Number 70 Spring 2011

BARC Newsletter

BARC's Fourth Annual Wine Tasting and Silent Auction

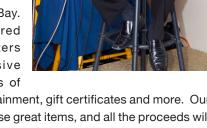
RHODA DEJONGE, DIVERSITY COORDINATOR

ARC celebrates another success! Our 2011 Wine Tasting and Silent Auction was our best one yet. We were overwhelmed with the number of volunteers, donors, and supporters who made the evening elegant, entertaining and enjoyable. Ward 2 Councillor Jason Farr was a hoot as our MC, and Steve Strongman demonstrated that he is a true entertainer. What talent!

Our palettes were delighted as well - with mouth-watering cheeses from The Cheese Shoppe on Locke, as well as the tasty appetizers from the Royal Hamilton Yacht Club. And who can forget the delicious drinks? Mmm that warm java from My Dog Joe/Mulberry Street Cafe, refreshing brews from Steam Whistle, and Juscious wines from Tawse winery and PMA Canada.

The best part of the entire evening, was not only that we all had a fabulous time, but also that we were able to raise

more funds to continue our important work in cleaning up Hamilton Harbour/Burlington Bay. Nearly one hundred generous supporters donated impressive works of art, bottles of



wine, trips and entertainment, gift certificates and more. Our fine guests bid on these great items, and all the proceeds will go directly to the great work of restoring our Harbour. Thank you to all those who helped make this such a success!

For a full list of volunteers and supporters, please see our website: www.hamiltonharbour.ca/auction



Fish Don't Smoke! page 3 Emerging Concerns page 4

Returning river channels: Boosting marsh restoration for

fish & wildlife habitat page 5

RAP Update page 7



The Bay Area Restoration Council is at the centre of community efforts to revitalize Hamilton Harbour and its watershed.

Baywatch

Messages from our President:

As humans, we are but a drop in the bucket of time in relation to the evolution of oc Bay. Besides the powerful movement

of massive glaciers, humanity's short time here has made the largest impact.

For the last 20 years, BARC and our partners have been working hard to reverse the negative impact our species has had on the harbour. It was 20 years ago this spring when the Bay Restoration Council was born. Ann Redish heroic came our first president, and we' been pushing forward with vim and vigor ever since.

Hamilton Harbour's history shows the negative impacts that humans can have on the environment. However,

together with our stakeholders, BARC is working to rebuild the health of the Harbour and show that people can also make positive changes.

ack in 1991, the list of issues with our Bay seemed unting and unmanageable at times. But our members continued looking forward believing in the slogan: 'Together we're bringing back the Bay'; and much progress has been made.

Though there are a few big hurdles to overcome, our checklist continues to shrink. We have much to celebrate! Throughout the year we'll be remembering nd celebrating our fabulous 20 years!

Debra McBride. **BARC Board President**



Upcoming Events

BARC can't wait to host our second annual Multicultural Waterfest down at our gorgeous harbour front. Expect more fun, food and friends... and hopefully warmer weather too!

Don't miss it! Save the date for the afternoon of August 20th, 201

Interested in helping out?

Contact Rhoda deJonge, Diversity Coordinator rdejonge@hamiltonharbour.ca.





BAY AREA RESTORATION COUNCIL

BAY AREA RESTORATION COUNCIL

Life Sciences Building - B130F 1280 Main Stree Hamilton, Ontario L8S 4K1

Tel: (905) 527-7111 Email: barc@hamiltonharbour.ca www.hamiltonharbour.ca

President: Deb McBride

Executive Director: Jim Hudson

Communications & Administration Manager: Lainie Tessier

Program Manager: Kelly Pike

Diversity Coordinator: Rhoda deJonge



Funding for this newsletter generously provided by the Ontario Ministry of the Environment.

Bringing Back the Bay is published four times per vear. Articles in this newsletter reflect the views of individual contributors. Your comments and ietters to the editor are encouraged.

Newsletter Editor: Lainie Tessier Newsletter Design: Launchbox Inc.



