

Canada's Urban Forestry Footprint

Measuring the extent and intensity of urban forestry activities

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Background

Despite the public demand for more treed communities, and the fact that urban forestry has grown in Canada over 50 years ago, still there is no urban forestry program at the national or provincial levels to serve as an umbrella for strategically linking and directing urban forestry efforts (Kenney, 2003; Canadian Council of Forest Ministers, 2006). As a result, it is still hard to grasp the

full extent of urban forestry activities and visualize their extent across Canadian municipalities. Urban forestry includes a wide range of elements, from policies, regulations and by-laws to diverse management and stewardship activities. It can also include spatial and green systems design, and various conservation efforts. These activities are often perceived in isolation and often not linked to urban forestry.

Objectives

- The overall objective of this project is to capture the distribution of urban forest activities.
- An additional objective is to map and the differences in the geographic variation of urban forestry. This enables to show spatially where these programs are absent or where information gaps exist.
- To achieve these objectives, it is necessary to obtain standard, spatially integrated data that can be further analyzed using spatial analysis and other analytical methods. Thus, the project aims to capture, standardize, assess and map urban forests and stewardship activities across Canadian municipalities.

Study Area

- Urban municipalities (dissemination areas) across Canada's provinces and territories
- Urban areas with populations over 3,000 and at least one population center.
- 800 municipalities (census subdivisions) across the country, which accounted for 88.5% of the total population of Canada in 2016, were examined
- Data collection was done by Yuki Yung, a Master of Forest Conservation (MFC) student at the University of Toronto. Yuki Yung focused her capstone paper on tree protection in Ontario.
- Project was funded by Mitacs and Tree Canada.

Methods

Urban forest and stewardship analysis was based on readily available spatial information and data gathered through web data mining. The method enabled capturing and standardizing web-available information related to urban forestry and mapping findings based on municipal and decision-making boundaries.

The categorical and descriptive information was classified and standardized using a relational database. It was converted into a structural database format that was used for quantitative analysis. Thematic information extraction of urban forestry activities and relevant subjects can be summarized for Canada or provinces

A set of indicators was established to guide the search and summary of the current state of urban forestry activities. These mapped indicators (categories) include:

- Forestry and related departments
- Professionals managing urban forests and their components
- Urban forest management strategies
- Urban tree policy
- Tree by-laws
- Tree inventory
- Pest and disease management strategies

Mapped Indicators: Interactive Maps

Standardized information on urban forestry and related stewardship, policy and management activities is spatially integrated into interactive maps.

Disclaimer: The maps and data available for access at this website are for research and illustrative purposes only. Any maps and associated data do not represent the full study result. The information collected is based on publicly available websites as of April 2018 and may contain omissions.

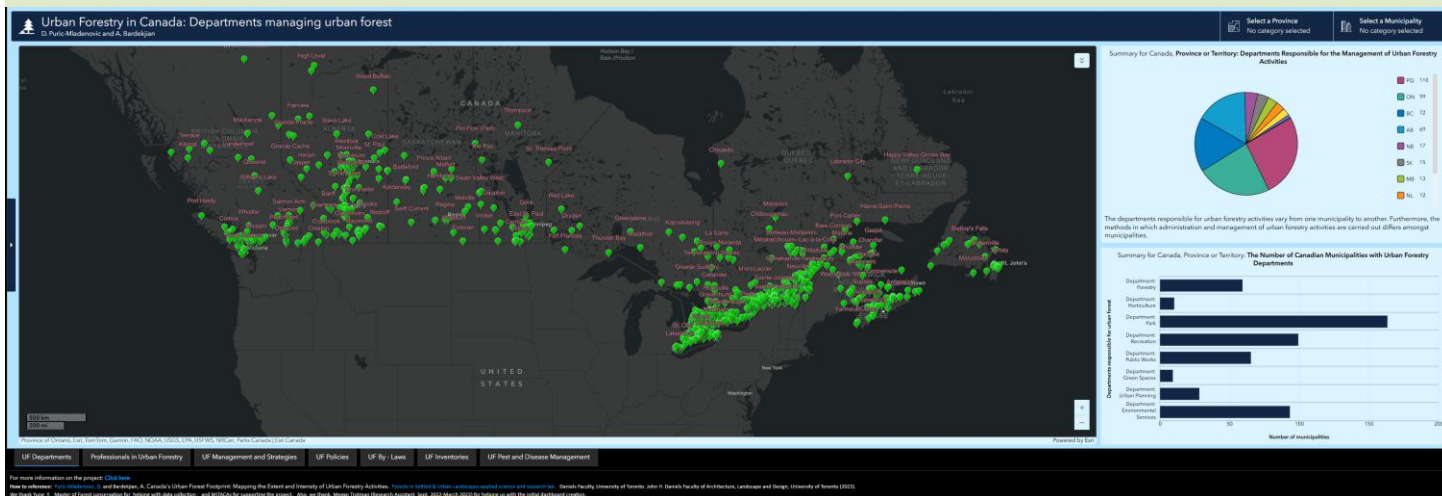


Figure 1. [The User Interface of the Interactive Map.](#)

For more information, including descriptions of the interactive maps and other urban forestry footprint maps, please visit: <http://forests-settled-urban-landscapes.org/UrbanForestryFootprint/>

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