

Report on Fish Surveys by Friends of the Rouge, 2022  
for the Alliance of Rouge Communities

This project was funded by the Michigan Department of Environment, Great Lakes, and Energy

August 12, 2022

## **Introduction**

Friends of the Rouge (FOTR) was funded by the Michigan Department of Environment, Great Lakes and Energy (EGLE) Agency through the Alliance of Rouge Communities, to sample 20 sites on the Rouge River in 2022 for fish as an extension of the work funded in 2020-21.

## **Materials and Methods**

A Quality Assurance Project Plan for Fish Monitoring and Benthic Macroinvertebrate Monitoring was submitted to EGLE and approved in June 2022.

Seine and dip nets were used to sample approximately 300 feet of stream. All available habitats were sampled for approximately one hour and at least 20 seine hauls. All fish were identified to species, measured to the nearest half centimeter, and released back to the stream. Invasive species were disposed of. Fish with uncertain identification were collected live by Robert Muller and photographed. If identity was still uncertain, they were preserved and sent to UM Professor Dr. Gerald Smith. Water temperature, number of seine hauls, and fish sizes by species were recorded. Equipment was cleaned and dried at the end of each day and disinfected before moving to another tributary system. Within a given day, sites were sampled within the same tributary system or all equipment was disinfected with a bleach solution between sites. Following each sampling day, field data was entered into Excel spreadsheets. FOTR checked the raw data against the spreadsheets and entered all into one database.

In addition to seining only at 10 sites, 8 sites were sampled using electroshocking and 4 sites used a combination of electroshocking with a seine as a blocking net. This included four sites on the Main stem (Main10, Main21, Main12N and Main21) done in conjunction with the DNR who provided their boomshocking boat. A backpack or barged electroshocker was provided by a University of Michigan Master's student. Using these additional methods at sites with long term sampling data will allow for comparisons of methods and enabled us to catch additional species not caught with seine nets.

## Sites

Twenty-two sites were sampled. They were chosen for these purposes: to investigate endangered species, assess PAC habitat restoration projects, track the round goby migration up the Lower branch and its effect on the fish community and check degraded areas.

2022 Fish Sampling Sites						
Date	Branch	Stream Name	FIELDID	Site Description	Latitude	Longitude
6/6/2022	Middle	Johnson Creek	John1	5M Salem	42.3897	-83.5819
6/6/2022	Middle	Johnson Creek	John2	5M NV	42.39382	-83.5342
6/6/2022	Middle	Middle Rouge	MR-4	Levan Knoll	42.36445	-83.4041
6/15/2022	Upper	Seeley Creek	See3	Kennedy Ct	42.51073	-83.4304
6/16/2022	Upper	Minnow Pond	Min2	OCC	42.49307	-83.3773
6/16/2022	Upper	Upper Rouge	Up1	Heritage Park	42.47526	-83.3855
6/22/2022	Main	Main Rouge	Main20	Ford Road	42.33006	-83.2415
6/22/2022	Middle	Middle Rouge	MR-15	Outer Dr Ford	42.3306	-83.2483
6/23/2022	Main	Main Rouge	Main5	Douglas Evans	42.52219	-83.2469
6/23/2022	Main	Main Rouge	MN-2	Eliza Howell	42.39972	-83.2714
7/5/2022	Lower	Lower Rouge	LR-10	Inkster	42.29851	-83.3058
7/5/2022	Lower	Lower Rouge	LR-11A	Ford Field east	42.31257	-83.2415
7/5/2022	Middle	Middle Rouge	MR-11	Elm Grove	42.34516	-83.3629
7/18/2022	Lower	Fowler Creek	Fowl4	Ridge Rd S of Geddes	42.27556	-83.5538
7/18/2022	Lower	Fowler Creek	Fowl5	Fowler Denton	42.28029	-83.5254
7/19/2022	Lower	Lower Rouge	LR-2	WTUA	42.28196	-83.503
7/19/2022	Lower	Fowler Creek	Fowl2	Fowler Beck	42.28226	-83.50515
7/20/2022	Lower	Lower Rouge	LR-12	Morton Taylor	42.28232	-83.4661
7/22/2022	Main	Main stem	Main10	HF Estate Dam	42.29294	-83.1483
7/22/2022	Main	Main stem	Main12	Oxbow	42.30494	-83.2196
7/22/2022	Main	Main Stem	Main21	concrete channel at oxbow	42.307632	83.220396
7/22/2022	Main	Main stem	Main12N	oxbow north	42.30589	83.221978

Data

John1 Five Mile Rd. w. Of Salem Rd. June 6, 2022 Johnson Creek - Middle Rouge																	Total Number of Fish	
Temp. 16° C.	Salt 43 ppm 15 hauls																	
Species	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	~	28	
Central Stoneroller													1					1
Northern Redbelly Dace					1	1	1											3
Fathead Minnow			1		1		1	1										4
Blacknose Dace		1																1
Creek Chub						1	1	1					1					4
Central Mudminnow	7							1	4	4								16
Mottled Sculpin				1				3	2	1		1		1				9
Brook Stickleback	2																	2
Largemouth Bass																	1	1
Rainbow Darter		4	9	19	17	14	14		1									78
Total Fishes Sampled																	119	

John2 5 Mile & RR Tracks June 6, 2022 Johnson Creek - Middle Rouge																				Total Number of Fish					
Temp. 16° C.	20 Seine Hauls Salt 69 ppm																								
Species	Size Class cm																								
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	11	12	13	14	~	16	18	25	30	
Fathead Minnow							1	1	1																3
Bluntnose Minnow								1																	1
Creek Chub									1	4	5	4	1		2		1	1	1			1	1		23
White Sucker								1								2	1							1	5
Brook Stickleback	23	14	4																					1	41
Green Sunfish							2																		2
Pumpkinseed													1												1
Bluegill			1	1			1	1				1													5
Rainbow Darter					2																				2
Johnny Darter						1	2	1																	4
Total Fishes Sampled																							87		