Environment Canada

Environnement Canada

This Project was undertaken with the financial support of the Government of Canada provided through the Department of the Environment.

Ce Projet a été réalisé avec l'appui financier du Gouvernement du Canada agissant par l'entremise du Ministère de l'Environnement.

Donor Highlight: Brendan Simons



Brendan Simons and his partner Francesca Ricci enjoying time at the Harbourfront.

ARC has so many people in our great community to thank. In coming newsletters, we plan to highlight a few of the many special contributors who help 'Bring back the Bay'. In this edition, we highlight Brendan Simons -who has found a very unique way to donate to BARC, - and for that, we are truly grateful!

It all started when Brendan had finished paying off his student loans. He now had more flexibility in donating to the causes he cared about in Hamilton. Brendan was ready to give back to the community. "I tried to evaluate my priorities. The Bay was the first thing I looked to". That was back in early 2008. Fast forward to 2011 - and Brendan has been faithfully giving a small donation every month to BARC via Canada Helps (a website that manages on-line donations for non-profit organizations). It certainly has added up!

"At the end of the year, you can always make excuses to spend money on other things," Brendan states, "the best way for me to donate and contribute in a substantial way was to make it part of my budget." He's hoping that other people catch on to his simple way of donating smaller amounts. "This ideas works if many people do it. In aggregate, you can make a big difference".

BARC is very grateful for the support from young, dedicated donors like Brendan. These smaller amounts certainly do add up. Thank you Brendan!

FISH DON'T SMOKE!

KELLY PIKE, PROGRAM MANAGER

everal parking lots at McMaster University run alongside Coldwater Creek. Coldwater Creek begins where Ancaster and Tiffany Creeks meet, and flows directly into Cootes Paradise.

In October 2010, BARC ran three separate cleanup events at these parking lots. Participants included members of four McMaster clubs. There is a significant amount of trash along the parking lots and despite cleanups being only a few weeks apart, new garbage was picked up each time.

BARC is pleased to be working with McMaster University on this issue. We have placed "Fish Don't Smoke" posters in bus shelters and shuttle buses and soon there will be more recycling & garbage bins down by the lots. We also plan to have signs made to be installed on campus. Our great thanks to Aleks for designing the witty sign.



EMERGING CONCERNS

Invasive Species in the Great Lakes

DR. BRUCE NEWBOLD, PROFESSOR & DIRECTOR, MCMASTER INSTITUTE FOR ENVIRONMENT & HEALTH

JIM HUDSON, EXECUTIVE DIRECTOR, BARC

This article in our series on emerging and continuing threats to our Harbour and the Great Lakes examines the pervasive problem of aquatic invasive species.

What are they?

Non-native species are plants and animals that do not naturally occur in our area. When they become pervasive and spread widely, we call them invasive. Aquatic invasive species in the Great Lakes include both plants and animals, such as purple loosestrife, zebra mussels, sea lampreys, round gobies, and the spiny water flea. Over 180 known non-native aquatic plants have entered the Great Lakes basin. While many of these are harmless, the few that have become invasive can have negative and irreversible effects on our waters.

Should we care?

The introduction and spread of aquatic invasive species poses a serious threat to the environment, economy and human health and safety. For example, the invasive zebra mussel has had one of the greatest effects on the Great Lakes. Because of its ability to filter water, light has been able to penetrate to greater depths, disturbing habitats of organisms such as walleyes that were adapted to living in cloudy waters. Zebra mussels compete for food with native mussels, many of which face extinction. Zebra mussels also clog water intake pipes used by municipal and industrial raw water users, reducing water flow and increasing costs.

Invasive species also threaten commercial and economic interests. Their treatment and control cost billions of dollars annually. The Great Lakes Commission (www.glc.org/ans) notes that Ontario Power Generation facilities spent \$44 million in order to keep their water pipes clear of zebra mussels in 1999/2000 alone. A hometown example is the non-native carp that have uprooted native vegetation and reduced habitat for native plants in Cootes Paradise. This carp's more aggressive cousin, the Asian carp, has been found in the Mississippi and Illinois Rivers, where it has essentially eliminated commercial fishing. Their entry into the Great Lakes would be devastating to our ecosystems and fisheries.

