

Rouge River Watershed 2012 Winter Stonefly Search

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's volunteer benthic macroinvertebrate monitoring program.

Seventy-three volunteers participated in Friends of the Rouge's 2012 Winter Stonefly
Search on January 28 hosted at the University of Michigan-Dearborn's Environmental Interpretive Center. Detroit Free Press reporter Matt Helms and photographer Eric Seals covered the event and visited one site on the Johnson Creek. Wayne County Department of Public Services Water Quality Management Division (WC) sampled an additional seven sites and Schoolcraft College students sampled one site on their campus for a total of 31 sites.

Sampling was very different this year due to the unusual warm weather. Though there was snow, none of the creeks were frozen like last year. Some sites did have very high water due to the rain on Friday and one team was unable to sample their second site at all due to flooding.

Stoneflies were found at fourteen of the thirty-two sites. Most of the stoneflies found were slender winter stoneflies (Capniidae). Perlodid stoneflies were found at three of the Johnson Creek sites. Additionally, a Broadback stonefly (Family Taeniopterygidae, genus *Taeniopteryx*) was found in the Johnson Creek near Six Mile Rd.



Broadback stonefly



Adult Slender Winter Stonefly

Lower Rouge

Fellows Creek had stoneflies at three sites: Fel2 (near Ford and Ridge), LR-9 (Beck & Warren) and Fel4 (Flodin Park). They were not found at Fel1, the most upstream site. The team at Fel2 even found a fully hatched adult stonefly (photo at left-credit Philip Kukulski). We had looked for the adults last year, trying to determine when they hatch and did not find any until March. Fowler Creek had stoneflies at Fowl1 (Prospect & Cherry Hill) but none at Fowl2 (Beck Road), where they were found last year. Four sites were sampled on the Lower Rouge and only one upstream site had stoneflies: LR-8 at Proctor. They were not found at Morton-Taylor (LR-12), above the Wayne Road dam (LR-6) that will be removed this year, or at John Daly (LR-10). All stoneflies found in the Lower Branch were slender winter stoneflies (Capniidae).

Main Rouge

The Main Rouge was sampled just south of Eight Mile (MN-1) where a Broadback stonefly was found in 2010. Sadly, none were found.

Middle Rouge

Ten sites on the Johnson Creek were sampled and all but one (John5-Fish Hatchery Park) had stoneflies. Most sites had slender winter stoneflies but three had Perlodids (John2, John8, MR-22). One interesting finding was a *Taeniopteryx* stonefly at John3 (Six Mile). This family and genus had only been found once before in 2010 at Eight Mile (MN-1). Two sites on Tonquish Creek were sampled and neither had stoneflies (Ton1 & Ton1.5). Four sites on the Middle Rouge were sampled with great difficulty as water levels were very high. None of the flies were found.

Upper Rouge

The Upper Rouge was sampled on the Bell Creek by Schoolcraft (Bell2), at Heritage Park in Farmington Hills (Up1), Shiawassee Park (Up2) in Farmington and at Lola Valley by Wayne County (UR-1). None were found.

<u>Fish</u>

In addition to looking for stoneflies, one team also looked for and identified the fish found at their two Johnson Creek sites. UM-D students Bob Muller and Kristina Blott are interning with Friends of the Rouge and will be doing a study on fish in the Rouge this spring. Some of the fish found at the sites include: rainbow darter (pictured right), central stoneroller, blacknose dace, creek chub, white sucker, Johnny darter, mottled sculpin and possible blacknose shiner.



Thank you to all the volunteers! The Winter Stonefly Search is part of Friends of the Rouge's long term volunteer monitoring program and is supported by the Erb Family Foundation. Please join us for the Spring Bug Hunt on Saturday April 21, 2012. Team leader training will be held on March 31, 2012.

See the results on a Google map at www.therouge.org
See articles in the Detroit Free Press and Redford Observer 1/29/2012

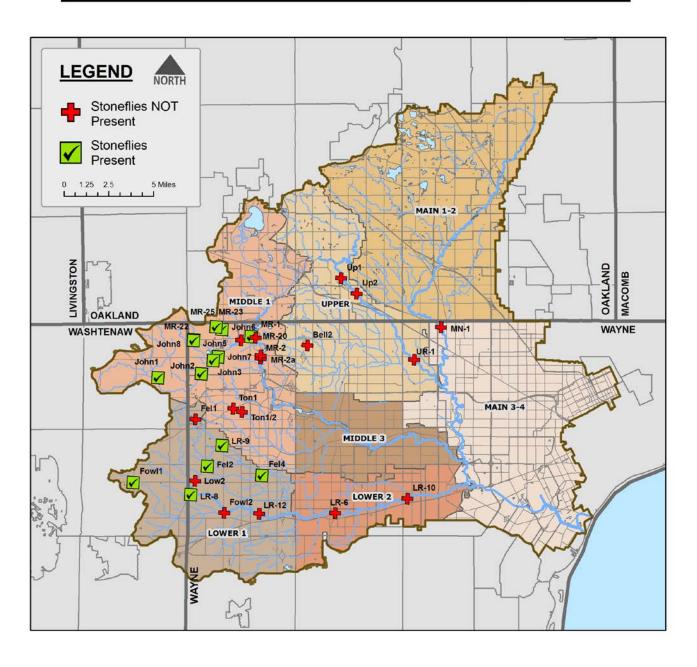
Spring Bug Hunt – Sat. April 21 9am-4 pm UM-D EIC *Register by 4/13* Team Leader Training March 31 (must have previously attended an event)

www.therouge.org (register online)

