Native Plants & Your Yard

Can your suburban lot become a place of beauty, a home to wildlife and an important ecological landscape? YES!







Make your mark! Learn how by taking a look inside…

The Silverhill Institute of Environmental Research and Conservation was established as a registered Canadian charitable foundation in 2004. The Silverhill Institute seeks to fill the need of providing balanced environmental information and guidance to encourage individual action to protect and enhance the environment.

The objectives of the Institute are to:

- focus on current environmental issues and to provide realistic and practical advice to stimulate individual action
- to provide balanced information amongst the array of multiple competing advocacy positions
- to support environmental stewardship through individual action to protect and enhance woodlots and wetlands

This brochure has been developed for the Silverhill Institute by Ms. Antonietta Minichillo, Toronto, Ontario. The views expressed are those of the author. The information provided in this brochure was compiled from a number of sources and personal experiences. This brochure is intended to provide advice and direction to individuals and families in new suburban developments on how to personalize their residential spaces in an environmentally appropriate and cost effective manner.

For additional information on the Silverhill Institute of Environmental Research and Conservation, please visit our website – www.silverhillinstitute.com

Native Plants

A positive gardening trend over the last few years has been the increased interest in native plant gardening. People across Canada are looking to the natural landscape for inspiration in their gardens; they are transforming their front and back yard landscapes based on natural models.

> " In the end we conserve only what we love. We will love only what we understand. We will understand what we are taught..."
>
> - Baba Dioum

The loss of habitat as a result of rapid urbanization in Ontario is affecting ecosystem health and reducing the diversity of native plants and wildlife in natural areas. Because 90 percent of the land in southern Ontario is privately owned, reducing loss of green space can only be achieved with the help of landowners. As more and more habitat is lost, every little bit that gardeners do to create habitat becomes increasingly important to our wild fauna.

If a complete switch to native plants seems daunting, start small by incorporating a few native species amongst cultivated ones, and add more gradually. Plant several native shrubs, or create a native woodland plant community underneath your trees. You can also replace your lawn with native groundcovers. It is up to you!

Our task is to simply bring a bit of wilderness to the cultivated context of the garden.

What about the neighbours?

Your native plant garden can be as formal looking as you choose to make it. However, some people are worried when they start gardening with native plants that the neighbours might complain or that the garden won't fit in with others in the neighbourhood. Consider this an extra incentive to make your native garden a place of beauty.

Let your neighbours know of your plans. Your native plant garden can be used to educate others about the ease and beauty of native plants. You may also want to align your plans with those of your neighbours for a collective effort which will create beautiful garden areas as well as attract and sustain wildlife.

As you start gardening with native plants, remember that they include not only native wildflowers but also mosses, lichens, ferns, vines, grasses, shrubs and trees. You will find the model on which to plan your garden by exploring local natural areas, learning to identify the native plants that live there, and understanding how they relate to one another and to local conditions.

Advantages of Native Plants

A lawn and non-native plants do not provide much habitat for wildlife. Instead of making an ecosystem richer and more diverse, non-native plants often simplify it, erasing complex rhythms and interactions. So enjoy your tulips but consider planting native plants to enrich your landscape and help put back some of the ecological pieces.

Why native plants are a better choice:

- **Native plants require less maintenance because they are adapted to the local environment and therefore require less care in the form of fertilizer and irrigation.**
- **Native plants are less susceptible to disease and pests. They have evolved with local insects and plants, developing defenses that allow them to coexist. As plants are domesticated, they become more susceptible to disease, insect pests and weeds, and are therefore more dependent on the use of pesticides and other chemicals in order to survive.**
- **Native plants are better suited to meet the needs of local wildlife. They provide valuable food sources and shelter for wildlife. Many non-native flowers have been bred for showiness and may have lost much of their nectar and pollen characteristics.**

- **Some wildlife species are entirely dependent on the availability of certain native plants. Local wildlife evolved, not in isolation, but with the native vegetation. This wildlife has adapted to survive in dependence on the existing plant life. While some wildlife is flexible in their choice of food plants, others are dependent on the availability of a specific plant for their survival. By choosing plants native to your region you support local wildlife.**
- **Indigenous gardens are affordable, and most importantly, the plants are resilient and beautiful!**

