



# Amphibian Voice

Vol. 20 No. 2

ISSN 1705-8228

Spring 2010

## Celebrating Biodiversity

### Academics, Government Staff, and NGOs Come Out of Their Shell for Social Marketing and Chelonian Sustainability Workshop

*By Erin Nadeau, Social Marketing and Outreach Coordinator, Adopt-A-Pond*

On March 23<sup>rd</sup> and 24<sup>th</sup> the education auditorium at the Toronto Zoo was a buzz of activity for the Social Marketing and Chelonian Sustainability Workshop hosted by the Adopt-A-Pond Programme. The workshop, funded in part by Environment's Canada Habitat Stewardship Program, brought together more than 100 people to discuss the challenges facing Ontario's turtle species at risk and how best to use the process and tools of Community-Based Social Marketing (CBSM) to change public behaviours to improve life for these populations. The workshop kicked off with presentations from some of the world's most respected turtle experts, Dr. Justin Congdon and Dr. Ron Brooks. Presentations followed from researchers from across the

province on issues of legislation, ecology, and threats related to multiple species of turtle. The first evening finished with an engaging and inspirational talk from Kathleen Martin, founding member of the

Canadian Sea Turtle Network and accomplished author of several children's books. The second day of the workshop featured expert practitioners from both the public and private sectors who presented case studies and advice on applying CBSM to species at risk conservation. The second day ended with a practicum from H el ene Gaulin, of Parks Canada, who guided the group through the CBSM process with a series of exercises that equipped attendees with the knowledge necessary to jump start programs in their own corners of the country.

#### In this Issue

TZ Turtle Workshop...	1
Spring Toad Festival.	2
Frog Rescue Party...	3
TurtleHaven.....	4
Research Update....	5
Turtle Truths.....	6
Frog Facts.....	7
Rabbit's Review.....	8



Photo: David Galbraith

Participants of the Social Marketing and Chelonian Sustainability Workshop, March 23<sup>rd</sup>, 2010.

# Frog Watchers Fall for Love- Struck Toads at Adopt-A-Pond's 11<sup>th</sup> Annual Spring Toad Festival!

By Julia Phillips, Adopt-A-Pond Coordinator

On May 1<sup>st</sup> and 2<sup>nd</sup>, 2010, Toronto Zoo's Adopt-A-Pond Programme joined together with FrogWatchers and Zoo visitors of all ages to celebrate the feeling of love in the air as amorous male American toads attempted to woo their female counterparts at the 11<sup>th</sup> annual Spring Toad Festival! As in previous years, the event was scheduled around the explosive breeding ritual of American toads at the Zoo's Americas Wetlands Outdoor Exhibit. However, this year brought much excitement as kids and adults alike discovered not only frogs and toads feeling that loving feeling, but also a suite of other creatures bringing the wetlands to life! Activities featured at the festival included touch tables with live wetland specimens, a visit from a giant friendly toad, face painting, arts and crafts, frog related games, lessons on tracking wildlife, and information sessions on how to become a FrogWatcher or Turtle Detective. For a summary of the day's events, or for more information on how you can join Adopt-A-Pond's FrogWatch Ontario or Ontario Turtle Tally programmes, visit [www.torontozoo.com/adoptapond](http://www.torontozoo.com/adoptapond).



Photo: AAP

Little girl greets Toady, the Festival mascot.



Photo: AAP

Young brothers enjoying their catch at the Spring Toad Festival fishing game!

## Name Your Newsletter! \*CONTEST\*

It's time for *Amphibian Voice* to change its name! When the first edition was sent to press in 1992, the newsletter was aptly titled for the issues it addressed – mainly those related to amphibians as indicators of wetland conservation. However, as the Adopt-A-Pond Programme has evolved to focus on a wider variety of wetland conservation issues, the need for a more appropriate newsletter title has emerged. We want *you*, the reader, to help us pick a new name for our newsletter that encapsulates the full spirit of the Programme. Examples of fitting titles for the new newsletter include names such as *The Wetland Wildlife Reporter*, *The Aquatic Inquirer* or *Reptile and Amphibian Tales*. Please send newsletter name suggestions to Julia at [aap@torontozoo.ca](mailto:aap@torontozoo.ca) by August 15<sup>th</sup>, 2010. The winning entry will receive a Spring Toad Festival t-shirt and a conservation tool kit from Toronto Zoo!

