WISCONSIN DEPARTMENT OF NATURAL RESOURCES

MUSSER FLOWAGE

2024 CREEL SURVEY REPORT

PRICE COUNTY

Treaty Fisheries Publication

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INTRODUCTION

Fish populations can fluctuate due to a variety of factors including natural forces like climate, reproductive success, predation, and competition. Human activities such as fish harvest, stocking, habitat change, and invasive species introduction can also have significant impacts. Wisconsin Department of Natural Resources (DNR) fisheries crews regularly conduct fishery surveys on lakes and reservoirs to gather the information needed to monitor changes, identify concerns, evaluate past management actions, and to prescribe fishery management strategies. Netting and electrofishing surveys are used to gather data on the status of fish populations and communities, measuring such parameters as species composition, population size, reproductive success, size and age distribution and growth rates.

The other key component of the fishery that we often need to measure is angler harvest to assess its impact on the fishery.

On many lakes in the Ceded Territory of northern Wisconsin, the harvest of fish is divided between sport anglers and the six Ojibwe tribes who harvest fish under rights granted by federal treaties. The tribes harvest fish mostly using a highly efficient method, spearing, during a relatively short time period in the spring. Every fish in the spear harvest is counted – a complete "census" of the harvest.

It would be highly impractical and very costly to conduct a complete census of every angler who fishes on a lake. Therefore, we conduct creel surveys.

A creel survey is an assessment tool used to sample the fishing activities of anglers on a body of water and make projections, or estimates, of harvest and other fishery parameters. Creel survey clerks work on randomly selected days and shifts, forty hours per week. The survey is conducted during the open season for gamefish from the first Saturday in May through the first Sunday in March. Creel surveys are generally not conducted in November when fishing effort is low, and ice conditions are often unsafe. The survey is run during daylight hours, and shift times change from month to month as day length changes.

Creel survey clerks travel their lakes using a boat or snowmobile to count the number of anglers at predetermined times, and to interview anglers who have completed their fishing trip. Data are collected on what species they fished for, catch, harvest, lengths of fish harvested, marks (fin clips or tags), and hours of fishing effort. Collecting information at the end of a fishing trip provides the most accurate assessment of angling activities, and it avoids the need to disturb anglers while they are fishing.

A computer program is used to estimate catch and harvest of each species, catch and harvest rates, and fishing effort by month, as well as for the year in total. Accurate estimates require that we sample a sufficient and representative portion of the angling activity on a lake. The accuracy of creel survey results depends on good cooperation and truthful responses by anglers when a creel clerk interviews them.

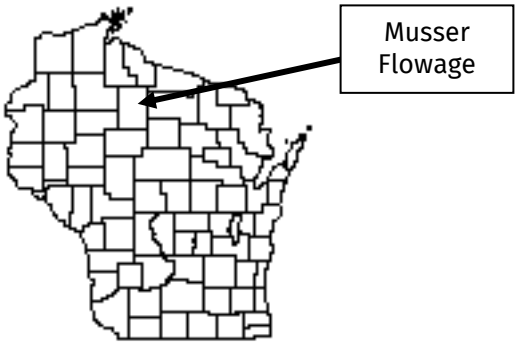
You may have encountered a DNR creel survey clerk on a recent fishing trip. We appreciate your cooperation during an interview. The survey only takes a few minutes of your time, and it gives the DNR valuable information needed for management of the fishery.

This report provides estimates of:

1. Overall fishing effort (pressure)
2. Fishing effort directed at each species
3. Numbers of fish caught and harvested
4. Catch and harvest rates

Also included are a physical description of the lake, discussion of results of the survey, and detailed summaries of fishing effort, catch and harvest.

GENERAL LAKE INFORMATION



LOCATION

Musser Flowage is located in Price County near the city of Phillips.

PHYSICAL CHARACTERISTICS

Musser Flowage is a 563-acre drainage impoundment with a maximum depth of 15 feet. Littoral substrate consists primarily of sand, with lesser amounts of muck, and gravel. Musser Flowage contains soft, slightly acidic, stained water of moderate transparency.

SEASONS SURVEYED

The open-water creel survey ran from May 4 through Oct. 31, 2024, and the ice fishing creel survey ran from Dec. 1, 2024 through March 2, 2025.

WEATHER

Ice-out on Musser Flowage was around March 14, 2024. Fishable ice formed in early December.

FISHING REGULATIONS

The following seasons, daily bag limits, and length limits were in place during the surveyed season:

SPECIES	SEASON	BAG LIMIT	MIN. SIZE
Largemouth Bass	5/4-3/2	5	14"
Smallmouth Bass	6/15-3/2	5	14"
Largemouth and Smallmouth Bass Catch and release only all other times of year			
Musky	5/25-12/31	1	40"
Northern Pike	5/4-3/2	5	none
Walleye	5/4-3/2	3	15"
	20-24" Protected Slot, 1>24"		
Panfish	year round	25	none
Rock Bass	year round	none	none

SPECIES CATCH AND HARVEST INFORMATION

Summaries of angling effort, catch and harvest information for each species are in Table 2 and Figures 1-10, along with a comparison of these statistics with the previous creel survey in Table 2, if available. Information about species with fishing seasons extending beyond the season surveyed should be considered minimum estimates. Each species page has up to five graphs depicting the following:

1. **ESTIMATED FISHING EFFORT**
   The estimated number of hours during each month that anglers spent fishing for a species.

2. **ESTIMATED CATCH AND HARVEST**
   The estimated number of fish of the indicated species caught or harvested by all anglers, regardless of targeted species.

3. **ESTIMATED SPECIFIC CATCH AND HARVEST RATES**
   The estimated number of hours it takes an angler to catch or harvest a fish of the indicated species. Only information from anglers who were specifically targeting that species is reported.

4. **LENGTH DISTRIBUTION OF HARVESTED FISH**
   All fish of a species that were measured by the clerk during the entire creel survey season.

5. **LARGEST AND AVERAGE LENGTH OF HARVESTED FISH**
   The largest and average length of a species of fish harvested that month. Only fish measured by the creel survey clerk are reported.

CREEL SURVEY RESULTS AND DISCUSSION

SURVEY LOGISTICS

We encountered no unusual problems conducting the survey or calculating the projections contained in the report.

GENERAL ANGLER INFORMATION

Anglers spent 9,690 hours, or 17.2 hours per acre, fishing Musser during the 2024 open water season (Table 1). That was less than the Price County average of 26.8 hours per acre. July was the most heavily fished month (2,633 hours), and fishing effort was lightest in October (563 hours). The creel clerks were able to conduct 166 interviews throughout the survey.