What is being done? Regulations and Policies

Many invasive species in the Great Lakes have entered through ballast water carried in ocean-going ships. To control the entry of new invasive species, the U.S. and Canadian governments have enacted certain regulatory procedures,



particularly with respect to the shipping industry and the exchange of ballast water. Flushing ballast tanks at sea minimizes the risk of introducing new species.

Steps must be taken to ensure that nuisance species do not come into the Great Lakes in the future. With that in mind, both governments are updating their regulations.

Prevention is key to addressing invasive species. It is difficult and costly to deal with them after they become established. Hamilton Harbour's own carp barrier, managed by the Royal Botanical Gardens (RBG), is proof of the great amount of time and resources spent that are needed to remove invasives and bring natural order back to our aquatic ecosystems.

(With input from: Tasnova Shah, McMaster Institute for Environment & Health; Jennifer Nalbone, Great Lakes United, Marilyn Baxter, Hamilton Port Authority, and Becky Cudmore, Fisheries and Oceans Canada)

Further Resources

In Canada, significant research is being led by organizations like the Canadian Aquatic Invasive Species Network (CAISN) at the University of Windsor (www.caisn.ca), and Fisheries and Oceans Canada (DFO).

Green Marine (www.green-marine.org).

The Great Ships Initiative (GSI), (www.greatshipsinitiative.org).

Great Lakes United (www.glu.org) Contact: Jennifer Nalbone, Director, Navigation & Invasive Species.

Glassner-Shwayder, K., (2000). Briefing Paper: Great Lakes Nonindigenous Invasive Species. Great Lakes Commission. Retrieved from http://www.glc.org/ans/pdf/briefpapercomplete.pdf

Great Lakes Commission (2010). Great Lakes Aquatic Nuisance Species. Retrieved from http://www.glc.org/ans/

Transport Canada (2010). Alien Invasive Species- The Canadian Ballast Water Program. Retrieved from http://www.tc.gc.ca/eng/marinesafety/oep-environment-ballastwater-alienspecies-1055.htm

Returning river channels: Boosting marsh restoration for fish & wildlife habitat

TYS THEYSMEYER, HEAD OF NATURAL LANDS, ROYAL BOTANICAL GARDENS

attails and water lilies and wildlife. That was the view Ifrom one end of Cootes Paradise Marsh to the other some 200 years ago, when Spencer Creek and its tributaries snaked through the area, weaving from shore to shore before escaping around the north end of Burlington Heights behind the Rock Garden. The main creek channel is estimated to have meandered for at least 10 kilometres while crossing the 3.5 kilometre length of wetland. Over the years the channels disappeared but are being reborn. They were first damaged during construction of the Desjardins Shipping Canal in the 1830s. Then they struggled under the sediment that washed in from upstream erosion. Finally, in the1880s, they were overwhelmed by the arrival of the large Asian fish, common carp (Cyprinus carpio). Yet these channels did - and still do - play a critical role in the health of the marsh. They provide migratory corridors for fish like salmon, restrict the spread of inflowing pollution, and sculpt an otherwise flat surface into diverse habitats.

Until the arrival of carp, the channels were able to regenerate themselves under the guiding influence of the wetland plants through which they flowed. The carp reversed this regenerative ability, as they crushed and dug out the marsh plants that held the channels together, most significantly releasing inflowing sewage and contaminants across the resulting open water. In the 1990s, at the beginning of the wetland restoration effort, only remnants of the canal and old river channel could still be located, all at the west end. This area was preserved from carp damage because it was flooded over for only a few weeks of the year. The rest of the marsh bottom was leveled, virtually shaken flat, by years of carp rooting, and then infilled by the tons of sediment eroded from upstream lands, leaving not a hint of depth where the channels or canal once ran.

