WINTER 2005

## **Biodiversity and Water Quality**

# Woodlands are Important to the Quality of Lake Huron's Coastal Waters

The Huron Fringe Forest includes the wooded areas that parallel the shoreline of Lake Huron. It is a remnant of what used to be part of the great forests of pre-European settlement that covered about 90% of the landscape in southwestern Ontario. Today, because of clearing for agriculture and development, the forests have been reduced to patches and strips of woodlands.

### Benefits of Woodlands

Most cottagers know some of the direct benefits of the woods bordering the Lake Huron shoreline—shade during the summer providing needed relief from the hot sun; wind break from the intense winds off the lake during storms; the aesthetic value of the trees and the connection with nature.

More fundamentally, these woodlands give us clean water, fresh air and beautiful, relaxing places to enjoy with our families. They act as "living filters" that intercept, absorb and store sediments and excess pollutants carried in runoff from adjacent lands. The more we do to reduce the ability of these woodlands to filter runoff, the more we can expect water quality along the lakeshore to deteriorate.

Similar in function to wetlands as water purifiers, woodlands play a significant role in keeping our waters clean. These woodlands are essential in filtering out nutrients from farmland and development runoff,

pesticides, pathogens and excessive sedimentation.

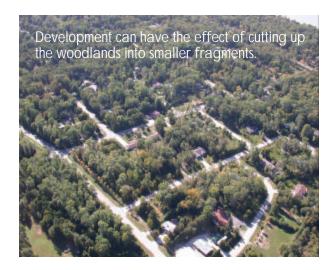
When we look at a woodland, it's more than simply a bunch of trees. Healthy woodlands are balanced ecosystems that are home to a variety of plants and animals. They include the vegetation, soil, insects and microbes that each play a part in the health of a forest.

### **Threats**

The remaining woodlands along Lake Huron are threatened as more development and resulting tree clearing occurs.

Every time a new cottage or home is built or expanded, more of the Huron Fringe woodlands are lost. New subdivisions can impact large portions of the woodlands. Development has the effect of cutting up, or fragmenting the woodland into smaller pieces. As this happens, the woodlands lose some of its ecological integrity which can, among other things, make the woodlands more prone to disease and pests, and reduce their water cleansing function.

Once development is in or adjacent to a woodland, other impacts can occur to alter or damage its ecology. As development moves in, it offers a pathway for a number of alien, invasive species to intrude, and in some cases overtake the forest. Garlic Mustard (Alliaria petiolata) is an example of an invasive plant that can overtake native plants and choke out seedlings that replace trees as they die out. This loss of ability of the woodland to regenerate is a long term consequence that is a legacy for our children and grandchildren. The woodlands that we see today, may not be around tomorrow.



## What can be done?

- Reduce your impact by adopting stewardship measures that reduce impacts to woodlands.
- Preserve trees on your property and keep your place as natural as possible.
- Use native species when doing landscape planting, and keep a vigilant eye out for damaging invader plants, like Garlic Mustard.
- Work with your neighbors and your cottage association in adopting conservation stewardship practices that will benefit the whole community.
- Encourage your municipality to adopt plans and bylaws that strongly protect remaining woodlands, and where development plans are already being considered, to adopt plans and bylaws that encourage future development to adopt conservationist or "new urbanist" designs that result in preservation of natural areas.

Protect Lake Huron's woodlands, protect our water quality.

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