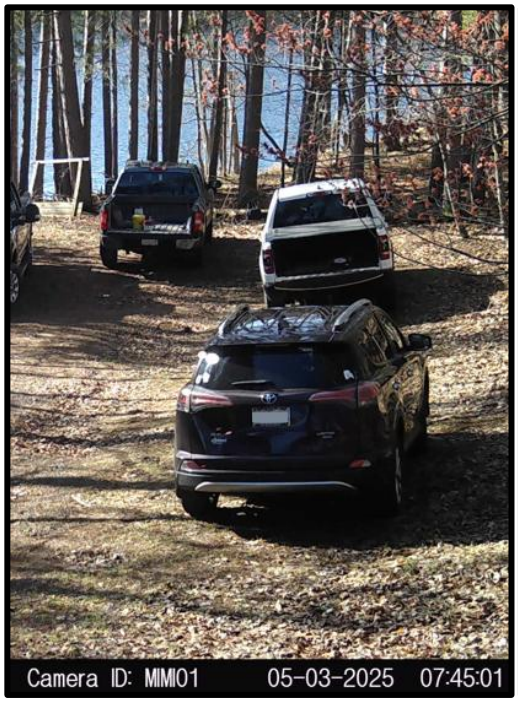
## Wisconsin Department of Natural Resources

# Angler Use of Stocked Trout Lakes in Douglas and Bayfield Counties

2025-2026



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# Introduction

The Wisconsin Department of Natural Resources (DNR) annually stocks brook, brown and rainbow trout into small lakes across the state, creating opportunities to catch and harvest trout, often in lakes that don't support other fisheries. Most of these lakes are stocked with yearling trout (8-10 inches) in the spring prior to fishing opener, but some are stocked with fingerlings (5-7 inches) in the fall. Trout typically do not naturally reproduce in these systems and often experience winter kill or summer kill related to low oxygen or high temperatures. As such, these lakes are often managed for put-and-take opportunities with no minimum length limits and harvest is encouraged. In Douglas and Bayfield counties, the DNR stocks nine trout lakes annually (Table 1). More information about trout stocking in Wisconsin can be found on the DNR webpage for catchable trout stocking.

*Table 1. Stocked trout lake size, stocked brook trout age and stocking rate (fish per acre) in Douglas and Bayfield counties.*

| Lake | County | Size (acres) | Stocked Age | Stocking Rate |
|---|---|---|---|---|
| Anderson | Douglas | 4.8 | Fingerlings* | 600* |
| Park | Douglas | 9.4 | Yearlings | 80 |
| Beaver | Bayfield | 14.9 | Yearlings | 100 |
| Little Star | Bayfield | 5.2 | Yearlings | 90 |
| Mimi | Bayfield | 8.7 | Yearlings | 90 |
| Nymphia | Bayfield | 12.2 | Yearlings | 100 |
| Overby | Bayfield | 7.3 | Yearlings | 90 |
| Perch | Bayfield | 68.9 | Yearlings | 100 |
| Wanoka | Bayfield | 15.2 | Yearlings | 150 |

*Anderson was stocked with 160 yearlings per acre in spring 2025 but returned to fingerling stocking in fall 2025.

Because stocking is a substantial investment, evaluating angler use of these lakes is important to maximize angler opportunities while using DNR resources efficiently. Our goal was to assess angler use of the nine stocked trout lakes in Douglas and Bayfield counties to prioritize future stocking efforts.

# Methods

To assess angler use, we placed voluntary survey kiosks at angler access points on Anderson Lake and Park Creek Pond in Douglas County and Beaver, Little Star, Mimi, Nymphia, Overby, Perch and Wanoka lakes in Bayfield County for the 2025 angling season (first Saturday in May through the first Sunday in March). All lakes had one survey kiosk at the main angler access point, except a second kiosk at an alternate angler access location was used at Overby (open and ice seasons) and Wanoka (ice only). Survey questions included number of anglers, time fished, species targeted, number of fish caught and number of fish harvested for each species, among others (Appendix Figure A1). For this report, all anglers not targeting trout were removed from analyses.

