Lake Huron Coastal Bluff Native Plants Guide

2013

THE LAKE HURON CENTRE FOR COASTAL CONSERVATION

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Lake Huron Centre for Coastal Conservation
(The Coastal Centre)
74 Hamilton Street
Goderich, Ontario, Canada
N7A 1P9

226-421-3029

Email: coastalcentre@lakehuron.on.ca
Website: www.lakehuron.on.ca

Minister's Award for
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2012 Award Winner

the Coastal Centre
THE LAKE HURON CENTRE FOR COASTAL CONSERVATION

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Introduction

The native plants along Lake Huron's shoreline have adapted to local climate and soil over thousands of years. Bluffs are just one type of ecosystem along Lake Huron's shoreline, but they play a large role in the overall coast. Supporting native plant growth on a bluff property can help to sustain the natural beauty and productivity of the ecosystem.

Local cottagers and residents have identified the need for resources to be able to identify the good plants (native coastal plants) along Lake Huron bluffs. It is the intention of this guide to help private landowners, municipalities and landscape professionals with the tools to know the species they are most likely to encounter in a coastal bluff ecosystem, and provide a resource which will assist them in naturalizing properties along the Lake Huron bluffs.

This guide will be useful for those who want to enhance an already vegetated slope, or to create a buffer that will help prevent erosion, filter water pollutants, attract wildlife and minimize storm water flows.

The Ecosystem: *What is a bluff?*

- A bluff is a steep slope exposure of **unconsolidated sediment** – as opposed to a cliff which is a steep exposure of rock.
- Bluffs were created as glaciers receded and left behind mixtures of glacial till (sand, gravel, silt and clay) along the lakeshore. Waves have cut into and eroded the till to form bluffs.
- As the base of a bluff is eroded by waves, it causes the slope to become unstable and can lead to a slope failure, known as a slump, which results in large portions of the bluff sliding from the top down to the beach or into the lake.
- This process is **natural** and is **important** to enable other critical coastal processes to take place.
- The resistance to erosion of the bluff depends on the soil type - the Huron County shoreline from **Amberley to Grand Bend** is made up primarily of clay bluff.
- The bluff is what provides dunes and beaches with the sand material that they need.

The Importance: *Why conserve coastal bluffs?*

- Bluffs provide the **source of sand** required for other coastal processes to take place.
- When material from bluffs slide down the slope, waves sort the material and carry it along the shoreline by currents.
- The eroded till is sorted by waves into its constituent parts: the small particle clay and silt become suspended in the water and carried offshore to be deposited. Sand, because it is denser, gets deposited along the shoreline, becoming part of the beach and dune system.
- Dune systems with their specialized vegetation protect the shoreline from storm waves and accelerated erosion.
- On Lake Huron sand is generally carried from north to south and is deposited in areas such as Pinery and Ipperwash.
- So the bottom line is that **coastal bluffs are needed** for coastal processes to continue to build on the beaches that protect the shoreline.
- Accelerated erosion of bluffs due to human disruptions to the natural state of the bluffs can alter this process, often leading to negative consequences.

- Maintaining plants on a bluff property, particularly native plants, will help to maintain the slope stability of the bluffs.

The Plants: *Why landscape with native plants?*

Benefits of Native Plants

- Native plants are those considered to be indigenous to the area, meaning they originally or naturally occurred in that area and have evolved and adapted to the local climate, soils and wildlife over thousands of years.
- Native plants generally thrive without any maintenance once they are established in a suitable spot that matches their needs.
    - Watering and fertilizing is not required since plants are adapted to the local environment.
    - Useful and beneficial insects that prey upon pests are attracted to native species which reduces the need for pesticides.
    - Time, energy and money are inevitably saved since maintenance is minimal.
- They have co-evolved with local wildlife, becoming their ideal food source and habitat. Since many natural habitats are destroyed due to development it is vital to

create and maintain native plant habitats for local wildlife.

