

SPARLING BUSH: MANAGEMENT RECOMMENDATIONS FOR THE TOWN OF ST. MARYS



**UPPER THAMES RIVER CONSERVATION AUTHORITY
JULY 2015**



TABLE OF CONTENTS

Table of Contents	i
Introduction	1
Sparling Bush Overview	1
Recommendations	1
Community Involvement	1
Encroachment	2
Non-Native Invasive Species	2
Community Naturalization	3
Walking Trails and Signage	3
Budget	3
Appendix 1: 2015 Vegetation Inventory	4
Appendix 2: Sparling Woodlot Assessment, 2001	8
Appendix 3: Living with Natural Areas: A Guide for Homeowners	9
Appendix 4: Protecting Natural Areas in the City of Woodstock	10
Appendix 5: Recommended Native Trees, Shrubs and Vines	11

INTRODUCTION

In 2014, the Upper Thames River Conservation Authority (UTRCA) was approached by the Town of St. Marys to review and make recommendations on how best to manage Sparling Bush. This request came as a result of concern about the woodlots' overall health and management.

In preparing this report, the UTRCA undertook a detailed vegetation study which included both trees and herbaceous plants (Appendix 1). The UTRCA also reviewed a report entitled, "Sparling Woodlot Assessment," prepared by Warren Moore in October 2001 (Appendix 2). The Rotary Club of St. Marys commissioned the W. Moore report in an effort to guide the Town in its management of the woodlot. Although 14 years old, much of the W. Moore report and many of its recommendations are still applicable today. This UTRCA report in many ways will re-emphasize recommendations that were made in 2001.

SPARLING BUSH OVERVIEW

This 2.4 hectare mature sugar maple woodlot is still relatively healthy but is showing signs of pressure from the surrounding development. Encroachment and the spread of non-native invasive species are probably two of the main threats. The relatively good health indicates that the woodlot was well managed historically. The density, age and health of the trees indicate that it was never over harvested. Improvement cutting of diseased and damaged trees for firewood was probably the extent of harvesting.

The current basal area of the woodlot, 28.4 m²/ha, is greater than the recommended 20 m²/ha for optimizing timber growth. Basal area is the surface area of wood growing at breast height (1.3 m) on a given hectare of land. In this case, the higher basal area is probably protecting this woodlot from the spread of non-native invasive species into the interior. For this relatively small woodlot, the interior is almost void of non-native invasive plants, due to the closed canopy and lack of light reaching the forest floor. The closed canopy has also resulted in a very even age stand of sugar maple with very little regeneration of saplings and seedlings, resulting in a park-like woodlot.

RECOMMENDATIONS

Following are management recommendations to improve the integrity and health of Sparling Bush.

COMMUNITY INVOLVEMENT

Foremost, we believe that community involvement through a dedicated group of interested volunteers would be of great benefit. A committee, such as a "Friends of Sparling Bush," could help in plan and implement projects to enhance the woodlot. The committee might include representation from the Town of St. Marys, the Rotary Club of St. Marys, adjacent landowners and the UTRCA. Herb Sparling, former landowner and Rotarian, bequeathed the woodlot

through the Rotary Club to the Town of St. Marys. Rotary is very dedicated to being a major partner in the enhancement of Sparling Bush.

Community involvement is critical in maintaining community support and will help in policing permitted uses. Community interest needs to be nurtured and supported.

ENCROACHMENT

The Town of St. Marys needs to re-establish the property boundaries between Sparling Bush and the adjacent residential properties. Over the years, a number of these properties have encroached upon the woods by cutting vegetation, expanding lawns, planting ornamentals and building structures. This type of encroachment makes a small fragile woodlot even smaller.

The other type of encroachment that is occurring is the dumping of unwanted yard waste (such as grass clippings and leaves) and even construction materials. This type of illegal dumping needs to be stopped. Yard waste reduces the potential for natural regeneration and increases the potential to introduce seeds of non-native vegetation. These materials can be disposed of through the Town's yard waste program.

To stop these types of encroachment there needs to be both an educational and regulatory component. In many cases, we believe that home owners, who really appreciate living near the woods, just do not understand how their actions can negatively impact the woods over the long term. In 1996, UTRCA and the City of London produced a brochure entitled, "Living With Natural Areas – A Guide for Citizens of London" (Appendix 3). In 1998, UTRCA and the City of Woodstock produced a flyer entitled, "Protecting Natural Areas in the City of Woodstock" (Appendix 4). These are examples of educational materials that outline how our actions can impact natural areas. A guide similar to these could be created for Sparling Bush or for St. Marys in general.

