Western Ontario Fish and Game Association Pond: A Shoreline Restoration Plan

Challenge:

The challenge facing the Western Ontario Fish and Game Association Pond is shoreline trampling and erosion due to heavy pedestrian traffic for fishing use.

Goal:

The goal of this restoration plan will be to naturalize the east facing shoreline of the Western Ontario Fish and Game Association Pond.

Objectives:

- 1. Install floating docks to minimize shoreline trampling and to create fish habitat.
- 2. Naturalize the shoreline for stability and control of erosion.

Considerations:

- The shoreline area is home to many Canada Geese which contribute to the trampling and lack of groundcover in the area.
- 2. Open areas along the shoreline are necessary to allow for access to the pond.
- The height of the vegetation should be kept to a minimum around the west dock to allow for a view of the pond from the clubhouse.
- 4. The choice of species to be planted should be closely monitored as the naturalization is taking place in the Westminster Ponds Pond Mills Environmentally Significant Area (ESA) and Provincially Significant Wetland.

Restoration Plan:

In keeping with the ideas of the members of the Western Ontario Fish and Game Association as well as restoration and ESA issues the following plan is suggested:

The shoreline area to be naturalized should present a continuation of the existing willow-dogwood-silver maple community on the south end of the restoration area. Generally the form of this community has lower shrubs along the shoreline and taller shrubs and trees in the backshore area with scattered openings that support ground layer herbaceous species. This variation in layers and heights is very attractive to wildlife such birds and butterflies and discourages Canada Geese. They prefer open grass shorelines for easy access to the water. Extension of the thicket will limit pedestrian traffic, trampling and geese activity in the area, therefore helping to stabilize the shoreline.

To compensate for the loss of shoreline for fishing, it was suggested by the MNR to build a section of floating dock as a fishing platform. Access can be provided through an opening in the shrubs. The dock will provide additional fish habitat (shade and cover) and provide good access to the deeper fishing hole close to the shore.

To integrate the "wild" aspects of the shoreline vegetation with an aesthetically pleasing landscape at the clubhouse, while still using native species, it is suggested that a gradual transition be made along the shoreline restoration area from taller shrubs and thicket vegetation to lower shrubs, and larger openings of herbaceous plants. Plant selection can be made to choose native flowering shrubs and plants, and specimen sedges, grasses and ferns that will create a meadow like area which allows for a view of the pond from the clubhouse as well as upon entrance to the Western Ontario Fish and Game Association parking lot. A general concept plan is attached.

Implementation

It is recommended that local native plant nurseries with experience in restoration projects be consulted for assistance in preparing the detailed planting plan, making recommendations for species and perhaps completing the main planting and/or providing members with appropriate direction on planing, care and maintenance to ensure success.

The restoration are will likely require some form of protective fencing in the initial period of establishment to prevent the geese from eating and damaging the small seedlings and to control access by club members.

After the fence is removed, some signs to identify the site as a restoration project may be desired by the club members.

A restoration committee in charge of maintenance activities such as control of weeds and monitoring for success should be established.

Native Plant Suggestions:

The following plant list indicates species that are tolerant to the soil, light and moisture conditions present at the shoreline restoration site. It lists many of the species that were identified in a visit to the site on May 29, 2001 and can be used as a basis for a planting plan. It also lists some other plants suitable to the shoreline area, which are of a lower stature and are available for purchase at some specialized native plant nurseries. All of these plants are native to the London area and are also found at various locations within the Westminster Ponds ESA. It is important to use locally native plants in an Environmentally Significant Area to preserve its diversity and local site context. There are many other plants found in this area which may be added to this list following the ESA Planting Guidelines. Further consultation with wetland specialists is recommended to help select species that will be most successful based on site conditions.

Botanical Name	Common Name	Soil Conditions	Light Conditions	Height
Calamagrostis canadensis	blue-joint grass	moist	full sun	< 1 m
Carex crinata	fringed sedge	wet	full sun	< 1 m
Cephalanthus occidentalis	buttonbush	damp	full sun-partial shade	< 3 m
Cornus racemosa	grey dogwood	moist	full-partial sun	< 2 m

Cornus stolonifera	red osier dogwood	moist - wet	sun	< 4 m
Eupatorium maculatum	joe-pye weed	damp	sun	< 1 m
Eupatorium perfoliaturm	boneset	damp	sun	< 1.5 m
Lindera benzoin	spicebush	moist	full sun-partial shade	< 3 m
Onoclea sensibilis	sensitive fern	wet	shade	< 1 m
Osmunda cinnamomea	cinnamon fern	moist	shade-sun	< 1 m
Physocarpus opulifolius	ninebark	shoreline	full sun-partial shade	2-3 m
Salix discolor	pussy willow	moist	full sun	3 - 4 m
Spiraea alba	narrow-leaved meadowsweet	moist	full sun-partial shade	< 2 m
Thelypteris palustris	marsh fern	moist	shade	<1 m
Vaccinium corymbosium	high bush blueberry	moist-wet	full sun	< 4 m

ESA Planting Guidelines:

Before finalizing the planting plan, it is recommended that the <u>Guide to Plant Selection for Environmentally Significant Areas</u> be consulted. This guide is available from the City of London Planning Department and outlines which species should and should not be used in local restoration as well as the rationale behind these choices.