RESULTS BY SPECIES

WALLEYE (Table 2, Figure 1)
Walleye received 3.6 percent of the fishing effort during the season. Anglers spent 459 hours targeting Walleye. The greatest fishing effort for Walleye was in August (167 hours). September had the least amount of Walleye fishing effort (19 hours).

Total catch of Walleye was 256 fish, with a harvest of 33. Highest catch (107 fish) occurred in August, and highest harvest (18 fish) occurred in May. Anglers fished an average of 3.3 hours to catch and 21.1 hours to harvest a Walleye during the survey. The mean length of harvested Walleye was 17.7 inches, and the largest measured was an 18.8-inch fish.

NORTHERN PIKE (Table 2, Figure 2)
Fishing effort directed at Northern Pike was 1,194 hours during the season. Northern Pike fishing effort was greatest in May (298 hours). Total catch of Northern Pike was 115 fish, with a harvest of 52. Anglers fished an average of 38.5 hours to catch a Northern Pike during the survey. The mean length of harvested Northern Pike was 28 inches, and the largest measured was a 34.1-inch fish.

MUSKELLUNGE (Table 2, Figure 3)
Anglers spent 2,999 hours targeting Muskellunge during the season. Muskellunge fishing effort was greatest in August (724 hours). Total catch of Muskellunge was 199 fish, and the highest catch (74 fish) occurred in August. Anglers fished 16 hours to catch a Muskellunge, and there was no documented harvest during the survey.

SMALLMOUTH BASS (Table 2, Figure 4)
There was no directed fishing effort targeted at Smallmouth Bass during the season. Total catch of Smallmouth Bass was 36 fish, with no documented harvested.

LARGEMOUTH BASS (Table 2, Figure 5)
Fishing effort directed at Largemouth Bass was 2,859 hours during the season. Largemouth Bass fishing effort was greatest in July (1,156 hours). Total catch of Largemouth Bass was 1,188 fish, with a harvest of 24. Highest catch (514 fish) occurred in July. Anglers fished an average of 3 hours to catch a Largemouth Bass during the survey.

PANFISH (Table 2, Figures 6-10)
YELLOW PERCH received 615 hours of directed fishing effort. Total catch of Yellow Perch was 1,467 fish, with 186 harvested. The mean length of harvested fish was 8.4 inches.

BLUEGILL received 2,370 hours of directed fishing effort. Total catch of Bluegill was 10,887 fish, with 2,374 harvested. The mean length of harvested fish was 6.9 inches.

BLACK CRAPPIE received 2,287 hours of directed fishing effort. Anglers caught 4,830 Black Crappie and harvested 751. The mean length of harvested fish was 8.9 inches.

PUMPKINSEED received no directed fishing effort. Anglers caught 955 Pumpkinseed and harvested 363. The mean length of harvested fish was 6.6 inches.

ROCK BASS received no directed fishing effort. Anglers caught 29 Rock Bass with no documented harvest.

ACKNOWLEDGMENTS

The DNR would like to thank all the anglers who took the time to offer information about their fishing trip to the survey clerk. Without their cooperation, the survey would not have been possible.

We also thank our cooperators, Tom and Carol Hoge, who generously allowed the DNR to keep a boat on their property during this survey.

Completion of this survey was possible because of the efforts of the following fisheries management and treaty fisheries staff: : Angelena Sikora, Gene Hatzenbeler, Todd Brecka, Misty Rood, Jeff Scheirer, and Kendal Patrie. Creel clerk during the survey period was Logan Mannigel.

This creel report was reviewed by Angelena Sikora and Gene Hatzenbeler.

Additional copies of this report, and those covering other local lakes, can be obtained online at: http://dnr.wi.gov/topic/Fishing/north/trtycrlsrvys.html

Table 1. Sportfishing effort summary, Musser Flowage, 2024 season; Price County averages, and Ceded Territory averages.

Month	Number of Angler Party Interviews	Total Angler Hours	Total Angler Hours/Acre	Price County Average Hours/Acre	Ceded Territory Average Hours/Acre
May	37	1,770	3.1	5.0	4.8
June	26	2,082	3.7	5.3	6.2
July	26	2,633	4.7	6.4	6.6
August	30	1,596	2.8	5.3	5.2
September	23	1,046	1.9	3.1	3.2
October	24	563	1.0	1.7	1.4
Summer Total	166	9,690	17.2	26.8	27.4

Note: Summer is May-October

Number of Angler Party Interviews is the number of groups of anglers interviewed by the creel clerk. A party is considered the members of a group who fish together in the same boat, ice shanty or from shore. The clerk fills out one interview form for each group of anglers. The number of individual anglers actually contacted by the clerk is usually much greater than the number of groups listed in this table since most groups consist of more than one angler.

Total Angler Hours is the estimated total number of hours that anglers spent fishing on Musser Flowage during each month surveyed.

Total Angler Hours/Acre is the total angler hours divided by the area of the lake in acres. This is useful in order to compare effort on Musser Flowage to other lakes.

County Average Hours/Acre is the average angler effort in hours per acre for county lakes that have been surveyed since 1990. This value is useful for fishing pressure comparisons with other waters.

Ceded Territory Average Hours/Acre is the average angler effort in hours per acre for inland lakes in the Ceded Territory that have been surveyed since 1990. This value can be used to compare Musser Flowage to other lakes in northern Wisconsin.

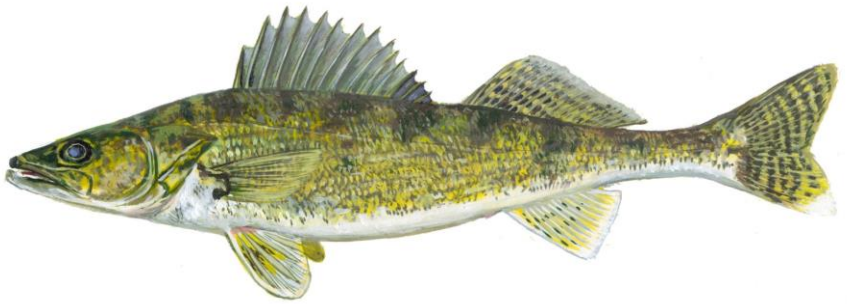
Table 2. Creel survey synopsis, Musser Flowage.

