

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

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

Fish community surveys were conducted at 6 stream sites in the Lake Erie - Lake St. Clair Basin in 1998. Fish were collected by electrofishing with pulsed-DC current in a mapped reach at each stream site. Two electrofishing passes were conducted at each reach on the same day. Kick seining was done briefly in riffles after completion of electrofishing. One-quarter inch mesh was used for the kick seine and the dip nets. Fish were identified, measured, weighed, and checked for external anomalies such as parasites, lesions, and skeletal deformities. Individuals were returned to the stream after processing. More details regarding collection methods can be found in Meador and others, 1993. Individual fish data (including length, weight, and anomalies) are available from the USGS, Lansing, Michigan. Additional surface-water and/or water-quality data for selected sites can be found in the continuous-record sections of the Indiana, Michigan, and Ohio Water Resources Data Reports.

Family names are in uppercase, scientific names are in italics, and common names are in parentheses. Common names follow American Fisheries Society (Robins and others, 1991). Hybridized fish are located at the end of the table.

CALENDAR YEAR 1998

CATOSTOMIDAE

STATION NUMBER	STATION NAME	DATE	DRAIN-AGE AREA (mi <sup>2</sup> )	REACH - A LENGTH (meters)	<i>Carpiodes cyprinus</i> (quillback)		
					Number of Fish	Batch Weight (grams)	Fish with Anomalies
04161820	CLINTON RIVER AT STERLING HEIGHTS, MI	07/29/98	309	286	0	0	0
414041084320700	E. BR. ST. JOSEPH RIVER AT PIONEER, OH	07/31/98	111	240	0	0	0
414101084401500	W. BR. ST. JOSEPH RIVER NEAR BRIDGEWATER CENTER, OH	07/30/98	102	240	3	22	0
04178000	ST. JOSEPH RIVER NEAR NEWVILLE, IN	10/24/98	610	300	0	0	0
04193500	MAUMEE RIVER AT WATERVILLE, OH	08/05/98	6,330	500	17	8038.1	0
04211820	GRAND RIVER AT HARPERSFIED, OH	08/04/98	552	509	0	0	0

CATOSTOMIDAE -- Continued

STATION NUMBER	<i>Catostomus commersoni</i> (white sucker)			<i>Hypentelium nigricans</i> (northern hog sucker)			<i>Minytrema melanops</i> (spotted sucker)			<i>Moxostoma anisurum</i> (silver redhorse)		
	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies
04161820	57	743	0	48	762.5	0	0	0	0	0	0	0
414041084320700	2	265.5	1	10	150	0	0	0	0	0	0	0
414101084401500	39	1641	6	53	1984	0	0	0	0	0	0	0
04178000	5	651	0	0	0	0	5	568.1	0	0	0	0
04193500	0	0	0	23	5942.3	0	0	0	0	1	984	1
04211820	8	31	0	117	666	0	0	0	0	0	0	0

CATOSTOMIDAE -- Continued

CENTRARCHIDAE

STATION NUMBER	<i>Moxostoma duquesnei</i> (black redhorse)			<i>Moxostoma erythrurum</i> (golden redhorse)			<i>Moxostoma macrolepidotum</i> (shorthead redhorse)			<i>Ambloplites rupestris</i> (rock bass)		
	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies
04161820	0	0	0	0	0	0	0	0	0	5	1047	0
414041084320700	0	0	0	2	457	0	0	0	0	1	445	1
414101084401500	1	550	0	16	4147	0	0	0	0	2	140	0
04178000	2	290	0	6	1230	0	0	0	0	11	1378.6	2
04193500	0	0	0	17	3176.3	0	25	10307	0	2	108	0
04211820	0	0	0	106	342	0	0	0	0	52	927	1

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CENTRARCHIDAE -- Continued

STATION NUMBER	<i>Lepomis cyanellus</i> (green sunfish)			<i>Lepomis gibbosus</i> (pumpkinseed)			<i>Lepomis macrochirus</i> (bluegill)			<i>Micropterus dolomieu</i> (smallmouth bass)		
	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies
04161820	2	18	0	2	36	0	0	0	0	0	0	0
414041084320700	14	82	1	0	0	0	0	0	0	0	0	0
414101084401500	19	85	0	0	0	0	0	0	0	0	0	0
04178000	4	71.5	0	2	66.4	0	9	37.6	0	0	0	0
04193500	1	13.8	0	0	0	0	0	0	0	39	3214	0
04211820	1	14	0	0	0	0	10	45	0	70	387	0