To learn about the plants native to your region look at:

- **The Plant Encyclopedia at www.wildaboutgardening.org**
- **The North American Plant Society www.nanps.org**
- **Check out the books and articles listed at the end of this brochure**

A Sample of Easy-to-Grow Native Plants for the Ontario Region

Bee Balm – *Monarda didyma*

Height: 2-5 feet (60-150cm)
Blooming Period: early to mid-summer
Exposure: partial shade to full sun
Wildlife: bees, butterflies and hummingbirds
Appx. Cost: $2.99 per plant

Black-eyed Susan – *Rudbeckia hirta*

Height: 1-3 feet (30-90cm)
Blooming Period: summer to fall
Exposure: full sun to partial shade
Wildlife: bees and butterflies
Appx. Cost: $3.00 per pack (50 seeds) or $4.95 per plant

Butterfly Weed – *Asclepias tuberosa*

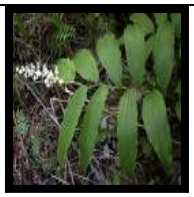
Height: 2-3 feet (60-90cm)
Blooming Period: mid-summer
Exposure: full sun to light shade
Wildlife: monarch and queen butterflies
Appx. Cost: $4.50 per pack (15 seeds) or $4.95 per plant

Canada Milk Vetch - *Astragalus Canadensis*

Height: 2-4 feet (60-120cm)
Blooming Period: summer
Exposure: full sun to partial shade
Wildlife: birds, bees, butterflies and hummingbirds
Appx. Cost: $3.00 per pack (30 seeds) or $4.95 per plant

Cardinal Flower – *Lobelia Cardinalis*

Height: 2-4 feet (60-120cm)
Blooming Period: mid to late summer
Exposure: full sun to partial shade
Wildlife: hummingbirds
Appx. Cost: $4.50 per pack (100 seeds)



False Solomon's Seal – *Smilacina racemosa*

Height: 1-3 feet (30-90cm)
Blooming Period: mid-to late spring
Exposure: full shade or partial sun
Wildlife: birds
Appx. Cost: $4.99 per plant

Indian Grass – *Sorghastrum nutans*

Height: 3-8 feet (90-240cm)
Blooming Period: late summer to fall
Exposure: full sun
Wildlife: birds and several types of butterflies
Appx. Cost: $4.95 per plant

Spider-wort- *Trades - cantia virginiana*

Height: 8-24 inches (20-60cm)
Blooming Period: spring to early summer
Exposure: sun to partial shade
Wildlife: butterflies
Appx. Cost: $3.75 per pack (25 seeds) or $4.95 per plant

Purple Cone-flower - *Echinacea purpurea*

Height: 3 feet (90cm)
Blooming Period: spring
Exposure: full sun to partial shade
Wildlife: butterflies and songbirds
Appx. Cost: from $3.50 per plant

Attracting Wildlife:

All creatures have basic requirements which must be met by the place they consider home. In order to make your yard attractive and useful to wildlife, you must provide their four essential needs: food, water, shelter, and space. These four elements are the fundamental ingredients of a healthy home or habitat for wildlife.

FOOD: Providing wildlife with food is a great start in attracting them to your property. When planting for wildlife, a diversity of plants will attract the greatest variety of wildlife. A combination of evergreen and deciduous trees, shrubs (especially berry producing ones), grasses, and flowers (especially native flowers) will provide plentiful food.

WATER: Add a source of water to your yard and you will be amazed at the wildlife you attract. Without a nearby water source, you limit which wildlife will take advantage of the food you provide. If space limitations prohibit a pond, you can still provide water with a small birdbath.

SHELTER: Wildlife needs shelter to protect them from inclement weather and predators and to provide them with places to raise their young. You improve your yard for wildlife by improving the shelter available.

SPACE: Birds may nest in your shrubs, scavenge the ground, and perch in the branches of your tree. Having many layers on your property can increase the "space" of the habitat.

