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Vetland Conservation Programme
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Amphibian Voice

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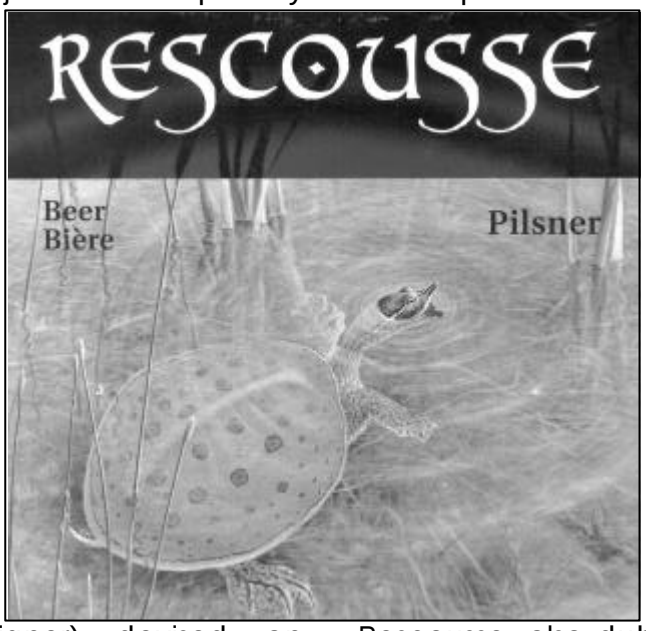
Ontario's Troubled Turtles

Project Rescousse: The Turtle Rescue Beer

By: Sarah Ingwersen

Project Rescousse is a unique initiative to help imperiled wildlife. The project has two primary goals: to raise funds for species at risk and to increase awareness of endangered species. How does Project Rescousse accomplish its goals? With a beer...



Project Rescousse is a not-for-profit organization. It began when a highly innovative trio made up of Alain Branchaud, Andrée Gendron (both biologists) and Michel Cusson (photographer/web designer) devised an ingenious plan to help species at risk. The concept, brilliant in its simplicity, was to develop a premium craft beer to be sold in liquor stores and donate all royalties to species and habitat conservation. So with help from partners, RJ Brewers and Premier Brands the beer was developed and after partnering with Wildlife Habitat Canada foundation, Project Rescousse was poised to make a difference in species recovery.

The funds raised are channeled to projects that aid the recovery of species at risk in Ontario, as designated by the federal Species At Risk Act (SARA). The main priorities for the funds are projects that facilitate access, restore and protect habitat.

Rescousse, also dubbed the SOS beer, was first launched in Quebec. The Quebec version is a flavourful red ale and the flagship species is Copperhead Knight (a fish). In the May 2002, Project Rescousse was introduced to Ontario. The beer is a pilsner, and the species is the Eastern Spiny Softshell Turtle.

The Eastern spiny Softshell (*Apalone spinifera spinifera*) is a threatened freshwater turtle in southern Quebec and Ontario. This unique turtle

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has a flexible, olive-green leathery shell and is named for the row of spiny projections along the front edge of its carapace. Adult females are typically twice the size of adult males and they are both highly aquatic. They are very secretive, but may be seen basking on beaches, sandbars, logs and shoreline rocks. In Ontario, Softshell

turtles are found in the Thames and Sydenham Rivers, Rondeau Provincial Park, Long Point National Wildlife Area and in a few other isolated areas. Estimates of the number of Spiny Softshell turtles in Ontario are below 2000 with less than 100 remaining in Quebec.

Habitat fragmentation and loss is the major factor in the decline of Eastern Spiny Softshell turtles. They were listed as threatened by COSEWIC (Committee On the Status of Endangered Wildlife in Canada) in 1991. The Softshell is protected under the Ontario Fish and Wildlife Conservation Act that forbids the collection of turtles for human consumption or the pet trade.

Where can you get Rescousse? Look for the beautiful artwork by Ghislain Caron with design by Adigraph Communication on the box. It is sold at most LCBO (Liquor Control Board of Ontario) stores. If you can't find it at your local LCBO talk to the manager and order it at no extra charge. The beer is sold in six packs and sells for $10.45. Please remember, always drink responsibly and never drink and drive. But if you are going to have a drink—save a turtle!

Adopt-A-Pond's 1st Annual Turtle Tracking Event

By Phung Tran

On Sunday, August 11, 2002, the Adopt-A-Pond Programme, along with the Rouge Valley Conservation Centre, held its first annual Turtle Tracking Event in the Rouge Valley.

