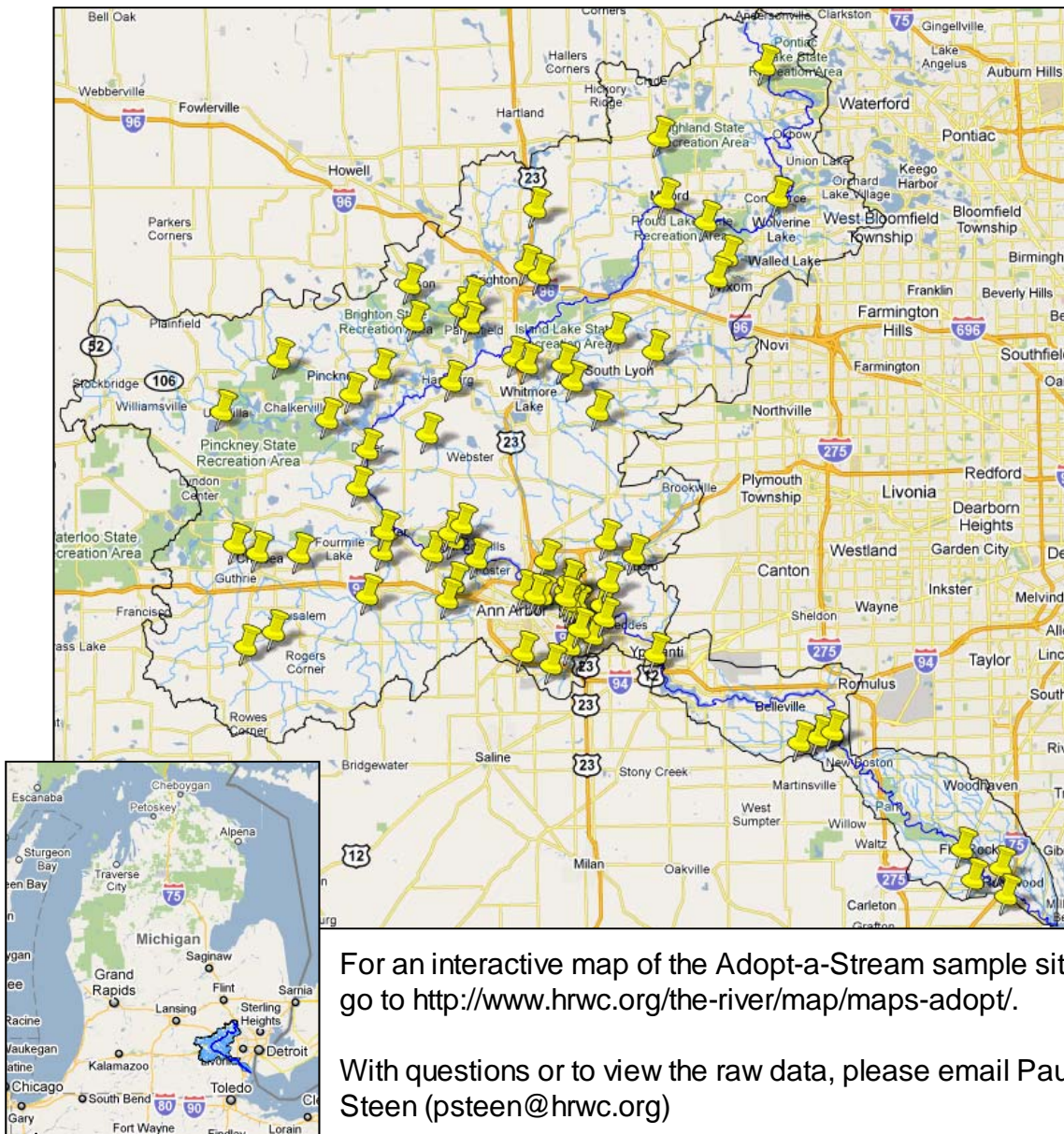




Protecting the river since 1965

# Adopt-a-Stream Winter Stonefly Search 2010 Data

## January 2010 data and site summaries for the Huron River watershed sample sites



For an interactive map of the Adopt-a-Stream sample sites, go to <http://www.hrwc.org/the-river/map/maps-adopt/>.

With questions or to view the raw data, please email Paul Steen ([psteen@hrwc.org](mailto:psteen@hrwc.org))

# Why do we look for stoneflies?

The Huron River Watershed Council (HRWC) holds three benthic macroinvertebrate collections per year, during which volunteers visit river and creek across the watershed and collect a sample of the critters that live in the stream and on the streambed.