NON-NATIVE INVASIVE SPECIES

Our vegetation inventory indicated that Sparling Bush is comprised of 69 species in total, 44 of which are native and 24 non-native. All 24 non-native species are located in the edge community; only seven of them are also located in the interior community. This indicates that the interior is still relatively healthy and that the spread of non-natives is coming in from the edge.

Encroachment as described above is one of the leading causes.

To reduce the spread of non-native plants an educational and control program should be implemented. The UTRCA has produced an educational brochure entitled, "Recommended Native Trees, Shrubs & Vines – for Naturalization Projects in the Upper Thames River Watershed" (Appendix 5). This information could be shared with neighbouring homeowners or presented through a workshop conducted by UTRCA.

A control program might target some of the more aggressive non-natives such as common buckthorn, garlic mustard, Norway maple and common periwinkle. The program would consist of volunteer community members manually pulling the plants, under the supervision of the UTRCA and the Town of St. Marys. A monitoring and control program would be required

annually to try to maintain control of some of the more aggressive non-natives. Once control on these species is achieved, then some of the other non-natives could be targeted.

COMMUNITY NATURALIZATION

Once the encroachment and non-native invasive species issues have been addressed there will be an opportunity to re-plant some of the cleared area with native trees and shrubs. Planting of these areas will help to re-establish the perimeter of the woodlot. A planting day could be organized by UTRCA with planting assistance provided by school groups and/or community members.

WALKING TRAILS AND SIGNAGE

Currently, there are more walking trails than necessary in Sparling Bush. Many of these trails are coming from unauthorized entry points on private land. Excessive trails compact soil, prevent natural regeneration and promote the spread of non-native invasive plants.

The main trail is part of the Town's "LOOP" trail system with signed entry and exit points from the cemetery. There is also an entrance from Waterloo Street South that connects to the main trail. Most of the main trail is presently mulched with woodchips. It is recommended that the entire main trail be maintained with woodchips to indicate permitted use. All other trails could be closed by blocking with downed woody debris and planting with native trees and shrubs. To reduce public liability, an annual inspection of hazard trees adjacent to the walking trail should be made. Any trees within falling distance of the trail that are deemed to be a potential hazard should be felled by the Town. Material cut can be bucked up and left on the forest floor to decompose, adding organic matter to the forest.

Once some of the above issues have been addressed, the sign at the Waterloo Street South entrance can be updated. The new sign can indicate partners, permitted uses and walking trail location.

BUDGET

A budget should be developed for implementing the recommendations in this report. The UTRCA would be able to assist the Town of St. Marys in developing this budget. The UTRCA would also work with the Town and other partners in pursuing potential grants from external funding sources to cover these costs.

APPENDIX 1: 2015 Vegetation Inventory

Community 1 - Perimeter of the woodlot (see attached map)

