COOTES (CONTES) (CONT **Plants and People** WRITTEN BY PAUL WEINBERG PHOTOGRAPHED BY MIKE DAVIS EXCEPT WHERE NOTED 34 Niagara Escarpment Views ∞ SUMMER 2024





he diversity of wild plants here is made possible by the positioning on the Niagara Escarpment, explains David Galbraith, the RBG's head of science. "A large section of land faces south as an angle of the Escarpment to the sun, making for a warmer micro-climate. As a result, more southerly plants grow on portions of the area," he adds.

What You Can Do

The RBG's 1941 provincial legislative mandate encourages interaction between people and nature. At the head of the lake, Cootes is a major staging area for 277 different migratory birds, making it ideal for bird watching. One can also walk, canoe or just sit and relax on a bench on the site.

The latest 2022 RBG annual report shows that about 285,000 visitors paid admission to visit the RBG and take advantage of various activities and programs for all ages. Its front office at 680 Plains Road West in Burlington is accessible by car from Highway 403 or by local bus. Half a million people visited the trails which can be reached without charge at free access points to the sprawling Cootes Paradise. One principal one is Princess Point which has a canoe launch and can be visited by local bus in southwest Hamilton.

Exploring the RBG today, it's easy to forget that Cootes was not always this pristine. Once covering what is now southwest Hamilton, it was much larger than it is now. Historically, it has suffered from more than a century of neglect and degradation. When European settlers arrived in the 1700s, fish, wild

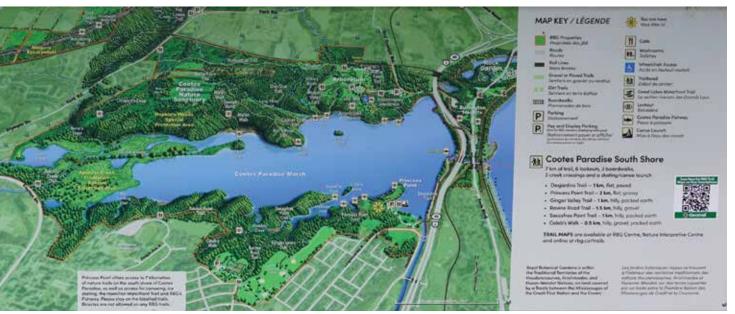
▲ Osprey at Princess Point flying with a catch of Carp.



▲ Adult Bald Eagle feeding her two eaglets that were born in Cootes Paradise last spring. PHOTO COURTESY OF GARRINE TSANG.



▲ Great Blue Heron fishing.



▲ Map onsite shows Cootes Paradise Marsh at the western end of Lake Ontario, where the Niagara Escarpment curves around Hamilton and Hwy 403 crosses on Burlington Heights.



▲ Muskoka chairs invite relaxation with a wonderful view.





▲ Signage onsite explains that Princess Point gives access to seven km of nature trails on the south shore of Cootes Paradise, as well as access for canoeing, ice skating, the Hamilton Waterfront Trail and RBG's Fishway.

turkeys, turtles and other wildlife and plants abounded and represented important food sources for local Indigenous peoples whose earliest presence at Princess Point was roughly between 500 and 1000 AD, according to archaeological findings.

Serious remediation and restoration did not begin until the 1990s says Tys Theysmeyer, senior director of ecosystem stewardship programs and policy at the RBG. A trained aquatic ecologist, he arrived on the scene in 1997 just a few years after various levels of governments in Canada and the U.S. marshalled their resources under the Great Lakes Water Quality Agreement to target places like Cootes and Hamilton Harbour which had experienced severe environmental damage.

Challenges

Although both lie almost side by side in the west end of Lake Ontario, there are also important differences between these two. Because water mostly flows out of Cootes Paradise through the Desjardins Canal and into Hamilton Harbour, Cootes is less affected by what falls into the lake from the polluting steel industry inside Hamilton Harbour, says David.

