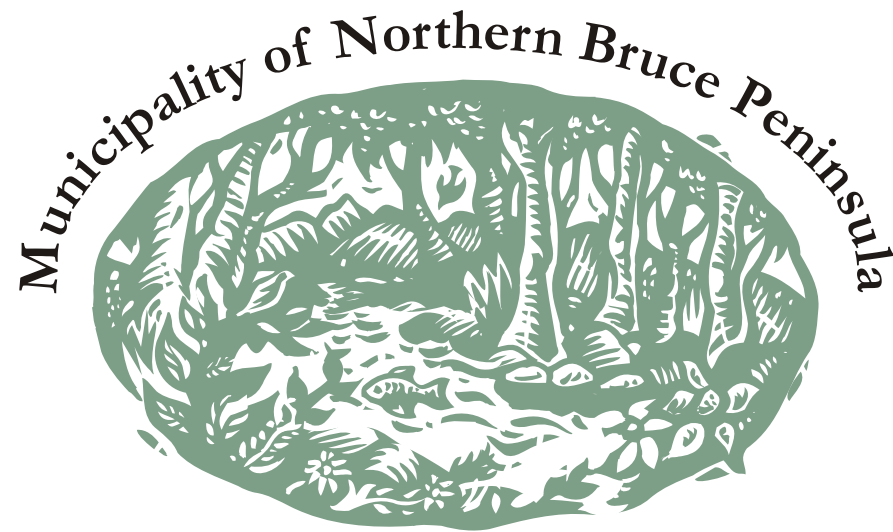


# GREENOUGH HARBOUR COMMUNITY



## Homeowner Manual

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# GREENOUGH HARBOUR COMMUNITY, MUNICIPALITY OF NORTHERN BRUCE PENINSULA HOMEOWNER MANUAL

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## 1.0 INTRODUCTION

The Greenough Harbour Community in the Municipality of Northern Bruce Peninsula is the product of a lengthy planning and design process based on current environmental principles, policies and practices established by the Province of Ontario, County of Bruce and the Municipality of Northern Bruce Peninsula.

As a resident of the Greenough Harbour Community, you have a unique opportunity to participate actively in the protection, maintenance and enhancement of Greenough Harbour's extensive Natural Heritage system. Your positive contributions will ensure that these features are maintained for the enjoyment and education of your family and future generations.

The retention of substantial natural habitat areas within the Greenough Harbour Community and the integration of wildlife and fisheries management practices were vital components of the decision-making process leading to the approval of the plan for your community. For the purposes of this manual, the Environmental Protection areas are described as the Natural Heritage System.

A high level of commitment to the preservation and management of the valued ecosystem and natural heritage features during active construction and occupation of the Community will be maintained. You, the homeowner, will be involved in the day-to-day, season-to-season management of the community's natural heritage features once you have occupied your new home in North Bruce.

The term "Natural Heritage System" is used frequently throughout this manual. The Provincial Policy Statement, an important planning document in Ontario defines Natural Heritage Features and Areas as follows:

*Means features and areas, such as significant wetlands, fish habitat, significant woodlands south and east of the Canadian Shield, significant valleylands south and east of the Canadian Shield, significant portions of the habitat of endangered and threatened species, significant wildlife habitat, and significant areas of natural and scientific interest, which are important for their environmental and social values as a legacy of the natural landscapes of an area.*

Provincial Policy Statement  
February 1, 1997, page 16

It is in the context of the above definition that the areas along the shoreline and in the interior uplands are described as a Natural Heritage System. The integrating features of the system are the Lake Huron and Greenough Harbour shorelines, large interior forest tracts, wetlands and extensive wildlife habitat areas.

Only a small portion of the original Greenough Harbour land holding is designated for active development. The remainder of the land area will be placed in a Natural Heritage Designation.

An array of key Natural Heritage Features and Area are integrated into the Community design we have today.

The Features and Area include:

- The Lake Huron and Greenough Harbour shoreline
- Provincially significant wetland along the coastal zone and in the interior of the site
- Alvars, a type of plant community thriving on calcareous bedrock with shallow soils
- An Area of Natural and Scientific Interest (ANSI; Bruce County Forest Miller Lake Tract) constitutes the major land area to the north east of the development area

- Inland lakes (unnamed) are being maintained
- Habitat for several provincially significant plant and wildlife species including the Eastern Massasauga Rattlesnake, a threatened species in Ontario Large blocks of undisturbed woodlands in the core area of the Greenough Point peninsula site
- Wildlife use and habitat areas and corridors located within the community area.

Other valued ecosystem features and functions such as fish habitat, natural vegetation area linkage and corridor functions and stormwater management concerns were all addressed as part of the planning and design process.

Development within the larger community site has been highly focused based on two fundamental design philosophies.

- 1) Avoidance and protection of key habitat features and the consumer desire for lake front properties.
- 2) Where potential conflict occurred, protection of natural heritage features took precedence.

## 1.1 Purpose Statement

This Homeowner Manual provides the residents of the Greenough Harbour Community with a summary of the key Natural Heritage Features within the Community and the management approaches that are needed to maintain the Natural Heritage System when the Community has been built and is fully occupied.

