

# MONITORING REPORT

June 7, 1999

Dear Fellow River-Protectors,

We had an excellent River RoundUp this spring. Eighty people participated in the two events (collection and I D Day) and they managed to sample 30 study sites! (Some teams decided to go to a third site this year.) It looks like people have become more skillful at collecting a sample of the population. Most collections included fewer than 130 creatures with good diversity (or at least normal for the site). We added a new site in Sylvan Township, a little south of Chelsea, our first on the huge south fork of Mill Creek. One of the new participants there gave us a nice "article" in the Chelsea paper by writing a letter to the Editors, describing what we are doing.

Our most alarming discovery was in Letts Creek in Chelsea. Once again, the creek had very little life in it. But, unlike our similar collection just two years ago, there was no evidence of an oil spill. The DEQ did not know of any new problems there. We do not know what caused this and would like to explore upstream to see if we can locate the source. (Please let me know if you would like to participate in such a study.)

The results might indicate a general improvement of the river, especially in Chilson, Davis, and Hay Creeks. Quite a few of the sites had an increase in both diversity and EPT compared to our recent spring collection. Davis Creek at Silver Lake Road was "Site of the Day", having the greatest diversity and the most sensitive families. Other sites that increased included Chilson Creek at both Brighton Road and Chilson Road, Davis at Pontiac Trail, and Hay Creek. Most of the comparisons are with last year, which also showed a general increase over the previous year (which had been a collection of somewhat lower diversity). However, we are concerned about the decrease in sensitive families over the past couple of years in the Huron at White Lake Road, that may be an effect of road construction there. We hope to sample upstream of the road soon. Unfortunately, there were fewer sensitive families found in the river at Zeeb Road as well.

While it may look like conditions in the river are getting better, we must wait a few months to draw that conclusion. Mike Wiley is beginning a rigorous statistical analysis all of our past seven years of data (made possible by Edward and Marilyn Couture, who proofread all the data entries since 1992). We will produce a report of Mike's conclusions. Please let me know about any particular questions that you would like answered while he is analyzing the data.

The analysis would be better if we had temperature data for all of our study sites. If you can help us collect this information, it would require that you visit the creek site once a week (on a weekend day) during July and August and write down a simple measurement. You can ask someone to do the measurement for you when you will be away. Please let me know if you would like to help with this, and I will give you the thermometer and the instructions.

I am including a calendar of the dates for our next events. Please note that the date for the Creek Mapping Workshop has been changed to August 28.

Thank you for your participation,

Joan (734) 769-5971

Anticipating that we will soon have a comprehensive report about all of our monitoring data, we are giving you the summary of the most recent findings on the opposite side of this page.

I suggest you look at the diversity (# of taxa) and the number of Sensitive Groups. You may wish to compare this years results to the previous sampling of each site, which is located on the right side of the page.

Let me explain the enclosed table of data. For each site the table includes:

- the total number of individual creatures collected ("Total #"),
- the number of families ("# Taxa", which is the variety, or number of different kinds); and
- the "# EPT", which is the number of families that are mayflies (Ephemeroptera), stoneflies (Plecoptera), and caddisflies (Trichoptera).

The EPT are singled out because many, but not all, of them are sensitive to organic pollution.

- The "Sensitive Groups" are the families that are especially sensitive to organic pollution. (Some of the Sensitive Groups are in the EPT and some are in other insect families.) Sites that have several Sensitive Groups have good quality.
- The number of taxa, EPT, and Sensitive Groups found last April are listed on the right.

APRIL 1999 STREAM SEARCH RESULTS

		1999			Previous Sampling (Most Recent)				
1999 CREEK SITES	Total Number	Total Taxa	EPT	Sensitive Groups	Year	Total Number	Total Taxa	EPT	Sensitive Groups
Boyden Creek: Golf Course	100	24	10	Perlotidae, Leptophlebiidae, Lepidostomatidae	1997	234	25	9	2
Chilson Creek: Brighton Road	126	23	9	Perlotidae, Lepidostomatidae	1998	97	15	6	1
Chilson Creek: Chilson Road	66	18	8	Perlotidae, Leptophlebiidae, Perlidae, Ephemereillidae, Corydalidae	1997	104	12	4	2
Davis Creek: Rushton Road	183	15	2	Corydalidae	1998	168	17	3	1
Davis Creek: Silver Lake	168	26	11	Corydalidae, Perlidae, Perlotidae, Leptophlebiidae, Brachycentridae	1998	125	19	7	2
Davis Creek: Doane Road	96	18	9	Perlidae, Perlotidae, Brachycentridae	1996	141	15	6	3
Davis Creek: Pontiac Trail	66	16	6	Corydalidae, Perlidae, Perlotidae, Leptophlebiidae	1997	85	9	4	2
Fleming Creek: Warren	164	19	9	Perlotidae, Leptophlebiidae, Corydalidae, Brachycentridae	1998	108	20	8	3
Eriggs Drain	39	9	6	Nemouridae, Perlidae, Leptophlebiidae	1998	98	15	7	1
Hay Creek	85	22	11	Perlotidae, Leptophlebiidae, Brachycentridae	1998	92	13	7	3
Honey Creek (N): Darwin Rd.	40	15	6	Gomphidae	1998	89	18	7	4
Honey Creek: Jackson	118	16	7	Nemouridae, Perlidae, Lepidostomatidae	1995	180	12	4	2
Huron River: US-23	54	15	7	Perlidae, Leptophlebiidae					
Huron River: Commerce Rd	77	18	6	Perlotidae	1998	95	15	4	0
Huron River: Zeab Road	86	22	9	Ephemereillidae, Corydalidae	1998	122	20	8	5
Huron River: White Lake Rd	59	18	8	Perlotidae, Ephemereillidae, Leptophlebiidae	1998	177	15	7	2
Letts Creek: M-52	62	9	2	Perlotidae	1998	63	16	7	3
Malletts Creek: I-94	50	8	1	none	1996	81	5	1	0
Malletts Creek: Scheffler	29	6	1	none	1995	98	5	1	0
Mill Creek: Jackson Road	77	13	4	none	1998	215	11	3	0
Mill Creek: Manchester Road (M-52)	125	14	7	Nemouridae, Glossosomatidae, Psychomyiidae					
Portage: Dexter-TownHall Rd	131	23	10	Perlidae, Perlotidae, Leptophlebiidae, Gomphidae	1998	130	22	8	3
South Ore Creek: Bauer Rd	100	18	9	Perlotidae, Leptophlebiidae, Gomphidae	1998	135	20	8	4
South Ore Creek: Hamburg Rd	72	14	5	Perlidae, Leptophlebiidae	1997	181	14	7	3
South Ore Creek: Lake Ridge Rd	81	14	4	none	1998	54	9	2	0
Swift Run	26	6	1	none	1996	78	6	1	0
Traver Creek: Broadway	28	9	1	none	1998	86	11	2	0
Traver Creek: Dhu Varren	71	17	5	Perlotidae	1997	189	19	8	2
Woodruff Creek: Hyne Road	63	13	4	Leptophlebiidae	1998	64	13	4	2
Horseshoe Creek	74	24	7	Leptophlebiidae	1998	261	20	4	0