

Large Woody Debris (LWD) 2016

By Rachael Horn

As many people may have noticed over the past couple of summers while floating down Grass River there are many dead trees stationed alongside the riverbank. These stationed dead trees are known as large woody debris structures and have multiple purposes. The most well known purpose of LWD structures along riverbanks is to provide new habitat for many different species of plants and animals. LWD structures also help with the redistribution of sediment in a designated area of the riverbed. Wood plays a large role in river channel complexity and function. Many of the functions wood plays in the rivers are important for fish habitat. These include dissipation of flow energy, sorting of sediment, riverbank protection and stabilization, pool, riffle and gravel bar formation, cover and refuge for aquatic organisms, habitat diversity due to increased channel complexity, and redirection of flow.

Three Lakes Association along with the help of many volunteers have worked hard over the past couple of years to install these LWD structures. The main goal we are trying to reach by installing these structures along the banks of Grass River is to increase the depth of the channel. Currently the depth of the channel is quite shallow and is of concern to us in regards to the safety of boaters and aquatic life. Grass River is very well used by many boaters to travel along the chain of lakes and with the consistent use of boating along the river we are noticing many



Student Advisor Kyle Russell and Donn Stone moving a LWD structure down Grass River

motors dragging along the river bottom. By installing LWD structures in areas of the rivers of concern we are helping redistribute sediment to the riverbank and keeping it out of the middle of the channel. Also, increasing the channel depth will ensure the safety of aquatic life in the river by allowing boats to pass through without disrupting their habitat.

Over the summer I was involved with taking the depth measurements for 2 different sites in the river. Now that we have these measurements on record we will be able to compare them to future measurements that will be taken next spring

or early summer. We are hoping that the channel depth increases overtime in order to ensure the safe traveling of boaters through the river. We are also pleased to see that with the installation of many LWD sites that we are creating new habitat for not only animals such as fish and turtles, but also for aquatic plants. Many other environmental factors will be taken into consideration next year when further research will be conducted. The depth of the channel is undoubtedly the biggest concern we have at this point, but we also need to consider the

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Sneak peek

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The mission of the Association is to provide leadership to preserve, protect, and improve the environmental quality of the Elk River Chain of Lakes Watershed for all generations with emphasis on Lake Bellaire, Clam Lake, Torch Lake and their tributaries.





President's Message - Just add water

Just add water – and watch them bloom! That's what it is really like to see the young people in TLA's summer internship program. High school students at all levels of academic achievement; some already having a passion for the health and beauty of our lakes and streams; some just eager to discover the hidden and diverse organisms living in those waters, some just seeking a fun-filled adventure for the summer.

Just add water – it's all about the water! The program is different each summer. The primary focus this year was twofold: 1) the Large Woody Debris project to improve the health and navigability of Grass River, and 2) the use of benthic barriers to combat the growth of Eurasian Water Milfoil. A perennial favorite of each summer is the visit of Heather Hettinger, DNR fish biologist, who leads the team in fish shocking to learn which species of fish are thriving in our streams.

Just add water – outdoor summer fun! This summer's high school interns were: Donn Stone, John Sabins, and Hailey Casillas, who were assisted by former high school intern Kyle Russell, and our college intern Rachael Horn, in addition to the adult TLA volunteers – a big 'thank you' to each of you. What fun they had dragging the benthic barriers out into the water, stomping on them to get them placed on the benthos, then tossing sandbags onto them to keep them in place. Everybody got wet – what could be more fun! John was always the first one into the water and the last one out.

Just add water – and get school credit for it, too! Each of the high school interns makes a presentation of the summer program to the school board, is awarded a half-credit for environmental science, and receives a monetary stipend at the end of the season. Several of TLA's former interns have gone on into exciting environmental science careers.

Just add water – and watch them lead! Yes, these young people are the leaders of the future, the ones who will guide us through the next fifty years, the ones who will carry on with our mission "to provide leadership to preserve, protect, and improve the environmental quality of the Elk River Chain of Lakes Watershed for all generations with emphasis on Lake Bellaire, Clam Lake, Torch Lake and their tributaries."

Volunteers always welcome and needed in the internship program. If you would enjoy helping with this valuable program, be sure to contact us by phone (231-544-7221), or by email (info@3lakes.com); or visit our website (www.3lakes.com). There is room for you, no matter what your skill level is, as long as you care about our lakes and our youth – come on in – the water's fine!

