allow for naturalization.

Since updating the PW-15 bylaw, the City of London has focussed on developing new procedural components that are referenced in the bylaw, as well as educational and communications pieces related to the bylaw’s implementation, aimed at improving public awareness and efficiency of enforcement procedures. City staff are developing a list of specific prohibited plants in consultation with ecologists and Indigenous peoples, as well as an updated administrative monetary penalties framework.

To raise awareness of the updated bylaw, the City is updating its website with information about naturalization and distributing yard signs to help gardeners demonstrate intentionality in their landscaping and refer neighbours to more information online. The print material that municipal law enforcement officers use to issue bylaw orders is being updated to reflect this new information. Finally, the City created a mechanism to receive service requests related to alleged property standards violations through an online portal that prompts complainants for more specific information about the subject of their complaint, and supports the collection of data on the incidence of complaints throughout the municipality. Taken together, these initiatives hold promise for natural gardens and may better align the bylaw with supportive appropriate enforcement procedures.

### ***Prince Edward County***

Prince Edward County (PEC) has two bylaws in place to regulate natural gardens on private property. The [Grass Weeds Bylaw No. 78-2023](#) is intended to support the naturalization of private yards and clearly defines terms such as “lawn area,” “naturalized areas,” “turfgrass,” and “noxious weeds.” The plants deemed noxious under this bylaw include several that are not listed under the Ontario Weed Control Act but which are locally present and deemed detrimental to human and ecological health and safety. These prohibited plants include Glossy buckthorn, Himalayan Balsam, Japanese knotweed, and Phragmites reed grass (p. 6).

The [Property Standards Bylaw 4250-2018](#) is the second bylaw that governs naturalized gardens on private property. Recently, Section 5.7.4 was amended by Bylaw 79-2023 to replace the term “grass” with “turfgrass” to align with the Grass and Weeds Bylaw No. 78-2023. The Property Standards Bylaw 4250-2018 does not specify a height limit on plant growth on the property. Section 8.2 of the Property Standards Bylaw 4250-2018 stipulates the penalties for any person who violates the bylaw standards, with the first offense carrying a fine of \$200. The penalties associated with the Grass and Weeds Bylaw No. 78-2023 are authorized under the Administrative Monetary Penalties Bylaw No. 4519-2019, however specific values were not

accessible online.

Although PEC stipulates a bylaw violation fine, Bylaw No. 78-2023 is written to support naturalized gardens and justification for violation requires investigation of complaints by a bylaw enforcement officer to determine if a garden is indeed in violation. No information is currently available as to how or if bylaw officers receive training and education in prohibited plant identification.

#### ***The City of Fredericton***

The City of Fredericton is exceptional in this study as it is the only municipality whose bylaw does not regulate height restrictions or cut requirements for vegetation (discussed further in [Murphy, 2021](#)). Passed in July 2005, [Bylaw No. R-2](#) governs private yards and gardens, and adopts section 4 of the [Residential Properties Maintenance and Occupancy Code \(Regulation No. 84-86\)](#) approved by Council in May 1984. In addition to a reference to proper grading for stormwater drainage, Regulation No. 84-86 indicates that the yard must be kept “clean and free from rubbish or other debris and from objects, holes, excavations or other considerations that might create a health, fire or accident hazard” and “be maintained free of ragweed, poison ivy, poison sumac and other noxious plants” (p. 4.).

Under Bylaw No. R-2, should a violation notice be issued, the municipality can administer a maximum financial penalty of \$25 and no more than \$100 for each day the violation continues (p. 3-4). While this Bylaw lacks height and other restrictions, it does not specifically mention or address naturalized gardens which creates a potential conflict with enforcement officers who may not be familiar with natural landscaping practices. Residents interested in creating naturalized gardens may be unsure of what “other considerations” could lead to bylaw violation.

#### ***The Town of Lunenburg***

The Town of Lunenburg has recently undertaken a public engagement process to draft a bylaw to support naturalized lawns and gardens, and the new draft bylaw is expected to reach Council for a second reading and vote in late 2024. Through their discussions, planning staff identified the need to develop clear guidelines for naturalized gardens. For example, the draft bylaw contains clear definitions and refrains from using subjective terms related to garden “aesthetics”. It also includes a process to manage invasive species and public safety. The [staff report indicates](#) a need to promote public education and engagement around garden naturalization, and will continue with a complaint-based approach for enforcement.

The bylaw review conducted in this study has shown that maintaining a complaint-based approach for enforcement has been problematic in other municipalities where complaints are often part of ongoing conflicts between neighbors.

