BIRD-FRIENDLY GARDENS: SUPPORTING BIRD HABITAT IN EVERY SEASON

PREPARED BY:

The Ecological Design Lab Toronto Metropolitan University

IN COLLABORATION WITH:

The National Environmental Treasure Nature Canada FLAP Canada

NOV. 2024



CITATION: Careri, S., Jordan, A., Takada-Lien, M., Samuels, B., & Lister, N.M. (2024). *Bird-Friendly Cities: Gardening for Birds*. Retrieved from <u>https://ecologicaldesignlab.ca/site/uploads/2024/12/03_bird-friendly-gardens.pdf</u>

BIRD-FRIENDLY GARDENING

North American bird populations are experiencing a rapid decline due to habitat loss, degradation, and other global pressures (Birds Canada, n.d.; Goddard et al., 2010). However, adopting bird-friendly gardening practices offers a powerful way to combat these threats and support biodiversity conservation on a local scale (Birds Canada, n.d.; Goddard et al., 2010; Evans et al., 2009). Birds contribute to healthy ecosystems: they pollinate plants, disperse seeds, and prey on insects. Numerous studies have concluded that everyday encounters with birds and birdsong across urban and suburban areas can treat mental health conditions including anxiety, depression and paranoia (Batty, 2022).

As Guinness (2024) states, "bird-friendly gardening is not a radical shift from gardening; in fact, you may already be doing it."

WHAT ARE THE COMPONENTS OF A BIRD-FRIENDLY GARDEN?

Generally, a bird-friendly garden is structured around three key components: food, water, and shelter. First and foremost, a bird friendly garden provides food and includes native plants that produce a diversity of sustenance such as seeds, cones, berries, fruits, and nectar that are available across all seasons (Birds Canada, n.d.). Native plant species are particularly effective at this, as they attract and sustain a broader variety of birds than feeders alone (Goddard et al., 2010).

Birds Canada has an entire section on their website dedicated to gardening for birds. This website is a great place to start as a reputable resource for identifying plant species and practices which can help to attract specific birds, and is categorized based on Canadian regions Their Bird Gardening campaign features tips on how to plan your garden, find your bird garden zone, as well as a plant selector search tool to customize a list of plants suited to your space. The <u>Birds Canada</u> <u>plant selector tool</u> offers a resource of 500+ native Canadian plant species compatible with various garden plans and regions. By selecting plants that match your garden's sun, soil, and moisture conditions, you can create a bird-friendly garden that better supports local bird species. For more information on habitat gardens, visit the <u>Gardening for Biodiversity</u> resources page, on the <u>Ecological Design Lab</u> website.

Including water in your garden is beneficial for creating a bird-friendly habitat. However, water sources must be kept clean and accessible, such as bird baths or sloped ponds with flowing water (Birds Canada, n.d.). To ensure birds have a steady supply of drinking water during winter, consider adding a heated bird bath or a small bubbler to prevent ice buildup (Cornell Lab of Ornithology, n.d.). The sound of water running or splashing can help birds to initially find your water source. How to Keep Cats Out of the Garden and Keep Cats Out of Bird Baths articles provide ways to prevent water sources for birds from becoming targets for cats. Also, don't forget to refresh the water regularly and clean the bath as needed, particularly if a sick bird is observed, to maintain a sanitary and inviting environment. Some fountains and bird baths are better suited for winter use than others; because ice can result in cracks and leaks, water sources made out of concrete should be stored or covered in winter.

Next, incorporating shelter is essential; include dense vegetation and / or brush piles to offer safe spaces for birds to nest or seek refuge throughout the seasons (Birds Canada, n.d.). Evergreen shrubs and trees are especially valuable over the winter as they retain their leaves and offer protection from harsh weather (Cornell Lab of Ornithology, n.d.). Brush piles, which can be built from yard waste like woody debris and leaf litter, provide additional hiding spots for birds (Cornell Lab of Ornithology, n.d.). Over time, the decaying wood attracts insects for birds to feed on and returns nutrients to the soil (U.S. Fish and Wildlife Service, 2023). The <u>Ottawa</u> <u>Field Naturalists' Club</u> provides a great resource to learn how to build your own brush pile. Beyond these core elements, additional practices can enhance the garden's appeal to birds. Organic gardening without pesticides or herbicides, leaving plant stems and seed heads intact, leaving fallen leaves, keeping cats indoors, and using birdcollision prevention markers on reflective surfaces can all support and attract a richer diversity of bird life (Birds Canada, n.d.; Goddard et al., 2010; Burghardt et al., 2009; Daniels & Kirkpatrick, 2006; French et al., 2005).



Habitat log in Hillcrest Meadow. Lister, 2024

HOW CAN YOU MAKE YOUR GARDEN SAFE FOR BIRDS?

Above all, if you want to attract birds to your garden, you must first make sure your garden is bird-safe! Plant selection, gardening practices, and environmental hazards are all crucial elements which can impact whether your garden is considered safe for birds. There are many small changes you can make to gradually transform your garden to not only attract birds, but ensure their safety as well.

The following are some general tips and useful links for ensuring your garden is safe for birds:

 Apply a dense pattern of visual markers at least 2" by 2" apart on glazed surfaces like windows and glass balcony railings to prevent collisions (FLAP Canada Commercial and Institution Solutions or Safe Wings Ottawa Best Practices).

