Restoring Your Shoreline







- Maintain Water Quality: Plants intercept and slow runoff from our properties and roads; It is then absorbed into the soil layer where nutrients and pollutants can be filtered out.
- Reduce Erosion: The roots hold soil in place and protect shorelines from slumping and washing away. Plants reduce the severity of wave and ice action from water currents and they reduce the boat wake protecting shorelines from damage.
- Create Wildlife Habitat: Over 70% of land-based wildlife and 90% of aquatic life depend on shorelines for some part of their life.
- Discourage Canada Geese: Plants on a shorelines can create a visual and physical barrier detering Canada Geese.
- ✓ Help Lower Impacts of Flooding: Plants intercept and slow rain water moving down the land (runoff) allowing it to be absorbed into the soil.
- ✓ Protect Property Value: Shoreline plants protect from unslightly erosion and loss of shoreline. Plants help to protect from wind or water damage and poor water quality.



An eroding shoreline.



Canada geese grazing on a waterfront lawn.



Great blue heron.

The appeal of waterfront views and access are important. Consider maintaining views and access routes when planning your shoreline.

PLANNING FOR YOUR SHORELINE

Assess your property

- How do you use your shoreline? Where do you frequently access the water? Locate your septic system and well.
- Walk your property and look for a high water lines. Identify any erosion concerns, planting can sometimes resolve those.
- Determine your soil type, soil moisture, and amount of sunlight.
- Identify your high water line above this line is typically dry, below this line is typically moist. This will help to determine which species will have most success. Look for what is already growing and adjacent to your property.
- * Tip: print a map of your property using Google Maps, apply the satellite imagery layer, and use this as a basis for your shoreline plan.

Planning your planting

- Decide on the size of your buffer.
- Mark access routes to the water to be left open.
- Mark out where you want to plant. Don't plant trees and shrubs near your septic and well.
- Consider low growing plants in areas where you want to maintain views, and larger shrubs and trees along the edges of your property to help define property boundaries and maintain privacy.
- Plants can be planted directly into existing sod or in areas with controlled sod removal.

Choosing Your Species

- Select native plants appropriate for your site conditions (soil, sunlight, moisture levels). Plants requiring moisture should be below the high water line.
- Consider flowering or fruit bearing plants for maximum wildlife benefits.
- Decide how many to plant. Shrubs can be planted 1 metre apart, and trees 2.4 metres apart. Wildflowers and grasses can be planted 20-30 cm apart.
- Remember to consider mature plant height and width when spacing plants.



A planted garden-style shoreline with Ontario wildflowers, trees and shrubs.



Minor shoreline erosion that can be resolved with plantings.



A staked no-mow zone to later be planted with shrubs and trees.



A shoreline buffer with wildflowers.



Sketch your waterfront property, mark property features, buildings, access routes, well, septic, etc. Mark desired locations for your plants.

SITE CONSIDERATIONS:

- Soils Conditions (clay, sand, loam)
- Light Levels (full sun, part shade, full shade)
- Moisture Levels (wet, average, dry)
 *Tip: look for evidence on the landscape of a high water line.



A shoreline planted with Ontario wildflowers and flowering shrubs.



Naturalize your shoreline while maintaining views and access points.

Native Shoreline Plants of Southeastern Ontario

DRY UPLAND (above floodplain)

TREES

- Balsam Fir
- Sugar Maple
- White Birch
- White Spruce
- Red Pine
- White Pine
- **Black Cherry**
- White Oak
- Red Oak
- Bur Oak

WET LOWLAND (in floodplain) **TREES**

- Red Maple
- Silver Maple
- Cottonwood
- Black Willow
- Tamarack
- Yellow Birch
- **Tamarack**
- White Cedar
- Eastern Hemlock
- Balsam Poplar
- Shagbark Hickory

To ensure views are maintained consider pruning your shrubs and the lower branches of the trees as they mature.

