

CreekTime

The newsletter of the Etobicoke and Mimico Creek watersheds

Spring 2005

ISSN #1492-675X Volume 7, Number 1

50 Years Later...

Hurricane Hazel's Legacy at the mouth of Etobicoke Creek

by Katrina Guy

October 2004 marked the 50th Anniversary of Hurricane Hazel, a devastating tropical storm that hit the Toronto area on October 15, 1954. In Etobicoke, at the present-day site of Marie Curtis Park, it changed the very landscape when floodwaters came crashing through a housing development located at the mouth of Etobicoke Creek. Over 56 cottages and houses were destroyed, 365 people left homeless and seven people died.

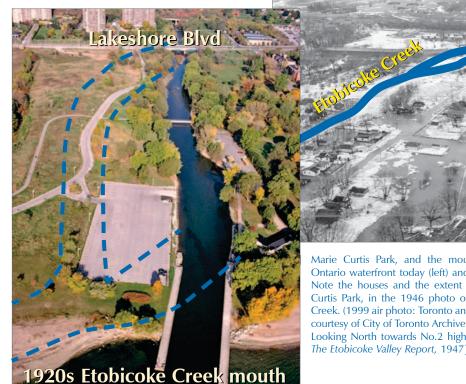
The first permanent residents on the sand bars, or Etobicoke Flats, were Captain Oates and his wife, who built a cottage in 1921. By the late 1940s, at least 277 families were living in this part of Long Branch. The Etobicoke River Conservation Authority offered to purchase houses after the 1948 flood with the idea of developing a park together with flood controls but owners refused to sell.

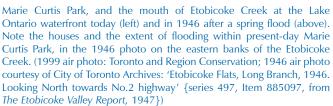
Even after a channel was cut into the sand bar to allow ice to pass, a heavy spring ice jam in 1952 destroyed some houses located on the Flats. Although there were some projects planned by the Long Branch Council to increase the capacity of the channel, Hurricane Hazel hit in 1954 before any of those plans could be implemented. Within 24 hours, over 28 centimetres (approximately one foot) of rain fell.

In the aftermath of the storm there was a new direction in watershed management and flood control throughout Ontario. Part of this new approach led to the development of new parks along creeks and floodplain areas. These lands have now become important wildlife corridors and recreation areas. Another change that took place was the introduction of new zoning bylaws, regulations and permit processes to prevent future buildings being constructed within flood plain land. In the aftermath of Hurricane Hazel, the Village of Long Branch and the Province of Ontario purchased the remaining land and 164 properties and the land was converted into Marie Curtis Park in 1959.

Continued on page 2.

We welcome your submissions of news, stories and photos. If we feature your article we'll send you an official Etobicoke and Mimico Creek's hat, sweatshirt or t-shirt! Contact Paul Willms at (416) 661-6600, extension 5316 to find out more about how you can contribute to CreekTime.

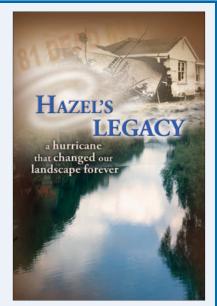




• **GET THE INFO!** For more information, visit www.hurricanehazel.ca

configuration

- **GET THE POSTER!** FREE Hurricane Hazel poster Teachers, if you would like a free Hurricane Hazel poster for your classroom, please contact Paul Willms at (416) 661-6600, extension 5316.
- BUY THE VIDEO or DVD! Hazel's Legacy. A must-see documentary featuring first-hand accounts that have never been publicly recorded. The film includes interviews with famed Canadians, Pierre Berton and Betty Kennedy. Hazel's Legacy is available for purchase on DVD and VHS exclusively through Toronto and Region Conservation at the Black Creek Pioneer Village and the Kortright Centre gift shops, or contact Gail Boyd at 416-661-6600, extension 5355.





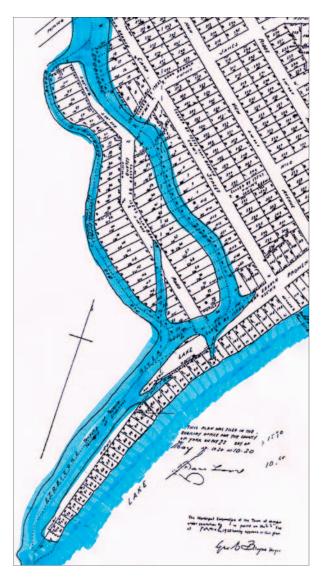






The Evolving Mouth of Etobicoke Creek (1920 - 1956)

Continued from page 1.



▲ Above image shows the 1920 Subdivision Plan for the waterfront and mouth of Etobicoke Creek. (Photo: Ontario Department of Planning and Development — Conservation Branch, Etobicoke Valley Report, 1947)



▲ Above photo shows the mouth of Etobicoke Creek as it looked in 1956 after reconfiguration in the aftermath of Hurricane Hazel. The old sand bar and filled in area are visible from the air. (Photo: National Defense Archives).



▲ Above photo was taken April 7, 1923 and shows a typical Etobicoke Creek Flats' cottage – on stilts! (Photo: John Boyd / National Archives of Canada / PA-86025)

Climate change and future severe storms...what can we do?

The 2004 Peterborough storm flooding and South Asian Tsunami raised questions again about our preparedness in the face of severe storms and natural disasters. Some have suggested that climate change is to blame for increasingly severe weather events. The science of climate change does not paint as dire a picture for this area as it does for the Canadian Arctic, or low-lying Pacific islands, where the socio-economic and cultural impacts may see not only the destruction of ecosystems but also the people who live there. Urban stormwater management has traditionally focused on impacts created by changes in land use but the advent of climate change suggests a need to re-evaluate the importance of weather in urban planning, design and city living. Climate change may increase mid-winter melts, lead to more flooding, more freeze/thaw erosion of stream banks, water supply problems, lower base flows, changes

to aquatic life and increased intensity of storms with flash flooding. Reducing greenhouse gas emissions is a precautionary measure against the effects of climate change. At the national level, this means adopting measures to ensure the implementation of the Kyoto protocols and agreement that came into force on February 16, 2005. At the local level, it means reducing our industrial, home and car emissions. What can you do in the face of severe storms, globally complex weather systems and climate change at the local level? Start by visiting Environment Canada's Web site www.climatechange.gc.ca and calculate your greenhouse gas emissions, take the One-Ton Challenge and learn about how other Canadians are changing their local scene in order to combat the causes of climate change.