Also Consider:

Diversity: Planting a variety of trees, shrubs, and other plants provides a diversity of different food types and therefore allows you to meet the needs of a greater number of wildlife species. One species might prefer nuts, another seeds, another fruits, and yet another nectar.

Changing Seasons: Most wildlife cannot survive on only 1 season of food. If your flowers only bloom midsummer what will the butterflies do in the spring and fall? Try to provide a variety of plants that will allow for food and shelter to be available throughout the year. Deciduous trees provide shelter in summer but evergreens provide protection from the cold climate.

Wildlife Friendly Gardens

SIZE DOESN'T MATTER

Your garden may not seem large enough to make a difference in the grand scheme of things; however even the smallest native gardens can help migrating pollinators and the environment.
Invite wildlife to your yard or balcony with native plants that are nectar and pollen rich.

Container Planting

Your balcony or patio can become a wildlife friendly green space.

- Collect planting containers
- Create drainage holes

Plants:

- Thyme parsley, mint, coriander, phlox, petunia, zinnia, cosmos, Shasta daisy iris, aster & bergamot
- Each of these plants attract butterflies

Potted Shrubs

Songbirds can nibble and nestle in potted shrubs.

- Place in sunny balconies or patios

Native Shrub Species:

- American Alderberry
- Common Winterberry
- Northern Bayberry
- Running Serviceberry
- Juniper
- Cedar
- Winterberry

Wildlife Friendly Plants & Trees

Native Plants & Associated Wildlife

Hummingbirds	Bees & Butterflies	Birds
Columbine (red)	Asters	Bunchberry
Cardinal flower	Black-eyed Susan's	Coneflower
Canada lily	Goldenrods	Sunflower
Wild geranium	Common thistles	Blazing star
Phloxes	Violets & Irises	Rosin weed
Firewood	Milkweed	False Solomon's seal
Bee balm		

THE VARIETY OF PLANTS FOR ATTRACTING WILDLIFE IS SO GREAT THAT, IN THE PROCESS OF BUILDING YOUR GARDEN, YOU COULD ALSO BE BUILDING A LANDSCAPE THAT WILL BE THE ENVY OF THE NEIGHBOURHOOD.

Native Trees

Coniferous Trees	Deciduous Trees
- Balsam Fir	- Balsam Poplar
- Black Spruce	- Barclay Willow
- Shore Pine	- Black Ash
- White Cedar	- Paper Birch
- White Pine	- Red Ash

**Depending on where you live, there may be restrictions on tree species to try and contain certain pests.

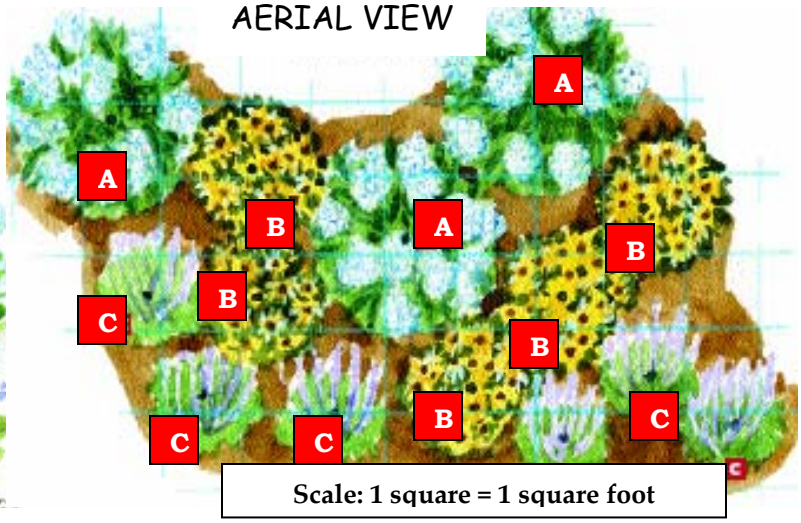
For information call your local nursery.

Native trees are more appealing to birds and small mammals. If mature trees grow on your property a new tree should be planted near the others. If you are planting your first tree be mindful of power lines, utility pipes and consider its proximity to your home throughout its lifespan.