MR-4 Above Levan on Hines Drive June 6, 2022 - Middle Rouge																	Total Number of Fish							
Temp. 21° C.	20 Seine Hauls Salt 177																							
Species	Size Class cm																							
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	~	13	14	16	20	25		
Spotfin Shiner					1		1	1	1	1	1	1												7
Rock Bass																1					1			2
Bluegill																			1	2				3
Smallmouth Bass															1				1			1		3
Largemouth Bass																							1	1
Round Goby							1	1		2	2	1												7
Total Fishes Sampled																						23		

See3 June 15, 2022 Seeley Ck. - Upper Rouge (Seine)																				Total number of Fishes					
Temp 22° C.	21 Hauls																								
Species	Size in cm																								
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	~	12	13	14	17		
Central Stoneroller												1				1		1		1					4
Common Shiner								1			4	5	7	4											21
Fathead Minnow	4	2	8	6	5	1		1																	27
Northern Redbelly Dace						1																			1
Blacknose Dace				1	2	1	7	4	5	1	2			1											24
Creek Chub							1	2	1	1	1	1						1			1				9
White Sucker																		1			1		1		3
Black Bullhead																1									1
Central Mudminnow												1													1
Brook Stickleback			1																						1
Bluegill										1															1
Johnny Darter							2	3																	5
	Total Fishes Sampled																						98		

Min2 June 16, 2022 Minnow Pond Ck. - Upper Rouge (Electro & Seine)																										Total number of Fishes						
Temp 23° C.	21 Hauls																															
Species	Size in cm																															
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	~	12	13	14	15	16	17	18	19	20	21	23	25	
Central Stoneroller							1				2			1																	4	
Common Shiner														2			1	1		1	1										4	
Bluntnose Minnow											1																				1	
Blacknose Dace									1	1																					2	
Creek Chub									2	2	1	1		1	1	1					1	1	1	1						13		
White Sucker														1	3							1					1	1		1	8	
Mottled Sculpin				2	2	3	3	5	4	1																					25	
Pumpkinseed					1	1	2	4	1	2	1	1																			13	
Bluegill							2	1	3		2	1																			9	
Johnny Darter				2	3	1	2																								8	
	Total Fishes Sampled																									87						

Up1 June 16, 2022 Upper Rouge (Electro)																										Total number of Fishes						
Temp 23° C.	21 Hauls																															
Species	Size in cm																															
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	~	12	13	14	15	16	17	18	19	20	21	23	25	
American Brook Lamprey																										1					1	
Central Stoneroller									1																						1	
Common Shiner							1	1						1	4		3			1		2	1								14	
Blacknose Dace	1			1	1		1	1		2	1	1																			9	
Creek Chub							1	1	2	3	1	1					1			1	1	1	1	1	1		1				17	
White Sucker													1								1	1	1			1	1	2	1	1	2	11
Northern Hogsucker			1	3	2	2	2	1	1									1			1	2	1	2				2	2			23
Mottled Sculpin	4						1	1		1																					7	
Green Sunfish				1	1		1	1																								4
Pumpkinseed							1																									1
Bluegill							1																									1
Rainbow Darter			1	1				1																								3
Johnny Darter				1	1			1																								3
	Total Fishes Sampled																									95						

**Main20 June 22, 2022 - Downstream from mouth of Middle - Main Rouge (Electro)**

Temp. 24C.	Size in cm															Total number of Fishes
Species	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	
Fathead		1	1	1												3
White Sucker	1		1													2
Green Sunfish							2	1	1							4
Pumpkinseed						1			1							2
<b>Total Fishes Sampled</b>															<b>11</b>	

**MR-15 June 22, 2022 Middle Rouge (Electro & Seine)**

Temp. 24 C	Size in cm																	Total number of Fishes	
Species	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	~	13		15
Common Shiner							1					1			1				3
Spotfin Shiner		1							1		3		1		1				7
Bluntnose Minnow							1												1
Fathead Minnow		1																	1
Creek Chub															1		1		2
White Sucker																	1		1
Rock Bass																	1	1	2
Green Sunfish							1												1
Pumpkinseed												1							1
Johnny Darter							1												1
Blackside Darter												1							1
Round Goby								1		1		1							3
<b>Total Fishes Sampled</b>																	<b>24</b>		

**Main5 Douglas Evans June 23, 2022 Main Rouge (Electro with blocking net)**

Temp. 20 C.	Size in cm																													Total number of Fishes
Species	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	~	12	13	14	15	17	18	20	22	25	30	
Central Stoneroller				1					1		1		2	1								1							1	8
Common Carp																													2	2
Common Shiner		1									1	1	5	2	1		4	4		6	4	1	2							32
Bluntnose Minnow							1																						1	
Creek Chub											1					1													2	
White Sucker		1	5																			1		1	1	3	1	5	1	19
Stonecat										1										1		1	1						4	
Rock Bass																				2					1			1	4	
Bluegill													1								1	1							3	
Hybrid Sunfish - <i>Lepomis X</i> Northern																							1						1	
Blackside Darter													1																1	
Johnny Darter	1	1																											2	
<b>Total Fishes Sampled</b>																													<b>79</b>	

**MN2 Eliza Howell June 23, 2022 Main Rouge (Seine)**

Temp. 23C.	10 Hauls																	Total number of Fishes	
Species	Size in cm																		
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	~	13		
White Sucker	49	53	29															131	
Hybrid Sunfish																		1	1
Blackside Darter	1																		1
<b>Total Fishes Sampled</b>																	<b>133</b>		