Etobicoke-Mimico Watersheds Coalition

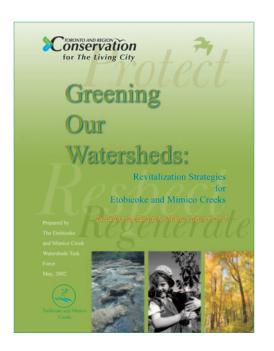
▲ Coalition members survey Heart Lake by North Canoe

The Etobicoke-Mimico Watersheds Coalition is composed of volunteer representatives of watershed groups and municipalities who work with Toronto and Region Conservation (TRCA) as well as many partner organizations within the community to achieve the vision of Greening Our Watersheds. Through the efforts of thousands of volunteers and community partners, we are making progress toward the goals of improving water quality, reducing the impacts of stormwater flow, restoring aquatic and terrestrial habitat, improving recreational opportunities, and protecting and enhancing the natural resources of the watersheds.

version.

Greening Our Watersheds - Revitalization Strategies for Etobicoke and Mimico Creeks

Greening Our Watersheds is the culmination of two years of work by a multi-stakeholder task force, and is an Ontario Professional Planners Institute award-winning document. It outlines the actions needed to reach environmental restoration targets and an initial report card on the health of the watersheds. Get your copy from the TRCA Web site or contact Paul Willms at (416) 661-6600, extension 5316 for a paper





Coalition members (from left to right): Marjut Dunker, Marilyn Hagerman, Janice Etter, Debbie Wagdin, Suzanne Barrett and Irene Jones with TRCA Chief Administrative Officer Brian Denney at the 2004 Tom Riley Park Earth Day and Mayor's Community Clean-up Event

2004 Coalition Accomplishments!

The Etobicoke-Mimico Watersheds Coalition surpassed its inaugural year's accomplishments in 2004 by conducting over 30 projects and events, involving many partner organizations and over 12,000 community participants. The Coalition continues to work on projects including the Heart Lake Master Plan, Integrated Watershed Trails Map, Peel Children's Water Festival and Etobicoke-Mimico Report Card. The Coalition's 2004 environmental projects saw 8,342 native trees, shrubs and wildflowers planted, over 5,000 square metres (0.5 hectares, 1.24 acres) of new habitat established, over two tons of garbage collected through clean-ups, a wetland created and several hundred linear metres of riparian habitat enhanced. New events and projects launched in 2004 included the Malton Environmental Stewardship Project, the Healthy Yards Web site, South Mimico Stewardship Group Earth Day Event, Heart Lake Bat Night and Spills Workshop. TRCA congratulates the Etobicoke-Mimico Watersheds Coalition on another successful year!



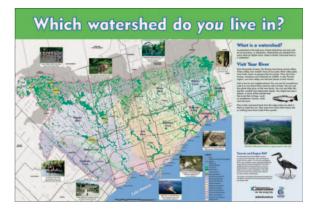
▲ The Etobicoke – Mimico Creek Watersheds Coalition. From left to right Marjut Dunker, TRCA Chair Dick O'Brien, Kristin Geater (TRCA staff), Alex Waters (TRCA staff), Robert Volpe, Tanya Trivedi, Lia Lappano (TRCA staff), Doug McRonney, Bette-Ann Goldstein, Cleve Battick, Alina Korniluk, Chris McGlynn, Irene Jones, Chris Barnett, Suzanne Barrett, Sean Stuart, Cathy Crinnion (TRCA staff), Glenn Miller, Fandy McGill, David Lyons, John McMahon, Janice Etter, Steve Rutherford, Chandra Sharma (TRCA staff), Chris Nelson

ACROSS THE WATERSHEDS

Organizations, Intiatives and New Resources!

FREE poster!!!

The Toronto and Region Remedial Action Plan (RAP) has nothing to do with hip-hop, but instead it aims to clean up the waterfront, rivers and habitats in the area. The Toronto and Region RAP area includes six major watersheds as well as 45



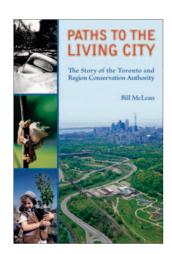
kilometres of waterfront and the Toronto Bay. To obtain a copy of this poster, contact Paul Willms at (416) 661-6600, extension 5316. You can also obtain maps of all of the TRCA watersheds and subwatersheds at www.trca.on.ca



Paths to The Living City

The Living City project of Toronto and Region Conservation is a remarkable initiative, which should have a significant impact on the quality of life in the GTA in the 21st century. Paths to The Living City, is an indispensable companion for understanding the project's fundamental premises and historical roots. Rich in detail, exciting in scope, Bill's careful story-telling gives the reader an excellent grasp of essentials and lifts the human spirit. It's a pleasure to read. Don't miss it!"





By Bill McLean, ISBN 0-9732764-2-8, paperback, 251 pages, June 2004, \$19.95. To order your copy visit www.trca.on.ca/paths/ or contact Gail Boyd at (416) 661-6600, extension 5355.



▲ Planting native aquatic emergent plants along the Heart Lake shoreline

TRCA Aquatic Plants Program

Give your students the hands-on experience of growing and caring for aquatic plants through the winter from seed. In the spring, your class can take an exciting field trip to plant their stock while learning about the ecology of a nearby wetland. This program can be delivered from JK to grade 12 students, upon request. The Aquatic Plants Program kit features several species native to the watersheds and comes with a pan, special soil, growing medium, grow light and seeds to produce 36 plants. Classes may pick up their kits before the end of December, and then plant the growing vegetation at a location within the watersheds in May/ June. If you'd like to get your class started on the Aquatic Plants Program in 2006, and contribute to habitat and water quality improvements in our local creeks, wetlands and lakes, contact Adrian O'Driscoll at (416) 661-6600, extension 5389.

The Region of Peel is Sizing up its **Ecological Footprint and Liveability**

The Region of Peel Planning Department is examining sustainable development issues through the ecological footprint model. Ecological footprint (EF) measures how much biologically productive land is required to produce all the resources and absorb all the waste that a population produces. Across Canada, a wide range of footprints exist in our towns and cities from a low of 6.87 hectares per capita in Greater Sudbury to a high of 9.86 hectares per capita in Calgary. Peel's ecological footprint is 7.83 hectares per capita and is the sixth highest in Canada, behind Calgary, Edmonton, Halton Region, Ottawa and York Region. Peel's land area is 122,500 hectares. The land area required to support Peel's ecological footprint is 7,743,439 hectares. The world population is currently consuming resources at a rate that would require four planets to sustain itself. You can find out more about ecological footprints in Canada and how the region measures up by checking out the regional planning department's Web pages

Region of Peel Working for you

PEN! Building a Strong Environmental Community in Peel

at www.peelregion.ca/planning.