- They play a key role in stabilizing and anchoring soil with their roots and also keeping soil drier by intercepting precipitation and removing water through transpiration (plant sweat).
- Native landscaping can be as small as a garden in your backyard to have a positive impact.

Problem with Invasive Plants

- An invasive plant is a species from another part of the world whose introduction, or spread, negatively impacts native biodiversity, the economy, and/or society.
- They are successful at inhabiting new areas because they have a high annual seed production, develop quickly and densely, tolerate a variety of growing conditions, have few or no natural predators, spread denser underground roots and re-grow quickly even when disturbed.
- When native plant communities are replaced by invasive plant infestations, biodiversity declines and habitats change as landscapes are altered permanently.

To learn more about invasive species characteristics and identification, visit these resources:

- Ontario Invasive Plant Council
  http://www.ontarioinvasiveplants.ca
- Ontario's Invading Species Awareness Program
  http://www.invadingspecies.com

The Plan: *Tips for a native plant garden*

- Emphasize diversity during your selection by including a variety of native trees, shrubs and groundcovers.
- Don't take plants from natural areas because they may be rare or invasive.
- Purchase native plants from reputable suppliers.
  - See the list of suppliers on pages 49 to 51
- Ask for the geographic source of stock and choose local when available.
  - Locally derived seed or stock is preferable, as plants will already be adapted to the conditions (soils, temperatures, insects and diseases) within this seed zone and are more likely to survive.
  - In addition, plants are less likely to bring in disease or genetic adaptations from other zones.

    - Visit: www.treesontario.ca/files/learn/tree-seed-zone-map.pdf to locate your seed zone.
- Dispose of yard waste through your local municipality or in your backyard compost.
    - If invasive species are part of yard waste do not compost because seeds can remain viable.
- Spread the word to friends, family, and neighbours!

Keep in mind that on some bluffs erosion is so extensive that planting vegetation would be impractical. Vegetation alone cannot protect against erosion in all cases. Vegetation cannot withstand wave attack at the toe of a slope, nor will it prove effective in stabilizing a slope already subject to deep-seated mass soil movements.

If you suspect problems of this nature, contact the Coastal Centre or consult with your local Conservation Authority to see if you need to seek the services of a geotechnical engineer.

Conservation Authorities:
Maitland Valley Conservation Authority
519-335-3557
Ausable Bayfield Conservation Authority
519-235-2610
Saugeen Valley Conservation Authority
519-367-3040

The Native Species:

Recommended trees, shrubs and groundcovers for coastal bluff areas

White Ash
Fraxinus americana

USE	often found in parks and other large areas
IDENTIFICATION	deciduous tree about 21m tall opposite, compound leaves which are dark green above and paler beneath bark has a distinctive diamond-shaped ridge pattern
HABITAT	prefers sun moist, well-drained soil woodland, fields, open areas
SEASON	flowers bloom in spring fruit appears in summer and fall leaves change from green to yellow then deep purple in fall
OTHER INFO	attracts birds and mammals pollution and salt tolerant grows rapidly

Close-up of leaves and branches
Photo © Michael S. Pascoe @ www.canadaplants.ca

Full tree
Photo © Michael S. Pascoe @ www.canadaplants.ca

Trembling Aspen
Populus tremuloides

USE	useful as a natural landscape plant
IDENTIFICATION	about 20-30m tall deciduous tree leaves are alternate and have a round to broadly ovate shape leaves 'tremble' in the wind due to flattened petiole lower limbs usually die leaving a V-shaped scar as the tree matures bark is a white-green to cream colour
HABITAT	requires sun, very shade intolerant prefers moist soil but is quite adaptable open areas or woodland edge
SEASON	seeds bloom in spring beautiful yellow/orange leaves in fall