Native/Non-Native	Weediness	Common Name	Scientific Name
Non-Native	-3	Norway Maple	<i>Acer platanoides</i>
Non-Native	-1	Horse-chestnut	<i>Aesculus hippocastanum</i>
Non-Native	-3	Garlic Mustard	<i>Alliaria petiolata</i>
Non-Native	-3	Smooth Brome	<i>Bromus inermis</i>
Non-Native	-2	Lily-of-the-valley	<i>Convallaria majalis</i>
Non-Native	-3	European Swallow-wort	<i>Cynanchum rossicum</i>
Non-Native	-1	Sweet Woodruff	<i>Galium odoratum</i>
Non-Native	-2	Herb Robert	<i>Geranium robertianum</i>
Non-Native	-2	English Ivy	<i>Hedera helix</i>
Non-Native	-3	Orange Day Lily	<i>Hemerocallis fulva</i>
Non-Native	-2	Purple Dead-nettle	<i>Lamium purpureum</i>
Non-Native	-2	Motherwort	<i>Leonurus cardiaca</i>
Non-Native	-2	Privet	<i>Ligustrum vulgare</i>
Non-Native	-3	Tartarian Honeysuckle	<i>Lonicera tatarica</i>
Non-Native	-1	Apple	<i>Malus pumila</i>
Non-Native	-2	Lemon Balm	<i>Melissa officinalis</i>
Non-Native	-2	Sweet Cherry	<i>Prunus avium</i>
Non-Native	-3	Common Buckthorn	<i>Rhamnus cathartica</i>
Non-Native	-2	Curly Dock	<i>Rumex crispus</i>
Non-Native	-1	Stonecrop	<i>Sedum sp.</i>
Non-Native	-2	Climbing Nightshade	<i>Solanum dulcamara</i>
Non-Native	-2	European Mountain-ash	<i>Sorbus aucuparia</i>
Non-Native	-1	Common Comfrey	<i>Symphytum officinale</i>
Non-Native	-2	Common Lilac	<i>Syringa vulgaris</i>
Non-Native	-2	Common Periwinkle	<i>Vinca minor</i>
Native		Manitoba Maple	<i>Acer negundo</i>
Native		Black Maple	<i>Acer saccharum</i>
Native		Sugar Maple	<i>Acer saccharum</i>
Native		Red Baneberry	<i>Actaea rubra</i>
Native		Jack-in-the-pulpit	<i>Arisaema triphyllum</i>
Native		Calico Aster	<i>Aster lateriflorus</i>
Native		Blue Cohosh	<i>Caulophyllum thalictroides</i>
Native		Enchanter's-nightshade	<i>Circaea lutetiana</i>
Native		Alternate-leaved Dogwood	<i>Cornus alternifolia</i>