Good Luck!



## Young Conservationist Hosts Hopping Frog Rescue Party!

*By Sherri Chaban, Alex's mother*

Anyone who knows 8 year old Alex Chaban, knows he loves frogs. He reads about them, studies them, writes about them, talks about them and raises money to help protect them. Alex collects all kinds of toy frogs and displays them in his frog-themed bedroom, which he affectionately nicknamed "Frog Heaven." Frogs are Alex's passion.



Photo: Sherri Chaban

A young Alex Chaban with a bullfrog.

A couple of years ago, Alex read an article in National Geographic for Kids about how frog populations are being devastated by the chytrid fungus. That's when Alex's passion took a new direction. He researched more and learned about the many threats facing amphibians in the world today, and he knew he had to do something to help.

Alex became much more environmentally aware. He made conscious choices to save energy, recycle and not be wasteful. He notices and disapproves of pollutants and harmful chemicals. He understands the importance of protecting the health of our wetlands. He signed up online and became a "frog watcher". Alex is very sensitive to the fragile status of frogs and the fact that thousands of species are at risk. Frogs are frequently the subject of Alex's schoolwork and projects. In this way, he helps to educate and raise awareness for amphibians with his schoolmates. On this subject Alex says, "Frogs are a treasure and to lose them would be sad."

On his own initiative, Alex decided to host a "Frog Rescue Party" for his 7<sup>th</sup> and 8<sup>th</sup> birthdays. It was an excellent opportunity to raise awareness of the plight of frogs for many families. We contacted a number of organizations for help, including Adopt-A-Pond at the Toronto Zoo. With their assistance, each party guest was given some great activities to take home that were both fun and educational. His parties were held at Bognor Marsh in Grey County, where the children got a firsthand look at the biodiversity of wetlands. We learned to identify local frog species and their calls. With games, we learned about the threats facing frogs and how each of us can help to protect our environment. Alex asked for donations to be made to the Toronto Zoo's Amphibian Conservation Program, in lieu of birthday gifts. This idea was well supported by families, and to date, with birthday donations, savings from allowance, and lemonade stand sales, Alex has been able to donate over \$700 to this cause! Alex says "Having frogs in my backyard is more important to me than presents." We think this is the best gift of all for Alex.

Alex's passion for frogs is a strong one and we are pleased to see it going in such a positive direction. Alex says he'll keep working for the frogs "because they need us." Way to go Alex!



Photo: Greg Chaban

Alex and friends on his 8<sup>th</sup> birthday.

# TurtleHaven – Providing Safe Alternatives for Red-Eared Sliders and Injured Native Turtles

By Angie Schoen, TurtleHaven Founder



TurtleHaven, located in Kitchener, Ontario, started out simply enough by taking in Red-Ear Sliders (which are not native to our province) so they would not be released into wetlands in the Waterloo Region. Some of the Sliders were kept here at TurtleHaven while others were adopted out and given homes in places with backyard ponds or private man-made wetlands. As word spread that someone was willing to take in unwanted Sliders, it was as though the floodgates opened. The sliders started coming in droves. That was 12 years ago, and now, over a couple hundred sliders have been provided with housing or adopted out by TurtleHaven volunteers and associates.



Photo: AAP

A rescued Red-eared Slider going for an indoor stroll.

Six years ago TurtleHaven became incorporated as a non-profit organization and was registered as a wildlife custodian with the Ministry of Natural Resources to provide rehabilitation for Ontario's injured native turtles. We worked with the Waterloo Region and had turtle-crossing signs installed in areas where

wetlands intersected roadways to help educate the public about hot spots where a lot of turtle traffic existed. TurtleHaven also established drop-off locations with three local veterinarian clinics that were able to provide medical attention to turtles hit or injured on roadways.