To estimate the proportion of anglers that completed survey cards (reporting rate), trail cameras were deployed at Mimi Lake overlooking the parking area and at Beaver Lake overlooking the access trail for the entire angling season. Similarly, cameras were deployed overlooking Overby and Wanoka lakes during the ice fishing season (late November 2025 to March 2026). On lakes without cameras, the average reporting rate for other lakes during that season (i.e., ice or open water) was used. Creel metrics were calculated using the following equations.

$$Reporting\ Rate = \frac{\#\ of\ survey\ cards\ completed}{\#\ of\ groups\ on\ camera}$$

$$Total\ Effort = \frac{\#\ survey\ cards}{reporting\ rate} * average\ \#\ of\ anglers * average\ \#\ of\ hours\ fished$$

$$Total\ Catch = \frac{\#\ survey\ cards}{reporting\ rate} * average\ \#\ anglers * average\ \#\ caught$$

$$Total\ Harvest = \frac{\#\ survey\ cards}{reporting\ rate} * average\ \#\ anglers * average\ \#\ harvested$$

$$Exploitation = \frac{Total\ Harvest}{Total\ Fish\ Stocked\ that\ year}$$

Exploitation (percent of the population harvested each year) was calculated assuming the total trout population was equal to the number of trout stocked that year. This excludes holdover trout, so if holdover does occur, actual exploitation would be lower than our estimates.

Angler use was compared among lakes using the following metrics: effort per acre, catch per acre, harvest per acre, effort per fish stocked, average angler catch rate (trout caught per hour) and average angler harvest rate (trout harvested per hour).

# Results

Anglers completed 176 survey cards in 2025. One group of 12 anglers on Anderson Lake during the ice season was removed as an outlier, since including that group doubled the estimates of total catch and harvest. Across all lakes, 85% of anglers targeted trout. Of the anglers that fished these lakes, 60% were from Douglas or Bayfield counties, and 13% were from out of state.

Potential for holdover trout (survived at least one year after stocking) was documented in Anderson, Beaver, Mimi, Nymphia, Overby, Perch and Wanoka lakes by angler reports of at least one trout over 12 inches. Anglers reported at least one trout over 14 inches in Beaver, Mimi, Overby, and Perch lakes, which indicated higher

likelihood of holdover trout. However, holdover of trout likely changes from year to year based on temperature, wind and ice cover.

Angler effort, catch and harvest varied widely among lakes (Table 2). Angler effort per acre ranged from 3 hours per acre to 93 hours per acre. Angler catch ranged from 10 trout per acre to 433 trout per acre, and average catch rates ranged from 0.6 trout per hour to 7.7 trout per hour. Angler harvest ranged from 1 trout per acre to 147 trout per acre, and average harvest rates ranged from 0.2 trout per hour to 2.7 trout per hour. Lakes were ranked by the primary angler use metrics (effort, catch and harvest per acre, and angler effort per stocked trout) and an average rank was determined to help make comparisons between lakes (Table 3).

*Table 2. Primary angler use metrics from angler kiosk creel survey of stocked trout lakes in Douglas and Bayfield counties in 2025. Anglers not targeting brook trout were removed from analysis.*

| Lake | Size (ac) | Effort per Acre | Catch per Acre | Harvest per Acre | Effort per Fish Stocked | Average Catch per Hour | Average Harvest per Hour |
|---|---|---|---|---|---|---|---|
| Anderson | 5 | 93 | 433 | 147 | 0.57 | 4.1 | 1.8 |
| Park | 9 | 3 | 26 | 1 | 0.04 | 7.7 | 0.3 |
| Beaver | 15 | 22 | 66 | 38 | 0.22 | 4.1 | 2.7 |
| Little Star | 5 | 5 | 12 | 5 | 0.05 | 2.0 | 0.8 |
| Mimi | 9 | 42 | 109 | 55 | 0.45 | 2.7 | 1.5 |
| Nymphia | 12 | 7 | 10 | 4 | 0.07 | 1.2 | 0.2 |
| Overby | 7 | 45 | 91 | 38 | 0.50 | 2.1 | 1.0 |
| Perch | 69 | 6 | 16 | 8 | 0.06 | 3.3 | 2.5 |
| Wanoka | 15 | 35 | 14 | 8 | 0.25 | 0.6 | 0.3 |