Thirty people showed up to hike the trails of the Rouge Valley, and then participate in four, fun Snapping turtle stations. The participants learned about Adopt-A-Pond's Rouge Valley Biodiversity study, as well as about Snapping Turtles themselves, and their hibernating and nesting behaviors. The group also tracked a turtle using radio telemetry, a technique used in the Adopt-A-Pond study, in which the turtles are fitted with radio transmitters that emit a certain frequency. Using an antenna, one is able to hear "beeps" from the turtles from up to 500 metres away.

The turtle-tracking event was a big success and everyone had a great time. Thank you to all who came out and participated in the summer heat, and a special thanks to Bill Lewis and everyone at Rouge Valley Conservation Centre.

Kawartha Turtle Trauma Centre*

By: Kristy Hiltz

In June of this year, The Kawartha Turtle Trauma Centre (KTTC) opened its doors. Located in Peterborough at the Riverview Park and Zoo, the Centre provides medical, surgical and rehabilitative care to injured native turtles for eventual release back to their natural habitat. Turtles of Ontario are in trouble. Six of the eight species have been identified by COSEWIC (the Committee on the Status of Endangered Wildlife in Canada) as being at risk. Most turtle populations are declining and unless drastic measures are taken, scientists fear that several species may disappear from our province.

The idea of a trauma centre was conceived after Kids 4 Turtles, a childrens' conservation group, raised almost $5000 to purchase turtle crossing signs in Peterborough County. The children's hard work and determination inspired local veterinarians, biologists, zookeepers and conservationists to do their part to assist in turtle conservation. Thanks to generous grants from the Friends of the Environment Foundation, the Otonabee Conservation Foundation, and the Township of Cavan-Millbrook-North Monaghan, we were able to receive our first patients this summer. So far this year the centre has seen sixteen patients. Sadly, several of the turtles could not be saved, but seven painted turtles who are recovering from their injuries will be winter residents in the centre, and a painted turtle and a snapping turtle have already been released.

I am the veterinarian who initially treats the injured turtles brought to the centre. When someone brings in a turtle, I clean and flush the wounds with antiseptic solution. Depending on the wound, it may be left open for several days or sealed with a fiberglass patch. The patch acts as a waterproof cast to close and stabilize shell fractures. With multiple fractures, many layers may have to be placed. Most turtles are placed on antibiotics to prevent infection from setting in. This is not something to try at home! Some turtles require an anaesthetic, and without proper medical treatment of the wounds, life-threatening infections are likely to occur. Once the turtles are considered stable they are placed in a large aquarium where they may remain for up to one year. Shell fractures are very slow to heal and the fiberglass patch needs to be removed before they are released.

Our patients have some extraordinary tales to tell. Houdini, our 18-pound pregnant snapping turtle, managed to escape from her tank and gave us quite a surprise when we found her on the hospital floor. Unlike many snapping turtles, Houdini was quite docile - likely her maternal instincts coming out as she was carrying 40 eggs! Luckily her wounds were superficial and she was released after 10 days. Chomper, the painted turtle, is much more cantankerous and delivered my first turtle bite. She has certainly made me respect a turtle's jaws, no matter what the species! Chomper's shell injury had exposed her intestines but she has done very well with her patch on. Humpty Dumpty is a grand old female painted turtle who didn't quite make it across the road to lay her 16 eggs. Poor Humpty suited her name as her shell had multiple fractures, a smashed bridge, and even pieces of shell missing. She is a testament to the turtles' resilience and ability to overcome overwhelming obstacles.

Although we did not see many patients this year, we expect many more next spring as more and more people become aware of the centre. We hope to develop research projects in the near future. We are already collecting DNA samples from our patients, and next spring we hope to track our patients with radio telemetry.

My children love to read books about Franklin the turtle. In one of his recent books, "Franklin Goes to the Hospital" (Kids Can Press), Franklin injures his shell and needs an operation. The KTTC is a real-life turtle hospital, so, Franklin, if you ever need help, just give us a call!

***Editor's Note**: For more information on the Kawartha Turtle Trauma Centre log onto www.kawarthaturtle.org.

Turtle Pond:
A Wetland in Progress on the Toronto Islands

By Leslie Coates

In the fall of 2001, Toronto Parks and Recreation began construction of Turtle Pond, the first component of the larger Franklin Children's Garden project planned for Centre Island. The project is inspired by Franklin the Turtle, the celebrated series of books written by Paulette Bourgeois, illustrated by Brenda Clark and published by Kids Can Press.