The purpose of this Homeowner Manual is to provide the residents of the Greenough Harbour Community with the following information:

- 1) A brief outline of the ecological functions and values associated with the Natural Heritage System of the Community; and
- 2) Recommend guidelines for environmental stewardship within the Community. The Homeowner Manual provides examples of desirable activities that should be followed within the Community. Less desirable activities are also listed.



## 2.0 NATURAL HERITAGE / GREENWAY SYSTEM: LINEAR AND OTHER OPEN SPACE

The primary Natural Heritage Features are included within the large Natural Heritage System area designation within the Community Plan. In this manual, this designation has been described as the Greenough Harbour Natural Heritage System.

The Natural Heritage System in your North Bruce Community begins on your individual lot and extends outward over much of the land in the Greenough Harbour Community. It includes the ANSI lands contained within the property, Provincially Significant Wetlands, alvars habitat areas, undisturbed coastal shorelines, inland lakes and streams and large undisturbed forest blocks. The residential enclave including your lot extends around the perimeter of this complex and diverse natural heritage area.

It was noted above that the Natural Heritage System begins on your property. The Natural Habitat Retention Plan for your property is an attempt to retain the Natural Heritage framework through your property to the Lake edge. The animals and plants within these habitat areas are part of the Natural Heritage System. They will also need your protection.

Uses within the Natural Heritage Areas will be restricted to passive nature appreciation. Trails along the shoreline are not permitted and only trails created by the Greenough Harbour Preservation Corporation will be allowed through the interior forest. Such trails will be marked. Development of any type will not be permitted in the natural preserve area. Only those uses and activities that contribute to the conservation and enhancement of the natural heritage features and functions will be encouraged.

The creation of a sustainable natural heritage open space system has been and remains a guiding principle for the use and management of the Natural Heritage System within the Greenough Harbour Community.

## 3.0 NATURAL HERITAGE SYSTEM FUNCTIONS AND VALUES

In addition to its obvious recreational and aesthetic potential, the Natural Heritage System has a variety of important environmental, ecological and legal functions, including the following:

- Maintains and enhances biodiversity by providing habitat for a variety of plants and animals;
- Provides habitat for a number of significant wildlife species;
- Provides linkage and corridor functions through the community connecting other natural areas necessary for the maintenance of biodiversity and the movement of wildlife;
- Maintains stream baseflow and water temperatures;
- Maintains groundwater levels;
- Filters pollutants from air and water;
- Produces life sustaining oxygen;
- Modifies the local climate by modifying solar radiation, air temperature, humidity and wind speed;
- Reduces soil erosion and runoff; and
- Delineates public and private property boundaries.

The proposed natural heritage system will maintain and enhance the functions listed above.

## 4.0 RECOMMENDED MANAGEMENT PRACTICES

### 4.1 Natural Heritage System Management Guidelines: The DO List

Residents are encouraged to follow these basic management guidelines to protect and enhance the ecological integrity and function of the Natural Heritage System as a whole:

- 1) Please use marked trails only within the Natural Heritage System. Intensive pedestrian use of the Natural Heritage System can result in severe trampling of vegetation, destruction of wildlife habitat and soil compaction. These impacts can ultimately lead to a decline in the health of trees and shrubs, ultimately inhibiting plant colonization of the Natural Heritage System by desirable plant species.
- 2) If you decide to improve and protect a lawn and garden on your property, try to use organic alternatives to pesticides and fertilizers that may have direct and indirect effects on flora, fauna, and aquatic features. If pesticides/herbicides and fertilizers must be used, use them sparingly and appropriately. Always follow the manufacturer's directions.
- 3) If you decide to install a pool, do not drain it into the Natural Heritage System along the lakefront directly, as this can severely affect vegetation and potentially cause localized erosion.
- 4) If you plan on building a patio, consider building a wooden deck to ensure that rainwater can soak through and into the ground reducing runoff.
- 5) Keep your dogs and cats under control. When not controlled, both dogs and cats range far from home and can kill or harass significant numbers of wildlife. Keep your pets under control (on a leash, in the house, or in a kennel).  
  
You must conform to local pet control bylaws.
- 6) Native, non-invasive species such as those listed below in Section 4.2 are recommended for landscaping of the yard area.

This will help maintain and enhance the ecological integrity of the Natural Heritage System. Seed and fruit-bearing trees and shrub plantings are recommended as they provide additional food, cover and shelter for birds and animals. Bedding plants should be non-invasive species. Use the surrounding natural area as a model for your dwelling landscaping.

- 7) You are living in a prolific and productive wildlife area and you can expect to encounter these creatures at some point during your stay. Co-existence and adaptation will be necessary. There are measures that can be taken to reduce the "nuisance" element and any small risk associated in an encounter. Wildlife interactions are addressed in a later section.