The Peel Environmental Network (PEN) raises awareness of environmental issues and initiatives in the Region of Peel and provides support to other environmental non-profit groups. PEN helps to build a strong environmental community by keeping environmental organizations in Peel connected.

Organizations and individuals alike are invited to attend PEN Connections networking meetings, held three times a year, to exchange ideas and develop partnerships. PEN recently hosted its EcoBuzz 2005 conference at John Fraser Secondary School in Mississauga and over 250 high school students, community groups and organizations attended. Skillbuilding workshops for environmental nonprofit groups are also offered throughout the year. For information on upcoming PEN Connections and workshops or to get involved in an environmental organization in your area, please contact Stephanie Crocker, PEN coordinator at (905) 279-1855, peelenvironment@bellnet.ca or visit www.peelenvironment.org.



▲ Etobicoke-Mimico Watersheds Coalition member David Switzer with Paul Willms at the Peel Environment Network (PEN) EcoBuzz 2005 Conference

LINKS!

Municipal Environmental Initiatives in the Watersheds...

The watershed municipalities are partners in realizing the targets set out in the Greening Our Watersheds strategy at the local level.

- TRCA Etobicoke-Mimico creeks, including the State of the Watersheds Report, Greening Our Watersheds Strategy and past issues of CreekTime are featured at www.trca.on.ca/water protection/strategies/etobicoke/
- City of Brampton Environmental Stewardship pages offer a number of programs, awards and stories on Brampton's environmental initiatives: www.brampton.ca/successes/stewardship.htm
- City of Mississauga For info on Mississauga's environmental initiatives (Earth Days) and plans (Natural Areas Survey) visit www.mississauga.ca/portal/residents/environment
- City of Toronto Information on the Green Toronto Awards, Environmental Plan Status Report and Pedestrian Charter is available at www.city.toronto.on.ca/environment/index.htm
- Town of Caledon Learn about Caledon's Environmental Advisory Committee and its Greenest Town in Ontario award at www.town.caledon.on.ca
- Region of Peel Check out the Peel Water Story, the Children's Water Festival, EcoFair, how to get a rain barrel and a book on water-wise gardening at www.peelregion.ca



Spills Management in the Creeks

Coalition Aims to Tackle Spills

The Etobicoke-Mimico Watersheds Coalition identified spills within their strategy document, *Greening Our Watersheds*, as a major issue to tackle if the creeks were ever to become healthy again. The urbanized and industrialized creeks are subject to many spills each year and the Coalition wanted to ensure that everything was being done to prevent, clean-up and restore the natural environment. The Coalition saw an opportunity to partner with other groups across the TRCA jurisdiction including the Humber Watershed Alliance, the Black Creek Project and the Don Watershed Regeneration Council, as well as Environment Canada, the Ontario Ministry of Environment and Regional Spills Action Centres in Peel, York, Toronto and Durham in order to address the issues across the GTA. The Remedial Action Plan (RAP) Team (consisting of TRCA, Environment Canada and Ministry of Environment representatives) adopted and sponsored the initiative and struck a technical advisory committee in order to produce a background report as well as host a workshop to discuss the issues.

Spills Workshop Begins to Identify Issues

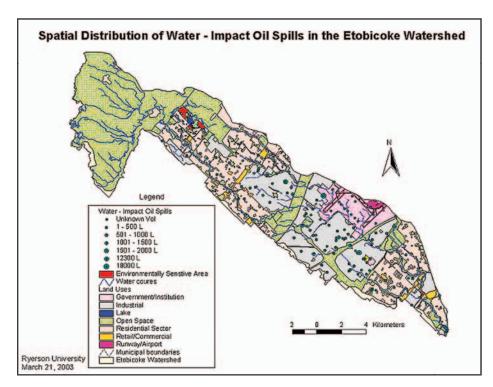
A major accident on Highway 401 almost derailed the September 29, 2004, Spills Workshop by snarling traffic for most of the day. However, the workshop went ahead and brought together approximately 70 people to discuss spills response efforts, policy, programs and protocols. The technical advisory committee helped to develop a background report that detailed issues and evaluated the spills response system. The workshop invited watershed council representatives, as well as staff from agencies interested in spills (such as the International Joint Commission, Environmental Commissioners Office, and the Canadian Institute for Environmental Law and Policy, local municipalities and organizations) to discuss the state of spills in the GTA. Thankfully, the spill which occurred that day on Highway 401, consisting of thousands of gallons of burned paint and garbage, never made it to the Don River due to the quick response of emergency services staff.

The overall goal of the Spills Workshop was to raise awareness about spills management issues and ensure that effective measures are implemented to monitor, control and prevent harmful substances from entering our watersheds and the waterfront. A number of activities will be carried out in support of these goals in consultation with a variety of community, municipal, regional, provincial and federal stakeholders. An Outcomes Report was published with recommendations for future action. The challenge of addressing those recommendations was assigned to the RAP Team and the work will continue in 2005.

Recommendations from the Spills Workshop

The workshop discussion identified key areas for further action. The participants supported holding issue specific workshops to canvass ideas and to collaborate on activities. A summary of the workshop recommendations include the following:

- Undertake thorough research on impact assessment and monitoring of restoration efforts.
- Develop public education strategy and easy-to-remember special emergency number for spills.
- Improve spills database management.
- Target outreach to industrial sectors.
- Require mandatory spills prevention plans for all businesses.
- Require mandatory spills plans for all municipalities. Elevate the relevance and importance of municipal spill plans and tie into source water protection.
- Explore alternate prevention practices.
- Develop training kit for first response staff.
- Identify gaps and improve efficiencies between multiple agencies and departments.
- Investigate ways to increase enforcement while tightening up legislation to deter spills.



▲ A recent study of spills in the Etobicoke Creek watershed revealed the many kinds of spills, their distribution and their volume. (James Li, 2003: Spills Management in the Etobicoke Creek Watershed)



▲ This spill on Mimico Creek in 2001 turned the entire creek from headwaters to its mouth a milky white

WHAT CAN YOU DO

What Can YOU do if you witness a spill happening in the creeks?

Spills are defined as releases of pollutants into the natural environment originating from a structure, vehicle or other container and that are abnormal in light of all circumstances. There are two things that you should be looking for:

- 1) Pollution emitting from the storm sewer (e.g. odours, a multicoloured 'gasoline sheen', discoloured water, etc.).
- 2) Continual water coming out from the storm sewer (at a time when it hasn't rained for several days).

