

LITTLE RIVER NEWS

FALL/WINTER 2014

***MAY PEACE BE WITH YOU AND YOUR LOVED ONES
THROUGHOUT THE HOLIDAYS AND THE COMING YEAR***

COMPLETED SURVEYS TO HELP IN DEVELOPING LONG RANGE PLAN

In 2014 LMWCC completed two important surveys that will enable the Council to generate a comprehensive, long-range vision for our continuing stewardship of the resource. Nate Winkler of Conservation Resource Alliance paddled the river from King's Highway to the weir documenting erosion sites with photographs and GPS co-ordinates. He then identified each according to the severity of its bank failure and rated all according to their need for remediation. As we know bank erosion is one of the leading causes of the sedimentation of the streambed, and having an inventory of those sites will allow us to prioritize our efforts in minimizing sand deposits into the river.

Also in 2014 Kristen Thomas, an Aquatic Ecologist with Michigan Trout Unlimited and a team of interns conducted a fish habitat survey of the length of the river focusing on the amount of woody debris and other

fish cover in the stream. Following the completion of that phase of their survey, they did a fish population count in two distinct sections of the river — one at Old Grade Campground and the other at the site of the CRA channel restoration project located above 9 Mile Bridge. The latter location was chosen in order to determine the effects of that project in subsequent yearly population samplings.

The data accumulated in these two surveys provides us with invaluable information for developing a strategy on how best to preserve and protect the rivershed, its habitat, and its fish. With this baseline we can evaluate accurately and systematically the effectiveness of our efforts, enabling us to know where and what needs to be done to ensure quality experiences for all on the river we cherish.

Results of the two surveys will be available for the 2015 Spring/Summer newsletter.

PRESIDENTIAL MUSINGS — A YEAR'S END MESSAGE FROM TIM PHILLIPS

Well, here we are again at the end of another summer season of fun, that is if you don't count the first half being cold and rainy. 2014 has been a turning point for the LMWCC as we have completed surveys that will allow the Board to identify and select locations where we can make needed improvements to our river. We have monies available coupled with various grants that have us positioned to be able to make some serious impacts on the future health on our already great river.

One of the biggest undertakings was the completion of the Bank Erosion Survey by Conservation Resource Alliance (CRA) from Kings Highway to the weir. That provides locations of eroding banks identified from severe to moderate to minor as well as sites where the river is in need of improved flow rates to facilitate sand and sediment diminishment in the river. An Aquatic Habitat Mapping survey completed by Trout Unlimited biologists also ran from Kings to the weir. This survey will identify areas of the river where additional fish cover (habitat improvement) would benefit the overall health of the

river; and, similarly has prioritized these sites. T.U. also completed a fish population sampling at Old Grade Campground and at the site of the CRA channel restoration project being funded by a \$65,000 grant received from the National Fish and Wildlife Service (NFWS). The purpose for the latter sample is to determine the effects of the CRA project in samplings to be taken 1, 3, & 5 years after completion of the work. The site, on privately owned land on the north bank and National Forest Service (NFS) on the south, was selected from the CRA survey in conjunction with a group supporting CRA, Inter-Fleuve LLC, out of WI. The project will install large woody debris at various locations within approximately ½ mile of river that is broad with fairly shallow, slower water lacking structure. This is a newer technology (see the 2014 Spring/Summer newsletter for a more detailed description of the project) being applied for the first time in our state; however it has been applied with great success in other Midwest states. The goal is to narrow and deepen

(Continued page #3)



President Tim Phillips (left) and Vice President Jim Squier participate in the TU fish population survey in August

the river channel helping to move sediment, increase dissolved oxygen content, and lower water temperatures while providing much needed quality fish cover.

In the past several years, the Board of Trustees has primarily provided LMWCC funding for in-stream improvements to locations accessible to all the public, i.e. NFS or DNR river access sites. Prior to that (1998-2004), we completed bank erosion mitigation at various sites on both public and privately held lands. We are intending to use our new surveys to again provide improvements where they are most needed in order to accomplish the most good for the river irrespective of whether they are in areas accessible to all of us or not.