“Benthic macroinvertebrates” are another word for stream insects, crustaceans, worms, and mollusks. The word “benthic” refers to the bottom of a lake or stream, and the word “macroinvertebrate” refers to creatures that don’t have a backbone and that are large enough to see with the naked eye.

Like canaries in a coal mine, benthic macroinvertebrates are indicative of a stream’s habitat and water quality. If these macroinvertebrates are absent or start disappearing from once abundant populations, there is a good chance that something is negatively affecting the stream (like pollution, erosion, or uneven stream flow). Collecting and counting macroinvertebrates does not tell what the problem is, but it does show us, in an inexpensive and rapid way, if there might be a problem. If HRWC gets a macroinvertebrate sample that is particularly bad from what is normally found at that site, then we can mobilize more volunteers to resample the site, and if the problem continues, visit the site and perform a more thorough assessment.

In late January every year, HRWC volunteers go to our stream sites and look for a particular type of benthic macroinvertebrate- stoneflies. Stoneflies are particularly sensitive to stream health. They require cold, well oxygenated water that is free from pollution. We look for stoneflies in the winter because of their life cycle. Some stonefly families undergo a transition from the aquatic nymph to terrestrial adult in late winter and early spring, so in order to find the nymph it is necessary to look in the wintertime.

HRWC regularly finds 5 different stonefly families in its sampling events (see next page for diagrams). Every year, most volunteer teams are able to find 1 or 2 stonefly families (usually winter stonefly and small winter stoneflies), indicating they are sampling a healthy river. In exceptional rivers with habitat suited just right for stoneflies, volunteers can find 3 or 4 stonefly families. In creeks that are heavily affected by human development and erosion, like Millers and Mallets Creek, it is very unusual to find any stoneflies.

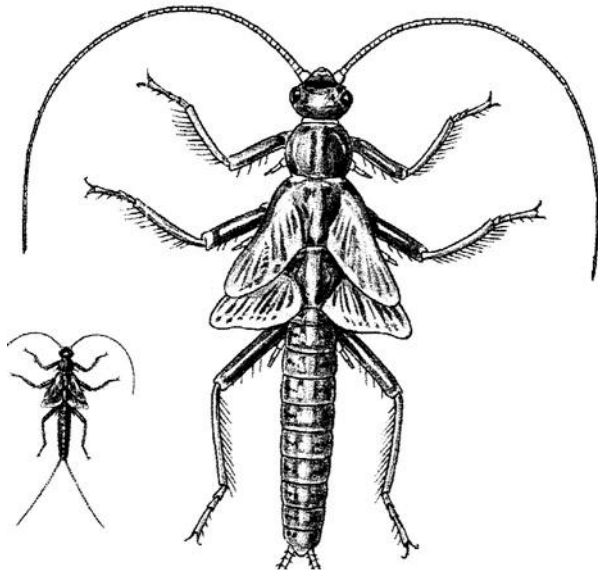


Common Stonefly: Family Perlidae

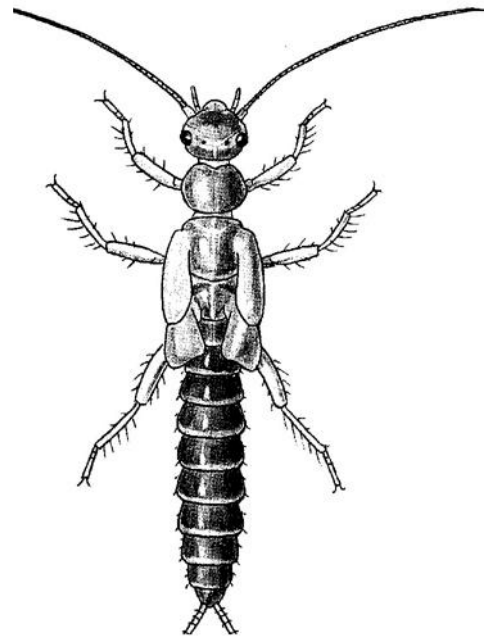


Winter Stonefly: Family Taeniopterygidae

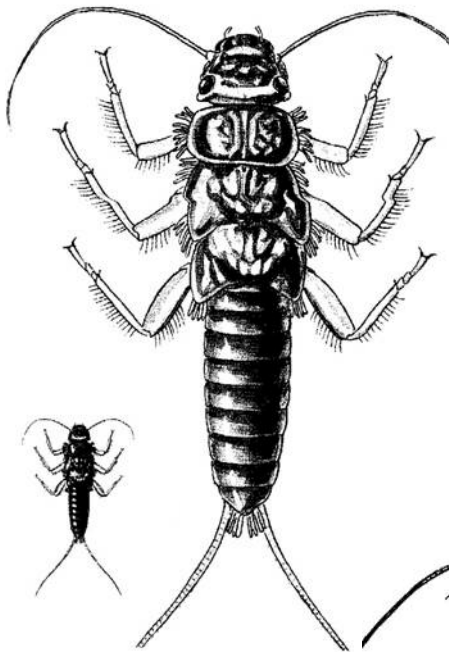
# Common Stoneflies in the Huron River Watershed



