



Black River, Montmorency Co., Springs 2400' trout population estimate

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SPRINGS AREA NEAR MOUTH OF TUBBS CREEK – (2,200 – 2,400 FEET)

Trout population data for this survey site extends back to 1983. The general statewide minimum size limit for harvest of brook trout from inland streams in the Lower Peninsula of Michigan was 8 inches from 1979 through 1999. The general statewide daily creel limit for brook trout was 10 fish from 1979 through 1999. In 2000, Type 2 regulations were applied to the Black River from Tin Shanty Bridge downstream to Tower Dam. The minimum size limit (MSL) for brook trout was 10 inches under Type 2 regulations; bait fishing is permitted; the daily creel limit was 5 trout with no more than 3 over 15 inches long; and the possession season extended from the last Saturday in April through September 30. Type 1 regulations were applied to the remainder of the Black River system in 2000 (upstream of Tin Shanty Bridge). The daily creel limit was 5 trout under Type 1 regulations with a lower minimum size and all tackle could still be used.

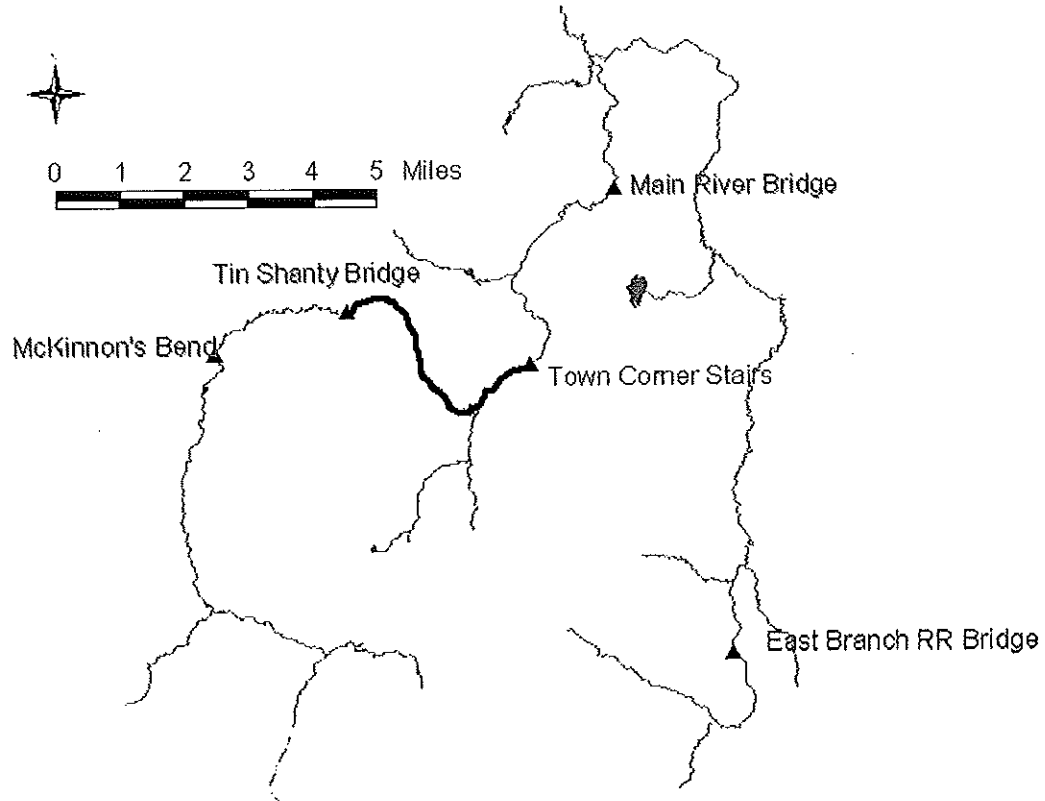
In 2008, an artificial lures or flies regulation was applied to a 4.4-mile reach of the Black River extending from Tin Shanty Bridge downstream to Town Corner Lake Stairs (Figure 1). The MSL for brook trout remained at 10 inches; the daily creel limit was reduced to 2 fish, and catch-and-release angling for brook trout was allowed when the normal April-September possession season was closed. Brook trout numbers did not increase despite the more conservative regulations. Despite this, the regulation remained intact following the study, yet the remainder of Type 2 regulations on the Black River downstream were converted to Type 1 regulations and the minimum size limit was again lowered to 7 inches. Thus, the entire Black River watershed is managed with Type 1 trout regulations (7 inches MSL, 5 fish daily bag), while the reach between Tin Shanty Bridge and Town Corner Lake stairs is maintained under gear restrictions (10 inch MSL, 2 fish daily bag limit, bait prohibited).