**LR 10 Inkster Rd. July 5, 2022 Lower Rouge (Seine)**

Temp.	10 Hauls																	Total number of Fishes	
Species	Size in cm																		
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	
Creek Chub										1									1
Bluegill															1		1		2
Northern Logperch										1				1					2
Blackside Darter										1									1
Round Goby				1	1	2	5	3	5	2	1								20
<b>Total Fishes Sampled</b>																	<b>26</b>		

**LR 11A Brady St. July 5, 2022 Lower Rouge (Seine)**

Temp.	10 Hauls																				Total number of Fishes		
Species	Size in cm																						
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	~	15	25	28	
Emerald shiner							2	1	1														4
White Sucker				3																			3
Rock Bass												1											1
Green Sunfish				1																			1
Largemouth Bass																					1	1	2
Northern Logperch									1	1	1	1	1			1							6
Yellow Perch													1								1		2
Round Goby			1	2	3	3	3	2	1	3		1											19
<b>Total Fishes Sampled</b>																				<b>38</b>			

**MR-11 Elm Grove July 5, 2022 Middle Rouge (Seine)**

Temp. C.	20 Hauls																				Total number of Fishes					
Species	Size in cm																									
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	~	13	14	15	17	19	20	
Spotfin Shiner							1																		1	
Common Shiner										1			1	1						2	1	1			8	
Bluntnose Minnow	1						1		1			2													5	
White Sucker															1							3	1		1	6
Yellow Bullhead																								1	1	
Rock Bass										1		1						1							3	
Smallmouth Bass																								1	1	
Johnny Darter	1	6	3				1																		11	
Blackside Darter			1				1			1	1														4	
Round Goby					1		3	1	2																7	
<b>Total Fishes Sampled</b>																				<b>47</b>						









Main12N Oxbow July 22, 2022 Main Rouge (Electro DNR boat)

Temp. C.																															Total number of Fishes					
Species	Size in cm																																			
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	~	13	14	15	16	21	21	22	23	26	27	28	30	31	40			
Gizzard Shad																						1	2	1	1										5	
Common Carp	8 Carp																														8					
Goldfish																																	1		1	
White Sucker																							1					1								2
Brown Bullhead																										1										1
Northern Pike																																		1		1
Pumpkinseed												1	1																							2
Bluegill																				2																2
Largemouth Bass																											1					1				2
Black Crappie																												1								1
White Crappie																														1						1
yellow Perch														1		1					1	1													4	
Drum																																		1		1
<b>Total Fishes Sampled</b>																														<b>31</b>						

Report on Fish Surveys by Friends of the Rouge, 2023  
for the Alliance of Rouge Communities

This project was funded by the Michigan Department of Environment, Great Lakes, and Energy  
and the United States Environmental Protection Agency's Great Lakes Restoration Initiative

December 21, 2023

## **Introduction**

Friends of the Rouge (FOTR) was funded by the Michigan Department of Environment, Great Lakes and Energy (EGLE) and the United States Environmental Protection Agency's Great Lakes Restoration Initiative through the Alliance of Rouge Communities, to sample 21 sites on the Rouge River in 2023 for fish.

## **Materials and Methods**

A Quality Assurance Project Plan for Fish Monitoring and Benthic Macroinvertebrate Monitoring was submitted to EGLE and approved in June 2022.

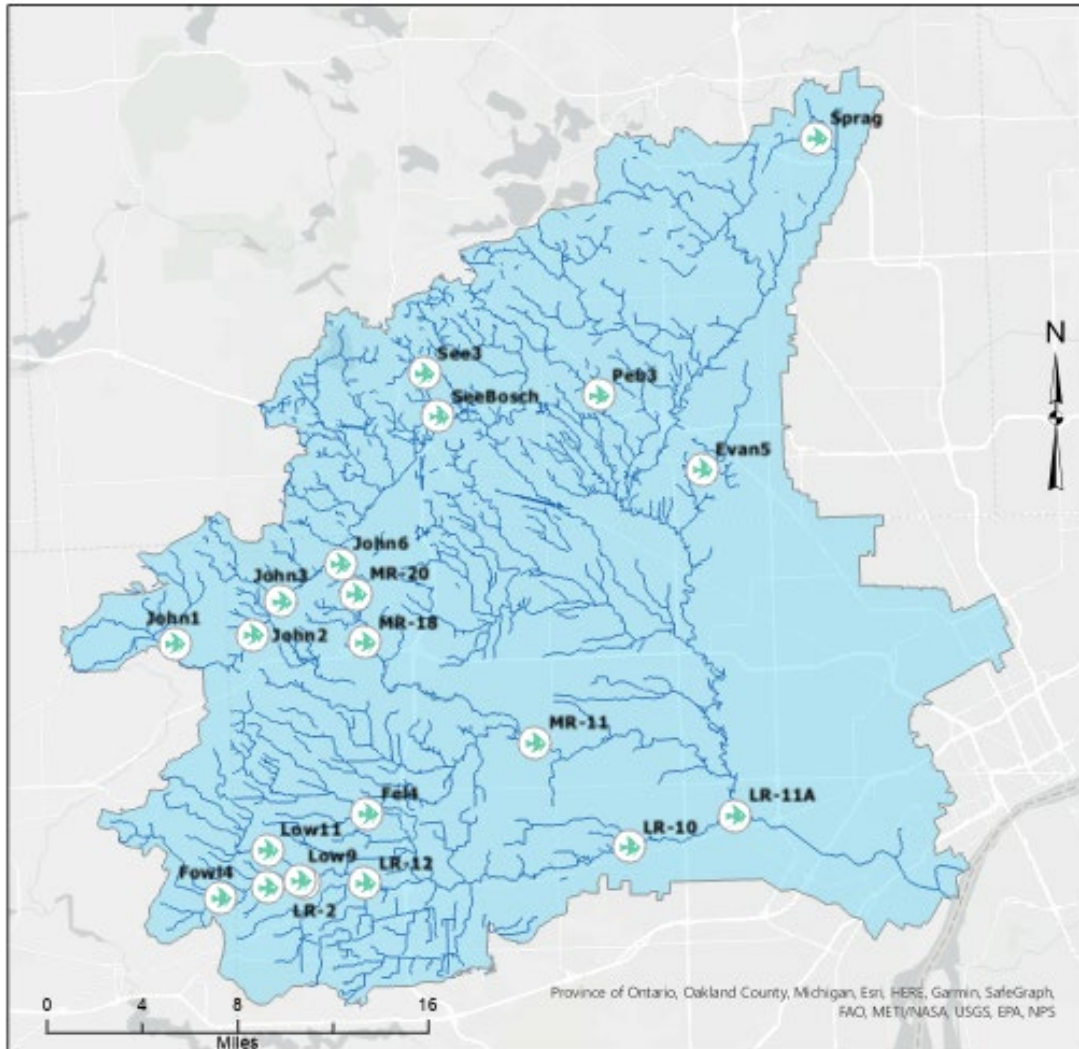
Seine and dip nets were used to sample approximately 300 feet of stream. Water temperature was measured with a thermometer, and the length and width of the stream was measured with a range finder. All available habitats were sampled for approximately one hour and at least 20 seine hauls. All fish were identified to species, measured to the nearest half centimeter, and released back to the stream. Invasive species were disposed of. Fish with uncertain identification were collected live by Robert Muller and photographed. Water temperature, number of seine hauls, average stream width, and fish sizes by species were recorded. Equipment was cleaned and dried at the end of each day and disinfected before moving to another tributary system. Within a given day, sites were sampled within the same tributary system or all equipment was disinfected with a bleach solution between sites. Following each sampling day, field data was entered into Excel spreadsheets. FOTR checked the raw data against the spreadsheets and entered all into one database.

