

"The open fields had become blowsand deserts, drifting sands had blocked roads, the split rail fences were soon buried, and on dry windy days the whitchurch sky was yellow from blowing sand." ¹

photo: W-S Mu

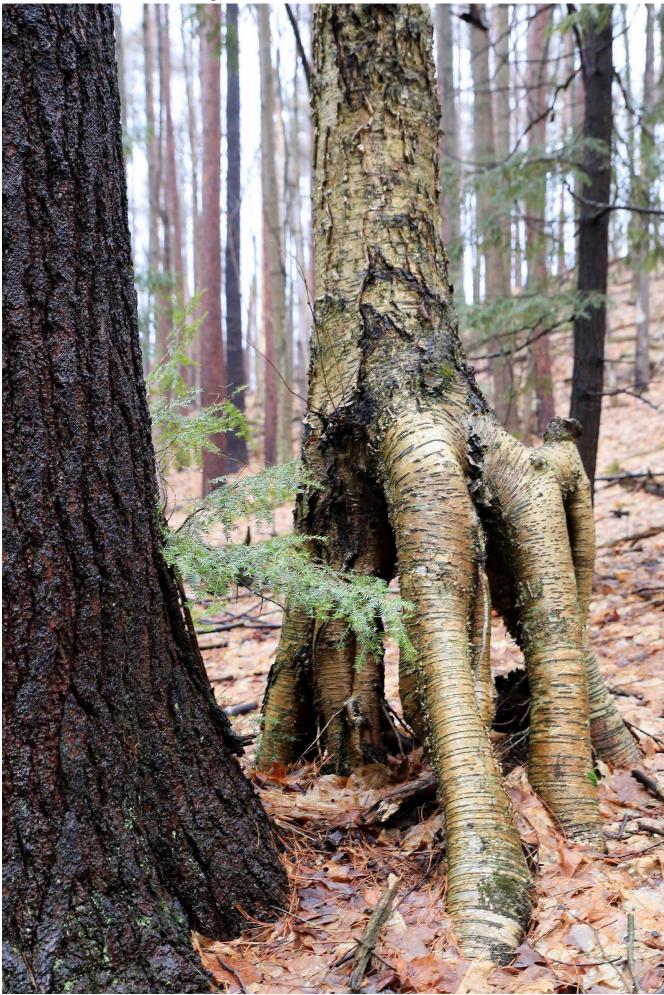
"Drinking water began to dry up and the number of birds, deer, fish, and other animals dwindled."²

"With the top soil gone, there was not enough available nutrient in the soil to support even grass." ³

In hilly areas, the light soils were readily removed by water flow, the ground being gouged into ever deepening gullies. Sand-filled flash flood waters became common for every one downstream in the spring, while the same patch became a parched, waterless bake oven in the summer sun...

Whitchurch had become a wasteland...

York County Forests



Looking Backwards

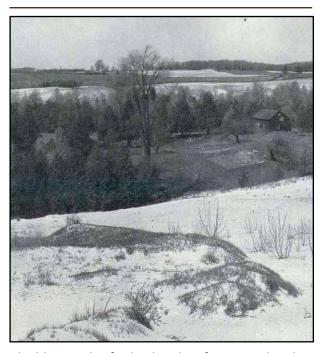
The "old stories" appear *not* to be an exaggeration. On first glance, the drifting sand that is frozen in time on black and white photographs appears to be snow. The black soils were then gone, Whitchurch Township had become a wasteland, especially to the north of Ballantrae.

It only took fifteen minutes in the Whitchurch-Stouffville Museum & Community Centre to dig out prime source material on the subject of deforestation with the help of enthusiastic museum and archival staff.

In the nineteenth century the Whitchurch landscape was subjected to heavy timbering to clear the land for cultivation. Large volumes of Ontario's softwood forest was shipped to Britain and the United States as square timber. Hardwoods were typically burned in piles to make potash. With the forest cleared, farming could commence.

Most farming activity was supported only for a few decades, the land had given out by the 1890s. Large areas of wasteland were created in the light sandy soils of Whitchurch Township and elsewhere in southern Ontario. The mistake: to farm the Oak Ridges Moraine.

Realizing the problem, many municipalities like Whitchurch paid landowners 25 cents a tree to start reforesting roadsides and gullies. In 1910 the York County council passed a resolution to consider the problem, but not much was done until 1920. By 1924 an agreement was struck between the County of York and the Province of Ontario where the County would purchase land, and Provincial foresters would plant and manage the forest.