### 4.2 Recommended Landscaping Species

Suitable native trees for local landscaping include the following:

- Red Maple (not to be confused with red-leaved varieties of Norway Maple [Crimson King]), Sugar Maple, Silver Maple, Bur Oak, Red Oak, White Ash, Green Ash, White Pine, White Spruce, Eastern White Cedar and Eastern Hemlock

Suitable native shrubs for residential landscaping include the following:

- Serviceberry, Grey Dogwood, Red-osier Dogwood, Alternate-leaved Dogwood, Staghorn Sumac, Maple-leaved Viburnum, Witch Hazel, Elderberry, High Bush Cranberry, Nannyberry, Purple-flowering Raspberry and Choke Cherry.

The above list is a partial listing of suitable plant species. Additional information on landscaping with native plants can be obtained by contacting the Grey Sauble Conservation Authority and the Municipality of Northern Bruce Peninsula. References to selected Natural Heritage and Natural Landscaping books are noted in a later section. A longer list of suitable woodland and prairie plants is also attached.

Please purchase your plants from a local nursery; do not collect from the wild.

### 4.3 Species Not Recommended for Use

It is important to understand how destructive certain invasive species can be to the natural environment. These trees, shrubs and groundcover plants reproduce rapidly and aggressively compete with native species for light and space, often “choking out” the species that naturally occur in an area. Over time, they can transform a diverse ecological area to a degraded environment.

Trees, shrubs and groundcover to avoid include:

- Norway Maple (various varieties including Crimson King, Sentry, Royal Red, Emerald Queen), Scot’s Pine, Black Locust, European White Birch, Buckthorn, Tartarian Honeysuckle.
- Also avoid using the following groundcover species: Purple Loosestrife, Periwinkle, Goutweed, Reed Canary Grass and Lily of the Valley.

### 4.4 Unacceptable Activities: The DON’T List

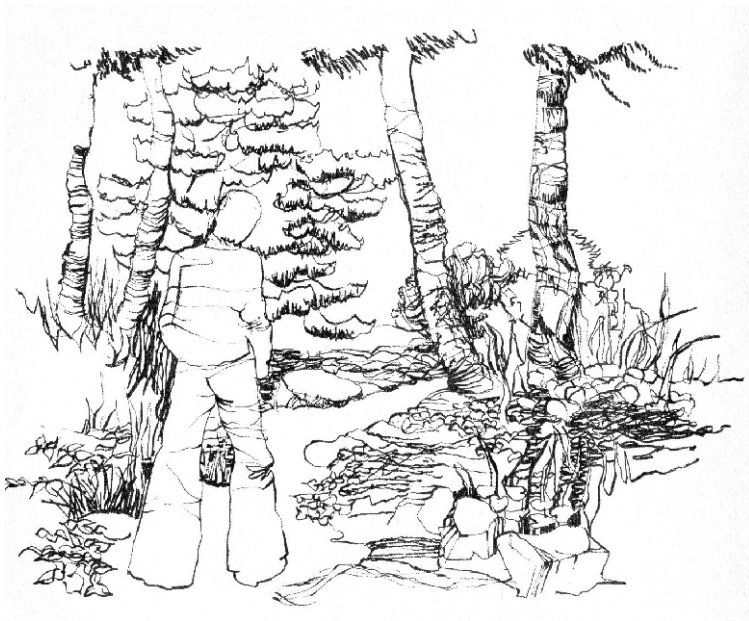
In order to maintain the function and value of the Natural Heritage System the collective cooperation of all residents is required. Examples of undesirable homeowner activities (the Don’t List), that can negatively affect the function of the Community include the following:

- 1) Do not remove trees, shrubs and herbaceous ground flora within the Natural Heritage System without the written consent of the Greenough Harbour Preservation Corporation. The protection and maintenance of the existing vegetation is essential to maintaining the ecological integrity and function of the Natural Heritage System. Do not collect plants for your home residence or for your North Bruce residence.
- 2) Do not pick native wildflowers. Wildflowers last longer, are enjoyed by more people, and look better growing in their natural setting. There are many sensitive native plants that should not be picked for any reason. If you must pick a bouquet, use only the most common species such as Buttercup, Dandelion,
- 3) Do not extend the maintained area on your individual lot into the Natural Heritage System surrounding your residence.
- 4) Do not cut or remove trees and shrubs to improve sight lines without the written consent of the Greenough Harbour Preservation Corporation. The protection and maintenance of the trees and shrubs along the shoreline setback are necessary for the ecological integrity and function of the Natural Heritage System. The Greenough Harbour Preservation Corporation will monitor the shoreline to ensure this requirement is enforced.
- 5) Do not dump material in the Natural Heritage area. Dumping of yard refuse, garbage or fill within the Natural Heritage System is prohibited. This action is detrimental to vegetation, inhibits regeneration, promotes establishment of aggressive weedy species and is aesthetically unpleasing. It contributes to a general sense of neglect that can contribute to further neglect. Local bylaws prohibit this activity and individuals are subject to prosecution for illegal dumping.
- 6) Do not erect structure (i.e. fences, sheds, tree-houses, kennels, decks, pools) that extends onto the natural heritage system including the shoreline setback zone without the written consent of the Greenough Harbour Preservation Corporation.
- 7) To minimize potential animal conflicts, garbage or composting facilities should not be placed in areas that will attract wildlife. Pets should also be controlled to avoid confrontations with wildlife.
- 8) Some species of wildlife, such as racoon, skunk, fox, coyote and even deer can be considered abundant in a cottage setting. Despite the issues these species can create, they are part of the Natural Heritage System. Learn to live with wildlife in your community.
- 9) Do not alter drainage patterns on your property as this can lead to erosion and sedimentation and changes to the plant community dependant on water availability.



