



Amphibian Voice

Vol.17 No.1

ISSN 1705-8228

Spring 2007

Spring and Road Awareness

Spring is Here! Be on the Lookout!

By: Ian McIntosh



© AAP Staff

The snow has melted. The temperature is on the rise. Amphibians and reptiles are on the move. It's April again and time to get outside for Frog Watch and Turtle Tally 2007.

Observing amphibians and reptiles is becoming even more important with every new spring. Each year they are challenged with new developments and increased pollution. Roads are taking a heavy toll on Ontario's frog, turtle, salamander, and

snake populations. Traffic on roads kills many individuals every year, particularly during spring when turtles are moving and amphibians are migrating to breeding ponds. (see our feature article *Roads and Ecopassages* on pages 4/5)

This is where we come in. By looking for areas where road mortality most often occurs we can locate the areas of greatest concern and start working toward a solution.

So get out your frog and toad call CD, review your safety tips, study your identifier guides, and sign up your friends and family for FrogWatch

and TurtleTally. Because not only is it fun to count them, but the frogs, toads, and turtles of Ontario are counting on you. (contact the AAP for any of the above resources)

In This Issue

Spring is Here.....	1
A cold spring.....	2
Coordination.....	3
Roads Forum...	4/5
Reducing Turtle Mortality	6
SAR Act.....	7
Ribbit's Review.....	8

Editors Note: The focus of this year's spring issue of *Amphibian Voice* is spring itself, but with an emphasis on the growing issue of road awareness. The cover story is a call to arms asking all FrogWatchers and Turtle Tallyiers to get out, enjoy spring, and start recording while keeping a close eye on areas where road mortality is the greatest. Matt Ellerbeck tells us about his efforts to increase turtle crossing signs in Ontario. Daniela Rambaldini reports on the success of the Roads and Ecopassages Forum held at the Toronto Zoo in March, which focused on the impacts of roads on our ecosystem. A letter from Dave Ireland describes a spring changeover of Adopt-A-Pond's coordinator. And below is a story from Urban Turtle Initiative researcher Mike Lawton about turtles, which are emerging right now.

Spring is finally here and hopefully our spring issue will inspire you to listen to the frogs and look for some turtles.

A Cold Spring for the Urban Turtle Initiative

By Mike Lawton

With the spring of 2007 exhibiting abnormally cold temperatures, turtles in the Rouge Park are beginning to get anxious. In past years, turtles have been observed in their favorite spring-time basking locations as early as the 28th of March. However, the frigid temperatures of 2007 have made this extremely difficult. We have witnessed very cool average temperatures during the last week of March and first week of April, with overall averages of 10, 5 and 5 degrees Celsius for the Air, water surface

and water bottom temperatures, respectively. Over the same time period in 2006, turtles were exposed to average temperatures of 15.5, 9.5 and 8.5, air, surface water and bottom, respectively. In fact, on two occasions turtles were observed with their heads exposed through the ice, possibly inhaling a fresh breathe of oxygen in anticipation of spring. Interestingly, one of these observations was on April 5th, when the air temperature was a mere 1 degree Celsius (Figure 1). This is the UTI's first experience with such odd behavior, hopefully foreshadowing another eventful summer.



Lucky the Blanding's turtle takes a breather amongst ice cover in a pond. © Mike Lawton, Toronto Zoo

Mike Lawton travels from Nova Scotia each year to be the first to collect data on turtles in the Rouge Valley. Mike is completing his MSc on Nova Scotia Blanding's turtles.

Coordinating the Adopt-A-Pond Programme...

By: Dave Ireland

If you had asked Bob Johnson, Curator of Amphibians and Reptiles, in 1990 what would evolve from the newly formed Amphibian Interest Group at the Toronto Zoo, I'm not sure he would have said "an internationally acclaimed wetland conservation programme that reaches thousands of concerned citizens annually". I don't think anyone had any idea that the Adopt-A-Pond Programme would take on a life of its own, requiring a dedicated, full-time coordinator to ensure the smooth delivery of outreach programmes, the publishing of *Amphibian Voice* quarterly, and, among many other tasks, a commitment to applied science in the Rouge Valley. These "AAP Coordinators", as they're affectionately known, take direction from Bob and Education Manager Caroline Greenland toward implementing AAP objectives. Indeed, coordinating the Adopt-A-Pond Programme requires a special person!

There have been many AAP Coordinators since the early 90's, and the programme has never been without; time with the programme ranged from 3 months to 3 years. With a new coordinator come new directions, new specialities, and new challenges. The Programme has benefited a great deal from this diversity: from teachers in training, to policy-minded professionals, to wetland scientists.

Ian McIntosh has recently taken over for Dave Ireland as the AAP Coordinator. Dave remains at Toronto Zoo as Curator of Conservation Programmes, and continues to collaborate with Bob Johnson and the AAP Programme. Ian comes from an applied science background, having

travelled the Caribbean to study the population dynamics of sea turtles, and, more recently, to sites within the GTA to study salamander populations. Ian, like all AAP Coordinators before him, has a passion and love for wetland systems and their inhabitants that spills over during formal and informal dialogue and through his writing. Please join me in welcoming Ian to the fold, and wishing him the success of his predecessors!