*Table 3. Ranks of primary angler use metrics from angler kiosk creel survey of stocked trout lakes in Douglas and Bayfield counties in 2025. Angler use was ranked from 1 to 9, with 1 indicating highest angler use and 9 indicating lowest angler use.*

| Lake | Angler Hours per Acre | Catch per Acre | Harvest per Acre | Angler Hours per Stocked Fish | Average Rank |
|---|---|---|---|---|---|
| Anderson | 1 | 1 | 1 | 1 | 1.0 |
| Park | 9 | 5 | 9 | 9 | 8.0 |
| Beaver | 5 | 4 | 3 | 5 | 4.3 |
| Little Star | 8 | 8 | 7 | 8 | 7.8 |
| Mimi | 3 | 2 | 2 | 3 | 2.5 |
| Nymphia | 6 | 9 | 8 | 6 | 7.3 |
| Overby | 2 | 3 | 4 | 2 | 2.8 |
| Perch | 7 | 6 | 6 | 7 | 6.5 |
| Wanoka | 4 | 7 | 5 | 4 | 5.0 |

## Lake Comparison

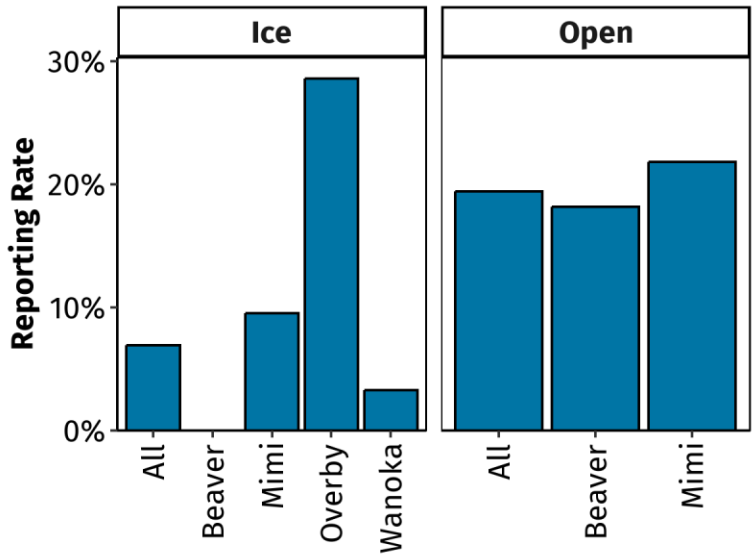



*Figure 1. Reporting rates from four Bayfield County trout lakes during 2025 ice and open water fishing seasons.*

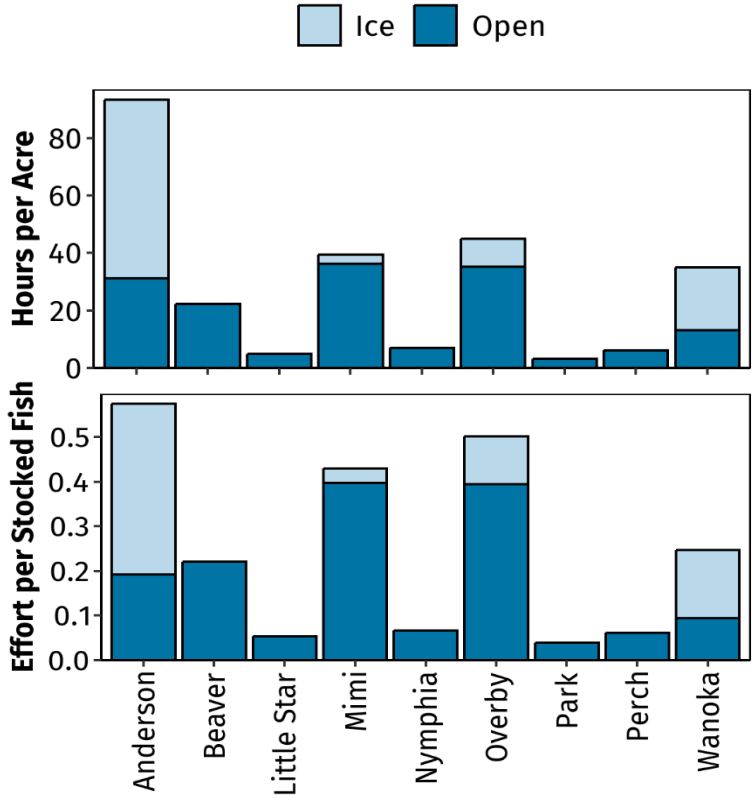



*Figure 2. Angler effort per acre (hours/acre; top) and angler effort per stocked trout (hours/fish stocked; bottom) in Douglas and Bayfield county trout lakes during the 2025 open water and ice fishing seasons.*

The total reporting rate was 15%, with 19% during the open water season and 7% during the ice season (Figure 1). No survey cards were completed during the ice season at Beaver lake, but only 3 anglers were documented on camera. Only 3 of 92 anglers documented at Wanoka lake during the ice season completed a survey card, but a primary access trail did not have a survey kiosk, so many anglers there likely never encountered a kiosk.