Some of the Board's other actions this year have resulted in removal of a beaver dam in the lower section of Syers Creek which was inhibiting normal flow and increasing water temperatures in

that most important tributary. Problems at the headwater of the creek were discovered at that time: namely a berm dam, located on totally private land, that is so constricted that virtually no water is flowing for approximately 1/3rd of the first section of the creek. The board was made aware of the situation and is working with MDEQ in identifying the seriousness of the problem, and along with CRA and the landowner, we are pursuing removal of said dam. Dam removal (large or small) is a very costly process; however, through application for grant monies available in the MI Aquatic Habitat Grant program we hope to be able to facilitate just such an action.

In July the DNR did a lampricide treatment of the river from M-37 downstream to the lake. These treatments normally occur every three years, but can be more frequent if DNR sampling indicates the need. Finally, we

(See "Musings on page #10)

Macro Invertebrate Survey Results

One aspect of the Council's work is to monitor the health of the river. An annual **macro invertebrate** study as well as a water quality study are part of our on-going commitment to this process. Below are the results of the macro invertebrate samplings from the last eight years. This is the information Joyce Durdell presented at the annual meeting in July.

On the following page find the **water quality survey** results.

COLLECTION SITES:	YEAR >	2007	2008	2009	2010	2011	2012	2013	2014	AVERAGE
	Day >	5/6	5/23	5/5	5/13	5/7	5/11	5/16	5/31	2007-2014
Below Queen's Highway		45	35	37	36	27	36	42	36	37
Old Grade Campground		49		35		35	56	54	42	46
Johnson Bridge		20	31	32	37		33	45	59	33
Dewitt's Bridge		24	35	28	30	36	34	43	50	33
Poggensee Bridge			33		28	51	23	36	22	34
Cool Creek		47	23	32			48	22	35	34
Bear Track Campground		25	18	23	28	27	38	46	43	29
9 Mile Bridge (south)		35	5	36	39	46	26	43	42	33
Bowman's (Cross Hole)		45	25	31	26	47	32	28	39	33
AVERAGE/YEAR/SITE>		36	25	32	32	38	35	40	41	35

RATINGS: > 48 EXCELLENT 34 – 47 GOOD 19 – 33 FAIR <19 FAIR



In addition to our macro invertebrate survey, the TU study has documented numbers of bait fish present as well as larger species such as salmonids.

Water Quality Survey Results July 10, 2014

		AMMO					
	COLLECTION SITE	E. COLI	pH	NIA	NITRATE	PHOSPHATES	DISSOLVED O2
1	L.M. Below Luther Dam	59.1	7.6	<0.05	<1	0.03	9.8
2	L.M. above Fairbanks Creek	195.6	7.6	<0.05	<1	0.023	9.9
3	Fairbanks Creek below Old M-63						
4	L.M above Twin Creek						
5	Twin Creek						
6	L.M. above Syers Creek	65	7.6	<0.05	<1	0.017	9.8
7	Syers Creek						
8	L.M. @ Spencer Bridge	122.3	7.7	<0.05	<1	0.048	9.6
9	L.M. @ Johnson Bridge	90.8	7.6	<0.05	<1	0.218	9.5
10	L.M. @ Dewitt's Bridge	77.6	7.7	<0.05	<1	0.018	9.6
11	L.M. @ Poggensee Bridge	81.3	7.6	<0.05	<1	0.03	9.4
12	L.M. above Cool Creek	72.7	7.7	<0.05	<1	0.026	9.2
13	Cool Creek @ 18 Mile Bridge	59.1	7.6	<0.05	<1	0.087	9.6
14	Cool Creek above Stronach Creek						
15	Stronach Creek above Cool Creek						
16	Cool Creek @ Cool Lake						
17	Cool Creek @ 12 Mile						
18	Cool Creek @ Hamilton Rd.	60.2	7.6	<0.05	<1	0.05	9.2
19	L.M. @ 9 Mile Bridge	57.3	7.7	<0.05	<1	0.076	9.4
20	L.M. @ 6 Mile Bridge	38.4	7.8	<0.05	<1	0.056	9.6
21	L.M. @ DNR Weir	28.2	7.8	<0.05	<1	0.122	9.6
22	L.M. @ Stronach Rd.	34.1	7.8	<0.05	<1	0.062	9.5

pH — a pH reading of 7 is neutral; anything higher is slightly alkaline, lower acidic

A minimum 4 ppm of dissolved oxygen is necessary for a viable aquatic ecosystem

E. coli — elevates water temperatures as oxygen is depleted to break down the various compounds; increases growth of aquatic plants adversely affecting the ecosystem

ANNUAL MEETING — JULY 12, 2014



Trout Unlimited interns, Hailey Yondo (left) and Emily Galassini present details of their habitat study conducted in July.

