

Trout Unlimited Canada



Greg Clark Chapter

**WELCOME TO THE 2023
ANNUAL GENERAL MEETING
FOR THE GREG CLARK CHAPTER OF TUC**

VIRTUAL EDITION



MESSAGE FROM THE EXECUTIVE BOARD



*Albert
President*



*Maggie
Treasurer*



*John
Secretary*



*Steve
Director at Large*



*Gordon
Director at Large*

Thank you for your ongoing support in making a difference within the Upper Credit River watershed. We rely on volunteers and donors like yourselves to help implement different restoration and rehabilitation projects.

This report provides an overview of our work in the past year. If you have any questions or comments regarding anything noted please feel free to email us.

Stay safe and see you out on the river

- TUC Greg Clark Chapter Executive Board



HIGHLIGHTS FROM 2022

- Brook Trout Sighting at Upper Credit Conservation Area
- Hwy 24 Project Update
- Hwy 24 Electrofishing
- Hwy 24 Brook Trout Genetic Bank Program
- West Credit River Restoration Project
- Fishing Regulation Signs
- Andrew Howarth's Radio Telemetry/Genomic Study
- Strategic Watershed Action Team (SWAT) Program
- Coalition for the West Credit River



UPPER CREDIT CONSERVATION AREA – BROOK TROUT SIGHTING

Earlier this year, Credit Valley Conservation (CVC) confirmed the first sighting of a Brook Trout in the reach we helped restore at Upper Credit CA!

This momentous result would not have been possible without the time and commitment of our volunteers.

Over the years volunteers have put in hundreds of hours to help plant trees and live stakes and install a variety of structures (habitat, silt traps, spawning beds) to create ideal conditions for brook trout to slowly return.

**So from the fish and our board members
THANK YOU!**



May 2022 - Upper Credit Conservation Area

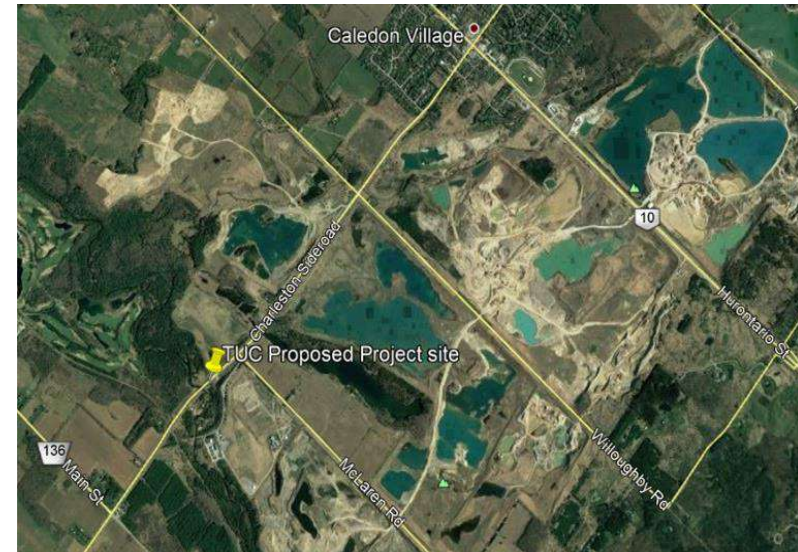


HWY 24 PROJECT

The Upper Credit watershed is one of the best remaining habitats for Brook Trout (*Salvelinus fontinalis*) in southern Ontario.

Considered to be the “last stand” for wild, native Brook Trout on the main stem of the Credit river, the project site is located close to where the Credit River crosses Highway 24 (Charleston Sideroad), just west of Caledon Village. Negative impacts associated with unnatural flooding, environmental changes, urbanization and increasing fishing and poaching pressures have caused Brook Trout numbers to significantly decline.

Since 2021, chapter members have been working on restoration and rehabilitation projects with the objective of improving the health of this key habitat. The following was completed in 2022.





HWY 24 PROJECT - TREE PLANTINGS

The Greg Clark Chapter held two planting events at the Hwy 24 project site. In the spring, 50 Silver Maples and 75 White Cedars were planted along the North West side of the river. In the fall, 25 mature White Cedars were planted in the existing footpath that was too close to the river bank. The planted trees will stabilize the bank and increase shading of the river.