The blowsands of Whitchurch in foreground and background look like snow [photo: W-S Museum] 3



Reforestation Begins

York County purchased the first property for reforestation in 1922 from Ted Hollidge. It was 197 acres and cost a little more than \$4,000. Trees were planted in 1924. Part of the deal was that Ted himself be the first caretaker for the emerging Vivian Forest.

An additional 400 acres were purchased in 1924. By 1930, 710 acres of land had been reforested; by 1938, an additional 1,166 acres. A little more than 60 years after the first purchase, the public forests across York Region (York County became York Region in 1971) totaled 4,900 acres.

The reasons for developing the forest were multifaceted: the demonstration of wise land use, wood production, a decrease in run-off and erosion, an increase in stream flows during the summer months, and a reduction in stream siltation.

Christmas trees were also planted, maintained and matured for harvest. First, it was to show local landowners the possibility of a cash crop on poor land. Second, it provided early revenue on recently purchased land. Finally, there were some rather sterile areas which were capable of producing only rather undemanding Scots pine. This practice stopped by 1960, as private enterprises had 4 become established (there are now more than 10 local Christmas tree farms), and it was thought that the government should not compete with private business.

The forests were managed through prescribed cuttings. Generally speaking, a third of the volume of the plantation is removed in the first thinning, and 10 years later it is again thinned. By the time of the final harvest, there are theoretically less than 200 trees per acre out of the original 800 or 1200 planted.

Prior to 1947, cutting resulted in only enough wood for internal needs and to supply a few local markets. For instance, in 1948 only 300 cords, or 25,000 cubic feet of wood were harvested from thinnings. These early sales proved unsatisfactory to the costs incurred. From 1949 onward, sales were in the form of pulpwood to the Ontario Paper Company. Second thinnings produced larger material by 1957, in which sales were focused toward product for pole barn construction. A profit was finally being realized, 33 years after the first tree was planted

The York Regional Forest

The former York County forests were managed

by the Ontario Department of Lands and Forests (now Ministry of Natural Resources) until 1998, when The Regional Municipality of York assumed full management responsibility for the forest. Today, while celebrating Canada's 150th Birthday, the York Regional Forest system is comprised of 22 tracts totaling over 5,700 acres, in four of the nine towns and cities in York Region. Whitchurch-Stouffville, with 11 public forest tracts including new acquisitions, claims 52% of the forest system, or roughly 3,000 acres.

In the York Regional Forest Management Plan, 1998-2018 (york.ca/forestry) the emphasis seems to have changed from economics to ecological restoration and sustainability as well as education and recreation:

"The Regional Forest (YRF) is a multi-use forest providing environmental protection and enhancement, passive recreation, outdoor education and sustainable forest management. The YRF serves as a demonstration forest for sustainable forest management, public participation and education, and the management of multiple recreational uses."

The York Regional Forest

The Forests Today

On a cool March afternoon, we met Kevin Reese at the Hollidge Tract. He is a Program Manager in Forest Conservation for York Region. Kevin explained that if forest management activities result in revenue, these revenues are reinvested in the forest. He said that the long term objective for reforestation is the conversion back to a presettlement forest ecosystem.

Kevin enthusiastically told us how the York Regional Forest (YRF) became the first public forest in Canada to be certified to the Forest Stewardship Council (FSC) standard in the year 2000. FSC is an international, membership-based, non-profit organization that supports environmentally appropriate, socially beneficial, and economically viable management of the world's forests. FSC has developed a set of international criteria and regional standards for forest stewardship.

In 2007 the Region conducted a survey to understand the level and types of public use occurring in the forest. The study concluded that the YRF has 600,000 visitors annually, and that dog walking or hiking account for 60 percent of use. It also found that 75 percent of use primarily occurs in five forest tracts; three of these are in Whitchurch-Stouffville - Eldred King Tract, Hall Tract and North Tract.

There are always challenges in managing a forest. About 10 years ago the red pine in some areas started to die out, generally called Red Pine Decline associated with two pathogens; both are a form of root rot and not easily controlled. The moss covered remains of red pine stumps and trunks are readily seen in areas of the forest.

In recent years, the Region's ash trees are under threat of being wiped out entirely as a result of the Emerald Ash Borer. All untreated ash trees are expected to die as a result of this infestation. Ashes represent 12% of the tree canopy cover in York Region, 8% in Whitchurch-Stouffville - this is devastating. Green slashes on trees are abound in the forest, marking ash trees near the trail that are being removed before they decline and become a hazard. Regional foresters do their best to keep up with the onslaught of new infestations and diseases, but surprises comes rapidly with climate change.