(313) 792-9621 monitoring@therouge.org

Coordinated by Friends of the Rouge and funded by the Erb Family Foundation. Additional data collection by Wayne County.

2012 Winter Stonefly Search Results



2012 Winter Stonefly Search Results

BRANCH	sws	city township	FIELDID	Stream Name	Location/Site Description	Latitude	Longitude	ST12	ST12Family
L	L1	Plymouth Twp	Fel1	Fellows Creek	Fellows Plymouth	42.35729	-83.53988	N	
L	L1	Canton Twp	LR-9	Fellows Creek	Beck Warren/Tonda Elem	42.33667	-83.509238	Y	Capniidae
L	L1	Canton Twp	Fel2	Fellows Creek	South Fellows	42.31932	-83.5246	Y	Capniidae
L	L1	Canton Twp	Fel4	Fellows Creek	Flodin Park	42.31346	-83.46471	Y	Capniidae
L	L1	Superior Twp	Fowl1	Fowler Creek	Fowler Prospect	42.30423	-83.60516	Y	Capniidae
L	L1	Canton Twp	Fowl2	Fowler Creek	Fowler Beck	42.28226	-83.50515	N	
L	L1	Canton Twp	Low2	Lower Rouge	Lower Ridge	42.30724	-83.53793	N	
L	L1	Canton Twp	LR-8	Lower Rouge	Lower Proctor	42.295976	-83.541846	Y	Capniidae
L	L1	Canton Twp	LR-12	Lower Rouge	Morton Taylor	42.282317	-83.466103	N	
L	L2	Wayne	LR-6	Lower Rouge	Wayne WDM 201 Site	42.285	-83.383888	N	
L	L2	Inkster	LR-10	Lower Rouge	John Daly	42.298506	-83.305839	N	
M	M1	Salem Twp	John1	Johnson Creek	JC 5M Salem	42.3897	-83.58194	Y	Capniidae
M	M1	Northville Twp	John2	Johnson Creek	JC 5M NV	42.39424	-83.534404	Y	Capniidae, Perlodidae
M	M1	Northville Twp	John7	Johnson Creek	JC Arcadia	42.405276	-83.521992	Y	Capniidae
M	M1	Northville Twp	John8	Johnson Creek	Maybury north	42.42148	-83.54396	Y	Perlodidae
M	M1	Northville Twp	MR-22	Johnson Creek	Maybury south	42.420833	-83.544167	Y	Capniidae, Perlodidae
M	M1	Northville Twp	MR-23	Johnson Creek	Maybury north	42.432475	-83.520006	Y	Capniidae
M	M1	Northville	MR-25	Johnson Creek	Maybury east	42.43058	-83.5135	Y	Capniidae
M	M1	Northville Twp	John3	Johnson Creek	JC 6M NV	42.40844	-83.51693	Y	Capniidae, Taeniopteryx
M	M1	Northville Twp	John5	Johnson Creek	JC FH	42.4224	-83.49289	N	
M	M1	Northville Twp	John6	Johnson Creek	JC Hines	42.42546	-83.48138	Y	Capniidae
M	M1	Plymouth Twp	Ton1	Tonquish Creek	Plymouth Twp Pk	42.36701	-83.49895	N	
M	M1	Plymouth Twp	Ton1/2	Tonquish Creek	Canton Ctr	42.36437	-83.48939	N	
M	M1	Northville Twp	MR-1	Middle Rouge	Northville Rec Area	42.42487	-83.47712	N	
M	M1	Northville Twp	MR-20	Middle Rouge	Waterford Bend	42.41054	-83.47079	N	
M	M1	Northville Twp	MR-2	Middle Rouge	Reservoir Road	42.408	-83.47076	N	
M	M1	Northville Twp	MR-2a	Middle Rouge	Reservoir Road W	42.4089	-83.4704	N	
MN	MN3/4	Detroit	MN-1	Main Rouge	Eight Mile	42.438056	-83.274722	N	
U	U	Livonia	Bell2	Bell Branch	Schoolcraft College	42.42	-83.42	N	
U	U	Farmington Hills	Up1	Upper Rouge	Heritage Pk	42.47526	-83.38567	N	
U	U	Farmington	Up2	Upper Rouge	Shiawassee Pk	42.46323	-83.36811	N	
U	U	Redford Twp	UR-1	Upper Rouge	Lola Valley	42.4111	-83.3029	N	