Citizen Scientists and the Stream Forecasting Project

The FoBR is energized and busy with the National Science Foundation grant project for crowd hydrology forecast modeling. The team installed and keeps water height gauges in place, makes sure wiring and batteries on the temperature gauges operate, and recently replaced batteries in three pressure transducers that measure water flow. Citizens are texting data to the supercomputer in New York state and the goal is 2,000 texts from five gauges by the end of this year.*

The transducers, added last summer, measure water flow and send data to the supercomputer every 15 minutes, 24/7, complimenting Citizen Scientists’ water height and temperature data to give an overall picture for a forecasting model.

The Saint Louis University survey team here in August was excited about the variety of fish species from their most recent surveys on the north and south branches. Results will be available soon.

Instructions and a gauge map are on our website boyneriver.org. Go to www.crowdhydrology.com for project information and data graphs, visit the Citizen Scientist display at the Water / Ways exhibit (p.3) to learn more, and Keep Texting!

*Readable from the river bank, gauges are located at the Boyne Mountain main entrance, Springbrook Road bridge, Dam Road access site, the first boardwalk at the Boyne River Nature Area, and Old City Park at the East St. Bridge.

Citizen Scientist Challenge

Show a photo while texting from three of the five gauges to the Boyne Area Chamber staff to earn a Citizen Scientist sticker.
Wed., Sept. 12, 7 pm
Mary Campbell & John Larch’s Appalachian Trail experience
The Appalachian Trail (AT) is a national scenic trail that traverses parts of 14 states as it winds its way over 2,190 miles from Georgia to Maine. Mary and John spent six months hiking the AT in its entirety. Having hiked through weather and terrain of all types, they will share their experiences, photos and amusing tales from this amazing adventure.

Wed., Oct. 10, 7 pm
How Fly Rods are Made & Fly Tying Demo
Brian “Koz” Kozminski has been plying trout from Michigan waters for over 30 years. A Boyne City resident, lifetime member of Trout Unlimited and ex officio for the Miller Van Winkle Chapter, he shares his passion for the resources by teaching locals the art of fly tying. Come early to see for yourself, then at 7p he’ll show us how a fly rod works, performance and why they break. www.truenorthtrout.com

Save the Date Events
Details will be shared via email, boyneriver.org and Boyne River Facebook as events near

Aug 11-Sep 23  Water / Ways exhibit at Raven Hill and throughout the community. See p. 3.

Sept 8  Water Ways  FoBR Membership Outing to Water / Ways Exhibit Water Festival.
The festival features area water organizations sharing their missions, including NOAA and Trout Unlimited. See a demonstration of NOAA’s (National Oceanic and Atmospheric Administration) weather model. Give fly casting a try. Learn more about northern Michigan’s wonderful water resources.

Meet 11:30 am, Boyne District Library parking lot, to car pool at noon. Entrance to the Water / Ways exhibit is free and because this is Raven Hill’s Free Second Saturday, there is no charge for the additional water features exhibits. Questions? Call 231-330-2923.

Sept 22  Stream monitoring. Join us 9 am-12 pm at to collect Boyne River aquatic insects. Date is weather contingent. Call to learn more 231-330-2923.

Dec 8  FoBR Christmas Party, 6 pm, Boyne City Hall. Details to come.

Jan 24  FoBR Board Directors work session to plan 2019 activities and events. Let us know your speaker ideas and thoughts on projects and events. Contact your board members, p. 5.

Lake Charlevoix Association is forming a small committee to create a program encouraging businesses around the lake to reduce or eliminate plastic usage. Contact Joe at jwkimmell@gmail.com if you would like to help. The first meeting of the group is targeted for October with plans to work over the winter.
**2018 Scholarship Winners**

FoBR’s 2018 *Marie Zoberski Scholarship* recipients were announced at the Aug. 8 annual membership meeting. We are pleased to award two $1,000 scholarships.

**Jordan Herman**, Boyne Falls Class of 2018 Valedictorian, will study at the University of Michigan to obtain a Bachelor of Science degree majoring in environmental sciences.

**Anna Harmeling**, Boyne City High School, will attend Stanford University to study international relations and earth system. She wants to intern or work with the Oceanic Preservation Society or Environmental Protection Agency, and from there, work in other countries to market and encourage ideas of environmental protection.

*Congratulations, Jordan and Anna!*

---

Leadership class at the June mill pond beetle release

The FoBR is pleased that the Boyne River was the recipient of *Galerucella calmariensis*, the purple loosestrife-eating beetle that helps control the invasive species. The **2018 Leadership Charlevoix County** class raised $5,000 to purchase the beetles for release at three Lake Charlevoix locations, including the Boyne River’s mill pond. Purple loosestrife, while beautiful, chokes out cattails and other wetlands native species, robbing wildlife of food and habitat.