#### ***The City of Saskatoon***

The City of Saskatoon’s [Property Maintenance and Nuisance Abatement Bylaw, No. 8175](#), sets the standards surrounding yard vegetation and growth. Within the bylaw, a 20cm height restriction is applied to turfgrass. The City of Saskatoon indicates support for yard naturalization by further specifying that the height restriction:

*“shall not apply to any growth which forms part of a habitat garden that has been deliberately planted to produce ground cover, including one or more species of wildflowers, shrubs, perennials, grasses or combinations of them, whether native or non-native, consistent with a managed natural landscape other than regularly mown grass” (p. 4).*

While not applying a height restriction to habitat gardens, the bylaw goes on to further state that to be considered “maintained,” yards must be “kept free and clean from: excessive growth of weeds or grass; an infestation of rodents, vermin or insects” (p. 6).

Two problematic issues are identified in this regard. First, the combined term ‘weeds and grass’ is vague, as “weeds” is not a scientific term and can be contentious, leading to conflict and confusion among residents and enforcement officers alike. “Grass” is also a vague term and should be defined according to specific species of (e.g.) either turfgrasses for lawns or native prairie grasses which may be included in a naturalized yard. Further definitions and greater clarity are critical to ensure that enforcement procedures are applied fairly.

Second, the bylaw states that insects must not comprise an infestation yet insects are a natural part of all gardens and many naturalized gardens specifically intend to provide habitat for native species of pollinators and other beneficial insects. Further, the bylaw does not define what constitutes an infestation. Defining such terms is critical for clarity to avoid the issuance of an unfair or inappropriate bylaw violation, and would benefit both gardeners and municipalities in navigating the enforcement process.

### 3.3 Bylaw Enforcement Process

#### **Review**

The bylaw enforcement process review undertaken in this report revealed insight into the ways in which the burden of proof, anonymity, discretion (judgment), and appeals all factor into how municipal governments approach bylaw complaints and enforcement. The process includes how staff receive and respond to a bylaw complaint related to a naturalized yard. Each theme presented an opportunity for improvement and better alignment between bylaw regulations and enforcement (which are discussed and elaborated in the companion toolkit - [Bylaws for Biodiversity: Collaborative Toolkit for Municipalities](#)). The municipal personnel or staff at intake are key to determining if and how a bylaw will be enforced, whether they are telephone operators, communications staff, site-attending enforcement officers, or the Clerk's office. Further, how the intake staff respond to the complaint (on the phone, interacting on site, or reviewing a web-based complaints) appears to be pivotal in determining if the complaint is investigated, and how or if a violation is assessed.

As the DSF survey captured the experiences of self-reported habitat and natural gardeners, and identified themes related to bylaw enforcement, this research yielded similar insights related specifically to complaint intake. These insights were mapped as process flow diagrams that illustrate how complaints are taken and processed. An overarching theme is that lack of clarity in the process – for both residents and municipal enforcement staff – can lead to confusion and contradictions between municipal policy, bylaw regulations, and enforcement processes.

During this phase of the work, project researchers searched online for enforcement procedures for each municipality being studied. None had enforcement information readily available, though all had property standards or equivalent bylaws posted under their civic website, or the municipal online portal. Each municipality was then called to inquire, follow up on, and search for information on enforcement processes including specific steps or procedures used to file a complaint and follow the complaint through to a notice of violation. Some municipalities such as Toronto have a 311 general call-in number for telephone, whereas other municipalities require a call to the clerk's office. In some cases, multiple phone calls were required to determine where or to whom a complaint should be lodged. There was no consistency as to how complaints are filed and the research team noted that no enforcement information was easily available or transparent. Major themes identified during fact-checking calls to the municipalities being studied:

#### **Discretion (Individual judgment)**

Phone calls require personal interaction - a conversation - with municipal staff, and the discretion of the individual staff person

is critical in determining how or if a complaint will be taken. Staff have the capacity but not necessarily the training to de-escalate, or to escalate a complaint. Few municipalities had any type of filtering system to determine complaints that could be vexatious or confrontational, but rather may simply refer the matter to the enforcement office. In Hamilton and in London, staff indicated they would reject a complaint if the call is made "outside the growing season" (Hamilton bylaw officer, personal communication, March 8, 2024; London bylaw officer, personal communication, March 8, 2024).

Discretion can also manifest through tone or approach to the inquiry, and confidence of the staff person. In all inquiries made for this research, municipal staff presented as confident and well-trained in front-line customer service, and fluent with the bylaw. This contrasts with the survey data in which gardeners (who reported facing violation charges) indicated that enforcement officers attending or investigating the site expressed ambiguity about plant identification or debate around what constitutes a weed. This lack of clarity was a leading cause of confusion for both residents and ultimately, for enforcement officers. While counter staff can accept or reject complaints based on specific criteria, those that reach enforcement officers may face ambiguity and uncertainty based on the individual training, education, judgment, and discretion of the attending officer.