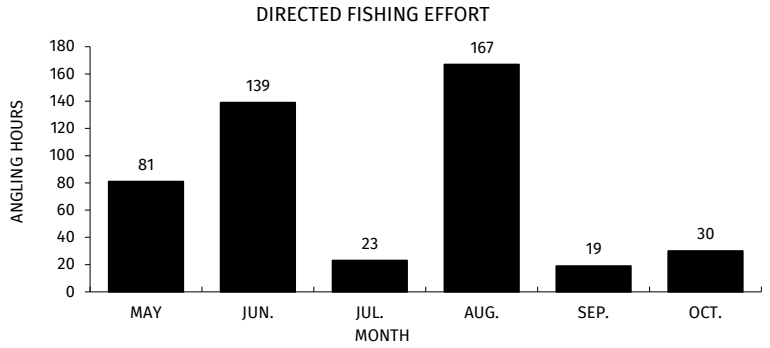
CREEL YEAR: 2024

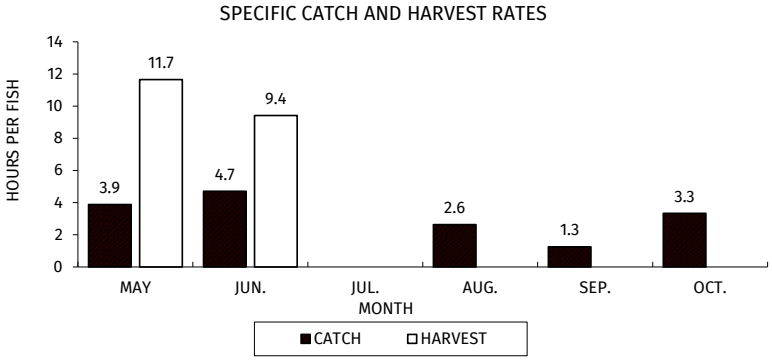
SPECIES	DIRECTED EFFORT (Hours)	PERCENT OF TOTAL	TOTAL CATCH	SPECIFIC CATCH RATE (Hrs/Fish)	TOTAL HARVEST	SPECIFIC HARVEST RATE (Hrs/Fish)	MEAN LENGTH OF HARVESTED FISH
Walleye	459	3.6%	256	3.3	33	21.1	17.7
Northern Pike	1,194	9.3%	115	38.5	52	41.0	28.0
Muskellunge	2,999	23.5%	199	16.0	0	*	**
Smallmouth Bass	0	0.0%	36	*	0	*	**
Largemouth Bass	2,859	22.4%	1,188	3.0	24	178.6	15.7
Yellow Perch	615	4.8%	1,467	1.1	186	9.4	8.4
Bluegill	2,370	18.5%	10,887	0.2	2,374	1.0	6.9
Black Crappie	2,287	17.9%	4,830	0.5	751	3.7	8.9
Pumpkinseed	0	0.0%	955	*	363	*	6.6
Rock Bass	0	0.0%	29	*	0	*	**

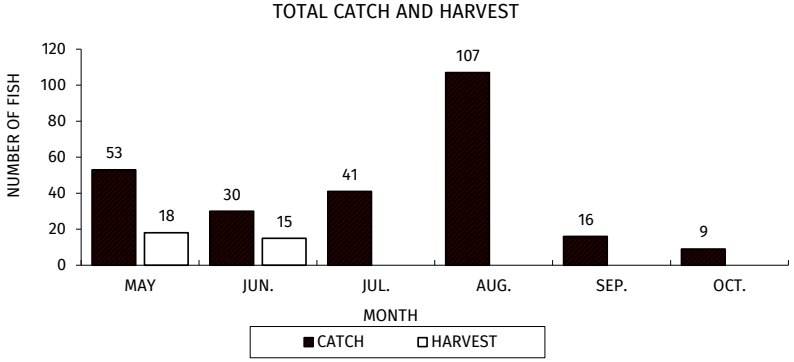
Note: If a species is not shown in a table, no data was collected by the creel clerks for that species.
* Indicates that no fish of this species were caught or harvested (depending on the column) by anglers who specifically targeted this species.
** Indicates that no fish were measured by the creel clerks for this species.