---

**WATER WAYS**

**2018 Water / Ways Exhibit**

Aug. 11 – Sept. 23

10a-4p daily

Fuller Road, East Jordan

Raven Hill Discovery Center is hosting the National Smithsonian Museum on Main Street Water / Ways exhibit, featuring water-related programs at Raven Hill and throughout our communities. The exhibit in the Great Room is free. Water Connections Special Displays in the Main Museum and Grounds is $10. A jam-packed calendar of events includes workshops, art exhibits, displays, guest speakers, book talks, community events and more. Visit [www.MiRavenHill.org/waterways](http://www.MiRavenHill.org/waterways) or call 231-536-3369 for details.

*Only 3 Weeks Left!*
2018 Founders Award presented at August 8 Annual Meeting

Marie Sheets and Adam Kennedy presented the FoBR Founders Award, given for outstanding service to the organization, to Sheri Rhoads for her board organizational efforts, producing FoBR news bulletins, and being “administrative assistant” to the board president.
"You mean you float this in the dark?"
"Yes."
"Actually cast and catch fish without any lights?"
"Often, not all the time, but once you do, you will be forever changed....It is not the delicate soft presentation of a #16 Madame X, actually quite the opposite."

Client conversation that has happened on more than one occasion over the years floating some of our heavily wooded northern Michigan rivers. Yes it’s true, we do it in the dark, not entirely true, red or green headlamps are acceptable, and they don't blind the guide/client nor giveaway you presence to any suspecting trout. But what does it take to be a good 'Mouser'?

Like most fishing, time and patience are critical but on a totally different level. First, understanding your prey. These are large nocturnal predators, specifically built for hunting swimming tenderloins - whether they be in the form of amphibian, fish or mammal. Brown trout have been found feeding almost exclusively at night and are most active just before dawn. Next, patience. No really. A LOT of patience. Very few occasions has an angler actually hooked up on his/her very first actual mousing 'take'. Many big browns will swipe or slash at a mouse pattern. Your sense of sight is gone, heightened are all your other senses, hearing and feeling become your primary inputs. When you hear the subtle take from a twenty-inch something, it takes every ounce of restraint not to set the hook and pull the fly directly out of the trout’s mouth. Waiting, patience, feeling the weight of the fish on the other end of the line, connection. Now you have your hands full!

Be sure you are properly outfitted. Hire a guide and get to know your water.

Tight Lines, Koz

Notes from Brian “Koz” Kosminski, owner of truenorthtrout.com, Boyne City

Adam’s Boyne River Kayaking Journal: 08/18/18
Perfect Weather 79°

We took out at Gow’s home just west of the Mill Pond

Annual Boyne River Sweep Day

Ten of us did the river sweep today, including my brother, Alex, who drove up from Jenison, and three volunteers from the TC river group. Joe and Lorraine Manary, Gow Litzenburger and I paddled while Jo Bowman and Eric Hartlep picked up on river banks.

Water low, weather perfect! We collected 100 pounds of junk plus 30 pounds weathered construction wood, a bunch of bobbers and various sandals. I dove for a car tire, and with Gow’s help, we shook the mud off the mucky ol’ thing and wrestled it into the canoe.

So fun having my brother along. Cedar wax wings and a green heron gave a great show. This was a super river sweep.

Keep on Paddling, Adam Kennedy

2018-2019 FoBR Board of Directors
Welcome new board member, Jo Bowman!

Adam Kennedy, President 231-330-2923
Nancy Cunningham, Secretary 231-582-9373
Jo Bowman
Candy Greene

Marie Sheets, Vice President 231-675-3344
Bob Greene, Treasurer 231-582-2324
Mark Contrucci
Gow Litzenburger

Suzie Dickow
Sheri Rhoads

Mike Durbin
Michael Ryan

We are your volunteer Board of Directors. Do you have questions? Ideas? Want to volunteer? Please call.
The FoBR Board meets 4th Wednesdays, 6 pm, Boyne District Library, except holidays.
“boyneriver.org”

Learn about FoBR projects, activities, events, newsletters, links, information about the Boyne River and river wildlife, and more at the Friends of the Boyne River website.

Like us on Facebook!

A frequent Boyne River visitor, the Great Blue Heron

Boyne River Trivia

Boyne River’s green herons are shy and rarely seen. They hunt by wading in shallow water, but also dive for prey and swim back to shore with help from the webs between their middle and outer toes.

The Green Heron is one of the world’s few tool-using bird species. It creates fishing lures with insects, earthworms, twigs, feathers and other objects, dropping them on the surface of the water to entice small fish.

Carnivorous, they eat mainly fish and invertebrates.

The Boyne River Bulletin is produced twice a year. Email comments and suggestions to boyneriver.org. Sheri Rhoads, Editor.