The purpose of the garden is to offer children a captivating playspace where they can learn about the natural world and enjoy the great adventure of reading. The garden will include a pond designed for turtles and amphibians, a storytelling stage, hands-on gardening area and other special features.

Located adjacent to the Island Public and Natural Science School, Turtle Pond responds to the need on the Toronto Islands for additional wetland creation; enhanced turtle habitat; increased water circulation; terrestrial improvements; and public education about turtle habitat, wetland systems and ecosystem health. The new wetland will provide visitors with a fun opportunity to observe turtles and amphibians in their native habitat. Although a work in progress right now, the pond will feature 1,300 new shrubs and 4,300 herbaceous and aquatic plants.

Construction of Turtle Pond was carried out by the Toronto and Region Conservation Authority based on a design by Schollen and Company, Landscape Architects. Funding support for Turtle Pond has been provided by: Toronto Parks and Recreation; Toronto and Region Conservation Authority; the Great Lakes Sustainability Fund; and the Ontario Great Lakes Renewal Foundation. Expert advice has also been provided by Adopt-A-Pond. Completion of the Franklin Children's Garden is scheduled for 2004. For more information, please call Leslie Coates, Toronto Parks and Recreation at (416) 392-1885.

Finding Franklin:
A New Study Turtle

By Phung Tran

The Rouge Park Biodiversity study at the Toronto Zoo is in its fourth year. Tinkerbell, Coco, Storm and Rocky have been tracked using radio-telemetry techniques. Learning about their movements has been intriguing!

One of the most exciting times of our study is when the turtles are just emerging from their hibernating sites. The turtles have been emerging from their hibernating spots around the same time since the beginning of the study.

This year, while tracking Coco to the wetland that he moves into to forage, we came across two NEW snapping turtles! We selected one of the two turtles to be radio-tagged for our study. We decided to name him Franklin. Franklin weighed in at 6.4 kg, with a length of 26.5 cm and a width of 29 cm, making him the smallest

male in our study.

Franklin's movements are much like the other male turtles in our study. There are days, sometimes weeks, when he will stay in one spot of the river, under the bank or a fallen tree. Sometimes he will move up to 750 metres in one night! With five turtles now in our study, the similarities and differences in movement will give us even more insight into how snapping turtles use the river system as their home and how we may take care and respect the river in order to protect these remarkable creatures.

Why Did the Turtle Cross the Road?

By: Brian Pomfret

The increase in the number, lengths and widths of roadways has made it easier for people to get from place to place but it has made travel much more difficult and dangerous for wildlife. As an ever increasing number of roadways and associated urban areas are built, more and more populations of animals become isolated from their overwintering sites, breeding or nesting areas, and significant parts of their territories. For these animals to live normal lives they are forced to cross our busy roadways. Small and slow-moving animals, especially, run high risks of getting run over every time they have to pass over a road with traffic.

Snapper on the move. Made it..this time. Photo: RBG

Turtles seem particularly vulnerable to being killed by vehicles. Along the western shore of Lake Ontario in Hamilton there is a coastal wetland called Cootes Paradise. Running through a portion of this wetland is a 4-lane highway called Cootes Drive. In 1999, Royal Botanical Garden (RBG) staff conducted a count of turtles killed by traffic from the end of April through into September along a two kilometre stretch of Cootes Drive. The results were alarming. A total of 66 Common Snapping Turtles, 11 Midland Painted Turtles, and one Blanding's Turtle were found dead during the period of the study. Of the 66 Snapping Turtles found dead, 7 were adults and 59 were hatchlings.

Along with the dead turtles, 16 Snapping Turtle nests were found alongside Cootes Drive. Snapping Turtles prefer to nest in south facing, easy to dig, well drained open areas, and the gravel road margins alongside the westbound lanes of Cootes Drive meet all of their requirements. RBG has found that female Snapping Turtles climb up from Cootes Paradise wetland in June to the gravel road margins of Cootes Drive to dig their nests. In the process of getting to and from their nesting sites the turtles are exposed to vehicle traffic and a number are killed. When the young Snapping Turtles emerge from their nests in late August they too are exposed to vehicle traffic and large numbers of them are also killed.