Tina



John Sabins, Hailey Casillas and Donn Stone identifying aquatic plants in Alden Harbor



Fred Sittel,
Mark Stone
and interns
Hailey Casillas
and Donn
Stone taking
baseline
measurements
of Grass River

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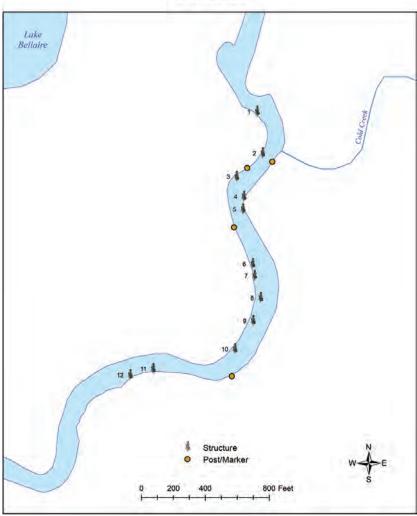
other factors that are involved with making changes to the structure and function of the river. Fish diversity, riverbank stability, and the flow of the water need to be addressed in our studies as well.

It is my goal to help improve the areas of Grass River we worked on this summer. I would also like to take a look at the river as a whole system to ensure that the structure and function of all areas are improving overtime with the addition of the LWD structures that we have already put into place. If other areas of the river need to be improved, we may need to look into placing LWD structures in those areas.



Measuring Grass River Depths.

Grass River Large Woody Debris



-Membership counts! -

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New Directors

Not shown but new to the TLA Board:

Mike Bertram - Custer Township



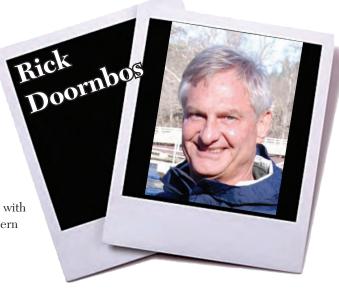
Bonnie Robbins

Born and raised in Mancelona. Married 40+ years to Patrick Robbins. Two children, both living and working in northern Michigan. Two grandchildren + numerous grand pets. I have worked in jobs ranging from store clerk to management and recently retired from Antrim County Habitat for Humanity. I have served on the Helena Township planning commission for about 16 years and I am currently a Trustee for the township.

Rick Doornbos

Retired in 2012 after 33 years of service at Dow Corning and Hemlock Semiconductor. Married to my wife Sandy for 37 years with three children and five grandchildren. Split time between our Torch Lake house and Midland, Michigan where our children/grandchildren live. Active member and volunteer at our church.

Interests include water sports, biking, music, traveling, and spending time with family. Joined the TLA board to help preserve environment quality of northern Michigan lakes for our grandchildren and future generations.



Steven Laurenz

Professional: Over 25 years of technical leadership experience in product development, process development, technology transfer, and process optimization.

Personal: Married for 34 years with three grown children. Activities and hobbies focus on getting outdoors to enjoy our wonderful natural environment. Enjoy hiking, backpacking, and biking.

Connection to three lakes. Chased my then girlfriend and now wife up to her family cottage on Torch Lake. Cottage was purchased by my wife's grandparents by trading an Oldsmobile car. Now experiencing its 5th generation of family visitors. Always been impressed of the area's natural beauty along with desiring to preserve it. Having retired wanted to also invest time helping to support 3lakes to preserve the area and am honored to be a board member to help advance that cause.





Mike & Phyllis Bertram Tom & Casey Clement Kris & Terry Finn Jill Parker Doug & Ann Parvin Pat & Bonnie Robbins RWB Creative, LLC

Looking for something this holiday season?

Three Lakes Association embroidered apparel is a great choice.

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We have teamed up with Modern Sportswear in Bellaire to provide top quality TLA merchandise.

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Become a Michigan Shoreland Steward to protect your lake!

Each year, as more and more lakefront properties are developed on our inland lakes, valuable shoreline habitat is lost, and water quality declines. If Michigan continues at its current rate and extent of shoreline development, the overall health of our inland lakes is in jeopardy. Luckily for our inland lakes (and us!), lakefront property owners can change this trend through the practice and implementation of lake-friendly landscaping and erosion control methods. The Michigan Natural Shoreline Partnership (MNSP) has developed the Michigan Shoreland Stewards Program to provide recognition to shoreland property owners for using best management practices to protect their lake.