Today, with the Fishway keeping carp away, the plants that hold marshy channels together are regenerating, and the river channels are reappearing. The marsh bottom is also regaining some shape, as it is no longer shaken flat by the digging carp, and within one of the newly sculpted pockets wild rice has taken hold.

The marshy remnants of the historical river channel that survived at the west end acted as an "ark" preserving some quite rare species including Blanding's turtle (nationally critically endangered), prothontory warbler (nationally critically



endangered) and least bittern (nationally threatened). Each species numbered less than five individuals in the 1990s. To date only the bitterns have managed to increase their population substantially. In recognition of the area's historical and future importance as one of the largest river delta areas on the lower great lakes, the south side floodplain is now designated the Spencer Creek Floodplain Special Protection Area. On the north side of Spencer Creek, the Spencer Creek Trail takes you along the 1870s diversion to its intersection with the historical ship canal, and after the spring floods you can still make out sections of the historical natural channel in the floodplain along the way.

To expedite the return of the main channel of Spencer Creek, and bring back the important fish and wildlife habitat, virtually all our wetland replanting efforts now focus on re-establishing the reeds that form its banks. The RBG and BARC, with help from hard-working volunteers, plant thousands of cattails throughout the marsh every year. The creeks flow much cleaner than a century ago, but still have a long way to go.

We invite you to see the results for yourself by trail at the Marsh Boardwalk observation platform on the north shore of Cootes Paradise. This platform sits at the current terminus of the reforming Spencer Creek channel. You can also try it by canoe, and paddle the 0.75 kilometre channel that has so far reformed. It's so inspiring, you can imagine how the marsh may have looked two centuries ago, and how it may look again once the restoration is complete...cattails and water lilies, abounding with fish and wildlife, as far as the eye could see.

Toward Safe Harbours 2011 — The Hamilton Harbour Watershed

o monitor and assess the progress of the Hamilton Harbour RAP, BARC has produced the Toward Safe Harbours report annually since 1994. This report is produced by a group of volunteers and technical assistants who form the BARC Monitoring Committee. The reports are written for the scientists and decision-makers of Hamilton Harbour, as well as the general public.

Historically, RAP restoration work was focused on the Harbour itself. As a result, many projects within the Harbour have already been completed or are underway. Recent attention has turned to making improvements in

the whole watershed, to ensure the water that enters the Harbour is clean and healthy.

The primary focus of the 2011 Toward Safe Harbours report is to identify the key restorative work that is being done within the Hamilton Harbour watershed. We recognize that many organizations are taking actions to make improvements that may positively impact the health of Hamilton Harbour and its watershed. Our goal is to provide an overview of the work that is being done by different organizations, as well as identify any potential gaps. The report is expected to be published in June 2011.

Yellow Fish Road™ (Y Community Survey

FR educates participants and the public about the impacts of pollution entering urban storm drains. YFR volunteers paint yellow fish symbols beside storm drains, place adhesive disks with the slogan "Only Rain Down the Drain" and distribute flyers to nearby mailboxes. The flyers tell residents about the program and tell them how to properly dispose of hazardous waste.





In summer 2010, BARC delivered 200 surveys to mailboxes of five different neighborhoods, for a total of 1000 surveys. Only neighborhoods where groups had participated in the YFR program in the past year were chosen. Of the 1000 surveys delivered, 173 people responded.

Based on the results of the survey, a number of recommendations are being drafted. To view the survey, report and recommendations please contact the BARC office.



RAP Office Update

From the RAP Office

by Kristin O'Connor Hamilton Harbour Research/Report Writer Kristin.Oconnor@ec.gc.ca

RAP Office

Canada Centre for Inland Waters 867 Lakeshore Road, Box 5050 Burlington, Ontario L7R 4A6 (905) 336-6279

We Are In This Together!

