



Native Plant List for Migrating Birds



*Use this list to select plants that will attract and support
migrating birds in your landscape*



Photo: Ann Harkness



Photo: Virginia (Emily) Sanderson

Bird Migration and Stopover Habitat

During spring and fall more than 120 species of landbirds move through the urban regions of the Credit River watershed. They make these long and difficult journeys between their winter homes in the south and their breeding grounds in the north so they can take advantage of the abundant insects and lower competition in Canada while they raise their young. During this movement, known as migration, birds need stopover locations where they can rest, refuel and be protected from threats such as cats, collisions with buildings and poor food supplies.

Steep declines in many bird species means there is a need for high quality stopover habitat that provides food and safe resting places. In spring, many birds rely on spiders and insects such as caterpillars, flies, bees and midges to give them the energy to travel to their next stopover site. Native insects have evolved with native plants over hundreds or thousands of years, often growing to depend on those plants for food, shelter or other resources not provided by non-native species. Non-native plants support very few insect species compared to native ones. For example serviceberry supports 124 species of caterpillar, while lilacs only support 40 species. Many birds will also add berries and seeds as part of their diet during fall migration.

Increasing the number of native plants in home landscapes and planting beds on commercial properties and other urban locations can provide these essential resources. This plant list can be used for planning a variety of landscape and garden projects to help migrating birds as they move through the city.

For additional plant information including preferred soils, flower colours and more, refer to CVC's landscaping plant lists: Native Woodland Plants (www.creditvalleyca.ca/woodlandplants) for Landscaping and Native Prairie and Meadow Plants for Landscaping (www.creditvalleyca.ca/prairiemedowplants).



Eastern Bluebird with Cedar Waxwings

Photo: Plumepics

Choosing Your Plant

This list recommends plants that support migratory birds by providing food, shelter and resting opportunities in gardens and landscaped areas. The list has been divided into six categories:

1: Height

In natural woodlands and forests you will notice different heights or layers of plants. Selecting plants from two or more layers of vegetation can increase the number of birds that use the site:

- tall trees (greater than 23 m)
- medium trees (15 to 23 m)
- small trees (10 to 15 m)
- large shrubs (6 to 10 m)
- medium shrubs (4 to 6 m)
- small shrub (2 to 4 m)
- very small shrub (less than 2 m)
- ground cover/vines

2: Name

Within each height category, plant names are sorted alphabetically by common name, with both the common and scientific names given.

3: Rank

Plants within each height category have been ranked to show which plants provide the most benefit to migratory birds (one being the highest rank). Ranking was determined based on the following characteristics, which contribute toward providing food, shelter and resting sites during migration:

- branch density
- number of butterfly and moth species supported (during larval and adult stages)
- support for birds, small mammals, bees or other insects
- number of bird foraging guilds it can support
- timing and abundance of fruit and seeds



Restoration Projects and Planting in Regulated Areas

Restoration projects and those requiring a CVC permit must use common species native to the Credit River watershed. Common native plants on this list are those *without* an asterisk. For a complete list of approved plants for CVC planning applications and restoration projects refer to:

www.creditvalleyca.ca/plantselectionguide.

4: Bird Families That May Use Plant

This section provides examples of bird families that may use a plant based on their food and foraging preference.

5: Foraging Guild

Birds are sometimes grouped into categories or **guilds** based on their eating or **foraging** habits. This section indicates which bird foraging guilds each plant supports. There are 11 foraging guilds listed:

- Aerial Insectivore – eats insects while flying through the air e.g. swallows
- Bark Insectivore – eats insects on or behind tree bark e.g. woodpeckers
- Upper Canopy Insectivore – eats insects high in the trees e.g. warblers
- Upper Canopy Grainivore – eats seeds high in the trees e.g. jays
- Upper Canopy Frugivore – eats fruit high in the trees e.g. orioles
- Lower Canopy Insectivore – eats insects in the lower part of trees and in shrubs e.g. chickadees
- Lower Canopy Grainivore – eats seeds in the lower part of trees and in shrubs e.g. cardinals
- Lower Canopy Frugivore – eats fruit in the lower part of trees and in shrubs e.g. robins
- Ground Insectivore – eats insects on the ground e.g. blackbirds
- Ground Grainivore – eats seeds on the ground e.g. sparrows
- Ground Frugivore – eats fruit on the ground e.g. finches

Choosing plants that support several guilds will increase the number and diversity of birds supported.