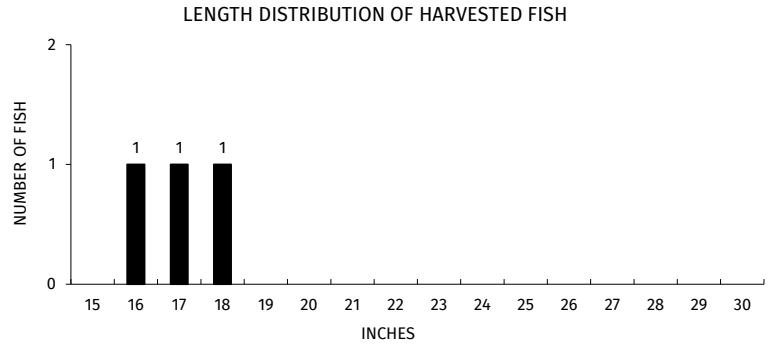
WALLEYE











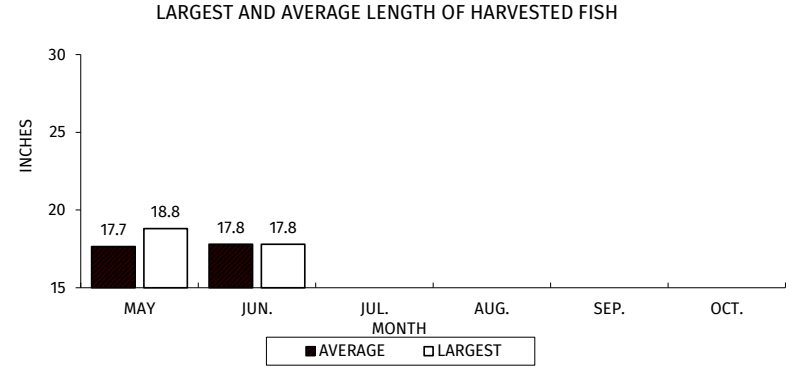
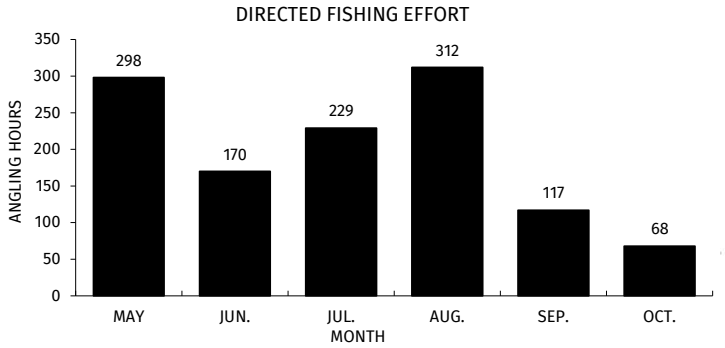
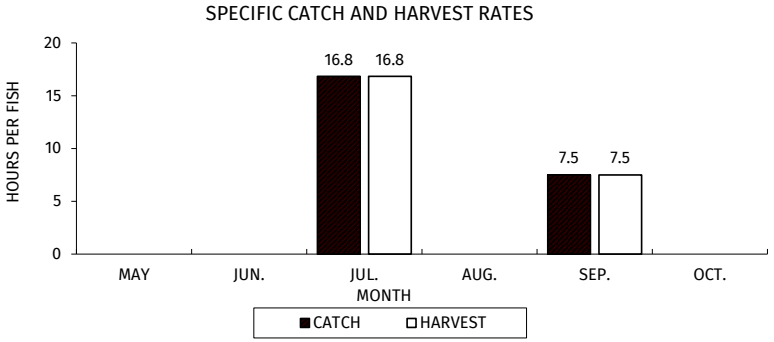
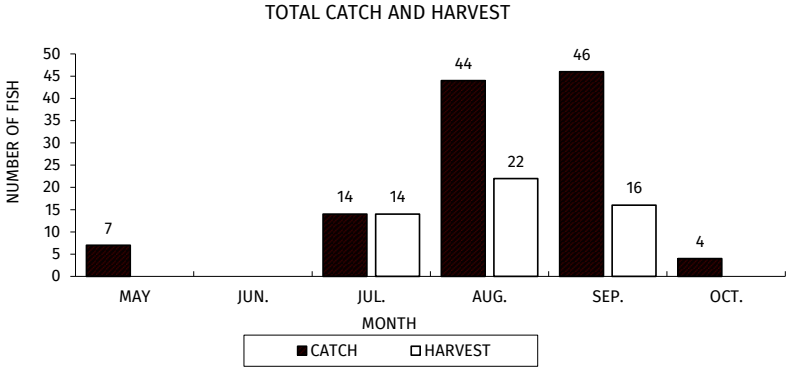


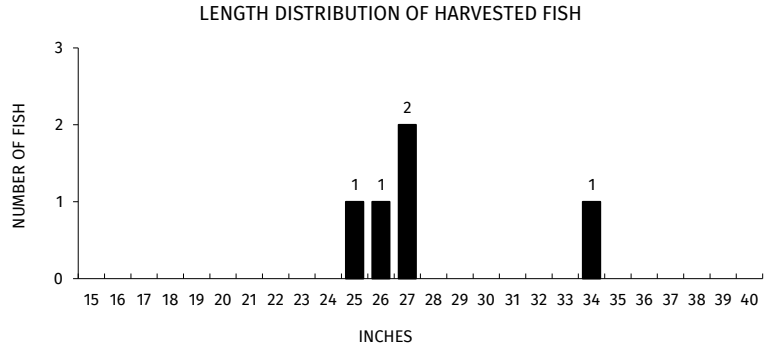
Figure 1. Walleye sportfishing effort, catch, harvest, and length distribution, Musser Flowage, during 2024.



NORTHERN PIKE







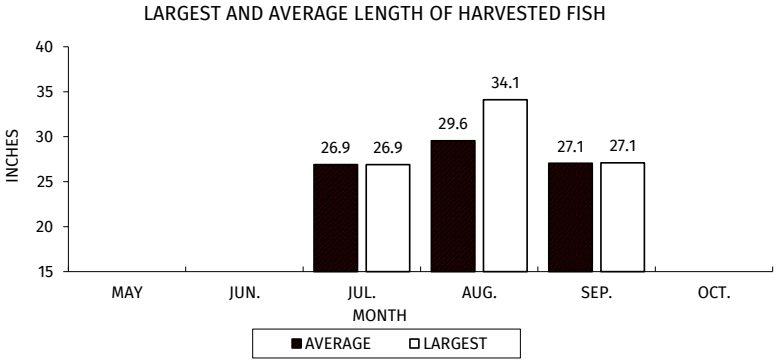


Figure 2. Northern Pike sportfishing effort, catch, harvest, and length distribution, Musser Flowage, during 2024.