KRISTIN O'CONNOR, RESEARCHER/REPORT WRITER, HAMILTON HARBOUR REMEDIAL ACTION PLAN

"Play nice". "Pick up your toys". "Share please". As a new mom, my daily vocabulary is now filled with gentle encouragements to teach my child common courtesy. One of the skills my child is going to have to get better at as she starts daycare is the idea of sharing. This important skill will take a bit of work on her part to master, but it is one that will serve her well for the rest of her life.

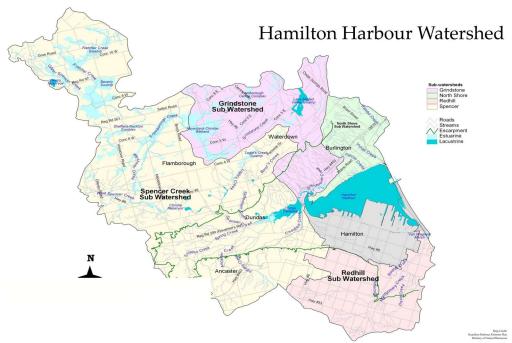
The Hamilton Harbour Remedial Action Plan is all about sharing. The sharing of ideas to come up with solutions. The sharing of time to attend seemingly endless meetings to solve problems. The sharing of money to help pay for projects required to restore this ecosystem. Our RAP thrives on the contributions of a wide range of individuals and agencies. For example, the Bay Area Implementation Team (BAIT) is made of representatives from 18 groups (including BARC) working together to track and move forward remediation efforts.

As the RAP Researcher/Report Writer, I am constantly asking people to share with me. The reports I write

require information from a lot of different partners. I think seeing an email from me leads people to wonder what I want now. Despite the groans, our partners always share with me what I need. My big report to tackle in 2011 will be a 2006-10 update to the Stakeholder Investments report. 2001-05 estimates showed \$209.57 million was invested in the Hamilton Harbour RAP by local, provincial and federal contributors. tuned to find out what the past five years will show! You can check out a variety of RAP reports under the RAP Resources tab on the BARC website.

When my child learns something new, I clap and praise her for her efforts - a bit of positive reinforcement for a job well done. In my ten years here I have tried to remember to acknowledge those who share their ideas/time/money with the RAP. Sometimes it was in private with a quick email or it was across the table in a small smile with a whispered "thank you". Alas, sometimes I forget as the day gets away from me and the next task creeps into my mind. Well it is time to do something more public, less subtle.

THANK YOU! Thank you to the hundreds of people who have shared a part of themselves with the Hamilton Harbour RAP since it began. Maybe you shared by attending a single BARC workshop or you stopped feeding the waterfowl along the shoreline or you were part of a team that designed and built a huge CSO tank or you helped to arrange funding for a new project or you proofread a 100+ page technical report. Your efforts are noticed and deeply appreciated. Keep up the good work. We are in this together and sharing is the only way we will get to the end we all are striving for



There are so many who share in the important work of cleaning up Hamilton Harbour and our watershed.





BAY AREA RESTORATION COUNCIL

ECOLOGY · INDUSTRY · RECREATION



Celebrate BARC's 20th Birthday with us! At our Annual General Meeting

Thursday, June 9th, 2011 7pm- 9pm

The Discovery Centre
57 Discovery Drive, Hamilton

Seating is limited, please RSVP to barc@hamiltonharbour.ca
Or call (905) 527-7111.

Expect birthday cake!

Photo: HHRAP Office

REMINDER: This is our last issue that will be mailed automatically to you. If you would like to continue to receive this newsletter by mail, please contact our office.

Become a Supporting Member!

YES! I support the restoration of Hamilton Harbour and its watershed.

Name:	
Address:	\$200
City: Postal Code:	\$100
Phone:	\$50
I am applying as a representative of:	\$30
I wish to be a non-voting member:	S
Emal:	Thank you for your generous support. Receipts are issued for donations of \$10 or more.
"Bringing Back the Bay" Newsletter Check if you wish to receive your newsletter electronically:	Charitable Registration Number: 89293 6584 RR0001