

2015 -2016

Regular Coalition Meetings

October 22

January 28

April 28

At 10:00 AM

Greenbush Township Hall



Working Together to
Restore and Protect
Our Natural
Resources

2015 Projects Underway for Road/Stream Crossings Improvement Stream Bank Stabilization and Invasive Species Monitoring

Working in partnership with the Huron Pines conservation group and receiving funding from the Au Sable River Restoration grant, PRVEL has prioritized several areas within the watershed that will have a “facelift” this season.

At least two road stream crossings have been scheduled for restoration – one on the East branch of the Pine River at McConnell Road in Hawes Township and another on a tributary of the East branch at Trask Lake Road again in Hawes Township – with another selection possible at Grey Creek and Alvin Rd in Mikado Township.



*East Branch Tributary at Trask Lake Road
improvements completed in 2015*

In addition, the South branch will be the site for several bank stabilization efforts to decrease the amount of sediment entering the river. This work will be a continuation of previous projects completed on this section (near Buhl Road) and is in partnership with the

United States Forest Service (USFS), a long time supporter of PRVEL projects.

Invasive plant species are also being targeted for monitoring and removal, specifically on the 80 acre site indicated as an ecological reference area (ERA) by the Department of Natural Resources (DNR) as discussed in the related article on page 2. A team of volunteers have been to the site along the main branch of the Pine River, just north of where it enters Van Etten Lake, and plans are to make another field visit this season. Herbicides may be applied if needed, but most of the eradication has been by hand-pulling or digging. Again, this work is being supported through the work of Huron Pines, DNR, and Americorps volunteers.

Tentative plans are underway to possibly remove Buhl Dam on the south branch in Alcona County since it is no longer used for its original purpose and it is an obstacle to fish passage. Much research and planning have gone into studying this project. If the decision is made to proceed, then the dam removal work is expected to begin in 2016.



*Erosion site on the Pine River in need
of stabilization*

Van Etten Lake Floodplain Ecological Reference Area (ERA)

Invasive Species Update

By Doug Jager

Invasive plants along the Pine River affect the ecological well being of the river and Van Etten Lake. Left alone they will have a detrimental effect to the native plants. They support the wildlife in the area and provide biodiversity within that ecosystem.

Last summer (2014), PRVEL began a new project on an 80 acre parcel of DNR land that was designated as an ERA on the south end of the Pine River just before it enters Van Etten Lake. The DNR requested that volunteers survey the area and remove any invasive plants that were found or report the GPS locations of plants that required the use of herbicides.

Armed with information provided by the DNR and Huron Pines (a non-profit conservation organization), PRVEL volunteers made several trips up the Pine River into the area. They walked along the river banks and inland through some dense foliage, over and under fallen trees. Anyone that enjoys the natural beauty of this place many of us call home would be in awe of this land. Some of the pictures they took can be found on the PRVEL Face Book page at facebook.com/pineriverwatershed. They were very successful in getting to a majority of the locations, but were unable to gain access to some locations because they had become deep marsh areas due to the heavy rains that occurred last spring and summer. They were able to remove thousands of inva-

sive plants such as mullein, sweet clover, spotted knapweed to name a few.

This summer the PRVEL team will be back at it again but we would like to get more VOLUNTEERS to help us with this endeavor. We only have a small window of time during the months of May to August. We would like to plan an event day if we have enough volunteers and have fun with this project.

Please contact Doug Jager if you are interested in joining PRVEL this summer at: dj62852@charter.net



Invasive crew in training at Ken Ratliff Park

WE WANT YOU!



Trying to keep abreast of any changes and/or problems within the watershed is a task that requires more than one or two people. The **River Keepers** program has been instituted to allow PRVEL a better chance to do just that and be pro-active in our efforts to restore and protect the land and water within our area, counting on the information provided by the volunteers. Thank you to all 17 of our current volunteers – your efforts are greatly appreciated and essential to keeping abreast of conditions within the watershed.

Please consider being a River Keeper and contact Carole Plunkey at caroleplunkey@charter.net or call 739-8717 for more details.

Stream Temperature Monitoring Summary for 2014

(in cooperation with Michigan DNR, Tim Cwalinski)

As reported in our last newsletter, the PRVEL board strongly supports the efforts of the DNR Fisheries Division to continue its long term monitoring program in the Pine River to assess stream temperatures by collecting data from temperature loggers.

This information helps to determine the suitability of the river for a variety of fish (e. g. brown trout) and other aquatic species. If problems are noted or negative trends are seen, it then becomes possi-



ble to take appropriate measures before there is damage to the ecosystem.