Spring Toad Festival:

Love will be in the air at the **8th annual Spring Toad Festival** and people of all ages are invited to hop on over to Toronto Zoo's Americas Wetlands on Saturday, May 5th and Sunday, May 6th to experience the ardent wooing of American toads and to learn about the wonders of our wetlands. Meet a friendly Giant Toad. Become a Toad Detective and use special equipment to find their hiding places. Find out how to identify frogs and toads by mimicking their calls! Enjoy face painting, crafts, and much more.



Roads & Ecopassages: Connecting Landscapes, People and Wildlife

By: Daniela A. Rambaldini

Most people use roads or railways everyday, often times without thinking about how these transportation corridors affect the local ecosystem and wildlife. However, when we see animals killed on the road, we are reminded that we are not the only ones traveling across the landscape.

The science of road ecology explores the impacts that transportation infrastructure, such as roads and railways, has on wildlife and it explores different solutions to increasing road permeability for wildlife. Too often, roads fragment wildlife habitat, forcing animals to cross these dangerous paths in order to access water, prey, mating or breeding grounds, overwintering sites, or migration destinations.

As a result, roads and railways are sources of wildlife mortality or injury. They also fragment landscapes and potentially isolate wildlife populations, may disturb or displace animals, introduce invasive alien species, and pollute habitats with exhaust, leaked motor fluids, noise, light and litter. Biologists agree that transportation corridors pose real or potential threats to many species at risk. Wildlife vehicle collisions are also the cause of many human fatalities and injuries.

Avoiding these impacts to wildlife and humans involves consideration of these factors in the planning and design of roads before they are built. Taking proactive measures, such as designing roads that minimize landscape fragmentation and

that include road barriers to prevent wildlife from getting near the roadside or wildlife ecopassages to allow safe movement of species across roadways, are among the most effective solutions to these problems.



This wildlife overpass is one of many ecopassage structures built across Highway 1 in Canada's own Banff National Park, Alberta. Ongoing research in the park monitors the passage of wildlife to gauge the effectiveness of the structures in improving the permeability of park roads.

Photo © **A. P. Clevenger**

Throughout Canada and in Ontario, road ecology is starting to play an important role in the planning, design, and maintenance of road systems. However, where the Fisheries Act provides clear and strong protection of water systems no such definitive legislation or policy exists for the protection of terrestrial species.

In March, 2007, Toronto Zoo and Parks Canada hosted a very successful *Roads & Ecopassages Forum*. The first of its kind in Ontario, the forum was attended by more than 100 professionals from across North America. The 3-day event helped to foster working partnerships among regional planners, road engineers, ecologists, biologists, and policy makers.

"Ultimately, we want to see these partnerships create sustainable land management policies in Ontario," said Bob Johnson, Curator of Amphibians and Reptiles at the Toronto Zoo and co-organizer of the forum. "We look forward to ongoing collaborations with the Ministry of Transportation."

"Our urban areas and transportation infrastructures need to be designed in such a way that people can travel safely and quickly to their destinations, but at the same time protect the province's natural heritage. Effective solutions to the roads issue will certainly promote recovery of federal and provincial species at risk, as well as help prevent currently common species from becoming endangered."

As educators of conservation and sustainability, and as stewards of Canada's natural heritage, Toronto Zoo and Parks Canada want Ontario's roads to be safe for both wildlife and motorists. The public can also help make this happen by contacting local municipalities and provincial agencies about the need for increased road permeability for wildlife, including the construction of ecopassages.

Bob adds that "Daniela Rambaldini provided a forum that will promote dialogue and ultimately help the recovery of species at risk in Ontario."

Concerned citizens can make their voices heard by visiting the online searchable Environmental Registry database at www.ene.gov.on.ca to review policies, proposals, and environmentally sensitive initiatives. You can send your comments or questions to the Environmental Standards Project Team of the Ministry of Transportation at esp@mto.gov.on.ca.



A fence guides turtles away from the roadside toward an underpass that will allow them safe passage to the other side of the road. The Lake Jackson Ecopassage project along US state Highway 27 in Tallahassee, Florida has saved the lives of thousands of turtles and has greatly decreased road mortality of other wildlife, as well. Visit www.lakejacksononturtles.org/ for more information and to support this great initiative.

Photo © M. J. Aresco

More information on the Roads & Ecopassages Forum proceedings can be found at the following web address www.torontozoo.com/adoptapond/ecopassages.asp

Co-sponsors of the event included Environment Canada Habitat Stewardship Program, Banrock Stations Wetland Foundation Canada, and Bullfrog Power, Inc. As part of a city-wide initiative to minimize carbon emissions, Toronto Zoo also purchased carbon offsets from Calgary-based TransAlta to compensate for each conference registrants' travel to and from Toronto.