Angler effort per acre and angler effort per stocked trout generally followed the same patterns, with Anderson as the highest angler use, Beaver, Mimi, Overby and Wanoka with moderate to high levels of angler use, and Little Star, Nymphia, Perch and Park Creek Pond with the lowest angler use (Figure 2). Most lakes with high angler use had ice angling pressure, while low angler use lakes were generally only used by open water anglers. Although Perch Lake had high total angler effort, it is the largest of the studied lakes (69 acres), gets stocked with more trout than the other lakes, and many anglers targeted panfish and largemouth bass.

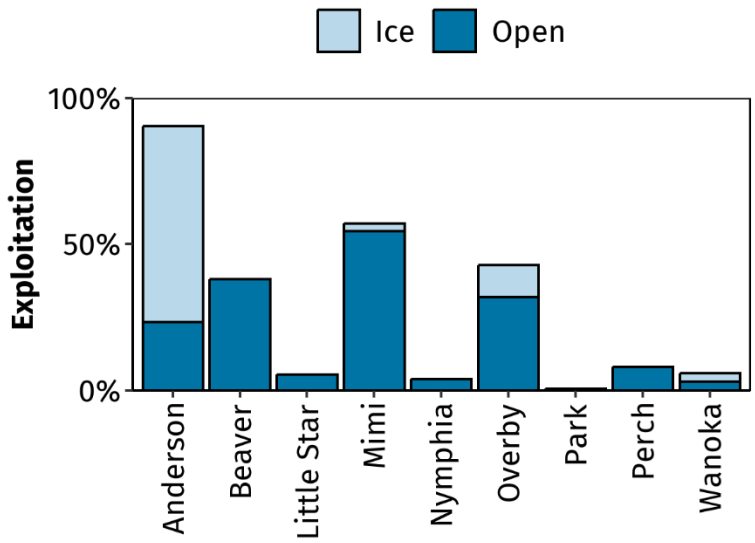



*Figure 3. Brook trout exploitation (% of population harvested) in Douglas and Bayfield county trout lakes during the 2025 open water and ice fishing seasons.*

Similar to the angler effort metrics, brook trout exploitation (percent of the population harvested) was highest in Anderson, moderate in Beaver, Mimi and Overby, and low in Little Star, Nymphia, Park and Perch (Figure 3). However, exploitation was also low in Wanoka lake due to low harvest rates. Most harvest and exploitation occurred during the open water season for all lakes except Anderson.

## Discussion

Angler use of stocked trout varied widely among lakes in Douglas and Bayfield counties. Anderson, Mimi, Overby, Beaver and Wanoka lakes were used the most. Angler use on Little Star, Nymphia and Park Creek Pond was minimal. Although total angler effort on Perch Lake was high, the cost of stocking a larger lake like Perch led to a low return on investment. Little Star, Nymphia, Park Creek Pond and Perch lakes are lowest priority for stocking due to low angler use and the presence of other nearby put and take trout angling opportunities.

Ice angling was documented on four of the nine lakes (Anderson, Mimi, Overby and Wanoka). These lakes also had the highest angler effort per acre (open and ice combined). Access may also influence ice angling use, as four of the lakes where ice angling was not documented were relatively inaccessible during the ice season due to unplowed roads and parking areas.

Although voluntary survey kiosks provided important information for managing these fisheries, some bias must be acknowledged. Some anglers may use alternate or unexpected access points and never encounter a survey kiosk. This was observed at Wanoka, where ice anglers primarily accessed the lake from a trail without a survey kiosk. As a result, the reporting rate on Wanoka was exceptionally low. Additionally, anglers who are unsuccessful may be less likely to complete a survey, or anglers who are highly successful may overestimate their total catch. Both situations result in overestimates of catch and harvest, so basing management decisions on angler effort estimates may result in less bias.

