Conservation Update


PC - Sharon Nethercott

November 2021

Another Record Year for the SCRCA Captive Hatch and Release Program

It was a busy spring and summer for the SCRCA Biology team who rescued a record-breaking number of turtle eggs during this year's Captive Hatch and Release Program. In total, 2,461 turtle eggs were collected from at-risk nests throughout the watershed and 2,188 hatchlings were returned to the wild.

The Captive Hatch and Release Program aims to increase hatchling survivorship by eliminating the threats posed by nest predation and destruction during one of the most challenging and vulnerable stages in a young turtle's lifecycle. Common threats to turtle nests include habitat loss through shoreline development and alteration, predation by skunks, raccoons and weasels, and human activities such as ATV traffic.

The St. Clair Region watershed is home to six of eight different species of turtle found in Ontario – all of which are considered Species at Risk (SAR). Efforts focus on the collection of eggs laid by the Eastern Spiny Softshell turtle — an endangered species facing imminent extinction The 2021 season saw the successful collection, incubation, hatching, and release of 1,187 Eastern Spiny Softshell Turtles (endangered), 343 Snapping Turtles (special concern), 590 Northern Map Turtles (special concern), 56 Midland Painted Turtles (special concern) and 12 Blandings Turtles (threatened).

The Blandings Turtle hatchlings released by the SCRCA in 2021 was a first for the Captive Hatch and Release Program.

SCRCA staff release turtle hatchlings back in the wild at the same location the original nests were found.

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"working together for a healthy environment"

Events are Back!

With the easing of COVID-19 restrictions throughout the province, SCRCA staff were excited and eager to hold a few in-person events this Fall. Thanks to all the volunteers and attendees who followed COVID-19 protocols to ensure the health and safety of all participants.

Ipperwash Shoreline Clean-up

On Saturday, September 11th, over 25 volunteers gathered at Ipperwash Beach for the annual shoreline clean-up. Over 100 pounds of garbage was collected during the morning event including diapers, beer cans, coffee cups and cigarette butts – by far the most prevalent item found along the beach. The clean-up was supported by funding provided by the Ministry of the Environment, Conservation, and Parks (MECP).

Sign unveiling during the National Tree Day event on September 22nd.

A Geocaching Adventure

Over 30 people attended the annual Geocaching Adventure event on a sunny Sunday this September at the Lorne C. Henderson Conservation Area, just outside of Petrolia. Twenty-three new caches were hidden throughout the Conservation Area named after local butterfly species observed at the park. The 2021 event also saw the youngest geocacher who has ever participated in the event – a 6-week old baby boy!

National Tree Day

Despite the heavy rain, the SCRCA held a small, private event on National Tree Day (September 22nd) to celebrate two significant milestones. Over the Authority's 60-year history, 4 million trees have been planted and 100 hectares of wetland have been created throughout the watershed. The event was held at a local landowner's property, just outside of Komoka, who has worked with the SCRCA to naturalize the property. In addition to remarks by former Authority Chair, Joe Faas and SCRCA staff, a commemorative sign was unveiled that will be installed along Komoka Road, northwest of the Town of Komoka. The event was supported by the Department of Fisheries and Oceans Canadian Nature Fund.

Coldstream Boardwalk Replacement

In partnership with the Coldstream Envirofriends community group, the SCRCA held two volunteer events to replace over 150 m (500 ft) of aging boardwalk at the Coldstream Conservation Area. Funding for the project was provided by MECP's Great Lakes Local Action Fund.

Bridgeview Shrub Planting

With funding support provided by MECP's Great Lakes Guardian Fund and TD Tree Days, over 600 native shrubs, perennials, and aquatic plants were planted at Bridgeview Conservation Area. Over 25 volunteers (pictured left) of all ages joined SCRCA staff and Town of Petrolia representatives on October 2nd to further naturalize a portion of the park. The plantings will help to enhance biodiversity and complement the recently created wetland and wildflower meadow.

SCRCA Welcomes New General Manager

The St. Clair Region Conservation Authority (SCRCA) is pleased to welcome Ken Phillips as the Authority's new General Manager. Ken began his tenure at the SCRCA on November 1st, replacing Brian McDougall who retired after a 30-year career with the SCRCA – the last ten as General Manager.

"On behalf of the Board of Directors, I wish to congratulate Mr. Phillips on his selection," said Joe Faas, former Chair of the SCRCA. "I am confident that his diverse experience and leadership skills will benefit the current and future operations of the Authority."

