URBAN ECOSYSTEMS

Boulevards and Street Trees
Utility Rights-of-ways
Lawns and Gardens

Fact Sheet #6
What are Urban Ecosystems?

Urban areas are centres for human activity. While there is much development and permanently altered areas of the landscape, unique habitat opportunities for plants and wildlife still exist. Examples of key greenspace and habitat opportunities within urban areas include lawns, gardens, parks, boulevard/street trees and utility rights-of-ways.

Where are Urban Ecosystems?

Lawns, gardens, parks, boulevard/ street trees and utility rights-of-ways are an integral part of the urban mosaic located throughout the Greater Vancouver Area.

Status

Urban areas are growing as population trends continue to increase. The benefits of planning from an ecological perspective that includes retaining, conserving or restoring greenspaces amid development is becoming more widely recognized.

Nature’s Services

- Lawns, gardens, and parks add to the beautification of our urban areas.

Regional Indicator Checklist

- Pacific Treefrog (*Hyla regilla*)
- Black-throated Gray Warbler (*Dendroica nigrenscnes*)
- Townsend’s Warbler (*Dendroica townsendi*)
- Rufous Hummingbird (*Selasphous rufus*)
- Spotted Towhee (*Piplio maculates*)
- Anise Swallowtail (*Papilio zelicaon lucas*)
- Orchard Mason Bee (*Osmia lignaria*)
- Bumble bee (*Hymenoptera Apidae*)

There are several species which have adapted to urban areas in search of food, shelter and space. Though small, backyard gardens can provide much habitat value for an array of wildlife species such as songbirds, butterflies, bees and insects. Utility rights of way can also...
be enhanced with native vegetation and used as wildlife corridors for bird species and small mammals. Artificial ponds can be used as breeding sites for amphibians and water baths for birds. Structural diversity with dense vegetation can attract a variety of backyard/urban wildlife.

**Pacific Treefrog**

The Pacific Tree Frog is a tiny (3-4cm) frog that can be identified by their infamous “ribbit” call and dark bands that mask their eyes. They are common in woodlands, shallow wetlands, orchards, pastures and urban areas. Pacific Tree Frogs prefer using vernal pools (wet areas that only exist seasonally or for short periods) as they are usually devoid of predatory fish. They are a robust species that can do well in urban environments given the right type of natural features. Often people are not even aware that these beautiful, delicate amphibians are residents in their neighbourhood mistaking their egg masses for algae or fungus in backyard ponds. Their courtship calls as early as February or March can be traced to street trees, hedges or overgrown walls or buildings. Domestic house cats, an introduced predator in urban areas can be a threat to adults, especially if they do not have adequate connecting cover to move through.

People can do simple things to attract these beautiful amphibians such as putting in a backyard pond or water feature (non-chlorinated) that Pacific Tree Frogs can use for breeding.

**Orchard Mason Bee**

The mason bee is one of many wild solitary bee species present in North America. It is a gentle, shiny blue-black metallic bee, and slightly smaller than a honey bee. Males are smaller than females and have longer antennae and an additional tuft of light colored hairs on the face. Females have hairs on the underside of the abdomen adapted for carrying pollen.

They are called "mason" because they construct nests with walled-off chambers for each of the eggs they lay. The orchard mason bee is a gentle beneficial insect that has potential as a pollinator of apples, cherries, and other tree fruits. It is found throughout most of North America, particularly in wooded areas but often around homes in towns and cities.

Mother Nature’s great spring pollinator, the orchard mason bee was pollinating the fruits and flowers of the continent for millions of years before the first honey bee was brought to North America.
Optimal form & function

Buildings, bridges and roadsides can provide shelter for nesting or roosting. Trees should be close to sites for connectivity. Bird and bat boxes should be placed to help mimic natural nesting sites. Plantings on rooftops and balconies, and buildings surrounded by parklands can create stopover areas for birds. Retention of urban forests at least 300 ha in size (parks etc.). Bird feeders and naturescaped backyards and gardens with native plants (flowers, berries and fruit) are useful habitat elements. Backyards, parks and gardens should be equipped with ponds where possible, and the application of pesticides and herbicides should be discouraged.

What can we do?

- Go for walks and take in green areas in your community and discover the phenomenal diversity of plants and wildlife that use these areas.
- Volunteer to help rehabilitate areas around you to provide more inviting habitat for native plant and animal species.
- Pick up litter, don't let your streets, urban greenways or parks become dumping grounds.
- Make your backyard or balcony inviting to native species through applying naturescaping principles by planting native plants.

Even the smallest backyard space can be a garden of habitat with a little change in planning and effort.

From downtown streets to backyards and boulevards we can move beyond lawns and concrete as habitat in urban areas.

More detailed information on this ecosystem and associated species can be obtained from the report: “Conserving Biodiversity in Greater Vancouver – Indicator Species and Habitat Quality”. Available from the Ministry of Water, Land & Air Protection at: http://wlapwww.gov.bc.ca/sry/lwh/GBEI/index.htm

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