



OAK RIDGES MORaine

The Oak Ridges Moraine is one of southern Ontario's most important and vulnerable ecological regions, stretching 160 kilometers from the Trent River in the east to the Niagara Escarpment in the west. The Moraine's glacially-deposited sands and silts act as an important filter for groundwater for many southern Ontario communities, providing water for over 65 river systems in southern Ontario. The Moraine's rich soils along its southern slopes support prime agricultural land, and large interior forests in a mosaic of rolling hills and open farm fields. Located just north of the Greater Toronto Area, and crossing 32 municipalities, the Moraine is in proximity to the largest populations in Canada and, as a result, faces increasing pressure from development and other human impacts.

History of the Oak Ridges Moraine

The Oak Ridges Moraine was created over 12,000 years ago when, during the last ice age, glaciers retreated, leaving behind mounds of sand and gravel deposited onto the landscape. Over hundreds of years, vegetation took hold and, eventually, trees and forests became established, providing habitats for wildlife. The forests of the Oak Ridges Moraine grew to be diverse with an array of tree species including sugar maple, oak, and beech. Although there had been humans on the Moraine since 11,000 AD, when the European settlers first arrived in the 1700s they were granted title to land on the Moraine only if they cleared the land for agriculture. This "incentive" led to the removal of entire forests from the landscape, over the course of 200 years.

Soil fertility lies mostly in the thin top layer of soils. Without protection this fertile soil layer is removed by wind and water erosion. Although farming became successful in some areas of the Moraine, the removal of tree cover caused soils to be unstable in many areas. By the early 1900s, forest restoration efforts began. In many areas, red pines were planted to stabilize the sandy soils. These pine plantations have played an important role in stabilizing the soils and returning some of the Oak Ridges Moraine back to forest cover. Various conservation groups today continue to restore forest cover across the Moraine through tree planting efforts.



Tree Planting on the Oak Ridges Moraine

Almost 80 percent of southern Ontario's forest has been lost due to land conversion and development. Today, the Oak Ridges Moraine has 30 percent forest cover, making it an important forest area in a region impacted heavily by development. This forest cover is important for many native plant species, including the endangered American Ginseng. In addition, over 90 percent of the Oak Ridges Moraine is privately owned, making it important to educate and encourage landowners to be good stewards of their land.

The Oak Ridges Moraine's close proximity to the highest population density of Ontario has increased development pressures on the landscape. In 2001, as a result of decades of effort by individuals and groups, the Provincial government recognized the need for legislation to preserve the health and diversity of the Moraine, especially its water resources. Both the Oak Ridges Moraine Protection Act and Conservation Plan were established in 2002 as key pieces of legislation to help protect and conserve ecosystems on the Moraine. Alongside this legislation, in 2002 the Oak Ridges Moraine Foundation was established to provide financial support and encouragement for activities that preserve, protect, and restore the environmental integrity of the Oak Ridges Moraine.

One of the main objectives of the Oak Ridges Moraine Foundation (ORMF) is to increase natural land cover on the Moraine. To help achieve this goal, a partnership was established in 2006 between the Oak Ridges Moraine and Trees Ontario. Through this partnership the ORMF supported Trees Ontario to source trees grown from locally-sourced seed. A key part of this project is to ensure that adequate supplies of seed are collected from trees and forests of the Moraine in order to support restoration efforts.

The native trees of the Oak Ridges Moraine have adapted and evolved to fit a specific climate and other environmental conditions, and they are the best choice for successful reforestation and restoration of the Moraine's forest cover. Collecting locally on the Oak Ridges Moraine from healthy trees ensures that the seed is well adapted to regional soil and other unique living conditions.

Seeds collected on the Oak Ridges Moraine are sent to the Ontario Ministry of Natural Resources Tree Seed Plant in Angus, Ontario and are made available to local tree planting agencies such as conservation authorities, stewardship councils and municipalities.

For more information

Oak Ridges Moraine Foundation: www.moraineforlife.org

Trees Ontario: www.treesontario.ca

Ontario Forestry Association: www.oforest.ca

Focus on Forests Partnership

Working together, Trees Ontario and the Oak Ridges Moraine Foundation identified an opportunity to engage with and educate teachers and youth province-wide about the Moraine and tree seed identification, collection and germination, all essential components to healthy tree planting. The Ontario Forestry Association has partnered with two NGOs to develop the Focus on Forests resource materials on tree seed, which aligns with the province's curriculum. These materials are available free of charge online at www.focusonforests.ca.

Trees Ontario, working with its partners, is the largest, not-for-profit tree planting partnership in North America. It is committed to the re-greening of Ontario through a range of tree planting activities. The goal of Trees Ontario is to restore the province's tree planting capacity, especially throughout southern Ontario on private lands, by providing funding and planning support for its tree planting partners, including local Conservation Authorities, Ontario Stewardship Councils, municipal governments and community volunteer groups.

The **Oak Ridges Moraine Foundation** provides support and encouragement for activities that preserve, protect, and restore the environmental integrity of the Oak Ridges Moraine. The Foundation offers leadership and coordination for Moraine-wide activities working cooperatively with agencies and organizations active on the Moraine. The Foundation is a convener - bringing people and interests together who share a common goal to conserve the Moraine for Life.

The **Ontario Forestry Association** has been regarded as a trusted source of forest education and stewardship programs since 1949. The OFA is dedicated to raising awareness and understanding of all aspects of Ontario's forests, and to developing commitment to stewardship of forest ecosystems.



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