

Connections

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Anniversary Issue 2005



Building Rouge Park

Ontario Greenbelt

Invasive species

Award-winning park



Rouge Park
Wild in the City!

Gone Fishin'

Maryam Nassar

Rouge Beach is a great place to visit for swimming and relaxing. On the north side of the beach is the Rouge Marshes wetland complex, roughly 68 hectares in size, over half of the remaining coastal wetlands in the Greater Toronto Area and a popular fishing spot. Since 1996, much work has been done to restore the ecological health of the marshes by removing invasive species and renaturalizing the shore line. This work is beginning to show results with an exciting find in 2005: Blandings Turtles are nesting in the marshes!

In 2006, reconstruction of the driveway, parking lot and pedestrian pathways will begin. The improvements will help to control contaminants from vehicles accessing the area, and improve visitor safety. Construction will be done in the off-season to avoid disturbing the breeding of turtles and other animals living in the marshes.



Minister of Natural Resources, Hon. David Ramsay with some Toronto-area kids on their summer break, celebrating Urban Fishing days.

Floral Prints

Maryam Nassar

Before the real flowers of spring were out, paintings, photos and other graphics of flora bloomed at Markham's Varley Art Gallery (www.varleygallery.ca). Named after Frederick Horsman Varley, one of Canada's famed Group of Seven painters, the gallery is on the banks of the Rouge River in the historic town of Unionville, where Varley had a studio for many years.

The exhibition "Field Studies: Picturing Flora in Canadian Art" included over 30 works representing nearly 200 years of images from diverse geographic regions in Canada. Fresh arrangements from local florists brought a breath of spring to the exhibit. Rouge Park sponsored "Field Studies" to help raise awareness about the value of flora to our ecosystems and to people's enjoyment of nature. "In spring, summer and fall, native flowers in Rouge Park add to the beauty of the natural landscape," observed Lewis Yeager, Rouge Park's General Manager, at the exhibit's opening. "The Park protects these plants for animal habitat, and for their own value. Some may be rare species, but all are important. We want to cultivate an appreciation of the beauty and resiliency of our native flowers and other plants."



L to R: Our Chair, Gord Weeden is joined by staff Barb Davies and Lewis Yeager, with William Pickering, Chair of the Varley-McKay Art Foundation and John Ryerson, Director of the Varley Gallery at the opening of *Field Studies*.

Kershaw, Linda. *Ontario Wildflowers*. Lone Pine Publishing, 2002.

A light-weight field guide with many tips for easy identification and an illustrated key and glossary. Over 200 vivid colour photographs show the whole plant and flower detail. This book features the common native and naturalized flowers that beautify meadows, trails, roadsides, orchards and other wayside areas in the province. Each account features clear and detailed descriptions, including blooming times. They also include notes of interest on edibility, medicinal uses, poisonous plants and important guidelines on harvesting flowers. **Barb Davies**

Newcomb, Lawrence. *Newcomb's Wildflower Guide*. Little, Brown and Company, 1977.

One of the best guides for both novice and expert botanists, Newcomb provides an easy-to-use key to assist with quick plant identification and indicates whether the plant is native or naturalized. Illustrations of plants, some in colour. **Barb Davies**

Traill, Catherine Parr and Agnes D. Chamberlin. *Canadian Wild Flowers*. Originally published by J. Lovell, 1868.

(If you are not lucky enough to find a reprint, see Heritage Canada's web site of Early Canadiana at www.canadiana.org/eco/index.html to view the document with full text and illustrations)

A whimsical field guide for Canada's native flowers by famed early Canadian author Catherine Parr Traill, an English immigrant who settled in 19th century Ontario, what was then the "wilds of Canada". Traill's anecdotes on the history and common regard of the flowers are embellished by illustrations in a typical Victorian style. **Maryam Nassar**



Building Rouge Park

1954 Hurricane Hazel hit Southern Ontario causing large scale flooding and widespread property damage

1957 Conservation Authorities created to help manage floodplains. Local CA began purchasing Rouge River valley lands for flood control

1972 Government of Canada purchased lands near northern Pickering for future airport

1974 Province of Ontario purchased land in Scarborough area as a greenbelt and to support the planned federal international airport