If you believe you have witnessed a spill, call:

Ministry of Environment Spills Action Centre

Toll Free: 1-800-268-6060 or in Toronto (416) 325-3000

Water Flow

Sometimes storm sewers have a constant flow of water coming out of them, even though there has been no rain to warrant this. This could be an indication of illegal discharge into the storm sewer system or an illegal hook-up to the storm system. In this instance, the local works department or local Spills Action Centre should be contacted:

Local Spills Action Centres in the Mimico and Etobicoke Creek Watersheds

City of Toronto: (416) 338-8888

Region of Peel's 24-hour Spill Response Line for City of Brampton,

City of Mississauga and Town of Caledon: (905) 791-7800



GET IN ON THE ACTION

Heart Lake Community Action Area Report

UPDATE: Heart Lake Master Plan

The Heart Lake Conservation Area (HLCA) Master Plan Advisory Committee has been working for over a year to assist Toronto and Region Conservation (TRCA) in the development of the HLCA Master Plan. Together, the advisory committee and TRCA is producing a background report on the HLCA. It is an extensive document that provides the current knowledge about all aspects of the HLCA and will act as a reference tool for the advisory committee as they develop the Master Plan. Next, the advisory committee and TRCA will develop a vision for the HLCA to guide the development of management zones and recommendations for the park. For more information, please contact Deanna Cheriton at (416) 661-6600, extension 5204 or dcheriton@trca.on.ca.

Local Artist Donates Painting in Support of Regeneration Projects

A Brampton artist, Gordon Stuart, was so inspired by the shoreline restoration at Heart Lake and the aquatic planting efforts of thousands of Region of Peel students at the Water Festival that he captured a sunny day at the shore in watercolour. The painting was displayed in a Brampton gallery, and Mr. Stuart decided to donate the painting to raise funds for future restoration projects. The Etobicoke-Mimico Watersheds Coalition officially received the painting at their July meeting and it was subsequently auctioned at the Charles Sauriol Conservation dinner. The coalition thanks Gordon Stuart for his inspiration, painting and generous 'pay-it-forward' attitude to environmental restoration at the Heart Lake Conservation Area.



▲ Etobicoke-Mimico Watersheds Coalition Co-chair Irene Jones and TRCA Chair Dick O'Brien accept the painting of the Heart Lake shoreline by Brampton watercolour artist Gordon Stuart

Heart Lake Welcomes Back the Peel Children's Water Festival

Community Day allows families to experience what grades 2-5 students learn during the week at the Peel Children's Water Festival through over 60 interactive activities. This year Community Day, May 28, 2005, 10:00 am - 3:00 pm, will feature many new activities as well as past favourites such as the raptor show, trout release and wildflower planting. Expect the Etobicoke-Mimico Watersheds Coalition to be there with a

variety of native plants and resources to get people started on their water conservation garden this year. For more information, visit www.peelregion.ca or contact Paul Willms at (416) 661-6600, extension 5316.



Peel Children's

▲ The Etobicoke-Mimico Watersheds Coalition (Marilyn Hagerman, Doug McRonney and Bob Noble pictured at the 2004 festival booth) will have Black-Eyed Susans as well as other species of native water-conserving plants at the 2005 Peel Children's Water Festival Community Day on May 28, 2005

Heart Lake Gets a New Staircase Through the Hard Work of Scouts

by Don Ford

Scouts Canada has a Scout Shop across from Heart Lake Conservation Area and many local Scouts, Cubs and Beavers make use of the conservation area for program activities. Some local Scout leaders asked Park Superintendent Ed Patterson and Assistant Superintendent Kyle Drake what they could do to help out at the conservation area. Mr. Drake identified the need to

replace a wooden staircase that leads from the group picnic area down to the lake. Scouts and leaders from 4th Brampton, 2nd Bramalea and the Area leadership team participated in the construction process over three separate weekends. Park staff, under Mr. Patterson's direction, also worked on the project. The Scouts gained confidence in their ability to undertake a significant construction project and the good feeling of having left a legacy for future park users.



Editor's Note: TRCA and Heart Lake Conservation Area staff congratulate and thank the Scouts, their leaders and project manager and Scout leader Don Ford for a job well done! The staircase is one of the many contributions and projects that Scouts and Girl Guides have made within the park in recent years and illustrates a great stewardship tradition!

The New Peel Aboriginal Network and National Aboriginal Day Celebration at Heart Lake Conservation Area

by Damian MacSeáin

Last June, approximately 40 local people got together under blue skies to celebrate National Aboriginal Day. It was a diverse group that included people who are Cree, Dene, Métis, Wendat, Ojibway and Oneida, as well as non-Aboriginal people interested in learning more about the cultures. The celebration was planned by a group of Aboriginal people from Brampton and Mississauga who make up the emerging Peel Aboriginal Network (PAN). The goal was to have participants share, learn and enrich one another with diverse Aboriginal teachings. For example, the lesson of the 'talking stick' was shared by Wendat elder and Mississauga resident, Joe Paquette, who also led everyone in making their own talking stick. The stick is used to ensure clear and respectful communication and the teaching revealed that when we speak harshly, we not only hurt others, we dishonour ourselves. Brampton resident and PAN member, Patricia Chrisjohn, of the Oneida Nation, shared the teaching of the Iroquoian 'Great Tree of Peace' symbolizing how nations chose to live together peacefully and how this teaching of peace has been extended to nations in all four directions. Pauline Sutherland from Brampton shared teachings from her James Bay Cree culture by demonstrating the mother's use of a cradle board and portable hammock, while singing a soothing Cree lullaby to a sleeping baby. Participants also enjoyed a presentation by Cathy Crinnion, an archaeologist with the TRCA on the subject of ancient Aboriginal tool fragments recently discovered at Heart Lake Conservation Area. The children heard stories of the Trickster and received lacrosse lessons from PAN member Clayton Cadeau, of

the Métis Nation. The sunny day ended with drumming and chanting as six indigenous saplings were planted on site to mark the occasion. In the words of Patricia Chrisjohn: "These small trees, like PAN's first small event, will hopefully grow stronger with each passing year." For more information about PAN, contact Pauline Sutherland at (905) 495-3811.



▲ Clayton Cadeau of the Métis Nation shared his knowledge about lacrosse with some eager pupils (Photo: Damian MacSeáin / PAN)



GET IN ON THE ACTION

Snelgrove Community Action Area Report

On Saturday, October 28, 2004 in the Etobicoke Creek Valley of north Brampton, over 150 scouts, guides and residents of the surrounding neighbourhoods planted 700 native trees and shrubs in an effort to create habitat for migrating songbirds and extend the riparian zone. The TRCA Environmental Volunteer Network and Etobicoke-Mimico Watersheds Coalition members hosted a number of interesting wildlife activities. The planting area and event were one of the many components of the four-year Snelgrove Reach Regeneration Project that we are implementing in partnership with the Region of Peel and the City of Brampton. Many thanks to the 24th Brampton, 16th Bramalea, 1st Huttonville Scouts and Cubs, 6th Brampton Beavers, and the 73rd Brampton, Heart Lake, and 77th Birchlea Guides, the 71st Pathfinders, their leaders Gloria Martin,

Kelvin Davis, Jay Mason, Alison Rodrigues, Alex Szabo, Heather Guy, Cheryl Herd, Elizabeth Ward, Karen Meyer, Karen Marrello and Kay Tull, City of Brampton Wards 2 and 6 Councillor John Hutton, the many volunteers and Don Ford for making this year's effort a success! For more information on this year's planting event contact Kristin Geater at (416) 661-6600, extension 5667.