President, Tim Phillips discusses the state of the Council.



A display of photos depicting some of the Council's projects and their results.



Some of the members in attendance at the annual meeting in July



More from the 2014 Annual Meeting**2013/2014 ANNUAL MEETING
SALES AND EXPENSES**

<u>Sales</u>	<u>2013</u>	<u>2014</u>
Apparel Sales	\$300	\$295
Bucket Raffle	\$627	\$740
Large Raffle	\$3,446	\$3,630
Silent Auction	<u>\$512</u>	<u>\$180</u>
	\$4,885	\$4,845
 <u>Expenses</u>		
Kayak		\$500
Annual Meeting	<u>\$1,073</u>	<u>\$474</u>
 <u>Profit</u>	 \$3,812	 \$3,871

Raffle Winners:

3rd Prize: Guided fishing trip with Schmidt outfitters — Pat Lottier

2nd Prize: Kayak and accessories — Dick Ploeg

1st Prize: Hand-crafted cedar strip canoe — Alan and Diane Gregory

The Council would like to thank the following for their donations to the raffle, bucket raffle, and silent auction:

John Baker	O'Keefe's Reef
Schmidt Outfitters	Wolverine Worldwide
Gene and Lynn Means	Janette Klaiss
John and Nellie VanHaafen	Larry DeRossett
Wayne Anderson	DeLong's
Dublin General Store	Jay Jorgensen
Jim and Sylvie Squier	Dave Gendler
The MacDonald's	David and Gayle Spruance

And as always a BIG THANK YOU to the members of the Indian Club for providing lunch!

Data from the Weir since 2010

YEAR	SPRING STEELHEAD	CHINOOK	COHO	FALL STEELHEAD	FALL BROWN TROUT
2010	1,961	5,776	203	91	32
2011	3,196	14,124	1,815	901	40
2012	4,818	12,327	1,333	283	103
2013	3,667	6,427	1,021	988	80
2014	2,767	2,781	760	392	79
Total since 1968	228,986	813,929	672,151	91,345	3,640
Average since 1968	4,872	17,318	14,301	1,944	77

The **Chinook** salmon numbers are the lowest in history dating back to 1968 when the weir was put into place. The **spring steelhead** numbers the lowest since 2010, and only four years since 1968 had lower numbers than 2010. The numbers of **Coho** salmon have fluctuated more widely over the years, but this year's numbers fall well below the historic averages. But it is noteworthy that in 1993, 18,096 Coho were passed through the weir; since then never more than 2,500 and that once in 1996. The **fall steelhead** numbers since 2010 are far below the historic high of 7,622 recorded in 1971. *The Little River News* will contact the MDNR for more information for the Spring/Summer newsletter.

A statement from the DNR about the operations of the weir:

Our Chinook salmon target has ranged between 5 and 7 million eggs in the last few years. Chinook salmon have been averaging about 4,000 eggs/female over the last few years, so that would be roughly 1,250 pairs that we spawned to get our eggs.

For steelhead, the target is usually right around 4 million eggs. The steelhead in recent years have averaged about 4200 eggs/female, so we're spawning between 900 and 1000 pairs to get enough eggs.

Council News and News from Around the Great Lakes

Salmon-in-the-Classroom



One of the two new tanks donated by Lyle Hansen to KND for our Salmon in the Classroom program which has been extended into the high school.

New Membership Chairperson

At the annual meeting in July Council member Dale Downes volunteered to join the Board of Trustees. He subsequently agreed to coordinate all membership related matters. We thank Dale for his commitment and welcome him to the Board.



LMWCC member Jim Squier and his grand-daughter (right) join the TU crew and Nate Winkler of CRA in the fish population survey in August.