Bark

Round leaves

Photo © Michael S. Pascoe @ www.canadaplants.ca

Full tree
Photo: Chris Earley, U of Guelph Arboretum

Red Osier Dogwood
Cornus stolonifera

USE	often planted near water for habitat restoration and preventing erosion
IDENTIFICATION	2-5m tall shrub with numerous stems forming thickets distinctive bright, shiny red bark dull white flowers and fruit leaves are opposite and accurately veined
HABITAT	needs full sun to moderate sun a characteristic species of open wetlands, riparian zones and damp woods prefers rich moist soils with high level of nutrients
SEASON	flowers blossom in spring; berries from summer to fall
OTHER INFO	tolerates flooding well, but also drought tolerant once established less palatable for white-tailed deer than many other ornamental shrubs cover and berries offers benefits for birds

Distinctive red bark
Photo © Michael S. Pascoe @ www.canadaplants.ca

White flowers

Leaves and branches
Photo: Paul Morris, Acorus Restoration http://www.ecologyart.com/

Staghorn Sumac
Rhus typhina

USE	great in open natural area on banks
IDENTIFICATION	shrub growing up to about 8m tall compound leaves form leaflets that hang down with serrations along the edges braches are velvety and resemble antlers of a male deer clusters of bright red berries
HABITAT	requires sun tolerates most soil types, but is drought and salt tolerant generally grows in open places such as forest edges, riparian zones
SEASON	flowers in June leaflets turn red and orange in the fall berries present throughout winter
OTHER INFO	provide nectar for bees and other insects birds eat sumac berries in winter very pest and disease resistant

Full plant
Photo: Sarah Coulber, Canadian Wildlife Federation

Velvety branches

Close-up of flowers
Photo © Michael S. Pascoe @ www.canadaplants.ca

White Birch
Betula papyrifera

USE	often a colonizer of disturbed sites
IDENTIFICATION	about 18-25m tall deciduous tree thin, smooth, white, papery bark diamond shaped leaves that droop
HABITAT	requires sun prefers moist soil found on shorelines, woodland edge
SEASON	catkin blooms in spring; fruit composed of tiny seeds in summer
OTHER INFO	also known as Paper Birch acts as a winter food source for birds and mammals

Leaf shaped as diamond or triangle
Photo © Michael S. Pascoe @ www.canadaplants.ca

Smooth white bark peeling
Photo © Michael S. Pascoe @ www.canadaplants.ca

Wind pollinated catkin

Full tree without leaves

Photo © Michael S. Pascoe @ www.canadaplants.ca

Eastern Cottonwood
Populus deltoides

USE	valuable in landscaping of natural settings and restoration projects
IDENTIFICATION	20-40m tall hardwood tree very broad pyramidal shape large triangular shaped leaves on long petioles with coarse teeth silvery-gray bark with ridges
HABITAT	prefers full sun to part sun often found near water on floodplains and wetland areas prefers loose open soil and lots of water
SEASON	flowers in May leaves turn yellow in the fall
OTHER INFO	seeds buds and twigs feed numerous birds and mammals

Deltoid shaped leaves
Photo © Michael S. Pascoe @ www.canadaplants.ca

Trees with yellowing leaves

Ridged bark

Photo © Michael S. Pascoe @ www.canadaplants.ca

Eastern White Cedar

Thunja occidentalis

USE	used as a good windbreak and as hedging useful as a species in habitat restoration
IDENTIFICATION	10-20m tall evergreen tree leaves are scale-like, pointed; opposite in altering pairs; bright green on top and pale on underside leaves are very aromatic when rubbed branchlets are flattened in fan-shaped spray seed cones are ellipsoid bark is greyish brown to reddish-brown
HABITAT	thrives in fertile, moist soils wide ranging from wet forests to coniferous swamps to dry areas prefers partial shade to sun
SEASON	flowers in May
OTHER	often used as a food source by deer