1980s Scarborough community groups along with "Save the Rouge Valley System" helped voice citizens' support for the protection of the Rouge River valley

1988 Scarborough council approved Official Plan Amendments recognizing the "Rouge Valley" and confirmed its support for a protected park

1988 Under the leadership of Hon. Pauline Browes, the Government of Canada committed \$10 million to further the federal mandate in the Rouge River watershed and establish Rouge Park

1989 Interim Report of the Royal Commission on the Future of the Toronto Waterfront recommended the protection of the Rouge River valley

1991 The remains of a Seneca village from the 1600s designated a National Historic Site. Bead Hill later became part of Rouge Park, joining the eastern arm of the Toronto Carrying Place route, as the Park's National Historic resources

1994 Rouge Park Management Plan approved by the Province of Ontario

1995 Rouge Park created. Ron Christie appointed by Province of Ontario as Chair of the Park's board of directors, which eventually became the Rouge Park Alliance. Gord Weeden hired as first General Manager to lead the Park's own professional staff.

1998 First Rouge Park Award presented to Hon. Pauline Browes

2001 Rouge North Management Plan approved by the Rouge Park Alliance to guide decision-making on lands becoming part of Rouge Park in York Region

1990 House of Commons unanimously approved a private members' motion by Hon. Pauline Browes supporting the protection of the Rouge River valley

1990 Province of Ontario announced its intention to create a park to protect the Rouge River and adjacent lands in Pickering and Scarborough. It established an advisory committee to prepare a management plan for the area and recommend actions for extending the Park into York Region

2004 Rouge Park grew by over 1400 hectares, donated by the Province of Ontario, to a total size of 3800 ha, or 38 km²

2003 Rouge Park's expanding communications initiatives attracted visiting delegations of scientists from China and Brazil

2003 Rouge North Implementation Manual created to guide use of innovative ecological and cultural heritage criteria to protect watercourses and important adjacent habitats in newly urbanizing areas

2002 Over 50 hectares of new land acquired for Rouge Park, including our first private property donation from Judy Woods & family

2001 City of Toronto report recognized Rouge Park's vital importance to the health of the city's natural environment when revising its Official Plan

2001 Government of Canada designated 50 hectares of former airport lands as Rouge Park

2005 Rouge Park's 10th Anniversary

2005 Ontario Parks Association recognized Rouge Park's achievements with its prestigious "Protecting Tomorrow Today" award

2005 Province of Ontario included a special section on Rouge Park in its groundbreaking Ontario Greenbelt Plan. It recognized our management plans and Rouge North Implementation Manual as key planning documents and protects a major biodiversity reservoir in the Park for the GTA and beyond.

2004 Rouge Park recognized for its rare Carolinian habitat by Carolinian Canada, and a plaque commemorating this natural legacy placed at Glen Eagles Vista



Our New Chair Takes His Seat

Maryam Nassar

Mr. Gord Weeden has been appointed by the Province of Ontario as the new Chair to lead the Rouge Park's board of directors, the Rouge Park Alliance. When the Park was launched in 1995, the Alliance was established as a voluntary partnership of 12 public sector organizations, including the Province of Ontario, and one citizen group.

Gord served as Rouge Park's general manager from 1995 until 2001 when he retired. As the new Chair, Gord Weeden replaces Ron Christie, who served as Chair since 1995 and was involved with Rouge Park planning since the early 1990s.

In 2004 Gord was the recipient of the Rouge Park Award in recognition of his outstanding contributions to the Park. Shown in this photo accepting the award, with past Chair Ron Christie (right) and General Manager, Lewis Yeager (left).



If you go out in the woods today...

Barb Davies

When in bloom from July to August, this summer flower looks like a miniature bouquet with its tight cluster of white flowers and symmetrical whorl of four leaves underneath. Once the flowers are done bright red berries develop, similar to holly. The leaves turn a dark maroon/red colour in Autumn.

Bunch Berry is native to North America, found from Alaska to Newfoundland, and further south in mountain areas. The Southern limit of its range may be due to its preference for cool, acidic soils and its inability to survive in summer soils warmer than 18°C. An important food source for wildlife, Bunch Berry is one of the two main forage plants for

Mule Deer, Black-tailed Deer and the Northern Red-backed Vole in Alaska, who relies heavily on the fruit, especially in winter months. Moose and birds also feed on Bunch Berry and help its spread by dispersing the seeds.