- 10) Noise and light can be intrusive, particularly when located adjacent to wildlife areas. Light and noise can affect wildlife behaviour and reproductive success. Please consider these effects when designing and using your backyard area.
- 11) Do not harm or interfere with the reptiles and amphibians that may share your property. They are harmless.
- 12) Additional detailed information on the 30 metre setback zone can be found in the Greenough Harbour Environmental Protection Plan ( under the heading "Restrictive Covenants")

The do and don't guidelines listed above are important and should become part of the on-going management of your individual properties. Collectively, you and your neighbour can have a profound positive effect on the natural features in your community.



## 5.0 WILDLIFE: PART OF THE COMMUNITY

### 5.1 Wildlife Habitat Enhancement

The wildlife habitat on your cottage property can be enhanced. The increased number and frequency of wildlife sightings and viewing opportunities will contribute to the cottage experience. Simple enhancement can be carried out that cost little or no money, but will improve habitat for many species of wildlife.

#### 1) Brush piles

Brush piles provide essential habitat for many species. Small mammals such as rabbits, squirrels and other rodents will use brush piles as escape refuge or denning cover: Songbirds will use the brush pile as a perching site and reptiles will use the cover as breeding, feeding and resting habitat.

The best way to assemble a brush pile is to start with the largest material on the bottom (large logs or poles) and top it off with the smallest material (twigs and small limbs). Larger material at the bottom will ensure that the pile is raised off the ground slightly, enabling animals to enter easily. It will also help to slow the rate of decay. Brush piles are generally best used in areas where habitat may be lacking such as in open forest areas or along forest edges.

#### 2) Snags

Snags are dead or partially dead trees that remain standing. They provide important habitat for wildlife. Often, snags are used by cavity-nesting birds and mammals. Woodpeckers, wood ducks, squirrels, bats, nuthatches, owls, raptors (hawks), and indigo bunting are a few examples of species that use snag habitat at some point in their life cycle.

The most effective way to increase snag habitat is to leave dead standing trees that do not pose a danger to people or property. It is recommended that several different sizes of snag trees be left standing. Different species are attracted to a range of tree trunk sizes.

### 3) Nesting boxes

One of the easiest and most popular ways to enhance wildlife habitat is to provide nesting boxes. Some animals that can be attracted by the placement of nesting boxes are:

- Songbirds
- Bats
- Wood duck
- Osprey (platforms not on individual lots)
- Kestrels and merlins

Many people are wary about attracting bats. In fact, there is a huge benefit to having bats on your property. Bats eat insects that humans find annoying, particularly mosquitoes. A bat can eat its body weight in mosquitoes in a single night. In addition, bats also help by pollinating flowers and spreading tree seeds.

Worksheets describing how to build bat boxes are available from Ducks Unlimited.

### 4) Forest edge improvements

Forest edge habitat is important to many wildlife species. These areas provide excellent opportunities for cover and feeding opportunities. The best way to create good edge habitat is to permit natural succession. Edge habitat should have a gradual transition from shorter vegetation (lawn) to forest habitat. Brush piles and nesting boxes can be established in this transition area to enhance habitat. Do not extend lawn and manicured areas into woodlands adjacent to your building and lawn area.

### 5) Wildlife corridors

Wildlife corridors are small linear features that are left in a natural state and connect two larger areas of habitat. Many areas of the Greenough Harbour community have been left in a natural state to allow for wildlife movement on site, including the shoreline area.

### 6) Creating Wildlife Habitat: Suitable Species

The following native species will attract and encourage wildlife use.

Plant species	Wildlife Benefits
<b>Conifers</b> - White Pine, Eastern Hemlock	<ul style="list-style-type: none"><li>• Ruffed grouse - winter cover</li><li>• Mourning dove nesting</li><li>• Red squirrel forage</li></ul>
<b>Nut producers</b> - Oak, Hickory, Beech	<ul style="list-style-type: none"><li>• Food for grouse, wild turkey, wood duck, black bear, deer, rodents.</li></ul>
<b>Fruit-bearing trees</b> - Black Cherry, Dogwood, Elderberry, Mountain Ash	<ul style="list-style-type: none"><li>• Food for most songbirds, cedar waxwing, wild turkey, gray catbird, black bear, deer, small mammals</li></ul>
<b>Wildflowers</b> - Asters, Columbine, Joe-pye Weed	<ul style="list-style-type: none"><li>• Nectar for hummingbirds, bees, and butterflies</li><li>• Forage for deer</li><li>• Seeds for songbirds</li></ul>
<b>Other</b> - Clover	<ul style="list-style-type: none"><li>• Food for cottontail rabbits, deer</li></ul>

### 7) Controlling Pet Effects

Domestic dogs and cats can seriously affect natural wildlife populations. Cats are among the most serious predators of game birds, songbirds and amphibians; unleashed dogs can disturb nesting birds and reptiles, and harass larger mammals such as deer and black bear. Although it is tempting to let pets roam free, it can be dangerous to your pets and local wildlife. Pets should be leashed at all times or kept indoors. Porcupine are also common and can harm dogs if encountered.