Choke Cherry in bloom



Choke Cherry berries



Choke Cherry buds

6: Plant Phenology

This section lists the timing or **phenology** of a plant. It describes when a plant will leaf-out, drop leaves, flower and fruit with respect to early, mid and late spring and fall migrations.

Choosing a group of plants with different phenology during spring and fall migration will maximize the food available throughout migration and increase the likelihood of bird survival during this critical period.

When choosing plants:

- Make sure each plant matches your site conditions by referring to CVC's landscaping plant lists, which contain information on sun exposure, soil type and moisture. See page 3.
- For large-scale projects, such as forest restoration, focus on creating a diverse canopy of varying heights with plants that develop at different times in order to support a larger number of birds over the entire length of migration.
- For small-scale projects such as backyard landscaping, focus on choosing plants with a higher rank (closer to one) to maximize the benefit your planting has for birds.



Baltimore Oriole - Upper Canopy Frugivore



Northern Flicker - Ground Insectivore



Wilson's Warbler - Upper Canopy Insectivore



Ruby-crowned Kinglet



Purple Finch



Blue-headed Vireo

Examples of bird families that may use plant

	Common Name	Scientific Name	Rank	
Medium Trees	Poplar, Balsam	<i>Populus balsamifera</i>	5	Creepers, Vireos
	Spruce, White	<i>Picea glauca</i>	3	Doves, Finches
	Tamarack Other name: American Larch	<i>Larix laricina</i>	2	Sparrows, Finches
	Willow, Peach-leaved*	<i>Salix amygdaloides</i>	4	Flycatchers, Warblers
Small Trees	Blue-beech Other name: Muscledwood	<i>Carpinus caroliniana</i>	6	Kinglets, Vireos
	Cherry, Choke	<i>Prunus virginiana</i>	1	Thrushes, Woodpeckers
	Cherry, Pin	<i>Prunus pensylvanica</i>	2	Mimics, Waxwings
	Hop-hornbeam, Eastern Other name: Ironwood	<i>Ostrya virginiana</i>	5	Kinglets, Vireos
	Redbud, Eastern*	<i>Cercis canadensis</i>	4	Hummingbirds, Cuckoos
	Sumac, Staghorn	<i>Rhus typhina</i>	3	Grosbeaks, Cardinals

	Aerial Insectivore	Bark Insectivore	Upper Canopy Insectivore	Upper Canopy Grainivore	Upper Canopy Frugivore	Lower Canopy Insectivore	Lower Canopy Grainivore	Lower Canopy Frugivore	Ground Insectivore	Ground Grainivore	Ground Frugivore	Spring Migration Foliage			Spring Migration Flowering			Spring Migration Fruiting			Fall Migration Foliage			Fall Migration Fruiting		
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Eastern Bluebird

Photo: Syd Phillips



Lincoln's Sparrow

Photo: Kelly Colgan Azar



Winter Wren

Photo: Kelly Colgan Azar

Examples of bird families that may use plant

	Common Name	Scientific Name	Rank	
	Small Shrubs	Meadowsweet, White	<i>Spiraea alba</i>	1
New Jersey Tea*		<i>Ceanothus americanus</i>	4	Kinglets, Flycatchers
Raspberry, Black		<i>Rubus occidentalis</i>	2	Mimics, Towhees
Raspberry, Purple-flowering		<i>Rubus odoratus</i>	4	Towhees, Tanagers
Raspberry, Wild Red		<i>Rubus idaeus ssp. strigosus</i>	5	Sparrows, Tanagers
Rose, Carolina*		<i>Rosa carolina spp. carolina</i>	5	Swallows, Thrushes
Rose, Smooth		<i>Rosa blanda</i>	7	Waxwings, Kinglets
Serviceberry, Low Other name: Running Serviceberry		<i>Amelanchier spicata</i> Former scientific name: <i>Amelanchier stolonifera</i>	4	Bluebirds, Towhees
Snowberry, Common*		<i>Symphoricarpos albus var. albus</i>	5	Cuckoos, Bluebirds
Spiraea, Hardhack* Other name: Steeplebush		<i>Spiraea tomentosa</i>	6	Flycatchers, Sparrows
St. John's-wort, Kalm*		<i>Hypericum kalmianum</i>	7	Finches, Towhees
Viburnum, Maple-leaf	<i>Viburnum acerifolium</i>	2	Chickadees, Orioles	