SHRUBS

- Serviceberry
- Chokeberry
- Grey Dogwood
- Common Juniper
- Creeping Juniper
- Ninebark
- Chokecherry
- Staghorn Sumac
- Red Elderberry
- Highbush Cranberry
- Nannyberry
- Canada Plum

*LOW SHRUBS (for maintining views)

- Wild Rose
- Meadowsweet

Basswood

Hackberry

Pin Cherry

- Fragrant Sumac
- **Bush Honeysuckle**
- Shrubby Cinquefoil
- Shrubby St John's Wort
- Virgin's Bower
- New Jersey Tea

SHRUBS

- Speckled Alder
- Silky Dogwood
- Red Osier Dogwood •
- **Bebbs Willow**
- **Pussy Willow**
- Sandbar Willow
- Slender Willow
- Common Elderberry •
- Highbush Cranberry •
- Nannyberry
- Buttonbush
- Winterberry

*LOW SHRUBS (for maintaining views)

- Swamp Rose
- Steeplebush
- Meadowsweet
- Sweet Gale
- Witch Hazel
- Virgin's Bower
- Snowberry

WILDFLOWERS & GRASSES

- Black-eyed Susan
- **Butterfly Milkweed**
- Canada Anemone
- False Sunflower
- Heath Aster
- Harebell
- **New England Aster**
- Smooth Aster
- **Sweet Oxeye**
- Wild Bergamot

- **Switchgrass**
- Little Bluestem
- **Indian Grass**
- Big Bluestem

WILDFLOWERS & GRASSES

- Bee Balm
- Blue Flag Iris
- Boneset
- Canada Anemone
- Cardinal Flower
- **Closed Gentian**
- Common Vervain
- Golden Alexander
- Helenium

- Joe-Pye Weed
- Marsh Marigold
- Monkey Flower
- Swamp Milkweed
- White Turtlehead
- Canada Blue-Joint Grass
- Canada Wild Rye
- Giant Bur-Reed
- **Prairie Cordgrass**

Plant wildflowers and small shrubs in groups of 3 or more for a larger display of colour when in bloom.

How To Plant a Seedling

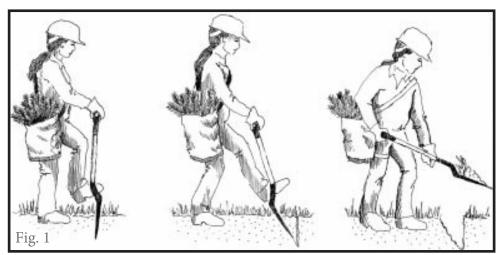


Figure 1-2
Prepare a planting hole by removing a "wedge" of soil.

Dig one side of hole straightdown.

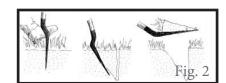
Figure 3-4
Place roots in the planting hole.

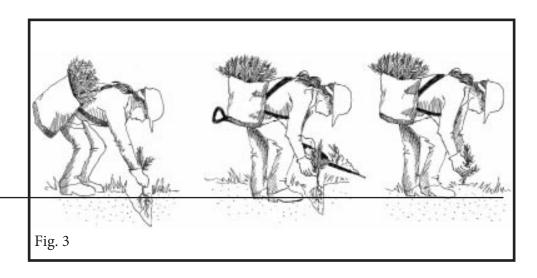
Spread soil around the roots ensuring good contact.

Tamp the soil around the base of the seedling with your toe.

Your time and effort in advance planning and preparation will give your tree planting project the best chance for success.

Your reward will be alifetime of enjoyment and benefit from your trees.







