

## **Minnesota DNR**

### **2024 Farm Island Lake Creel Survey summary report- May 11 to September 30, 2024**

#### **Aitkin County, MN**

A survey was conducted from May 11 to September 30, 2024 on Farm Island Lake (DOW # 01-0159-00) in Aitkin County. Total seasonal angling activity in 2024 (34,849 angler-hours) was below previous pressure estimates from 1994 (39,262 angler-hours), 1995 (52,580 angler-hours), 2003 (37,630 angler-hours) and 2004 (41,714 angler-hours). Sixty-nine percent of the 1,155 parties interviewed in 2024 were fishing for Walleye as a primary or secondary species, followed by Bluegill (18.5 percent), Largemouth Bass (17.9 percent), Smallmouth Bass (13.7 percent), “no particular species” (7.8 percent), Northern Pike (7.4 percent), Pumpkinseed (0.4 percent), and Rock Bass (0.1 percent). Note that those percentages will not add up to 100% simply because people fished for more than one species.

Anglers caught a total of thirteen species of fish on Farm Island Lake in 2024, including Black Crappie, Bluegill, Bowfin, Bullhead, Channel Catfish, Hybrid Sunfish, Largemouth Bass, Northern Pike, Pumpkinseed, Rock Bass, Smallmouth Bass, Walleye, and Yellow Perch. The three most commonly caught species were Bluegill, with 9,836 caught (2,589 pounds) and 3,175 fish harvested (1,366 pounds); Walleye with 7,274 caught (12,311 pounds) and 1,697 fish (2,601 pounds) harvested; and Northern Pike with 7,023 fish caught (7,842 pounds) and 287 fish (402 pounds) harvested. Anglers caught an estimated 5,729 Largemouth Bass and 4,323 Smallmouth Bass with the majority released (~96 percent released).

#### ***Walleye***

Anglers reported Walleye ranging from 8 to 30.5 inches in total length. Harvested fish ranged from 11.5 to 24.5 inches. The clerk did encounter two illegal length fish on separate occasions in the 18 to 18.5 inch range. Illegal fish accounted for less than 1 percent of all Walleye harvested. The most frequent size range of Walleye harvested across monthly strata was 14 to 14.9 inches, except in September when 15.0 to 15.9 inch Walleye were harvested slightly more.

The catch rate for Walleye in 2024 (0.21 fish per angler hour) was much higher than historic catch rates in 1994 (0.12 fish per angler hour), 1995 (0.12 fish per angler hour), 2003 (0.12 fish per angler hour), and 2004 (0.089 fish per angler hour). This catch rate was driven by both harvestable fish and fish in the protected slot, which accounted for 0.12 fish per angler-hour. All anglers combined released 76 percent of the Walleye catch in 2024, of which 57 percent were in the 16.0 to 19.0 inch protected slot. Anglers were also asked during their interview if they supported the current Walleye regulation (16 to 19 inch protected slot) with 80 percent of parties reporting that they supported the current regulation.

#### ***Bluegill***

In 2024 an estimate of 9,836 Bluegill were caught and 3,175 harvested compared to 1994 with 6,194 caught and 3,567 harvested; 1995 with 16,817 fish caught and 10,266 harvested; 2003 with 9,703 fish caught and 3,432 harvested; and 2004 with 7,380 fish caught and 3,999 harvested. The harvest rate in 2024 was 0.091 fish per angler hour, which was nearly identical to 2004, 2003 and 1994, but below what was seen in 1995 at 0.20 fish per angler hour.

The mean length of Bluegill harvested in 2024 was 8.0 inches, while in 1994 it was 6.9 inches. Mean lengths of harvested Bluegills were not reported in the 1995, 2003, or 2004 Farm Island Lake creel reports. However, it appears that the size structure of Bluegill has improved in the last decade, based on both gill net and trap net catches of fish over 8 inches in the last 6 surveys, spanning 2010 through 2023.

### *Northern Pike*

In 2024, Northern Pike harvest was at an all-time low of 287 fish (402 pounds) and it appears that there was a shift in anglers' preferences over the years in terms of harvesting Northern Pike. All anglers combined harvested a total of 1,080 Northern pike in 1994, 1,752 in 1995, 1,687 in 2003, and 2,835 in 2004. The total number of Northern Pike caught in 2024 was 7,023 and was within the range estimated in past creel surveys (1994, 2,769 fish; 1995, 7,275 fish; 2003, 8,108 fish; 2004, 11,480 fish).

