

Summarized by Tim Cwalinski, DNR Fisheries

East Branch Black River brook trout population estimates by DNR at Four Stations

Station 1. Railroad Grade, T31N, R1E, S26

Population estimate by inch group of brook trout in various years for a 1,500 foot reach of the upper East Branch Black River downstream of the railroad grade. The 1975 estimate was for 1,950 feet.

Length (in)	1975	1991	1998	2007	2008	2009	2010
1	11	12	1				
2	977	651	636	112	125	216	251
3	57	113	36	202	339	544	414
4	80	130	115	37	95	59	39
5	150	280	216	141	84	135	147
6	136	220	97	86	165	166	160
7	27	91	61	28	84	60	82
8	13	45	25	32	32	29	28
9	26	19	14	6	16	24	13
10	4	7	3	5	2	2	3
11	1	1	1	3		2	2
12		1			2		
13		3	1				
14							
15							
16							
17							
Total	1,481	1,573	1,206	651	945	1,236	1,139

Brook trout population estimates in various years for the upper East Branch Black River, Railroad Grade sampling site.

Year	Month	Distance Surveyed (ft)	Width Used in Estimate (ft)	Size Limit (in)	No./acre	Lbs/acre	No./ Mile	Growth (in)*	Trout per mile ≥ 8 in	Trout per mile ≥ 10 in
1975	July	1,950	37.78	7	876	28.6	4,009	-	119	14
1991	Aug	1,500	37.78	8	1,210	64.7	5,536	-	269	42
1998	July	1,500	37.17	8	942	40.3	4,244	-	155	16
2007	Aug	1,500	37.78	8	501	29.6	2,292	+0.2	162	28
2008	Aug	1,500	37.78	8	727	43.4	3,325	+0.3	183	16
2009	Aug	1,500	37.78	8	951	46.5	4,352	+0.5	201	16
2010	Aug	1,500	37.78	8	876	44.7	4,008	+0.3	164	16

*compared to the statewide average for brook trout

Notes Station 1:

- Highly variable numb numbers, good numbers of juvenile fish; production zone
- High pounds per acre typically, good numbers of age 1 and 2 fish
- Large brook trout (13 inch and larger) less common

Station 2. Shingle Mill Bridge, T31N, R1E, S14/23

Population estimate by inch group of brook trout in various years for the upper East Branch Black River at Shingle Mill Bridge, County Road 622. Station was 850 feet downstream of culvert, and 1,600 feet upstream of culvert (2,450 ft total). Station in 1991 and 1998 was 1,900 ft (1,000 ft upstream).

Length (in)	1975	1991	1998
1	2		
2	372	102	40
3	133	49	12
4	1	9	5
5	11	120	75
6	288	126	108
7	218	90	73
8	90	14	18
9	9	12	17
10	11	9	5
11	13	12	
12	4	3	2
13	5	2	
14	3		
15	1		1
16			3
17			
Total	1,160	548	
Station Length	2,450 ft	1,900 ft	1,900 ft

Brook trout population estimates in various years for the upper East Branch Black River, Shingle Mill Bridge.

Year	Month	Distance Surveyed (ft)	Width Used in Estimate (ft)	Size Limit (in)	No./acre	Lbs/acre	No./Mile	Growth (in)*	Trout per mile \geq 8 in	Trout per mile \geq 10 in
1975	July	2,450	24.9	7	829	79.3	2,500	-	296	79
1991	Aug	1,900	24.9	8	502	50.7	1,522	-	143	74
1998	July	1,900	24.9	8	328	41.3	995	-	127	32

*compared to the statewide average for brook trout

Notes Station 2:

- Deep wading water at times, narrow stream, tag alder corridor, sandy
- Larger brook trout (13 inch and larger) more common at this location
- Declining numbers in the 1990s based on estimates, which is supported by anglers (beaver dam program)
- Greater densities of legal fish

Station 3. 1-mile upstream of Barber Bridge (Blue Lakes Road), T32N, R1E, S22

Population estimate by inch group of brook trout in various years for a 2,000 foot reach of the East Branch Black River a mile upstream of Barber Bridge.

Length (in)	1975	1991	1998
1			
2	837	90	24
3	1,486	34	22
4	258	10	11
5	5	40	50
6	154	54	35
7	135	18	19
8	139	3	9
9	52		3
10	6	3	1
11	9	3	
12	8	2	
13	5		
14	1	2	
15	1		
16			
17			
Total	3,096	259	174

Brook trout population estimates in various years for the East Branch Black River, 1-mile upstream of Barber Bridge.

Year	Month	Distance Surveyed (ft)	Width Used in Estimate (ft)	Size Limit (in)	No./acre	Lbs/acre	No./Mile	Growth (in)*	Trout per mile \geq 8 in	Trout per mile \geq 10 in
1975	Aug	2,000	23.0	7	2,921	129.8	8,174	-	586	79
1991	Aug	2,000	24.0	8	235	17.1	683	-	37	26
1998	July	2,000	24.0	8	158	12.2	459	-	37	5

*compared to the statewide average for brook trout

Notes Station 3:

- Larger brook trout (13 inch and larger) more common at this location at times
- Declining numbers in the 1990s based on estimates, which is supported by anglers (beaver dam program)

Station 4. Barber Bridge (Blue Lakes Road), T32N, R1E, S22

Population estimate by inch group of brook trout in various years for a 2,100 foot reach of the East Branch Black River at Barber Bridge. Station is 1,000 feet downstream and 1,100 feet upstream of bridge.

Length (in)	1975	1991	1998
1	6		
2	1,064	469	712
3	1,117	85	124
4	81	38	130
5	39	97	158
6	149	54	100
7	195	15	54
8	118	9	21
9	30	1	14
10	5	5	3
11	8	1	
12	6	3	1
13	2		
14			
15			
16			
17			
Total	2,821	777	1,317

Brook trout population estimates in various years for the East Branch Black River at Barber Bridge.

Year	Month	Distance Surveyed (ft)	Width Used in Estimate (ft)	Size Limit (in)	No./acre	Lbs/acre	No./ Mile	Growth (in)*	Trout per mile \geq 8 in	Trout per mile \geq 10 in
1975	Aug	2,100	28.0	7	2,089	88.5	7,092	-	422	53
1991	Aug	2,100	32.4	8	498	16.4	1,954	-	48	21
1998	July	2,100	32.4	8	844	31.0	3,311	-	100	11

*compared to the statewide average for brook trout

Notes Station 3:

- Larger brook trout (13 inch and larger) uncommon at this location
- Large variability between three sampling years



Photo 1. Looking upstream from station 2, E. Br. Black River.



Photo 2. Looking downstream from station 4, E. Br. Black River.



Photo 3. Typical habitat near station 3, E. Br. Black River.