Contacts and References:

For information regarding the availability of environmental consulting firms, native plant suppliers, and general planting guidelines, the following agencies can be contacted:

Society for Ecological Restoration (SER) Copies of SER's 2001 - 2002 Native Plant Resource Guide are available for \$2.50 (+ \$2.50 shipping and handling) by calling the Natural Resources Information Centre (1-800-667-1940). This Guide is full of restoration information including a directory of local native plant nurseries involved with SER.

www.serontario.org
SER Ontario Chapter
c/o Centre for Environmental Training
Niagara College - Glendale Campus
135 Taylor Rd., R.R.#4
Niagara-on-the-Lake, ON
LOS 1J0 (905)641-2252 ext. 6494

Garden of Eden Tree Farm

Garden of Eden Tree Farm specializes in native Carolinian trees and shrubs.

Pat & Julie Van Den Nest Box 20 Eden, ON NOJ 1HO (519)866-5269

Acorus Restoration

Acorus Restoration provides ecological consultation as well as a native plant nursery.

Paul Morris and Darleen Degrieck

RR #1

Walsingham, ON

N0E 1X0

(519)586-2603

Otter Valley Native Plants

Otter Valley Native Plants provides native plants of Southern Ontario for restoration and naturalizing.

Gail Rhynard

P.O. Box 33, R.R. #1

Eden, ON

NOJ 1H0

(519)866-5639

McLeod, D. 1981. Biological Survey of the Proposed Westminster Ponds/Pond Mills Conservation Area.

The report lists all of the vascular plant and animal species found in the Westminster Ponds ESA. It can be used to reference between the species to be planted and what is already present around the site.

Copies are available on loan from the City of London Planning Department.

Room 609

Contact Bonnie Bergsma

(519)661-4980 ext. 4865

Guide to Plant Selection for Environmentally Significant Areas

The City Guide outlines the species which should and should not be planted within ESA's such as the Westminster Ponds.

City of London Planning Division 300 Dufferin Ave, P.O. Box 5035 London, ON

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(519)661-4980

Upper Thames River Conservation Authority

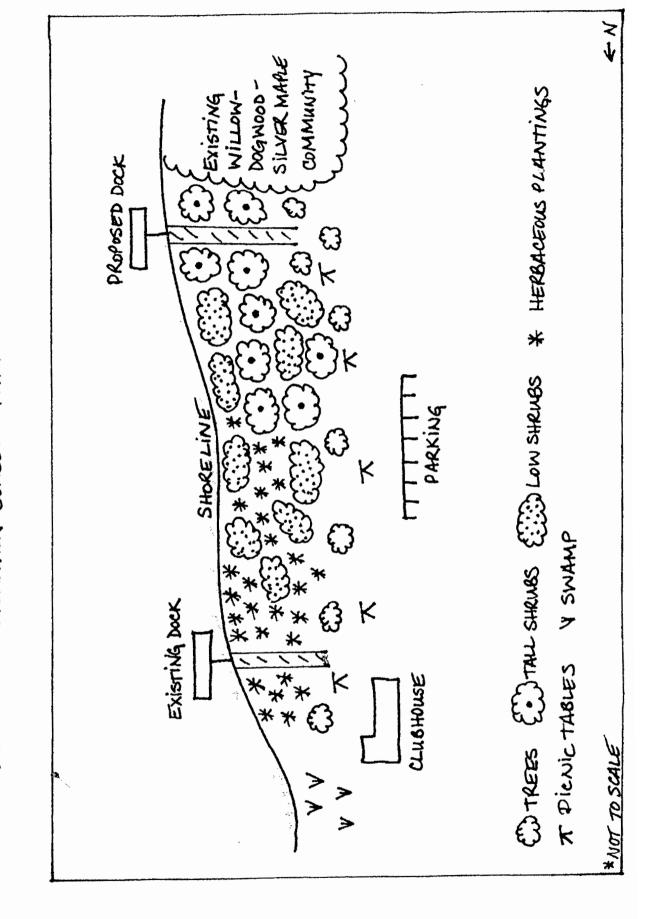
1424 Clark Road London, On

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WESTERN ONTARIO FISH AND GAME ASSOCIATION: SHORELINE RESTORATION CONCEPT PLAN



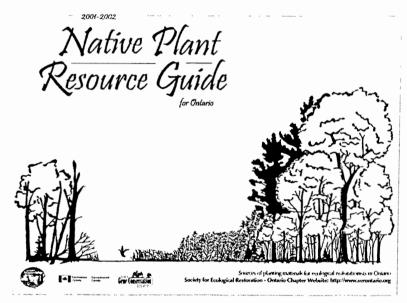


The following document is posted as a PDF file and can be viewed and/or printed using Adobe Acrobat Reader. This program is available free of charge at http://www.adobe.ca/products/acrobat/readstep2.html

Sustaining Biodiversity: A Strategic Plan for Managing Invasive Plants in Southern Ontario (1.22 MB)

Other sources of information on invasive exotics can be found at the Canadian Botanical Conservation Network at http://www.rbg.ca/cbcn/en/index.html.

Our 2001-2002 Native Plant Resource Guide for Ontario is now available!



Copies of the new 2001-2002 Native Plant Resource Guide for Ontario (now 40 pages!) are available. The Guide will help you find appropriate sources of seeds or plants for your ecological restoration or natural landscaping projects. Also included in the directory is information on the important steps to successful planning, establishment, and maintenance of native plantings, as well as questions you should ask suppliers to ensure you buy only source identified planting materials that are suited to your local climate and from sites as similar to your planting site as possible.

HOW TO ORDER:

Copies are available for \$2.50 (plus \$2.50 shipping and handling) from the Natural Resources Information Centre (1-800-667-1940) or by visiting http://mnr.steres.gov.on.ca/mnr/english/publication_subjects.asp?tid=0&cat=2&subcat=0.

Both Mastercard and Visa are accepted.