



**BEAVER
RIVER
WATERSHED
INITIATIVE**

what water wants

Volume 4
October 2020

NEWSLETTER

UPDATES ON WHAT WE ARE ACCOMPLISHING

Welcome to volume four of the Beaver River Watershed Initiative Newsletter. The BRWI executive committee sincerely hopes that our members and their families are all staying healthy and weathering these trying times of the Covid 19 Pandemic.

Our once a month in person committee meeting have been shut down due to Covid 19, but we have managed a few Zoom meetings since that shutdown on March 17. Prior to the lock down we were invited by the newly elected council of the Town of Blue Mountains to a deputation on Dec 16 2019.

Bradley Mulligan presented a informative power point presentation introducing the council to who we are, and what we do for the community and watershed. Debbie Crosskill joined Bradley Mulligan for a excellent Q/A with the councillors. We thank the Town of Blue Mountains for this opportunity!

We are happy to share with you, our membership, the latest achievements and initiatives we've been working on despite the pandemic!

Kimberly Pond

In the summer of 2019 BRWI did a site check of the old Kimberly Gristmill pond, we then contacted Ray MacDonald of the KCA in July of 2020, a short bio of the BRWI and an offer to meet with the KCA to provide advice and assistance was included in the KCA August newsletter. We very much look forward to meeting with the KCA in the near future to discuss this important cold water resource in the Beaver River Watershed

Clendenen Dam Fish Ladder Operation



We have been informed by the MNRF that updated operational procedures for the fish ladder have been implemented by MNRF as of the 2020 spawning season . There was concern by members of the public that the fish ladder was no longer being monitored or operated in the 2019 spawning season as salmon were spawning up past Slabtown. We thank MNRF Owen Sound and MNRF Midhurst for rectifying this situation and protecting the Trout population in the Beaver River.

Little Beaver Creek

Back in 2016-17 BRWI received a number of member inquiries about the Little Beaver River. In response to this, in early fall of 2018 BRWI initiated a one day restoration of a section of the river just north of Alice Street, additionally in 2019 we received funding from the Town of Blue mountains to start water quality testing, and with the assistance and expertise of the Grey Sauble Conservation Authority, Water samples and rudimentary water temperatures were taken in 6 strategic locations of the watershed from April to October 2019. I have included at the end of this newsletter both reports as compiled and authorized by the study head Rebecca Ferguson of the Grey Sauble Conservation Authority. The quick answer to the question of water quality is that the system as tested was “Fair“ or C grade, no major concerns in terms of the chemical composition and pollutant levels, as well water temperatures were within reasonable readings. It must be noted that both Water Quality and Temperature readings are based on a one season sample set, and do not necessarily represent a complete data set, to properly do this would require a 5 year study with temperature data loggers and continued water sampling, that said this gave us a base line to work from for further rehabilitation work. In our previous Newsletter the watershed had received from GSCA a fair grade for water quality, poor for forest health and very poor in wetland cover. We hope moving forward to increase these grades to better levels!!

Electrofishing the Little Beaver



Electrofishing below Bridge abutment Georgian trail

Photo Credit : Bradley Mulligan



Electrofishing 2020 Identifying and counting

Photo Credit : Bradley Mulligan

With encouraging water testing and temperatures results. Our next step as completed(!) this September of 2020 was that the MNRF asked us to electrofish the system and do a presence/absence community survey of fish species in the Little Beaver River (MNRF due to provincial budget cuts has no longer the ability to supply the equipment or personnel), we choose eight sites from the mouth of the river at the treatment plant up to the 10th line. Back in late 2018 we had applied for and where given funds from the Lake Huron Georgian Bay Community Action Initiative and have allocated these funds for various projects including the Little Beaver River, in March of 2020 we applied for the MNRF permit to electrofish, then hired Trout Unlimited Canada's, licenced electrofishing Biologist Kelly Mason and her equipment, contacted and was granted permission from private land owners and the ToBM's to access their properties and then finally put together a Covid safety protocols for the electrofishing crew!

Needless to say all of this was not easy to do with the Covid pandemic and delays caused by ever changing provincial guidelines for safety and travel.

Electrofishing the Little Beaver *continued*

On a beautiful September fall day we set out to Electro fish both the Little Beaver (8 sites) and Boyne (4 sites). As suspected on the Little Beaver we discovered a near complete lack of trout species (one lone yearling Rainbow) above the abutment on the old rail bridge on Georgian trail (see supplied picture) but we did note White Suckers , Creek Chub, Emerald Shiner, Brook Stickleback, Bluntnose Minnow, Blacknose Dace, Common Shiner, and Fathead Minnow in the system, with many Rainbow trout north of the abutment. Clearly the abutment is an impediment to trout movement and spawning. BRWI would like to thank both Andy McKee and Bradley Mulligan (BRWI Executive Committee projects co-chairs for both organizing this and being on the crew, also a special thanks to Biologist and Environmental Engineer Marc Faiella for volunteering his time, his expertise and taking time off of work to be on our crew! Given the results of our studies and the electrofishing, the next steps on rehabilitation of the Little Beaver River is that we (BRWI) recommend that either the abutment be removed (very expensive proposition requiring engineering reports, MNRF permits, ToBM, contractors etc) or we install a Fish Culvert System similar to the recently installed fish culvert on Armstrong Creek that feeds the newly naturalized Rotary Club park in Markdale. We contacted David Penny of fish culvert to do a feasibility report and costing, and have a plan and partial funding in place to install the fish culvert pending approvals from all parties. Once we restore the movement of fish and allow spawning on the Little Beaver, we can then look at further sections of the river that need restoration work and habitat rehabilitation. The Little Beaver River will be a perfect project for all the landowners and stakeholders to get involved with over the next few years !!



