
# Invasive Species Control on Lake Huron Beaches

A Position Statement of the Centre's Board of Directors

2008

**Position on the Application of Herbicides in Coastal Areas**
**Board of Directors**
**Lake Huron Centre for Coastal Conservation**
**2008**

The use of herbicide to control invasive plants, like Common Reed, should be considered as a last resort after all other control measures have failed and the plant is out of control. Use of herbicide needs to be carefully planned, target only the invasive plant, and be undertaken by professional applicators under strict supervision by the public authority.

In experimental trials done in the United States, the cutting of larger stands having high stem densities has been identified as not an effective control method unless coupled with an immediate application of glyphosate herbicide to the freshly-cut, stem cross sections or with a cut-stem injection of glyphosate. However, it must be noted that in Canada, there is currently no regulated glyphosate-based herbicide that is regulated for use in areas of standing water. It is only possible therefore to use glyphosate herbicide in areas a safe distance from a body of water, and on dry soil.

Researchers from the Ontario Ministry of Natural Resources did experimental trials in 2007 in Rondeau Provincial Park using various types of herbicide. It was found that glyphosate herbicide was the most effective, and safest, ensuring that it was properly applied.

The application of herbicide in an environmentally significant coastal area, like dunes, beach, and wetlands, requires special planning and treatment. This may include labour intensive techniques such as hand-wicking or using a backpack-style hand sprayer that targets the invasive plant and eliminates herbicide drift and the possibility of over application. Timing of such application is important, with fall application preferred since native plant species will have become dormant. This prevents unnecessary mortality of non-target plants.

In particularly sensitive areas (such as those with species at risk, or rare dune or wetland species), the use of herbicides should also be supervised by a qualified field biologist familiar with native coastal plants and species at risk. Coastal areas have a higher than average concentration of rare species and species at risk. Species at Risk are protected by federal and provincial legislation. Failure to have due diligence to protect Species at Risk could result in severe penalties.

The Coastal Centre recognizes that the use of pesticides (herbicides) along the shoreline may be controversial if the purpose and the implementation are not clearly defined. The purpose of controlling the spread of *Phragmites australis* is to protect the biodiversity of native plants and therefore ecosystem health of the region. **It is not being done for cosmetic purposes.** It is not being completed for the purpose of maintaining a view to the lake or for sight lines to the beach. By controlling or reducing the threat of *Phragmites* overtaking native plants, the shoreline and beach dune ecosystem will remain intact. If *Phragmites* is permitted to dominate the vegetation type along the shoreline, the ecosystem will be compromised. Any test plot or application location using pesticide as part of the control treatment should include specific communication techniques to engage and inform the neighbouring shoreline community on the purpose of the application, the reason for using herbicides and the safeguards that are being used.

**If the use of herbicides is being considered, it should be applied in fall once native plants have senesced. Herbicide should only be applied by a provincially licensed applicator approved and authorized by the local municipality. Ecological evaluation of a target site should be undertaken by a qualified professional biologist, or related discipline, prior to application. Depending on the site, other agency approvals may be necessary.**