In an example from Fredericton, the inquiry call went to an enforcement official who focused on their concern that "vermin" might be attracted by "tall grasses" although the bylaw itself has no height restrictions. The enforcement officer indicated that regular policing and site investigations were undertaken irrespective of whether a complaint had been filed. Visits were made to sites suspected of being in violation (Fredericton municipal staff officer, personal communication, March 8, 2024). Other municipalities receive complaints by phone or online through a web portal rather than by random site inspections by staff, which give considerably greater power and latitude to the enforcement officer's discretion.

#### **Anonymity**

Across the municipalities reviewed, the practices surrounding anonymity of complainants were varied. Some municipalities did not ask for any personal information at the time of intake (Fredericton, London) while others required the address (Hamilton and Saskatoon) for the bylaw officer to follow-through. In all cases, the privacy and anonymity of the complainant is never divulged to the person who is the subject of the complaint. In some cases, as reported in the DSF survey data, the subject garden address (and owner's name) are posted or otherwise made public by the complainant, resulting in shaming or stigmatizing the gardener.

### ***Burden of Proof***

Municipalities usually place the burden of proof to refute a violation on the gardener or property owner(s). In Toronto, the municipal compliance officer was clear that the burden of proof was on the person making the complaint to follow-up. In other municipalities, the city would conduct its own independent investigation, including a review and a site visit to investigate. Site visits in Saskatoon, for example, were mandatory, whereas in Toronto, they would only be conducted if evidence of a violation is provided by the complainant, e.g. by submitting a photo of the garden or specific plant at issue (Toronto bylaw officer, personal communication, March 8, 2024).