Electrofishing Georgian trail abutment

Photo Credit : Bradley Mulligan



*Covid spaced Crew shot Bradley Mulligan (Katie the fly fishing dog)
Andy McKee Marc Faiella Kelly Mason (TUC).* Photo Credit : Thomas Pick

Beaver River/Boyne River



Jack Imhof (TUC) Spawning Survey Nov 2019, Large multiple Brown trout Redd, maybe 2-3 different females have spawned here.

Photo Credit : Bradley Mulligan



New Brown Trout spawning Redd , Beaver River Nov 2019

Photo Credit : Bradley Mulligan



Hoggs Falls, Boyne River, site three of electro fishing. Sept 2020 Electro fishing

Photo Credit : Bradley Mulligan

We have taken a break this 2020 year on any major projects on both the Beaver and Boyne to allow past years work to settle in, as well as the difficulties of crewing during this Covid Pandemic. That said, since our last newsletter we did in late 2019 “tweak” sections of both the Beaver River and Boyne River. This included widening sections we have worked on in the past and tweaking the river course based on 2019 spring high water events, a big thank you to Bradley Mulligan, Frank Muschalla and Andy McKee for their hard work! In November of 2019 Bradley Mulligan and Jack Imhof (TUC) conducted a spawning survey of the rehabilitated sections of the Beaver River and were thrilled to note multiple new Brown Trout spawning Redds in the newly restored sections!! Overall the rehabilitated sections of the river get a good to excellent rating on Brown trout spawning! Additionally, in Sept 2020 we also Electro fished three sites (including Hoggs Falls) of the Boyne River and found a very healthy Rainbow and Brown trout population as well as a surprising population of rare River Burbot!

FEVERSHAM BEAVER RIVER PROJECT

In February of 2019, BRWI member Jeff Graham brought to us his concerns and some excellent data on the Beaver River upstream of Feversham. After joining Jeff on a field survey in the early spring of 2019, we realized this project was extremely important to maintain and rehabilitate a pristine year round cold water Brook trout habitat! After careful analysis of Satellite imagery and boots in the water reconnoitering we approached the landowner and received permission to start a multi year project of restoration and rehabilitation. Much of the damage to the river was caused by what appeared to be early settlers damning the river, an abandoned road and bridge construction and past ice storms that have created a severely braided, shallow and heavily silted watercourse. We are using an upstream, downstream approach to this rehabilitation work in both August 2019 and August 2020, it is slow and tedious due to the dense bush, fallen cedars and the careful restoration needed of the original sections of the river bed, but the immediate results of this methodical approach have been fantastic and we hope to connect the two sections over the next upcoming two years. As a note on continued and future work being done onsite by BRWI, due to recent cuts by the Provincial government in funding of MNR, Conservation authorities and environmental agencies, we at BRWI have lost some very important volunteer work crews from both the MNR, GSCA and other NGO groups. The Student Stewardship Rangers program has been cut back, and we at BRWI are no longer able to access crews of summer students from MNR as well as similar crews from Grey Sauble Conservation authority. Both in August of 2019 and this August of 2020 we relied on much smaller crews of volunteers from entirely within the BRWI membership base, and as a result we have done fewer on stream work days than in years past. Membership in BRWI and active volunteering is key to our success of being stewards of the watershed.

We would like to thank the following volunteers for their dedication and hard work. Jeff Graham, Alexander Graham Don Harris, Robert Burcher, Keith Broughton, Bradley Mulligan, Alexander Mulligan, Nicholas Mulligan, Jack Imhof, Andy McKee, Rebecca Ferguson and Austin Caldwell