The 2400 foot “Springs” station is within this gear restricted reach and was Type 2 regulations for nearly a decade.

This reach also received significant amounts of large woody debris in 2013 prior to the survey. This was work accomplished by the Upper Black River Council with placement locations determined by MDNR Fisheries Division.



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Population estimate (Chapman-Peterson) by inch group of brook trout for the Black River at the springs area located downstream of the confluence of Tubbs Creek.

Length (in)	1983 (2300')	1991 (2200')	2006 (2400')	2007 (2400')	2008 (2400')	2009 (2400')	2010 (2400')	2013 (2400')
1	6	15						
2	968	1,297	173	371	135	241	500	226
3	1,081	66	294	314	498	521	442	571
4	49	31	36	13	17	85	25	31
5	123	182	64	55	68	91	156	99
6	341	155	88	74	121	148	138	160
7	430	56	69	54	94	78	62	54
8	174	64	29	22	28	22	19	54
9	143	21	30	11	14	12	25	31
10	132	7	16	9	5	8	6	9
11	64	5	14	5	1	1	5	3
12	22	1	5	1				2
13	12	1	2	1			1	1
14	1			1				
15	2				1			
16							1	
Total	3,547	1,900	820	931	981	1,208	1,380	1,241
#/Stream foot	1.54	0.86	0.34	0.39	0.41	0.50	0.58	0.52

Brook trout population estimates in various years for the Black River, springs sampling site.

Year	Month	Distance Surveyed (ft)	Width Used in Estimate (ft)	Size Limit (in)	No./ acre	Lbs/ acre	No./ Mile	Growth (in)	Age 0/ mile	Age 1+/ mile	Trout per mile \geq 8 in	Trout per mile \geq 10 in
1983*	Aug	2,300	37.96	8	1,774	164.2	8,143	-	4,715	3,427	1,262	533
1991	July	2,200	37.00	8	1,016	38.0	4,561		3,305	1,257	238	32
2006	Aug	2,400	37.96	10	393	31.0	1,809	+0.7	1,030	781	214	79
2007	Aug	2,400	37.96	10	445	20.7	2,084	+0.5	1,505	544	110	37
2008	Aug	2,400	37.96	10	470	25.2	2,159	+0.6	1,431	750	126	21
2009	Aug	2,400	37.96	10	578	26.9	2,657	+0.5	1,763	892	95	21
2010	Aug	2,400	37.96	10	660	29.6	3,035	+0.4	2,075	966	127	26
2013	Aug	2,400	37.96	10	594	33.4	2,730	+0.1	1,753	977	220	32

*hot summer and fish were congregated in this reach

** 2008 estimates modified by Nuhfer



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Notes and observations:

- It should be noted that extremely high densities of trout in 1983 were surveyed during a period of extremely high temperatures and brook trout were congregated in this cooler reach of water.
- Current regulations for the Black River seem very appropriate. Many anglers are appreciative that most of the river was placed back in Type 1 regulations where minimum harvest sizes of brook trout are lower (7"). This is consistent with much of the rest of the watershed (Canada Ck, East Branch Black River) with the exception of the 4.4 mile gear restricted reach.
- The "Springs" site has been surveyed on occasion dating back to 1983 when regulations on brook trout were liberal. This reach has been under a more conservative 10" minimum size limit since 2000, and a reduced harvest limit (2 fish) since 2008. Catches of brook trout 8 inch and larger, and 10 inch and larger have increased slightly in recent years, but are below the estimates when regulations were more liberal. Data, however, should be interpreted with caution since other factors are involved (year class strength differences, possible fishing pressure, addition of in-stream habitat structures, etc)
- The gear restricted reach is a popular area for anglers to fish in the fall for catch and release fishing opportunity. Thus, having a small reach of gear restricted waters on the Black River among the majority of Type 1 regulations seems appropriate.
- This site will continue to be surveyed every 4-5 years as a population estimate.