Reddish bark

Full tree

Photo © Michael S. Pascoe @ www.canadaplants.ca

Needles and buds

Photo © Michael S. Pascoe @ www.canadaplants.ca

Basswood
Tilia americana

USE	common along rural hedgerows used in naturalisation landscaping
IDENTIFICATION	18-30m tall deciduous tree multi-stemmed with somewhat pyramidal crown very large leaves in roundish shape pale yellow fragrant flowers dull grey bark that divides into plates large buds
HABITAT	slopes, edges of fields and forests prefers sun to partial shade generally moist soil but can be tolerant of dry
SEASON	flowers bloom in summer

Distinctive large, roundish leaves
Photo © Michael S. Pascoe @ www.canadaplants.ca

Bark dividing into plates
Photo © Michael S. Pascoe
@ www.canadaplants.ca

Full tree
Photo: Chris Earley, U of Guelph Arboretum

Sugar Maple
Acer saccharum

USE	often used as a good shade tree
IDENTIFICATION	up to 30-35 metres tall light green leaves with deep lobes smooth gray, ridged bark seeds contained in winged key
HABITAT	prefers sun, tolerates partial shade prefers deep, rich, moist soils woodland
SEASON	bloom in early spring leaves turn yellow to red in the fall keys develop in fall
OTHER INFO	produces sweet sap which is used to make syrup

Winged key seeds
Photo © Michael S. Pascoe @ www.canadaplants.ca

Deeply lobed leaves
Photo © Michael S. Pascoe @ www.canadaplants.ca

Aged gray bark with ridges

Full Tree
Photo © Michael S. Pascoe @ www.canadaplants.ca

Hophornbeam
Ostrya virginiana

USE	good choice when a unique, smaller, ornamental tree is wanted grows well under larger species
IDENTIFICATION	deciduous tree up to 18m tall shredded looking gray-brown bark distinctive fruit clusters finely serrated oval leaf with pointed tips has a wide conical crown
HABITAT	prefers sun to partial sun prefers slightly acidic loamy soil moist area such as upland forest
SEASON	blooms mid spring
OTHER INFO	also commonly known as Ironwood buds and catkins attract birds

Inflated sac fruits in hanging cluster
Photo © Michael S. Pascoe @ www.canadaplants.ca

Shaggy bark
Photo © Michael S. Pascoe @ www.canadaplants.ca

Full tree with wide crown
Photo: Chris Earley, U of Guelph Arboretum

Chokecherry
Prunus virginiana

USE	ideal for wildlife enhancement good for hedgerow and windbreak used in many land reclamation projects and on erosion-prone areas
IDENTIFICATION	3-10m tall alternate, simple, oblong leaves cylindrical clusters of small white aromatic flowers small red-purple cherries bark is smooth, gray-brown and twigs are slender
HABITAT	prefers sun to part shade prefers rich, moist soils but will grow in sandy and gravelly soils woodland, forest edge, lakeshore
SEASON	leaves are yellow to orange in fall dense flowers in spring are followed by dark cherries in late summer
OTHER INFO	extensive root mass often growing in dense thickets may attract birds, butterflies

Distinctive black knot

Leaves and berries

Photo © Michael S. Pascoe @ www.canadaplants.ca

Cluster of white flowers

Photo: Northscaping Inc. www.netpsplantfinder.com

Common Juniper
Juniperus communis

USE	can be used for hedges and groundcover on sandy soils
IDENTIFICATION	1m tall evergreen shrub blue waxy berry-like fruit needles are blue-green in summer narrow, pyramidal shape or low growing bark is red-brown that flakes off
HABITAT	commonly grows in very bad soil conditions; very adaptable plant prefers sun to partial shade
SEASON	blooms in spring needles are yellow-brown in winter
OTHER INFO	berries are favoured by birds