## **Summary**

Twenty one sites were sampled from May to July 2023. A total of 4,445 fish were captured and identified over the course of the season. The most commonly captured fish were Fathead minnow (1045), Johnny Darter (519), and Common shiner (440); the least commonly captured fish were Bowfin (1), Northern Hogsucker (1), and Northern Pike (1). The site with the highest diversity was Low9, which had 16 species; the site with the lowest diversity was Peb3, LR-10, John 6 with 7 species; John3 had 6 species; John5 had 5 species.

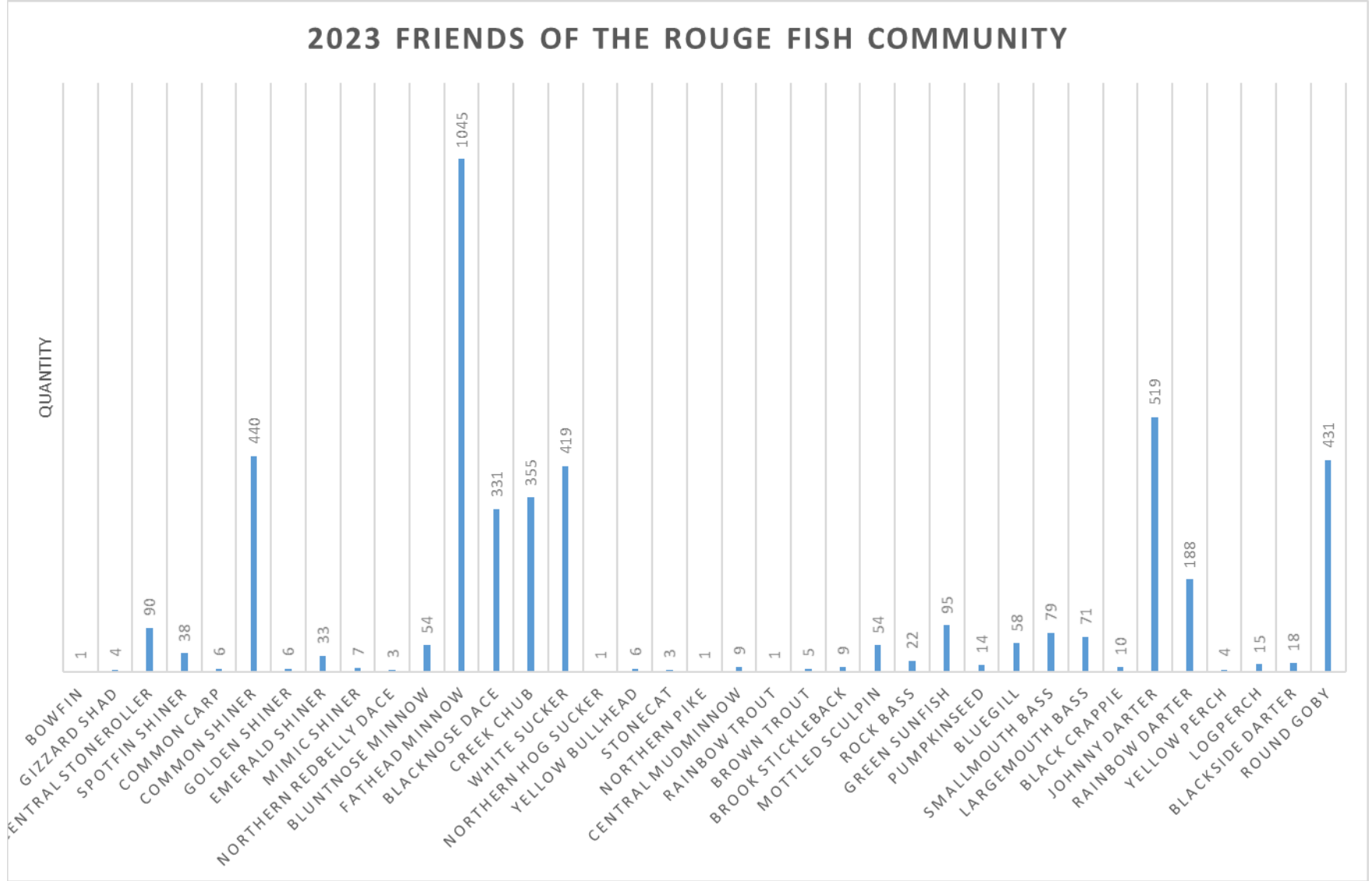
## Sites

Twenty-one sites were sampled. They were chosen for these purposes: to investigate endangered species, assess PAC habitat restoration projects, track the round goby migration up the Lower branch and its effect on the fish community and check degraded areas.