Typical traffic on Cootes Drive. Photo: Mary Pomfret

RBG believes that if large numbers of Snapping Turtles continue to be killed along Cootes Drive, the population in Cootes Paradise will be in serious jeopardy. To prevent this from happening, the creation of alternate, safe nesting habitat away from vehicle traffic was explored.

During the summer of 2001 three experimental turtle nesting bed were created by RBG at two sites adjacent to Cootes Paradise using 40 tonnes of gravel kindly donated by LaFarge Canada, Dundas Quarries. Two of the beds are replicas of gravel road margins, and the other is a simple pile. All of the sites are near known Snapping Turtle populations, and all are well away from vehicle traffic.

In the spring of 2003 the usage of these nesting beds by turtles will be monitored by a remote surveillance system provided by a gracious donation from the Ministry of Natural Resources' Community Fisheries/Wildlife Involvement Project. The cameras will record the individual

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turtles making use of the nesting beds, and the ultimate fate of the nests, for example if they become predated, or the hatchlings emerge etc. In the meantime, beginning in September 2002, RBG will capture, measure, tag, and release turtles at appropriate times in the local area to get an idea of the size and composition of the various turtle populations, and provide visible markings so the individual turtles can be identified by the surveillance system as they make their way to the nesting beds. If these artificial beds prove effective in reducing turtle mortality, it is hoped that they will be adopted for use by those in charge of providing and caring for roadways, and created in areas that experience significant vehicle-related turtle mortality.

Waiting for nesting turtles at one of the new beds. Photo: Mary Pomfret

For more information on this and other projects, visit the RBG webpage at www.http://rbg.ca/

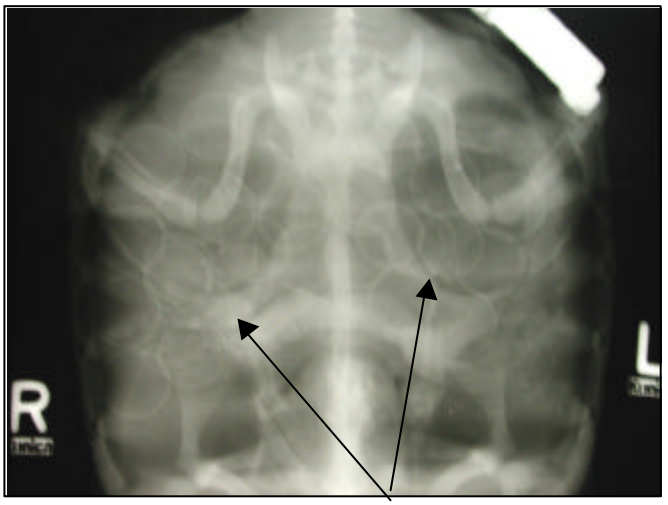
Lily Pads & Cattails

By: Sarah Ingwersen

There are several programme updates in this edition! From a fascinating discovery about Tinkerbell to a totally redesigned website to a new curriculum resource…these last couple of months have kept all of us at Adopt-A-Pond including the summer students, Phung Tran, Lisa Fry and Alison Ronson very busy!

The Tinkerbell Surprise!

In late June, the Adopt-A-Pond crew headed out to the Rouge Valley in search of Tinkerbell. It was time to change her transmitter. It was no coincidence that we decided to catch her during egg-laying season…We wanted to determine if she was carrying eggs, using X-ray



technology. Sure, enough, to our delight Tinkerbell was carrying 28 ping-pong ball shaped eggs as the X-ray image, above, shows! Tinkerbell is a mother and we are all wondering if Coco is the father!….

A New Adopt-A-Pond Website

Finally the totally new Adopt-A-Pond website is ready! Adopt-A-Pond is moving towards a more web-based approach to our programming. Log onto www.torontozoo.com/adoptapond and and visit back frequently to find out about other Adopt-A-Pond updates! In the next edition of Amphibian Voice find out more about the website and some of the designers that contributed to making the website a reality!

The Turtle Conservation Curriculum Resource

In February, 2002 the Adopt-A-Pond Programme, with the help of dedicated Queen's University education students, Dave Jarrell and Charles Kim, began to develop a curriculum resource examining issues in turtle conservation. The resource examines Ontario species and conservation concerns and extends to include the Leatherback Turtle, Canada's only sea turtle. In May, 2002 Dennyne Gibson and Linda Ghosh, both education students from the University of Toronto, began the difficult task of developing curriculum-based activities and lessons. After a month and a half of writing, reviewing and revising they presented a comprehensive 120 page document which has been sent out for educational review…I will keep you updated on the progress!