**Commented [RB1]:** Lets steer clear of the NOP reg stuff. The mean wt is certainly an artifact of the reg.

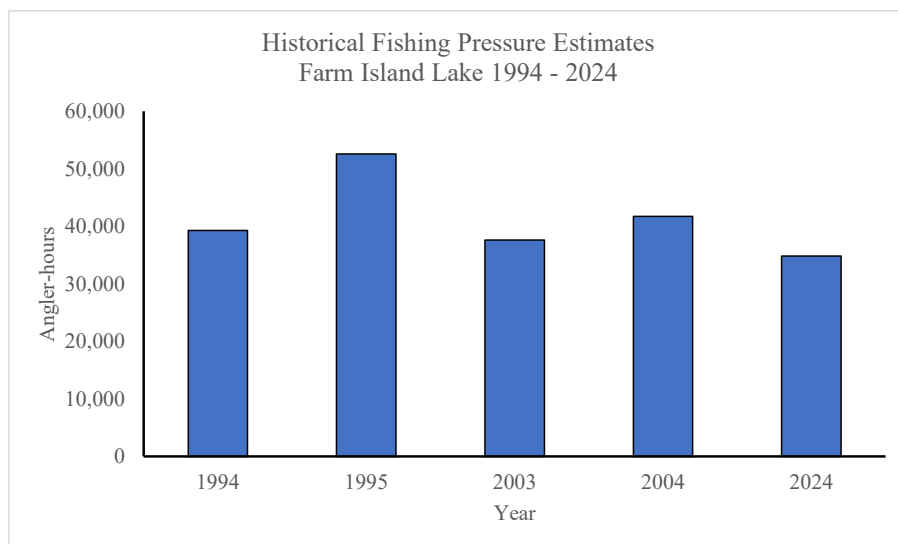
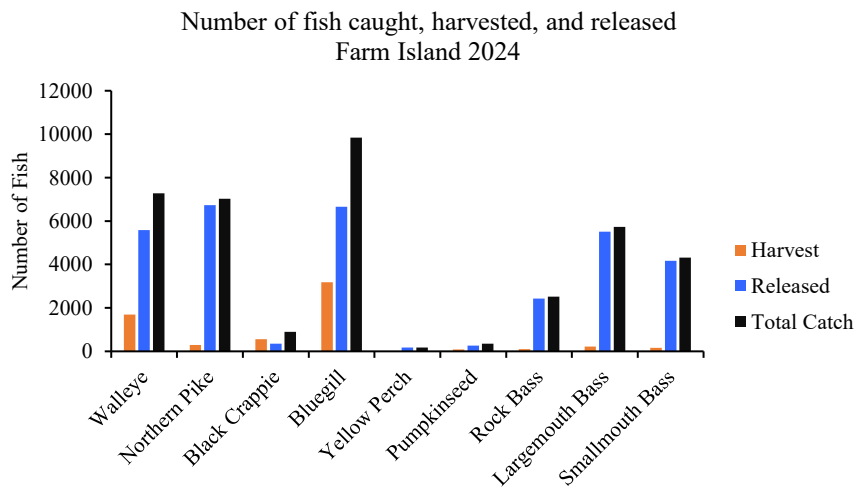
### *Angler demographics*