To assist in this endeavor, PRVEL applied for a grant (see Norcross Grant article) in order to purchase several temp loggers and we were hoping to place these in the streams this season. Unfortunately, the order had to wait until grant approval was received and this ended up being too late to be of benefit for this season. With the help of DNR fisheries biologist, Tim Cwalinski, they will be utilized next Spring.

Please consider attending the **11th Annual MiCorps Conference and Training**

November 4-5, 2015 at the Kettunen Center, Tustin, Michigan

MiCorps hosts an annual conference each fall to report on volunteer monitoring activity in the state. Training is provided at the conference for interested volunteer coordinators. The conference provides an excellent opportunity to stay up to date on monitoring methods and to meet and interact with other volunteer monitors.

Visit the www.micorps.net web page for details and to view the conference agenda.

Watershed Wildlife Watch **Badger**

This muscular, brownish gray, long haired member of the weasel family is found mainly in meadows or hay fields. Its black face is bisected by a narrow, white stripe extending to the tip of its pointed black nose. They may reach 2.5 ft. in length and may weigh up to 30 pounds. Although fairly common in Michigan, they are not often seen, so feel lucky if you spot one.

Hunting primarily at night, they eat prey such as mice, voles, chipmunks, snakes, eggs, or ground nesting birds. Some kills may be buried for later consumption.

When challenged or frightened, they release a musk, skunk-like scent and will attack with their long, curved, sharp toe nails if cornered.

They are adept at burrowing, using their claws and teeth to dig themselves into the ground in just a few minutes. They live in dens up to 60 ft long and sometimes use the dens of other animals.



PRVEL Applies for Grant to Fund Program Materials

PRVEL received notification in June that our request for funding from the Norcross Wildlife Foundation had been approved in the amount of \$1,800. These monies will be used to help PRVEL cover specific costs related to water temperature monitoring – namely, twelve temperature loggers – to better assess the quality of the Pine River fish-



Norcross Wildlife Foundation

ery (see article on Stream Temperature Monitoring on page 3).

Although the amount of funding granted was less than requested, equipment will still be purchased, just in smaller quantities and will be of benefit for years to come.

WOODY DEBRIS MANAGEMENT

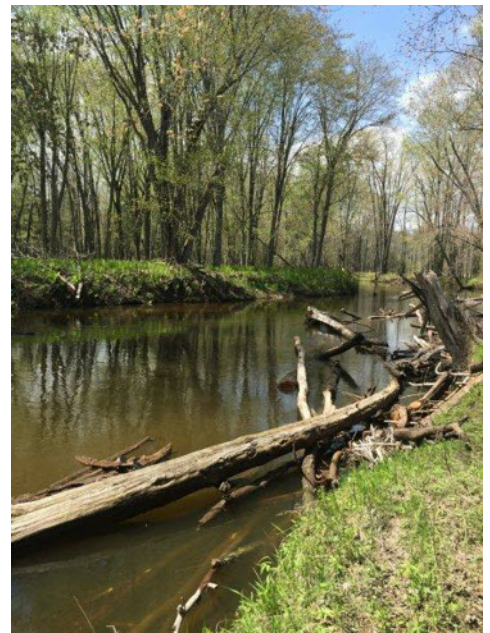
It is well known that the Pine River was used extensively in the logging era for floating logs down the river to eventually end up for transport by barges on Lake Huron. The land suffered the effects of this logging practice and over time, the river banks have been eroded and older or damaged timber has fallen into the water. In addition, dead ash trees, victims of the borer infestation, have begun to fall. Every Spring, after snow melt and seasonal rains, the downed logs are pushed and shoved as the current dictates, to create barriers to clear passage along many parts of the river.

In an effort to create at least a small section of river for the benefit of people wishing to canoe or kayak, PRVEL and the Van Etten Lake Association have partnered to have the log jams cleared for passage on the main branch of the river, between the lake and Kings Corner Rd. Woody debris is either moved to side of the river or dead branches cut to allow safe passage.

Woody debris is often an asset to a river system, as it helps to hold back sediment, creates a natural habitat structure for a healthy fishery, serves as a buffer to prevent soil erosion, and provides habitat for aquatic wildlife. Our goal is not to remove all logs from the streams, but to manage them wisely.



Before clearing



After Clearing

Pine River Clearing Project for Canoe and Kayak Travel

**PLAGUED BY PLASTICS:
Microbeads in the Great Lakes**
by Jennifer McKay, Policy Specialist TOMWC

Sometimes it is the small things that can have the biggest impact. Unfortunately for the Great Lakes, a big impact is coming from a barely visible threat - microbeads. Microbeads are tiny particles of plastic used in hundreds of cosmetics and personal care products such as facial scrubs, soaps, and toothpaste. These microbeads, typically used as abrasives and exfoliates, are flowing by the billions into the Great Lakes and other waterways. When you wash your face or brush your teeth, you may be unknowingly discharging these tiny pieces of plastic into our Northern Michigan waterways.

