

PLANNING FOR HEALTHY COMMUNIBEEES:

Evaluating Presence & Quality of Municipal Support for Native Pollinators

This project explores how cities plan for and implement pollinator protection strategies. Additionally, this project attempts to track wild pollinator awareness in municipal documents and strategies.

With increasing awareness of pollinator decline, people take up initiatives to “save the bees”. Much of the focus is on honey bees, which are not native to North America. This approach neglects the multitudes of other species that perform pollination services, including wild solitary bees native to an area, butterflies, moths, flies, beetles, and more. This project focuses on municipal supports for native pollinators.

Why Are Pollinators Important?

Pollinators provide critical ecosystem services to ensure plant reproduction. Pollinators collect pollen from flowers for food, and assist moving pollen from the anther to the pistil. This causes seeds to grow, or to “set”.

You can look at seed set when you cut open fruit or fruiting vegetables.

Causes of Pollinator Decline

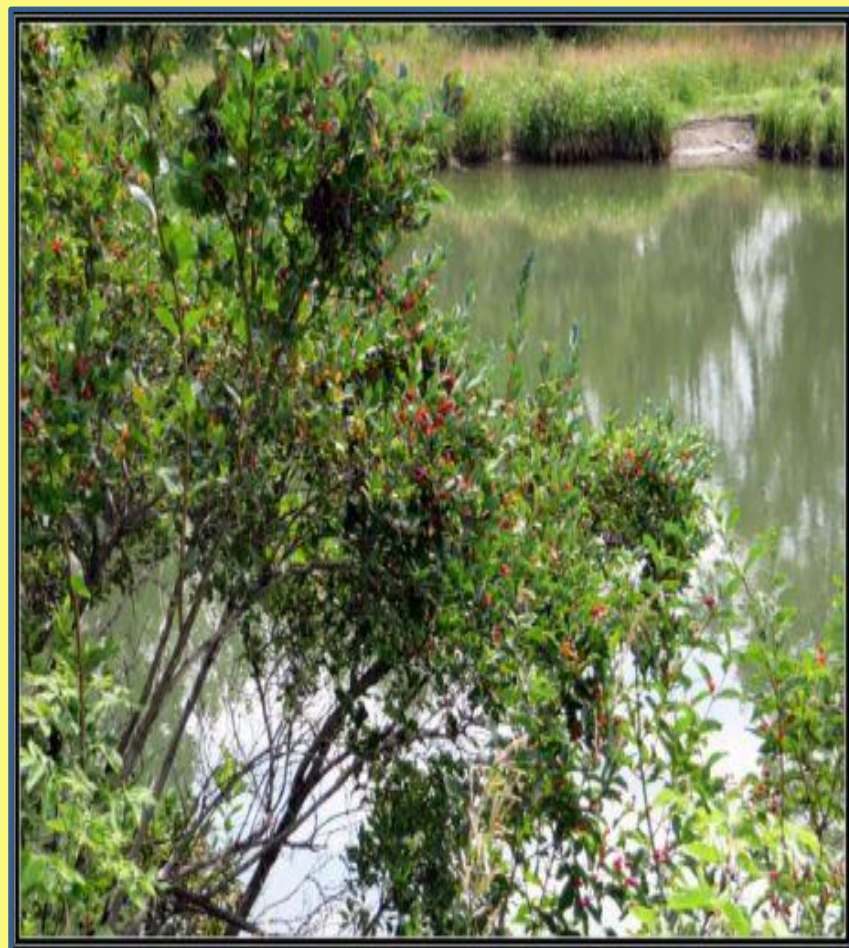
- Habitat Loss,
- Lack of Floral Forage,
- Pesticide Use,
- Disease,
- Climate Change.



Brubacher.net, 2019, Site Clearing

What Do Pollinators Need in Cities?

- Reliable access to food from consistent and varied flowers,
- Food that is safe from pesticide contamination,
- Connection between green spaces to enable travel,
- Access to appropriate nesting materials, depending on species (bare dirt, sticks, leaf litter, wood),
- Green spaces with healthy and functional ecosystems.



marian_black2, 2014, Inglewood Bird Sanctuary

What Animals Pollinate Plants?

Many species of insects pollinate plants, including thousands of species of bees. Wild bees in North America are solitary or live in small communities, and they rarely or never sting. Some other examples:

- bumblebees,
- butterflies,
- moths,
- beetles,
- birds,
- Bats.



Cocoparisienne, n.d., Hoverfly



Suju, n.d., Peacock Butterfly



Cocoparisienne, n.d., Lady bug

How Do Cities Address Wild Pollinators?

City policy documents were studied for prevalence of certain words. These words were : *pollinat-**, *biodivers-**, *ecol-**, *ecosys-**, *habitat..* In addition, supporting departments and projects were searched for evidence of pollinator support. Interviews were conducted in Calgary and in the Ottawa/Gatineau region for in-depth information.

Fourteen (14) cities in Canada and the US were analyzed for attention to wild pollinators.



Cities With Mention of Key Words in Documents

	Total Cities (14)	Canada (7)	US (7)
Pollinat-*	8	4	4
Biodivers-*	9	5	4
Ecol-*	11	6	5
Ecosys-*	13	6	7
Habitat-*	11	4	7

The city of **Calgary** has a strong history of biodiversity programs thanks to a partnership commitment with an organization called Local Action for Biodiversity (LAB).

Cities That Mention Multiple Key Words

	Total Cities (14)	Canada (7)	US (7)
All 5 terms	4	2	2
4 of 5 terms	6	3	3
3 of 5 terms	2	1	1
2 of 5 terms	1	0	1
1 of 5 terms	0	0	0
none	1	1	0

The **National Capital Commission** provides federally-supported sustainable development guidelines for its surrounding region.

What Can Cities Do to Help Wild Pollinators?

- Ensure continuous varieties of flowers blooming from early spring to late fall.
- Connect green spaces as “stepping stones.”
- Reduce mowing, swap lawns for prairie.
- Use pesticides as a last resort.
- Rehabilitate damaged ecosystems.
- Put demonstration gardens on city property & certify natural residential lawns.
- Promote community gardening.
- Track honey bee hives and exercise caution around natural areas.
- Include biodiversity in sustainability work.
- Pursue regional, national, and international partnerships for biodiversity.
- Support scientific research on pollinators.



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