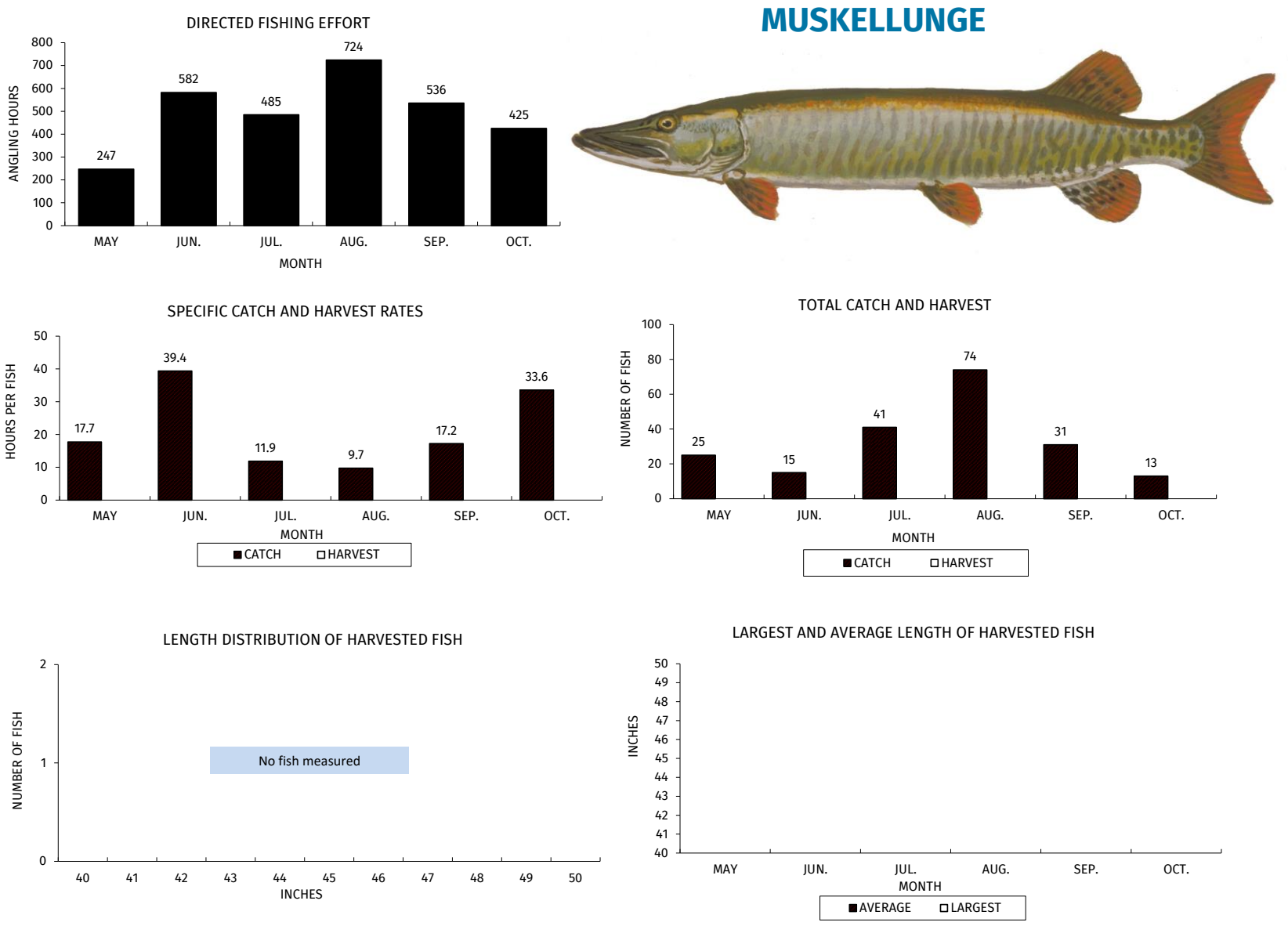
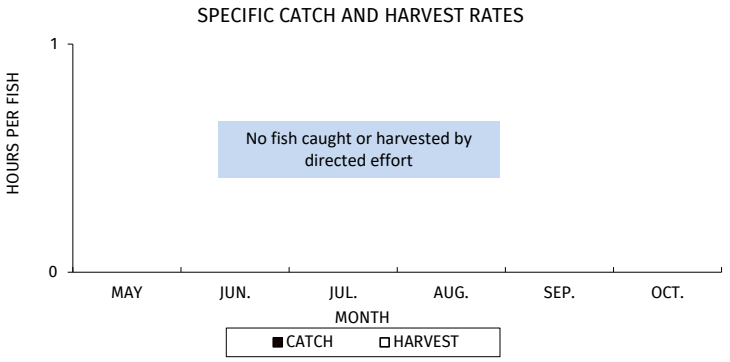
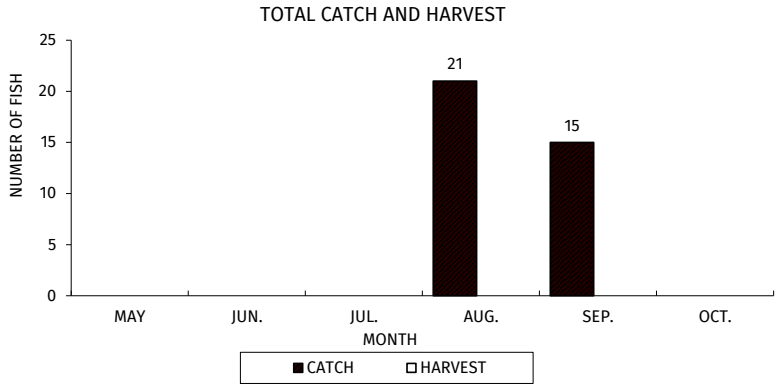
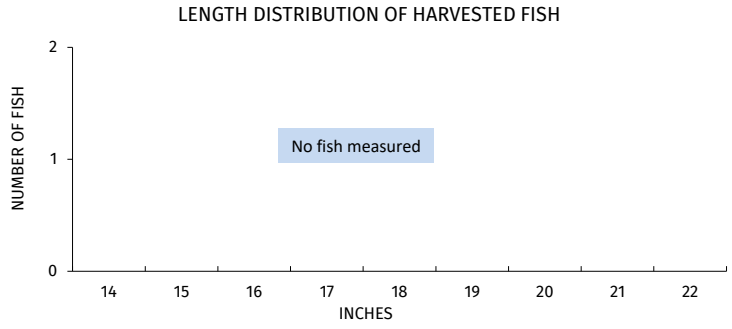


Figure 3. Muskellunge sportfishing effort, catch, harvest, and length distribution, Musser Flowage, during 2024.