### 8) Pesticide Use

Insecticides such as organophosphates are extremely harmful to wildlife. Pesticides can also leach through the ground and affect local waterways and resident fish populations. Organic pesticides are a great alternative to harmful chemicals. A list of some of the top organic pest management tools is included below:



Product	Uses
Insecticidal Soap	Good for soft-bodied pests like mites, aphids, lace bugs. Insecticide is best applied early in the morning to avoid the hot sun. Spray must contact insect to be effective.
Oil (Dormant and horticultural)	Horticultural oils can be used throughout the growing season, whereas, dormant oils are best used in late winter before buds bloom. Spray must come into contact with the insect to be effective.
Neem	A low-toxicity insecticide that is derived from the Neem tree (India). This product comes in an oil form and can be used as an insecticide. It will also control many diseases such as rots, blights, rust and leafspots.
Mulch: Newspaper and bagged leaves	For weed control. Place sheets of newspaper around plants and cover with leaves. Paper and leaves will naturally decompose by the end of the season.
Polyester Rowcover	Lightweight fabric that covers garden bed to prevents pests and weed growth. Excludes pests, but allows air, water and light to pass through.

## 5.2 Wildlife Interactions

### Abundant Wildlife

Wildlife is most frequently a welcomed addition to a landowner's property, but occasionally certain species can become a problem. The Ministry of Natural Resources (MNR) defines these animals as follows "when an animal damages, or is about to damage, your property". The Ministry also states: "Just having wildlife on your property does not make it a nuisance animal." The Fish and Wildlife Conservation Act identifies the actions a property owner is legally entitled to use to control nuisance wildlife. In general, landowners (or an agent of the landowner) are entitled to capture, kill or harass nuisance wildlife in order to prevent damage to the landowner's property. The following exceptions are specified in the Act:

- Moose, elk, caribou or other protected species cannot be captured, killed or harassed to protect property.
- White-tailed deer cannot be captured, killed, or harassed unless a Deer Removal Permit is issued (by the Ministry of Natural Resources).
- Bears killed in defense of property must immediately be reported to the local Ministry of Natural Resources office.
- Unnecessary suffering cannot be inflicted on any wildlife.

The killing of wildlife is not condoned by the MNR and is only used as a last resort. Property owners are advised to contact their local municipality regarding the discharge of firearms by-laws applicable to your community.

If you choose to live-capture a nuisance animal you must within 24 hours:

- Release the animal in close proximity to where it was caught (maximum of one kilometer away).
- If the animal is sick, injured, or immature, it must be turned over to a veterinarian or an authorized wildlife custodian.

Remember raccoon, skunk and fox are "rabies carrier species" and should be handled with care or by a professional.

The Ministry of Natural Resources and the local municipality should be consulted before any of the above control measures are undertaken. Many species are protected in Ontario and it is a punishable offence to harm or harass them (including the Eastern Massasauga Rattlesnake).

### Species of Interest

#### White-tailed Deer (*Odocoileus virginianus*)

White-tailed Deer can create problems for residents when they begin to browse on landscape plantings. Once deer find a preferred place to feed, they will often return to that site. It is easy to identify deer browse damage. Deer have no upper incisors. They bite with their lower incisors and tear with the upper jaw. This results in a browsed stem with a jagged edge. Bucks (male deer) can damage trees and saplings by rubbing against them with their antlers, resulting in bark being scraped from trees (deer scrap).

One of the best ways to resolve a deer concern is to make your property less attractive to deer. Simple things that can be done to keep deer from your property are:

- Do not provide winter feed or salt for deer
- Remove all unharvested fruits and vegetables from trees and from the ground in the fall

Once deer have begun to use your property as a feeding stop, more dramatic steps may have to be taken. Remember, poisoning or shooting are not the answer.

Accept White-tailed deer as a positive part of the cottage experience and try not to worry about the landscaping.

More detailed recommendations are included in Attachment 1.

### **Black Bear (*Ursus americanus*)**

Black bears will eat hard mast crops (oak and beech), but predominantly feed on berries. Being opportunistic feeders, they will feed on anything they find, including garbage. Bears are shy animals and in most circumstances will avoid humans.

Black bear encounters are relatively rare, but when living in bear country it is important to be aware of ways to avoid close encounters. You should be prepared to respond safely if an encounter with a bear does occur.

Precautions that can be taken to prevent conflicts include:

- Never feed bears directly or indirectly;
- Keep garbage in a bear-proof container or locked inside a building;
- Keep meat scraps in the freezer until garbage is removed;
- Keep compost piles away from the house;
- Wash garbage containers frequently to reduce odors;
- Keep pet food inside the house;
- Keep barbecues clean;
- Remove ripe fruit from ground and trees;
- Do not put meat products in the composter.