Phillips joins the SCRCA with over 25 years of experience in the environmental sector including a combined 15 years as General Manager of Conservation Halton and Crowe Valley Conservation Authority. A graduate of McMaster University, Phillips was most recently the appointed Chair of the Ontario Parks Board of Directors, tasked with providing expertise and advice on the planning, management, and development of the provincial parks network.

Phillips' joins the SCRCA during a transformative time for Ontario's 36 Conservation Authorities with recent changes to the *Conservation Authorities Act* (CA Act), passed by the Provincial Government in December. "Ken has a proven ability to foster relationships with a wide variety of stakeholders," continued Faas. "That ability will be a tremendous asset as we continue to work with our staff, member municipalities, partners, and the province to adhere to the political and regulatory changes to the CA Act."

2021 Conservation Education Fall Strategy

The SCRCA education team is excited to welcome students and teachers back to the Lorne C. Henderson Conservation Area! The SCRCA is once again offering a number of traditional, in-person field trips, in addition to the virtual and schoolyard programming created in response to the COVID-19 pandemic. For the entire suite of Fall 2021 conservation education program options visit www.scrca.on.ca/govirtual.

A bus full of excited students arrived at the Lorne C. Henderson Conservation Area on September 27th for the first traditional, in-person field trip since March 2020.

SCRCA FishCAST Intern – Roland Eveleens

Funded through the National Science and Engineering Research Council (NSERC), the FishCAST* internship program was developed to provide graduate students in the fisheries and aquatic sciences field the opportunity to gain hands-on experience with expert organizations. This past spring, the SCRCA recruited Roland Eveleens as part of the FishCAST program. Roland was a Master of Science student at the University of Windsor, whose research focused on the mussels of the Sydenham River. He successfully defended his thesis titled "It takes a community to save a species – using community interactions to restore freshwater species at risk" in August. Roland worked with various departments at the SCRCA to develop science-related communications. Read on to learn more about Roland, his research, and what he did during his time with the SCRCA.

**Short for Fisheries Management and Conservation Careers in Science and Technology*

Hi Roland! Tell us a little bit about yourself.
I am originally from New Zealand but have recently completed a two-year Master of Science program in Environmental Science at the Great Lakes Institute of Environmental Research (GLIER) at the University of Windsor.

What was the focus of your Master's research?
My research focused on better informing how to restore the amazing and threatened mussels we have here in Southern Ontario. I investigated interactions between mussel species and aquatic insects within and across the sub-watersheds of the Sydenham River. I also reviewed existing literature on mussel restoration to better understand what tools are available for restoring mussels and whether we can use the interactions between species to support the re-establishment of mussel species at risk of extinction. I was lucky to collaborate with the SCRCA biology team and the federal Department of Fisheries and Oceans (DFO) who provided existing monitoring data for my analysis.

What was your favourite part of working in the Sydenham River last summer?
It was so nice to get some late summer fieldwork in and sample mussels in the Sydenham River last year, given the ongoing COVID-19 pandemic. My personal highlights included the vast number of different mussel species we discovered, and the hands-on learning experience provided by the SCRCA, DFO, and members of our team at GLIER.

What drew you towards pursuing graduate studies at the University of Windsor and researching mussel species in the Sydenham River?
I wanted to study overseas and experience living in another country. Canada stood out as a cool place to study. I was introduced to the University of Windsor by a Canadian faculty member that I worked with in New Zealand but had returned to Canada to set up a research group at the university. My interest in mussels came later, as I wanted to include a restoration element in my project and funding was available to research mussels. I really hadn't thought much about mussels before coming to Canada as New Zealand only has three species of freshwater mussel across the entire country (compared to 34 in the Sydenham River alone!). I had a lot of fun learning about mussels through my research and I find how they connect aquatic ecosystems together so fascinating!

What did you work on as part of your internship with the SCRCA?
My internship with the SCRCA focused on science communication. I created and shared content and information on many of the species at risk we have in the Sydenham River and St. Clair Region through the Authority's social media platforms. I also shared some stories and findings from my own research.

How do you think the internship at the SCRCA will assist you in reaching your career goals?
The internship was a great opportunity for me to build science communication skills and gain further experience working collaboratively – skills I view vital for a career in environmental management and conservation. As an aspiring scientist, I think it is important to be able communicate the science I am involved with to everyone, be able to consider the diverse ways our environment is valued and be able to work effectively with other like-minded organizations. It provided me with the opportunity to build professional connections beyond those I had formed at the University of Windsor.

For more information on Roland's research and other research by the Healthy Headwaters Lab at the Great Lakes Institute of Environmental Research, University of Windsor, visit https://www.healthyheadwaterslab.ca/.