SMALLMOUTH BASS







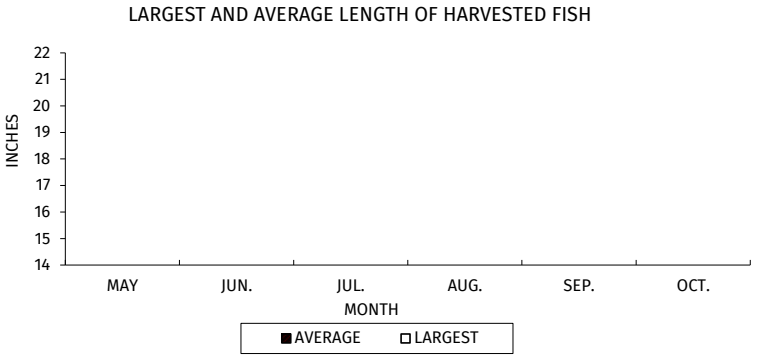
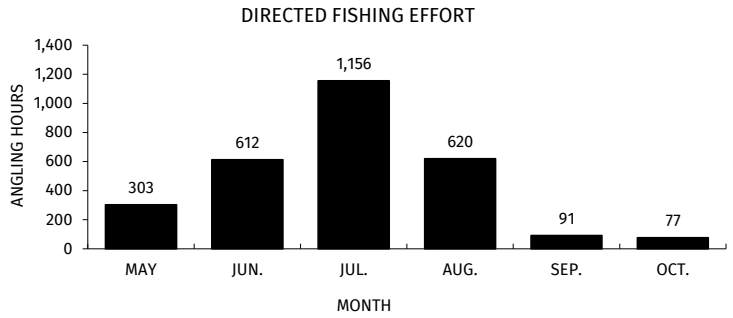
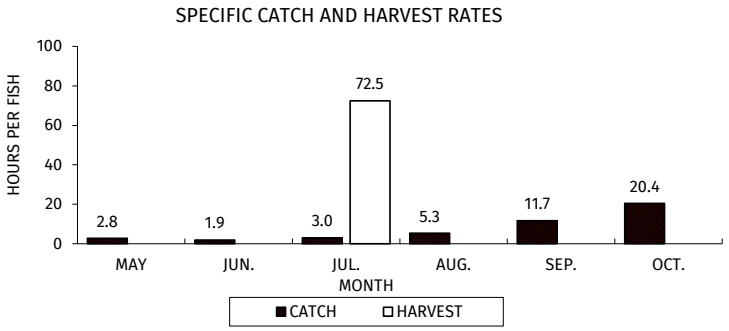
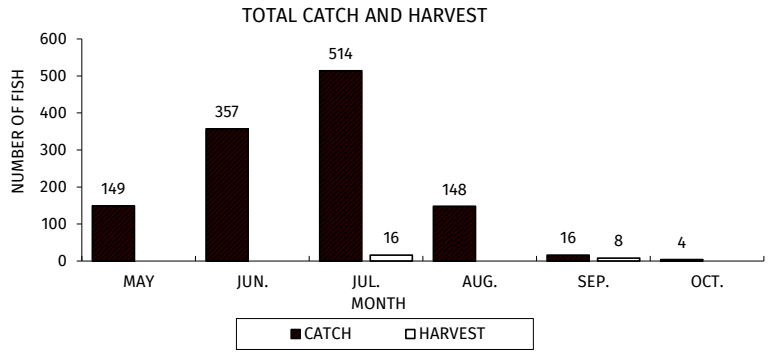


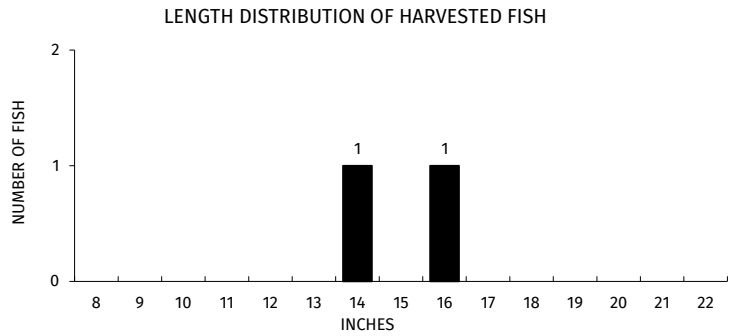
Figure 4. Smallmouth Bass sportfishing effort, catch, harvest, and length distribution, Musser Flowage, during 2024.

LARGEMOUTH BASS









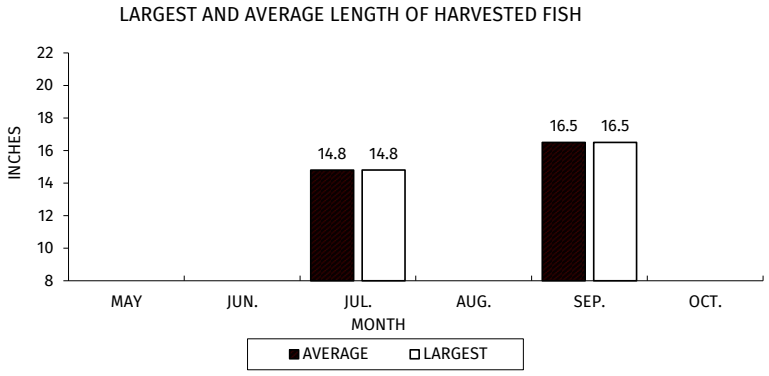


Figure 5. Largemouth Bass sportfishing effort, catch, harvest, and length distribution, Musser Flowage, during 2024.