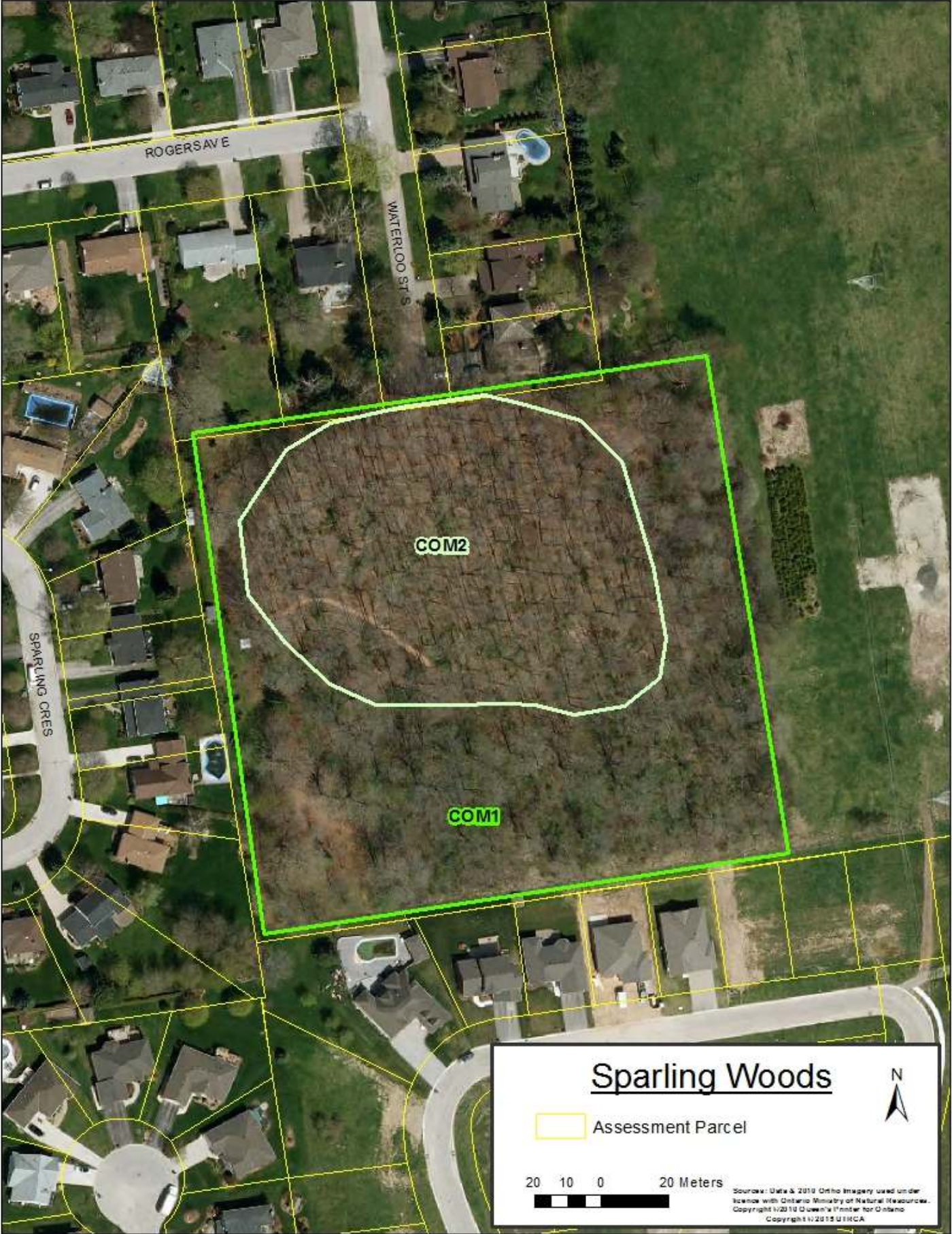
Native/Non-Native	Weediness	Common Name	Scientific Name
Native		Grey Dogwood	<i>Cornus foemina</i>
Native		Red-osier Dogwood	<i>Cornus stolonifera</i>
Native		Daisy Fleabane	<i>Erigeron annuus</i>
Native		American Beech	<i>Fagus grandifolia</i>
Native		White Ash	<i>Fraxinus americana</i>
Native		Red/Green Ash	<i>Fraxinus pennsylvanica</i>
Native		White Avens	<i>Geum canadense</i>
Native		Canada Waterleaf	<i>Hydrophyllum canadense</i>
Native		Virginia Waterleaf	<i>Hydrophyllum virginianum</i>
Native		Black Walnut	<i>Juglans nigra</i>
Native		False Solomon's-seal	<i>Maianthemum racemosum</i>
Native		American Ostrich Fern	<i>Matteuccia struthiopteris</i>
Native		Virginia Creeper	<i>Parthenocissus inserta</i>
Native		Clearweed	<i>Pilea pumila</i>
Native		Solomon's-seal	<i>Polygonatum biflorum</i>
Native		Wild Black Cherry	<i>Prunus serotina</i>
Native		Choke Cherry	<i>Prunus virginiana</i>
Native		Bur Oak	<i>Quercus macrocarpa</i>
Native		Red Oak	<i>Quercus rubra</i>
Native		Staghorn Sumac	<i>Rhus typhina</i>
Native		Wild Black Currant	<i>Ribes americanum</i>
Native		Wild Red Raspberry	<i>Rubus idaeus</i>
Native		Black Raspberry	<i>Rubus occidentalis</i>
Native		Bloodroot	<i>Sanguinaria canadensis</i>
Native		Canada Goldenrod	<i>Solidago canadensis</i>
Native		Early Meadow-rue	<i>Thalictrum dioicum</i>
Native		White Cedar	<i>Thuja occidentalis</i>
Native		Basswood	<i>Tilia americana</i>
Native		Horse-gentian	<i>Triosteum aurantiacum</i>
Native		Eastern Hemlock	<i>Tsuga canadensis</i>
Native		Highbush-cranberry	<i>Viburnum trilobum</i>
Native		Riverbank Grape	<i>Vitis riparia</i>

Weediness Score

A negative score means the plant is non-native. A score of -1 to -3 indicates degree of invasiveness. A -3 score is the most invasive.

Community 2 - Interior of the woodlot (see attached map).