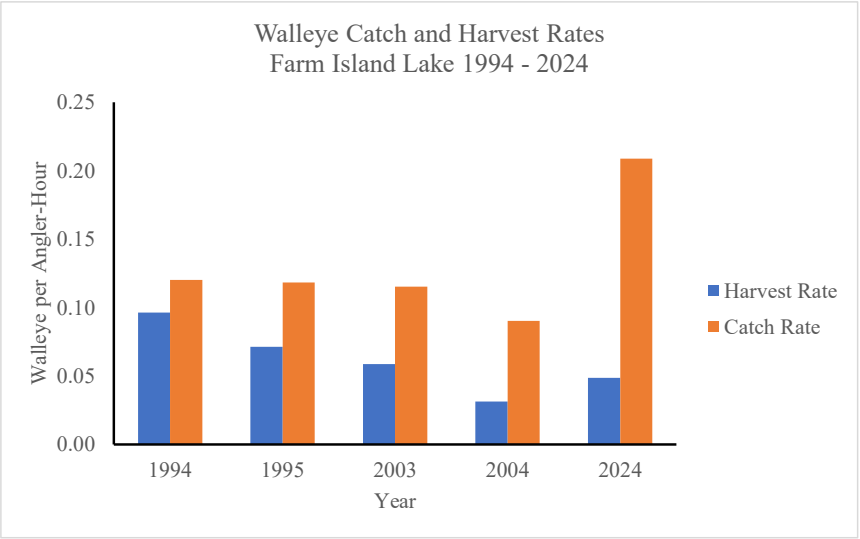
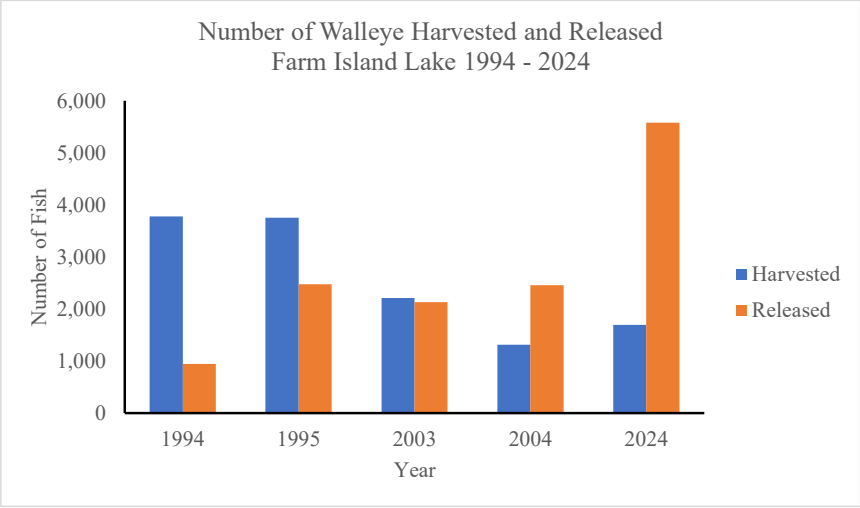
The highest concentrations of anglers were coming out of the Twin Cities, Aitkin area, and Crow Wing County (Deerwood & Brainerd areas). About 27 percent of anglers had a hometown distance of 0 to 49 miles from Farm Island Lake, while ~34 percent of anglers lived 50 to 99 miles away, and 22 percent lived 100 to 149 miles from Farm Island Lake. In total, anglers from 28 states and 1 international country (United Kingdom) were interviewed and recorded fishing on Farm Island Lake during the 2024 season. The 28 states include Alaska, Alabama, Arkansas, Arizona, Colorado, Florida, Georgia, Iowa, Illinois, Kansas, Kentucky, Minnesota, Missouri, Montana, North Carolina, North Dakota, Nebraska, New Hampshire, New York, Ohio, Oklahoma, Oregon, South Carolina, South Dakota, Texas, Virginia, Washington, and Wisconsin.

### *Pressure directed from Mille Lacs Lake*

Additionally, anglers were asked "what are two other lakes in Minnesota that you fish most often?" A total of 268 different lakes were mentioned by anglers with Mille Lacs Lake being the most popular response (21 percent of responses), followed by Lake of the Woods (3 percent of responses) and Leech Lake (3 percent of responses). Mille Lacs Lake was the most common response (21 percent of responses), which is similar but a little more than what we observed at Big Sandy Lake in 2016 when we asked the same question. Mille Lacs Lake was the most common response at 12 percent of responses. The slightly higher frequency at Farm Island is not surprising given the near proximity to Mille Lacs.

While one out of five anglers on Farm Island do fish Mille Lacs, increased fishing pressure on Farm Island Lake due to the restrictive regulations on Mille Lacs Lake was not apparent because total fishing effort was the lowest observed among all four of the open water creel surveys on Farm Island Lake. Historically, Farm Island Lake has always had busy days (extra effort) when high wind events rock Mille Lacs Lake. The difference now is that total fishing effort at Mille Lacs is so much lower than it once was and so any redirected effort from the big lake is less than it could be during those events. In either case (wind or regulation driven), any extra effort from Mille Lacs anglers appears to have been inconsequential to the fishery at Farm Island at this time.





**Commented [RB2]:** drop the FFS stuff but add in a table of the length distributions

*Length frequency distribution of fish harvested, and fish released, as reported to clerks, Farm Island Lake, Aitkin County, Minnesota, May 11 – September 30, 2024.*