Photo: Angie Schoen

Dr. Chris Murfin examines an injured Blanding's turtle at the Kingsdale Animal Hospital in Kitchener.

We would like to acknowledge with gratitude the following clinics for their help in saving turtles and providing humane euthanasia when turtles are too badly injured to be saved. Many thanks to Dr. Chris Murfin and his staff from the Kingsdale Animal Hospital in Kitchener, Dr. Amanda MacDonald and staff from the Preston Animal Clinic in Cambridge and Dr. Chris E. Crombie and staff from Windrush Animal Clinic in Burford. The help that these talented people have provided has made TurtleHaven what it is today. And one more thank-you is definitely in order... kudos to Janine Holman whose passion to help injured turtles and all wildlife is uplifting.

*TurtleHaven's passion is for the good health of turtles everywhere. For more information on Turtle Haven and its future endeavours please visit <http://www.turtlehaven.ca>.*

## Did You Know?

Red-eared Sliders, the turtle species most commonly sold in pet stores across Ontario, are not native to Canada and can live for over 40 years in captivity! Please do not release Red-eared Sliders into your local wetland ecosystem. They can spread disease to our native turtle populations and they are not likely to survive since they are not well adapted to our northern climate. If you wish to find an organization in your area that adopts Red-eared Sliders please contact us at [aap@torontozoo.ca](mailto:aap@torontozoo.ca).

# Tracking Turtles, Mapping Habitat and Enhancing Partnerships to Protect Species at Risk – Research Update 2010

*By Julia Phillips, Adopt-A-Pond Coordinator*

Since 1999, the Adopt-A-Pond Wetland Conservation Programme at the Toronto Zoo has been researching turtle movements and habitat use in the GTA's Rouge Valley to gain a better understanding of what type of habitat species at risk turtles need to sustain populations within an urban environment. Radiotelemetry equipment has been used to track Snapping turtles, Map turtles and Blanding's turtles over several years to get a better sense of where these species spend their time. In 2008, using data from previous seasons, a list of criteria was developed to define ideal foraging, nesting and overwintering habitat for turtles. From this information a GIS (Geographic Information Systems) model was created to map areas across the Rouge River watershed where high quality turtle habitat exists. The areas defined as high quality turtle habitat could either be located at existing wetlands or in areas where wetlands could be created or restored. A map of potential "turtle hotspot" locations was developed and used by field researchers to confirm that these sites were, in fact, high quality sites, not only on the computer screen, but also on the ground. This on-the-ground verification process is known as "ground-truthing."

This year, with funding from Environment Canada's Habitat Stewardship Program, Adopt-A-Pond staff will continue with ground-truthing efforts in the Rouge River watershed. By visiting existing wetland sites that overlap with high quality turtle habitat, and sites already designated for wetland restoration by the Toronto and Region Conservation Authority (TRCA) that fall within good turtle habitat, ground-truthers can establish a ranked list of areas to prioritize for protection or restoration. Ultimately, the goal of this project is to provide information to TRCA and Rouge Park that will guide wetland restoration management for turtles. Of course, turtles aren't the only animal

that restoration experts need be concerned with, but wetlands that are created or managed with turtles in mind often serve to benefit a variety of wildlife because they maintain conditions important to many plant and animal species.

In addition to the work being done in the GTA, our research programme has expanded this year to include turtle populations near Brantford, Ontario. After Turtle Tallyer, Don Scallen, reported a horrific sighting of eight dead species at risk turtles along Hwy. 24 in Brant County to Adopt-A-Pond, Adele Mochrie, an Environmental Planner at the Ministry of Transportation, responded quickly by setting plans in place to establish permanent road mortality mitigation fencing along a section of the highway that intersects a large wetland complex. To better understand how effective the fencing is at preventing turtles from crossing the road and encouraging them to use the culvert underneath the highway as a passage between wetlands, Adopt-A-Pond staff are in the process of radio-tagging turtles and tracking their movements between wetlands near the highway network. This portion of our research is being funded by the Ontario government's Species at Risk Stewardship Fund and Environment Canada's Habitat Stewardship Program and will involve partnerships between Adopt-A-Pond and the Ministry of Transportation, the Ministry of Natural Resources and private landowners living along highway and wetland properties. The study will help to improve management plans for species at risk turtles and promote stewardship in critical turtle habitat areas in Ontario.