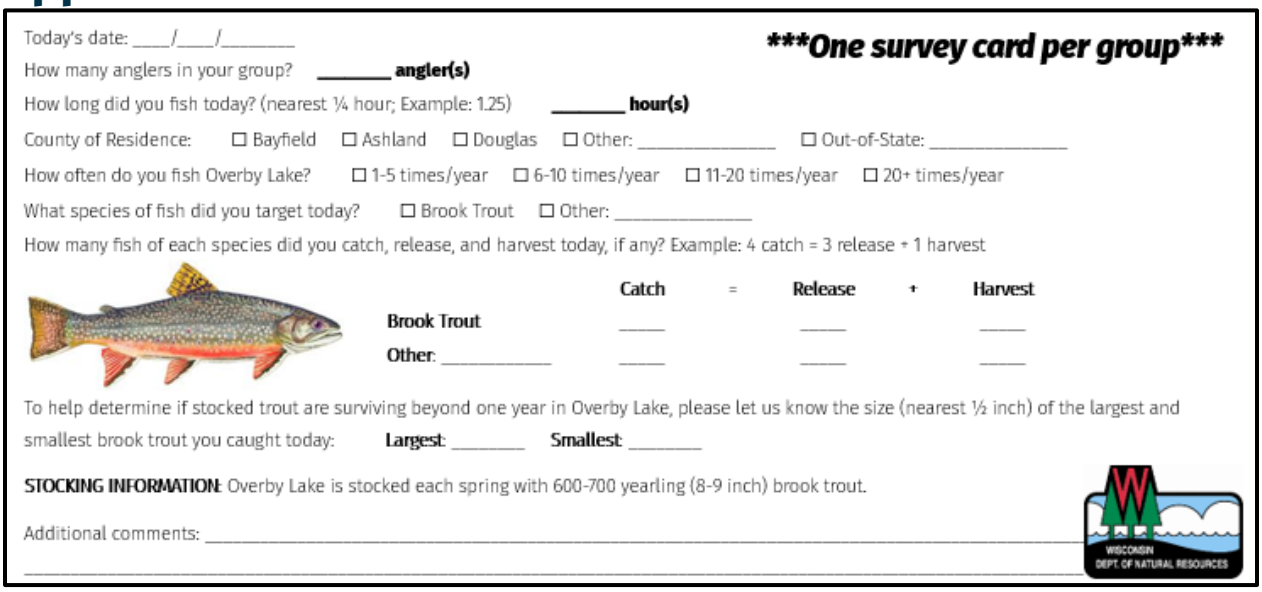
Despite some bias, our reporting rate (15%) was comparable to other similar creel surveys in Forest and Florence counties (8-14%, Greg Matzke, personal communication) and on the White River in Bayfield County (10-13%, Shaikh et al. 2026). Similarly, the angler effort per stocked fish that we documented (0.04-0.62 hours/fish) was similar to surveys in Barron and Polk counties (0.29-0.68 hours/fish, Broadway and Landes 2023) and Forest County (0.11-0.46 hours/fish, Greg Matzke, personal communication). As such, angler survey kiosks provide a cost-effective tool to assess angler use on these systems.

# References

Broadway, K. J., and C. L. Landes. 2023. Creel survey report for put-and-take trout lakes, Barron and Polk Counties, Wisconsin 2023. Wisconsin Department of Natural Resources, Fisheries Management Report. Available here.

Shaikh, S., N. Thomas and L. Cutler. 2026. White River watershed and creel survey, Bayfield County, Wisconsin, 2024-2025. Wisconsin Department of Natural Resources, Fisheries Management Report. Available here.

# Appendix



Today's date: ____/____/_____ ***One survey card per group***

How many anglers in your group? _____ angler(s)

How long did you fish today? (nearest ¼ hour; Example: 1.25) _____ hour(s)

County of Residence: ☐ Bayfield ☐ Ashland ☐ Douglas ☐ Other: _____ ☐ Out-of-State: _____

How often do you fish Overby Lake? ☐ 1-5 times/year ☐ 6-10 times/year ☐ 11-20 times/year ☐ 20+ times/year

What species of fish did you target today? ☐ Brook Trout ☐ Other: _____

How many fish of each species did you catch, release, and harvest today, if any? Example: 4 catch = 3 release + 1 harvest

| | Catch | = | Release | + | Harvest |
|---|---|---|---|---|---|
| Brook Trout | ____ | | ____ | | ____ |
| Other: _____ | ____ | | ____ | | ____ |

To help determine if stocked trout are surviving beyond one year in Overby Lake, please let us know the size (nearest ½ inch) of the largest and smallest brook trout you caught today: Largest: _____ Smallest: _____

STOCKING INFORMATION: Overby Lake is stocked each spring with 600-700 yearling (8-9 inch) brook trout.

Additional comments: _____

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*Figure A1. Example survey questionnaire available at survey kiosks.*