▲ Scout and Guide leaders, City of Brampton Councillor John Hutton and TRCA staff at another successful planting event in the beautiful Snelgrove valley



◆ After planting 700 trees along with tree guards and mulch mats, you'd be one tired Scout too!

South Mimico Community Action Area Report

The South Mimico Stewardship Group met regularly during 2004 and held an Earth Day planting and Mayor's clean-up event at Tom Riley Park inviting Tom Riley himself to the celebration! Over 1.5 tonnes of garbage were collected, 325 trees and shrubs established as a buffer within the riparian zone, 65 bird boxes built and approximately 300 people participated. The South Mimico Stewardship Group is a stalwart bunch (remember, they were the ones who planted trees and shrubs for three hours in a torrential

downpour at Reid Manor Park!) and have many projects on their agenda from the mouth of Mimico Creek to Montgomery's Inn this year... but they'd love to partner with schools, businesses, residents, ANYONE who's interested in improving the local environment, celebrating local human heritage stories and taking a hands-on approach to enhancing greenspaces and habitat in the area. If you're up to the challenge and would like to become involved with a project, attend an event or sponsor a tree planting project, call Kristin Geater at (416) 661-6600, extension 5667.



▲ Building bird boxes and cleaning up the creek at the South Mimico Stewardship Group's Earth Day planting and Mayor's clean-up Event

UPDATE! The Malton Environmental by Marnie Branfireun Stewardship Project

In May 2004, The Malton Environmental Stewardship Project (MESP), a partnership between the Malton Residents Association, Mississauga-Airport Rotary Club, City of Mississauga and TRCA, was awarded an Ontario Trillium Foundation (OTF) grant of \$253,700. With the support of community partners the MESP took flight in 2004 with several community celebrations and events:

- ❖ A clean-up event was held in Elm Creek Park with the St. Mark's Presbyterian Church Youth Group.
- ❖ On Saturday, October 2, thousands of people came out to the Malton Community Festival held at the newly-renovated Malton Community
- Centre. Just as things were winding down, a young boy brought an oddly shaped 'rock' over for identification. That was when the 'rock' woke up, extended its head and legs and began to take its first steps. It was a newly hatched snapping turtle!



❖ October 13 marked the official project launch with a planting event along the Derry Greenway with children from Ridgewood Public School and City of Mississauga Ward 5 (Malton) Councillor Eve Adams. Ridgewood Principal Aki Odamura and environment club leader and teacher Angela Caldwell were on hand with 30 enthusiastic grades four and five environment club students to plant 50 native trees and shrubs.

Future activities will highlight the wonderful green spaces of Malton as we enhance wildlife habitat and provide educational experiences to school classes, church groups, businesses and residents. For more information on how you or your group can become involved, contact Marnie Branfireun at (905) 615-4640 extension 2513 or marnie.branfireun@mississauga.ca. The

Malton Environmental Stewardship Project would not be possible without the generous support of the Ontario Trillium Foundation.





▲ City of Mississauga Ward 5 (Malton) Councillor Eve Adams officially launched the Malton Environmental Stewardship Project along with community partners and Ridgewood school students



▲ Malton Environmental Stewardship Project partners (from left to right): Principal Aki Odamura (Ridgewood Public School), Larissa Cherevaty (TRCA), Chandra Sharma (TRCA), Gordon Bant (Mississauga-Airport Rotary Club), Eugene Furgiuele (City of Mississauga), Doug McRonney (Malton Residents Association / Etobicoke-Mimico Watersheds Coalition), Steve Roberts (Malton Residents Association), City of Mississauga Ward 5 (Malton) Councillor Eve Adams, Russ Pooley (City of Mississauga), Dr. Kuldip Kular (MPP Malton), Marnie Branfireun (MESP Project Coordinator)

HUMAN HERITAGE...

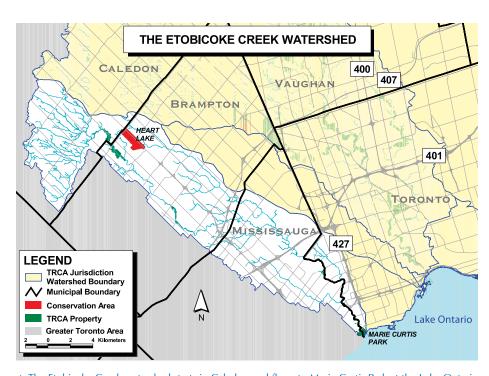
Public Utility, Ecological Slum, Open Sewer or Natural Resource — by Katrina Guy The Evolving Perspectives of Etobicoke Creek

Today we are beginning to think of Etobicoke Creek as a natural resource to be managed and protected. Fifty years ago it was considered an 'ecological slum'. A little over a 100 years ago, the creek was regarded not as a natural stream, but was officially classified and used as a public utility, in which it was acceptable to dump both raw sewage and industrial effluent. It was not considered to be a natural resource to be protected nor even as a source of recreation. Two hundred years ago, the creek was almost completely forest-covered and featured many large old growth trees, a very different environment than what we see today. This deciduous forest cover was filled with such species as ash, beech, birch, elm, sugar maples and red oaks in the highlands, and in the lowlands with yellow beech, alders and eastern hemlock. With a thick undercover, the ground held lots of water and the creek was the spawning grounds for Atlantic Salmon.

The settlers who arrived in the 1790s used the creek for drinking water. They were required to build a house, clear their half of land to the road allowance as well as plant five acres of every 100 acres granted, all within two years. Within 10 years of the first settlement, towns and villages started to spring up in the Etobicoke watershed. By 1840, it is estimated that forest cover had been reduced by 50 per cent. Farmers chose forested areas over the meadows and floodplains that First Nation farmers used, because they believed that the forested areas were more fertile. Wood was also needed for building and for fuel.

