

## Rouge River Watershed 2014 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 volunteer benthic macroinvertebrate monitoring program.



Sampling at Johnson Creek. Esma Tuncay in foreground, Bob Muller entering stream  
Photo credit: P. Kukulski

Eighty-one volunteers participated in Friends of the Rouge 2014 Winter Stonefly Search on January 25 hosted at the University of Michigan-Dearborn's Environmental Interpretive Center and were able to sample 24 sites in 12 teams. UM-D students were well represented at this event with the Aquatic Ecosystems class using it as their lab and the genetics class also participating.

On the day of the search, metro Detroit officially broke the record for the snowiest January since the weather service began recording levels in 1880. The 39.1 inches surpassed the previous mark of 38.4 inches in January 1908. Snow started early that morning, delaying many volunteers. The sun came out as volunteers left the EIC but was soon followed by periodic blinding snow squalls. A big thank you to this amazingly dedicated group of volunteers.

In addition to the sites sampled on Jan 25, Wayne County Department of Public Services Water Quality Management Division (WC) sampled an additional three sites, Schoolcraft College students sampled one site and Sue Thompson sampled five sites, for a total of 33 sites. The majority of the sites were on the Middle and Lower branches. Twenty-three of the sites had stoneflies in the past, five had none and five were new sites (Table1).

Stoneflies were found at eleven of the thirty-three sites (see map and Table 1), all on the Middle or Lower branches. Two of these were new sites (Fel6 and Fel5). The remaining sites with stoneflies had them present in the past. All sites had slender winter stoneflies (Capniidae) and one site (Fel5) also had Perlodid stoneflies.

### Middle Branch

The Johnson Creek on the Middle branch had six of eleven sites with stoneflies. Five of these sites were Five and Seven Mile Roads and one was in Maybury State Park on the Sump tributary to Johnson Creek. The Walled Lake branch was sampled just upstream of the confluence with Johnson Creek but none were found. Downstream on the Middle Branch, stoneflies were found at Reservoir Road but none in between Fish Hatchery Park and Reservoir Road. There were no stoneflies found in the two sites on Tonquish Creek. All of the stoneflies found on the Middle branch were slender winter stoneflies (Capniidae).

### Lower Branch

On the Lower Branch, Fowler Creek had stoneflies at Fowl1 but not at Fowl2. Fellows Creek had stoneflies at the two new sites (Fel6 and Fel5) but not downstream at Fel4 or LR-9. All of the stoneflies found were slender winter stoneflies (Capniidae) with the exception of one Perlodid stonefly found at Fel5. On the main Lower branch, stoneflies were present near Proctor (LR-8) but not at any of four sites further downstream (Low4, LR-3, LR-6, LR-10).



Perlodid stonefly  
(Perlodidae)

### Upper Branch

Stoneflies have rarely been found on the Upper Rouge. Three Upper sites were sampled: Bell2-Bell Creek at Schoolcraft College, See2-Seeley Creek, downstream from where adults were found in 2012 and Up2-Shiawassee Park where they were found in 2003. None were found.



Slender winter stonefly  
(Capniidae)



Dedicated searchers on the Middle branch getting covered in snow  
Photo credit: S. Weis

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 Rouge River National Wet Weather Demonstration Project. Please join us for the Spring Bug Hunt on Saturday April 12, 2014. Team Leader training will be held on March 29, 2014.