Bears adapt readily to human activity particularly when they learn to associate people with food. This can lead to bears losing their natural fear of humans.

If you encounter a bear:

- Do not approach the bear. Slowly back away while watching the bear or wait for the bear to leave. Never turn your back or run from a black bear.
- Make sure you always leave an exit path between you and the bear.
- If you are near a building or car, move inside as a precaution. If the bear was attracted to garbage or food, make sure it is removed once the bear leaves. This will discourage its returning.
- Make yourself appear aggressive. Wave your arms and yell. Carry a whistle or air horn to scare off bears.
- Keep dogs away from a bear. A well trained dog may be able to deter a bear, but a poorly trained dog could excite a bear and lead it back to the dog's owner - you.
- Bears are excellent climbers; never climb a tree to escape a bear.
- Swatting the ground with a forepaw, jaw popping, huffing and bluff charges are warning signs that you are too close and the bear is feeling threatened. Back away slowly.

If you experience problems with a black bear, call the Ministry of Natural Resources Bearwise program report line (1-866-514-BEAR (2327)). For an immediate emergency response call the local police or 911.

## **Eastern Massasauga Rattlesnake (*Sistrurus catenatus catenatus*)**

The Eastern Massasauga Rattlesnake is found throughout the northern Bruce Peninsula, including the Greenough Harbour Community. As the only venomous snake in Ontario, it is often persecuted. The Eastern Massasauga Rattlesnake will avoid detection and often blends into its surroundings, under shrubs, tall grasses, leaf litter or rock slabs. It is important that residents understand the importance of this federally-protected species and the legal ramifications for harming it. Residents should learn how to co-exist with this important reptile. Knowledge about this interesting species should replace the fear often associated with it.

The Eastern Massasauga Rattlesnake (EMR) can be distinguished from other local snakes by its thick body, heat sensitive pits and the presence of a rattle. Typically, the Eastern Massasauga Rattlesnake has a cryptic skin pattern, consisting of dark brown to black blotches on the back over a grey to cream background. The underside or belly is black.

The EMR is born with a small button at the end of its tail, not a full-sized rattle. Over time, as the snake sheds its skin, additional segments are added to the rattle structure. Skins can be shed anywhere from 1 to 3 times a year depending on factors such as food availability, temperature and age of the snake. All rattlesnakes may not have a rattle, as it is possible for a rattle to be damaged or lost. If this occurs the rattlesnake will have a “stump” at the end of their tail. These snakes cannot produce a warning rattle. Remember, the rattle sound is a warning that you are too close and not that the snake is about to strike. Back away.

Snakes (including rattlesnakes) are ectothermic, which means they regulate their body temperatures using the surrounding environment. When you see snakes basking on rocks or on the road; they're trying to increase their body temperatures so they can maintain metabolic activity levels. When the body temperature drops, the metabolic rate is reduced and the snake becomes sluggish and slow. Care must be taken when driving in rattlesnake country. Reduce road mortality by avoiding basking snakes.

Snake safety tips and rattlesnake “look-alike” descriptions are attached to this report.

During the planning phase for your community, extensive research was directed at the EMR and its use of the site. Individual EMR's were captured and implanted with an electronic tracking device. These snakes were then tracked from their summer feeding grounds back to their place of hibernation. Tracking resumed when they emerged in the spring. In the third year, the individual snakes were recaptured and the tracking device removed.

Monitoring of rattlesnake movements continued while road construction was underway. Again, the purpose was to reduce harm to the snake population.

The Community can continue to monitor and observe your population of EMR. A system for reporting snake observations and a response system for “problem” snakes can be developed by your community organization. MNR will provide information, but will not provide assistance when dealing with “problem snakes” (snake removals).

Rattlesnake safety tips are included as an Attachment.

## 6.0 ENVIRONMENTAL MANAGEMENT PLAN

### 6.1 Implementation

Additional information about the environmental management framework for the Greenough Harbour Community may be obtained by contacting the Municipality of Northern Bruce Peninsula Planning Department. The Grey Sauble Conservation Authority may also be contacted for information about landowner support in landscaping and land stewardship.

Management responsibility for the Natural Heritage System of Greenough Harbour Community will change overtime. However, a key area of responsibility resides with the residents of the Greenough Harbour Community. You are now and will continue to be key players in the management and conservation of the Natural Heritage System in your Community. At some points in the development and occupation of the Community, you will share this responsibility with others.

#### *The Land Developer and Home Builder: The Early Days*

Responsibility for the planning and design of the Community and construction of homes, streets, utilities and stormwater facilities lies with the land developer and home builder. They are most active in the early stages of Greenough Harbour Community development.

Their activities are guided by the Municipality of Northern Bruce Peninsula to ensure that the transformation of the land is undertaken in an environmentally sound fashion.

#### *The Municipality of Northern Bruce Peninsula/Bruce County*

The County and Town have an integrated set of policies and programs for the management of environmental issues and areas within the County and Town.