Settlers also cleared the land of 'excess water' by draining the wetlands and ponds. The effect of these activities on water quality became evident early in the19th century. By 1825, wells had replaced creeks as sources of potable water due to increasing pollution of the creek. Saw and grist (grain) mills developed along the creek banks in order to meet increasing building and agricultural needs. There were six mills located on Etobicoke Creek, even though the size and minimal flow of the creek discouraged milling operations. The mills required dams to be built to provide a supply of water in order to power the mechanisms. The dams proved to be barriers to fish swimming upstream. The mills added further stress by dumping sawdust and other waste materials directly into the creek, which impaired fish spawning grounds. By 1850, the salmon that had first entered the Great Lakes from the Atlantic Ocean had disappeared from Etobicoke Creek.

The annual cycle of devastating spring floods and summer droughts became a growing problem by the 1850s, especially in Brampton where Etobicoke Creek meandered through the heart of the town and overflowed its banks almost every spring. Later on, it was obvious to many hunters, fishermen and naturalists that the 'bounty' of the creek and the surrounding area was



▲ The Etobicoke Creek watershed starts in Caledon and flows to Marie Curtis Park at the Lake Ontario waterfront







▲ Perspectives on nature and the watershed have changed with their development. The photo progression above shows land use and settlement from 1820 (A 'location') through 1840 (an 'improved holding') to 'a typical farm' in 1860...notice how the number of trees in the sketches changes from the 1820 picture to the 1860 picture. (Photos: City of Toronto Archives, Etobicoke Valley Report, 1947: Series 497, Items 881817, 881818, 881813)

...IN ETOBICOKE CREEK

in rapid decline, even as more people came to visit the waterfront. For the first time, people began to see the creek valleys and waterfront as a place for relaxation. It was the beginning of an awareness and appreciation of the area that led the first efforts to clean things up, even as urbanization of the area continued. The connections between bacteria, water pollution and disease began to be made and efforts were made to build a safe, comprehensive sewer system in the name of public health and urban planning. The first municipal sewage treatment plant in Canada was built in Brampton and was a significant development, as it meant that Etobicoke Creek was no longer inundated with raw sewage. This also meant that the area along the creek and at the waterfront became very attractive real estate. Houses were built on flood plains and cottages were built at the Long Beach Sand Flats. The TTC laid down rails for streetcars, bringing daily visitors to the sandy beaches.

Although the area flooded regularly, there were many efforts to minimize these dangers with engineering projects. The Etobicoke-Mimico Conservation Authority was formed in 1946, and after heavy flooding in 1948 attempted to purchase the houses at the Long Branch Sand Flats. In October 1954, Hurricane Hazel destroyed 70 homes at the Long Branch Sand Flats and proved that earlier measures were not enough to protect lives and property. Buildings were prohibited in floodplains which were developed instead as recreational park areas. Natural channels were straightened, flood control dams were built and stormwater ponds were developed.

The next two decades saw the continued use of Etobicoke Creek as a stormwater channel and for the disposal of treated sewage. In 1959, in the wake of Hurricane Hazel, more flood controls including dams, reservoirs, channel improvements, acquisitions of flood plain lands, flood warning and a stream forecasting system were implemented. In 1962, the Ancilliary Conservation Plan made it very clear what the conservation priorities were after flood control: recreation, reforestation, fish and wildlife. Gradually, the traditional 1950s-70s focus on engineering measures for flood and erosion control were replaced with a new focus in the 1990s on measures to restore and protect natural areas. The views on the management of fish, wildlife and habitat began moving away from development for recreational opportunities and toward protection as a valuable part of the environment. Fish management for instance became geared toward habitat improvement and restoration of native species.

Protecting, respecting and regenerating the creek in an integrated way to address complex issues such as stormwater management, urbanization, development in the headwaters and the quality of our drinking water are part of the new perspective for Etobicoke Creek in 2005. To find out more about these strategies contained in *Greening Our Watersheds*, and other initiatives, contact Chandra Sharma at (416) 661-6600, extension 5237.



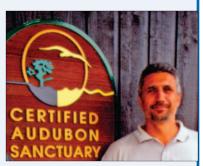


▲ The two photos demonstrate the 'flashy' nature of Etobicoke Creek and show the same location, near Summerville, in flood conditions during spring melt and at the height of summer circa 1947. The Village of Summerville used to exist where Dundas St. meets Etobicoke Creek on the border of what is today Mississauga and Etobicoke. For an excellent article on 'The Lost Village of Summerville,' visit the Mississauga Heritage Foundation's Web site at www5.mississauga.ca/heritage/new/summerville.htm (Photos: City of Toronto Archives, Etobicoke Valley Report, 1947: Series 497, Items 883245 and 883244, pp. 215-216. The Etobicoke River near Summerville in flood [and] in summer, Photo by A. F. Coventry)

Peel Village Recertified as an Audubon Sanctuary

"Enhance it and Balance it!" heard alongside "Grip it and Rip it!" at this Golf Course

The City of Brampton's Peel Village Golf Course is recognized for its leadership in the watersheds because of its Audubon certification. Etobicoke Creek, which flows through the golf course, has been tested on the downstream and upstream ends of the property and the water leaving the golf course is actually cleaner than the water that enters it — the golf course's environmental improvements are the reason! Peel Village opened



▲ Frank Merran and the Audubon plaque at the Peel Village Golf

as the Brampton Golf Club in 1922. In 1998, it became the first municipal golf course to become fully certified under the Audubon Cooperative Sanctuary System. Combining golf and environmentalism is Frank Merran's (Manager of Golf Operations) top priority. "The rigorous process of certification has been very educational and ultimately rewarding. Working together, our regular golfers, resource advisory committee members and staff have greatly enhanced our already beautiful property and everyone involved has thoroughly enjoyed the whole process." For golfers, Peel Village offers the unique experience of actually playing in a wild garden. The wildlife species that make the property their home include beaver, mink, muskrat, skunk, rabbit, song birds, raptors and the occasional deer. Peel Village is the busiest nine-hole golf course in Canada, hosting about 42,000 rounds a season, compared with the national average of 24,000 so golfing has not been compromised by the Audubon initiatives but obviously enhanced through these environmental improvement. The Etobicoke-Mimico Watersheds Coalition congratulates Peel Village Golf Course and the City of Brampton on the recent Audubon recertification and looks forward to future habitat enhancements at the course that are improving the water quality of Etobicoke Creek. For more information on the Peel Village Golf Course, contact Frank Merran at (905) 874-2995 or frank.merran@city.brampton.on.ca

HUMAN HERITAGE...

Mimico Creek, the Passenger Pigeon, and Learning from Our Mistakes by Katrina Guy

In Algonkian, 'Mimico' means resting place of the wild pigeons. The wild pigeon that is referred to is more commonly known as the Passenger Pigeon (Ectopistes migratorius), a now extinct bird that once covered the skies of eastern North America in the billions. In Canada, the last sighting of them in the wild was July 6, 1900 when five were spotted.