The Michigan Shoreland Stewards Program is just one of the outreach and education efforts of the MNSP. It began to take shape in early 2015, when MNSP asked Tip of the Mitt Watershed Council, a member of MNSP, to help develop the program. Based in Northern Michigan, the organization was deemed well equipped to take on this role because of its strong connections with local lake associations in its Northern Michigan service area. Through regular meetings and in-depth discussions about what it takes to protect Michigan's inland lakes, our collaboration has led to what we believe will be a great resource for lakeshore residents, lake associations, and many others who care about our lakes.

Property owners and Lake Associations all over Northern Michigan have joined the program since its premier in April 2016.

Over 250 people have taken the next step in learning about how to find a balance between protecting the lake and managing their property.

High impact developments such as removing native plants on the land and in the water, excessive impervious surfaces (buildings, driveways, etc.) and seawalls are changing the lake ecosystem and disrupting natural habitats for wildlife and fish. According to the National Lakes Assessment forty percent (40%) of Michigan's inland lakes were rated as poor with another twenty percent (20%) rated as fair for lakeshore habitat.

The Michigan Shoreland Stewards
Program works to address this problem by
asking property owners how they manage
their properties to determine areas for
improvement and potentially qualify them for
a certificate of recognition. The property is
broken down into four main areas: the upland,
the buffer, the shoreline, and the lake.

Completion of the survey generates a certificate of recognition for three different levels: Gold, Silver, and Bronze. If a property does not yet meet the standards for one of these levels, a starter level will be indicated. Every property is different. Some properties will qualify right away, while others may need improvements before they qualify. Those who do not immediately qualify will be provided with suggestions for improvement. They are then encouraged to take the survey again once they have implemented changes to their practices. For lakefront property owners who

want to let their neighbors and passersby know they are proud Shoreland Stewards, there is an option to purchase a weatherproof sign that indicates the stewardship level and program logo.

Our many thanks to the lake associations who provided invaluable input and financial support: Three Lakes Association, Lake Charlevoix Association, Crystal Lake and Watershed Association, Elk-Skegemog Lakes Association, Glen Lake Association, Mullett Lake Area Preservation Society and Pickerel-Crooked Lakes Association. Additional funding for the website development was provided by Michigan Lake and Stream Associations, The Resource Institute of Michigan, the Michigan Department of Natural Resources, and the Michigan Department of Environmental Quality. Also assisting with the project are Huron Pines and Land Information Access Association.

If you own lakefront property and are interested in being recognized for your good management practices or you want to see how your property rates, the Michigan Shoreland Stewards Program is here for you! For more information on the Michigan Natural Shoreline Partnership, visit www.mishorelinepartnership.org. To take the Michigan Shoreland Stewardship Program survey visit www.mishorelandstewards.org.

Elijah Baker

Huron Pines AmeriCorps Member, Tip of the Mitt Watershed Council eli@watershedcouncil.org (231)347-1181









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Three Lakes Association P.O. Box 689 Bellaire, MI 49615 3lakes.com







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After 50 years, still swimming with the fish!

On August 11, 2016, over 100 folks gathered to celebrate our 50th Anniversary.

The program began with socializing in Bellaire Room at in the Lakeview Hotel at Shanty Creek Resorts - with outstanding views of Lake Bellaire. TLA President Tina Norris Fields offered the following:

"The people who started TLA would be delighted, I am sure, to see how far this organization has come in the last fifty years. Indeed, I believe they would be pleased, and probably more than a little surprised at what their initial passion has accomplished

through the hands of those who followed.

Tonight, let's celebrate the vision and determination of that small group of neighbors, whose example of dedication to a worthy mission has led us to this moment.

They understood the need to be vigilant, devoted, and faithful stewards of the precious waters that bless this region. They showed us the way. Now, it is our turn to point into the future and strive to show the way for the coming fifty years.

Let's raise a toast to the accomplishments of the past and the beckoning potential of

the future!"

Our speakers for the evening included Bill Weiss, known by many as Mr. TLA, our first executive director and Tom and Casey Clement. Bill shared fond memories and a few generally lesser known stories. Tom and Casey offered great ideas to help move us forward sharing additional strategies to spark the interest of the millennial generation.

Many thanks to our sponsors and donors for the celebration:

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