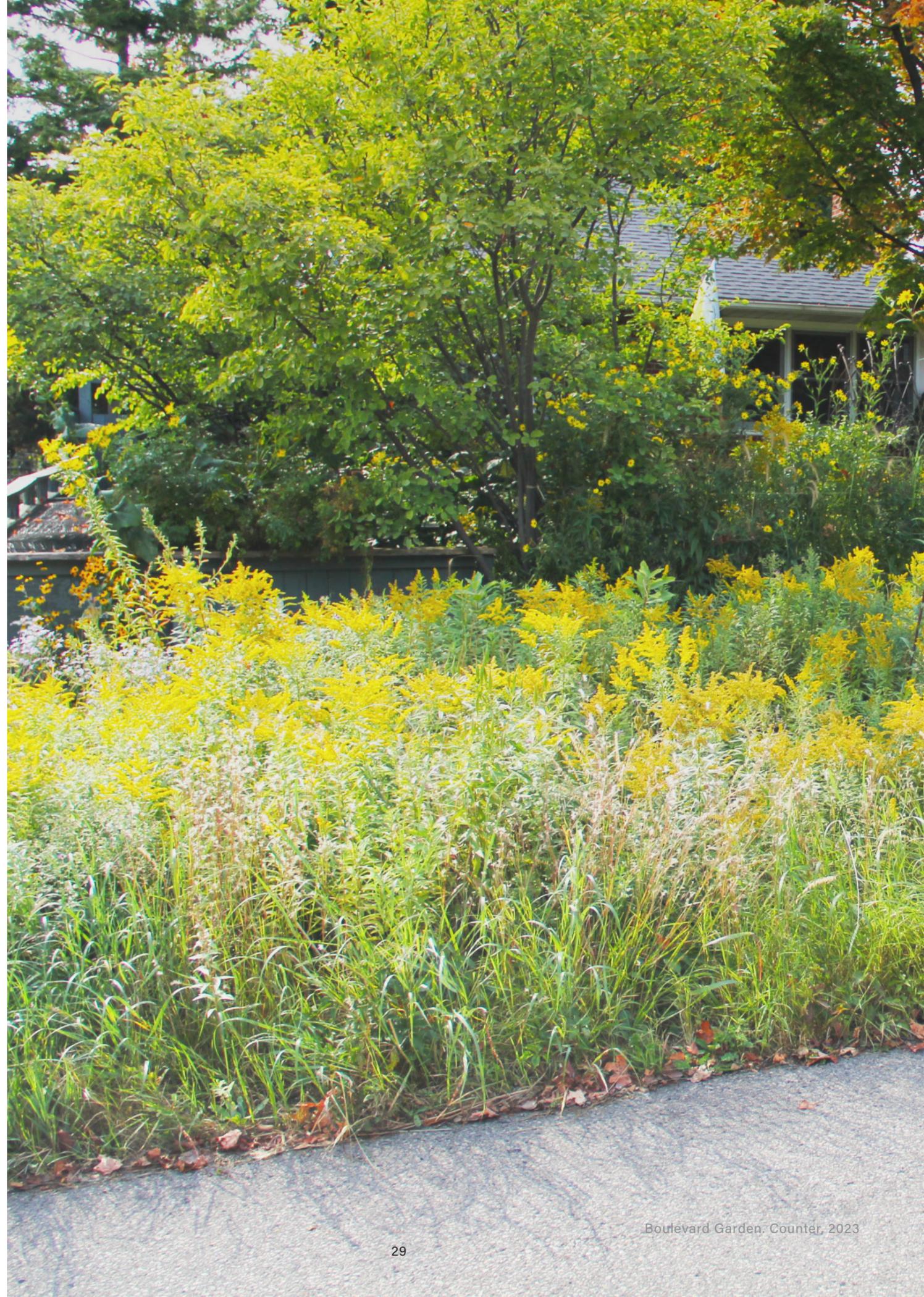
### ***Appeal***

The ability of recipients of bylaw violations to appeal decisions varied across municipalities. Some municipalities provide property owners with an opportunity to request an appeal, upon initially receiving a notice (the City of Toronto offers an informal appeal opportunity by email indicated on the notice of violation), while others only indicate and explain the appeals process through a subsequent notice following an order (such as London). In some municipalities the deadline for recipients of a notice to take action is flexible, while others explicitly state a deadline, typically requiring action within one week of the notice. Short or poorly communicated deadlines for action may result in conflicts or forced cut orders that are carried out without appeal, especially if property owners don't receive the notice in time, e.g. if are away for an extended period, as is common during summer season when vegetation grows quickly.

### ***Lack of Closure: A Complete Processes is Needed***

As reported in the literature review, the DSF survey, and in the SME discussion, residents who maintain naturalized gardens and who have been subject to bylaw enforcement report a lack of closure. Even when the complaint or compliance order is withdrawn or otherwise resolved, the recipients attest that there is no room or opportunity for an apology or admission of error in the enforcement process, and there is seldom a confident declaration that a case has been closed. Ultimately, residents are left uncertain about the outcome, and they may remain vulnerable to receiving additional, unwarranted complaints in the future. All of this points to a need for a clear process with specific desired outcomes and resolutions identified.

So long as room for confusion remains, there is greater risk of adversity and continued conflict which contributes to resource strain. These pressures mount on both residents and the public service: on the gardeners, who need to spend considerable effort, energy and time (and sometimes money) defending the gardens they care about, and on municipalities, who expend staff time and resources responding to complaints, from vexatious and frivolous to legitimate.



## 4.0 Conclusion

It is evident that municipal governments throughout North America are considering ways to better support, foster and protect urban biodiversity through policy and planning tools. Generally, urban biodiversity is supported on public lands under municipality-wide policies. At the same time, municipalities are increasingly recognizing the value of landscaping techniques for improving resilience of urban areas to climate change. This has been seen through the implementation of more eco-friendly building standards, in addition to applications of “nature-based solutions” for mitigating climate change-related impacts such as flooding and heat islands.

However, there are comparatively fewer tools dedicated to supporting urban biodiversity on private lands, within home gardens. Municipal codes and zoning bylaws are relatively underused, and in many places, operate as barriers to the cultivation of gardens for biodiversity. This report underscores common provisions in municipal codes, or “weed ordinances” including property standards and “long grass and weeds bylaws,” which can place prohibitive restrictions on naturalized landscapes in favor of manicured turfgrass lawns. Not only do these practices uphold outdated standards for gardening practices, but this prioritization of lawns is also inconsistent with municipal-wide policies and practices, aimed at supporting local ecosystems where biodiversity and native species flourish. Prescribing requirements for landscaping which emphasizes lawns, stands in opposition to growing public support for promoting urban biodiversity, and municipalities’ efforts to cultivate native biodiversity on lands within the public sphere.

Advocates responding to conflicts between bylaws and biodiversity report that municipalities often underestimate the role that bylaws play in suppressing and inhibiting public uptake of naturalization and habitat gardening, out of fear of punitive consequences. Enforcement of property standards bylaws typically follows a complaint-driven process. If enforcement is applied unevenly, it can exacerbate conflicts within communities, reduce local tolerance of alternative landscaping practices, and risk contributing to environmental inequality and degradation. Under Canada’s Charter of Rights and Freedoms, all residents are guaranteed the freedom to express their environmental beliefs through acts of landscape care and maintenance on their private property, at home within their garden.

Enforcement of property standards bylaws is an important municipal service whose costs are borne by taxpayers. Given that municipalities across Canada are facing budgetary pressures, while needing to address gaps in delivery of housing services, manage invasive noxious weeds, and mitigate risks to human health and safety brought by climate change, there are limited resources that are available to support municipal law enforcement, which should be prioritized accordingly. Instead of enforcing arbitrary standards on the appearance or aesthetics of gardens, municipalities should focus regulations on matters of health, safety and public nuisance, while still promoting public awareness and acceptance of alternative and more ecological diverse landscaping practices.

In exploring both the bylaw regulations and the enforcement process, this project provides a greater understanding of the tensions which exist between them, as well as presenting opportunities for better alignment. For more detailed information on the recommendations made, as well as the opportunities for improvement in municipal enforcement, the accompanying [Bylaws for Biodiversity: Collaborative Toolkit for Municipalities](#) offers both strategies and tools for alignment – to weed out bad bylaws and nip enforcement problems in the bud.

