

## Macro-Invertebrate Survey - Big Creek September 17, 2021

The collection and identification teams were comprised of HLPOA members and friends: Susan Brooks, Dan Schaeffer, Candy Hendrickson, Linda Stevens, Rick Larobardiere, and Melanie Brown. Leah Higgins, an AmeriCorps volunteer from Huron Pines assisted as well.

Melanie trained with the Muskegon River Watershed Assembly in using the collection net and how to sample the different stream environments. Leah shuttled samples from the stream to the sorting table. Rick and Susan were the collection team turning over rocks and wood debris to find specimens. Dan, Linda, and Candy worked at the bench sorting through the stream samples. Dan also was the recording photographer, and his photographs of the teams are below.



Sampling Team working below the Dewey Ave. Culvert on Big Creek (Photo by Dan Schaeffer)



Linda and Candy Sorting Macroinvertebrates (Photo by Dan Schaeffer)

The most commonly captured specimens were fresh water shrimp or “scuds”. They are quite tolerant of pollution and live in the bottom sediments. However, they are an important source of nutrition for small fish and some invertebrates. Melanie took the picture of a sample of these species. Look at the eggs!



Amphipoda (scuds) In Collection Jar (Photo by Melanie Brown)

In increasing order of pollution tolerance the abundance of species were these:

Mayflies	11
Caddisflies	2
Dragonflies	1
Hellgramites	1
Scuds	>100
Aquatic Worms	30

Based on the numbers and types of animals collected, the water quality score as indicted by the MRWA protocol was "good".

Melanie Brown  
09/17/2021