2023 Fish Sampling Sites						
DATE	BRANCH	STREAM NAME	FIELDID	SITE NAME	LATITUDE	LONGITUDE
4/30/2023	Main	Sprague Creek	Sprag	Stage Nature Center	42.61597	-83.1921
5/4/2023	Lower	Lower Rouge	LR-2	outfall	42.28196	-83.503
5/4/2023	Middle	Johnson Creek	John2	5 Mile RR tracks	42.39382	-83.5342
5/18/2023	Upper	Seeley Creek	See3	Kennedy Court	42.51073	-83.4304
5/18/2023	Upper	Seeley Creek	SeeBosch	Bosch	42.49167	-83.4215
6/20/2023	Middle	Johnson Creek	John1	5 Mile Salem Rd	42.3897	-83.5819
6/20/2023	Middle	Johnson Creek	John3	Six Mile/Beck	42.40844	-83.5169
6/21/2023	Middle	Johnson Creek	John6	7 Mile/Sheldon	42.42546	-83.4814
6/21/2023	Middle	Middle Rouge	MR-20	Waterford Bend	42.41195	-83.4717
6/22/2023	Middle	Middle Rouge	MR-11	Elm Grove	42.34516	-83.3629
6/22/2023	Middle	Middle Rouge	MR-18	Hines S of M-14	42.39025	-83.4664
6/27/2023	Main	Evans Creek	Evan5	Lahser Rd	42.46781	-83.2616
6/27/2023	Main	Pebble Creek	Peb3	Danvers Pond	42.50085	-83.3245
6/28/2023	Lower	Fellows Creek	Fel4	Flodin Park	42.31346	-83.4647
7/5/2023	Lower	Fowler Creek	Fowl4	Fowler Ridge	42.27556	-83.5538
7/5/2023	Lower	Fowler Creek	Fowl5	Fowler Denton	42.28029	-83.5254
7/11/2023	Lower	Lower Rouge	Low11	Lower Denton	42.29721	-83.5254
7/11/2023	Lower	Lower Rouge	Low9	Lower Beck	42.28346	-83.5053
7/12/2023	Lower	Lower Rouge	LR-10	Inkster	42.29851	-83.3058
7/12/2023	Lower	Lower Rouge	LR-12	Morton Taylor	42.28232	-83.4661
7/19/2023	Lower	Lower Rouge	LR-11A	Ford Field	42.31257	-83.2415

Data





<b>Common Name</b>	<b>Quantity</b>
Bowfin	1
Gizzard shad	4
Central stoneroller	90
Spotfin shiner	38
Common carp	6
Common shiner	440
Golden shiner	6
Emerald shiner	33
Mimic shiner	7
Northern redbelly dace	3
Bluntnose minnow	54
Fathead minnow	1045
Blacknose dace	331
Creek chub	355
White sucker	419
Northern hog sucker	1
Yellow bullhead	6
Stonecat	3
Northern pike	1
Central mudminnow	9
Rainbow trout	1
Brown trout	5
Brook stickleback	9
Mottled sculpin	54
Rock bass	22
Green sunfish	95
Pumpkinseed	14
Bluegill	58
Smallmouth bass	79
Largemouth bass	71
Black crappie	10
Johnny darter	519
Rainbow darter	188
Yellow perch	4
Logperch	15
Blackside darter	18
Round goby	431
Total	4445

<b>Intolerant</b>	<b>Quantity</b>
Northern hog sucker	1
Stonecat	3
Mottled sculpin	54
Rainbow trout*	1
Brown trout*	5
Rock bass	22
Smallmouth bass	79
Rainbow darter	188
<b>Tolerant</b>	<b>Quantity</b>
Bowfin	1
Common carp*	6
Golden shiner	6
Bluntnose minnow	54
Fathead minnow	1045
Creek chub	355
White sucker	419
Yellow bullhead	6
Central mudminnow	9
Green sunfish	95
Johnny darter	519
Round goby*	431
*not native	

Table 1

## Sprag, Stage Nature Cent. April 30, 2023 Main Rouge

## Creek

Temp. 10	10 Hauls Width 12' 9" Length 76 yards (228 ft)																			Total number of Fishes						
Species	Size in cm																									
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12		13	~	14	18	19	
Central Stoneroller				1			1				1		1													4
Common Shiner			2		9	7	1	4		3	6	8	2	1				1								44
Bluntnose Minnow								3	1				1													5
Fathead Minnow				1	4	2	5																			12
Creek Chub						2	6		2		5		3		1		4	1	1							25
White Sucker											1			1												2
Rock Bass							1				1															2
Bluegill						2																	1	2	1	6
Pumpkinseed				1																						1
Johnny Darter				2	1	1																				4
Total Fishes Sampled																										105

## Pond

Temp. 10	7 Hauls Pond 25 X 34																			Total number of Fishes						
Species	Size in cm																									
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12		13	~	14	18	19	
Central Stoneroller							4	3	6		6	2	1													22
Common Shiner				1	5	7	6	1																		20
Fathead Minnow				1	2	2	2	1																		8
Creek Chub								1			2															3
Bluegill			1																							1
Johnny Darter								2																		2
Total Fishes Sampled																										56