Bunch Berry (*Cornus canadensis*) is the only vascular plant that belongs to the dogwood family. Attributes such as its deeply veined leaves closely resemble those of the many species of dogwood shrubs found in Rouge Park. Although the berries taste rather bland on their own they have historically been used in jellies, jams, sauces, puddings and syrups. Early peoples brewed its

roots into a mild tea used to treat colic in infants. Among contemporary herbalists, parts of the plant, including the roots, have been used in place of common medicines such as aspirin.

As tempting as it may seem to gather wild Bunch Berries, removing plants from Rouge Park or other protected areas deprives wildlife of important natural food sources and is illegal. You can grow Bunch Berries yourself, the plants are sold in seasonal garden centres and plant nurseries throughout Canada.

Centre spread photo key

1 Tree planting commemorating the Government of Canada's financial contribution to Rouge Park. Photo: Rouge Park, 1996.

2 Local activist and long-time resident Lois James receives Rouge Park Award. Photo: Rouge Park, 1999.

3 Celebrating the Government of Canada's financial contribution to Rouge Park. Photo: Rouge Park, 1996.

4 Former MP and local advocate Hon. Pauline Browes receives first Rouge Park Award. Photo: Rouge Park, 1998.

5 Celebrating Province of Ontario's donation of 1400 ha of land to Rouge Park. Photo: M Nassar, 2004.

6 Government of Canada designates 50 ha of land on Oak Ridges Moraine as Rouge Park. Photo: M Nassar, 2001.

7 Celebrating the renaturalization of Glen Eagles Vista. Photo: R Hasner, TRCA, 2000.

8 Local residents celebrate new lands donated from Province of Ontario to expand Milne Park, part of Rouge Park in Markham. Photo: Rouge Park, 1999.

9 Shoreline restoration planting in marshes at Rouge Beach. Maryam Nassar of Rouge Park (wearing orange vest) works with local volunteers. Photo: Ontario Streams, 2002.

10 Premier Bob Rae at launch of Rouge Park. Photo: R Hasner, TRCA, 1995

11 Lieutenant Governor Hilary Weston at a tree planting in Rouge Park in her honour. Photo: S Russell, 1997.

12 Government delegates visiting from China tour Rouge Park. Photo: M Nassar, 2003.

13 Provincial Ministers and GM Lewis Yeager at the announcement of the Province of Ontario's donation of 1400 ha of land to Rouge Park. Photo: M Nassar, 2004.

14 Celebrating Carolinian Canada's recognition of Rouge Park's rare habitat with new plaque placed at Glen Eagles Vista. Photo: M Nassar, 2004.

15 Park naturalist Barb Davies moving fish at Milne Dam fishway in part of Rouge Park in Markham. Photo: M Heaton, 2004.

16 GM Lewis Yeager providing music for the masses at a community tree planting event. Photo: M Nassar, 2001.

17 Rouge Park staff at Valley Halla office. Photo: Rouge Park, 1996.

18 Celebrating the acquisition of new land purchased in Toronto for Rouge Park. Photo: R Hasner, TRCA, 2000.

19 Canadian Rivers Day celebration of newly named "Willowgrove Creek" in Whitchurch-Stouffville. Photo: M Nassar, 2003.

World Travellers: exotic species in our natural areas

Lewis Yeager

News stories regularly announce the latest “enemy” to invade Ontario’s lakes, lands, wetlands and rivers. Zebra Mussels have had the highest profile, but other new species continue to arrive with unknown potentials for ecological and economic impacts. An important management goal of Rouge Park is to restore native plant and animal communities in our lands and waters. Today, however, the Park finds itself home to such newcomers as Dog-strangling Vine, Rusty Crayfish, Garlic Mustard, Rainbow and Brown Trout, Norway Maples, Carp, Mute Swans and most of our agricultural crops and livestock. How concerned should we be?

The introduction of organisms to new habitats is one of the most significant ways in which humans are altering the planet. The damage caused by just one introduced species can be enormous. In 1981, a Comb Jellyfish hitchhiked into the Black Sea in eastern Europe from the USA in a ship’s ballast. The new species disrupted the ecosystem to such an extent that, six years later, Black Sea fish catches had declined by 90%.