Model Gardens

FRONT VIEW

AERIAL VIEW

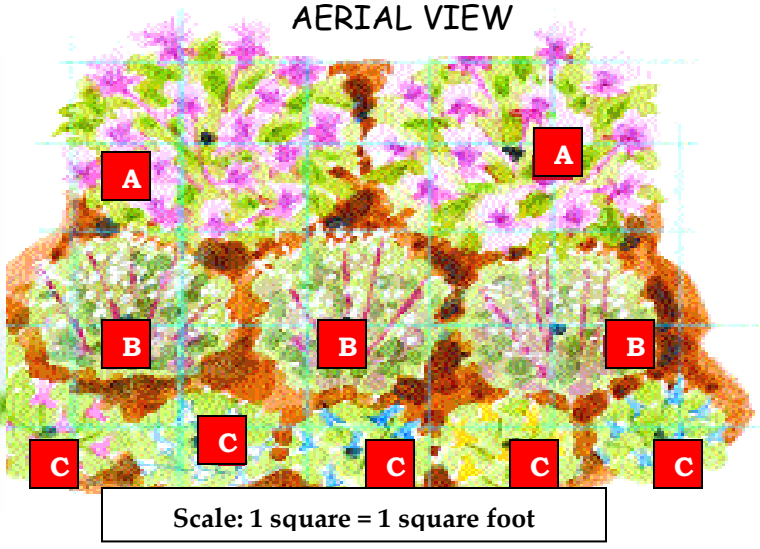


Garden #1: Whether your space is small or large try mixing these three plants for a beautiful and long-blooming garden that will attract butterflies and hummingbirds.

Symbol	Plant Name	No. of plants
A	Phlox – choose one that is native to your area	3
B	Black-Eyed Susan, Rudbeckia	5
C	Violets, Viola Papilionacea	6

FRONT VIEW

AERIAL VIEW



Garden #2: This simple combination will leave you with a beautiful garden that will attract hummingbirds.

Symbol	Plant Name	No. of plants
A	Bee-Balm, Monarda	2
B	Columbine, Aquilegia	3
C	Coral Bells, Heuchera Samguinea	6

A Rock Garden

The garden can be large or small and the rocks you choose are entirely up to you; they can be rocks that you have purchased or those that you have found. The following garden is circular and four feet in diameter. If you prefer an alternative shaped rock garden you can still use the following steps. Several design, rock and plant material alternatives exist so do not be afraid to explore the options and remember to use native species where possible.

Step #1: Create the First Course of the Rock Garden

- Remove the grass in the desired area
- Lay the first course of stones in the desired shape
- When the rocks are in place fill the centre with soil

Step #2: The Second Course of Stone

- The second course of stone is a smaller version of the first and entails forming a smaller version of your desired shape within the original one
- Make the second layer small enough to ensure that there is space around the first perimeter for plants
- Use the more appealing and smaller rocks for the second course as they will be more visible

Step #3: Selecting Plants for the Rock Garden

- Consider drainage and light requirements
- The following plants have been used in this rock garden:
  - 6 scotch moss
  - 1 daffodil
  - 3 wood spurge
  - 3 hens and chickens
  - 3 snow in summer
  - 1 lamb's ear plant
  - 3 candy tuft

Step #4: Plant the Rock Garden

- Planting can be done on the perimeter of the first layer and on top of the second one
- As you plant add more rocks and leave little openings which will act as nesting and shelter for wildlife
- Cover as much of the surface as you can with rocks and plants

Step #5: Mulch for Rock Gardens

- Keeping weeds down is a consideration in any garden; however, instead of using bark mulch consider using smaller stones and pebbles

THIS LOW MAINTENANCE GARDEN IS SURE TO PLEASE!

Creating a Pond? Here's How!

Shape & Size:

- Crescent and oval shapes are best for wildlife and for maintenance.
- Incorporating a 10 to 18 centimetre deep shoreline or shelf adds more wildlife habitat potential.
- Islands are a way to create opportunities for wildlife to nest and feed.
- Shallow water around the edge of your pond or at one end provides safe access and entry/exit points for wildlife.
- The ideal size of a pond to attract wildlife is five metres long by four metres wide.
- The minimum size of a pond to attract wildlife is 0.5 metres long by 1.5 metres wide by 0.5 metres deep.
- To provide winter habitat your pond will need to be at least one metre at the deepest point to prevent if from completely freezing.

