



2013 Stream Survey Report

Little Wolf River TREND (WBIC 272400)

Waupaca County

Prepared by Al Niebur and Top Moon Lee

Introduction and Objectives

Approximately 27.8 miles of the Little Wolf River is classified as either Class I, II, or III trout water. Originating in Marathon County it flows through Portage and Waupaca Counties until it eventually meets with the Wolf River. Fishing access is good with accessibility to many DNR managed easements and fee title lands. The Little Wolf is managed as a mixed brook and brown trout fishery with brook trout as the dominant salmonid. The lowest reach of designated trout water has been managed with a trophy emphasis (Category 5 special regulations) since 1995, however, current regulations have had limited success and will likely revert back to the system wide regulation pending outcome of next rule change process. A small number of feral brown trout fingerlings are stocked annually in the warmer sections of the lower river. This trend site is located downstream of Ness Road in the special regulations water. Objectives of the trend survey are to monitor relative abundance and size structure.

Regulations :

Category 5 (Cty J to Ness Rd) Size Limit: Brook Trout - 14 inches Daily Bag Limit: 1 (in total)	Category 4 (All other portion) Size Limit: Brown & Rainbow - 12 inches Brook - 8 inches Daily Bag Limit: 3 (in total)
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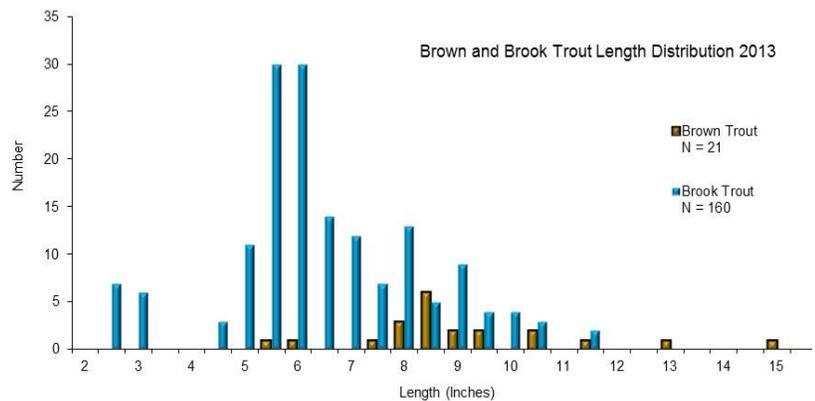
WISCONSIN DNR CONTACT INFO.

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Survey Information					
Site location	Survey Date	Station Length	GPS (Start/Finish)	Gear	Dippers
Ness Rd	07/30/2013	3000 ft.	44.6177, -89.1645 44.6213, -89.1730	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.

Catch per Effort - Brown Trout								
Year	Average Length and (Range)	Total (PCTL)	YOY	>6" (PCTL)	>7"	>9"	>12" (PCTL)	>15" (PCTL)
2008	-	0	0	0	0	0	0	0
2009	-	0	0	0	0	0	0	0
2010	6.2 (4.7-7.8)	113 (45th)	0	66 (45th)	21	0	0	0
2011	6.1 (3.8-11.1)	44 (30th)	2	14 (15th)	7	7	0	0
2012	7.1 (4.7-13.0)	111 (45th)	0	70 (45th)	44	19	4 (40th)	0
2013	9.3 (5.6-15.3)	37 (25th)	0	35 (35th)	33	16	4 (40th)	2 (60th)

Catch per Effort - Brook Trout							
Year	Average Length and (Range)	Total (PCTL)	YOY	>5" (PCTL)	>8" (PCTL)	>10"	>12" (PCTL)
1996	7.4 (3.3-14.2)	262	0	257	76	19	0
1999	5.4 (2.3-12.4)	732	222	457	83	12	1
2006	6.1 (2.3-12.3)	905 (85th)	255	600 (90th)	121 (90th)	32	2 (85th)
2007	5.7 (2.7-11.7)	562 (70th)	123	364 (80th)	72 (80th)	11	0
2008	7.1 (2.6-12.6)	342 (60th)	30	310 (80th)	104 (85th)	26	2 (85th)
2009	5.1 (2.1-12.5)	664 (75th)	366	228 (70th)	90 (85th)	26	4 (90th)
2010	5.7 (2.4-11.9)	575 (75th)	177	383 (80th)	42 (70th)	13	0
2011	7.3 (2.4-10.9)	188 (45th)	9	180 (65th)	62 (75th)	16	0
2012	5.6 (2.3-11.8)	349 (60th)	146	199 (65th)	92 (85th)	14	0
2013	6.7 (2.6-11.7)	282 (55th)	23	254 (75th)	70 (80th)	16	0

Survey Methods

The Little Wolf River trend site was surveyed in 1996 and 1999, then annually since 2006. This station is 3000 feet in length and is electrofished with a towed barge streamshocker. All captured trout are identified to species, measured for length, and examined for fin clips.



Results and Discussion

- Brook trout abundance has remained at low to moderate levels with electrofishing CPE at the 66th percentile for all sizes. Young of year (YOY) density has remained at very low levels. We suspect environmental conditions (i.e. low water levels and higher water temperatures) to be main contributing factors to low density and declining reproduction.
- Special regulations have not improved brook trout size structure, however, it is likely that environmental conditions have superseded any gains realized by the special regulations. Local anglers have expressed displeasure in the current regulation and since it is not having the desired effect it is being recommended to be discontinued in the next rule change process and revert back to the system wide regulation (Category 4).
- Brown trout abundance is at very low levels but increasing. It appears that the majority of fish sampled are the result of feral trout stockings. Stocked fish are showing fast growth with 3-year olds attaining 15+ inches. If environmental conditions persist, brown trout may be the more suitable salmonid for future management. It is recommended that feral brown trout stocking be continued at current quota.