

Rouge River Watershed 2013 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



Searchers go through brief introduction at the Environmental Interpretive Center at UM-D; Volunteer Monitoring Support Ioannis Kamarinas in front.
Photo credit: C. Marvin

Seventy-five volunteers participated in Friends of the Rouge's 2013 Winter Stonefly Search on January 26 hosted at the University of Michigan-Dearborn's Environmental Interpretive Center and were able to sample 26 sites. Many college students participated this year with groups from UM, UM-D, EMU, WSU, and HFCC. The UM-D genetics class collected additional samples to begin examining the populations of stoneflies and other macroinvertebrates found in the Rouge.

Unlike last year, temperatures were below freezing the week before and during the search, forcing many teams to use sledgehammers and axes to break through the ice. Conditions were not as bad as in 2011 when creeks had been frozen solid for weeks.

Wayne County Department of Public Services Water Quality Management Division (WC) sampled an additional nine sites and Schoolcraft College students sampled one site on their campus for a total of 36 sites.

Stoneflies were found at ten of the thirty-six sites (see map on p. 3 and table on p. 4). Most of the stoneflies found were slender winter stoneflies (Capniidae). Perlodid stoneflies were found at one of the Johnson Creek sites near Maybury State Park (John8) and Broadback stoneflies (Family Taeniopterygidae, genus *Taeniopteryx*) were found in the Johnson Creek at Five Mile and Ridge (John2).



Solomon and Tomas find a crayfish at LR-2
Photo credit: F. Ashley

Lower Rouge

Stoneflies were found at only two of thirteen sites on the Lower branch: Fowl1 (Prospect and Cherry Hill) and LR-9 (Beck & Warren). All stoneflies found in the Lower Branch were slender winter stoneflies (Capniidae).



Team Leader Bill finds good habitat to sample at a logjam at LR-12
Photo credit: F. Ashley

Main Rouge

The Main Rouge was sampled at two sites (Main7 and MN-1) and none were found.

Middle Rouge

Ten sites on the Johnson Creek were sampled and eight had stoneflies. Most sites had slender winter stoneflies but one had only Perlodids (John8) and one (John2) had *Taeniopteryx* along with slender winter stoneflies. The Johnson Creek sites without stoneflies were at the upper end (MR-22) and too frozen on the downstream end near the confluence with the Walled Lake Branch (John6).

Four sites on Tonquish Creek were sampled and no stoneflies were found.



Left: Team at Ton1: From left: Emily & Lisa, Kristi Weber and Berto; Steve facing team.

Right: Team Leader Steve cracks through ice at Ton1/2

Photo credits: C. Marvin



Three sites on the Middle Rouge were sampled and no stoneflies were found.



Left: HFCC Team at John6: Carla, Agoberto, Cindy, and Amy.

Right: Cool case building caddisfly!

Photo credits: A.Cloutier



Upper Rouge

The Upper Rouge was sampled at four sites and none were found. A video crew from Farmington-Farmington Hills cable interviewed and taped the team at their site.

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 20, 2013. Team leader training will be held on April 13, 2013.

See the results on a Google map at www.therouge.org

Spring Bug Hunt – Sat. April 20 9am-4 pm UM-D EIC *Register by 4/5*

Team Leader Training April 13 (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. Additional data collection by Wayne County.

