



2021 Stream Survey Report

WHITE RIVER TREND SURVEY

(WBIC 148500)

Waushara County

INTRODUCTION AND OBJECTIVES

The White River is a Class 1 trout stream consisting of 4.50 miles of trout water. The White River stretches through Waushara County and is part of the White River watershed. This trend site has had past habitat development work. Objectives of the trend survey are to monitor relative abundance and size structure.

Regulations: **RED** (Lower Millpond Dam upstream to HWY 21&73) Size Limit: All Trout - 12 inches Daily Bag Limit: 2 (in total)
 Gear restriction: Only artificial lures may be used.

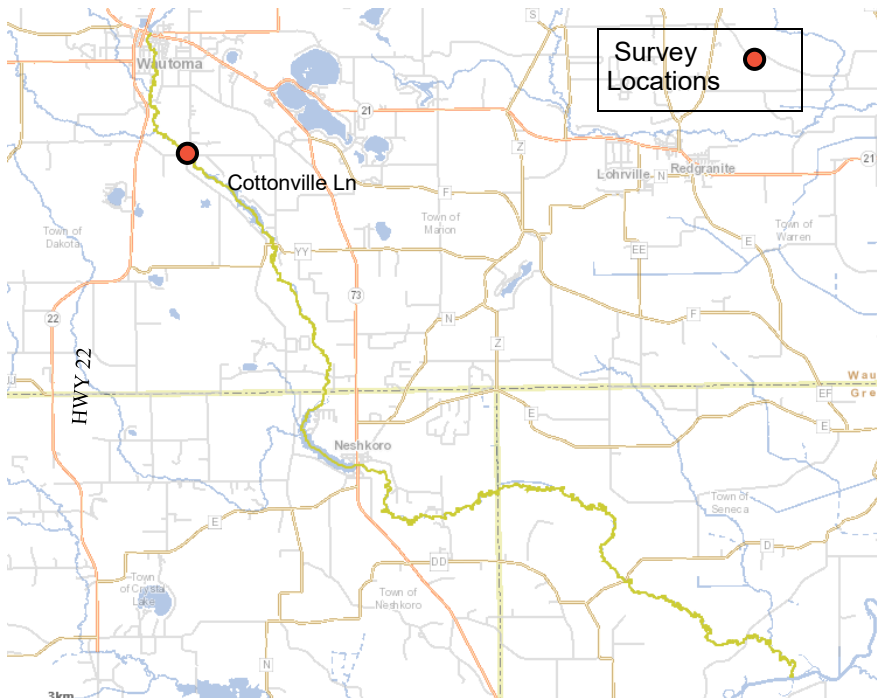
WISCONSIN DNR CONTACT INFO.

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SURVEY INFORMATION

Site location	Survey Date	Station Length	Water Temperature (F)	GPS (Start/Finish)	Gear	Dippers
Cottonville Ln	08/05/2021	2000 ft	59	44.0439,-89.2776 44.0464,-89.2820	Towed Barge Shocker	3



Survey Method

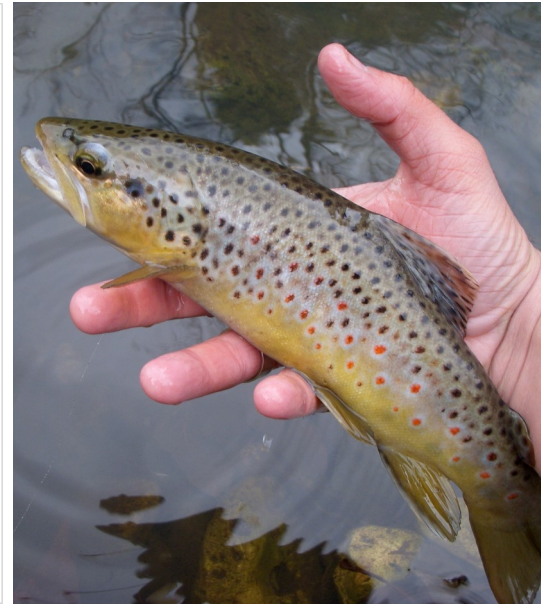
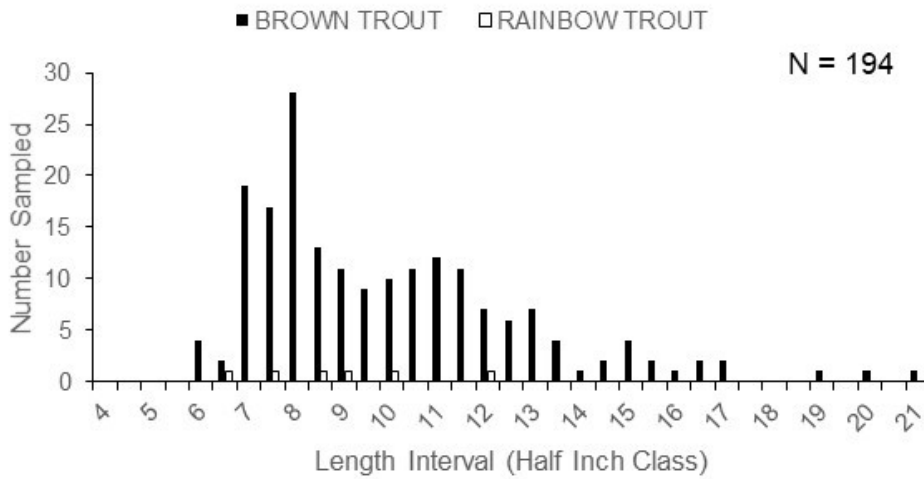
- The White River trend site has been surveyed annually since 2005. This particular site is 2000 feet in length and is electrofished with a towed barge stream shocker. All captured trout are identified to species, measured for length, and examined for fin clips.
- Metrics used to evaluate fish populations include catch rate by size and proportions of length.