Photo: Adele Mochrie

Toronto Zoo field staff set out to find turtles in a roadside wetland where mitigation fencing has been established.

# Titillating Turtle Truths!

By Marie Kurtcu, Grade 11 Co-Op Student,  
Dunbarton Highschool

1) Turtles have been on Earth for over 200 million years.

2) They evolved before mammals, birds, crocodiles, snakes, and even lizards.

3) Some turtles can live to be over one hundred years old.

4) Turtles live on every continent except Antarctica.

5) Though most turtles cannot remain active in cold climates, the Blanding's turtle has been observed swimming under the ice in the Great Lakes region!

6) The turtle shell is made up of 60 different bones, all fused together.

7) Turtles have good eyesight and an excellent sense of smell.

8) The earliest turtles had teeth and could not retract their heads into their shell. Other than this, they were very similar to turtles today.

9) For some turtle species the sex of their hatchlings is determined by the temperature the eggs are incubated at in the nest, rather than by genetics. Typically, very warm temperatures produce female hatchlings and cool temperatures produce male hatchlings.



10) Turtles can absorb oxygen through the skin that lines their mouth.

11) Turtles range in size from the 4-inch Bog turtle to the 1500-pound Leatherback turtle.

12) A turtle's shell is part of its skeleton, and it can't crawl out of its shell because it's permanently attached to the spine and rib cage.

13) Snapping turtles do not try to bite swimmers in the water and actually prefer to swim away from danger. They are defensive while on land because they have a reduced plastron (lower shell) compared to other turtles and therefore can't protect themselves from predators by hiding inside their shell. Even on land they only snap when they feel threatened.



Photo: Calvin Knages

Ontario's Midland Painted turtle

14) Turtles can feel vibrations and changes in water pressure that tell them where food or a predator might be.

15) When turtles lay eggs, they bury them in sand, soil or vegetation. Turtles do not exhibit parental care.

16) Most turtles are omnivores and eat plants and animal food such as fish, snails, worms, or insects.

17) Some turtles and tortoises are strictly herbivores and eat only grasses, leafy plants, flowers, fruit and even cactus.

18) In order to find their tasty prey, Wood turtles trick earthworms into coming above-ground by stomping on the soil and creating vibrations like those of heavy rains.

19) Since turtles don't have teeth, their mouths have a hard sharpened edge that they use to slice food.

20) Hatchlings of some turtle species can overwinter underground in the nest chamber. A species that is able to do this Ontario is the Painted turtle.

## Fun Frog Facts!

By Laura Wang, Grade 11 Co-op Student,  
Dunbarton Highschool

1) Frogs and toads (anurans) can breathe and absorb water through their skin. This is why living in polluted water makes frogs very sick.

2) Some species of frogs will rest in large groups, touching the skin of the frog beside them to reduce the amount of skin exposed to the air, and thus the amount of water lost to the atmosphere.

3) Frogs and toads are among the most diverse groups of vertebrates in the world, as there are over 5000 species.

4) There are 11 species of frogs and 2 species of toads in Ontario.

5) Ontario's Wood frog has glycerol in its blood which acts like antifreeze. During the long winter months in Canada this prevents its cells from freezing entirely. Even though a wood frog may seem stiff and cold, no more than sixty-five percent of the water in its body is frozen at any given time.

6) Frogs only have teeth on the upper jaw (called the maxillary teeth), which grind food before swallowing.

7) Over 17% of a frog's total body mass is made up of the muscles involved in jumping.

8) The Gray treefrog changes colour depending on its body temperature. When it is cold it is white or gray in colour, and when it is warm it turns a brilliant green.



Photo: Calvin Knaggs

11) The fertilization of frog and toad eggs is external. The female releases her eggs and the male covers the eggs in a sperm solution.

