GARDENS THAT HELP NATIVE SPECIES THRIVE

Welcome Garden Guide



InTheZoneGardens.ca

In the Zone looks at your garden as an important element of creating a healthy and resilient future for native species and people living in southern Ontario's Carolinian Life Zone. The program invites both new and seasoned gardeners to create habitat that will help native wildlife thrive and reverse the biodiversity loss occurring in this region. When you join In the Zone, you will connect with a community of gardeners creating a healthy, resilient neighbourhood for all, one yard at a time. In the Zone creates the opportunity for you to:

- Cultivate healthy natural habitat for native species and your family
- · Start or expand natural neighbourhood networks
- Track your influence on biodiversity and the health of your yard and neighbourhood
- Connect with neighbours and celebrate healthy landscapes in your community



The Welcome Garden Guide gives you the information to get started on your own In the Zone Garden.

Sign up today at InTheZoneGardens.ca

Why Your Garden Counts

The Carolinian Life Zone in southern Ontario is the southernmost region of Canada. The biologically rich ecosystems in the Carolinian Zone, including forests, wetlands, tallgrass prairie and oak-pine savannah, occur nowhere else in Canada and contain the highest number of rare, threatened and endangered species in this country.

The Carolinian Zone is a place where familiar plants and animals, like White Pine, Sugar Maple, White Oak, Pileated Woodpecker, and Red Fox mingle with more southern species, like Tulip Tree, Butternut, Acadian Flycatcher, Yellow-Billed Cuckoo, Southern Flying Squirrel, and Eastern Hog-nosed Snake – species which are at their most northern range limit in southern Canada. But the Carolinian Zone is also considered by biologists as Ontario's most threatened ecological region!

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Did You Know?

- The Carolinian Zone occupies < 1% of Canada's total land area, but is home to 25% of its people.
- Woodland cover has been reduced from 80% to 11% overall and in some places is less than 3%.
- Wetlands once covered almost 25% of the land but represents about 5% now.
- Southern Ontario is the most fragmented landscape in Canada.
- Over 1/3 of all Canada's species at risk are found in the Carolinian Zone.
- Over 95% of the land in southern Ontario is privately owned.

What is Rare in the Carolinian Zone?

Over 165 of Canada's 521 species at risk are found in the Carolinian Life Zone.

Species at risk are defined by the provincial government as "any naturally-occurring plant or animal in danger of extinction or of disappearing from the province". Over 500 additional species and habitats in the Carolinian Zone are considered "rare" by international standards but most are not legally protected. Some, such as migratory waterfowl, may be protected by other legislation.

Species become at risk due to a number of reasons, like habitat loss, pollution, and invasive alien species.

COSEWIC Status	Definition	Carolinian Zone examples (2017)	
Extinct	No longer exists anywhere in the world	• Blue Pike	• Passenger Pigeon
Extirpated	No longer exists in the wild in Ontario but lives elsewhere	• Blue-eyed Mary • Gravel Chub	• Karner Blue Butterfly
Endangered	Facing imminent extinction or extirpation	• American Chestnut • Monarch	• American Badger • Spotted Turtle
Threatened	At risk of becoming endangered	• Gray Fox • Whip-poor-will	Kentucky Coffee-Tree
Special Concern	Sensitive to human activities or natural events	• Broad Beech Fern • Short-eared Owl	• Milksnake

Restoring Habitat in the Carolinian Zone One Yard at a Time

In the Carolinian Zone, we need to double the levels of natural cover to meet targets recommended by conservation scientists for a healthy landscape. In fact, thriving communities need 30-50% natural cover for healthy, resilient landscapes. This target can be met if we include home gardens and private land as part of the solution and integrate the protection of habitat for native wildlife one yard at a time.

Gardening is one of the most popular ways that Canadians connect with nature. Your garden can play a vital role in helping native species thrive now and in the future.



Please join In the Zone today!

lt's easy to join In the Zone

Sign up through **InTheZoneGardens.ca** to receive your invitation to register your garden.

Then you can start helping native species thrive!

Welcome to My Garden — Ruth's Story



"I love watching the Bloodroot in the spring when its leaves uncurl. You can witness things in your yard that are hard to spot on nature trails. We have the endangered Giant Swallowtail Butterfly because we planted three Hop Trees three years ago. The caterpillars look like bird poop!

I started with a Victorian garden and transformed it to one with native plants. Now I've got a whole ecosystem growing. I love that it supports so many animals from toads to butterflies and birds. I don't get all those invasive pests anymore. Native plants look after themselves!"

Ruth's Wildlife Tip

Whether you are starting from scratch or rejuvenating an established garden, select native nectar-producing plants that support disappearing butterfly species in the Carolinian Zone to discover some hidden wildlife gems. You can witness a change in wildlife visiting your yard in just one season.

Three Steps to Creating Your In the Zone Garden





Save What You Have—Your Garden Worksheet

Identify the biodiversity that you currently have or could easily attract to your garden. Calculate your Biodiversity Score to help you decide which In the Zone Garden Guide to download when you register your garden. **Count the total number** of natural elements per category to find out your biodiversity score — a higher number can help you choose.