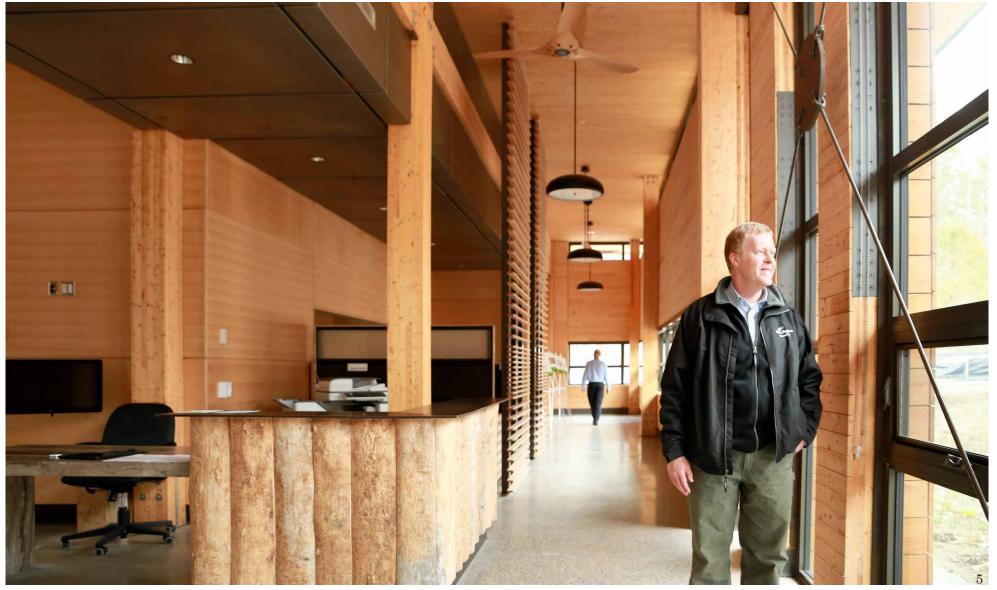
A New Crown for Hollidge

Appropriately placed in the original forest tract of Hollidge, the Bill Fisch Forest Stewardship and Education Centre (BFFSEC) has been built nearby the trail access parking lot off Highway 48. Named in honour of a long time Regional Chair, it opened in 2015. It is the first-of-its-kind sustainable building and integrates seamlessly into the restored landscape.

The space blends an inside-outside experience expertly. The occasional floor-to-ceiling windows provide great views of the forest. The warm wood tones contrast beautifully against the native limestone and polished concrete.

The new facility replaces and consolidates former buildings that have been there since the 1940s. The BFFSEC is conceived as a powerful teaching

Forester Kevin Reese inside the Bill Fisch Forest Stewardship and Education Centre





tool and living laboratory. The Centre is intended to facilitate engagement opportunities and visibly integrate nature and innovative sustainable building practice into comprehensive education programming.

In the near future the facility is expected to join a current short list of 12 buildings worldwide, in meeting Living Building Challenge requirements, recognized as one of the world's strictest environmental certifications.

"Almost every building harms our environment, whether it is through the use of toxic building materials, the use of energy and water to operate it, or the disposal of materials when it is torn down... We set out to create a building that functions like a forest ecosystem; to become an integral part of nature and actually enhance its surrounding environment."

- Craig Applegath, project principal from the architecture firm DIALOG

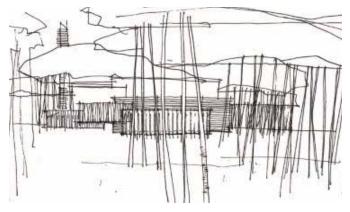
Although the forest is the real classroom, the Centre will serve to enhance York Region's educational programming. It will also provide meeting space for the many programs hosted there, and has a boardroom and hoteling stations for York Region staff.

Kevin Reese told us about the Region's forest education program called Nature's Classroom and the free public walks and events held in the York Regional Forest. Nature's classroom provides group specific programs to various school and community groups as requested. Public forest events include walks and festivals which are held throughout the year. In excess of 2000 people have participated in these programs annually.

The Centre is a showcase in green design principles. Rainwater is harvested from the roof for use in toilets and urinals, while a system of groundwater wells and UV filtration provides water for sinks and showers. The wastewater treatment system utilizes both aerobic and anaerobic bacteria and a bioswale. A roof-mounted solar panel array generates renewable energy, and energy reduction strategies such as heat recovery ventilation and LED lighting. The wood used in the project was sustainably harvested or recycled.