CENTRARCHIDAE -- Continued

CLUPEIDAE

STATION NUMBER	<i>Micropterus salmoides</i> (largemouth bass)			<i>Pomoxis annularis</i> (white crappie)			<i>Pomoxis nigromaculatus</i> (black crappie)			<i>Dorosoma cepedianum</i> (gizzard shad)		
	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies
04161820	22	130.5	0	0	0	0	0	0	0	0	0	0
414041084320700	1	1	0	0	0	0	0	0	0	0	0	0
414101084401500	1	570	0	0	0	0	2	325	0	6	49	0
04178000	1	3.8	0	7	104	0	0	0	0	0	0	0
04193500	0	0	0	1	290	0	0	0	0	8	76	0
04211820	0	0	0	0	0	0	0	0	0	0	0	0

COTTIDAE

CYPRINIDAE

STATION NUMBER	<i>Cottus bairdi</i> (mottled sculpin)			<i>Camptostoma anomalum</i> (central stoneroller)			<i>Cyprinella spiloptera</i> (spotfin shiner)			<i>Cyprinus carpio</i> (common carp)		
	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies
04161820	0	0	0	0	0	0	1	10	0	15	48310	0
414041084320700	0	0	0	2	2	0	0	0	0	12	24830	1
414101084401500	79	456.5	0	124	1538	1	12	50	0	7	11110	0
04178000	0	0	0	0	0	0	6	23.8	2	30	67000	0
04193500	0	0	0	2	4.3	0	41	91.1	0	59	70152	1
04211820	0	0	0	17	65	0	5	32	0	0	0	0

CYPRINIDAE -- Continued

STATION NUMBER	<i>Luxilus chrysocephalus</i> (striped shiner)			<i>Luxilus cornutus</i> (common shiner)			<i>Nocomis micropogon</i> (river chub)			<i>Notemigonus crysoleucas</i> (golden shiner)		
	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies
04161820	0	0	0	0	0	0	0	0	0	0	0	0
414041084320700	0	0	0	1	7	0	1	21	0	0	0	0
414101084401500	0	0	0	16	137	0	58	1042	8	1	4	0
04178000	0	0	0	0	0	0	1	14.2	0	0	0	0
04193500	2	1.8	0	2	1.9	0	0	0	0	0	0	0
04211820	167	499.5	0	0	0	0	196	1732.5	1	0	0	0

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CYPRINIDAE -- Continued

STATION NUMBER	<i>Notropis atherinoides</i> (emerald shiner)			<i>Notropis buccatus</i> (silverjaw minnow)			<i>Notropis photogenis</i> (silver shiner)			<i>Notropis stramineus</i> (sand shiner)		
	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies
04161820	2	1	0	0	0	0	0	0	0	0	0	0
414041084320700	0	0	0	0	0	0	0	0	0	0	0	0
414101084401500	3	6	0	0	0	0	12	97	0	0	0	0
04178000	0	0	0	0	0	0	0	0	0	0	0	0
04193500	4	4.5	0	0	0	0	0	0	0	0	0	0
04211820	134	181	0	8	25	0	0	0	0	142	281.5	0

CYPRINIDAE -- Continued

STATION NUMBER	<i>Notropis volucellus</i> (mimic shiner)			<i>Pimephales notatus</i> (bluntnose minnow)			<i>Pimephales promelas</i> (fathead minnow)			<i>Rhinichthys atratulus</i> (blacknose dace)		
	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies
04161820	0	0	0	2	4	0	0	0	0	0	0	0
414041084320700	0	0	0	5	13	0	0	0	0	0	0	0
414101084401500	1	2	0	16	67.5	0	8	22	0	11	33	0
04178000	0	0	0	17	38.7	0	0	0	0	0	0	0
04193500	0	0	0	50	41.1	0	0	0	0	0	0	0
04211820	1	2	1	501	1611	0	0	0	0	0	0	0