Fish Habitat Project

Matching funds donated by the Little Manistee Land Owners Association and using data from the recently completed CRA erosion survey, the Council has identified two sites below the weir for fish habitat improvement work. The LMLOA gave \$1750 to the Council, and the Board agreed to supplement that with an additional \$5000.

The project will entail construction and placement of two structures, one on the north side of the river and one on the south bank.

Remembering by Howard Roberts

I remember days when I could sit on the bank of the Little Manistee and watch fish feeding all over on a small "Mayfly." (I'm sure others have a name for it). We always referred to it as "the 2 o'clock hatch," because each warm day in the spring and summer this hatch would appear around 2 o'clock - mid-day. We could always depend on three hatches: 10 A.M., 2 P.M., and finally the evening hatch which would always bring out the larger fish. I remember those days well. They were in the 1930's. In those days the river was clear and cold, log jams were everywhere, the gravel runs were clean, and the fishing was great!

A lot of work was done on the river in those days by the Civilian Conservation Corps, known as the CCC. This group was established in 1933, and a large camp was located on M-37 just south of the Little Manistee River. They worked on projects such as forest conservation, flood control, stream improvement, drainage control, etc. Later, other conservation groups organized and worked to make the Little Manistee River one of the best trout streams in the country.

I'm sorry to say this is no longer true. Things like the weir, located below 6 Mile Bridge, lampricide treatments (which have had a great deal to do with the disappearance of our hatches), bank erosion, sand-filled gravel runs, widening of the river, and the lack of control to prevent erosion all contributed

to the problems that we are facing today on the Little Manistee River. We all know fish cannot survive where there isn't enough food or good cover. With the work of the Little Manistee Watershed Conservation Council and the cooperation of the riverbank property owners and river users, we can once again enjoy the bounty this river once provided.

The above article is re-printed from the Winter 1996 issue of the ***LITTLE RIVER NEWS***, the first issue for the fledgling organization. Howard Roberts was a founding member of the organization and served as a trustee from the beginning until his passing on Christmas Day 2003. The **Howard Roberts Memorial Fund** was established in 2004.

We remain in Howard's debt for his commitment to the river he dearly loved.

(Musings continued from page#3)

have selected two sites below the weir for fish cover construction with monies donated to the council from The Little Manistee Land Owners Association. The council elected to match that gift to maximize improvement to the river. These are located on DNR property and will be appropriately identified as LMWCC funded projects. This nicely blends in with the major renovations being done at the weir and will publicize our organization's involvement on the river.

I am excited by all we are doing together to make positive differences to our river.

YOUR TRUSTEES**2014**

Tim Phillips	President
Jim Squier	Vice President
Dan Sernick	Treasurer
Evelyn Furman	Secretary
Dale Downes	Membership
Joyce Durdell	Water Quality
David Spruance	Newsletter
Joe Rogers	SWAT
Armas Soorus	Marketing
John Gorys	Emeritus
Kaye McDonald	Emeritus
Gordon Lewis	Emeritus

OTHER NON-TRUSTEE CO-ORDINATORS

Anna Jo Rogers	Web Site
Gene Means	Grant Writing

As Gene is cutting back his commitment to LMWCC, we are looking for someone with grant writing experience to help in our efforts to secure funds for our on-going efforts.

Membership renewal forms will be sent out before year's end. Please take a moment to renew your annual membership and consider adding to your dues with a contribution. Remember the monies donated to the **Howard Roberts Memorial Fund** are used solely for in-stream improvements and habitat enhancement. Please see the previous page for an article Howard wrote for inaugural issue of the *Little River News* in 1996. Also please consider what you can do for the Council in non-monetary ways. We always need volunteers to assist with our on-going work: Water Quality and Macro Invertebrate surveys, in-stream work projects, and solicitation of donations for the annual meeting.

OUR MISSION

Is to bring together persons and organizations who have an interest in the resource conservation and restoration of the Little Manistee River and its watershed. Our goals are to restore, protect, and preserve the natural character of the watershed by communicating resource problems and then offering and implementing problem resolution. We are a state chartered non-profit, tax-exempt organization. All contributions are tax deductible under §501(c)(3) of the IRS code. Our business is conducted by a council of trustees elected by the membership. All positions are voluntary, non-compensated.