May 2022 - Volunteer tree planting event along the north west side of the river



October 2022 - Volunteers planting mature trees along the existing path



HWY 24 PROJECT - PATH RELOCATION

As part of the Fall Tree Planting event, volunteers relocated the existing footpath to a location farther from the river to prevent bank erosion and keep heavy foot traffic away from key fish holding areas and sensitive habitat along the river bank.



Mature trees planted along the old path



Planted area is fenced with a sign redirecting hikers to the new path



New path created using mulch and dead logs



HWY 24 PROJECT – HABITAT STRUCTURE INSTALLATION

In July and September, volunteers and chapter members installed cedar log habitat structures on the existing older historical structure. The enhanced habitat will provide Brook Trout with overhead and in-stream cover near ground water upwellings that provide thermal refuge through warm/low water periods. Large woody debris additions provide numerous benefits for the entire fish and benthic (aquatic insect) community.



July 2022 - Group photo of volunteers



Volunteers Securing Logs as Part of Creating Habitat Structures



HWY 24 PROJECT – HABITAT STRUCTURE INSTALLATION



Hwy 24 site - Before habitat structure installation



Hwy 24 site - After habitat structures installed



HWY 24 ELECTROFISHING

CVC electro fishing day was June 10th. Several chapter members assisted CVC staff in doing non-lethal sampling of the fish community to assess current health at the Hwy. 24 project site.



Brook Trout data collection as part of their long term monitoring program



Male longnose dace in spawning colour, sampled from the project site



HWY 24 - BROOK TROUT GENETIC BANK PROGRAM

The Greg Clark chapter assisted Ministry of Natural Resources and Forestry (MNR) in sampling the unique, genetically distinct strain of Brook Trout found in the Credit River watershed.

A total of eight family groups were collected (16 pairs), eggs and milt were collected from each fish through non lethal sampling techniques before being returned to the river to continue their annual spawning ritual.

The samples will be used as part of the MNR's genetic bank program.



Sampling eggs and milt from Credit river brook trout



Credit river brook trout spawning on a pit nest called a redd



WEST CREDIT RIVER RESTORATION PROJECT

In May, volunteers planted 150 trees and shrubs and 50 live stakes on CVC owned property adjacent to the West Credit River in Erin Ontario. The trees will eventually provide shade to keep the river cool for brook trout.



May 2022 - Group photo of volunteers



May 2022 - Planting site after volunteers planted trees and shrubs along the riverbank

FISHING REGULATION SIGN

Continuing from our 2021 project, an additional 16 fishing regulation signs were installed last year within the Credit River watershed.



Close up of the fishing regulation signs



Fishing regulation sign at a trailhead at Forks of the Credit Provincial Park



ANDREW HOWARTH'S RADIO TELEMETRY / GENOMIC STUDY

Greg Clark chapter members assisted PhD candidate Andrew Howarth in his radio telemetry and genomic study of Credit river Brook Trout on both the West Credit river and the main/middle stem of the river. The two populations are genetically isolated from each other and represent unique study opportunities in seasonal movements and adaptive responses of the species. Numerous stressors impacting the species are being studied as part of a multi-year radio tagging and genomic study.



April 2022 - Electrofishing sampling



ANDREW HOWARTH'S RADIO TELEMETRY / GENOMIC STUDY

Chapter members assisted in electro fishing, property owner permissions, radio receiver locations and other aspects of the study. Non lethal methods were used throughout all aspects of the study which included gill tissue sampling of brook trout caught by angling method (fly fishing). The samples will be analyzed to determine the impacts on fish caught and released during both cool and warm water conditions as well as other aspects of their physiology at the time of sampling. A total of sixty five brook trout are currently having their seasonal movements recorded within the study areas. This will provide unprecedented new data to help protect and conserve this sensitive indicator species.



April 2022 - Preparation for tagging surgery



ANDREW HOWARTH'S RADIO TELEMETRY / GENOMIC STUDY

Andrew has become a valued friend of the chapter, his quest to increase our knowledge of the species and his conservation ethic is something we should all support and be inspired by.

