

Sydenham River Watershed

helping aquatic species at risk

March, 2011

The Sydenham River in southwestern Ontario is the only major watershed which lies completely in the Carolinian Life Zone and is relatively undisturbed by industrial development. This has made the river a biological treasure. The Sydenham River supports an incredible variety of aquatic life, or what we call biodiversity. At least 82 species of fish and 34 species of freshwater mussels have been found here, making it one of the most species-rich watersheds in all of Canada. Several species in the Sydenham River are found nowhere else in Canada, and some remain at only a few locations globally. Twenty-three species of fish, mussels and reptiles which live in and around the Sydenham River are nationally or provincially Species at Risk.

Why Build a Wetland?

Landowners Kerry and Laura Margetts have undertaken a project on their own property through the Habitat Stewardship Program for Species at Risk.

SCRCA: Could you describe the project?

Laura: We purchased this beautiful property in the Sydenham River watershed that includes a large woodlot, agricultural land and some scrub land that runs along a depression on the property. This scrub land is not good for agriculture so we contacted the St. Clair Region Conservation Authority to plant trees. In discussion with the conservation staff, we decided to combine the tree planting with the creation of a small wetland to increase the diversity of the site. A small berm was constructed to pond the water in the flats creating a wetland. About 4000 trees were planted on the scrub land and around the wetland to provide more varied habitat.

SCRCA: Why did you want a wetland?

Laura: We were both very interested in creating a wetland in a low lying area on the property. The field drains towards the Sydenham River and we wanted to create a direct link with the river. The wetland will provide habitat diversity including frogs and birds. I can't wait until we get a great blue heron landing in our wetland. We both wanted to make this project the best it could be. Creating wetlands does more than attract wildlife – wetlands help to filter pollutants out of the water, maintain soil moisture as well as increase biodiversity.

SCRCA: Did the grant from the Habitat Stewardship Program help?

Laura: Absolutely - While we would have done some tree planting, the grant allowed us to do so much more and to do a better job of making our property habitat friendly. It was more than the grant though – the Conservation Authority

staff helped us understand the big picture – they developed a plan and were happy to make changes to satisfy our desires. They helped us fill in the application and completed the work for us. They made it easy.

SCRCA: You spent your own money on this project too - is it a good investment?

Laura: It certainly was – it is very satisfying to do our part to help with the environment. We found out from the Conservation Authority staff how all this helps with species at risk by keeping the water clean and increasing the diversity of living things. This is our return on our investment.



Laura and Kerry Margetts have taken advantage of a grant through the Habitat Stewardship Program for Species at Risk to construct a wetland on their property in the Sydenham River watershed.



Volunteers Share Their Experiences

Each spring, a group of dedicated Sydenham River locals collect observations on species of turtles that are experiencing declining populations and are considered to be at risk. From canoes, using monitoring equipment provided by St. Clair Conservation, volunteers record information on species of turtle, weather, location, etc. This data is entered into a database which is made available to the Ontario Turtle and Reptile Atlas.

We asked these volunteers why they got involved, what they learned, and what they have seen. We found that by participating in the annual turtle survey, these volunteers not only learned about turtles, they also ended up discovering more reasons to treasure the Sydenham River:

SCRCA: Why did you become involved with the Sydenham River turtle survey?

"I first heard about it from our neighbours. Harry was going for training on how to count turtles (his grandkids were amazed that he needed to learn how to count!) and he asked if I would go as his canoe partner for the training. I agreed right away, as I love to paddle down the river and look at turtles. As I learned more, I had to find out how to get involved in the turtle count, too." Janice LeBoeuf

"I was canoeing already, my parents were naturalists so I grew up exposed to the outdoors. I was also involved with scouting and other annual canoe trips. You get to see more animals canoeing. Gar swim up beside the canoe. I've seen indigo buntings, bald headed eagles, water snakes and owls. I like the idea of having an added purpose for the canoeing." Jan Mersereau

"I am still very interested in the Sydenham River and the species that call it home. This is a way to stay involved and perhaps help improve the river." Donald Craig

SCRCA: What is the most interesting thing you have observed while paddling the Sydenham?

"The vibrating sound of catfish that comes from under the water and fills the area of the canoe. It is a strange sound." Jan Mersereau

"Everything is interesting – the turtles, the gar, the wood ducks and their ducklings, the herons, the mussels, the raccoons, the deer, the flowers, the trees, the birds, the cattle, the landscape, the sound of the bees in the black locust flowers..." Janice LeBoeuf

"Bald eagles. I guess they are the most spectacular. A lost lone trumpeter swan. The turtles are pretty interesting, too!" Lawrene Denkers

SCRCA: What have you learned about Sydenham turtles?

"We have learned that there are more around than we thought. Once you get the hang of looking for them, they are everywhere. They are also not slow - nothing slips into the water as fast as a turtle..." Lawrene Denkers

"You have to train your eyes to see turtles from a distance. I learned the difference between the northern map and painted turtles. There is a ridge that extends the length of the back of the northern map turtle. There is an old white weather worn tree that extends out of the Sydenham covered with turtle scratch marks where I am able to find many turtles every year. Very cool!" Jan Mersereau

SCRCA: Have you participated in other stewardship activities? What type? Why?