End of 2021 Camping Season and Off-Season Guidelines

The 2021 camping season at the SCRCA's three regional campgrounds (A.W. Campbell Conservation Area, Lorne C. Henderson Conservation Area, and Warwick Conservation Area) closed on October 17th. Thanks to all our seasonal campers and visitors for another successful summer. Online reservations for the 2022 camping season will open on Monday, January 10, 2022. For all seasonal camping inquiries, please contact Greg Wilcox, Manager of Conservation Areas at (519) 245-3710 Ext. 216 or at gwilcox@scrca.on.ca.

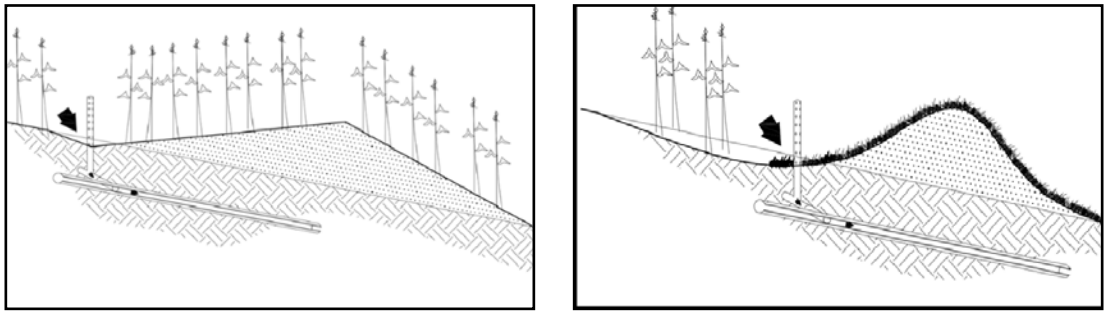
The SCRCA wishes to remind visitors that vehicular access to the campgrounds is restricted during the winter season (November – May) and washroom facilities are closed. Only school busses and vehicles associated with SCRCA education programming at the Lorne C. Henderson Conservation Area are permitted to enter the property past the entrance gate.

Landowner Spotlight – Erosion Control at the Gilroy Property

Local landowner, Don Gilroy reached out to the SCRCA after he noticed rills and gullies forming on his agricultural fields just outside of Alvinston (pictured right). The erosion problem on his property was caused by increased overland flow which led to soil and nutrient loss.

In cooperation with Gilroy and an Ontario Ministry of Agriculture, Food, and Rural Affairs Certified Erosion Control Contractor, SCRCA staff assisted in the development of a plan that would slow the movement of water as it moved over the field. The plan included the creation of a series of WASCoBs (Water and Sediment Control Basin), a common embankment erosion control structure installed on agricultural fields.

WASCoBs reduce gully erosion by slowing the speed of overland flow and allowing for suspended sediment to settle back on the field. A typical structure includes a small earth embankment that stores overland flow that is slowly released through an underground outlet (e.g., a hickenbottom connected to a tile drain). The embankments can be broad and available for crop production, or a permanently vegetated narrow embankment that allows for crops to be grown on either side.



Berms can be broad based or narrow based. Broad berms can be used for crop production (left) while narrow berms are permanenetly vegetated with crops growing on either side (right). Diagrams courtesy of Upper Thames River Conservation Authority.

The Gilroy project included a broad embankment that also served as a continuation of a laneway. A hickenbottom was installed that connected to an existing tile. In addition to the WASCoBs, rock chutes were installed adjacent to the municipal drain to slow the movement of any overland flow not caught by the WASCoB (i.e., as a result of a severe storm) before it reached the drain. The design implemented on the Gilroy property will not only reduce gully erosion but also decrease the need for or frequency of costly municipal drain cleanouts, as sediment has time to settle on the farm field before entering the municipal drain.

The SCRCA was able to provide funding support to Mr. Gilroy to help offset the cost of the project. Any landowner who is experiencing erosion on their property and is interested in erosion control options can contact Jessica Van Zwol, SCRCA Healthy Watershed Specialist at (519) 245-3710 Ext. 241 or at jvanzwol@scrca.on.ca.

For more information on WASCoBs and other agricultural resources visit our website at www.scrca.on.ca/publications.

The completed WASCoB at the Gilroy property. The berm was designed to also serve as a continuation of the laneway. The yellow hickenbottom connects to an existing tile. The rock chute (far left in photo) slowly allows ponded water to enter the municipal drain.

Next Conservation Authority Board Meeting
Thursday, December 9, 2021 10:00 am
(Virtual Meeting)

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