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## Selected Media Links:

The following links are a sample of recent media coverage that indicates the groundswell of naturalized and habitat gardening in North America:

[Hey London: Ready for natural look – on your neighbour's front lawn?](#): The London Free Press, February 2024

[Ignore the eco-evangelist haters. A nice lawn is a beautiful thing:](#) Toronto Star, July 2024

[The gardener who took a Canadian city to court for the right to not mow his lawn:](#) The Guardian, June 2024

[Is this front yard forest too tall? How a project to bring back Toronto's oaks fell afoul of city bylaws:](#) Toronto Star, June 2024

[This Mississauga man fought the city's weeding bylaws in court. He's part of Ontario's growing fight against lawn enforcement:](#) Toronto Star, June 2024

[Gardens have become battlegrounds in the climate crisis:](#) Toronto Star, August 2023

[It shouldn't be illegal to rewild your yard:](#) Rewilding Magazine, January 2023

[They fought the lawn. And the lawn is done:](#) The New York Times, December 2022

[How does your garden grow? As cities and towns continue to expand into our wild landscapes, conservation gardens can provide refuge for Canada's plummeting biodiversity:](#) Canadian Geographic, Nov 25 2022

[Changing a Toronto By-Law for Biodiversity:](#) City Building TMU, June 2022

[An oasis rich in 'joy' with a few complaints: why it takes guts to grow a naturalized lawn:](#) CBC Radio, June 2022

[Couple's court win forces Smiths Falls to revisit its approach to 'naturalized' lawns:](#) CBC News Ottawa, May 2022

[Couple's win forces Smiths Falls to revisit approach to 'naturalized' lawns:](#) CBC Radio, May 2022

[Barriers, by-laws, and the biophilic city:](#) Toronto Metropolitan University, February 2021

[This ecologist was told she could keep her natural garden. Here's why she's fighting city hall anyway](#): CBC News, October 2020

['What kind of barbarian would mow buttercups?'](#): The city tried to rip up a local ecologist's natural garden. Now she's fighting back: The Toronto Star, October 2020

['A case of neglect disguised as a naturalized garden'](#): The Globe and Mail, September 2020

[Battle over front-yard meadow thick with irony](#): Toronto Star, September 2020

[Ecologists wild garden is a challenge to lawn order](#): The Globe and Mail, August 2020

[Only in Toronto was a wild garden this big of a concern](#): CBC Radio, September, 2019

## Appendices:

### Appendix A: PL8110 Advanced Graduate Planning Studio Bylaws for Biodiversity Syllabus - W2024



**PL8110 Advanced Graduate  
Planning Studio  
Winter 2024**



**BYLAWS FOR BIODIVERSITY**

**Professor Nina-Marie Lister, MCIP RPP Hon ASLA**

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#### **Project Overview**

Throughout North America, municipal governments are considering ways to support, foster and protect urban biodiversity through policy and planning tools. Urban biodiversity is generally supported on public lands under city-wide policies; in Toronto, for example, such policy tools include the [Biodiversity Strategy](#), the [Ravine Strategy](#), the [Green Streets Strategy](#), the [Pollinator Protection Strategy](#) and the [Strategic Forest Management Plan](#) (among others). However, there are comparatively few tools engaged to support urban biodiversity on private lands. According to previous work in this studio, municipal codes and zoning bylaws are relatively underused, and in many places, operate as barriers to biodiversity. As well, advocates working on the issue of bylaws and biodiversity report that municipalities often underestimate the role that bylaws play in suppressing and/or inhibiting public uptake of naturalization and habitat gardening.

In 2021, legal and policy support for urban biodiversity in Toronto changed through public discourse and [revisions to Chapter 489](#) of the city's zoning code, also called the "[Grass and Weeds Bylaw](#)". The policy and legal changes in Toronto illustrated the persistence of long-time legal barriers found in municipal codes throughout cities in Canada and the U.S. to cultivating native biodiversity on private

property. Often termed “weed ordinances” or “long grass and weeds bylaws”, these provisions in municipal codes place prohibitive restrictions on naturalized landscapes in favor of maintained lawns that are often inconsistent with local ecosystems that support flourishing biodiversity, including native species. These proscriptions as to landscaping often stand in opposition to broad public support for promoting urban biodiversity and a city’s effort to cultivate native biodiversity on lands within the public sphere.

Working with the David Suzuki Foundation (DSF), the **project objective** is to examine the **opportunities to address this inconsistency**, and to inform a national advocacy campaign co-developed by DSF and experts in municipal planning, policies and ecology-supportive landscaping. A critical goal is to update and revise municipal codes that align the right to use private lawns and gardens to support native biodiversity as a vital complement to efforts on public lands at the citywide and global scales.