- Bird feeders should be placed either 10 feet away from, or within 1.5 feet of windows / glass to reduce risk of injuries from collisions by reducing potential for birds to build up momentum before impact. (BirdSafe Home Safe for Birds Guide is a great resource for additional information on guidelines for window visual markers and bird-feeder placement). Applying insect screens on the outside of windows can also reduce the risk of injuring birds.
- Never place unmarked reflective mirrors outside.
- Ensure all outdoor lighting is <u>Dark-Sky</u> <u>compliant</u>, is not excessively bright and does not cast light up into the night sky; light timers and occupancy sensors can reduce impacts of light pollution on birds and insects birds depend on for food.
- Install a water feature with circulation (e.g., a fountain or pond) to attract and sustain birds during warmer weather.
- Regularly empty and sanitize feeders and baths, before each refill, and monitor visitors for signs of disease - removing feeders if necessary (<u>Bird Canada Tips for Keeping</u> <u>Feeder Birds Healthy</u>).
- Bird water sources should be placed on elevated surfaces (3 to 4 feet above the ground) and surrounded by twigs, pinecones, or prickly yard trimmings to deter cats.
- Remove potential entanglement hazards such as loose netting, plastic decorations or stringy material. This includes introduced plant species that may entangle small birds (e.g., burdock plants). It is not recommended to provide anything but natural substrates (e.g., grass, leaves) for nesting material; never provide birds with yard, pet fur or hair.
- Avoid using pesticides including rodent poison; instead, remove rodent attractants and exclude rodents from entering buildings and waste storage facilities. See more: <u>Bird Friendly London Responsible Pest</u> <u>Management, Saskatchewan Network</u>

for Alternatives to Pesticides (SNAP) and Rodenticide Free Ontario.

• Partake in <u>World Migratory Bird Day</u> activities.



Pileated woodpecker on habitat log. Craig Sinclair, 2022

HOW CAN YOU ENCOURAGE MIGRATORY BIRDS TO VISIT YOUR GARDEN IN SPRING?

There are many actions you can take to encourage birds to visit your garden during spring migration. The earliest migratory birds to return each spring have strategies to find food while the temperatures are still cool. Spring can be a stressful time for some migratory birds as they may find it difficult to forage food or build a nest. An easy way to help migratory birds is to establish a bird feeder in your garden - most importantly using a mix of ingredients to attract them. Nature Canada has an article all about preparing your bird-friendly feeding mix in your garden! In addition to increasing availability of resources for foraging, providing spots for birds to seek refuge, and enhancing plant diversity are beneficial strategies that have been proven effective at attracting migratory birds into urban gardens early during the spring season (Cerra & Crain, 2016; Kos et al., 2021).

96 percent of bird species that live on land in North American depend on insects for at least part of their diets at some point in their life cycle (Tallamy and Shriver, 2021). Indeed, baby birds mostly depend on high-protein insects for food. Many insects that birds will forage for their offspring during the breeding season will not emerge until after frost passes (Bale & Hayward, 2010). In the meantime, birds will search for insects in their hiding places: under fallen leaves, buried in soil, tucked inside plant stems, below the outer layer of tree bark, and so on (Holmes & Robinson, 1988). By electing to leave natural elements of your garden from the fall into the winter, (e.g., fallen leaves and dead logs), you can provide suitable hiding places for insects to burrow and complete their life cycle (Wheeler et al., 2024). In turn, birds will recognize these substrates as foraging sites to return to in the spring. Where migratory birds find success with overwintering, foraging and breeding, they may return in subsequent years to familiar territory (e.g., Figueira et al., 2020; Kelly et al., 2019.)

Plant selection can make a big difference for attracting birds to your garden. Choose to cultivate specific plants that provide foraging and nesting opportunities for birds, including seeds, fruit and nectar. Native species provide better quality forage for birds in terms of nutrients and fats compared to introduced species (Gallinat et. al., 2020). Consideration of seasonality is also crucial. Think about which plants have early flowering times (Salmonberry, Virginia Bluebell, etc.) to ensure a supply of food when migratory birds arrive in the spring, and other plants that hold their fruit into the winter (e.g., crabapple, huckleberry, etc.). Summertime tends to be the period of the year when edible plants and insects are most abundant and accessible to birds in nature. For more good garden practices, visit the Gardening for Biodiversity resources page, on the Ecological Design Lab website.

ADDITIONAL RESOURCES:

- <u>Bird Friendly London Bird Friendly</u>
 <u>Landscaping</u>
- <u>Bird Friendly London Responsible Pest</u>
 <u>Management</u>
- Birds Canada: Bird Gardens
- Birds Canada: Episode 1 | Why Garden for Birds?
- Birds Canada: Episode 2 | Attract Birds
 Year-round
- Birds Canada: Episode 3 | Add Diversity to Your Garden
- Birds Canada: Episode 4 | Planning Your Bird Garden
- Birds Canada: Episode 5 | Protect Birds at Home
- <u>Canadian Wildlife Federation: Attracting Birds</u> to Your Garden
- Ecological Design Lab: Bird-Safe City Project
- FLAP Canada: Backyard for Birds
- FLAP Canada: Useful Links + Resources
- <u>Cornell Bird Lab: Bird Friendly Winter</u> <u>Gardens</u>
- Cornell Bird Lab: Plants Poster
- Cornell Bird Lab: Bird Academy
- <u>Government of Canada: Frequently asked</u> <u>questions on Bird collisions with glass</u> <u>windows</u>
- Fletcher Wildlife Garden: Creating a Garden
 Safe for Birds

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