"We have planted several acres of native trees on our farm near Florence. When we lived in Belle River, we reforested an old pasture along the river with native species. I learned about snake hibernaculum from one of the Conservation Authority staff at a turtle counter get-together a couple of years ago, so we might build a couple of those in the future. We're also considering restoring a wetland on our farm. We like to see a diversity of plants and wildlife in the area." Janice LeBoeuf

"I am trying to expand populations of rare trees including butternut and Kentucky coffee tree through seed collection, planting, etc. I am interested in helping to collect seed and find suitable seed sources." Donald Craig



northern map turtle - notice its ridged shell.



Turtle volunteers Lawrene Denkers, Jan Mersereau and Janice LeBoeuf received the 2009 SCRCA Conservation Award from Authority Chair Andy Bruziewicz.

Building Homes for Snakes

St. Clair Conservation plans to build artificial snake nesting habitat for endangered eastern foxsnakes in 2011. This will be the first time that the Authority has built *nests for snakes*.

The bulk of their food is voles and mice so they are valuable for rodent control and an important part of our ecological heritage.

A major threat to the eastern foxsnake is their slow reproduction; females do not breed until several years after birth, and then only every two years. In late summer, females lay their eggs in rotting logs, sawdust piles or manure heaps. Nests are subject to disturbance by humans and high levels of predation by skunks or raccoons.



This artificial nesting habitat constructed with straw, moss and wood chips in a wire cage, may give this species a better chance at survival.

eastern foxsnake

Aquatic Species at Risk in the Sydenham River

Mussels

northern riffleshell - **Endangered**
wavy-rayed lampmussel - **Endangered**
rayed bean - **Endangered**
snuffbox - **Endangered**
mudpuppy mussel - **Endangered**
kidneyshell - **Endangered**
round hickorynut - **Endangered**
round pigtoe - **Endangered**
rainbow mussel - **Endangered**
fawnsfoot - **Endangered**
eastern pondmussel - **Endangered**
mapleleaf mussel - **Threatened**

Fish

northern madtom - **Endangered**
eastern sand darter - **Endangered**
blackstripe topminnow - **Special Concern**
pugnose minnow - **Special Concern**
grass pickerel - **Special Concern**
bigmouth buffalo - **Special Concern**

Reptiles

eastern foxsnake - **Endangered**
eastern spiny softshell turtle - **Threatened**
Blanding's turtle - **Threatened**
snapping turtle - **Special Concern**
northern map turtle - **Special Concern**

Endangered: A species facing imminent extirpation or extinction.

Threatened: A species that is likely to become endangered if limiting factors are not reversed.

Special Concern: A species is of special concern because of characteristics that make it particularly sensitive to human activities or natural events.



Researchers from the Ministry of Natural Resources undertook a study to learn more about the blackstripe topminnow.

How You Can Help Species at Risk

Improve Water Quality:

- Divert your downspouts onto your lawn or garden, instead of onto pavement or into a storm sewer
- Maintain, repair or replace your septic system. Have it pumped out every three to five years
- Along a watercourse, plant, protect or enhance woody plants to filter soil runoff and shade the water
- If you use fertilizers and pesticides, use them wisely and dispose of them through Hazardous Waste facilities

Prevent the Spread of Invasive Species:

- If you fish with live bait, do not move them from one body of water to another
- Do not release aquarium pets, aquarium plants or live bait into natural water bodies. They can introduce diseases or become invasive



Did you know?

The eastern sand darter is well named. It often buries itself completely in the sandy bottom of rivers.

The Sydenham River is the only river in Canada where the blackstripe topminnow can be found.

The Sydenham River has more mussel species than any river in Canada.

Win a Pair of Binoculars

Species at Risk Contest

Hints for these riddles are on page 3



What turtle never gets lost?

What mussel is not a lot of doe - less than a buck?

What circular mussel might you find nosing up to the trough for dinner?

What fish keeps getting into trouble for "spilling the beans"?

What mussel must be a proud Canadian?

First Prize - Tasco 7 x 35 Wide Angle Essentials Binocular

Second Prize - Weekend Camping Pass

Third Prize - Photo Field Guide to the Freshwater Mussels of Ontario

You can send in your answers by e-mail to:

contest@scrca.on.ca

or by mailing your answers to:

St. Clair Region Conservation Authority
205 Mill Pond Cr., Strathroy, ON, N7G 3P9

Be sure to include contact information so we can notify the winners.

Draw will be held May 2, 2011

For more information

St. Clair Region Conservation Authority
205 Mill Pond Cr., Strathroy, ON, N7G 3P9
(519) 245-3710
stclair@scrca.on.ca
www.scrca.on.ca

RBC Donates to River

RBC, through the Blue Water Project, donated funds to expand the work being done on the Strathroy Water Trail. The funds were used to improve the access points along the trail and to provide interpretive signs. This is a joint project between the Conservation Authority, Progress Through Partnerships and the Township of Strathroy-Caradoc. A second donation was received to support the work being undertaken to protect species at risk. The funds will be used to support communications and education.



The Strathroy River Trail is officially opened by (from left to right) Kevan Baker and Norm Giffen, SCRCA Strathroy-Caradoc Mayor Joanne Vanderheyden, and Justin Pasichnyk, Strathroy Branch Manager, RBC.

Partners in Conservation

Environment Canada's Habitat Stewardship Program for Species at Risk
Fisheries and Oceans Canada
St. Clair Region Conservation Authority
St. Clair Region Conservation Foundation
TD Friends of the Environment Foundation
Ontario Ministry of Natural Resources
Middlesex Stewardship Committee
Rural Lambton Stewardship Network
Stewardship Kent
University of Guelph

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St. Clair Region Conservation Foundation