To initiate this work, DSF recently undertook a “grass and weeds” survey of gardeners across Canada, including 1500 participants of the Butterflyway Project, a citizen-led movement growing highways of pollinator habitat in hundreds of towns and cities. The survey notes: “Every city/town has its own version of a grass and weed bylaw intended to uphold a standard of private property maintenance. Unfortunately, that standard is based on an outdated view of gardens and lawns; one that favors a neat and tidy appearance over habitat value. David Suzuki Foundation is asking gardeners to provide information on their own experiences with bylaws and/or the experiences of others in their communities via a short questionnaire [ that closed on Nov. 11/23]”. The survey can be viewed [here](#). (DSF will provide back-end access to the survey data on January 16 at the initial studio meeting.) Here is a summary of survey responses gathered in Fall 2023:

- 281 people responded to the English survey and 7 people responded to the French survey over four weeks.
- 32 (11.11%) of respondents reported experiencing a bylaw incident, while 256 (88.89%) of respondents did not.
- A large majority of incidents reported occurred in 2022 and 2023.
- 32 respondents reported on garden type, with 17 (53.13%) reporting the garden was exclusively or mostly native plants and 15 (46.88%) reporting the garden contained a mix of native and non-native plants.
- 70 (24.30%) of respondents are aware of neighbours who have experienced a bylaw incident, while 218 (75.70%) are not.
- Many respondents provided their contact info for follow-up on their responses.
- Many respondents provided insightful information in the “additional comments” fields. There is plenty of additional data to read and digest for the studio.

Beginning with the survey data, the **project tasks** are to:

- *Analyse survey data* to examine bylaw incidences and experiences reported, and the extent to which local municipal code and enforcement provisions present barriers and/or opportunities to support the cultivation of native landscaping for biodiversity on privately-owned property.

- *Explore and evaluate* the experiences of homeowners and gardeners with municipal code policies, enforcement, and promotion of native biodiversity (potentially through follow-up survey questions or interviews);
- *Analyse* and assess the extent to which there is community support within identified Canadian municipalities for native landscaping evident (e.g.) through non-profit organisations (such as Toronto’s [Project Swallowtail](#)), presence of notable or demonstration projects, certification programs, local native landscaping industry or other evidence of a culture of support; and
- *Explore and consider* opportunities for native landscaping across Canadian municipalities.

In tandem with the survey data analysis, the studio will research and investigate *other municipalities across Canada that show support for native landscaping through their municipal code provisions*. As an outcome of the tasks above, the project should document **case studies of best practices and innovative provisions for biodiversity**.

**Deliverables** (for preliminary guidance and discussion)

In the context of the key objectives and related tasks above, the deliverables for this project will include the following content (to be determined and finalised in consultation with the Client):

1. Analysis of **DSF survey data** and recommendations for further investigation and action. For example, the development of a follow-up interview guide for municipal staff to determine extent and success of native landscaping provisions both in terms of adoption (frequency) and improvements (outcomes) in support of local biodiversity.
2. A detailed set of **case studies of place-specific best practices** with specific reference to innovative municipal or other code provisions across Canadian municipalities (either included in the planning report below or provided as a separate addendum / handbook). The case studies should include (e.g.) any additional or **alternative land-based planning policies** that may be needed.
3. If needed, based on the above, **updates to the EDL model bylaw** for recommendation to Canadian municipalities.
4. An **advocacy and education campaign** that identifies (e.g.) strategies for Canadian municipalities to update and improve their municipal codes and specific bylaws to support biodiversity, and concomitant updates to enforcement strategies.
5. Based on the 4 analyses above, **an integrated final report that provides recommendations** for municipal code revisions, enforcement strategies, provisions and (potentially) supportive **policy alternatives** to support urban biodiversity on private lands and rights-of-way, perhaps at scales beyond the municipality.
6. An **oral and visual presentation** of analysis, findings, and recommendations to be made for and shared with DSF staff, stakeholders, and relevant municipalities.

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City of Toronto Policies (related to biodiversity):

- [Biodiversity Strategy](#)
- [Green Streets Strategy](#)
- [Pollinator Protection Strategy](#)
- [Ravine Strategy](#)
- [Strategic Forest Management Plan](#)

City of Toronto Municipal Code and By-Laws: <https://www.toronto.ca/legdocs/bylaws/lawhome.htm>

David Suzuki Foundation: *ButterflyWay Project* and *Rewilding Communities*:  
<https://david Suzuki.org/story/butterflyways-blooming-throughout-land/>  
<https://david Suzuki.org/story/rewilding-can-help-heal-wounds-weve-inflicted/>

Ecological Design Lab: *Bylaws for Biodiversity* (peruse the reports and articles):  
<https://ecologicaldesignlab.ca/project/by-laws-for-biodiversity/>

Ecological Design Lab: *Urban Biodiversity & Municipal Codes* (studio report & toolkit):  
<https://ecologicaldesignlab.ca/project/urban-biodiversity-studio/>