Needles
Photo © Michael S. Pascoe @ www.canadaplants.ca

Low growing groundcover
Photo © Michael S. Pascoe @ www.canadaplants.ca

Blue fruit
Photo © Michael S. Pascoe @ www.canadaplants.ca

Wild Strawberry

Fragaria vesca

USE	groundcover for sunny gardens
IDENTIFICATION	about 5-15cm tall low growing and spreading three-lobed and toothed leaves small white flowers above leaves edible red berries
HABITAT	prefers sun average soil; sand, loam or clay found in fields and open areas
SEASON	flowers in late-spring berries in early-summer
OTHER INFO	good pollinator plant

Colony of wild strawberry plants
Photo © Michael S. Pascoe @ www.canadaplants.ca

Distinctive red strawberry
Photo © Michael S. Pascoe @ www.canadaplants.ca

Small white flower
Photo © Michael S. Pascoe @ www.canadaplants.ca

Bearberry
Arctostaphylos uva-ursi

USE	great for butterfly and bird gardens useful groundcover prevents erosion on slopes
IDENTIFICATION	about 15cm tall shrub with multiple stems white and pink flowers hang down from tips of branches red fruit dark green, shiny and leathery leaves
HABITAT	sun to partial shade acidic sandy or rocky conditions
SEASON	flowers between April and July fruit forms by end of summer and persists for winter
OTHER INFO	drought tolerant good replacement for invasive groundcovers provides food for wildlife, including hummingbirds, butterflies, and some mammals

Bearberry growing as great groundcover
Photo © Michael S. Pascoe @ www.canadaplants.ca

Close-up of dark, shiny leaves
Photo © Michael S. Pascoe @ www.canadaplants.ca

Wild Geranium
Geranium maculatum

USE	groundcover for woodland garden
IDENTIFICATION	about 30-60cm tall clump forming pink/purple flower blooms with five petals leaves are opposite/whored, and deeply lobed in a loose mound leaves become spotted with age
HABITAT	prefers partial shade prefers dry sand or loam often in open woods and clearings
SEASON	blooms late-spring and early-summer (April to June)
OTHER INFO	nectar source for hummingbirds often forms colonies

Full plant
Photo: Stephen Smith

Close-up of the purple flower
Photo: Paul Morris, Acorus Restoration http://www.ecologyart.com/

Wintergreen
Gaultheria procumbens

USE	shady groundcover woodland habitat garden
IDENTIFICATION	about 10-15cm tall leaves are small, tough and aromatic fragrant white flowers that hang bright red berries underneath leaves
HABITAT	partial shade dry to moist acidic soil often in open forest habitat
SEASON	flowers in the spring berries in the fall; remain for winter
OTHER INFO	also known as Checkerberry and Teaberry

Full plant showing leaves and flowers
Photo © Michael S. Pascoe @ www.canadaplants.ca

White, hanging flower
Photo: W.D. Bakowsky

Red edible berries
Photo © Michael S. Pascoe @ www.canadaplants.ca

Running Strawberry Bush

Euonymus obovatus

USE	excellent groundcover in shade
IDENTIFICATION	low, trailing deciduous shrub up to 45cm tall orange/pink fruit with bright red berries dense leaf foliage
HABITAT	partial shade to shade rich and moist, well-drained soil woodland or thicket habitat
SEASON	leaves turn scarlet and berries appear in the fall
OTHER INFO	also known as running euonymus attracts butterflies and birds

Growing as great ground cover
Photo: Sean James

Bright red berries
Photo: Copyright © Walter Muma

Dense leaf foliage
Photo: Sean Fox, U of Guelph Arboretum

Canadian Bunchberry
Cornus canadensis

USE	great groundcover for woodland garden and naturalizing property
IDENTIFICATION	5-20cm tall leaves are opposite/whorled and oblong with pointed tip cream-white flowers with four petals red berries with one large seed
HABITAT	typically found on rich soils but can withstand nutrient poor soil in damp, cool conditions acid soil or peat moss
SEASON	flowers throughout the summer followed by red berries
OTHER INFO	often grows on stumps or rotting logs in coniferous forests