Native/Non-Native	Weediness	Common Name	Scientific Name
Non-Native	-3	Norway Maple	<i>Acer platanoides</i>
Non-Native	-3	Garlic Mustard	<i>Alliaria petiolata</i>
Non-Native	-1	Sweet Woodruff	<i>Galium odoratum</i>
Non-Native	-2	Privet	<i>Ligustrum vulgare</i>
Non-Native	-3	Common Buckthorn	<i>Rhamnus cathartica</i>
Non-Native	-2	Climbing Nightshade	<i>Solanum dulcamara</i>
Non-Native	-2	European Mountain-ash	<i>Sorbus aucuparia</i>
Native		Black Maple	<i>Acer saccharum</i>
Native		Sugar Maple	<i>Acer saccharum</i>
Native		Blue Cohosh	<i>Caulophyllum thalictroides</i>
Native		Redbud	<i>Cercis canadensis</i>
Native		Enchanter's-nightshade	<i>Circaea lutetiana</i>
Native		Alternate-leaved Dogwood	<i>Cornus alternifolia</i>
Native		Grey Dogwood	<i>Cornus foemina</i>
Native		American Beech	<i>Fagus grandifolia</i>
Native		White Ash	<i>Fraxinus americana</i>
Native		Red/Green Ash	<i>Fraxinus pennsylvanica</i>
Native		Yellow Avens	<i>Geum aleppicum</i>
Native		White Avens	<i>Geum canadense</i>
Native		Canada Waterleaf	<i>Hydrophyllum canadense</i>
Native		Virginia Waterleaf	<i>Hydrophyllum virginianum</i>
Native		Black Walnut	<i>Juglans nigra</i>
Native		False Solomon's-seal	<i>Maianthemum racemosum</i>
Native		Hop-hornbeam	<i>Ostrya virginiana</i>
Native		Wild Black Cherry	<i>Prunus serotina</i>
Native		Choke Cherry	<i>Prunus virginiana</i>
Native		Wild Black Currant	<i>Ribes americanum</i>
Native		Black Raspberry	<i>Rubus occidentalis</i>
Native		Early Meadow-rue	<i>Thalictrum dioicum</i>
Native		Basswood	<i>Tilia americana</i>
Native		Highbush-cranberry	<i>Viburnum trilobum</i>



Sparling Woods

Assessment Parcel



20 10 0 20 Meters



Source: Data & 2010 Ortho Imagery used under license with Ontario Ministry of Natural Resources. Copyright © 2010 Queen's Printer for Ontario. Copyright © 2015 UTRCA

APPENDIX 2: SPARLING WOODLOT ASSESSMENT, 2001

Sparling Woodlot Assessment

St Marys, Ontario

Woodlot Appraisal, October 2001

The Sparling woodlot is a typical woodlot found amongst our fragmented forests in Huron/Perth Counties. This woodlot is somewhat unique due to large diameter species found here. The six acre woodlot is an Upland Hardwood forest composed of mainly Hard maple with other species such as Beech, Basswood, Black cherry, and Black walnut. The walnut found in the woodlot is a species found naturally in the Carolinian area. St. Marys is basically on the northern fringe of the Carolinian Zone. The woodlot is in excellent health and the majority of stock is growing quite well. The overall diameter of the stand is 11 inches at DBH (diameter at breast height). This average diameter is quite large as a lot of the trees are mature, with an average age of 40 to 50 years old.

There are scattered larger trees through out the stand that are not common of the stock found in our area. Heavy logging pressure due to high prices have impacted many of our local woodlots leaving smaller residuals. Some of the larger stock of note are the large Black cherry and Walnut found in this woodlot. The one cherry is 28 inches in diameter, which is quite large for this species. There are scattered walnut of size as well found in the woodlot. One notices the lack of vegetation on the floor. The reason for this is the woodlot is overstocked, in that there is not sufficient sun reaching the forest floor for seedling germination. The woodlot has some interesting wildlife values.

Being on the edge of town one would feel that the woodlot would lack wildlife values. Entering the woodlot there are at least two stick nests, home to various hawks/owls. There are various cavity trees that provide home for squirrels, owls and possibly pileated woodpeckers. The woodlot is also home to an abundance of mast trees which provide food for many species of birds and small mammals.



This is a picture pointing south from the main entrance of the woodlot. Notice the little regeneration showing. Trees are quite straight and free of defects. The woodlot has been managed in the past where defective diseased trees, were removed leaving a good base of healthy trees. There are many wildlife values seen in this woodlot.

APPENDIX 3: LIVING WITH NATURAL AREAS: A GUIDE FOR HOMEOWNERS



Living With Natural Areas

a guide for homeowners

Is this information for me?

Natural areas are valuable features of our communities' parks and open spaces. Many citizens, however, may not be aware of these local treasures and the need to protect them. What can you do - whether as a property owner or as someone out to enjoy the scenery and get some exercise - to minimize your impact on natural areas? This brochure answers that question. First, it provides guidelines for those of us who live near natural areas, outlining ways to make the spillover impact from our properties more positive. Next, a "code of behaviour" describes what activities are appropriate in a natural area. The last section lists sources where more information can be obtained.



What is a natural area?