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Lister, NM 2020. Selected media re: Lister's meadow controversy, Biophilic Cities work:

- The Front Yard versus Toronto: Plant Crimes [podcast](#)
- Urban Biodiversity: NET [Podcast](#)
- Barriers, By-Laws & the Biophilic City: EDL [Webinar](#)
- Meadow Politics: [CBC Interview on Here and Now](#)

Murphy, C. 2021. *Model Bylaw* developed with the [EcoDesign Lab](#) (see Carly Murphy's MRP and the bylaw here: <https://ecologicaldesignlab.ca/project/bylaws-for-biodiversity/>)

Pagliari, J. 2020. What kind of barbarian would mow buttercups? *Toronto Star*, Oct. 6. <https://www.thestar.com/news/gta/2020/10/06/what-kind-of-barbarian-would-mow-buttercups-the-city-tried-to-rip-up-a-local-ecologists-natural-garden-now-shes-fighting-back.html>

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Pollinator Partnership Canada: *Project Swallowtail*:  
<https://pollinatorpartnership.ca/en/project-swallowtail>

## Additional Podcasts:

[Biophilic Solutions: Nature has the answer > Bylaws and Biodiversity with Nina-Marie Lister](#)

[99Percent Invisible: 177 - Lawn Order](#)

## Appendix B: DSF Survey Results

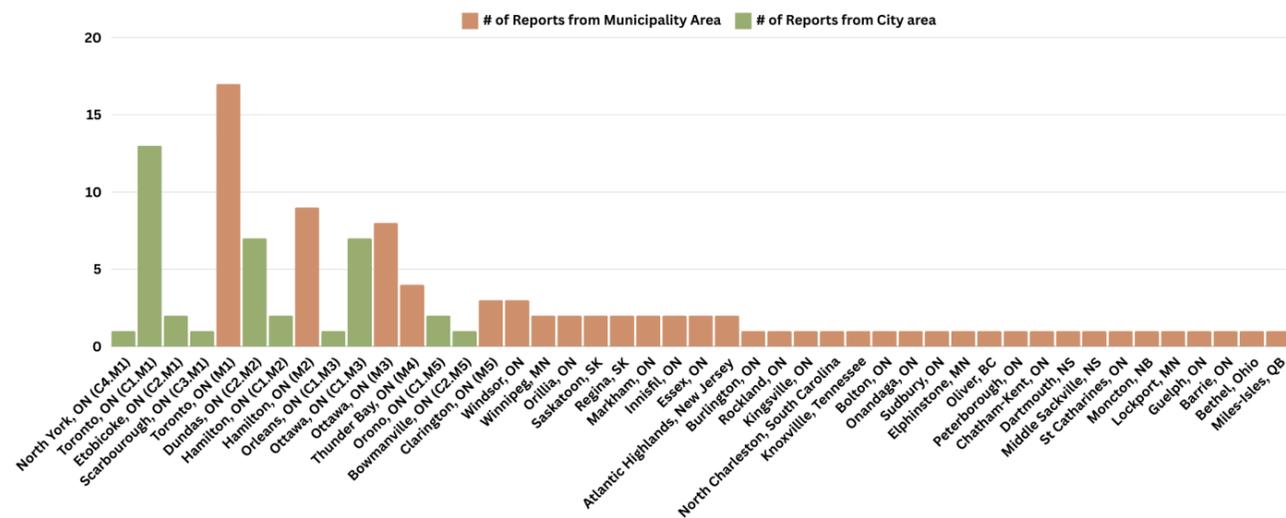
### B.1 Word Cloud

This Word Cloud visual represents the keyword perceptions of incidences related to bylaw complaints. This data is from the David Suzuki Foundation survey in 2023 called 'How prevalent grass and weed bylaw incidents are across Canada?' The common keywords featured in the Word Cloud provide a visual of the in initial scan, related to incident experiences of the respondents, summarizing the most commonly used words.



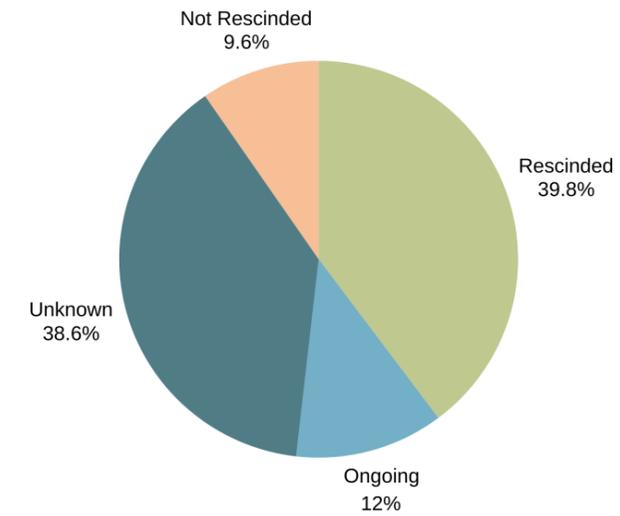
### B.2 Frequency Distribution

This chart summarizes the locations documented in the 2023 David Suzuki Foundation survey 'How prevalent grass and weed bylaw incidents are across Canada?'