Closer view of the flower with four large petals and tiny cluster within them
Photo © Michael S. Pascoe @ www.canadaplants.ca

The groundcover in bloom
Photo: W.D. Bakowsky

Red berries in the fall
Photo: Northscaping Inc. www.netpsplantfinder.com

Foamflower
Tiarella cordifolia

USE	groundcover for shady woodland or rock garden
IDENTIFICATION	13-25 cm tall maple-like leaves that remain throughout winter distinctive small white star-like flowers
HABITAT	partial to full shade average to moist, humus rich loam soils moist woodlands
SEASON	flowers in spring and early-summer leaves turn red in fall
OTHER INFO	seeds and pollen are source of food for pollinators

A group of foamflower plants covering ground
Photo: Sarah Coulber, Canadian Wildlife Federation

Close-up of a foamflower flower
Photo: Sarah Coulber, Canadian Wildlife Federation

Wild Ginger
Asarum canadense

USE	groundcover for shady location
IDENTIFICATION	15-20cm tall clump-forming single maroon flower with three petals forms under leaves soft green heart-shaped leaves
HABITAT	shade average to moist, humus-rich soil
SEASON	flowers in late-spring
OTHER INFO	drought-tolerant once established deer-resistant roots have a sweet ginger smell and taste

Close up of simple heart-shape leaves
Photo: Sean James

Growing as a great groundcover in the shade
Photo © Michael S. Pascoe @ www.canadaplants.ca

Contacts: Where to Get Help and Advice

The following is a list of nurseries that sell some of the native plants listed within this guide. Each nursery listed has a copy of this guide and can be used as a knowledgeable resource for getting started on your own native plant project along the bluff.

The Ark
Bruce County Rd. 23 RR#2, Tiverton
Phone: 519-396-7518 or 519-396-4971
Email: theark@bmts.com
Website: http://www.thearknativeplants.com

Folmer Gardens
2668 Highway 9, Walkerton
Phone: 519-881-3300
Email: bfolmer@wightman.ca
Website: http://www.folmergardens.ca

St. Williams Nursery and Ecology Centre
885 Hwy 24, St. Williams
Phone: (519) 586-9116 OR 1-866-640-TREE (8733) toll free
Email: sales@stwilliamsnursery.com
Website: www.stwilliamsnursery.com

Acorus Restoration
722 6th Con. Rd. RR#1 Walsingham
Phone (519) 586-2603
Email: info@ecologyart.com
Website: ecologyart.com

Nith River Native Plants
4265 Wilmot-Easthope Road, New Hamburg
Phone: (519) 780-1816
Email: info@nithriverplants.com
Website: nithrivernativeplants.com

Aquatic and Wildlife Services
242090 Conc. Rd. 3 Keppel RR#1, Shallow Lake
Phone: (519) 372-1990
Email: aws@gbtel.ca
Website: http://www.awsenvironmental.ca

Grand Moraine Growers
7369 12th Line, RR2 Alma
Phone: (519) 638-1101
Email: info@grandmorainegrowers.ca
Website: http://grandmorainegrowers.ca

Little Otter Tree Farm
870 Regional Road 30, RR#6, Tilsonburg
Phone: (519) 842-2419
Email: liotter@execulink.com
Website: http://www.littleotter.com/prices.html

Return of the Native
1186 Flos Road 10 East, Elmvale
Phone: (705) 322-2545
Email: return.native@gmail.com
Website: http://returnofthenative.ca