- Call before you dig! Know where phone and utility lines run on your property.

Water Plants

Two types of plants are essential to any water garden to keep the water clean naturally, floating and submerged.

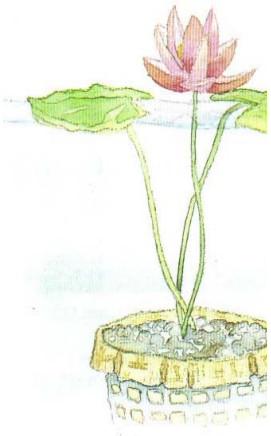
Floating:
Bladderwort
Duckweed

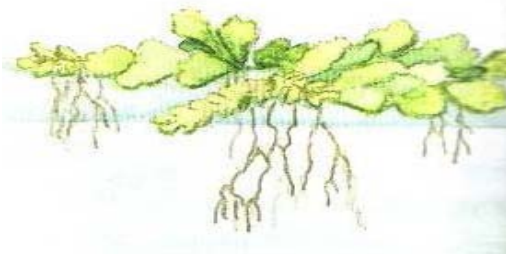
Submerged:
Canadian Waterweed
Water-lilies

Others are decorative and can be used to enhance the design.

Shallow:
Arrowhead
Cattail
Irises

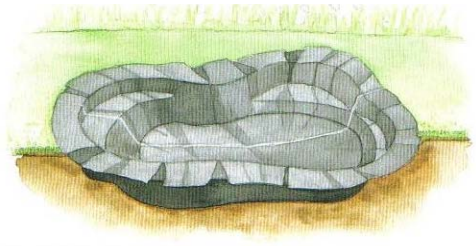
Border:
Forget-me-not
Sweet gale
Meadow sweet



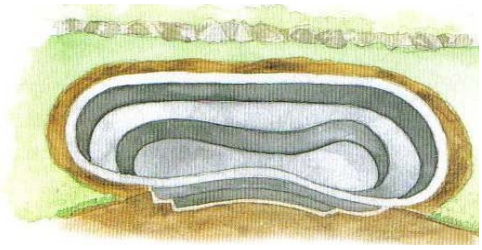


Digging In!

There are two popular options - a flexible pond liner or a cast pond (which is pre-made from plastic or fibreglass). Of the two, the flexible pond liner is best, because you can get your pond to be the shape you and the animals would like; you can also consider customizing a cast pond to make it attractive for wildlife.



FLEXIBLE POND LINER



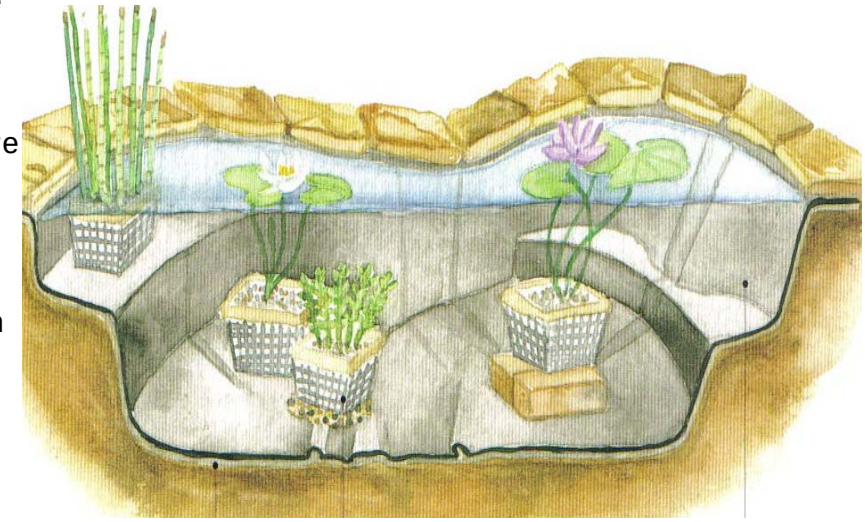
FIBREGLASS CAST POND

1. Mark you area with a rope or hose to achieve the desired shape and dig out the shape of your pond.

2. Smooth out any rough spots before laying your liner.

3. Use a layer of fine sand or old pieces of carpet under the liner to protect it from being punctured on sharp rocks.

4. Lay the liner over the whole pond area and carefully fit it into the corners and over any ledges or islands you may have created.