Microbeads, while extremely small, are used in large quantities. One product alone can contain over 300,000 microbeads. A 200 ml bottle can contain as much as 21 grams of microplastics, roughly a tenth of its weight. Because of their small size and buoyancy, wastewater treatment plants are not able to filter them out, and they are discharged directly into our rivers and lakes. Once discharged, there are no known methods to effectively remove these microplastics or microbeads from the environment.

Beginning in 2012, a research team that included scientists from the State University of New York (SUNY) at Fredonia and The 5 Gyres Institute began sampling the Great Lakes to better understand plastic pollution in our most treasured resource. The research results are alarming. Lake Michigan had an average of 17,000 microbeads per square kilometer. The levels were much lower in Lake Huron and Lake Superior, but much higher in Lake Erie and Lake Ontario. Lake Ontario's levels are highest, with counts of up to 1.1 million plastic particles per square kilometer!

Why are these tiny microbeads a big problem for the lakes? The microbeads have the potential to cause harm to Great Lakes aquatic species. The microbeads are about the same size as many fish eggs, which means that they can look like food. Fish, turtles, and waterfowl are unable to distinguish between food and microbeads and, therefore, feed on microbead plastics. If fish or birds eat the inert beads, the material can block their digestive systems depriving them of nutrients from real food. Researchers are already finding these tiny plastics in the stomach of some Great Lakes fish species, such as perch.

WARNING!

SOME BEAUTY PRODUCTS MAY CONTAIN TINY PARTICLES OF PLASTIC, ALSO CALLED MICROBEADS, THAT ARE POTENTIALLY HARMFUL TO AQUATIC SPECIES IN THE GREAT LAKES

Additionally, the microbeads are not biodegradable and the petroleum in the plastic serves as a magnet for other pollutants in the environment like DDT, PCBs, flame-retardants, and other industrial chemicals. Because microbeads easily attract and absorb toxins, the beads are potentially toxic to any wildlife that eats them. The toxins from the beads can also accumulate in fish and wildlife, potentially reaching humans who eat wildlife around the Great Lakes region.

The only way to stop the threat from micro plastics is to prevent them from entering the ecosystem in the first place. This means we need to stop the use of the plastic microbeads in consumer products. Since plastic microbeads are not an essential ingredient in personal care products, this can be achieved voluntarily by companies choosing to replace plastic abrasives with alternatives or through a law prohibiting the sale of products containing microbeads. Your actions can help both of these become a reality.

How can you help? First, avoid personal care products that contain microbeads by checking the

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Macro Invertebrate Sampling Results Indicate Continuing Improvement by Arnie Leriche, Macro-Invertebrate Team Leader

The macro invertebrate (macro) sampling has been indicating a slow but steady improvement in the quantity and quality of macro's in most of our 5 sampling sites. Our sites are showing rankings more often as Good or Excellent. Although we cannot say for sure, we remain hopeful that we may be seeing some benefits from the completed projects in the Pine River Watershed. These projects include: (1) river embankment erosion control projects; (2) road crossing sediment control projects; and (3) farm nutrient erosion control education and practices, etc.

Also, our program of inviting our local school students into our macro sampling program has continued to grow over the past 4 years with very rewarding successes and benefits to both our program and those of our Oscoda Area School District. Oscoda High and Middle School science teacher Mike Berenkowski says: "Oscoda students are stepping outside of the classroom to gain first-hand experience and knowledge through partnerships with community members." In May, six Oscoda students showcased their commitment to community resources by working alongside members of the [Pine River Van Etten Lake Coalition](#) (PRVEL) to monitor the river quality and fish habitat of the Pine River watershed. Mike continued to say: "This opportunity not only provides a link between Oscoda students and community members, but also an opportunity for them to become actively involved with their community through stewardship of our local natural resources." Please visit our PRVEL Facebook page at

www.facebook.com/PineRiverWatershed

to see our student residents at work in the watershed.

The sampling program called MiCorps is designed to measure the relative health of the fish habitat of the streams. This all volunteer program was established by the MI Department of Environmental Quality (DEQ) back in 1985. Dr. Paul Steen (MiCorps Program Manager) states the "... mission of MiCorps is to network and expand volunteer water quality monitoring organizations statewide for the purpose of collecting, sharing and using reliable data; educate and inform the public about water quality issues; and foster water resources stewardship to facilitate the preservation and protection of Michigan's water resources." For more information go to their website at:

www.MiCorps.net

The volunteer students were able to experience data collection training through a set of standards for comparative bi-yearly data. The water quality study involves sampling macro-invertebrates (visible bugs) for diversity of specie and population numbers.