A new species arriving in Ontario’s waters and wetlands must compete with native animals and plants for food, resources and living space. Most native organisms have advantages through already being adapted to their environments. On the other hand, a newly arriving species may have the upper hand if it has no specific predators to keep its numbers under control. The outcomes of such introductions are therefore very difficult to predict.

Plant and animal invaders (including micro-organisms) can be divided into three categories:

- Natural invaders which establish sustaining populations in Ontario by natural range extension or in response to changing habitat conditions due to human activities such as farming, forestry, urbanization, wildlife feeding, predator elimination, etc. For example, we see southern species such as Cardinal, Mockingbird, Virginia Opossum and White-tailed Deer moving northward, to extend their traditional ranges.

- Accidental invaders, including species such as Asian Longhorned Beetle, Zebra Mussel, Sea Lamprey and Purple Loosestrife, many of which establish sustaining populations in Ontario as a secondary or unintended result.

- Intentional invaders which comprise non-native species absent prior to European colonization, as well as species that were once native but had become rare or vanished. This category includes many species that have been introduced or re-introduced for wildlife or fishery management purposes, for game farms, and for use as ornamental plants or crops. Examples include Ring-necked Pheasant, Rainbow Trout, Wild Turkey and Forsythia.

In practice, populations of species from all three categories have the potential to develop in unexpected and economically-significant directions. Smaller, innocuous species such as micro-organisms and small invertebrates may pose particular risks, since they may initially be less noticeable and their potential impacts less likely to be anticipated when they encounter new habitats and neighbouring species. The Zebra Mussel at first fell into this category.

Ontario’s waters have been subject to invasions by aquatic species since the early 1800s. With increased human activity, the rate of introductions has increased. Almost one-third of the exotic species introduced to the Great Lakes, has arrived in the last 45 years or so, a period that coincides with the opening of the St. Lawrence Seaway in 1959.

By the 1990s, 139 non-indigenous aquatic species had been identified as established in the Great Lakes. Many are present in the Rouge River watershed. These include aquatic plants, fishes, algae, molluscs, worms, crustaceans and other organisms. Most have come from Eurasia (55%) and the Atlantic coast (13%). These non-native species have arrived in a variety of ways, including unintentional escapes, discharges from ships dumping ballast water, deliberate releases, hitching a ride in goods or packing materials, movement through and along canals, and migration along railroads and highways. Unintentional escapes (29%) and releases associated with shipping (29%) are the most common means of introduction.

Preventing non-native species from being introduced is far more effective than subsequent attempts to eliminate them. Once established, efforts to slow their spread or expensive site-by-site treatment measures are often the only recourse.

There have been recent attempts to identify potential high-risk species from an important donor region: the Ponto-Caspian (Black, Caspian and Azov seas) basin. This basin is the source of several freshwater organisms already invading North America, including the Zebra Mussel, Quagga Mussel, Ruffe and Round Goby.



Dog-strangling Vine, also known as Black Swallow-wort, is the most widespread invasive plant in Rouge Park.

M Nassar 2005

Scientists have identified 17 additional species that have recent invasion histories and are likely to be transported overseas in ship ballast water. Moreover, their broad salinity tolerances could allow them to survive an incomplete ballast water exchange. These findings suggest that without improved management measures, our waterways will continue to receive and be impacted by invasive Eurasian species.

Research has suggested certain common attributes of successful invasive aquatic species:

- Abundant and widely distributed in original range;
- Wide environmental tolerance;
- High genetic variability;
- Short generation time;
- Rapid growth;
- Early sexual maturity and high reproductive capacity;
- Broad diet (opportunistic feeding);
- Possessing natural mechanisms of rapid dispersal; and
- Benefits from human activity (e.g. ship ballast water transport).

Most new species that become established will likely become permanent features in Ontario's ecosystems. In some cases, a balance will be reached with native species as the number of predators that feed on them increases, either naturally or as a result of deliberate importation of species from the pests' region of origin. The latter approach involves its own set of risks.

Sometimes, early fears about the negative economic and environmental effects of an invading species may be exaggerated.

