



2013 Stream Survey Report

Mill Creek TREND (WBIC 299700)

Shawano County

Prepared by Al Niebur and Top Moon Lee

Introduction and Survey Objectives

Mill Creek is a Class I and II trout stream consisting of 22.57 miles of trout water in Shawano County. Brook trout is the dominant salmonid with low numbers of brown trout found in the lower reaches. Fishing access is limited to road crossings only. Feral brown trout fingerlings have been stocked in past years. Objectives of the trend survey are to monitor relative abundance and size structure.

Regulations: Category 2—Upstream Hwy 29
Category 3—Downstream Hwy 29

Size Limit: All Trout - 7 inches
Size Limit: All Trout - 9 inches

Daily Bag Limit: 5 (in total)
Daily Bag Limit: 3 (in total)

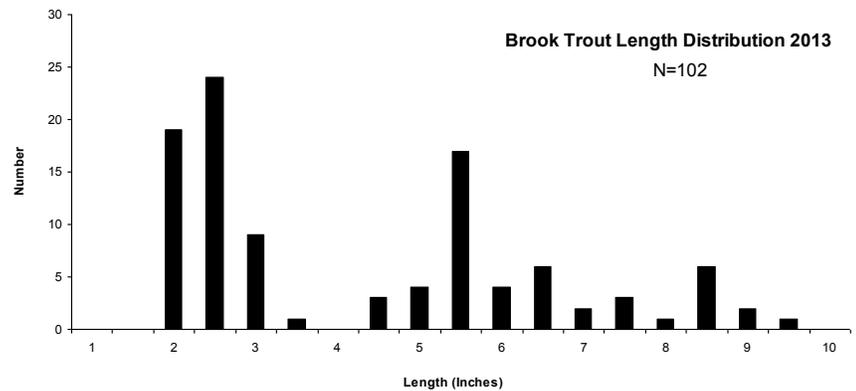
WISCONSIN DNR CONTACT INFO.

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Survey Information					
Site location	Survey Date	Station Length	GPS (Start/Finish)	Gear	Dippers
WINKLE RD TREND	7/22/2013	750 ft.	44.8115,-88.8216 44.8119,-88.8222	Towed Barge Shocker	3



Catch per Effort (CPE) and Length Frequency

- 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.

Survey Method

The Mill Creek trend site has been surveyed in 1987 and again in 1992. Then annually from 1996-2001 and again from 2005-2013 with exception to year 2006. This particular site is 750 ft. and is electrofished with a towed barge streamshocker. All captured trout are identified to species, and measured for length.



Catch per Effort (Brook Trout)

Year	Average Length and (Range)	Total (PCTL)	YOY	>5" (PCTL)	>8" (PCTL)	>10"	>12" (PCTL)
1987	5.7 (2.1-11.4)	964	190	645	151	39	4
1992	6.1 (2.2-11.2)	839	326	509	68	29	0
1996	5.0 (2.0-13.1)	1768	880	838	162	35	14
1997	3.9 (2.0-9.2)	2936	2106	803	42	0	0
1998	4.8 (1.9-10.5)	3261	1162	1824	134	7	0
1999	4.3 (2.0-11.9)	2077	965	838	42	7	0
2000	5.9 (2.4-12.6)	1408	324	1056	155	42	7
2001	5.1 (2.2-11.1)	528	141	352	92	0	0
2005	4.6 (1.6-11.6)	3790	1496	1899	244	34	0
2007	6.1 (2.4-11.4)	1204 (85th)	77	915 (95th)	162 (90th)	28	0
2008	4.0 (2.0-10.5)	1577 (90th)	1099	479 (85th)	106 (85th)	21	0
2009	5.2 (2.0-10.2)	1646 (90th)	316	1008 (95th)	83 (80th)	15	0
2010	6.4 (2.2-10.4)	711 (80th)	92	592 (90th)	134 (90th)	14	0
2011	7.6 (2.8-12.0)	430 (65th)	42	387 (80th)	190 (95th)	42	7 (90th)
2012	6.0 (2.2-11.9)	1732 (90th)	113	1401 (95th)	127 (90th)	49	0
2013	4.6 (2.0-9.5)	718 (80th)	373	324 (80th)	70 (80th)	0	0

Results and Discussion

- The 2013 survey indicated brook trout density for adult size fish was at moderate levels with CPEs ranking at the 66th percentile for 5+ and 8+ inch trout. Density has decreased from the last survey and is lower than the 10 year average. During our survey it appeared that stream levels were much lower than past years and may account for the decline in catch rates.
- Brook trout young of year relative abundance was higher than the last year and similar to the 10 year average.
- The current regulation appears to be working well and no changes are recommended at this time.
- The Mill Creek would be a good stream to focus easement acquisition and future habitat development.