Source: Ontario Ministry of Natural Resources, Landowner Resource Centre ©2000, Queen's Printer for Ontario ISSN 1198-3744 R.P.(2k P.R., 00 11 29) Order Number: LRC 14

Healthy Waterfronts Checklist

	Pump your septic every 3 to 5 years.	NOTES:
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	Address any shoreline erosion issues.	
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	Stop mowing and allow the shoreline to become natural.	
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	Avoid fertilizer application on lawns.	
	Enhance the charoline by planting native trees, chrubs	
	Enhance the shoreline by planting native trees, shrubs, and wildflowers.	
	Identify non-native invasive species, and control them if	
Ш	possible.	
	Leave woody debris for habitat.	
Ш	•	
	Choose an environmentally-friendly dock.	
ш		
	Install eavestroughs and direct downspout to a rain barrel or garden.	
\equiv		
	Minimize outdoor lighting.	
	Always refuel your boat with care.	
	Watch your boat's wake, it can cause erosion.	
Ш	Trator your board wand, it our oddoo croolon.	
	Become a citizen scientist. Collect and submit data.	
	Visit <u>www.ontarionature.org</u>	

Shoreline Stewardship Programs

With changing land use and development along waterways, natural vegetation is often removed and landowners may face undesirable consequences including flooding, excess algae in surface water, loss of land due to erosion, and mess created by unwanted geese. This can reduce valuable aesthetic appeal and recreational opportunities of shoreline properties.

To help landowners address these common concerns, Quinte Conservation has partnered with lake associations across our watersheds to provide shoreline planting programs. These programs encourage landowners to enhance shorelines by planting native trees, shrubs, and wildflowers to re-establish shoreline buffers of native vegetation on properties across our region.

More Information

For information on programs and connections to landowner resources, visit www.QuinteConservation.ca

Other Resources

Watersheds Canada - www.watersheds.ca
Bay of Quinte Remedial Action Plan - www.bqrap.on.ca
Ontario Federation of Cottagers' Associations - www.foca.on.ca
Ontario's Invading Species Awareness Program - www.invadingspecies.com

For advice, information, and connections to landowner grant programs contact:

Maya Navrot, Outreach and Stewardship Coordinator 613-968-3434 ext. 131 mnavrot@quinteconservation.ca

613-968-3434 Belleville RR2, 2061 Old Hwy 2 Belleville, ON K8N 4Z2



Native Plant Suppliers

Nurseries local to the Quinte Conservation region specializing in growing native plants.

Golden Bough Tree Farm

Johanna Bough
900 Napanee Road
Marlbank , ON K0K 2L0
goldenbough@lks.net
www.goldenboughtrees.ca

Green Side Up Environmental Services

Douglas Kennedy 121 Grassy Road Omemee, ON K0L 2W0 705-799-2610 doug@greenservices.ca www.greenservices.ca

Grow Wild! Native Plant Nursery

Paul Heydon 3784 Highway #7 Omemee, Ontario, K0L 2W0 416-735-7490 www.nativeplantnursery.ca

Friends of Lemoine Point Native Plant Nursery

Lemoine Point Conservation Area 1440 Coverdale Dr Kingston, ON 613-546-4228 www.crca.ca

Natural Themes Native Plant Nursery

Bea Heissler
319 Maybee Road
Frankford, ON K0K 2C0
613-398-7971
bea@naturalthemes.com
www.naturalthemes.com

Weese Tree Preservation & Nursery

112 Park Drive
R.R. #1 Bath. Ontario, K0H 1G0
613-352-5988
info@weesetreepreservation.ca
www.weesetreepreservation.ca

GreenUP Ecology Park Garden Market

1899 Ashburnham Drive,
Peterborough, ON
705-745-3238
greenup@greenup.on.ca
www.greenup.on.ca

Richardson's Pineneedle Farms

423 Highway #35
Pontypool, ON, L0A 1K0
*Source of bareroot stock/larger quantities
treepro@pineneedlefarms.ca
www.pineneedlefarms.ca

Disclaimer: This directory of native plant suppliers provided by Quinte Conservation is for informational purposes only and not intended to provide specific endorsement or recommendation in any circumstances. This information is intended to be of general nature and used at landowners own discretion.