2013 Stonefly Search Results

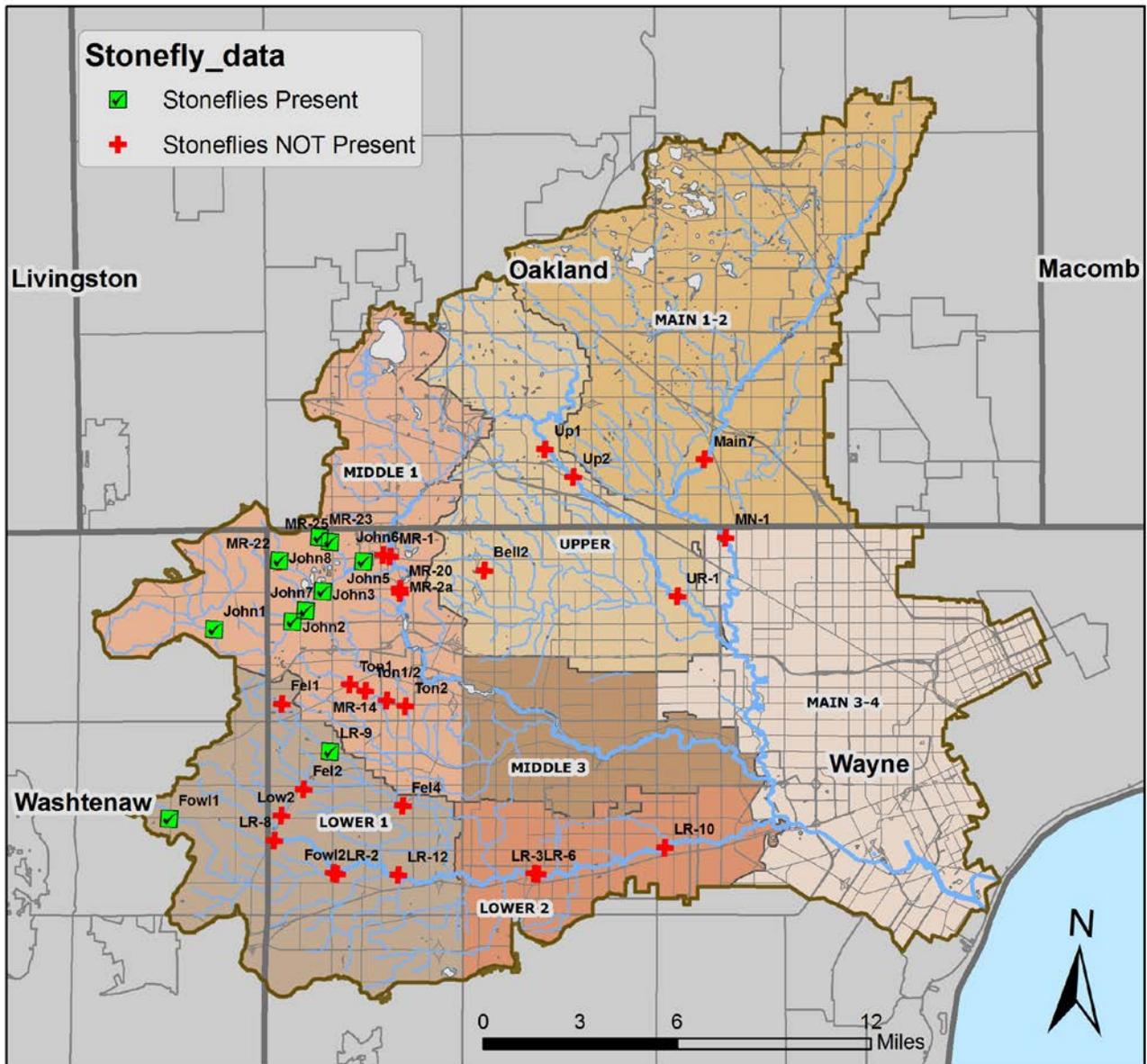


Table 1: 2013 Winter Stonefly Search Results

Branch	FIELDID	Stream Name	Location	ST13	Capnids	Perlodids	Taeniopteryx
Lower	Fel1	Fellows Creek	Fellows Plymouth	N			
Lower	Fel2	Fellows Creek	South Fellows	N			
Lower	Fel4	Fellows Creek	Flodin Park	N			
Lower	LR-9	Fellows Creek	Beck Warren/Tonda Elem	Y	Capniidae		
Lower	Fowl1	Fowler Creek	Fowler Prospect	Y	Capniidae		
Lower	Fowl2	Fowler Creek	Fowler Beck	N			
Lower	Low2	Lower Rouge	Lower Ridge	N			
Lower	LR-10	Lower Rouge	John Daly	N			
Lower	LR-12	Lower Rouge	Morton Taylor	N			
Lower	LR-2	Lower Rouge	WTUA	N			
Lower	LR-3	Lower Rouge	Goudy Park	N			
Lower	LR-6	Lower Rouge	Wayne WDM 201 Site	N			
Lower	LR-8	Lower Rouge	Lower Proctor	N			
Main	Main7	Main Rouge	Sfld 10 Mile	N			
Main	MN-1	Main Rouge	Eight Mile	N			
Middle	John1	Johnson Creek	JC 5M Salem	Y	Capniidae		
Middle	John2	Johnson Creek	JC 5M NV	Y	Capniidae		Taeniopteryx
Middle	John3	Johnson Creek	JC 6M NV	Y	Capniidae		
Middle	John5	Johnson Creek	JC FH	Y	Capniidae		
Middle	John6	Johnson Creek	JC Hines	N			
Middle	John7	Johnson Creek	JC Arcadia	Y	Capniidae		
Middle	John8	Johnson Creek	Maybury north	Y		Perlodidae	
Middle	MR-22	Johnson Creek	Maybury south	N			
Middle	MR-23	Johnson Creek	Maybury north	Y	Capniidae		
Middle	MR-25	Johnson Creek	Maybury east	Y	Capniidae		
Middle	MR-1	Middle Rouge	Northville Rec Area	N			
Middle	MR-20	Middle Rouge	Waterford Bend	N			
Middle	MR-2a	Middle Rouge	Reservoir Road W	N			
Middle	Ton1/2	Tonquish Creek	Canton Ctr	N			
Middle	MR-14	Tonquish Creek	Smith Elementary	N			
Middle	Ton1	Tonquish Creek	Plymouth Twp Pk	N			
Middle	Ton2	Tonquish Creek	Tonquish-Ann Arbor Rd	N			
Upper	Bell2	Bell Branch	Schoolcraft College	N			
Upper	Up1	Upper Rouge	Heritage Pk	N			
Upper	Up2	Upper Rouge	Shiawassee Pk	N			
Upper	UR-1	Upper Rouge	Lola Valley	N			

