

# Adopt-a-Stream

## River Round October 2013 Data and Trends

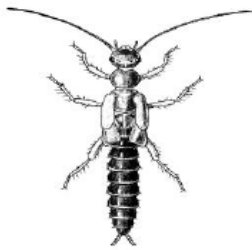


**All insects:** This metric includes all of the insect families in the sample, and serves as a general indicator of the stream health.

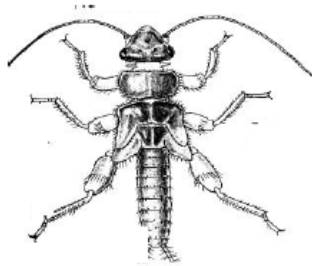
**EPT:** Standing for Ephemeroptera-Plecoptera-Trichoptera, this metric includes all of the mayfly, stonefly, and caddisfly families in the sample. These insects are sensitive to water temperature and oxygen availability. Stagnant or warm streams will not have many of these families.

**Sensitive:** There are a small handful of insect families in the Huron River watershed that are particularly sensitive to organic pollution. In other words, this metric is calculated from insects that are not likely to be found in streams polluted with fertilizers or animal and human waste.

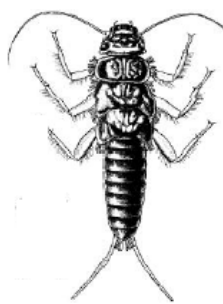
Site Location	Site #	Current Site Condition	October 2013 Samples			Averages since 2010			Comments	Trend
			All Insects	EPT	Sensitive	All Insects	EPT	Sensitive		
Fleming Creek: Botanical Gardens	9	Fair	No sample this season			13.5	4.8	1.0	No significant changes over time (1993-2013)	-
Fleming Creek: Galpin Road	84	Fair	18	5	2	13.3	4.7	1.0	We have detected a significant decrease of spring sensitive families here since 2004, but fall families have remained steady.	↓
Fleming Creek: Geddes Road	11	Fair	6	2	0	10.3	3.5	0.6	Slight, but significant increase in sensitive species over time in fall samples (although no sensitive species were found in this fall's sample). This was shown by establishment of a sensitive species (Athericidae, a watersnipe fly), in 2009. (1992-2013)	↑
Fleming Creek: Warren Road	13	Good	12	6	3	14.3	7.0	3.5	This site remains one of the best that we visit, and since 1994 has improved significantly in fall collections. Spring collections show improvement as well, though not quite statistically significant.	↑
Fleming Creek: Radrick Farms	12	Fair	No sample this season			10.7	5.0	1.0	No significant changes over time (1994-2013)	-



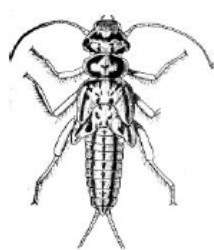
Capniidae:  
slender winter  
stonefly



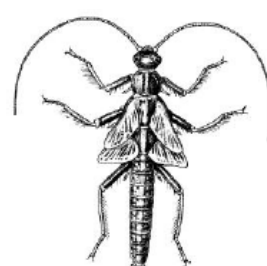
Nemouridae:  
broadback  
stonefly



Perlidae:  
Common stonefly



Perlodidae:  
Patterned stonefly



Taeniopterygidae:  
broadback winter  
stonefly

# Winter Stoneflies

SITE LOCATION	SITE #	2013 SAMPLES					ALL YEARS							
		Capniidae	Nemouridae	Perlidae	Perlodidae	Taeniopterygidae	Abundance Rating	Total # Families	First sampled	# Times sampled	Avg. Family Count	Min Family Count	Max Family Count	
Fleming Creek: Botanical Gardens	9	Like all of the Fleming Creek sites, Capnids are consistently found here; also this is the only site of the 5 on Fleming Creek at which Taeniops are found.							1995	12	1.6	1	2	
Fleming Creek: Galpin Rd	84	Like all of the Fleming Creek sites, Capnids are consistently found here. Perlodids were also found here for the first time in 2013.					x							
					x		Frequent	2	2005	7	1.1	1	2	
Fleming Creek: Geddes Road	11	Like all of the Fleming Creek sites, Capnids are consistently found here, and Perlodids are often found, though not this year.					x							
							Abundant	1	1995	14	1.1	1	2	
Fleming Creek: Radrick Farms	12	Like all of the Fleming Creek sites, Capnids are consistently found here.							1997	9	1.1	1	2	
Fleming Creek: Warren Road	13	Like all of the Fleming Creek sites, Capnids are consistently found here.					x							
							Rare	1	1996	14	1.0	1	1	