## Sprag2 Stage Nature Center April 30, 2023 Main Rouge

Temp. 11 C	15 Hauls, 342 ft. width 4 ft																			Total number of Fishes						
Species	Size in cm																									
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	~		14	16				
Central Stoneroller				1			2						1		1			1								6
Common Shiner			2		11	7	4	2	1	1	3	2	2	2	2	1										38
Fathead Minnow			4	3	11	3	2	1																		24
Creek Chub			2	2	5	8	4	2	1	2	1		1		1		1					1			31	
Stonecat						1		1							1											3
Bluegill																							1	1		2
Johnny Darter					3	6	2	1	1																	13
Total Fishes Sampled																				111						

**LR2 Beck Rd. May 4, 2023 Lower Rouge**

Temp. 12.5 C.	30 Hauls Salt 130 ppm 161 ft width 10.5, temp 12.5 C, pH 7.91, DO 93.8%, cond 935 act. 715 w temp																			Total number of Fishes	
Species	Size in cm																				
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	~	46		
Bowfin																				1	1
Fathead Minnow					1																1
Green Sunfish										1	2										3
Pumpkinseed																		1			1
Bluegill	1								1			1									3
Johnny Darter					1	1	1	1													4
Blackside Darter					1																1
Round Goby					1	3	9	4	6	3	1		2						1		30
<b>Total Fishes Sampled</b>																					<b>44</b>

**John2 5 Mile Rd. May 4, 2023 Johnson Creek Middle Rouge Rouge**

Temp. 10 C.	22 Hauls Salt 58 ppm 8.7 C, 222 x7 w, pH 8.33, DO 102%, Cond 655, 452 w temp																			Total number of Fishes	
Species	Size in cm																				
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	~	47		
Fathead Minnow					1																1
White Sucker																				1	1
Mottled Sculpin									1	1						1					3
Rainbow Darter		1	1	2	3				1												9
Johnny Darter				3	4	1															8
<b>Total Fishes Sampled</b>																					<b>22</b>

**SEE3 Kennedy Ct. May 18, 2023 Seeley Creek, Upper Rouge**

Temp. 12C.	22 hauls 156 yards 6 feet wide ( up and downstream of culvert)																			Total Number of fishes						
Species	Size in cm																									
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	~	12	13	14	15	16	17	
Central Stoneroller										1	1	1	1		1		4			2						11
Common Carp														1												1
Common Shiner						2	1		1		2	1		3		2					1	2	1	1		17
Northern Redbelly Dace			1	1			1																			3
Bluntnose Minnow				1		1																				2
Fathead Minnow			2	17	15	24	7	2	1																	68
Blacknose Dace		2	3	12	8	16	6	10	9	11	3	2	2													84
Creek Chub					1	6	1	4	5	3	5	2	1	7	1	4				2	4	1	2			49
White Sucker							1			3	1	5	2	6	2	2							2			24
Yellow Bullhead																									1	1
Brook Stickleback			1	2																						3
Mottled Sculpin						3																				3
Pumpkinseed									1			1									1					3
Bluegill																					1					1
Johnny Darter			3	8	10	8	5																			34
<b>Total Number of Fishes</b>																								<b>304</b>		

See Bosch May 18, 2023 Seeley Creek, Upper Rouge																										
Temp. 13.5 C.	20 hauls 105 yards 9 feet wide																					Total Number of fishes				
Species	Size in cm																									
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	~	12	13	14	15	18	21	
Central Stoneroller										1	1						3			1						6
Common Shiner					1	3	1			1	2	1		1		3				1						14
Fathead Minnow	1			1	2	2	1																			7
Blacknose Dace			2	7	13	4	8	2	8	1	13		2													60
Creek Chub					1	1	8	4	9	10	8	1					1	4			2	3	2	2		56
White Sucker													1		1	1	1							1	1	6
Green Sunfish						1			2								1									4
Johnny Darter						3	1																			4
<b>Total Number of Fishes</b>																								157		

John 1 5 Mile Rd. June 20, 2023 Johnson Creek Middle Rouge Rouge																										
Temp. 18 C.	20 Hauls 309 ft X 3.6 wide																					Total number of Fishes				
Species	Size in cm																									
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	~	12							
Central Stoneroller							1			5	3	2		1		2										14
Fathead Minnow	1	1	2	3	2	4	7	2	3																	25
Blacknose Dace	5			1		3	4		3	1																17
Creek Chub				2	6	3	1	2	2	2	1	1											1			21
White Sucker	13	1	2	1										1		1	1									20
Central Mudminnow		1	2					2	1			1														7
Mottled Sculpin	2				1	2	2		3	1	3					1			1							16
Green Sunfish						2			1	1																4
Bluegill					1																					1
Largemouth Bass	1																									1
Rainbow Darter			27	50	44	17	4																			144
Johnny Darter					2	1																				3
<b>Total Fishes Sampled</b>																							273			

John 3 6 Mile Rd. June 20, 2023 Johnson Creek Middle Rouge Rouge																										
Temp. 18 C.	20 Hauls 309 ft X 3.6 wide																					Total number of Fishes				
Species	Size in cm																									
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	~	12	13	18					
Blacknose Dace	3							1	2																	6
Creek Chub							1			1							1			1	1	1				6
White Sucker	30						1								2	1										3
Mottled Sculpin					2	2	1	1	1		1	1														9
Blue Gill															2	1										3
Rainbow Darter					3		1	1	2																	7
<b>Total Fishes Sampled</b>																							34			