	Black Crappie		Bluegill		Bowfin		Bullhead Spp.		Channel Catfish		Hybrid Sunfish	
Length (inches)	Har	Rel	Har	Rel	Har	Rel	Har	Rel	Har	Rel	Har	Rel
< 5.0				380								
5.0 - 5.4			6	200							1	
5.5 - 5.9			4	21								
6.0 - 6.4			28	256								
6.5 - 6.9			17	17								
7.0 - 7.4		12	69	190								
7.5 - 7.9			80	36								
8.0 - 8.4		14	162	100								
8.5 - 8.9			99	4								
9.0 - 9.4	6	5	77	28								
9.5 - 9.9	10		13	9								
10.0 - 10.4	15	7	5	17				1				
10.5 - 10.9	2			1								
11.0 - 11.4	15	1										
11.5 - 11.9	1											
12.0 - 12.9	7	1										
13.0 - 13.9	16	2										
14.0 - 14.9	1	5										
15.0 - 15.9		1										
16.0 - 16.9												
17.0 - 17.9												
18.0 - 18.9												
19.0 - 19.9												
20.0 - 20.9												
21.0 - 21.9												
22.0 - 22.9						1						
23.0 - 23.9												
24.0 - 24.9												
25.0 - 25.9												
26.0 - 26.9						1						
27.0 - 27.9												
28.0 - 28.9						1						
29.0 - 29.9												
30.0 - 30.9										1		
> 31.0												
N	73	48	560	1259	0	3	0	1	0	1	0	1
Mean Length	11.1	9.3	8.0	5.6	0.0	25.3	0.0	10.0	0.0	30.0	0.0	5.0
Min. Length	9.0	7.0	5.0	2.0	0.0	22.0	0.0	10.0	0.0	30.0	0.0	5.0
Max. Length	14.0	15.0	10.0	10.5	0.0	28.0	0.0	10.0	0.0	30.0	0.0	5.0

*Continued.*

	Largemouth Bass		Northern Pike		Pumpkinseed		Rock Bass	
Length (in.)	Har	Rel	Har	Rel	Har	Rel	Har	Rel
< 5.0		11				6		1
5.0 - 5.4		1				4		10
5.5 - 5.9								
6.0 - 6.4		8			1	3		10
6.5 - 6.9					3			
7.0 - 7.4		5			2	5	1	17
7.5 - 7.9					2	1		
8.0 - 8.4		24			8	11	3	83
8.5 - 8.9								7
9.0 - 9.4	1	9				7	2	57
9.5 - 9.9								5
10.0 - 10.4		36		13			6	109
10.5 - 10.9							2	
11.0 - 11.4	3	15		2			2	38
11.5 - 11.9								1
12.0 - 12.9		128		102				45
13.0 - 13.9	8	73		56				8
14.0 - 14.9	8	145		108				7
15.0 - 15.9	2	155		84				
16.0 - 16.9	11	130	1	125				
17.0 - 17.9	3	101	8	70				
18.0 - 18.9		72	4	147				
19.0 - 19.9		13	13	48				
20.0 - 20.9		9	9	147				
21.0 - 21.9			2	27				
22.0 - 22.9		1	1	27				
23.0 - 23.9				14				
24.0 - 24.9		1	1	25				
25.0 - 25.9				8				
26.0 - 26.9				3				
27.0 - 27.9				4				
28.0 - 28.9				1				
29.0 - 29.9								
30.0 - 30.9				1				
> 31.0								
N	36	937	39	1012	16	37	16	398
Mean Length	14.5	14.2	19.0	16.9	7.5	6.9	9.5	9.5
Minimum Length	9.0	3.0	16.5	10.0	6.1	3.0	7.0	4.0
Maximum Length	17.5	24.0	24.0	30.0	8.3	9.0	11.0	14.0

*Continued.*

	Smallmouth Bass		Walleye		Yellow Perch	
Length (in.)	Har	Rel	Har	Rel	Har	Rel
< 5.0		6				31
5.0 - 5.4		2				
5.5 - 5.9						
6.0 - 6.4		2				1
6.5 - 6.9						
7.0 - 7.4		4				
7.5 - 7.9						
8.0 - 8.4	1	19		6		1
8.5 - 8.9						
9.0 - 9.4		12				
9.5 - 9.9	1					
10.0 - 10.4	2	43		2		1
10.5 - 10.9				2		
11.0 - 11.4		21		5		
11.5 - 11.9	1		1	1		
12.0 - 12.9	4	99	2	22		
13.0 - 13.9	7	55	31	55		
14.0 - 14.9	2	100	98	42		
15.0 - 15.9	3	117	62	23		
16.0 - 16.9	3	102		85		
17.0 - 17.9	2	66		283		
18.0 - 18.9		52	2	288		
19.0 - 19.9	1	12	47	41		
20.0 - 20.9		18	25	10		
21.0 - 21.9		5	6	3		
22.0 - 22.9		1	1	3		
23.0 - 23.9			2	1		
24.0 - 24.9			1	1		
25.0 - 25.9						
26.0 - 26.9				2		
27.0 - 27.9				1		
28.0 - 28.9				1		
29.0 - 29.9				2		
30.0 - 30.9				1		
> 31.0						
N	27	736	278	880	0	34
Mean Length	13.6	14.2	16.1	16.9	0.0	3.5
Minimum Length	8.0	3.0	11.5	8.0	0.0	2.0
Maximum Length	19.2	22.0	24.5	30.5	0.0	10.0