



Rouge River Watershed 2018 Winter Stonefly Search

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The Friends of the Rouge Benthic Macroinvertebrate Monitoring Program lost its regular funding in December 2017 when the Alliance of Rouge Communities did not renew the funding they had been providing for the past five years. Friends of the Rouge (FOTR) has been working hard to find replacement funding to ensure that this long term monitoring program can continue. Thanks to the donations of sponsors, donors and participants, we were able to raise enough funds to hold the Winter Stonefly Search. The Spring and Fall Bug Hunts are still in need of funding and the Spring Bug Hunt has been cancelled.

Seventy-two volunteers participated in Friends of the Rouge's 2018 Winter Stonefly Search on January 20. Luckily, temperatures moderated a bit (high 43°F) but teams still had to break through thick ice at many sites. The University of Michigan-Dearborn's Environmental Interpretive Center hosted the event.

Stoneflies are sensitive indicators of healthy streams. Unlike other insects, winter stoneflies develop into adult flies in the winter. The Winter Stonefly Search is part of Friends of the Rouge volunteer benthic macroinvertebrate monitoring program.

This report contains data for a total of 36 sites. During the Stonefly Search, twelve volunteer teams sampled 24 sites. An additional seven sites were sampled by Wayne County Department of Public Services Water Quality Management Division, one site on Bell Creek by Schoolcraft College students, and four sites on Johnson Creek by Sue Thompson.

Stoneflies were found at fourteen of the thirty-six sites (39%) (map and Table 1). All stoneflies were found on the Middle or Lower branches with the exception of one stonefly found in the Upper Branch (Up1). This was the first time since 2010 that stoneflies have been found in the Upper branch! Three different types of stoneflies were found: Capnids, Perlodids, and Taeniopterygidae (*Genus Taeniopteryx*) with the majority being Capnids (Table 1).

On the Lower Branch, two of the ten sites had stoneflies (20%). One was in Fellows Creek and one was in Fowler Creek. Both sites had slender winter stoneflies (Capnids).

On the Middle Branch, eleven of the twenty-one sites had stoneflies (52%). Nine of these sites were on the Johnson Creek, the Rouge's coldwater tributary. Two of these sites were on the Middle branch: MR-2 and MR-20. All nine sites had slender winter stoneflies (Capnids). In addition, one site also had Perlodids (MR-25) and one site had *Taeniopteryx* (John3). Two sites on Tonquish Creek were sampled but none were found despite having been found there before. One of the teams encountered a possible oil spill at one of their sites on Hines Drive. This was reported to the state and county and investigated.

Only one site on the Main Branch was sampled for stoneflies and none were found. The site was MN-5. In 2010, stoneflies were found just downstream of this site at Eight Mile Road but have not been found since. Stoneflies have not been found upstream of this site on the Main branch despite sampling Main Branch sites over many years.

Four Upper Branch sites were sampled and stoneflies were found at one site: Up1, Heritage Park. This surprised the team as they were looking very hard, cracking through thick ice and had a *Detroit Free Press* reporter with them. The small insect they collected and put in the jar turned out to be a stonefly! Stoneflies have only been found at Up1 in 2010 and 2005. They were also found once downstream in Shiawassee Park in 2003 and upstream on Seeley Creek in 2012.

Overall, an average number of sites had stoneflies this year. The finding on at Up1 was a good sign for the Upper branch and Johnson Creek sites had a good number of sites with stoneflies (8/12 or 67%). The Lower sites had fewer stoneflies than usual even though all but two of the sites have had stoneflies before.

Thank you to all the volunteers, Michael Brosko for managing the equipment and data entry, Team Leaders, Daisy Lovain for running registration, the University of Michigan-Dearborn for providing meeting space, and Schoolcraft College, Wayne County and Susan Thompson for additional sampling. The Winter Stonefly Search is part of the Friends of the Rouge long term volunteer monitoring program.

Donations to support the program can be made at:
<https://www.crowdrise.com/o/en/campaign/save-friends-of-the-rouges-benthic-macroinvertebrate-monitoring-program>

Fall Bug Hunt
Sat. October 13
9am-4 pm

Register by 9/28

Team Leader Training Sept. 29 (must have previously attended an event)

www.therouge.org (register online) **(313) 792-9621**
spetrella@therouge.org

Coordinated by Friends of the Rouge and funded by the Erb Family Foundation, Washtenaw County, Waste Management and contributions from participants and supporters. Additional data collection by Wayne County and Schoolcraft College.

Table 1: 2018 Stonefly Search Results					
FIELDID	Stream Name	Site Description	Team*	Stoneflies Present	Families
Lower Branch					
Fel1	Fellows Creek	Top of Hill Ct	1	N	
Fel2	Fellows Creek	Vintage Valley	2	N	
Fel5	Fellows Creek	Warren Ridge	1	N	
Fel6	Fellows Creek	Hanford	2	Y	Capniidae
Fowl1	Fowler Creek	Prospect	3	Y	Capniidae
Fowl2	Fowler Creek	Fowler Beck	3	N	
Low2	Lower Rouge	Cherry Hill	11	N	
LR-8	Lower Rouge	Ridge Proctor	11	N	
LR-12	Lower Rouge	Morton Taylor	WC	N	
LR-3	Lower Rouge	Goudy Park	WC	N	
Middle Branch					
John1	Johnson Creek	5M Salem	4	Y	Capniidae
John2	Johnson Creek	5M NV	4	Y	Capniidae
John3	Johnson Creek	6M NV	5	Y	Capniidae, Taeniopterygidae
John5	Johnson Creek	Fish Hatchery Pk	6	N	
John6	Johnson Creek	Hines	7	N	
John7	Johnson Creek	Arcadia	5	Y	Capniidae
John8	Johnson Creek	Maybury Angell	6	Y	Capniidae
MR-22	Johnson Creek	Maybury south	ST	Y	Capniidae
MR-23	Johnson Creek	Maybury north	ST	Y	Capniidae
MR-25	Johnson Creek	Maybury East	ST	Y	Capniidae, Perlodidae
MR-26	Johnson Creek	Napier Rd	ST	N	
MR-27	Johnson Creek	Ridge	WC	Y	Capniidae
Ton1	Tonquish Creek	Plym Twp Pk	10	N	
Ton1/2	Tonquish Creek	Canton Ctr Rd	10	N	
Mid1	Middle Rouge	Northville Rec E	8	N	
MR-1	Middle Rouge	Northville Rec W	7	N	
MR-20	Middle Rouge	Waterford Bd	8	Y	Capniidae
MR-2a	Middle Rouge	Reservoir Rd W	9	N	
MR-2	Middle Rouge	Reservoir Rd	WC	Y	Capniidae
MR-18	Middle Rouge	Springbrook Rec	9	N	
MR-3	Middle Rouge	Plym Riverside	WC	N	
Main Branch					
MN-5	Main Rouge	Bridge St	WC	N	
Upper Branch					
Bell2	Bell Branch	Schoolcraft College	Sch	N	
Up1	Upper Rouge	Heritage Park	12	Y	Capniidae
Up2	Upper Rouge	Shiawasee Park	12	N	
UR-1	Upper Rouge	Lola Valley	WC	N	

*#1-12=FOTR Volunteers, Sch=Schoolcraft students, ST=Sue Thompson, WC=Wayne County