John6 7 Mile Rd. June 21, 2023 Johnson Creek, Middle Rouge Rouge																												
Temp.	22 Hauls 582 ft X 21 wide																											
Species	Size in cm																											Total number of Fishes
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	~	12	14	15	25	26	30				
Creek Chub								1	2								1											4
White Sucker										1				3	2		3		2	1			1	1	1			15
Mottled Sculpin					2	3	6		2		1																	14
Rock Bass																						1						1
Brown Trout							1		2					1									1					5
Bluegill							1						1															2
Rainbow Darter				2		3	1																					6
Total fishes sampled																											47	

MR-20 6 Mile Rd. June 21, 2023 Waterford Bend, Middle Rouge Rouge																												
Temp. 24 C.	22 Hauls 558 ft X 30 wide																											
Species	Size in cm																											Total number of Fishes
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	~	12	13	14	15	16	17	18	19	20	
Common Shiner																				1	3	2						6
White Sucker	14	13	20	14	17	3													1	2		1	2	3	1		1	92
Mottled Sculpin	3								1					1														5
Rock Bass													1												1	1		3
Smallmouth Bass	36	5													1				2	2		1					47	
Largemouth Bass	6	1	1																									8
Rainbow Darter	1	1		2	2	3	4	1																				14
Johnny Darter	9	1					1																					11
Total fishes sampled																											186	

MR-11 Elm Groove June 22, 2023 Middle Rouge Rouge																												
Temp. 23C	20 Hauls 435' X 30' wide																											
Species	Size in cm																											Total number of Fishes
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	~	13	14	15	18						
Spotfin Shiner				1		2	9	5	6	2	3	1		1														30
Common Shiner				1	2	1				2	6	5	2		5		1											25
Mimic Shiner					2	1																						3
Bluntnose Minnow					4	1	9	2	2	1	3																	22
Creek Chub										1			2		2													5
White Sucker	5	1	10	1	3	2													1		1					1	25	
Northern Pike														1														1
Rock Bass																									1	2		3
Bluegill						1																						1
Smallmouth Bass																								1				1
Black Crappy														1														1
Johnny Darter	13		1	1	11	2																						28
Blackside Darter	1		1				4	2		1																		9
Round Goby					5	8	21	10	10	2	4	2																62
Total fishes sampled																											206	

MR-18 Springbrook Rec. June 22, 2023 Middle Rouge Rouge																											
Temp. 22C	26 Hauls 663' X 33' wide																				Total number of Fishes						
Species	Size in cm																										
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	~	12	13	14	15	16	17	19	20	
Spotfin Shiner									1		2		1		1												
Bluntnose Minnow							1																				
White Sucker	2	3	2																		1	1				1	
Mottled Sculpin	1	2	1																								
Yellow Bullhead																	1		1							2	
Rock Bass													4		1	1							3	2	1		
Bluegill											2																
Smallmouth Bass	21	6															1		2	1							
Largemouth Bass		1	1	1	1																						
Rainbow Darter				1	4	2		1																			
Total fishes sampled																									83		

Evan5 Lasher Rd. June 27, 2021 Evan Creek - Main Rouge																										
Temp. 19° C.	Siene Hauls - 20 - 735' x 18'W																				Total Number of Fish					
Species	Size Class cm																									
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12	~	13	23.0				
Common Shiner									1						2		2					1				
Fathead Minnow	77	43	64	66	76	6	3	3	2																	
Blacknose Dace					1	3	9	5	4	4	6	1	1													
Creek Chub					2		1		1		1		2		2					2					1	
White Sucker	1	3	1								1		1													
Green Sunfish												1														
Total Fishes Sampled																						400				

Peb3 Davers Dr. June 27, 2021 Pebble Creek - Main Rouge																										
Temp. 18° C.	Siene Hauls - 20 - 516' X 15'W																				Total Number of Fish					
Species	Size Class cm																									
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12	~	13	14.0	15.0	18.0	21.0	
Central Stoneroller				1	1	2	2	2	6		4	2	2		1		2	2	1							
Common Shiner				1				7	6	5	1	1	6	4	2						1					
Fathead Minnow		1	1		3	2																				
Blacknose Dace	1	1	1	3	9	12	14	2	7	6	4	1														
Creek Chub				2	3	4	5	3	6		2	1	1		1	1	3	1	1							
White Sucker			1								2	2	2		1							1	1	1	1	
Largemouth Bass			1																							
Total Fishes Sampled																						179				

Fel4 Flodin Park June 28, 2023 Fellows Creek - Lower Rouge																												
Temp. 18 C.	20 Hauls 483' X 15'																				Total number of Fishes							
Species	Size in cm																											
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	11	11	12	~	12	13	14	16	17	18	19	20	23
Common Carp																											1	
Common Shiner					1		2	8	25	11	15	6	11	9	16	1	6			8	4							
Fathead Minnow	5		3	3	3	3	3	2																				
Blacknose Dace								2	1		1		1															
Creek Chub						1	1	4	4	2	1	3	1			3	1		2		1	1	1		1			
White Sucker			2											1														
Green Sunfish						1			1			1	2									1		2		1		
Bluegill															1													
Largemouth Bass	1																											
Johnny Darter	42	3			22	34	28	3	1																			
Blackside Darter									2																			
Total Fishes Sampled																						340						

**Fowl4 Ridge Rd. July 5, 2023 Fowler Creek, Lower Rouge**

Temp. 23 C.	20 Hauls 408' X 7'																				Total number of Fishes				
Species	Size in cm																								
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	11	11	~	12	13	14	15	18		
Central Stoneroller								1	3		1		1												6
Common Carp											1														1
Common Shiner			1				2	1		1					1	1						2			11
Fathead Minnow	1		1	2	3	1	2		1																10
Blacknose Dace				1	2	3	2	2	1		2														13
Creek Chub				1	1	4	4	2	8	3	1	2	1					1				1			29
White Sucker	3	4	17	2						1		1	2	1		2	1		1				2	1	38
Central Mudminnow									1																1
Brook Stickleback	2																								2
Green Sunfish								2																	2
Largemouth Bass	4																								4
Johnny Darter	24		3	2	14	21	12	4	4	1															85
<b>Total Fishes Sampled</b>																							<b>202</b>		

