

Huron Creek at Dexter-Pinckney Road

Adopt-a-Stream Site Report, updated January 2012

Overall Condition: **Good**

At this site there are many kinds of bugs and several of them are sensitive. The water is clean and cool. The habitat is good here although bed and the banks may have been impacted recently by construction of a bridge. Overall the stream has been rated good, which means that it is healthier than an average stream of this size.

Measuring Stream Quality

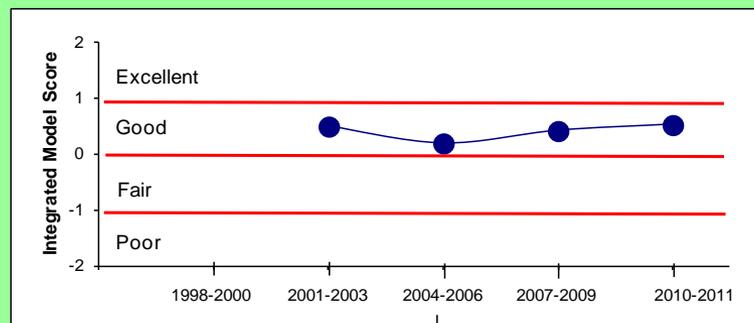
We use the bugs living in the creek to measure stream quality for two reasons. When the stream is rich in habitat variety it will have many diverse kinds of bugs (called families). Also, some bugs (called sensitive) can live only in good quality streams; they die in a poor quality stream. Any stream with sensitive families has the clean water and good habitat required by those bugs to survive.

Monitoring Data

This data comes from HRWC volunteers who have monitored this site 35 times, starting in 1996. This site on Huron Creek is 18 feet wide and shallow (about half a foot). In 2009 we found good habitat here although the rocks in the swift water (riffles) were somewhat clogged with silt and the banks were mostly bare. We anticipate that these bare banks are a temporary disturbance from the trail construction here. It has clean, cool water (seldom over 69°F) and with such little urban run-off (from only 6% impervious surface), we expect the creek to be in good shape.

There is very good diversity of bugs here for such a small stream. In the spring we typically find nearly 13 different families and 3 are sensitive families that can survive in a degraded stream. In the fall an average of nearly 14 families are typically found, with 2 sensitive ones.

Stoneflies are very sensitive insects that are only found in clean water. Both kinds of "winter stoneflies" (that grow only in winter and are dormant the rest of the year) live in this site, confirming the good water quality.



To determine the overall condition rating, HRWC uses an integrative model that compares this site to all of HRWC's other monitoring sites in the Huron watershed. The model uses insect, habitat, temperature, and stream size data.



Photo credit: HRWC

Huron Creek at Dexter- Pinckney Road

Background Information

Site History

Huron Creek flows into the west side of the Huron River in the Hudson Mills Metropark, away from the developed parts of the park. The Hike-Bike Trail running alongside the west side of the Huron and crossing Huron Creek is a recent addition; it was built in 2008-2009. This little creek historically has had excellent insect diversity and winter stonefly populations, although it requires the longest walk (and perhaps most confusing) for access of all the sites that HRWC monitors.

How is the Creek affected by land use here?

The area of land draining to this on Huron Creek is small, receiving water from only 6 square miles of land, mostly farms.

This is a rural area in the Huron watershed, according to data from 2000. Only one-seventh of the Huron Creek watershed is developed while half of it is used for agriculture. At that time, only 6% of the land was covered by impervious surface.

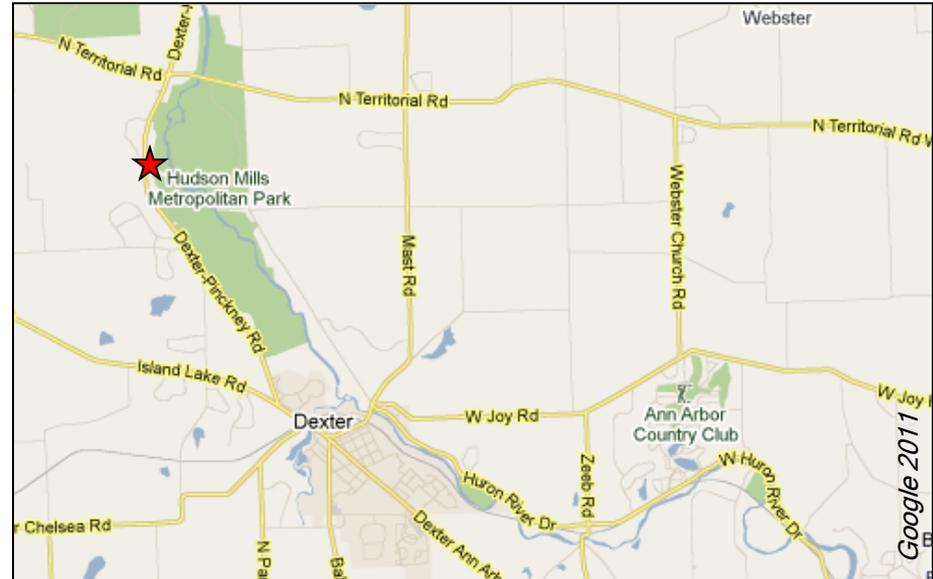
Impervious surface is hard on streams because it prevents rain from being filtered and cleaned through the soil and, instead, delivers it quickly to the stream, carrying pollutants and causing surging flows that damage the stream habitat and biotic community.

Creeks tend to start degrading once the watershed is more than 8% impervious and become badly degraded by 25%. [The most urbanized Huron River watershed that we study (draining into Millers Creek at Baxter Road) is 51% impervious.]

Watershed land use: 50% Agriculture, 14% Urban, 14% Forest, 10% Open, 13% Wetland.

What You Can Do

Help us improve Huron Creek! Plant trees and deep-rooted plants in low areas on your property to help the rain infiltrate into the earth so it can be cleansed and cooled. Go to www.hrwc.org/take-action for ways to keep the rain at home so that it doesn't wash pollutants into the stream and cause flooding from the sudden increase in flow volume.



Insects found in at least two sampling events from 2009-2011:

- | | |
|---|---|
| *Capniidae — slender winter stonefly | Elmidae — riffle beetle |
| *Corydalidae — dobson fly | Heptageniidae — flathead mayfly |
| *Nemouridae — Nemourid broadback stonefly | Hydropsychidae — common net-spinner caddisfly |
| *Perlodidae — Perlodid stonefly | Limnephilidae — northern caddisfly |
| *Taeniopterygidae — broad-back stonefly | Simuliidae — black fly |
| Aeshnidae — damner dragonfly | Tipulidae — crane fly |
| Calopterygidae — broad-winged damselfly | Uenoidae — Uenoid caddisfly |
| Chironomidae — midge | |
| Cordulegastridae — biddy dragonfly | |

**Sensitive Family*