5. Secure the edges with rocks, flagstone, bricks or logs.

6. Once the pond liner is in place, the bottom should be covered with 2 to 10 centimetres of washed sand topped with a layer of gravel. Aquatic vegetation can then be planted. Potted plants can be placed under water until there is enough sediment at the bottom of your pond to grow rooted plants.

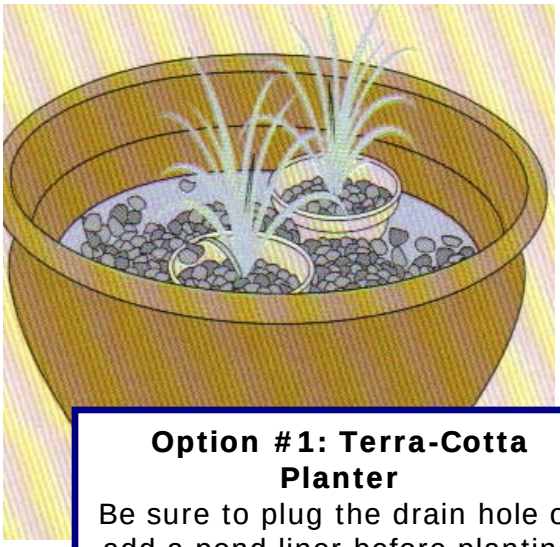
7. Fill in with water. If you are filling your pond with tap water, let it stand one week before transferring plants. This time will allow the chlorine to dissipate.

8. **ENJOY!** But remember it may take a while before your pond attracts wildlife.

If a Pond is Not for You, Check out the Alternatives!

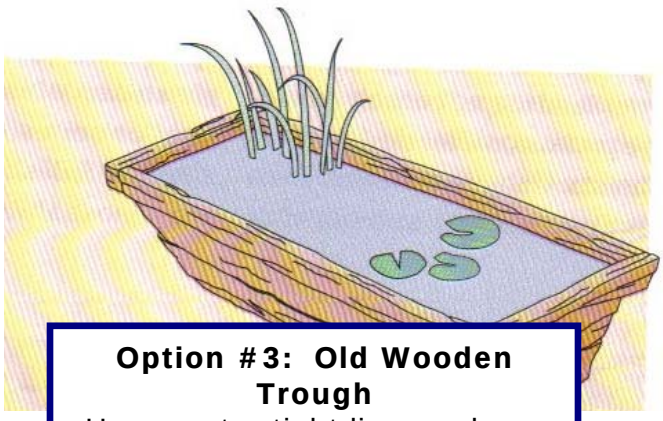
Almost everything capable of holding water can become an attractive garden accent pond. Sink any water tight container into the ground and fill with water for a pond alternative or keep it above ground – it is up to you!

Here are some examples:



Option #1: Terra-Cotta Planter
Be sure to plug the drain hole or add a pond liner before planting and use a bed of gravel to raise plants to desired height – voila!

Option #2: Wooden Half Barrel
Used barrels should be washed and lined. Use smaller rocks, pebbles, and plants for the desired look!



Option #3: Old Wooden Trough
Use a water tight liner and you will have a charming mini-pond.

Other Options for Providing a Source of Water:

- birdbaths
- tub containers
- mini-ponds
- wall fountains
- any water tight container

Remember to refresh your water sources daily to ensure that stagnant water does not become a mosquito breeding area. Also, consider purchasing a small aerator to keep water fresh and safe.