These levels of municipal government will continue to have oversight responsibility for the Greenough Harbour Community. If you have questions, please contact the Town or the County for planning and environmental advice.

#### *Other Agencies*

The Grey Sauble Conservation Authority, Ontario Ministry of Natural Resources (MNR), Ontario Ministry of Environment (MOE) are advisory agencies on whom the County can rely for advice regarding Environmental Issues. You may contact these agencies directly if you have natural heritage related concerns.

#### *The Landowner*

You, as a participating landowner within the Community have the ultimate responsibility for your property and collectively for the Community. Considerable effort has been expended during the development phase to ensure that the Natural Heritage System has been recognized and protected before you take possession of your home. Now it is up to you to manage your property and the Community in a way that is consistent with the overall design philosophy that led to the Greenough Harbour Community.

## 7.0 REFERENCES



There are numerous publications and documents, both published and unpublished, available to you. These documents provide an understanding of Natural Heritage System resource features and their management in an urbanizing environment.

Additional information is available from Bruce County, the Municipality of Northern Bruce Peninsula and the local Region Conservation Authority. Staff will be pleased to assist you.

Select References:

- **Restoring Nature's Place: A Guide to Naturalizing Ontario Parks and Greenspace.** Jean-Marie Daigle and Donna Havinga, Ecological Outlook Consulting. 1996.
- **Landscaping with Wildflowers and Native Plants.** Ortho Books. 1984.
- **A Guide to Natural Woodlands and Prairie Gardening (circa 1982).** Natural Woodland Nursery. Available from Ecoplans Limited, Kitchener, ON, N2G 4Y9.
- **Ecology of Greenways.** Daniel S. Smith & Paul Cawood Hellmund (ed.). University of Minnesota Press, Minneapolis. 1993.
- **Invasive Exotic Species Ranking for Southern Ontario.** Urban Forest Association Incorporated. January 2002. [www.serontario.org](http://www.serontario.org)
- **Landowners Information: Extension Notes - The Collection.** Landowner Resource Centre (P.O. Box 599, 5524 Dickson Street, Manotick, ON, K4M 1A5)
- **Woodland Heritage of Southern Ontario: A Study of Ecological Change Distribution and Significance.** Brenden Larson et. al. Federation of Ontario Naturalists, November 1999.
- **Cottage Water Systems.** Max Burns. **A Cottage Life Book, 2002.**

**Additional Cottage Life Publications are available ([www.cottagelife.com](http://www.cottagelife.com)).**

A more comprehensive reference list is available from the Municipality of Northern Bruce Peninsula.



## Attachment 1

### Deer Management Techniques

If you think that White-tailed Deer are a problem, the following measures may be appropriate.

#### Scare Devices

Deer are nervous and timid animals. Scare tactics such as loud noises or flashing lights will often aid in frightening deer from an area. Some simple devices that can be used are: sensor lights, radios, gas exploders and sprinkler systems. The drawback to these methods is obvious, they can be annoying to the residents and their neighbours.

#### Plant Deer Resistant Species

You can reduce or eliminate deer damage to your lawn and garden by simply altering your plant selection. No plant species is completely deer resistant, however, some species are less preferred by deer and are only browsed on when other food sources are limited. If deer resistant species are planted and preferred species are kept away from the gardens edge, it is possible to reduce or eliminate deer visits to your garden.

#### Physical Exclusion (fencing)

Fencing is the most effective way to eliminate deer from browsing on plantings. The entire property can be enclosed by fencing (7-10 feet height to prevent deer from jumping over), but this can be costly and unattractive. It is recommended that individual gardens or favored trees be fenced instead. Snow fencing and netting works well to protect small areas such as vegetable gardens and foundation plantings. Individual plantings can be boxed in with burlap. Plastic mesh fencing is very popular because it is lightweight and easy to install. This fencing has a big advantage because it is practically invisible so it does not take away from the visual appearance of your garden

#### Repellents

Odor and taste-based repellants can hinder deer occurrences in an area. Repellants are often used in orchards, nurseries and tree plantations. While repellants have been shown to reduce deer browsing, it may not completely eliminate the problem.

A homemade repellant can be created by mixing eggs with water and spraying the mixture on trees. The eggs then rot on the tree and the smell repels deer. The drawback being the smell can also offend humans as well. Below is a table with various repellent methods used to rid your property of troublesome deer

Repellent	Description
Hair bag	Made with human hair placed in a mesh bag. The hair bag is hung on the outer branches of tree no more than 3 feet from trunk. Bags are attached in the early spring and replaced monthly.
Bar Soap	Applied in the same matter as the hair bags. Strong smelling soaps work better
Predator-odor based	Not strongly effective. Wolf, bobcat, coyote and mountain lion urine can be sprayed on vegetation to deter deer by making them believe a natural predator resides in the area.
Soap-based	Made from fatty acid soaps and smells like ammonia. Can be used on edible crops. Effectiveness varies on the weather, but usually lasts between 2-4 weeks.
Egg-based	Made from putrid egg solids. Smells and tastes like rotten eggs. Better used on trees and not edible crops. Reported to be 85- 100% effective.
Hot sauce based	Should not be used on any edible parts of vegetables. Deters deer with a bitter taste.