**Fowl5 Denton Rd. July 5, 2023 Fowler Creek, Lower Rouge**

Temp. 25 C.	20 Hauls 435' X 12'																							Total number of Fishes		
Species	Size in cm																									
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	11	11	~	12	13	14	16	18	53		
Common Carp							1																		1	2
Common Shiner											3		1	2												6
Fathead Minnow	19	21	52	34	11	3	3																			132
Creek Chub							3	1	2	3	1			1	1						2	1	1			16
White Sucker	5	1	6	2						1				1	2				1	1	1	1	1			22
Central Mudminnow									1																	1
Brook Stickleback	2	1	1																							4
Green Sunfish		1	1	1		2	5	4	4	1	1	1	1													22
Bluegill	5	1	2	1	3				1		1															13
Johnny Darter	12				1	3	5	2																		23
Round Goby			1				3	1	5	3	2							1								16
<b>Total Fishes Sampled</b>																							<b>257</b>			

Low11 Denton Rd. July 11, 2023 Lower Rouge																										
Temp. 22 C.	30 Hauls 450' X 12'																						Total number of Fishes			
Species	Size in cm																									
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	11	11	~	12	13	14	15	17	18	19	
Central Stoneroller			3			1			3	1	3	3	1													15
Common Shiner			7	1	2		2	5	9	8	14	4	4	2	3		1			1						67
Golden Shiner				1							2		2				1									6
Fathead Minnow	1	1	7	2	1		1																			13
Creek Chub	2		2	2	2					1			1	1			1									12
White Sucker	1	3	13	14	17	6	6					1					7		2	1	1	1	1	1	1	76
Green Sunfish						1	2	1	1		1	1	1		1	2	2		1	1						15
Pumpkinseed									1																	1
Bluegill				2						1					1		1									5
Largemouth Bass		1	8	11	3																					23
Black Crappie															2											2
Johnny Darter	46	4	2	1	2	5	8	4																		72
Yellow Perch													1													1
Round Goby	5	1						2	4	4	2	1	1													20
<b>Total Fishes Sampled</b>																							<b>328</b>			

Low9 Beck Rd. July 11, 2023 Lower Rouge																										
Temp. 22 C.	19 Hauls 615' X 7'																						Total number of Fishes			
Species	Size in cm																									
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	11	11	~	12	14	18					
Gizzard Shad							4																			4
Common Carp																								1		1
Common Shiner			1								1			1	2		1									6
Bluntnose Minnow			3	2		1																				6
Fathead Minnow	1	2	14	6	3	3																				29
Creek Chub			2	1	1	2	1				1						2		1							11
White Sucker			2	5	4	2	2																			15
Yellow Bullhead														1												1
Green Sunfish					1	2	6	5	2	2	4	1	1							1						25
Pumpkinseed						2	1	2																		5
Bluegill	5			3	2		2	1			1						1		1							16
Largemouth Bass	1	1	7	11	4	3						1	1										1			28
Black Crappie			1								1	1														3
Johnny Darter	26	12	16	2		3	15	3	2																	79
Yellow Perch																1										1
Round Goby	2	1	1		1	2	4	3	1	8	7		1													31
<b>Total Fishes Sampled</b>																							<b>261</b>			



**LR-10 Inkster July 12, 2023 Lower Rouge**

Temp. 21 C.	20 Hauls 690' X 45'																			Total number of Fishes
Species	Size in cm																			
	<3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	11	11	~	13	
Common Shiner																4	2		1	7
Bluntnose Minnow								2		1										3
Fathead Minnow		1	1																	2
White Sucker					5	1	1	1												8
Logperch											2	2	1	1						6
Blackside Darter								1												1
Round Goby	1			1	6	9	11	7	7	2	6	4	1		1					56
<b>Total Fishes Sampled</b>																			<b>83</b>	

**LR-12 Morton/Taylor July 12, 2023 Lower Rouge**

Temp. 21 C.	24 Hauls 1,125' X 33'																				Total number of Fishes				
Species	Size in cm																								
	<3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	11	11	~	12	13		14	15	16	20
Common Shiner															2	1	3		6	2	2				16
Blacknose Dace	1	1				1	2	1	4	2	3	1	1												17
Creek Chub		2						1	1				1												5
White Sucker		1	2	4															1	3		1	1	2	15
Hogsucker																				1					1
Rainbow Trout																	1								1
Green Sunfish		1	2	2	2			2					1	2	1										13
Pumpkinseed				1	1												1								3
Bluegill			1	1																					2
Johnny Darter	8	2				2	2	2																	16
Logperch									2	1		3													6
Blackside Darter								1		1															2
Round Goby	11		1	2		5	11	13	11	6	4	3	1	1	1										70
<b>Total Fishes Sampled</b>																							<b>167</b>		

**LR-11A Brady St. July 19, 2023 Lower Rouge**

Temp. 22 C.	20 Hauls 310 feet x 27 feet																		Total number of Fishes	
Species	Size in cm																			
	<3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	11	11	~	13	
Common Shiner								1		1	1									3
Spotfin Shiner									1	1	1									3
Emerald Shiner	3	1		1	4	3	5	12	3	1										33
Mimic Shiner					4															4
Bluntnose Minnow		1				1	2	2	3	2	5									15
Fathead Minnow	4	1	5					1	1											12
White Sucker					4	3	1		2											10
Black Crappie			1	3	1															4
Jonny Darter							2													2
Yellow Perch												1				1				2
Logperch												1	1	1						3
Blackside Darter		2	1																	3
Round Goby	23	4	6	2	9	16	28	15	14	14	5	3	5	1	1					146
<b>Total Fishes Sampled</b>																			<b>240</b>	