Jacques Cartier's diary for July 1, 1534 is the first historic account of the Passenger Pigeon; the 16th century French explorer recounts seeing them in 'infinite numbers'. But fossil records of the wild pigeon go back 100,000 years and indicate that the bird was even found on the western side of the continent. Initially, their bones are not found in great numbers on Woodland archaeological sites and it is thought that their numbers did not rise to the great populations cited until after 1450. It is speculated that the climate change of the Little Ice Age (beginning around 1400) and the abandoned agricultural land resulting from the decline of the Mississippian culture, created more of the forested habitat that was suitable to the pigeon.

From this point on, both First Nation peoples and later Europeans hunted the bird as a food source. First Nation peoples used nets to trap several birds at a time and studies in the area point to this bird as an increasingly important food source. Later, Europeans settling in the region recorded giant shooting parties that brought down several birds with a few shots — one recorded instance saw 42 birds killed with one shot. Passenger Pigeons were used as a game bird, but they were also viewed as pests that ate certain types of crops and destroyed timber with their roosting.

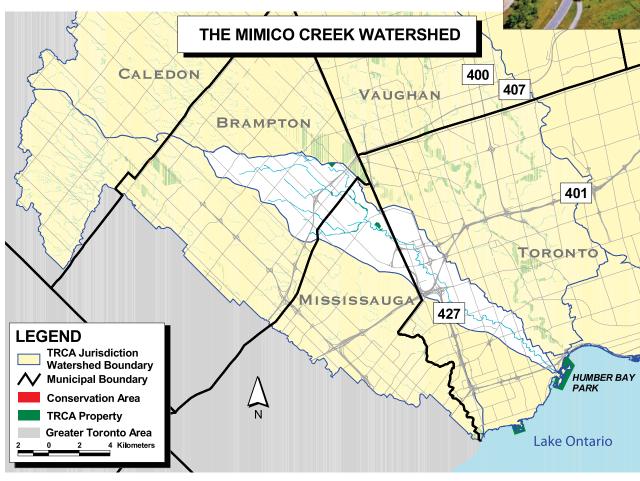
By the 1850s, their number had dropped significantly and laws were enacted to protect them from being hunted. But in many areas, including Ontario, they continued to be hunted through shooting and trapping. In Ontario's *Small Birds Act* they were classified in 1897 as a wild native bird to be protected and not to be 'killed or molested.' In between the hunting and the destruction of its habitat for timber, the ever advancing agricultural and urban 'sprawl' of the times and with little legal protection, the Passenger Pigeon's fate was sealed. Their extinction produced pressures up the food chain that are still present today as they were a prime food source for many bird-eating raptors, such as the peregrine falcon, one of their foremost natural predators.



▲ 'Extraordinary Wild Pigeon Shooting Near Blackwell, Lambton, Ont.' Canadian Illustrated News, May 13, 1876 (City of Toronto Archives, Series 496, subseries 2, File 10)



▲ The mouth of Mimico Creek at Humber Bay Parks



▲ The Mimico Creek watershed headwaters are in Brampton. The creek travels through Mississauga and Etobicoke to the Humber Bay Park on Lake Ontario.



...IN MIMICO CREEK

By 1896, there were only 250,000 Passenger Pigeons remaining in one single flock. But still they were not safe. The newly-erected telegraph lines allowed a large group of hunters to communicate with each other. On a spring day in April, they descended on the flock. At the end of the day, the carnage was devastating: 200,000 carcasses, 40,000 mutilated, thousands of chicks destroyed or left to predators. Less than 5,000 birds survived.

The last legitimate record of a wild Passenger Pigeon was in 1900 in Ohio. This bird was shot and its remains are still in the Ohio State Museum. A few birds lingered on into the early part of the century in captivity. In 1909, the Cincinnati Zoological Gardens had the three remaining birds, two males and a female. By 1910, only the female was left. This last bird to survive was named Martha. On September 1, 1914, at 1:00 pm, Martha died at the age of 29. This is possibly the only instance in history when we knew the exact moment of extinction for an entire species. It took 50 years of habitat destruction and hunting to exterminate the Passenger Pigeon. The exact number of Passenger Pigeons in North America when the Europeans arrived is not known but the best guess is five billion — about a third of all the birds in North America at the time and the same as the total number of birds to be found today in the United States.

The loss of Passenger Pigeons, along with the Carolina Parakeet and the Eskimo Kurloo, inspired the 1917 *Migratory Birds Act*, one of the earliest pieces of environmental legislation. This legislation is credited with saving a number of different species from extinction, including the wood duck, by restricting hunting and protecting important habitats like wetlands.

Potted Pigeons Recipe

Pigeons enough for the family
1 cracker per pigeon
1 egg per pigeon
Salt pork
Piece of suet or butter the size of an egg
Sweet marjoram or sage, ½ tsp per bird
Flour

Pigeons may be potted, roasted or stewed. Potting is the best, and the least trouble. After they are thoroughly picked and cleaned, put a small slice of salt pork, and a little ball of stuffing, into the body of every pigeon. The stuffing should be made of one egg to one cracker, an equal quantity of suet, or butter, seasoned with sweet marjoram or sage, if sweet marjoram cannot be procured. Flour the pigeons well, lay them close together in the bottom of the pot, just cover them with water, throw in a bit of butter, and let them stew an hour and a quarter if young, an hour and three quarters if old. Some people turn off [pour out] the liquor [pan juices] just before they are done, and brown the pigeons on the bottom of the pot; but this is very troublesome, as they are apt to break to pieces.

From The American Frugal Housewife by Mrs. Child, published 1833

EDITOR'S NOTE: If you attempt to make this dish, please remember that the key ingredient is no longer available on planet earth or in any grocery store, due to extinction.

Learning from our mistakes

Are we listening to the canary's song?

The first piece of environmental legislation, the Migratory Birds Act, was a reaction to the rapid decline of the passenger pigeon. A significant contributing factor to its eventual extinction was habitat loss and destruction due to increasing (agricultural) development. Species protection now includes protection of habitat - this sounds like an obvious connection but early attempts at conservation often focused on the *object*, rather than the supporting *system*. Protection efforts through legislation, land use planning and other means are still evolving. TRCA's Terrestrial Natural Heritage Program recognizes the need to move beyond crisis management and scientifically model the incremental habitat losses before they lead to biodiversity loss, extirpation or species extinction. The canary in the coal mine is often used as a metaphor for an early warning system. Canaries and other small animals were used by miners in the late 19th century to warn of toxic gases within the mine. If the birds died, the miners would evacuate. Today, we don't really have the option of evacuating if the animals and plants signal that our environment is toxic. Indicator species of ecosystem health, the plants and animals that signal clean air and water are decreasing in urbanized watersheds such as Mimico Creek. Mimico Creek is now

77 per cent urbanized and has lost approximately 95 per cent of its wetlands with a corresponding loss of bird species, such as the green heron which is an indicator of environmental health. Almost 100 years after the extinction of the passenger pigeon, we are just beginning to develop the scientific tools to understand incremental habitat loss, just beginning to build the basis for legislation and policy needed to protect habitat, and just beginning to understand the connections between biodiversity and human health.