It is advised to alternate repellants to maintain effectiveness.

## Attachment 2

### Eastern Massasauga Rattlesnake

#### Look-A-Likes

When living in rattlesnake territory it is important to learn how to identify the Eastern Massasauga Rattlesnake from other non-venomous species that share the same home ranges. There are three other snakes that live on the Bruce peninsula that may be mistaken for the Eastern Massasauga rattlesnake. Do not attempt to pick up a snake especially if you are unsure of its species. Below is a table that will help to identify each snake.

#### Snake Species Identification

ID Characteristics	Eastern Massasauga	Northern Water	Eastern Milk	Eastern Fox
Size	47-76 cm	61-106 cm	61-90 cm	91-137 cm
Coloration	Saddle-shaped blotches on grey to cream colored background	Red-brown square blotches on back	Cream color with red-brown blotches. Blotches bordered by black. White blotch on neck appears "Y" shaped.	Yellow color with large brown to black blotches
Underbelly	Black	Cream colored belly with red crescent moon shapes	White and black checkerboard	Yellow and black checkerboard
Tail	Stubby, with segmented rattle	Pointed	Pointed	Pointed, but may mimic EMR by vibrating its tail in leaf litter to produce "rattle" sound
Head	Diamond shaped	Oval head	Oval, slender	Oval
Eyes	Pupils Vertical (catlike)	Pupils rounded	Pupils rounded	Pupils rounded
Scales	*Keeled	*Keeled	Smooth scales	Weakly keeled

\* keeled scales scales have raised ridges, giving snakeskin a rough textured appearance

#### Snake Safety Tips

1. Learn to identify Ontario snakes, and to distinguish the Eastern Massasauga Rattlesnake from other snakes that resemble it. Children can also be taught to identify the Massasauga;
2. Always wear protective footwear (such as hiking boots that cover the ankles) and long, loose fitting pants, especially when hiking in open rocky areas or places where vision may be obscured, such as in long grass or at night;
3. DO NOT pick up snakes or other wild animals. This act is the most common cause of bites;
4. Do NOT harass, chase or threaten a snake. This act is the second most common cause for bites. Most importantly, never kill a Massasauga rattlesnake, which is unnecessary, dangerous, and illegal due to its protected status;
5. Always watch where you are putting your hands and feet. Poke around with a stick before reaching into brush, under rocks, or into dark places where snakes may be hiding;
6. If you hear a rattlesnake, STAY CALM! Stop walking, and then determine the snake's location. Slowly move away from the snake and give it room to also move away;
7. Keep pets on leashes; curious pets at large are more often the victims of snakebites than people;
8. If you come across a snake, the best advice is to enjoy the unique encounter but observe it from a safe distance and try not to disturb the snake.

(Safety tips taken from the eastern Massasauga rattlesnake stewardship guide page 37)

**\* Remember, a dead rattlesnake is still venomous and should not be touched.**

## Attachment 3

### Eastern Massassauga Rattlesnake - Emergency Information

#### First Aid for Bites

Rattlesnake bites are a medical emergency and should always be taken seriously. Most bites are recognizable within 15 minutes. The area around the bite will discolor, swell and there will be a great deal of pain at the site of the bite. With proper medical care, no one has died of a snakebite in Ontario.

#### Stay Calm

If a snake bite occurs it is important to stay calm and not panic. Although a bite has occurred, it does not mean a person has been envenomated. It has been estimated that 25% of all rattlesnake bites are only defensive strikes and no venom has been injected. This is called a "dry bite". The calmer a bite victim is the more useful they are to doctors and emergency personnel. Staying calm will help to slow the circulation of venom in the body.

#### What to do:

- Reduce activity of the person that has been bitten. Remaining inactive will slow the rate of circulation of the venom.
- Lay the victim down and keep the bite location below heart level.
- Wash and cleanse the wound.
- In case of swelling, remove all jewelry
- **Do not try to catch or kill the snake**
- **DO NOT APPLY ICE, SUCTION OR A TOURNIQUET**

#### Medical Treatment Centres

A person who has been bitten by an Eastern Massasauga Rattlesnake needs to seek medical treatment right away. It is important to know where the closest health centre is and if they have access to anti-venom, however, in most cases anti-venom is not required.

The nearest medical centre to the Greenough Harbor community is the Lion's Head Hospital located at 22 Moore Street. This medical facility has a supply of anti-venom. It is important to know the fastest route to this hospital.

### **Lions Head Hospital (519) 793-3424**

#### Directions

From Greenough Point, proceed east on Gauley Bay Road. Turn left and proceed east on Stokes Bay Road. To remain on Stokes Bay Road, turn left, then right in Stokes Bay. Follow Stokes Bay Road to Burma Road, also known as County Road 9. Turn left and proceed east towards Lions Head. From County Road 9, turn left at the "T" intersection. This is Main Street. Turn right at the first street( Moore St.) The Lions Head Hospital is located at 22 Moore Street.