12) Frogs and toads have many techniques to ensure the survival of their eggs. The eggs of some species can detect vibrations of predators and will hatch early to avoid being eaten. Other species lay poisonous eggs to prevent predators from consuming them.

13) Each species of frog and toad has a unique call which can be used to identify it to species. Some calls are so loud that they can be heard from up to a mile away.

14) Worldwide, frogs range from 1 cm to 30 cm in length.

15) Some frogs can jump up to 20 times their own body length in a single leap.



Photo: Calvin Knaggs

American Bullfrog

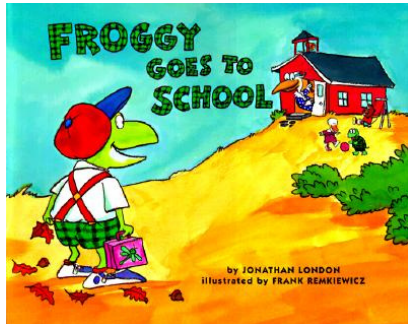
16) Small frogs will eat insects such as mosquitoes and moths. Larger frogs will eat invertebrates such as worms and grasshoppers. Some large frogs will eat mice, small snakes, birds, and even smaller frogs (e.g. the American bullfrog)!

17) You can determine the gender of some frogs (e.g. American bullfrogs, Green frogs) by the size of their eardrum, located behind their eye. If the eardrum is smaller than the eye, the frog is a female. If the eardrum is the same size as the eye or slightly larger, the frog is a male.

18) Motorists often encounter masses of frogs on the road after a spring or summer rainstorm. This is because frogs tend to move on warm, wet nights - they use the rain puddles as travel corridors to move between wetlands and keep their skin moist.

## Ribbit's Review - Froggy Goes to School

Written by Jonathan London  
 Illustrated by Frank Remkiewicz  
 Reviewed by Marie Kurtcu



This short story, written by an American author, is a great read best enjoyed together by parents and young children. It deals with the frustrations and anxiety of the first day of school. The story begins when the main character, Froggy, has a horrible dream about his first day in the classroom. He dreams about almost missing the bus and showing up at school with just his underwear on. But when Froggy's father finally awakens him and he realizes he was just having a bad dream, he decides to approach the first day by acting as though he's not nervous at all. Despite his mother's reminders that it is okay to be anxious as you start something new, Froggy takes his overconfident attitude to school with him. Once Froggy gets to school he finds himself getting into all sorts of embarrassing situations as he tries to masquerade as a fearless first-grader, and bit by bit he begins to realize that pretending you're not afraid when you really are won't necessarily impress those around you or make your fear go away. By the end of this story, Froggy learns not only about himself and his fears, but also that you can still have fun while you're learning!

In this tale about the fear of the imminent first day of school, readers learn that it is good to talk about your fears. In addition they learn that everyone gets nervous on the first day of school, and that it is important not to let your imagination get the best of you. And the most significant lesson this book shares with readers is to always pay attention in school!

A wonderful story to share with a nervous first-grader or any young child that needs a little help to know that having fear is human!

Publisher: Penguin Group  
 Publication Date: 1996  
 ISBN: 0670867268

## Volume 20, No. 2

**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.

### Editors:

Julia Phillips  
 Adopt-A-Pond Coordinator  
 Bob Johnson  
 Curator of Reptiles & Amphibians

### Contributors:

Erin Nadeau     Angie Schoen  
 Julia Phillips     Marie Kurtcu  
 Sherri Chaban     Laura Wang

### Support for the Adopt-A-Pond Programme:

Environment Canada's Habitat Stewardship Program  
 The Ontario Ministry of Natural Resources Species at Risk Stewardship Fund  
 Toronto Zoo Foundation

Adopt-A-Pond is a non-profit wetland education programme. Costs to produce this newsletter, and other resources, are funded by grants and private donations.

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

Adopt-A-Pond  
 Toronto Zoo  
 361A Old Finch Ave.  
 Scarborough, ON M1B 5K7  
 Fax: (416) 392-4979  
[aap@torontozoo.ca](mailto:aap@torontozoo.ca)



Printed on 100% recycled paper  
 using vegetable based ink!