



2021 Stream Team Report

The “Stream Team” macroinvertebrate river monitoring program allows participating students to experience the different roles of river monitoring - whether it be stepping into a pair of chest waders for the first time, learning macroinvertebrate collection techniques, identifying/sorting the macroinvertebrates found in the river, or simply working together as a study team. These activities give students the opportunity to get a hands-on science experience that not only would help give them gain an appreciation of the river that flows through their communities, but also help them meet the Michigan Academic Standards for science. This year, our program is being funded in part by the Action grant awarded to Friends of the Shiawassee River from Saginaw Bay WIN and some of our generous donors we call Stream Team Site Sponsors. We are so thankful to our funders and donors who help support this program.

The Friends regularly conduct a series of stream monitoring events in both the spring and fall each year. Due to many school districts current restrictions, we were unable to work with all of the school groups we typically join up with at this time of year. However, we were able to work with two of our usual school groups, and although we had to do things a little differently, it was a wonderful learning experience for the students as it typically is!

In early May we began our spring stream monitoring. It was ideal conditions for macroinvertebrate monitoring with wonderful weather at almost all the events. Significantly lower river levels than we typically see at that time of year enabled us to quickly and efficiently complete the collections. All in all, we were able to complete 9 of our river monitoring events. We worked with 54 volunteers, 31 of whom were students from Byron Middle School and Chesaning High School. In Fenton, we collaborated with Keepers of the Shiawassee River who has just started their own monitoring program in the Fenton and Linden area. One of our previous sites was at Rackham Park in downtown Fenton. This site will now be managed by Keepers of the Shiawassee which will allow Friends can take on other sites outside of the Fenton/Linden area that they’ll be monitoring. We are excited about this collaboration with Keepers, the more data being collected along the Shiawassee River the more successful and likely we’ll be to notice and pinpoint disruptions to the river’s health. The good news: the sites we were able to monitor all ranked well (see results below).

Spring Stream Monitoring Results 2021

Location	Total Stream Quality Score	Ranking
Byron	56	Excellent
Chesaning, Showboat Park	51	Excellent
Corunna, Above Former Dam	37	Good
Corunna, Below Former Dam	23	Fair
DeVries Nature Conservancy	58	Excellent
Fenton, Rackham Park	31	Fair
Shiatown, Above Former Dam	48	Good
Shiatown, Below Former Dam	47	Good
Owosso, Ampitheater Area	47	Good

Fall Stream Monitoring Results 2021

Location	Total Stream Quality Score	Ranking
South State Drain, Owosso	41	Good
Waterworks Park, Owosso	40	Good

Excellent	> 48
Good	34-48
Fair	19-33
Poor	<19

The scoring technique used for this and all subsequent river monitoring sessions is provided by MiCorps and has been used for all sessions.

We also found, as expected, that the area above both the Shiatown and Corunna dams ranked lower than the areas below the dams. We predict that those scores will increase over time as the restoration of the habitat and water quality upstream stabilizes. Friends' river monitoring above and below the former dams will be essential in tracking the progress of the benthic macroinvertebrates and their habitat during this time of habitat restoration.

In the fall, we experienced very heavy rains the week prior to our scheduled events. At most of our sites, on the mainstem of the river, the water was far too deep and moving very fast to be able to safely

monitor. However, we were fortunate to have even been able to collect at two of our sites. One of which was the South State Drain, a small tributary on the north end of Owosso. We had the opportunity to work with Owosso High School's A.P. Biology class. These students were so engaged in the collecting techniques as well as identifying the macroinvertebrates! We were also able to collect samples at our site nearest the headwaters. This site, at Waterworks Park in Holly, is much slower moving than downstream and has a shallow area perfect for students to get in for some hands on education. We worked with Holly Middle School science classes and provided an after school citizen science opportunity for them. In total, we worked with 43 students and 6 adult volunteers during the fall round. After rescheduling our other sites multiple times, we had additional rains and even high river levels which pushed us further outside of our sampling window. We are hopeful 2022 will allow for safer river conditions and more opportunities for us to involve students and citizen scientists of all ages to partake in this program.

We are truly grateful to Saginaw Bay WIN and our Stream Team Site Sponsors for providing the funding to help push forward our 2021 Stream Team endeavors. We also want to acknowledge our adult volunteers, teachers, and the students themselves for their roles in making our Stream Team efforts a success.

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Friends of the Shiawassee River