WISCONSIN DEPARTMENT OF NATURAL RESOURCES



2024 Wadable Streams Trout Population Report Buffalo, Jackson and Trempealeau Counties

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Survey Objectives

In 2024, the Wisconsin Department of Natural Resources (DNR) conducted electrofishing surveys on wadable trout streams in Buffalo, Jackson and Trempealeau counties. The primary sampling objectives for these surveys were to characterize relative abundance and size structure for all trout and overall ecological integrity through an index of biological integrity (IBI) based on all fish species captured in the sampled survey sites. The following report is a summary of trout metrics for all streams and stations surveyed in 2024. Please refer to the Guide to Wisconsin Trout Fishing Regulations for applicable size and bag limit restrictions for the stream you fish. If you have any stream-specific questions, contact fish biologist Zach Woiak.

DNR Contact

Zach Woiak

DNR Fish Biologist in Buffalo, Clark, Jackson and Trempealeau Counties

910 Street, Hwy 54 East Black River Falls, WI 54615 715-284-1428 Zachariah.Woiak@wisconsin.gov

Survey Methods

Trend survey sites are sampled annually while rotation survey sites are sampled every 3, 6 or 12 years. All sample sites are electrofished with either a backpack or stream barge electrofishing unit. Sampling distance is at least 35 times the mean stream width or a minimum of 330 feet (100 meters), whichever is greater. All gamefish are identified by species and measured for length. In at least one survey station per stream, all fish are captured and counted. Metrics used to describe fish populations include catch per unit effort (CPUE), length frequency and index of biotic integrity (IBI).

Metric Descriptions

Catch per unit effort (CPUE) is an indirect method of measuring fish population relative abundance. For all trout surveys we quantify CPUE by the number and size of trout captured per one mile of stream.

Index of Biotic Integrity (IBI) is a rating of environmental quality based on fish assemblages at each station. Scores between 90 and 100 indicate excellent quality streams, while scores less than 30 indicate poor quality. Our analysis uses Wisconsin's coldwater IBI, where the maximum daily mean water temperature is typically less than 22°C.



Photo Credit: Wisconsin DNR



Photo Credit: Wisconsin DNR

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Stream Survey Locations and Station Information							
Stream	County	Station	Survey Date	Station Length (ft)	IBI Score		
Borst Valley Creek	Trempealeau	1	8/21/24	450	70		
Eagle Creek	Buffalo	1	8/7/24	1000	90		
Elk (Bennett) Creek	Buffalo	1	8/21/24	675	90		
Elk Creek (Independence)	Trempealeau	1	8/14/24	850	90		
Halls Creek	Jackson	1	8/22/24	1000	100		
Levis Creek	Jackson	1	9/11/24	1125	60		
North Fork Beaver Creek	Trempealeau	1	9/11/24	765	70		
North Fork Buffalo River	Jackson	1	8/14/24	1000	60		
North Branch Trempealeau River	Jackson	1	8/22/24	1000	100		
Pigeon Creek	Jackson	1	9/11/24	850	90		
Pine Creek (Osseo)	Trempealeau	1	7/31/24	1000	80		
Pine Creek (Osseo)	Trempealeau	2	7/24/24	850	90		
South Fork Buffalo River	Jackson	1	8/13/24	730	90		
Swinns Valley Creek	Buffalo	1	8/8/24	1380	100		
Tamarack Creek (Modena)	Buffalo	1	8/21/24	1000	50		
Tank Creek	Jackson	1	8/14/24	1000	90		
Turton Creek	Trempealeau	1	7/22/24	480	70		
Turton Creek	Trempealeau	2	7/10/24	540	50		
Turton Creek	Trempealeau	3	7/10/24	450	50		
Turton Creek	Trempealeau	4	7/22/24	800	80		
Waumandee Creek	Buffalo	1	8/8/24	1000	80		

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В	rook and	d Brown	Trout Su	mmaries	 S		
Trei	nd Stations	CPUE (Cato	h per Mile) -	- Brown Tro	out		
Stream	Station	Total	YOY	≥8"	≥12"	≥14"	≥16"
Borst Valley Creek	1	0	0	0	0	0	0
Eagle Creek	1	1114	855	153	42	11	0
Elk (Bennett) Creek	1	23	0	23	0	0	0
Elk Creek (Independence)	1	37	0	37	6	0	0
Halls Creek	1	48	0	48	21	5	5
Levis Creek	1	404	131	84	0	0	0
North Fork Beaver Creek	1	0	0	0	0	0	0
North Fork Buffalo River	1	0	0	0	0	0	0
North Branch Trempealeau River	1	744	370	301	74	21	11
Pigeon Creek	1	6	6	0	0	0	0
Pine Creek (Osseo)	1	0	0	0	0	0	0
Pine Creek (Osseo)	2	0	0	0	0	0	0
South Fork Buffalo River	1	0	0	0	0	0	0
Swinns Valley Creek	1	1500	842	551	134	8	0
Tamarack Creek (Modena)	1	0	0	0	0	0	0
Tank Creek	1	1225	887	243	74	16	0
Turton Creek	1	44	0	44	0	0	0
Turton Creek	2	284	39	205	29	20	20
Turton Creek	3	446	23	352	0	0	0
Turton Creek	4	231	73	139	79	13	0
Waumandee Creek	1	734	169	454	116	48	5
		704	100	101	110	70	
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Brook and Brown Trout Summaries								
Trend Stations CPUE (Catch per Mile) – Brook Trout								
Stream	Station	Total	YOY	≥8"	≥10"	≥12"	≥14"	
Borst Valley Creek	1	164	141	23	12	0	0	
Eagle Creek	1	116	74	26	0	0	0	
Elk (Bennett) Creek	1	493	289	188	39	0	0	
Elk Creek (Independence)	1	236	25	174	62	12	0	
Halls Creek	1	491	174	153	37	0	0	
Levis Creek	1	52	0	19	9	0	0	
North Fork Beaver Creek	1	311	21	131	14	0	0	
North Fork Buffalo River	1	132	5	69	26	0	0	
North Branch Trempealeau River	1	887	348	269	32	0	0	
Pigeon Creek	1	342	31	217	68	19	0	
Pine Creek (Osseo)	1	285	53	121	16	5	0	
Pine Creek (Osseo)	2	87	6	68	31	0	0	
South Fork Buffalo River	1	311	108	116	51	0	0	
Swinns Valley Creek	1	50	0	46	0	0	0	
Tamarack Creek (Modena)	1	470	280	158	26	0	0	
Tank Creek	1	290	11	95	21	0	0	
Turton Creek	1	176	11	165	88	11	11	
Turton Creek	2	567	49	235	59	0	0	
Turton Creek	3	645	82	199	35	0	0	
Turton Creek	4	7	7	0	0	0	0	
Waumandee Creek	1	370	312	42	5	0	0	