Beaver River Feversham 2019 Before

Photo Credit : Bradley Mulligan



Beaver River Feversham 2019 After

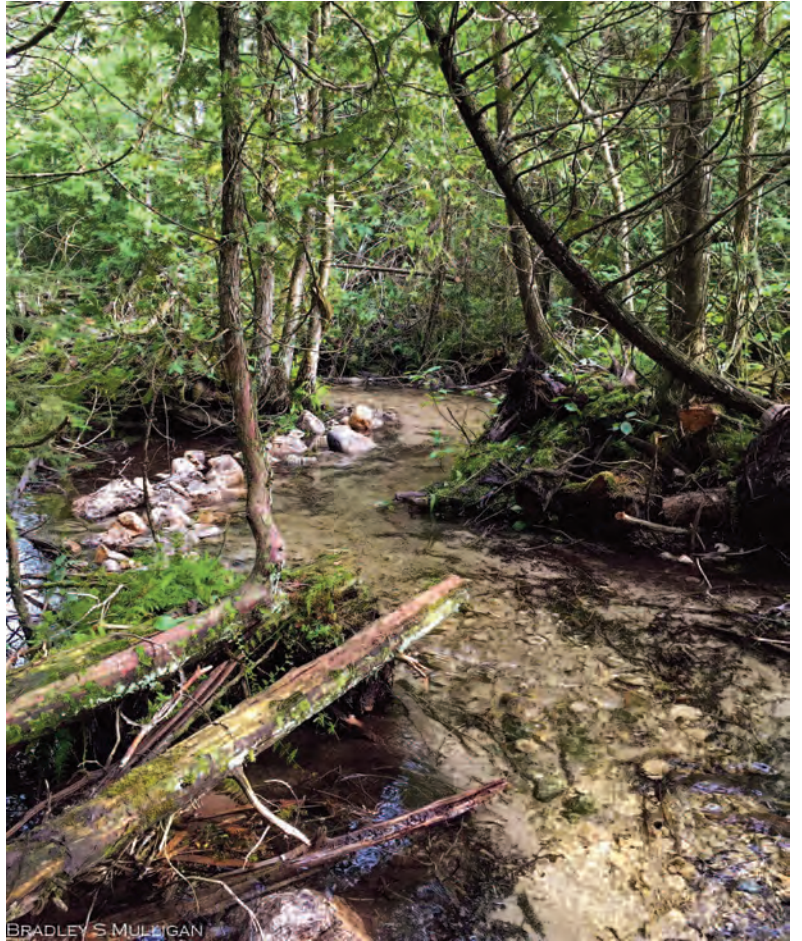
Photo Credit : Bradley Mulligan

FEVERSHAM BEAVER RIVER PROJECT



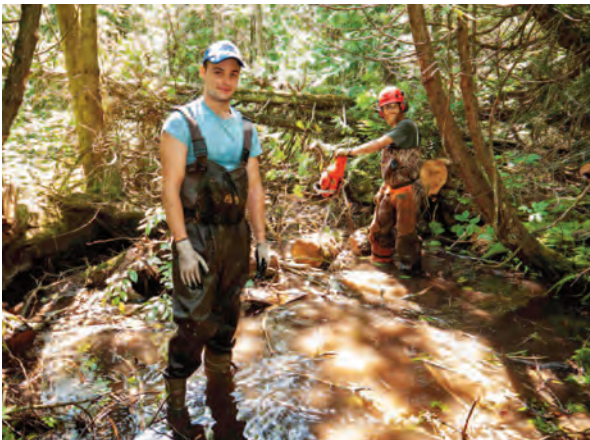
Beaver River Feversham west section after picture 2020

Photo Credit : Jeff Graham



Beaver River Feversham east section after picture 2020

Photo Credit : Jeff Graham



*Beaver River feversham 2020 Nicholas Mulligan,
Arborist Austin Caldwell*

Photo Credit : Bradley Mulligan



*Beaver River Feversham Covid Crew photo 2020 L-R
Nicholas Mulligan, Alexander Mulligan, Austin Caldwell*

Photo Credit : Bradley Mulligan



*Beaver River Feversham Covid Crew photo 2020
L-R Bradley Mulligan, Andy McKee, Jack Imhof, Robert Burcher,
Jeff Graham*

Photo Credit : Bradley Mulligan

Fencing Projects



Little Beaver River fencing project near Maxwell was 885 m of fencing and a 458 m stretch of the river was fenced out. 2.5 acres were planted with trees.

Photo Credit : Rebecca Ferguson

In 2019 BRWI's Andy McKee and GSCA's Rebecca Ferguson completed two separate fencing projects on privately owned land. Both locations are at the headwaters and tributaries for the Boyne river and Beaver river. At the Boyne headwaters location near Maxwell, 885 m of fencing was installed to protect a cold water spring and wetland from live-stock and a 458 m stretch of the Beaver River was fenced to keep livestock from degrading the rivers riparian zone and access to the river, additionally 2.5 acres were planted with trees to help stabilize banks and create habitat. Both of these projects were in partnership and funded by The W. Garfield Weston Foundation and also Grey Bruce ALUS.

THE W. GARFIELD WESTON
FOUNDATION

FORESTS
ONTARIO

ALUS
Canada
A Weston Family Initiative

THE BEAVER RIVER WATERSHED INITIATIVE IS LOOKING FOR MEMBERS
TO JOIN THE BRWI MANAGEMENT TEAM.
LET US KNOW IF YOU ARE INTERESTED - CONTACT: info@whatwaterwants.org



BEAVER
RIVER
WATERSHED
INITIATIVE

Don't forget the Annual General Meeting



BRWI is a subcommittee of the
Grey Sauble Conservation Authority