YELLOW PERCH

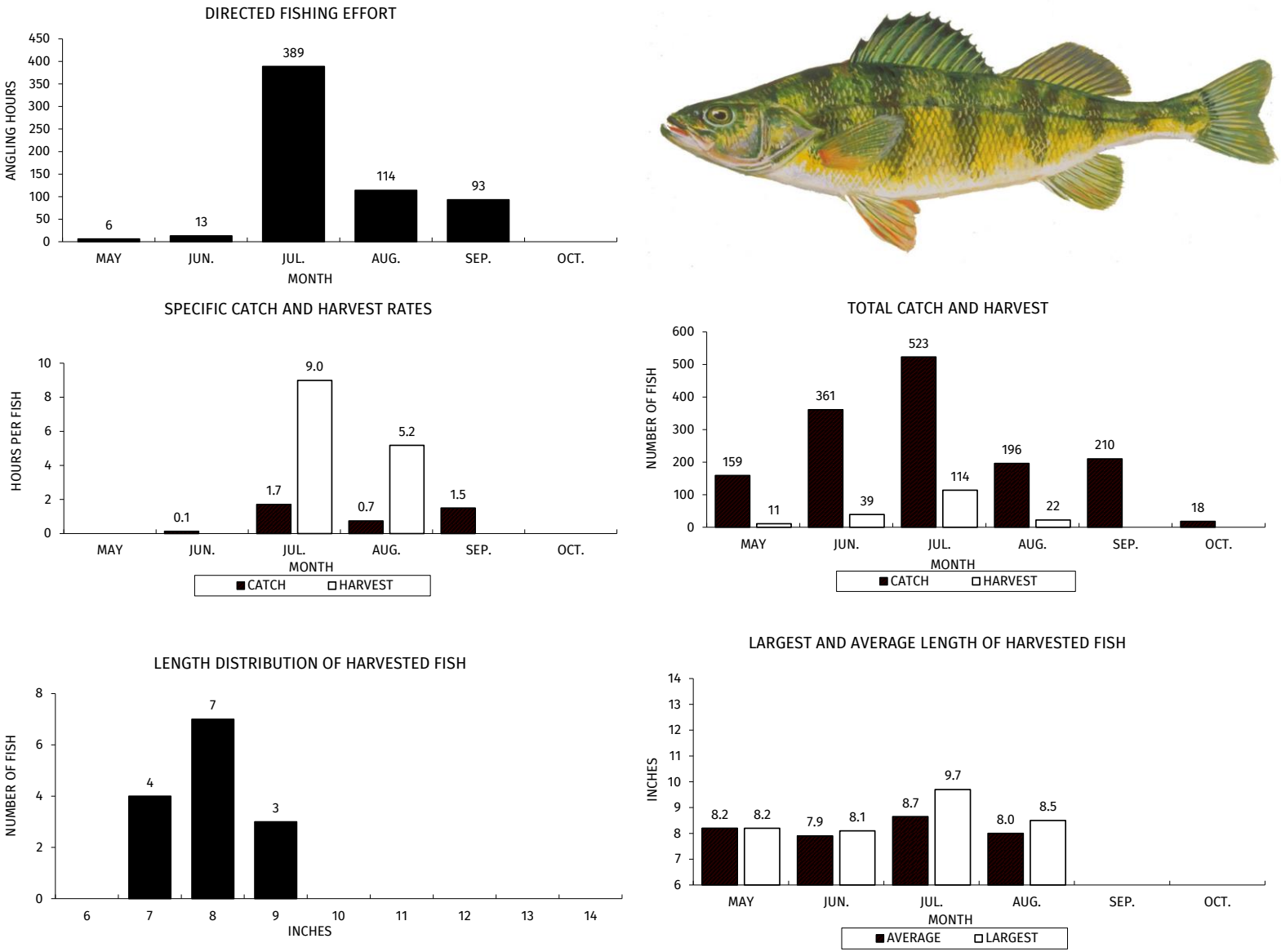
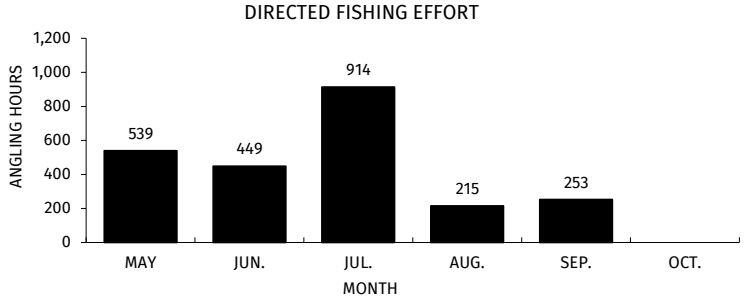
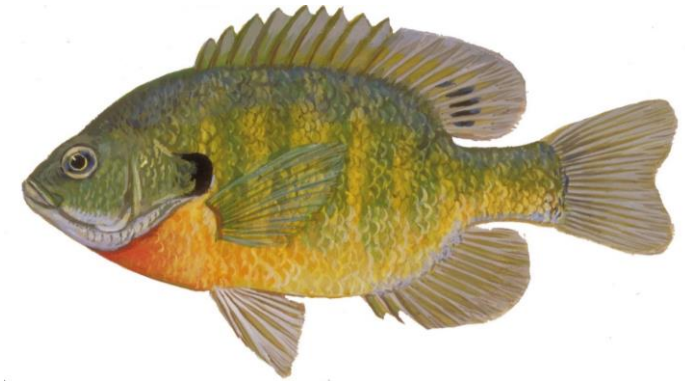
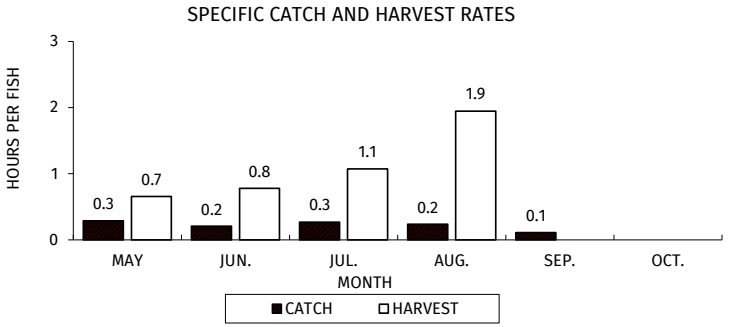


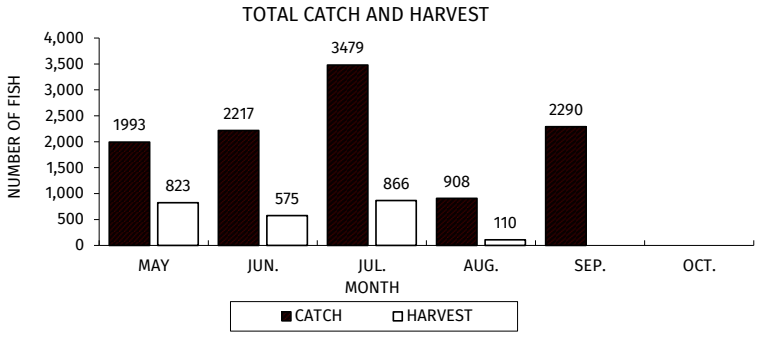
Figure 6. Yellow Perch sportfishing effort, catch, harvest, and length distribution, Musser Flowage, during 2024.

