



2025 Stream Survey Report

Prairie River Trend Station (WBIC 1481200)

Lincoln County

Introduction and Survey Objectives

The Prairie River starts in northwestern Langlade County and flows west and then southwest through Lincoln County where it joins the Wisconsin River 42.8 miles later in Merrill. The entire river is classified trout water and is home to both brook and brown trout. Both species of trout are supported entirely through natural reproduction and no stocking occurs. This trend survey site has not had intensive habitat improvements and is an example of good, natural habitat representative of much of the river. Trout habitat improvement projects have been completed in several areas throughout the stream. Fishing access is very good with multiple WDNR managed properties and town, county and state road crossings. Objectives of this trend survey are to monitor trout abundance and size structure, and to evaluate angling regulations. The current regulations have been in place since 2008.

WISCONSIN DNR CONTACT INFO.

Dave Seibel - Senior Fisheries Biologist
Wisconsin Department of Natural Resources
223 East Steinfest Road
Antigo, WI 54409

Phone: 715-870-4063
 E-mail: david.seibel@wisconsin.gov



Fishing Regulations

Location	Category	Minimum Size Limit	Daily Bag Limit	Gear Restrictions
Prairie River (All)	Red	Brook Trout – 8 inches Brown & Rainbow Trout – 12 inches	3 Total	None

Survey Information

Site location	Survey Dates	Station Length	Water Temperature (°F)		GPS Coordinates		Gear	Anode Electrodes
			Start	End	Start	End		
Gleason School Forest east of STH 17 and Lawless Lane	08/27/2025 (Marking Run) 09/02/2025 (Recapture Run)	1,386 feet	58 54	59 55	45.36493 -89.45863	45.36531 -89.46287	Towed Barge Stream Shocker	2



Survey Methods

- The Prairie River Gleason School Forest trend station has been surveyed annually since 1991.
- This station is 1,386 feet in length and is electrofished with a towed barge stream shocker.
- All captured trout are identified to species, measured for length, and examined for fin clips.
- On the marking (first) run a small portion of a fin is clipped on all 4-inch and larger trout to identify them as having been captured. The ratio of marked (clipped) and unmarked trout found on the recapture (second) run allow a population estimate to be calculated.
- Most 4 inch and larger trout are at least 1 year old and considered adults.



Metrics Used to Describe Trout Populations

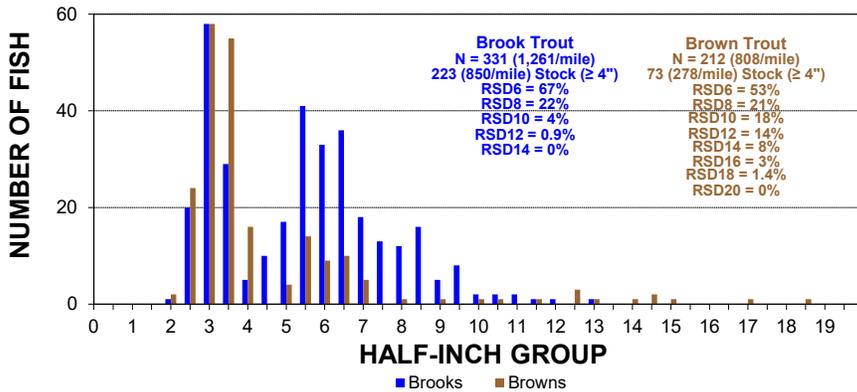
- **Population Estimate (Number of Trout Per Mile)** is the total adult population ≥ 4 inches and allows biologists to follow trout populations through natural up and down cycles. Population estimates are compared between years and between streams.
- **Catch Per Unit Effort (CPUE)** is an indirect method of measuring fish population abundance. For all trout surveys we typically quantify CPUE by the number and size of trout captured per mile of stream.
- **Length Frequency Distribution** describes trout size structure. It is the number of trout captured on the marking (first) run and grouped by half-inch size intervals.
- **Relative Stock Density (RSD)** is the percentage of trout that meet a minimum stock size (4 inches for stream trout) that are also over a quality size for that species. For example, RSD8 is the percentage of brook trout captured on the marking (first) run that were 8 inches and longer out of all brook trout captured that were at least 4 inches long.