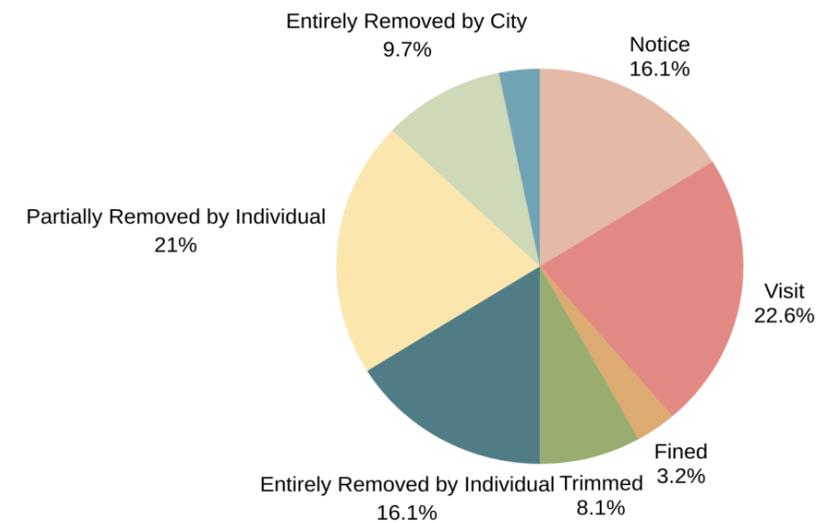
### B.2 Case Results

This chart summarizes the results of the cases documented in the 2023 David Suzuki Foundation survey 'How prevalent grass and weed bylaw incidents are across Canada?'



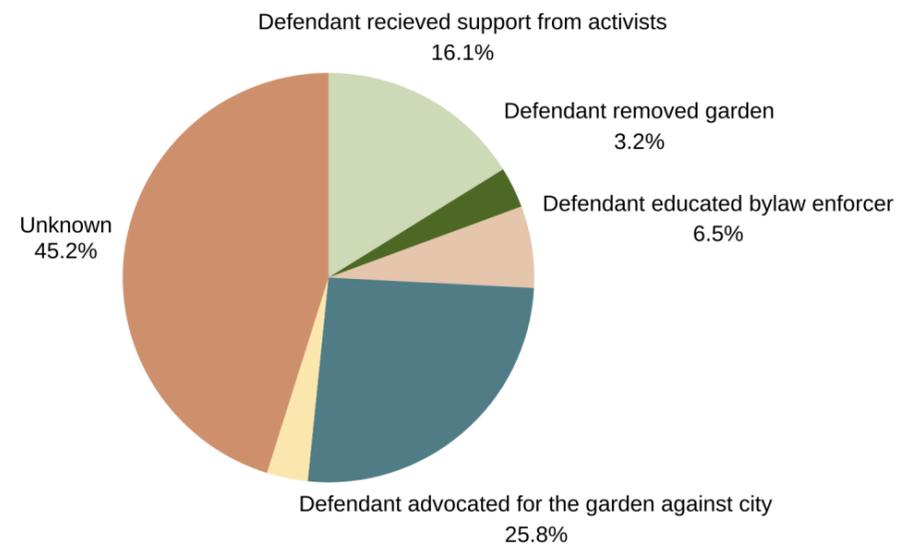
### B.3 Enforcement Action

This chart represents the bylaw enforcement action types and their frequency reported in the 2023 David Suzuki Foundation survey 'How prevalent grass and weed bylaw incidents are across Canada?'



#### B.4 Defendant Success

This chart represents cause or reasoning of defendant success in responding to bylaw violation notices, collected in the 2023 David Suzuki Foundation survey 'How prevalent grass and weed bylaw incidents are across Canada?'



#### Appendix C: Subject Matter Experts

David Donnelly is one of Canada's leading environmental lawyers, and the driver behind many of the major case studies presented in the literature review. Douglas Counter, an SME with the City of Toronto, has maintained a native plant garden in Toronto for over 20 years, after successfully challenging the City in court over their notice to mow his property. Albert Paschkowiak is an Environmental Services and Sustainability Supervisor for Prince Edward County with practitioner experience. Brendon Samuels is a London-based environmental advocate and PhD candidate in the Department of Biology at Western University. Ethan Ling is an analyst with Municipal Compliance division of the City of London. These experts, in addition to the project mentor Lorraine Johnson - a habitat garden expert and author - provided suggestions and considerations for the research study, which included advice as to the selection of municipalities on which to focus.