## Spring Bug Hunt – Sat. April 12 9am-4 pm UM-D EIC \*Register by 3/28\*

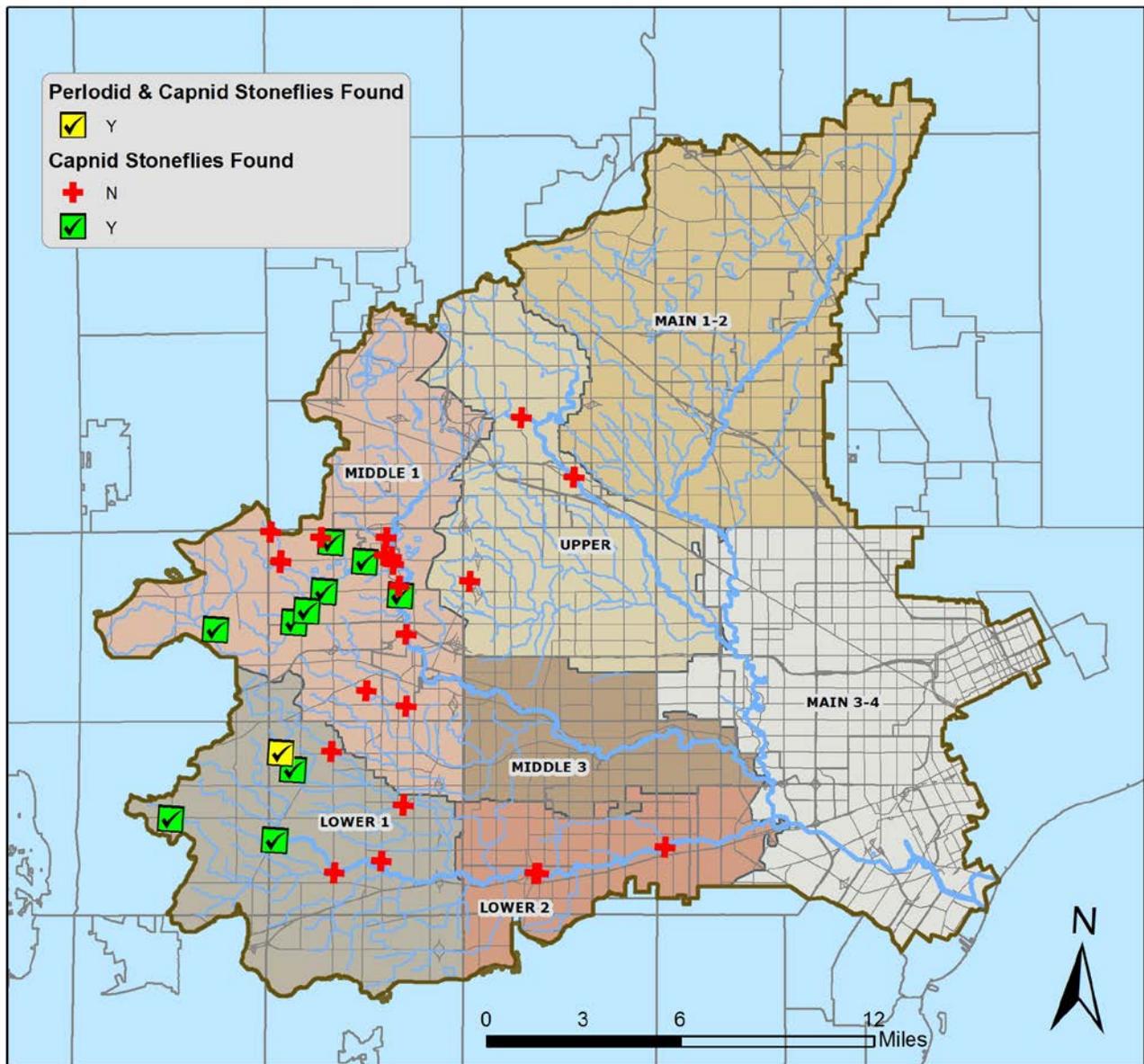
Team Leader Training March 29 (must have previously attended an event)

[www.therouge.org](http://www.therouge.org) (register online)

(313) 792-9621 [spetrella@therouge.org](mailto:spetrella@therouge.org)

Coordinated by Friends of the Rouge and funded by the Rouge River National Wet Weather Demonstration Project.  
Additional data collection by Wayne County.

# 2014 Stonefly Search Results



**Table 1: 2014 Winter Stonefly Search Results**

<b>BRANCH</b>	<b>FIELDID</b>	<b>Stream Name</b>	<b>Location/Site Description</b>	<b>Stoneflies present?</b>	<b>Family</b>	<b>present in past sampling?</b>
Lower	Fel4	Fellows Creek	Flodin Park	Y		Y
Lower	Fel5	Fellows Creek	Warren bet Ridge & Napier	Y	Capnids, Perlodids	*
Lower	Fel6	Fellows Creek	Hanford bet Ridge & Napier	Y	Capnids	*
Lower	LR-9	Fellows Creek	Beck Warren	N		Y
Lower	Fow11	Fowler Creek	Fowler Prospect	Y	Capnids	Y
Lower	Fow12	Fowler Creek	Fowler Beck	N		Y
Lower	Low4	Lower Rouge	Sheldon Rd	N		*
Lower	LR-10	Lower Rouge	John Daly	N		N
Lower	LR-3	Lower Rouge	Goudy Park	N		N
Lower	LR-6	Lower Rouge	Wayne WDM 201 Site	N		N
Lower	LR-8	Lower Rouge	Lower Proctor	Y	Capnids	Y
Middle	John1	Johnson Creek	JC 5M Salem	Y	Capnids	Y
Middle	John2	Johnson Creek	JC 5M NV	Y	Capnids	Y
Middle	John3	Johnson Creek	JC 6M NV	Y	Capnids	Y
Middle	John5	Johnson Creek	JC FH	Y	Capnids	Y
Middle	John6	Johnson Creek	JC Hines	N		Y
Middle	John7	Johnson Creek	JC Arcadia	Y	Capnids	Y
Middle	John8	Johnson Creek	Maybury Angell	N		Y
Middle	MR-22	Johnson Creek	Maybury south	N		Y
Middle	MR-23	Johnson Creek	Maybury north	N		Y
Middle	MR-25	Johnson Creek	Maybury east	Y	Capnids	Y
Middle	MR-26	Johnson Creek	Napier Rd	N		*
Middle	Mid1	Middle Rouge	Northville Rec Area	N		Y
Middle	MR-1	Middle Rouge	Northville Rec Area	N		Y
Middle	MR-18	Middle Rouge	Springbrook Rec Area	N		Y
Middle	MR-2	Middle Rouge	Reservoir Road	Y	Capnids	Y
Middle	MR-20	Middle Rouge	Waterford Bend	N		Y
Middle	Ton1/2	Tonquish Creek	Canton Ctr	N		Y
Middle	Ton2	Tonquish Creek	Tonquish-Ann Arbor Rd	N		Y
Middle	Wall4	Walled Lk Drainage	Ford Field	N		*
Upper	Bell2	Bell Branch	Schoolcraft College	N		N
Upper	See2	Seeley Creek	Sleepy Hollow	N		N
Upper	Up2	Upper Rouge	Shiawassee Pk	N		Y

\*new site