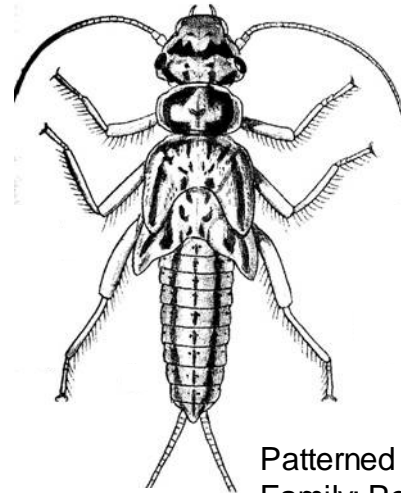
Winter Stonefly  
Family: Taeniopterygidae



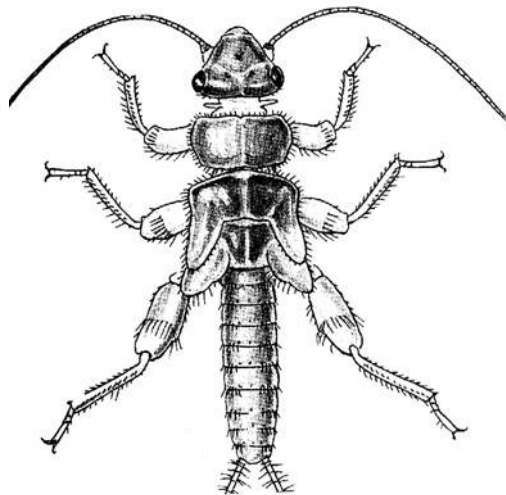
Small Winter Stonefly  
Family: Capniidae



Common Stonefly  
Family: Perlidae



Patterned Stonefly  
Family: Perlodidae



Nemourid Broadback Stonefly  
Family: Nemouridae



## Adopt-a-Stream

### Winter Stonefly Search 2010 Data

For all available data, contact Paul Steen at HRWC, psteen@hrwc.org

Abundance rating was subjectively assigned by the volunteers at the site (none, rare, some, frequent, abundant)

Sites highlighted in gray were not sampled this year.

Stonefly common names: Capniidae: Small winter stonefly; Nemouridae: Nemourid broadback stonefly

Perlidae: common stonefly; Perlodidae: patterned stonefly; Taeniopterygidae: winter stonefly

SITE LOCATION	SITE #	2010 SAMPLES					ALL YEARS					
		Capniidae	Nemouridae	Perlidae	Perlodidae	Taeniopterygidae	Abundance Rating	Total # Families	# Times sampled	Avg. Family Count	Min Family Count	Max Family Count
Arms Creek: Walsh Road	1								9	1.8	1	3
Bancroft-Noles Drain: Lebo Park	89						None	0	2	0.0	0	0
Boyden Creek: Delhi	2								10	1.3	1	2
Boyden Creek: Golf Course	3								12	1.5	1	3
Boyden Creek: Huron River Drive	4								10	0.0	0	0
Chilson Creek: Brighton Road	45						None	0	9	0.1	0	1
Chilson Creek: Chilson Road	5				X	X	Abundant	2	11	1.6	1	2
Davis Creek: 11 Mile Road	81						None	0	6	0.0	0	0
Davis Creek: Doane Road	6	X			X	X	Frequent	3	12	2.2	1	3
Davis Creek: Pontiac Trail	7						None	0	13	1.2	0	3
Fleming Creek: Botanical Gardens	9	X				X	Abundant	2	10	1.6	1	2
Fleming Creek: Galpin	84								5	1.0	1	1
Fleming Creek: Geddes Road	11								11	1.0	1	1
Fleming Creek: Radrick Farms	12	X					Abundant	1	8	1.1	1	2
Fleming Creek: Warren Road	13								11	1.0	1	1
Greenoak Creek: Rushton Road	8						None	0	10	0.0	0	0
Hay Creek: M-36	15	X			X	X	Frequent	3	9	2.0	1	3
Honey Creek: Darwin	16	X				X	Rare	2	10	1.8	1	2
Honey Creek: Jackson Road	18								10	0.6	0	1
Honey Creek: Pratt Road	19						None	0	11	0.6	0	2
Honey Creek: Wagner Road	20								11	1.3	1	2
Horseshoe Creek:	21	X				X	Frequent	2	11	1.4	1	2
Hummocky Lick: M-36	63	X					Frequent	1	9	0.4	0	2
Huron Creek: Near the mouth	22	X				X	Abundant	2	9	2.0	2	2
Huron River: Bell Road	62	X				X	Abundant	2	8	1.5	1	2
Huron River: Commerce Road	47								8	0.9	0	1
Huron River: Cross Street	24	X				X	Some	2	10	1.0	0	2
Huron River: Flat Rock	23	X				X	Frequent	2	7	1.7	1	2
Huron River: Island Park	61	X				X	Abundant	2	8	2.1	2	3
Huron River: Proud Lake Rec Area	64						None	0	8	0.1	0	1