	Aerial Insectivore	Bark Insectivore	Upper Canopy Insectivore	Upper Canopy Grainivore	Upper Canopy Frugivore	Lower Canopy Insectivore	Lower Canopy Grainivore	Lower Canopy Frugivore	Ground Insectivore	Ground Grainivore	Ground Frugivore	Spring Migration Foliage			Spring Migration Flowering			Spring Migration Fruiting			Fall Migration Foliage			Fall Migration Fruiting				
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Rusty Blackbird



Sedge Wren



Barn Swallow

Examples of bird families that may use plant

Ground cover/Vines	Common Name	Scientific Name	Rank	
	Bittersweet, American	<i>Celastrus scandens</i>	3	Hummingbirds, Finches
Creepers, Thicket Other name: Virginia Creeper	<i>Parthenocissus inserta</i>	3	Warblers, Sparrows	
Creepers, Virginia*	<i>Parthenocissus quinquefolia</i>	3	Bluebirds, Mimics	
Dewberry, Northern*	<i>Rubus flagellaris</i>	2	Mimics, Sparrows	
Grape, Riverbank	<i>Vitis riparia</i>	1	Mimics, Orioles	
Partridge-berry*	<i>Mitchella repens</i>	4	Swallows, Wrens	
Strawberry Bush, Running*	<i>Euonymus obovatus</i>	5	Swallows, Bluebirds	
Virgin's-bower* Other name: Virginia Virgin's-bower	<i>Clematis virginiana</i>	4	Swallows, Blackbirds	
Wintergreen Other name: Eastern Teaberry	<i>Gaultheria procumbens</i>	5	Swallows, Wrens	

Aerial Insectivore	Bark Insectivore	Upper Canopy Insectivore	Upper Canopy Grainivore	Upper Canopy Frugivore	Lower Canopy Insectivore	Lower Canopy Grainivore	Lower Canopy Frugivore	Ground Insectivore	Ground Grainivore	Ground Frugivore	Spring Migration Foliage			Spring Migration Flowering			Spring Migration Fruiting			Fall Migration Foliage			Fall Migration Fruiting		
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Sources

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- 2009. Tallamy, Douglas. *Bringing Nature Home: How You Can Sustain Wildlife with Native Plants*. Portland, Oregon: Timber Press.
- 2014 (last accessed). USDA, NRCS. *The PLANTS Database* (plants.usda.gov). Baton Rouge, LA: National Plant Data Center.

Credit Valley Conservation landscaping information and programs

CVC offers programs and resources that support native plant gardening, landscaping and naturalization.

Your Green Yard offers workshops and presentations on native plant gardening and landscaping to local residents within the Credit River watershed.

www.creditvalleyca.ca/gyg

Greening Corporate Grounds offers advice, landscape concept plans and planting events to businesses and institutions within the Credit River watershed.

www.creditvalleyca.ca/gcg

Countryside Stewardship offers workshops as well as technical and financial assistance to support rural environmental stewardship.

www.creditvalleyca.ca/countrysidestewardship

For additional landscaping fact sheets and resources, visit www.creditvalleyca.ca/landscaping



Additional Resources

Birds:

- CVC's Native Plant List for Breeding Birds (www.creditvalleyca.ca/plantsforbreedingbirds)
- Cornell Lab of Ornithology bird guide (www.allaboutbirds.org/guide/search)
- Celebrate Urban Birds (celebrateurbanbirds.org/)
- Bird Studies Canada (bsc-eoc.org/)
- FLAP (www.flap.org/)

Gardens:

- How to Create Bird Friendly Gardens (www.creditvalleyca.ca/birdgardens)
- Native Woodland Garden for Homes (www.creditvalleyca.ca/reswoodland)
- Native Woodland and Forest Plantings for Businesses and Institutions (www.creditvalleyca.ca/corpwoodland)
- Native Prairie and Meadow Gardens and Landscapes for Homes, Businesses and Institutions (www.creditvalleyca.ca/prairiameadow)
- Yard Map (<http://content.yardmap.org/>)

Migratory bird checklist

This is a list of landbirds that have been recorded during spring and fall migration in urban areas within the Credit River watershed. Use this checklist to keep track of birds you see throughout spring and fall migration in your backyard, at work or around the city.