As such, the BFFSEC has become the first LEED Platinum Certified building owned by the Region. The Leadership in Energy and Environmental Design (LEED) rating system was developed by the Green Building Council to measure the success of green building systems. Platinum is the highest level of certification. The Centre has received the following awards:

- 2016 Ontario Regional Winner and Technical Award Winner [Canadian Green Building Awards]
- 2016 Project of the Year in the area of Historic Restoration and Preservation [Ontario Public Works Association]
- 2016 Engineering Project of the Year [Professional Engineers of Ontario York Region Chapter]
- 2015 Green Building Wood Design Award [Ontario Wood Works]



An early sketch of the centre by DIALOG Design

Oak Ridges Trail



The Trail Captains

On a foggy, cool March morning we met Oak Ridges Trail Association (ORTA) Trail Captains, Noel Bain and Robert Lawrence, at the trail head in the Hollidge Tract. Noel and Robert are passionate volunteers, and as with many volunteers for ORTA, they are retired.

Noellives in Scarborough. She and her exceptionally behaved golden retriever have been volunteering for ORTA for about 4 years now. She is a retired VON Nurse. Robert is a resident of nearby Vivian. He had been a school teacher at the Sutton Public School, and still substitute teaches on occasion. He has volunteered with ORTA for the past couple of years.

The pair monitor the trail from York Durham Line to Highway 48. Much of this section of trail is on-road, but these sections are still marked with ORTA Trail Captains Noel Bain and Robert Lawrence monitor a trail in the Hollidge Tract. Cut, moss-covered red pine stumps & trunks dot the forest floor, while living red pines can be identified by their reddish bark.

white blazes and must be monitored at least twice a year. In the forest, Robert and Noel regularly hike and maintain the white-blazed main trail and the blue-blazed side trails. This involves removing fallen branches, re-painting the trail blazes, and annually loosening screws that fix signs to living trees in order to avoid any permanent injury. They also report any larger issues to the managers of the regional Forest.

The Oak Ridges Trail (also referred to as the Oak Ridges Moraine Trail) is a continuous footpath of over 220 kilometers across the Oak Ridges Moraine; additionally there are local side trails. The trail extends from Albion Hills in the west to the Northumberland Forest in the east. 14% or 49 km of the ORT's total 349 km (including side trails) is in the Town of Whitchurch-Stouffville.

The route of the Oak Ridges Trail is located on lands owned by multiple levels of governments, conservation authorities, NGOs, institutions, and private individuals who have made their properties available to the Oak Ridges Trail Association for the trail.

The concept for a trail grew out of the cooperative effort by the Save the Oak Ridges Moraine Coalition, the Metro Toronto and Region Conservation Authority and Hike Ontario. A group of volunteers pursued the idea of a system of public recreational trails along the full length of the Moraine. In 1992 the group officially organized as Citizens for an Oak Ridges Trail (CORT). The first sections of the Trail were established along existing road allowances in King and Uxbridge Townships. The CORT name

feature

was changed to the Oak Ridges Trail Association (ORTA) several years later.

The main objective of ORTA is to develop a trail along the Moraine, "...thereby promoting an appreciation and respect for the Moraine's ecological, cultural and scenic integrity, with the aim of retaining a trail corridor in its natural state," (Oak Ridges Trail Guidebook, 2004). The Association now has more than 700 members.

While walking on the trail we cross a clear, bubbling trout stream and admire a little waterfall nearby. Robert points out that this stream would have been a dry swale back in the old days. He also admires an ancient looking white pine; he speculates that the pine was spared selective cutting because it is (luckily) crooked. Other trees have grown to an immense size in marshy areas that were not easily accessed by the cutting machines.

Noel explains how the combination of blazes can help one navigate the trail. Some of the forests have so many crisscrossing trails that one can easily become confused.

ORTA has only one paid employee, who is supported through membership and fees associated with the annual race.

The Oak Ridges Moraine Adventure Relay

The annual relay is being offered for the eleventh year in a row. An enthusiastic team of volunteers has already started to plan one of the largest events of its kind in Ontario that annually engages 500 canoeists, runners and trail cyclists covering 160 km of the Oak Ridges Moraine trail. The big event is on Saturday, June 10, 2017.

Frank Alexander, a volunteer co-chair for the Whitchurch-Stouffville Chapter of ORTA, explains that they are looking for Ontario residents to create and register teams. Many teams are formed from neighbours and friends in communities all across the Moraine and further afield. The Relay course is from Gore's Landing on Rice Lake in the



east, stretching 160 km westward to King City, and is divided into 14 Relay stages of varying distances consisting of water, road and trail portions. Teams may consist of up to 15 members. Three Relay checkpoints are in Whitchurch-Stouffville. To find out more about the Adventure Relay, see: www.oakridgestrail.org/adventure-relay.