▲ Miner with a Canary, early 1900s, West Virginia Office of Miners' Health, Safety and Training, Archival Photos, www.wvminesafety.org/histphoto.html

Green Heron and ▶
Painted Turtle





▲ South Mimico Stewardship Group bird watching at Humber Bay Parks at the mouth of Mimico Creek



WHAT'S HAPPENING

Wildlife Sightings

People have written to CreekTime recently about sighting two species of bats, opossums, great horned owls, long-eared owls, porcupines, four different species of frogs and large (and tiny) snapping turtles in the creeks. The presence or absence of certain wildlife, fish, insect and vegetation species can tell you a lot about the health of the environment. TRCA, along with its partners in the Regional Monitoring Network, tracks populations of these species and their locations to monitor the health of the watersheds across the GTA. If you have photos, paintings, sketches, or stories of wildlife that you've seen in your backyard, at your school, business, or your travels within Etobicoke and Mimico Creek watersheds, please contact Paul Willms (416) 661-6600, extension 5316!





Connect with Nature! 2005 Events and Activities

Respect, Protect and Regenerate the Watersheds!

Malton Stewardship Day 2005

Wildwood Park, Malton. Saturday, April 23. Activities include: creek and park clean-up and naturalization, nature hikes, youth nature workshops, water quality monitoring, community displays, food fair, entertainment, community health area and a REALLY TERRIFIC PRIZE draw for participants. Contact Marnie Branfireun, MESP project coordinator at (905) 615-4640, extension 2513 or marnie.branfireun@mississauga.ca to find out more!

Bird Walks

Citizens Concerned about the Future of the Etobicoke Waterfront (CCFEW) is continuing its series of monthly bird walks. The next walk is on **Sunday, April 24, 9:00 am - 11:00 am** at Colonel Samuel Smith Park. Meet in south parking lot. The bird walks are sponsored by *TD Friends of the Environment Foundation,* are free to the public and take place regardless of weather conditions. For more information, please e-mail ccfew@sympatico.ca

Mississauga Garden Council presents Marion Jarvie — Colour in the Garden all Year with Dramatic Architectural Plants on April 26. Jim Anderson — David Austin Roses: Alluring and Enduring on May 31. Dr. Gail Krantzberg — Our Water Our Gardens Our Life on June 28. To register, or for more information visit www.mississaugagardencouncil.org

South Mimico Stewardship Group Woodford Park Event

In Etobicoke (near Queensway and Park Lawn Road). **Saturday, May 7, 10:00 am – 1:00 pm.** Councillor Peter Milcyn and the South Mimico Stewardship Group invite you to celebrate spring, talk about future environmental projects in the area and help clean up Mimico Creek. Free giveaways and prizes! For more information, contact Kristin Geater at (416) 661-6600, extension 5667.

Caledon's 3rd Annual Dandelion Festival

Saturday, May 14, 11 am - 4 pm. Celebrate Dandelions and backyard diversity. Find out 101 uses for Dandelions. Enjoy information booths and demonstrations, the marketplace, kid's activity tent, dandelion food including ice cream, sausages, wraps, baked goods, coffee and tea. The Weedgee Kidz teach Caledon residents alternative lawn care methods. Admission by donation to Weedgee Kidz Program. Inglewood Community Centre, 15855 McLaughlin Road. Contact Karen Hutchinson at (905) 584-6221, e-mail: cca@caledoncountryside.org or visit www.caledoncountryside.org

Peel Children's Water Festival

Heart Lake Conservation Area, Brampton. **May 26 - June 1.** For grades 2-5 students in Caledon, Brampton and Mississauga schools. For class registration, sponsorship, volunteering or other information contact Sangeetah Pabla, festival coordinator at (905) 791-7800, extension 4548.

Peel Children's Water Festival Community Day

Heart Lake Conservation Area, Brampton. **Saturday, May 28, 10:00 am - 3:00 pm.** Come see what the kids have been talking about! Free admission, entertainment, wildflower planting, rainbow trout release, over 60 activities and giveaways. For more information, contact Paul Willms at (416) 661-6600, extension 5316.

Heart Lake Conservation Area ENVIRO-Picnic

An end-of-school-year celebration, with a focus on the environment for grades 1-4. **Thursday, June 9**. For more information or to register your school, call (416) 667-6295 or visit www.trcaparks.ca

Peel Heritage Complex. Walk for the Art of It

Saturday, June 18. A number of walking tours from 10:00 am - 2:00 pm, exploring the architecture, nature, cemeteries and trails of Brampton – take one or take all of the walking tours. Free, fun family walks, no registration required! Volunteer opportunities! Visit www.peelheritagecomplex.org or contact Maureen Couse at (905) 791-4055 for more information.

Butterflies and their Gardens

Saturday, June 25, 1:00 pm - 3:00 pm. Humber Bay Butterfly Habitat in Humber Bay Park East, south of Lakeshore Blvd., at the foot of Park Lawn Road, Etobicoke. Learn how to identify butterflies and attract them to your own garden while touring this unique park with naturalists. Children will enjoy crafts and activities. Call the hotline at (416) 661-6600, extension 5660 to register.



Creating Beautiful Lawns and Gardens the Natural Way!

Saturday September 17, 10:30 am and 12:00 pm. Malton Community Centre. This annual festival runs from 10:00 am to 4:00 p.m. Adults and children will enjoy free food, entertainment and activities. Enter a draw for a chance to win gardening books and native wildflowers to plant at home. Call the hotline at (416) 661-6600, extension 5660 to register.

3rd Annual Heart Lake Dragon Boat Race — Come and Wake the Dragon!

Heart Lake Conservation Area, Brampton. **Saturday, September 24**. This is no sedate country picnic — it's a loud, boisterous celebration! Teams of 22 people working in synchronization, paddling toward a common goal — the ultimate team building experience! For only \$34 per team member you can compete in this exciting event and raise funds to support the **Prostate Cancer Foundation of Canada**. Registration forms and information, including how to organize a team, can be found at www.trca.on.ca/parks_and_attractions/activities/dragon_boat/

CreekTime is published by Toronto and Region Conservation in partnership with the Etobicoke-Mimico Watersheds Coalition.