Natural areas include wetlands, meadows, woodlots, valley lands and other relatively undisturbed lands that are home to many different plants and wildlife. Natural areas also include the green spaces and stormwater management ponds found in many new developments.

Some natural areas contain rare plants, wildlife or landforms, or have features characteristic of the region before European settlement, or are especially large or diverse in habitat. Many natural areas are considered environmentally significant on a local, regional, provincial or even national scale.

Many municipalities are working to preserve local natural areas. Settlement and development have destroyed much natural vegetation and caused some types of habitat to disappear completely. Often, natural areas contain the only remaining large sections of forest or wetland. They help us to learn about nature, provide clues to the current health of our environment, and add to our quality of life.

Around your home - having a positive impact

The properties that surround natural areas were once part of a wild landscape. Some yards still have remnants of particular habitat types, such as wet areas along the edge of a wetland. As development moves closer to natural areas, trees and other plants that were once in the middle of woodlands or wetlands, shielded by forests, are now exposed.

Because urban development sits on the doorstep of many natural areas, what is done in neighbouring yards is critical to their health. Here are some ideas to help home owners to ensure that their activities can help neighbouring natural areas and enhance their yards at the same time.



What about encroachment into natural areas?

Thanks to people who recognize their property limits! If a lawn is mowed past property boundaries into a natural area, the rich habitat is replaced by a manicured lawn and the original diversity is reduced. The cumulative impact of dozens, even hundreds of landowners cutting into the edges of natural areas threatens their integrity.

Encroaching past private lot lines into municipal parkland or open space is not permitted and may result in legal proceedings. Call your municipality for more information.

APPENDIX 4: PROTECTING NATURAL AREAS IN THE CITY OF WOODSTOCK

Protecting Natural Areas



in the City of Woodstock



April 1998

Natural areas are not as common in our landscape as they once were. It is important that we do all we can to protect those that remain. If you live next to or visit a natural area in the City of Woodstock, there are things you can do to protect it and reduce your impact. Here are some simple guidelines.



Living Next to a Natural Area:



Compost your yard and garden waste. Dumping it in a natural area can smother natural vegetation. Some garden plants and seeds from food waste may begin to grow in the natural area and force native plants out.

Choose plants for your gardens and flowerbeds very carefully. Some plants are invasive and very aggressive. Plants from your garden can spread to the natural area and choke out native species. Try planting native species in your flowerbeds; they are better adapted to the local conditions. Avoid plants such as purple loosestrife, periwinkle and goutweed, and trees such as Norway maple.

Dispose of household garbage and hazardous waste properly. Do not dump it in a natural area as it may contain harmful chemicals and will smother natural vegetation. Do not pour chemicals down a storm sewer. Oil, paint and other chemicals are extremely toxic and will eventually reach a waterway or wetland via stormwater drains.

Know where your property line is and do not mow into the natural area. Leave a buffer or space of two metres between the natural area and your lawn, if possible.

Save money and the environment by changing the way you maintain your lawn and garden. Even if your property is not near a waterway, pesticides and fertilizers can seep down into the groundwater. Try the following alternatives:

- 1 Add compost to your lawn to fertilize it.
- 1 Use a mulching lawnmower.
- 1 Plant native groundcovers rather than grass. They are better adapted to this area and require less maintenance.
- 1 Try nontoxic methods of pest control such as manual pulling of weeds.

Call the City of Woodstock Engineering Department at 539-2382 ext. 814 for more information on proper disposal of your paint, oil and other chemicals.



Approximately 10 times more pesticides are used on city lawns than are applied on an equal area of farmland.

Do not remove fallen or rotting trees and branches from the natural area. They provide many homes for wildlife.

Natural Areas:

Wetlands, meadows, forests, valley lands and other relatively undisturbed lands that are home to many different plant and wildlife species.

APPENDIX 5: RECOMMENDED NATIVE TREES, SHRUBS AND VINES

Recommended Native Trees, Shrubs & Vines for Naturalization Projects in the Upper Thames River Watershed

The following woody plants (90 species) are native to southern Ontario and grow naturally in the Upper Thames River watershed (Middlesex, Oxford and Perth Counties). They are adapted to the local climate and so are harder than non-native species. Some species have very specific sun, moisture and soil requirements and may not do well in all sites; see the following pages for habitat details.

All species may be available at nurseries that sell native plants (see nurseries list on last page).