SITE LOCATION	SITE #	2010 SAMPLES						ALL YEARS				
		Capniidae	Nemouridae	Perlidae	Perlodidae	Taeniopterygidae	Abundance Rating	Total # Families	# Times sampled	Avg. Family Count	Min Family Count	Max Family Count
Huron River: US-23 (Liv. Co)	51					X	Rare	1	9	0.8	0	1
Huron River: White Lake Road	25				X	X	Frequent	2	9	1.7	1	2
Huron River: Zeeb Road	26	X				X	Frequent	2	9	2.0	1	3
Malletts Creek: Chalmers	27								10	0.0	0	0
Malletts Creek: I-94	28						None	0	11	0.0	0	0
Malletts Creek: Main Street	56						None	0	8	0.0	0	0
Malletts Creek: Scheffler	29								8	0.0	0	0
Mann: VanAmberg Road	30	X		X	X	X	Abundant	4	10	2.4	1	4
Mill Creek: Fletcher Road	31	X			X	X	Abundant	3	10	1.7	1	3
Mill Creek: Jackson Road	33	X				X	Some	2	9	1.8	1	2
Mill Creek: Klinger Road	57								8	1.3	0	2
Mill Creek: Letts at M-52	34	X				X	Abundant	2	13	1.4	0	2
Mill Creek: Manchester Road	55								10	0.9	0	2
Mill Creek: Shield Road	80	X				X	Abundant	2	7	1.9	1	2
Mill Creek: Warrior Park	79	X					Some	1	7	1.9	1	2
Millers Creek (Trib): Lakehaven Ct	74								7	0.1	0	1
Millers Creek: Baxter Road	73						None	0	6	0.0	0	0
Millers Creek: Glazier Way	35						None	0	11	0.1	0	1
Millers Creek: Green Road	75		X				Rare	1	7	1.1	0	2
Millers Creek: Hubbard	77						None	0	7	0.0	0	0
Millers Creek: Huron Pkwy	76						None	0	7	0.0	0	0
Millers Creek: Plymouth Road	72						None	0	7	0.0	0	0
Norton Creek: West Maple Road	65								7	0.0	0	0
Pettibone Creek: Commerce Road	67								6	0.0	0	0
Pettibone Creek: Livingston Road	68						None	0	6	0.0	0	0
Port Creek: Armstrong Road	60								6	0.0	0	0
Portage Creek: Dexter-Townhall	37								11	1.7	1	3
Portage Creek: Unadilla	58						None	0	8	0.1	0	1
S Branch Huron River: Silver Lake	49					X	Some	1	9	1.6	1	2
South Ore Creek: Bauer Road	52								9	0.8	0	2
South Ore Creek: Hamburg Road	40					X	Some	1	12	1.3	1	2
South Ore Creek: Lake Ridge	50						None	0	8	0.0	0	0
Swift Run	41								10	0.2	0	2
Traver Creek: Broadway	42	X					Rare	1	10	0.7	0	1
Traver Creek: Dhu Varren									10	1.0	0	2
Walker Creek: 8 Mile Road	82						None	0	5	0.0	0	0
Woodruff Creek: Buno Road	46						None	0	8	0.4	0	1
Woodruff Creek: Maxfield Road	44						None	0	10	0.2	0	1
Woods Creek: L Huron Metropark	14				X	X	Rare	2	10	1.8	1	3
Woods Creek: Martinsville Road	87						None	0	2	0.0	0	0
Woods Creek: Renton Road	88						None	0	3	0.0	0	0