Your purchase of fishing equipment and motor boat fuel supports boating access and Sport Fish Restoration.

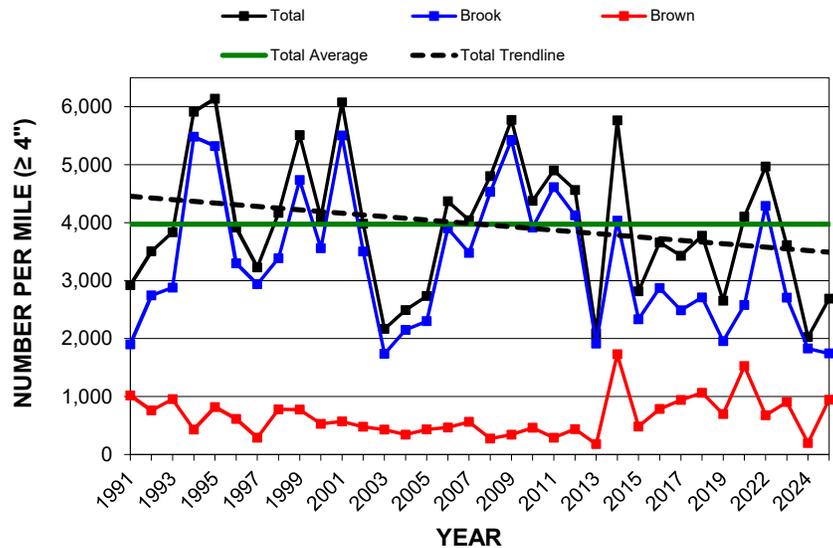
LENGTH FREQUENCY DISTRIBUTION

PRAIRIE RIVER GLEASON SCHOOL FOREST - 2025 BROOK & BROWN TROUT LENGTH FREQUENCIES



N = Total number of trout captured on marking run
 Stock = Total number of trout ≥ 4 inches captured on marking run

PRAIRIE RIVER GLEASON SCHOOL FOREST ADULT TROUT POPULATION ESTIMATES



Summary

- The 2025 survey estimated an adult (≥ 4 inches) brook trout population that was down 5% from the previous year and was 53% of the long-term average and an adult brown trout population that was up 377% from the previous year and was 145% of the long-term average.
- The total adult population of both species of trout fluctuates naturally from highs over 6,000 per mile to lows of 2,000 - 3,000 per mile.
- Years of lower abundance typically result in a higher percentage of quality size fish whereas years of higher abundance are usually the result of many 5-7 inch trout. This is likely related to density dependent factors such as food and habitat availability and carrying capacity of the stream.
- In 2025, the percent of 8 inch and larger brook trout (RSD8) was 22%. This was down 8 percentage points from 2024 but just 1 point down from the 34-year average of 23%. Brook trout RSD10 was 4.0%, down from 7.5% in 2024 but above the long-term average of 3.3%. The percent of 12 inch (legal) and larger brown trout (RSD12) was 14%. This was up 1 percentage point from 2024 and is 6 percentage points higher than the long-term average of 8%.
- The estimated number of brook trout ≥ 10 inches decreased to 49 per mile from 62 in 2024 and the estimated number of brown trout ≥ 12 inches increased to 53 per mile from 19 in 2024. Compared to 2024, this was a 21% decrease for brooks and a 179% increase for browns.
- The size quality of trout is even better where intensive habitat work has been done like upstream and downstream from R&H Road, Hackbarths Drive, CTH J and CTH C and also downstream Prairie Forks Drive and this Gleason School Forest station at the end of Dags Drive.
- The Prairie River has stood the test of time and remains one of the top trout producers in the state, both in terms of abundance and size quality. Fluctuations in the population from year-to-year are natural and likely related to dynamic environmental conditions.
- Quality trout populations are the result of above average water quality and habitat. Maintaining, protecting, and improving water quality and quantity, and instream, riparian, and watershed habitat are a top priority for this and other high quality trout streams.