Tips and Ideas:

- **Grow a diversity of plants to minimize your garden's susceptibility to pests.**
- **Match plants to the conditions of your garden (soil, moisture, light, etc.) to help plants thrive.**
- **Provide adequate spacing between plants for good air circulation.**
- **Keep the soil and soil organisms healthy. Add compost or well-rotted manure each year.**
- **Water plants deeply to promote strong roots.**

Develop Layers Varying the height of plants is called layering. In nature, layers consist of canopy, understory and herbaceous cover. Layering more typically reflects woodland habitats where trees, shrubs and ferns, flowers and groundcovers form the different strata.	**Growing Areas** Being familiar with the zones where plants grow can help you to develop a list for your garden with plants that are native to your area. These plants are well adapted to local environmental conditions such as climate and temperature, and are therefore less susceptible to disease and other problems.	**Learn Botanical Names** Both alien and native plants can share the same common name, which can lead to confusion when searching for native plants. Using each plant's botanical name will help avoid the problem. Botanical names are also referred to as scientific, species or Latin names.
Look Beyond Flowers Ferns, sedges, grasses, vines, trees and shrubs are often neglected in native plant gardens, yet they are part of the overall plant community. Trees and shrubs not only contribute height, texture and wildlife habitat, they also serve as a windbreak, offering protection for other plants.	**Look to Natural Plant Communities** Plants growing together -- sharing similar ecological requirements -- are called a community. Local natural areas can provide a context for your native plant garden. Replicating these communities exactly may not be possible, but try to emulate their conditions as much as possible for a healthier, more naturalistic garden.	**Additional Resources** Call your local conservation authority too- many are willing to become involved in helping you assess your site and your plan, sourcing materials and helping with planting. Many conservation authorities have active restoration programs, but make sure local native stock is used.

Purchasing Native Plants

Obtaining native plants from environmental organizations is the best way to ensure that you are obtaining plants from a reliable source. Some volunteer groups and other associations in Ontario sell native plants to the public at designated plant sales.

Buying native plants from commercial nurseries: Finding appropriate native plants can be challenging since most commercial nurseries carry cultivated varieties of native species. Since they are often reproduced from cuttings in large quantities from one individual plant, cultivated varieties have low genetic diversity. Ask staff about the source of plant material and use scientific names to make sure you receive true native varieties.

Plant Sources: Proper conservation practices and propagation methods of native plants for nursery stock will ensure that we do not cause unintentional harm nor lose our investment.

As native plants increase in popularity, it is important to ensure that the plants you purchase are properly cultivated and sourced; this prevents species from becoming endangered. Ask your garden nursery about the origin of any native plant you wish to purchase.

- The preferred sources are seeds or cuttings.
- Transplantations from natural habitat are harmful and illegal. The plants are crucial to their native habitats, so harvesting them might deplete the habitat of the population and consequently create an imbalance that will have a pervasive negative impact on the area.

Check Plant Hardiness Before You Buy: Check the labels of the native plants that you are considering in order to ensure that you will be planting them in their proper habitat. Ask the staff at the nursery about each plant's hardiness-zone rating, as well as the rating of the zone in your area.

Guarantees and Warranties: When you are buying your plants, ask if there are warranties or guarantees. Most nurseries offer a minimum one-year guarantee from the date of purchase on perennials, shrubs and trees. Make sure it is a no-hassle guarantee that does not depend on how the plant was planted or the care you provided. This ensures that no matter if you are a first-time gardener or an expert, the plant will be replaced if it does not survive its first winter. You should, however, expect at least one casualty out of a complete yard planting.

Want to Learn More:

Books & Guides:

Daigle, Jean-Marc & Donna Havinga. 1996. Restoring Nature s Place: A Guide to Naturalizing Ontario Parks and Greenspace. Ecological Outlook Consulting and Ontario Parks Association.

Environment Canada. 1996. Planting the Seed: A Guide to Establishing Aquatic Plants.

Johnson, L. 1995. The Ontario Naturalized Garden. Vancouver, Whitecap.

Johnson, L. 1999. 100 Easy-to-Grow Native Plants.

Lavoie, L. 1996. Homeowners Guide to Naturalization. Thunder Bay, Thunder Bay 2002.