Parks Canada

Parcs Canada



Helping To Reduce Turtle Road Mortality, One Sign At A Time

By Matt Ellerbeck

Turtles basking on logs and swimming through the shallows of a lush marsh are often common sights during the warm months in Ontario.

Unfortunately the sight of dead turtles on the road is also a common sight.

Road mortality is a serious problem for turtles, especially since it is usually nesting females going to egg laying sites that are being killed. One of the best things people can do to combat turtle road-mortality is to raise awareness of

the problem. I have been trying to get turtle crossing signs put up in and around the Kingston area. One spot that I had in mind was the road in front of my grandparent's land which is located between two wetlands, Little Clear Lake and Mud lake in Arden, Ontario. The



Toronto Zoo's Adopt-A-Pond programme, with support from Banrock Station Wetlands Foundation, and Environment

Canada's Habitat Stewardship Fund, was kind enough to provide me with a turtle crossing sign and on February 20th I had the sign erected. This was more than ideal because the sign went up well before the turtle's active season. Hopefully this sign will help raise awareness on turtles in the area, promote turtle stewardship for others with private

property, and help lower turtle road mortality in the area. Hopefully I will be able to get more signs put up in my area. As someone who has loved and been fascinated by turtles his whole life, the least I can do for turtles is try to help reduce turtle road-mortality one sign at a time.

Be a Turtle Detective! Join Turtle Tally!



We need to learn more about Ontario's turtles & **YOU** can help. Turtles are very active in late spring and early summer (nesting season). Learn how to identify turtles using our website, or ask for your free Turtle

Tally kit by contacting Adopt-A-Pond at aap@torontozoo.ca. Then simply log on to www.torontozoo.com/adoptapond/turtletally.asp to submit your observations. It's that easy! Good luck and happy turtling!

For more information contact Adopt-A-Pond:

361A Old Finch Avenue Scarborough, ON M1B 5K7 fax: 416.392.4979

Ontario set to clean up its Act

By Ian McIntosh

On March 20th 2007 the provincial government proposed an important update to Ontario's Endangered Species Act that would expand the document from 6 sections to 60 and quadruple spending on stewardship activities to \$18 million over a four year period.



The proposed changes to the act are much needed as the act has not previously been reviewed since it was passed in 1971. It currently protects only 42 of the more than 175 species considered at risk of extinction in the province.



The expanded act will move to protect all species at risk rather than just those deemed near extinction. As well, the list of protected species will be amassed by an independent committee of experts rather than by politicians.



Many of Ontario's reptiles and amphibians will benefit directly from this new protection including the Blanding's turtle, Jefferson's salamander, and Fowler's toad.

The new proposals must still be passed into law by the provincial legislature, but hopeful reports state that this is likely to happen before summer.

Join FrogWatch Ontario and help conserve Ontario's frogs!

Amphibian populations are declining across the province and YOU can help by joining FrogWatch Ontario. Frogs and Toads are mating in early spring and summer.

The easiest way to identify them is by their calls. So go to www.torontozoo.com/adoptapond/FrogwatchOntario.asp or contact Adopt-A-Pond (aap@torontozoo.ca) to get your free FrogWatching Kit (Including the Ontario Frog and Toad Calls cd).



For more information contact Adopt-A-Pond:

361A Old Finch Avenue, Scarborough, ON M1B 5K7 fax: 416.392.4979

Ribbit's Review – Timothy; or notes of an Abject Reptile

Written by Verlyn Klinkenborg
Published by Alfred A. Knopf
Reviewed by Ian McIntosh



Timothy; or notes of an Abject Reptile is an incredible story for all ages. Told from the perspective of a tortoise that lived with the 18th century English clergyman and naturalist Gilbert White, the book gives us a very wise look at life, both of our own and that of our little shelled companions. "So it is with humans. Quickness draws their eye. Entangles their attention. What they notice they call reality. But reality is a fence with many holes, a net with many tears. I walk through them slowly. My slowness is deceptively fast."

Timothy, actually a female tortoise, tells about the passing of time with the kind of immeasurable patience that we all aspire to have. She describes the natural beauty of her garden home from the understanding perspective of one who truly pays attention to everything.

By empathizing with Timothy's careful observations we're given the opportunity to see our cultures, our languages, and our world in a new light. We could all learn something from *Timothy; or notes of an Abject Reptile*.

Published: February 7, 2006; **Published by:** Alfred A. Knopf;
ISBN: 0679407286

Volume 17, No.1

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

Ian McIntosh,
Adopt-A-Pond Coordinator
Bob Johnson
Curator of Reptiles & Amphibians

Layout Manager

Kate Walkom, Dunbarton High
School Co-op Programme

Contributors

Ian McIntosh
Mike Lawton
Dave Ireland
Daniela Rambaldini
Matt Ellerbeck

Support for the Adopt-A-Pond Programme:

Toronto Zoo Foundation
Banrock Station Wetlands
Foundation Canada

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