Table 2: Rouge River Sites with Stoneflies 2002-13

Branch	FIELDID	Stream Name	Location/Site Description	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002
Lower	Fel1	Fellows Creek	Fellows Plymouth	N	N	N	N		N	Y	N		Y	N	Y
Lower	Fel2	Fellows Creek	South Fellows	N	Y	N	Y		Y	Y	N				
Lower	Fel4	Fellows Creek	Flodin Park	N	Y	N	Y					N			
Lower	LR-9	Fellows Creek	Beck Warren/Tonda Elem	Y	Y	N	Y	Y							
Lower	Fowl1	Fowler Creek	Fowler Prospect	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y
Lower	Fowl2	Fowler Creek	Fowler Beck	N	N	Y	Y	N	N	N		Y			
Lower	Low2	Lower Rouge	Lower Ridge	N	N		Y		N	Y	Y	Y			
Lower	LR-8	Lower Rouge	Lower Proctor	N	Y	N	Y	Y							
Main	Main9	Main Rouge	Rotunda		Y										
Main	MN-1	Main Rouge	Eight Mile	N	N	N	Y	N							
Middle	John1	Johnson Creek	JC 5M Salem	Y	Y	N	Y		Y	Y	Y		Y	Y	Y
Middle	John2	Johnson Creek	JC 5M NV	Y	Y	Y	Y	N	Y	Y	Y		Y	N	Y
Middle	John3	Johnson Creek	JC 6M NV	Y	Y		Y	Y	Y	Y			Y	Y	Y
Middle	John5	Johnson Creek	JC FH	Y	N	Y	Y	Y	Y	Y	Y		Y	Y	Y
Middle	John6	Johnson Creek	JC Hines	N	Y	Y	Y	Y	Y	Y	Y	Y			Y
Middle	John7	Johnson Creek	JC Arcadia	Y	Y	Y	Y	Y	Y	Y					
Middle	John8	Johnson Creek	Maybury north	Y	Y	Y									
Middle	MR-22	Johnson Creek	Maybury south	N	Y										
Middle	MR-23	Johnson Creek	Maybury north	Y	Y	N									
Middle	MR-25	Johnson Creek	Maybury east	Y	Y										
Middle	Mid1	Middle Rouge	Northville Rec Area			N	Y	Y	N	N		Y		Y	
Middle	MR-1	Middle Rouge	Northville Rec Area	N	N	N	Y	Y	N						
Middle	MR-18	Middle Rouge	Springbrook Rec Area			N	Y	Y							
Middle	MR-2	Middle Rouge	Reservoir Road		N	N	Y	Y	Y	Y		N			
Middle	MR-20	Middle Rouge	Waterford Bend	N	N	N	Y	N							
Middle	MR-2a	Middle Rouge	Reservoir Road W	N	N	N	N	Y	N						
Middle	Ton1	Tonquish Creek	Plymouth Twp Pk	N	N		N		N	N	N	Y	Y		
Middle	Ton1/2	Tonquish Creek	Canton Ctr	N	N	N	N	Y	N	N	Y	Y			
Middle	Ton2	Tonquish Creek	Tonquish-Ann Arbor Rd	N		N	N		N	N			N	N	Y
Upper	SeeBosch	Seeley Creek	Bosch Corp		Y										
Upper	Up1	Upper Rouge	Heritage Pk	N	N	N	Y		N	N	N	Y			
Upper	Up2	Upper Rouge	Shiawassee Pk	N	N	N	N		N	N	N	N	N	Y	N