Waterfront Regeneration Trust. 1995. Restoring Natural Habitats. Toronto, Waterfront Regeneration Trust. (specializes in greater Toronto)

Organizations:

Society for Ecological Restoration Environment and Resource Studies Program, Trent University, Peterborough, ON, K9J 788 (705) 748-1634

Canadian WIldflower Society
Unit 12A, Box 228,4981 Hwy 7 E,
Markham, ON, L3R 1N1.

Evergreen Foundation, (specializes in schoolyards)
355 Adelaide St. w:, Toronto, ON, M5W 1H3. (416) 596-1991

Wild About Gardening
350 Michael Cowpland Dr.
Kanata, ON K2M 2W1
Tel: 1-800-563-WILD www.wildaboutgardening.org

Federation of Ontario Naturalists
The FON can put you in touch with over 90 local naturalist organizations.

Landowner Resource Centre (source for materials about a variety of conservation activities)
Box 599, 5524 Dickinson St., Manotick, ON, K4M 1A5. 1-800-387-5304 or (613) 692-2380

Ontario Ministry of Natural Resources
http://www.mnr.gov.on.ca/MNR/

Canadian Wildlife Federation
http://www.cwf-fcf.org

Resources that Helped Create this Pamphlet:

- ☑ *Habitat Creation With Native Plants* - Environment Canada's EcoAction
- ☑ *Natural Habitat Communities* - Evergreen www.evergreen.ca
- ☑ www.nature.ca/plants
- ☑ www.wildaboutgardening.org
- ☑ www.toronto.ca/trees
- ☑ *Your Guide to Landscaping: How to Build a Rock Garden* – David Beaulieu
- ☑ Sunset Books - Landscaping Series
- ☑ Google Image Search

With more and more people taking an interest in ecological and wildlife-friendly gardening, we will soon see an increase in healthy green corridors across Canada. In addition to helping wildlife, these efforts result in cleaner soil, water and air

- A HEALTHY ENVIRONMENT FOR US ALL!

Ontario Nurseries & Native Plants

Listed below are just some of the Ontario Nurseries and Organizations you may want to visit to learn more about native plants.

Campberry Farm
RR# 1, Niagara-on-the-Lake L0S 1J0
Phone: 905.262.4927

Chalk Lake Greenhouses
RR#4, Uxbridge L9P 1R4
Phone: 905.649.5284 Fax: 905.649.5284

Dominion Seed House
PO Box 2500, Georgetown L7G 5L6
Phone: 905.873.3037 Free: 800.784.3037 Fax: 800.282.5746
mailto:email: mail@dominion-seed-house.com

OSC Seeds: Supplier of Native Seeds
OSC Seeds P.O. Box 7, Waterloo, ON N2J 3Z6
Phone: 519.886.0557Fax: 519.886.0605
email: seeds@oscseeds.com

Frank Schenk Perennials
663 River Road, Bellfountain L7K 0E5
Phone: 519.927.5415 Fax: 519.927.9084

Grimo Nut Nursery
RR#3, Lakeshore Road, Niagara-on-the-Lake L0S 1J0 Phone: 905.934.6887 Fax: 905.935.6887
mailto:email: nuttrees@grimonut.com

Habitat Works!
2099 Embleton Road, Brampton L0J 1B0
Phone: 905.450.3988 Fax: 905.392.8485
mailto:email: plants@habitatworks.com

Hortico Inc.
723 Robson Road, RR#1, Waterdown L0R 2H1
Phone: 905.689.6984 Fax:905.689.6566
mailto:email: office@hortico.com

Humber Nurseries Ltd.
8386 Highway 50, Brampton L6T 0A5
Phone: 905.794.0555 Fax: 905.794.1311
email: humber@gardencentre.com

Limestone Creek Wildflower Nursery
RR#1, Campbellville L0P 1B0
Phone: 905.854.2914 Fax:905.854.3363
mailto:email:limestone@interhop.net

Native Plants in Claremont
4965 Westney Road, Pickering (Claremont) L1Y 1A2
Phone: 905.649.8176 Cell: 416.888.3363
mailto:email: karen@nativeplants.ca

North American Native Plant Society
PO Box 84, Postal Station D, Etobicoke M3B 1X0
Phone: 416.680.6280 Fax: 416.536.8886
mailto:email: nanps@nanps.org

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