

2021 STREAM SURVEY REPORT

WEDDE CREEK

(WBIC 156000)

MARQUETTE COUNTY



INTRODUCTION AND OBJECTIVES

The Wedde Creek is a Class I and Class II trout stream and consists of 15.11 miles of trout water. It originates near Coloma and flows downstream into the Chafee Creek. Fishing access consists of public land and road crossings. Objectives of the rotation surveys are to determine species composition, relative abundance, and size structure for trout and other gamefish.

Regulations: Entire section **GREEN**

Size Limit: Rainbow no size

Daily Bag Limit: 5 in total

WISCONSIN DNR CONTACT INFO.

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SURVEY INFORMATION

Station	Survey Date	Station Length	Temperature (°F)	Mean Stream Width	GPS (Start/Finish)	Gear	Dippers	IBI
Deerborn Ave	7/21/2021	550 ft	60	14.95 ft	43.966636, -89.373420 43.96610, -89.37242	Barge Shocker	3	YES
CTH Y	7/21/2021	446 ft	62	12.75 ft	43.953390, -89.365358 43.95335, -89.36688	Barge Shocker	3	NO



SURVEY METHOD

- All streams are sampled according to DNR wadable streams monitoring protocols. Wedde Creek is on a 6 year rotation schedule with two sites identified for the segment of stream in Marquette County.
- All sampling stations are electrofished with either a towed barge shocker or backpack shocker.
- Sampling distance is at least 35 times the mean stream width or a minimum of 330 feet (i.e., 100 meters).
- All trout are counted and measured and all other species are counted in order to calculate an Index of Biotic Integrity (IBI) IBI score.
- Metrics used to describe trout populations include average length, catch per unit effort (CPUE), and length frequency distribution.

METRIC DESCRIPTIONS

- **Catch per unit effort (CPUE)** is a method of quantifying fish population relative abundance. For all trout surveys, we typically quantify CPUE as the number of a given size class of trout captured per mile of stream. CPUE indexes are compared to other trout streams throughout the state of Wisconsin by what percentile (PCTL) they fall out in. For example, if a CPUE is in the 90th percentile, it is higher than 90% of the other CPUEs in the state. CPUE percentiles can also be used to categorize trout abundance as low density (<33rd percentile), moderate density (33rd - 66th percentile), high density (66th - 90th percentile), and very high density (>90th percentile).
- **Length frequency distribution** is a graphical representation of the number or percentage of fish captured by half inch or one inch size intervals.
- **Index of Biotic Integrity (IBI)** is a rating of environmental quality based on the fish assemblage. Scores of 90 - 100 indicate excellent stream quality while scores less than 30 indicate poor stream quality. Our analysis utilizes the IBI for Wisconsin coldwater streams. Coldwater streams in Wisconsin are those in which the maximum daily mean water temperature is usually <22°C (71.6°F). A coolwater stream IBI may also be used when a stream doesn't fit the temperature criteria for a coldwater stream.





2021 STREAM SURVEY REPORT - CONTINUED

WEDDE CREEK

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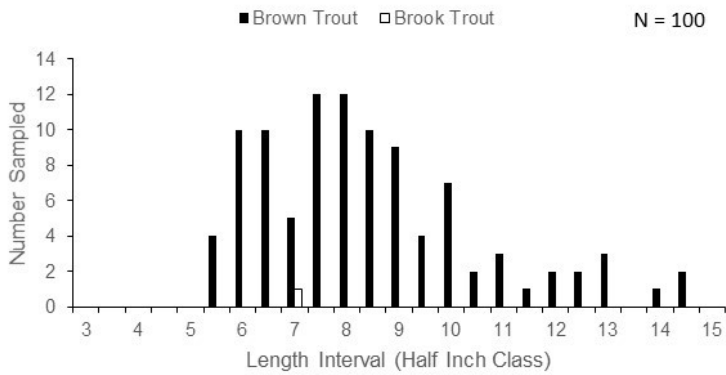
BROWN TROUT SIZE AND ABUNDANCE (CPUE) METRICS

Station	Total Number Sampled	Average Length (inches)	Length Range (inches)	CPUE (No. per Mile) Statewide Percentile in parentheses						
				Total CPUE (PCTL)	YOY CPUE	>6" CPUE (PCTL)	>8" CPUE (PCTL)	>10" CPUE (PCTL)	>12" CPUE (PCTL)	>15" CPUE (PCTL)
Deerborn Ave.	69	8.5	5.5 - 14.6	662 (80th)	0	634 (90th)	365 (89th)	115 (80th)	48 (80th)	-
CTH Y	30	9.5	5.5 - 14.6	355 (68th)	0	343 (81st)	237 (82nd)	130 (83rd)	59 (84th)	-

BROOK TROUT SIZE AND ABUNDANCE (CPUE) METRICS

Station	Total Number Sampled	Average Length (inches)	Length Range (inches)	CPUE (No. per Mile)					
				Total CPUE (PCTL)	YOY CPUE	≥5" CPUE (PCTL)	≥8" CPUE (PCTL)	≥10" CPUE (PCTL)	≥12" CPUE (PCTL)
CTH Y	1	7.2		10 (6th)	-	-	-	-	-

Wedde Creek - Trout Length Distribution



SPECIES COMMUNITY AND IBI FOR DEERBORN AVE

Species Sampled	Total	IBI Score	Integrity Rating
Brown trout	69		
Brook trout	1		
Mottled sculpin	29		
White sucker	3		
Bluegill	1		
Central mudminnow	2		
Hornyhead chub	4		
Brook lamprey	3		
Yellow perch	1		
Common shiner	3		
Creek chub	2		



Mottled sculpin (pictured above) is a small nongame species commonly found in coldwater streams. Similar to trout they require colder temperatures, are considered thermally intolerant, and their presence can be indicative of healthier environmental quality.



SUMMARY

- Brown trout were found in moderate to high densities at both stations with the total brown trout CPUE ranking out in the 80th and 68th percentiles when compared to trout streams throughout Wisconsin. Brown Trout 10+ inches ranked above the 80th percentile at both stations. YOY brown trout were not captured at either station, as the habitat is not suitable for YOY trout
- Both stations seen improvements in number and size structure of brown trout since the last surveys in 2015.
- Brown trout populations are doing well in portions of the Wedde Creek system and provides both opportunities to catch quantity and quality sizes of both species of trout.
- The IBI scores suggests this stream is a good coldwater stream and the WI Streams Natural Community Model considers this a cool - cold headwater stream. Habitat should be protected and should be able to do so with the large tracts of state owned land.
- Agricultural impacts, along with other habitat degradations are having a negative impact on this particular stream. Habitat improvement and riparian protection would be valuable to the Wedde Creek.