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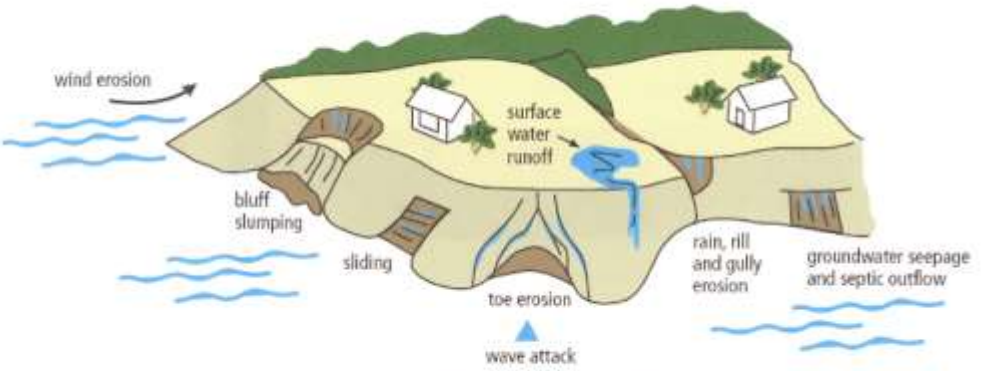
Glossary

Erosion: the wearing away of sediments, such as sand and soil, by wind and water

- On the coast this can be caused by:
  - **Wave erosion**
  - Surface water **runoff** from rain and snowmelt
  - Groundwater **discharge and drainage**



Causes and Effects of Coastal Erosion

Bluff: a steep slope exposure of unconsolidated sediment, such as sand, gravel, silt and clay, created by receding glaciers

Gully: an erosional feature cut into the bluff

Headward erosion: the process of stream channel building that erodes the soil at the upper end of the ravine

Seep: a small spring where groundwater exits the slope between layers of sediment

Slump: the falling away of large sections of a bluff or gully's sides often caused as waterlogged slopes weaken

Groundcover: low-growing, spreading plants that help to stop weeds growing

Biodiversity: an array of different animals, fish, birds and plants found existing together in nature

Native plants: a term to describe plants indigenous to a given area, meaning they naturally occurred in that area and have evolved and adapted to the local climate, soils and wildlife over thousands of years

Invasive species: introduced plants or animals that are known to degrade natural areas by growing uncontrollably, often resulting in the loss of plants and animals that naturally exist in these areas

References

Canada Plants (2011). Retrieved from http://www.canadaplants.ca/search.php

Evergreen Native Plants Database. (2011). Retrieved from http://nativeplants.evergreen.ca/

Grow Me Instead (2011). Retrieved from http://www.ontarioinvasiveplants.ca/files/GMI_Booklet_spreads_2011_Final_web.pdf

Lake Huron Coastal Dune Plants Guide: the Good, the Bad and the Ugly (2010). The Lake Huron Centre for Coastal Conservation.

Lake Huron Bluff Stewardship Guide (2013). The Lake Huron Centre for Coastal Conservation.

Muma, W. (2013). Ontario Trees and Shrubs. Retrieved from http://ontariotrees.com/main/index.php

Muma, W. (2009). Ontario Wildflowers. Retrieved from http://ontariowildflowers.com/main/index.php

Native Plant Nurseries and Seed Sources (2011). Retrieved from http://www.creditvalleyca.ca/wp-content/uploads/2011/01/CVCNativePlantNurseries.pdf

North American Native Plant Society (2013). Retrieved from http://cwf-fcf.org/en/discover-wildlife/flora-fauna/flora/index.jsp?page=3

Ontario Invasive Plant Council (2013). Retrieved from http://www.ontarioinvasiveplants.ca/

Ontario's Invading Species Awareness Program (2013). Retrieved from http://www.invadingspecies.com

Ontario Ministry of Natural Resources: The Tree Atlas (2012). Retrieved from http://www.mnr.gov.on.ca/en/Business/ClimateChange/2ColumnSubPage/STDPROD_085782.html?region=nativeSpecies

St. Williams Nursery & Ecology Centre (2013). Retrieved from http://www.stwilliamsnursery.com/products/small-trees-shrubs-a-vines.html?page=shop.browse&category_id=9

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