#### 7 White Spruce Management

Forest management, can increase the biodiversity of a forested area by creating opportunities for wildlife, enhancing tree growth, while providing economic and social benefits to the community. At this stop, the white spruce



stand is managed to improve the growth rate of the spruce and increase the tree species diversity. White spruce plantations are typically thinned when the stand reaches 40-45 years old. Thinning every 15-20 years promotes the growth and improves the quality of remaining spruce, while encouraging the establishment of native hardwood and conifer regeneration.

## 8 Natural Succession

A sand and gravel pit is a hostile environment for any plant, especially for trees. Over time this harsh environment slowly begins to change and become a more welcoming environment for a wide variety of plants. This process of change is known as "Natural Succession". Restoration of this site has recently been undertaken. The edges of the pit have been landscaped and the area seeded with tall grass species. As time passes the grass community will slowly convert to trees and shrubs. Early succession plants are known as "pioneer species"; they are the first to grow in an area after a disturbance and are hardy plants that can withstand periods of drought.

## White Pine Plantation

In this area, white pine has been under-planted beneath the larger hybrid poplar. The shade provided by the poplars slows the growth of the pine, making them less attractive to pests such as the white pine weevil. The result is a white pine tree with little or no weevil damage. The lower branches of the white pine are pruned to prevent a fungus known as the white pine blister rust from infecting the tree. These management techniques produce high quality white pine.



# Warwick Forest Conservation Area

Warwick Forest Conservation Area is a close-to-home adventure for the outdoor enthusiast. Take the self-guided tour and learn about a variety of wildlife habitats and forest management techniques. With 4 km of trail to explore by foot, horseback, cross-country skis, or snowshoes, you will want to return to this site throughout the year.

Become familiar with Warwick Forest's unique natural surroundings with information at nine interpretive stops.

This site showcases several forest management techniques that can be applied to other similar forests common to this part of Ontario. This forest is managed for a wide variety of uses including timber production, wildlife habitat, recreational activities and environmental protection. Since 1949, over 1,000,000 conifers have been planted at this site. Warwick Forest is a collection of several parcels of land owned by the United Counties of Stormont, Dundas and Glengarry, South Nation Conservation and the Province of Ontario.

We are committed to maintaining this natural space. Please respect our Conservation Area by taking all traces of your visit with you.



# **South Nation Conservation**

# **Get Outdoors**

South Nation Conservation manages and maintains a range of close-to-home Conservation Areas with our municipal partners. Warwick Forest Conservation Area is one of these day-use parks that make up our growing network of spectacular green spaces across our jurisdiction. Conservation Areas protect natural features, while offering some of Ontario's best recreation, for the enjoyment of watershed residents and beyond. Learn more about these local landscapes on our website:

www.nation.on.ca/recreation

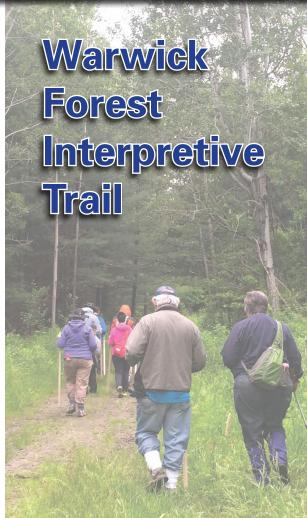


Warwick Forest is located on Berwick Rd. (County Rd. 9), east of Berwick, between MacMillan Rd. and Finch Roxborough Township Rd.



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Hunting is a permitted activity within the Warwick Forest

# **Warwick Forest Interpretive Trail**

## **1** Red Pine Management

This stand was harvested in 1997. Harvest operations, known as thinning, remove approximately one-third of low quality trees. This provides better growing conditions for the remaining trees. The next harvest operation, in 2015, removed 50% of the red pine, allowing more sunlight to reach the forest floor encouraging growth of new seedlings and saplings.

Most of the young trees are hardwoods – can you spot green ash, white elm, red maple, and bitternut hickory?

## 2 Fire Pond

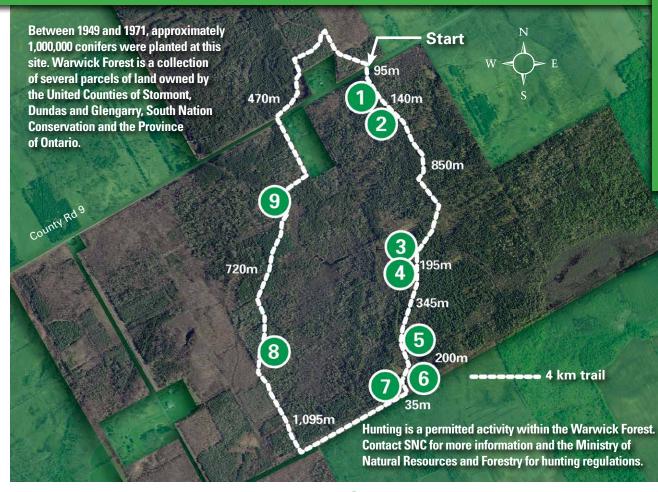
This small pond was dug in the early 1950's, when many of the trees were planted in the Warwick Forest. Now the pond provides habitat to a variety of species, including raccoons, skunks, frogs and turtles. As you pass by, look for animal tracks along the edge of the pond.

#### 3 Providing Wildlife Habitat in Conifer Plantations

Leaving or creating wildlife habitat features within a plantation, encourages wildlife species that otherwise might not use this forest. Cavity trees,



standing dead trees known as snags, and seasonally wet areas provide good wildlife habitat. Keep an eye out for other wildlife features such as brush piles; a collection of rocks, logs, large and small branches that are used by wildlife to take cover from predators. Forest managers can also provide temporary wildlife habitat by seeding skid trails (paths used to haul logs out to the road) and log landings from a variety of plants that provide a natural source of food for wildlife.



#### 4 Wetland Viewing Area

Keep your eyes and ears open at this stop. Wetlands are home to a greater variety of wildlife than any other habitat in Ontario. From insects to deer and moose, wetlands are important spawning grounds for fish and provide nesting and shelter areas for waterfowl and larger animals. Wetlands are grouped into four categories: marsh, swamp, fen and bog. This area is a swamp, a treed wetland.



#### 5 Managing Succession in Conifer Plantations: An Experiment

On this demonstration site, five different forestry treatments were used to demonstrate the best way to regenerate high quality hardwood trees. The five treatments involved were: 1) clearcutting the pine and leaving the tree saplings; 2) harvesting 50% of the pine and cutting the tree saplings at ground level;

- 3) clearcutting all the pine and tree saplings;
- 4) harvesting 50% of the pine and leaving the tree saplings untouched, and
- 5) leaving one area untouched.

South Nation Conservation (SNC) works with its partners to ensure that the watershed has healthy accessible forests and recreational areas. The following interpretive trail is located in both Stormont, Dundas and Glengarry County Forest and SNC Forest properties.



The areas where the regeneration was cut prior to harvest produced the highest quality hardwoods having straight stems and well developed branches.

## 6 The Old Homestead

This area was the homestead for one of the original farms in the area. Prior to European settlement, North Stormont Township was covered with forests and wetlands. Much of the forest was harvested to support a variety of industries, including shipbuilding. Eventually the land was cleared for agriculture, but was abandoned in the 1930's due to shallow soils and poor drainage. Abandoned agricultural fields can be restored to forest using careful management. Keep a look out for whitetailed deer and wild turkey that thrive in areas where farmland, wetland and forest are interspersed. As you continue west along the trail (unmaintained road allowance) you will notice an old fencerow constructed from stones collected while clearing land by the early settlers.