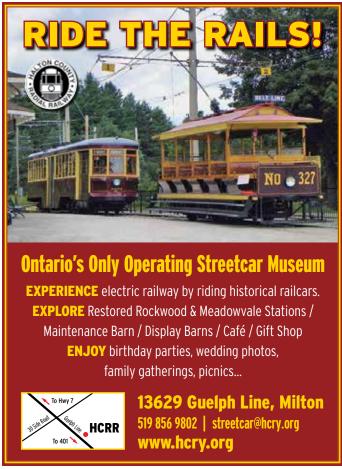
More significant sources of contamination for Cootes come from agricultural and urban development run off, clay extraction, the drilling of water in the marsh, sewage and invasive species, he and Tys say.

The RBG estimates there are more than 1,000 wild plant species on its natural lands and almost one-third of them originate outside North America. These invasive or foreign species arriving by ship, train and road can cause harm to the health and sustainability of local ecosystems and thus represent a challenge to restoration. One of the most pernicious is the common carp, originally an Asian fish that was introduced into Lake Ontario during the 19th century.



▲ The prairie habitat restoration project involves planting native prairie grasses and wildflowers, which gives habitat for pollinators, birds and other wildlife.







▲ Cootes has extremely rare oak savannahs which RBG maintains through careful management.



▲ Some areas of Cootes Paradise are so sensitive that they're kept off limits to the public. These include areas of national importance for reptiles, amphibians and birds.

"The carp ate everything that was growing because they are bottom feeders," says John Terpstra, a local historian and poet. "So, on the marsh, all of the plants were gone and that is why for so many years

we've had basically what boils down to a large reflecting pool in Cootes Paradise."

At its height there were approximately 70,000 carp inside Cootes, according to the RBG. Along came the

➤ Native plants thrive at Princess Point. Recently, the endangered American Chestnut has been planted as part of a restoration project.

Fishway which was set up in 1997 at the entrance to Cootes from the Desjardins Canal and those numbers dropped by 95 per cent.

Meanwhile native fish, aquatic plants and amphibians have all appeared in greater numbers in the marsh. Cootes today has more than 60 different varieties of fish.

Using holding tanks, RBG employees at the Fishway identify and block carp from swimming into Cootes. Meanwhile, native fish also coming through the same route from the canal are separated and permitted to enter and spawn in Cootes in the spring.

Cootes has also managed to persevere despite a massive and accidental leak of 24 billion litres of untreated sewage into Chedoke Creek and the Cootes marsh starting in 2014 and lasting over four and a half years. The dredging of the creek has recently been completed in the first stage.

The situation was mitigated, says John, by the presence of

massive underground tanks in Hamilton that capture and store the overflow of storm water and sewage, which in the absence of this infrastructure, would have flowed directly into the creek and marsh. Instead, once the storm ends, city employees collect the sewage in the tanks and transport it to a wastewater treatment plant on Woodward Ave in the city.

Tys often works outside at Cootes on a myriad of projects for ongoing restoration. One restoration project is the recent planting of the globally endangered American Chestnut deciduous tree in research collaboration with the Canadian Chestnut Council. The tree once thrived in Dundas Valley and was prized for its wood and chestnuts.

But there are also some challenges. At present more than 50 different species are at risk in all wildlife and plant categories. And while it is lovely to have visitors, there is also an effort to keep





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them away at sensitive times in the nature sanctuary.

"Basically, you don't want to interrupt the natural processes of breeding

birds and flowering plants," Tys says. NEV

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Grimsby's andens

PHOTOS BY MIKE DAVIS

rimsby Garden Club's 2022 self-quided tour offered 10 wonderfully varied gardens to explore. The owner-gardeners were present to field questions and accept compliments. The tour was a successful fundraiser for the club's community projects. These include providing hanging planters for downtown Grimsby, maintaining gardens on Elm St. and West Lincoln Memorial Hospital, giving student scholarships, and assigning Trillium Awards to deserving garden owners.

The next tour is June 22, from 10 to 4 pm, promising plenty of peonies, irises and roses. Details are at the club's website and through the Facebook page.