Vultures

- Turkey Vulture

Ospreys

- Osprey

Hawks

- Northern Harrier
- Sharp-shinned Hawk
- Cooper's Hawk
- Red-tailed Hawk

Plovers

- Killdeer

Sandpipers

- American Woodcock

Pigeons and Doves

- Rock Pigeon
- Mourning Dove

Cuckoos

- Black-billed Cuckoo

Owls

- Eastern Screech Owl

Nightjars

- Common Nighthawk

Swifts

- Chimney Swift

Hummingbirds

- Ruby-throated Hummingbird

Kingfishers

- Belted Kingfisher

Woodpeckers

- Red-bellied Woodpecker
- Yellow-bellied Sapsucker
- Downy Woodpecker
- Hairy Woodpecker
- Northern Flicker
- Pileated Woodpecker

Falcons

- American Kestrel
- Merlin
- Peregrine Falcon

Tyrant Flycatchers

- Eastern Wood-pewee
- Yellow-bellied Flycatcher
- Alder Flycatcher
- Willow Flycatcher
- Least Flycatcher
- Eastern Phoebe
- Great Crested Flycatcher
- Eastern Kingbird

Vireos

- Blue-headed Vireo
- Philadelphia Vireo
- Warbling Vireo
- Red-eyed Vireo

Jays and Crows

- Blue Jay
- American Crow

Larks

- Horned Lark

Martins and Swallows

- Purple Martin
- Tree Swallow
- Northern Rough-winged Swallow
- Bank Swallow
- Cliff Swallow
- Barn Swallow

Chickadees

- Black-capped Chickadee

Nuthatches

- Red-breasted Nuthatch
- White-breasted Nuthatch

Creepers

- Brown Creeper

Wrens

- House Wren
- Winter Wren
- Carolina Wren

Gnatcatchers

- Blue-gray Gnatcatcher

Kinglets

- Golden-crowned Kinglet
- Ruby-crowned Kinglet

Thrushes

- Eastern Bluebird
- Veery
- Swainson's Thrush
- Hermit Thrush
- Wood Thrush
- American Robin

Mimics (Mockingbirds and Thrashers)

- Gray Catbird
- Brown Thrasher
- Northern Mockingbird

Starlings

- European Starling*

Waxwings

- Cedar Waxwing

Buntings

- Snow Bunting

Wood Warblers

- Ovenbird
- Northern Waterthrush
- Blue-winged Warbler
- Black-and-white Warbler
- Tennessee Warbler
- Nashville Warbler
- Connecticut Warbler
- Mourning Warbler
- Common Yellowthroat
- Hooded Warbler

- American Redstart
- Cape May Warbler
- Cerulean Warbler
- Northern Parula
- Magnolia Warbler
- Blackburnian Warbler
- Yellow Warbler
- Chestnut-sided Warbler
- Blackpoll Warbler
- Black-throated Blue Warbler
- Palm Warbler
- Pine Warbler
- Yellow-rumped Warbler
- Black-throated Green Warbler
- Canada Warbler
- Wilson's Warbler

New World Sparrows

- Eastern Towhee
- American Tree Sparrow
- Chipping Sparrow
- Field Sparrow
- Vesper Sparrow
- Savannah Sparrow
- Fox Sparrow
- Song Sparrow
- Lincoln's Sparrow
- Swamp Sparrow
- White-throated Sparrow
- White-crowned Sparrow
- Dark-eyed Junco

Cardinals

- Scarlet Tanager

- Northern Cardinal
- Rose-breasted Grosbeak
- Indigo Bunting

Blackbirds and Orioles

- Bobolink
- Red-winged Blackbird
- Eastern Meadowlark
- Rusty Blackbird
- Common Grackle
- Brown-headed Cowbird
- Orchard Oriole
- Baltimore Oriole

Finches

- House Finch*
- Purple Finch
- White-winged Crossbill
- Pine Siskin
- American Goldfinch

Old World Sparrows

- House Sparrow*

* Non-native species



Photo: Fyn Kynd



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