CAROLINIAN ZONE PLANTS — What local wild (i.e. native) plants do you have?						
WOODLANDS	SHRUBS & VINES	POND & WETLANDS	MEADOW & PRAIRIE			
 Tulip Tree Spicebush White Pine Trillium Other trees or spring wildflowers: 	 Dogwood Sumac Wild Grape Virginia Creeper Other shrubs or vines: 	 Cattail Fragrant Water Lily Marsh Marigold Rushes Great Blue Lobelia Swamp Milkweed Other plants that like 'wet feet': 	 Milkweed Grey headed coneflower Big Bluestem grass Other pollinator plants: 			
WILD NEIGHBOURS — What w	ildlife have you seen in your yar	d or neighbourhood?				
 Eastern Chipmunk Owls Woodpeckers Red-backed Salamander Spicebush Swallowtail Other tree-dwellers: 	 Chickadee Swallowtail Butterfly Ruby-throated Hummingbird Carolina Wren Other thicket-dwellers: 	 American Toad Green Frog Dragonflies Painted Turtle Blue Heron Ducks Other water-lovers: 	 Bees Butterflies Hummingbird Clearwing (moth) Eastern Milksnake Meadow Vole Other meadow dwellers: 			
RARE SPECIES — What rare species do you have or have you seen nearby?						
 Hop Tree American Chestnut Southern Flying squirrel Other: 	 Eastern Flowering dogwood Purple Martin Other: 	 Bullfrog Spotted Turtle Snapping Turtle Other: 	 Monarch butterfly Eastern Hog-nosed Snake Rusty-patched Bumblebee Other: 			
HABITATS — What types of habitats does your yard offer?						
 Old growth tree(s) Tree canopy Swamp Other: 	 Hedgerows Thickets Vines Other: 	 Marsh Swamp Bog Other: 	 No-Mow zones Native plant meadow Wet meadow Other: 			
Total Woodlands	Total Shrubs & Vines	Total Pond & Wetlands	Total Meadow & Prairie			



Steward your Landscape — Set Your Goals & Register Your Garden

The beauty about living in the Carolinian Zone is that you can create a natural oasis for native species and a personal retreat for your family. Canadian wildflowers and other native plants are so diverse and fascinating that you can easily customize your In the Zone Garden.

Check Your Garden Goals along with your Biodiversity Score to choose which In the Zone Garden Guide to download. You can start from scratch or transform an existing green space or garden. The Garden Guide will suggest choices to create healthy habitat for native species.

You can also consider the following when making your choice:

Plants: Start with a few native plants or be 100% Canadian.

Enhance Quality: Choose organic and natural gardening methods to make your garden wildlife friendly and healthier for people.

Through the Seasons: Provide wildlife with year-round food and shelter, or create a seasonal rest stop or food supply for those just passing through. **Structures**: Your garden can include diverse and innovative habitat structures like bird houses, perches, ponds, toad houses.

Harmony: You can decide on a balance between nature and cultivation that suits you. You may want to start with one Carolinian wildflower or you may want to jump right in and help nature in a big way. This balance may evolve over time as you experiment with native plants. Your garden will have its own unique personality to reflect your taste, time and vision.

Connectivity: Together with your neighbours you are helping to create a natural network of healthy ecosystems even if your gardens are not directly connected. You can also collaborate to create mini greenways to traverse boundaries, connect nearby habitats and protect wildlife from urban threats.

Resilience: Healthy biodiversity builds ecosystem resilience which is even more important as our climate changes. The changes you make to your yard can act as a buffer to extreme weather events, higher temperatures, droughts and floods.

Safety: Be aware of plants that are toxic vs. edible. The Carolinian Zone has the greatest diversity of plants in Canada and many that look alike, so consult an expert when needed.

Leave a Legacy: Grow a Climate-Smart Garden

Your garden can help you reduce the impacts from climate change, including extreme weather, flooding, droughts and heat waves. The In the Zone Tracker will help you track your garden's contribution to resilient landscapes, wildlife adaptation, healthy ecosystems and a green future for you and your neighbourhood. Each Garden Guide offers tips on using trees, plants, soil, water features, and topography to: Build Diversity, Connect Landscapes, Conserve Water, Conserve Energy, Reduce Impacts of all Stressors, and Garden Adaptively.

YOUR GARDEN GOALS

SAVE THE EARTH	GROW A HEALTHY YARD	SAVE MONEY	MANAGE
Watch wildlife	Get outside	Low maintenance	Enhance curb appeal
Grow local	Relax	Share native plants	Create shady spaces
Help ecosystems	Create beautiful spaces	Conserve water	Contain wet areas
Climate proof your yard	Family fun	Conserve energy	Nurture dry areas
Share your love of nature	Connect with neighbours	Increase property value	Set healthy boundaries
	Forage for wild edibles	Deter pests	



Step 3 Seed local native plants and watch your garden grow

Once you register your garden with In the Zone and use your Garden Guide, you will begin to transform your yard to a place that supports native species and wildlife.

At this point you can:

- Track the transformation in your garden using the In the Zone Tracker
- Link your results to Big Picture science
- Share your experience through community connections
- Be part of a network of healthy neighbourhoods across the Carolinian Zone
- Prepare your yard for climate change

Your garden will also help to advance a healthy conservation strategy across the Carolinian Zone.

Explore More

Some books to inspire you:

Bringing Nature Home:

How You Can Sustain Wildlife with Native Plants, Douglas W. Tallamy, Timber Press, 2009 (updated)

Garden Revolution:

How our landscapes can be a source of environmental change, Larry Weaner & Thomas Christopher, Timber Press, 2016

The Natural Treasures of Carolinian Canada:

Discovering the Rich Natural Diversity of Ontario's Southwestern Heartland, edited by Lorraine Johnson, Lorimer Publishing, 2007

Biophilic Cities:

Integrating Nature into Urban Design and Planning, Timothy W. Beatley, Island Press, 2010

In the Zone is a collaborative initiative of WWF-Canada and Carolinian Canada



Some websites to visit:

Carolinian Canada:

Carolinian Species & Habitats http://caroliniancanada.ca/legacy/SpeciesHabitats.htm

Status of species by international standards are listed by the Ontario Natural Heritage Information Centre <u>http://www.nhic.mnr.gov.on.ca</u>



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