CYPRINIDAE -- Continued

ESOCIDAE

ICTALURIDAE

STATION NUMBER	<i>Semotilus atromaculatus</i> (creek chub)			<i>Esox americanus vermiculatus</i> (grass pickerel)			<i>Ameiurus natalis</i> (yellow bullhead)			<i>Ictalurus punctatus</i> (channel catfish)		
	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies
04161820	0	0	0	0	0	0	0	0	0	0	0	0
414041084320700	19	52	3	1	46	0	0	0	0	1	830	0
414101084401500	33	212	0	1	45	0	0	0	0	4	2940	0
04178000	0	0	0	0	0	0	3	389.7	0	0	0	0
04193500	0	0	0	0	0	0	1	82.7	0	5	679.3	1
04211820	2	11	0	0	0	0	0	0	0	0	0	0

ICTALURIDAE -- Continued

LEPISOSTEIDAE

PERCICHTHYIDAE

STATION NUMBER	<i>Noturus flavus</i> (stonecat)			<i>Noturus miurus</i> (brindled madtom)			<i>Lepisosteus osseus</i> (longnose gar)			<i>Morone chrysops</i> (white bass)		
	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies
04161820	0	0	0	0	0	0	0	0	0	0	0	0
414041084320700	0	0	0	0	0	0	0	0	0	0	0	0
414101084401500	0	0	0	0	0	0	0	0	0	0	0	0
04178000	0	0	0	0	0	0	0	0	0	0	0	0
04193500	0	0	0	0	0	0	3	840	0	7	668.3	0
04211820	9	221	0	2	12	0	0	0	0	0	0	0

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PERCIDAE

STATION NUMBER	<i>Ammocrypta pellucida</i> (eastern sand darter)			<i>Etheostoma blennioides</i> (greenside darter)			<i>Etheostoma caeruleum</i> (rainbow darter)			<i>Etheostoma flabellare</i> (fantail darter)		
	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies
04161820	0	0	0	17	35.5	0	0	0	0	0	0	0
414041084320700	0	0	0	0	0	0	0	0	0	0	0	0
414101084401500	0	0	0	24	57	0	0	0	0	6	15	0
04178000	0	0	0	0	0	0	0	0	0	0	0	0
04193500	0	0	0	6	9.2	0	0	0	0	0	0	0
04211820	1	0.5	0	161	577	0	16	33	0	7	12.5	0

PERCIDAE -- Continued

STATION NUMBER	<i>Etheostoma nigrum</i> (johnny darter)			<i>Perca flavescens</i> (yellow perch)			<i>Percina caprodes</i> (logperch)			<i>Percina maculata</i> (blackside darter)		
	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies
04161820	3	2	0	5	110	0	0	0	0	0	0	0
414041084320700	2	2.5	0	0	0	0	0	0	0	6	31	0
414101084401500	10	19	0	0	0	0	21	158	0	1	7	0
04178000	0	0	0	0	0	0	0	0	0	0	0	0
04193500	0	0	0	0	0	0	1	4.2	0	0	0	0
04211820	5	5.5	0	0	0	0	15	96	0	10	30	0

PERCIDAE -- Continued

PERCOPSIDAE

PETROMYZONTIDAE

SCIAENIDAE

STATION NUMBER	<i>Stizostedion vitreum</i> (walleye)			<i>Percopsis omiscomaycus</i> (trout-perch)			<i>Ichthyomyzon fossor</i> (northern brook lamprey)			<i>Aplodinotus grunniens</i> (freshwater drum)		
	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies
04161820	2	805	0	0	0	0	0	0	0	1	260	0
414041084320700	0	0	0	0	0	0	2	27	0	0	0	0
414101084401500	0	0	0	0	0	0	0	0	0	0	0	0
04178000	0	0	0	0	0	0	0	0	0	0	0	0
04193500	0	0	0	0	0	0	0	0	0	10	3191	0
04211820	0	0	0	2	14	0	0	0	0	0	0	0

UMBRIDAE

HYBRIDIZED FISH

STATION NUMBER	<i>Umbra limi</i> (central mudminnow)			(hybrid sunfish)		
	Number of Fish	Batch Weight (grams)	Fish with Anomalies	Number of Fish	Batch Weight (grams)	Fish with Anomalies
04161820	0	0	0	0	0	0
414041084320700	0	0	0	0	0	0
414101084401500	4	23	0	0	0	0
04178000	0	0	0	8	80.6	0
04193500	0	0	0	0	0	0
04211820	0	0	0	0	0	0

REFERENCES CITED:

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