

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

Invertebrate community results from selected sites in the Lake Erie - Lake St. Clair Basin (National Water-Quality Assessment Program)

Invertebrate community surveys were conducted at 3 stream sites (3 reaches per stream) in the Lake Erie - Lake St. Clair Basin in 1997. Two benthic invertebrate samples were collected at each stream reach: (1) a semiquantitative targeted-habitat sample (richest targeted habitat, RTH), usually a fast-flowing, coarse-grained riffle; and (2) a qualitative multihabitat sample (QMH), from as many instream habitat types as were present and accessible within the sampling reach in a one-half-hour period. RTH samples consisted of five composite kick samples collected using a modified Slack sampler (425- μ m mesh) having an area of 0.5 m by 0.5 m (depth 0.1 m). QMH samples consisted of a composite of kicking, dipping, or sweeping a D-frame kick net equipped with a 210- μ m mesh net in a manner appropriate for the many instream habitat types being sampled. More details regarding collection methods can be found in Cuffney and others, 1993.

Field samples were elutriated by swirling and were sieved (425- μ m mesh sieve for RTH, 210- μ m mesh sieve for QMH) until sample volumes were less than 750 mL. Samples were preserved in the field in 10 percent buffered formalin, and within one week, they were drained and refilled with 70 percent ethanol and shipped to the USGS National Water Quality Laboratory for identification. Additional surface-water and/or water-quality data for these sites can be found in the continuous-record sections of the Indiana, Michigan, New York, and Ohio Water Resources Data Reports.

Phylum or class names are in bold uppercase and parentheses, order names in bold uppercase, suborder names in uppercase and parentheses, family names in uppercase, subfamily or tribe names in *italic* and parentheses, and genus and species names in *italics* (1.25 m² = total area sampled for richest targeted habitat sample (RTH); Q = qualitative multihabitat sample (QMH); + = at least one organism present in the QMH sample).

CALENDAR YEAR 1997

STATION NUMBER	STATION NAME	DATE	DRAINAGE AREA (mi ²)	REACH	REACH LENGTH (meters)
04161820	CLINTON RIVER AT STERLING HEIGHTS, MI	09/08/97	309	A	286
04161820	CLINTON RIVER AT STERLING HEIGHTS, MI	09/09/97	309	B	308
04161820	CLINTON RIVER AT STERLING HEIGHTS, MI	09/26/97	309	C	298
04193500	MAUMEE RIVER AT WATERVILLE, OH	10/08/97	6,330	A	500
04193500	MAUMEE RIVER AT WATERVILLE, OH	10/09/97	6,330	B	400
04193500	MAUMEE RIVER AT WATERVILLE, OH	10/09/97	6,330	C	400
04211820	GRAND RIVER AT HARPERSFIELD, OH	09/10/97	552	A	509
04211820	GRAND RIVER AT HARPERSFIELD, OH	09/11/97	552	B	267
04211820	GRAND RIVER AT HARPERSFIELD, OH	09/11/97	552	C	291

REFERENCES CITED:

Cuffney, T.F., Gurtz, M.E., and Meador, M.R., 1993, *Methods for collecting benthic invertebrate samples as part of the National Water-Quality Assessment Program*. U.S. Geological Survey Open-File Report 93-406, 66 p.