Aquatic Insect Population Surveys

Mason-Griffith Founders Chapter of Trout Unlimited (MGFTU) is participating in a statewide program that uses aquatic insect populations and diversity to monitor stream quality in Michigan. Michigan Clean Water Corps (MiCorps) is administered by Michigan State University Extension in cooperation with Michigan Department of Environment and Great Lakes, and Energy (EGLE) and the Huron River Watershed Council. MiCorps provides training, quality control and the database. The data can be accessed online and is useful to state resource managers and organizations, like MGFTU, that are involved in stream improvement programs.

The Chapter's involvement with MiCorps began in 2010 when we were approached by Tom Dale, of the Marguerite Gahagan Nature Preserve in Roscommon, to consider assisting them by surveying two of their six sites in the upper Au Sable Watershed. After extensive MiCorps training, chapter volunteers began surveying insect populations at Guide's Rest on the Main Stream of the Au Sable and at Karen Lake Road Bridge of the East Branch in 2011. Chapter members received additional training by Tom Dale at Kirtland Community College where the preserved insects were identified and sites scored.

The Chapter now owns fourteen of its own MiCorps sites: six on the Main Stream of the Au Sable, two on the East Branch of the Au Sable, two on the West Branch of Big Creek, and four on the Manistee. Many of the Chapter's MiCorps sites were selected to gather pre and post insect population data for Chapter stream restoration projects. Since 2011, MGFTU volunteers have conducted over 80 surveys at the fourteen sites. The MiCorps insect data on Michigan streams can be accessed online to: https://micorps.net; then, MiCorps Data Exchange, then, View Data and highlight Streams and County, select Crawford and Kalkaska, highlight Macro Family and view results.

The Chapter attempts to conduct six surveys each spring, usually in early May. A team of five volunteers will begin by collecting insects by using nets. Insects are placed into five-gallon buckets and taken to the sorting table where they are removed and placed into jars of alcohol. The Chapter's identification and scoring is now done by Ralph Rucinski and Bob Andrus. Occasionally we get stumped and need to rely on Jim Wilkinson's expertise to identify an insect. Typically, a survey site will have between 200 and 400 insects that represent 20 to 30 different families.

MFGTU volunteer projects are often in need of additional volunteers. In addition to the MiCorps Insect Surveys, the Chapter also conducts a fall trout redd survey, monitors stream temperature, conducts cedar plantings, maintains stream access sites, and works with the Chapter's summer river crews stream improvement projects.

For more information about volunteering for the Chapter's river projects, contact Bob Andrus at Randrus45@gmail.com or MasonGriffithTU001@yahoo.com