Foreground: Sydney Lopez (7th grader) and Doug Jager (PRVEL) collect macro invertebrate insects from sampling net in Pine River. Background samplers are Andrew Lentz (Junior at OHS) and Arnie Leriche (PRVEL macro sampling team leader).

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Macro Sampling - Continued from page 6

After the river sampling crews collect the insects, the shoreline crew takes over and meticulously separates the insect from the 20 gallons of water, rocks, leaves and tree limbs. The insects, crayfish, and water bugs range in size from 1-2 inches to as small as a dot/period at the end of this sentence requiring tweezers or even small pipettes to suck them up.



Young, sharp eyesight really helps.

R to L: Amber Ortiz (11th), Hunter Gayeski (10th), Juan Compián (10th) and Dan Stock (PRVEL).

Based on the diversity, population numbers, and sensitivity to pollution, a water quality/fish habitat index can be calculated for each stretch of the Pine River sampled, i.e., Poor, Fair, Good, Excellent.

Oscoda School student sampling with PRVEL has been going on for over 5 years and provides a real opportunity for students to have a positive impact on their community through monitoring the water quality and wildlife habitat of the Pine River watershed. The students give PRVEL an important reminder about the environment and why we must be good stewards of it for the benefit and use by our youth and generations to come.

Please volunteer and join us and the Oscoda Area students for our upcoming macro-invertebrate sampling program this coming Fall. The dates of our Fall 2015 sampling are:

- Wed. (9/30), 8:45a-12:30p
- Sat. (10/3), 8:45a-12:30p
- Please check our PRVEL Facebook page and volunteer by "Joining" our 'event' post or by emailing or calling Arnie Leriche at aleriche526@gmail.com or (989) 255-0698.

Microbeads - continued from page 5

product ingredient list for "polyethylene" or "polypropylene" microbeads. Instead, look for products that are using alternatives such as ground almonds, oatmeal, sea salt, and pumice.

The 5 Gyres Institute created a free app, Beat the Microbead, which can scan a product's bar code and tell if it contains the beads. You can download the app at www.beatthemicrobead.org. If you currently have any products containing microbeads, stop using them and properly dispose of them at any local PO D Drop-off location. Drop-off locations throughout northern Michigan can be found at www.pillsinthepods.com

Next, support a ban on microplastics and microbeads in consumer products. Bills have been introduced in the Michigan legislature. Public support is critical to get a ban on microbeads in Michigan. Contact your elected officials today and tell them you want the Great Lakes protected from these tiny plastics that are plaguing our waters.

While the small microbeads are causing a big problem for our Great Lakes, small actions from you can make a big difference in stopping this plastic pollution. With your help, we can protect our precious, yet vulnerable, Great Lakes from the threat of microbeads.

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PRVEL Coalition Board

Chair - Carole Plunkey	caroleplunkey@charter.net
Recorder - Susan Malski	smallard3@yahoo.com
Treasurer - Dan Stock	dstock4239@charter.net
Scott Lingo	scott@targetrealestate.com
Arnie Leriche	aleriche526@gmail.com
Sheila Phillips	srplincn@juno.com

Non-Voting Advisors

US Forest Service	Huron Pines RC&D
USDA-NRCS	DNR/Fisheries
US Fish & Wildlife	DEQ/Water Quality

Spread the Word!!

In an effort to make our organization more recognized in the area and beyond, the board has taken the following actions:

1. created a Facebook page  at www.facebook.com/pineriverwatershed
2. joined the Chamber of Commerce in both Iosco and Alcona counties
3. updated our PRVEL brochure for use in fundraising
4. Updated our power-point presentation for ongoing community education

5. Applied for and received a 501 c3 exemption from federal taxes so that donations may be deducted and grants can be applied for.

We ask all of you to help us in this push to become a more visible entity within the two counties we watch over and let other people know who we are and what we're trying to accomplish through your own contacts. As always, we welcome any feedback on how we can improve our outreach and need your support to keep the momentum going.

Yes! I wish to support the water resource improvement efforts in the Pine River Van Etten Lake Watershed with my tax deductible contribution.

Please make your check payable to PRVEL Watershed Coalition and send to:

**PRVEL Watershed Coalition
PO Box 680
Oscoda, MI 48750**

Name _____

Street _____

City _____

State/Zip _____

Phone _____

E-mail _____