Kawartha Turtle Watch

By: Joe Cebek

This spring, a new wildlife monitoring program was launched in cottage country northeast of Toronto. Kawartha Turtle Watch was initiated to encourage residents and cottage owners in the region surrounding Lindsay and Peterborough to keep an eye out for turtles and to send in their observations to an online database. A website maintained at Trent University (www.trentu.ca/biology/turtlewatch) includes descriptions of the seven native species of turtle that have been found in this part of Ontario, some background on the project, and a user-friendly form that lets people submit their sightings directly to the database. By the end of July, close to 100 sightings had been sent in, including observation information for 5 species. So Kawartha Turtle Watch is off to a good start!

KAWARTHA TURTLE SIGHTING FORM

Species:

Number of Individuals Observed:

Habitat: (Provide as much detail as possible)

Date: (Yr/M/D):

Location: (Provide as much detail as possible)

Other comments: (eg. photos available, observations of behaviour such as basking, road kill etc.)

Name & Address of Principal Observer:

Email:

Keeping tabs on turtles seems to be especially urgent right now. In May, COSEWIC (the Committee On the Status of Endangered Wildlife In Canada) added the Map Turtle and the Musk Turtle to its list of species, meaning that 6 of Ontario's 8 native species of turtles are now considered to be of conservation concern. A number of factors may be responsible for this state of affairs, including loss of habitat (especially wetlands), illegal collecting for the pet trade and specialty food markets, and road kills.

Unlike most animals, turtles are long-lived: a feature which may make them particularly vulnerable to population decline. Recent evidence suggests that one Ontario species, the Blanding's Turtle, may live 60 or more years! Other species may live 30 or 40 years. Linked to this longevity, is a delay in reproduction. Some Ontario turtles don't start to breed until they are 12 – 18 years old. Many turtles simply may not get a chance to live long enough to reproduce. Females that do live long enough, typically lay less than a dozen eggs a year and most of these eggs are eaten by predators such as raccoons and skunks. So turtles are hard put to recover from reduced numbers.

Since turtles are long-lived, turtle watching complements other monitoring programs (e.g. Frogwatch) in an important way: changes in turtle numbers may signal changing long-term trends in our environment. For example, low levels of contaminants may gradually build up in the tissues of a turtle for a number of years until they finally reach critical concentrations. What happens as a result of long-term exposure may more readily reflect what could affect another (much more common) long-lived vertebrate – us!

Truth is, we don't know enough about the status of turtle populations in Ontario. Concerted efforts by biologists over the past two decades have produced a fairly accurate picture of where the different species are; the next step is to get some sense of just how common they are in different regions, and from there follow their populations through time. It's pretty easy to correctly identify the different species found in our part of the world. Anyone who sees and reports a turtle from the Kawartha Lakes region can help us get a better idea of how these unique animals and their habitats are doing.

RIBBET'S REVIEW

By Phung Tran

Sea Turtles for Kids

http://www.turtles.org

Ursula Keuper-Bennett and Peter Bennett

There is just something about sea turtles that captures our imaginations. Not many of us have the opportunity to encounter a sea turtle but a duo from Mississauga, Ontario do it regularly! They are both sport divers who have developed a great love for sea turtles. Together, they have set up a website to tell the world about them.

The webite outlines their unforgettable encounters with these amazing creatures. Some of the turtles that they have encountered have Fibropapilloma tumors. The Turtle Trax web-site http://www.turtles.org/overview.htm explains the crisis disturbing these turtles. The "Kidz Korner" page (http://www.turtles.org/kids.htm) introduces kids to the plight of these creatures by way of stories. The stories are accounts of turtles, their tumor development and the people who are trying to help. These stories will teach children respect and caring toward these remarkable creatures. The kids page also has poetry, artwork and stories from kids and activities to try such as "How to Build a Turtle Sundae".

This is a great web-site on marine turtles. Kids and adults will enjoy this site. I know I did.

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Amphibian Voice is distributed to schools and communities participating in the Adopt-A-Pond programme. The purpose of this newsletter is to provide information on amphibian, turtle and wetland conservation issues and efforts in Ontario.

Send in your stories, drawings and photographs to the address below and we will "hoppily" include them in future issues.

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We welcome support of our programme! Please make cheques payable to "Toronto Zoo" and send them to the following address. Thank you!

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