Metric Descriptions

- **Catch per effort (CPE)** is an indirect method of measuring fish population relative abundance. For all trout surveys we typically quantify CPE by the number and size of trout captured per mile of stream. CPE indexes are compared to statewide streams by percentile (PCTL). For example, if a CPE is in the 90th percentile, it is higher than 90% of the other CPEs in the state. CPE percentiles can also be used to categorize trout abundance by 33rd (low density), 66th (moderate), 90th (high), and 95th (very high) benchmarks.
- **Length frequency distribution** describes size structure and is the number of trout captured and grouped by one inch size intervals.

White River Trout Length Distribution



SIZE AND ABUNDANCE (CPUE) METRICS - BROWN TROUT

Year	Average Length (Inches)	Length Range (Inches)	Number Sampled	SIZE AND ABUNDANCE (CPUE) METRICS - BROWN TROUT						
				Total and (PCTL)	YOY	>6" (PCTL)	>8" (PCTL)	>10" (PCTL)	>12" (PCTL)	>15" (PCTL)
2005	9.2	(3.5 - 16.6)	182	480 (70th)	5	430 (80th)	312 (85th)	193 (85th)	45 (75th)	5 (70th)
2006	9.6	(4.9-18.0)	226	596 (75th)	0	586 (90th)	420 (90th)	288 (90th)	92 (90th)	8 (75th)
2007	9.8	(1.2-15.1)	144	380 (70th)	5	369 (80th)	293 (85th)	182 (85th)	69 (85th)	3 (65th)
2008	9.1	(3.7-16.1)	181	478 (75th)	3	470 (85th)	264 (80th)	158 (85th)	58 (80th)	8 (75th)
2009	9.1	(4.1-17.4)	146	380 (70th)	0	372 (80th)	227 (80th)	116 (80th)	45 (75th)	5 (65th)
2010	9.4	(4.4-16.0)	128	338 (65th)	0	332 (80th)	216 (80th)	119 (80th)	50 (80th)	11 (80th)
2011	9.2	(5.8-16.7)	205	541 (75th)	0	538 (85th)	330 (85th)	198 (90th)	63 (85th)	11 (80th)
2012	9.9	(0.4-18.4)	299	789 (85th)	5	773 (90th)	596 (90th)	406 (95th)	158 (95th)	24 (90th)
2013	10.0	(3.4-19.8)	274	723 (80th)	3	718 (90th)	596 (90th)	335 (95th)	129 (95th)	11 (80th)
2014	10.0	(6.3-18.4)	183	483 (70th)	0	481 (85th)	272 (80th)	132 (80th)	71 (85th)	11 (80th)
2015	9.6	(5.7-20.6)	132	348 (65th)	0	339 (80th)	198 (75th)	92 (75th)	29 (65th)	11 (80th)
2016	9.8	(3.6-21.8)	248	655 (80th)	3	644 (90th)	330 (85th)	190 (85th)	74 (85th)	13 (85th)
2017	10.0	(3.3-22.0)	198	523 (75th)	5	517 (85th)	375 (90th)	248 (90th)	90 (90th)	8 (75th)
2018	9.8	(5.3-19.0)	151	398 (70th)	0	390 (80th)	248 (80th)	179 (85th)	90 (90th)	18 (90th)
2019	9.6	(3.7-17.6)	84	221 (55th)	5	214 (70th)	119 (65th)	66 (70th)	37 (75th)	16 (85th)
2021	10.8	(6.1 - 21.0)	188	496 (75th)	0	496 (86th)	385 (90th)	224 (91st)	108 (93rd)	37 (97th)

Summary

- The 2021 survey indicated brown trout density for adult size fish was at moderate to high levels with CPEs ranking at the 70th percentile for >6+inch. The increased CPUE compared to 2019 is back to the average that we have observed since annual sampling started in 2005. High water levels and habitat improvements, which have scoured deeper pools is effecting our catch rates.
- Young of the year (YOY) numbers at this site have always been relatively low due to limited spawning habitat in this reach of the White River.
- We typically catch 1-6 rainbows in this stretch since 2005 with the average catch being 3. In 2021 we sampled 6 rainbow trout.
- Deep holes present in this stretch have always made it a challenge to effectively sample. Increased water levels can compound this difficulty.
- The White River has proven to produce good numbers of mid-size (8-12 inch) trout with good potential for trophy sized fish.
- With a large population of *Hexagenia* mayflies the White River is one of the most popular streams in the area to fish during "the Hex hatch." Quality fishing opportunities and access are provided by a good amount of public land available along the stream.
- Some habitat work in cooperation with Trout Unlimited has been done on this stretch of the White River. Dredging and narrowing of the river using brush bundles and the addition of wood has deepened the channel and provided better habitat in this very unstable section of the stream.
- Municipal issues resulted in the Wautoma Pond in town being drawn down in 2012. It was refilled in the spring 2017. The drawdown was thermally beneficial to the stream and provided access to good spawning habitat upstream in Soules Creek, the headwaters of the White River.