(R): Listed as rare in Ontario. Do not plant in large numbers
(C): Carolinian species, rarely found north of London

Trees

Acer rubrum
Acer saccharinum
Acer saccharum ssp. *nigrum*
Acer saccharum ssp. *saccharum*
Amelanchier arborea
Asimina triloba
Betula alleghaniensis
Betula papyrifera
Carpinus caroliniana
Carya cordiformis
Carya ovata
Celtis occidentalis
Comus alternifolia
Comus florida
Fraxinus americana
Fraxinus nigra
Fraxinus pennsylvanica
Gymnocladus dioica
Juglans cinerea
Juglans nigra
Juniperus virginiana
Larix laricina
Liriodendron tulipifera
Nyssa sylvatica
Ostrya virginiana
Platanus occidentalis
Pinus strobus
Populus balsamifera
Populus deltoides
Populus grandidentata
Populus tremuloides
Prunus americana
Prunus nigra
Prunus pensylvanica
Prunus serotina
Quercus alba
Quercus bicolor
Quercus macrocarpa
Quercus muhlenbergii
Quercus rubra
Quercus velutina
Sassafras albidum
Thuja occidentalis
Tilia americana
Tsuga canadensis
Ulmus americana
Ulmus rubra

Red Maple
Silver Maple
Black Maple
Sugar Maple
Downy Serviceberry
Pawpaw (R, C)
Yellow Birch
White Birch
Blue Beech
Bitternut Hickory
Shagbark Hickory
Hackberry
Alternate-leaved Dogwood
Flowering Dogwood (R)
White Ash
Black Ash
Green Ash or Red Ash
Kentucky Coffee-tree (R, C)
Butternut (R)
Black Walnut
Eastern Red Cedar
Tamarack
Tulip Tree (C)
Black Gum (R, C)
Hop-hornbeam or Ironwood
Sycamore (C)
White Pine
Balsam Poplar
Eastern Cottonwood
Large-tooth Aspen
Trembling Aspen
American Plum (C)
Canada Plum
Pin Cherry
Black Cherry
White Oak
Swamp White Oak
Bur Oak
Chinquapin Oak
Red Oak
Black Oak
Sassafras (C)
Eastern White Cedar
American Basswood
Eastern Hemlock
American Elm or White Elm
Slippery Elm or Red Elm

Shrubs

Amelanchier canadensis
Amelanchier laevis
Aronia melanocarpa
Cephalanthus occidentalis
Comus alternifolia
Comus amomum ssp. *oblique*
Comus foemina ssp. *racemosa*
Comus rugosa
Comus stolonifera
Corylus americana
Corylus cornuta
Hamamelis virginiana
Ilex verticillata
Juniperus communis
Lindera benzoin
Physocarpus opulifolius
Prunus virginiana
Rhus aromatica
Rhus glabra
Rhus typhina
Ribes americanum
Ribes cynosbati
Rosa blanda
Rosa carolina
Rosa palustris
Salix amygdaloides
Salix bebbiana
Salix discolor
Salix eriocephala
Salix exigua
Salix lucida
Sambucus canadensis
Sambucus racemosa ssp. *pubens*
Spiraea alba
Viburnum lentago
Viburnum trilobum

Canada Serviceberry
Smooth Serviceberry
Black Chokeberry
Buttonbush
Alternate-leaved Dogwood
Silky Dogwood
Grey Dogwood
Round-leaved Dogwood
Red-osier Dogwood
American Hazelnut
Beaked Hazel
Witch-hazel
Winterberry
Common Juniper
Spicebush
Ninebark
Choke Cherry
Fragrant Sumac
Smooth Sumac
Staghorn Sumac
Wild Black Currant
Prickly Gooseberry
Smooth Rose
Carolina Rose or Pasture Rose (C)
Swamp Rose
Peach-leaved Willow
Beaked Willow
Pussy Willow
Willow
Sandbar Willow
Shining Willow
Common Elderberry
Red-berried Elder
Narrow-leaved Meadow-sweet
Nannyberry
Highbush Cranberry

Vines & Woody Groundcovers

Celastrus scandens
Clematis virginiana
Euonymus obovata
Lonicera canadensis
Mitchella repens
Parthenocissus quinquefolia
Vitis riparia

Climbing Bittersweet
Virgin's-bower
Running Strawberry-bush
Fly Honeysuckle
Partridge-berry
Virginia Creeper
Riverbank Grape