Two excellent videos by David Williams on Andrew's study can be found here:

https://youtu.be/SxDMmyzg_6Y

<https://youtu.be/3sxanOuHjbY>



April 2022 - Tagging/gill tissue sampling



STRATEGIC WATERSHED ACTION TEAM (SWAT) PROGRAM

2022 marked the 5th year of the chapters participation in TUC Ontario's Strategic Watershed Action Team (SWAT) program.

SWAT is dedicated to helping the next generation of environmental and resource management professionals by providing summer employment, field experience and training in a demanding, often poorly funded and highly competitive field. The crew implements low-impact stream rehabilitation measures such as bioengineering, riparian plantings, stream clean-ups, as well as create in-stream habitat, restore stream meander and perform community electrofishing surveys.

Funded through in-kind donations and supporting grants, projects are achieved by working in collaboration with Trout Unlimited Canada Chapters, communities and partners. This support helps SWAT aid in providing chapters with the resources they need to improve southern Ontario's aquatic resources.

SWAT provided five days of support in July and August.

SWAT PROGRAM

In July, over two days the SWAT crew

- Installed 4 Fishing Regulation signs in Forks of the Credit Park
- Collected dead cedars for the chapters in-stream habitat work, scheduled for 2023, as part of the West Credit river restoration project.



July 26 - SWAT members installing fishing regulation signs



July 27 - Large pile of dead cedars collected for the West Credit river restoration project



SWAT PROGRAM

In August over three days, the SWAT crew installed habitat structures at Hwy. 24. A total of six trailer loads of dead cedars were used/installed.



August 9 - Volunteers and SWAT crew next to the two loads of dead cedars



SWAT PROGRAM

In August over three days, the SWAT crew installed habitat structures at Hwy. 24. A total of six trailer loads of dead cedars were used/installed.



August 10 - Bringing large cedar logs downstream to be positioned in place (before installation)



August 11 - Securing cedar logs in place to create additional habitat/refuge for brook trout



COALITION FOR THE WEST CREDIT RIVER

Our Chapter is a member of the “Coalition for the West Credit River” (CWCR (<https://cwcr.ca/>)).

The group was formed in December 2020 and continues its efforts to ensure that the Town of Erin’s proposed wastewater treatment plant (WWTP) will not impact the West Credit River ecosystem. We are particularly concerned with the conservation of the native Brook Trout population.



Photo credit: Steve Noakes

Aerial image of the West Credit river



Photo credit: Steve Noakes

Credit River Brook Trout



Trout Unlimited Canada



Greg Clark Chapter

Members of CWCR - Belfountain Community Organization, Ontario River Alliance, Ontario Streams, Izaak Walton Fly Fishing Club, TUC _ Greg Clark Chapter



COALITION FOR THE WEST CREDIT RIVER

Coalition efforts in 2022 included:

- Environmental Compliance Approval issued by the Ministry of Environment, Conservation and Parks included the requirement for an effluent cooling system and 3 real-time monitoring stations to be installed in the River which are firsts for a wastewater plant in Ontario
- Partnered with [SoFly](#) for two events in Toronto that raised a total of \$5k to support efforts of the Coalition
- Received a \$15k grant from Lush Cosmetics that will be used to install a live-stream fish cam in the River
- Article published in Ontario Nature that has a readership of 25K. Link to the article [can be found here](#).



CONCLUSION

THANK YOU for your continued support and for taking the time in going through our virtual AGM. These projects and others would not be possible without the generous support from **YOU** the volunteers and chapter members.

If you are a current TUC member (and as required by AGM's) please make sure you vote for our board members and financial statement by Sunday April 2, 2023.

The link to the survey [can be found here](#)





HOW CAN YOU GET INVOLVED

- Join our mailing list: [tu.gregclark\(a\)gmail.com](mailto:tu.gregclark@gmail.com)
- Follow us on Facebook or Instagram @tugregclark
- Visit [our website](#)
- Attend our monthly meetings held on the second Tuesday of every month
- Participate in workdays typically scheduled one Saturday a month between May and October

Anyone with an interest in conservation is welcome!