The Zebra Mussel appears to be somewhat controlled in some areas of the Great Lakes by limited food supplies, predation by several species of diving ducks, or both. As well, a recent international symposium concluded that the Ruffe might not be as great a threat to Yellow Perch, Walleye and Whitefish in the Great Lakes as was first thought.

It may take many years to determine the full impact of these and other exotic invaders. As for those already here, specific management strategies may help to control their spread and negative effects, but it is often expensive and difficult. The prevention of additional introductions to Rouge Park's ecosystems is therefore important and the best way to protect our Park.

References

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- Burdick, Alan. "The truth about invasive species: How to stop worrying and learn to love ecological intruders," *Discover* 26:5 (2005): 34-40.

This Rusty Crayfish was found by volunteers monitoring the water quality of the Rouge River in Rouge Park during summer 2004.



D. Lawrie 2004

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100 Worst Invasive Species
www.iucn.org/biodiversityday/100booklet.pdf

Global Invasive Species Data Base
www.issg.org/database/welcome/

Institute of Biological Invasions
invasions.bio.utk.edu/bio_invasions/index.html

Invasive Species in the Great Lakes Region
www.great-lakes.net/envt/flora-fauna/invasive/invasive.html

Invasive Species Resources in Canada
www.invasivespecies.gov/geog/canada.shtml

Minnesota Seagrant Field Guide to Exotic Plants & Animals
www.seagrant.umn.edu/exotics/fieldguide.html

Signs and Symbols

Want to go “wild in the city”? You can have a wilderness hiking experience on our trails. There are over 12 kilometres of hiking trails in the Park in Toronto and we’ve been working hard to ensure you have a safe and enjoyable visitor experience.

Just in time for the spring and summer hiking season, we released a new Park Map and Visitor Guide full of great information on our park and close-up maps of our five official trails in Toronto.



Thanks to our partners at Toronto Parks, signage and blazing were completed on the trails early this year. “Since we started marking blazes on the trails in Fall 2004, we’ve had very positive feedback from trail users,” reported Tom Boudreault of Toronto Parks. “Visitors are enjoying the trails more now that the paths are defined and the routes are clearly marked.”

Trail signage is not just important for helping visitors to have a safe and enjoyable visit, but also for protecting the natural environment. “Our biggest challenge is trying to ensure that people can enjoy Rouge Park, while we also protect the natural environment, since that is why the Park was created,” said Maryam Nassar who manages public use and education for Rouge Park. “We rely on the people who visit the Park to help protect it by being respectful trail users so this park stays healthy and beautiful now and in the future.”

How can you help? When you visit Rouge Park, look for trail signs and blazes which direct you on the designated trails. How does this protect the natural environment? Some results of people wandering off trails are trampling of sensitive plants, spreading of invasive plants and the disturbance of wild animals and their habitat.



How does this protect visitors? There is a lot of Poison Ivy in the Park; by venturing off the trails, people increase their chances of exposure. The Park is a large natural area and it is easy to get lost if you are not on marked trails.

Our Park Map and Visitor Guide is online at www.rougepark.com; request forms to have a paper copy mailed to you are also online, or call 905.713.6038.

About Us

Rouge Park is one of the largest natural environment parks in an urban area in North America. The Park is 38 km² in size, protecting a wilderness area within and near Toronto, Canada. Reaching from the Oak Ridges Moraine to Lake Ontario, visitors enjoy hiking, camping, a beach and spectacular views. Many areas accessible by public transit. Gord Weeden is Chair of the Rouge Park Alliance, the Park's board of directors. Rouge Park's General Manager is Lewis Yeager.

Our Vision

Rouge Park will be a special place of outstanding natural features and diverse cultural heritage in an urban-rural setting, protected and flourishing as an ecosystem in perpetuity. Human activities will exist in harmony with the natural values of the Park. The Park will be a sanctuary for nature and the human spirit.

Our Goal

To protect, restore and enhance the natural, scenic and cultural values of the Park in an ecosystem context, and to promote public responsibility, understanding, appreciation and enjoyment of this heritage.

Connections

We welcome your submissions of news, stories and photos. E-mail us at connections@rougepark.com or send to Rouge Park
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