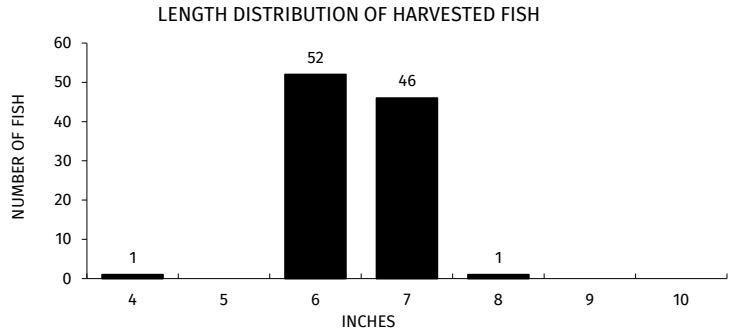
BLUEGILL











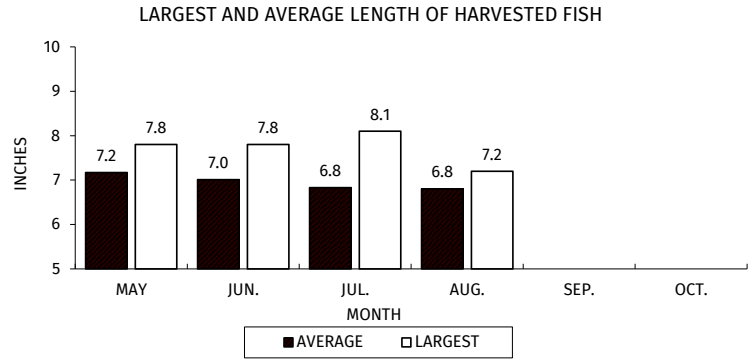
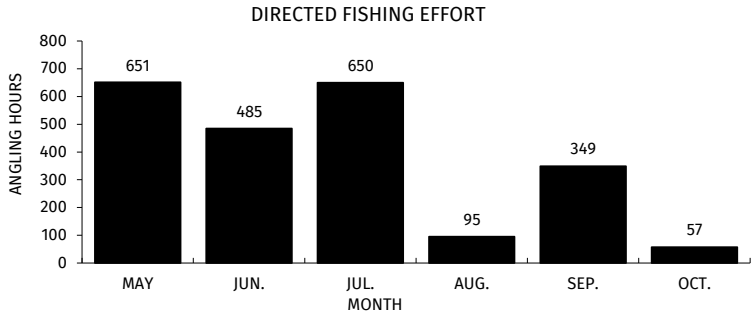
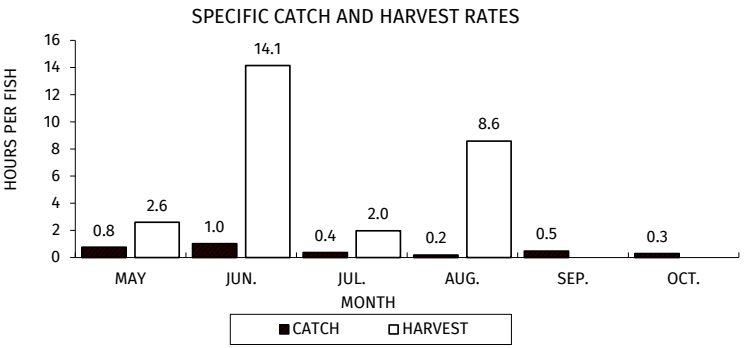
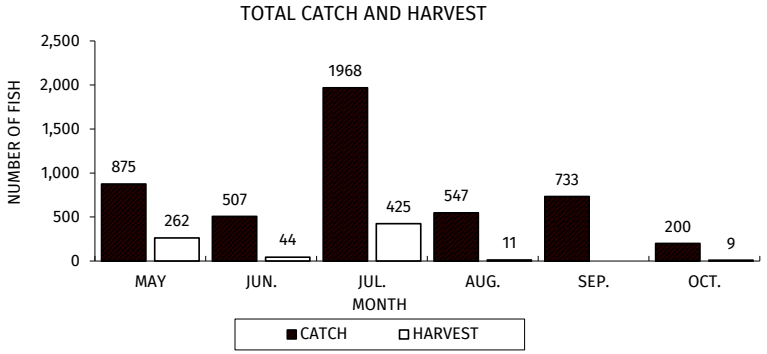


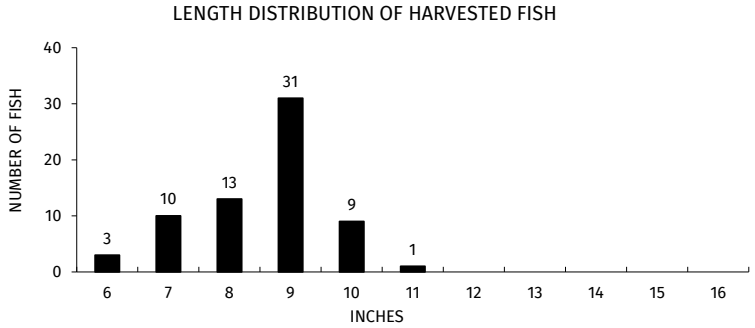
Figure 7. Bluegill sportfishing effort, catch, harvest, and length distribution, Musser Flowage, during 2024.

BLACK CRAPPIE









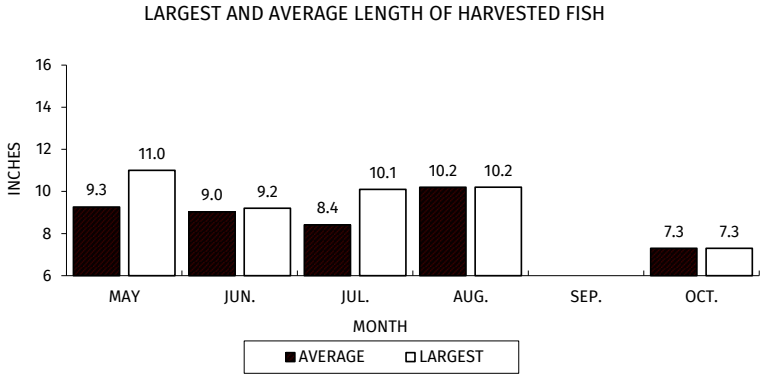
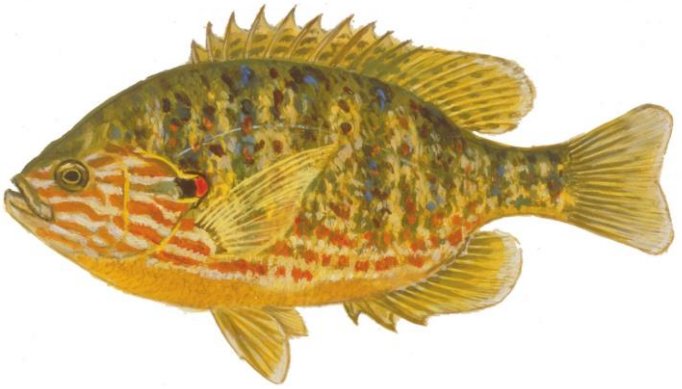
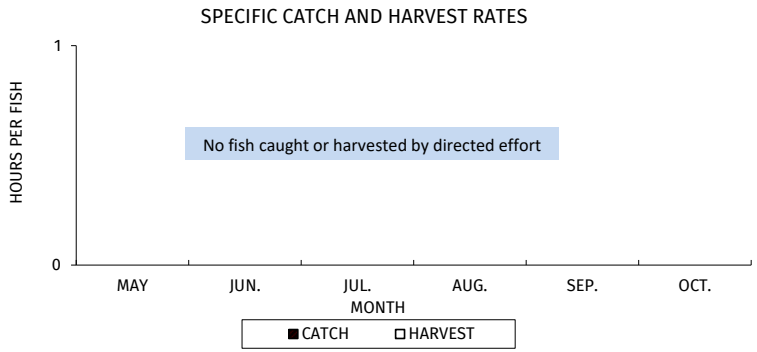
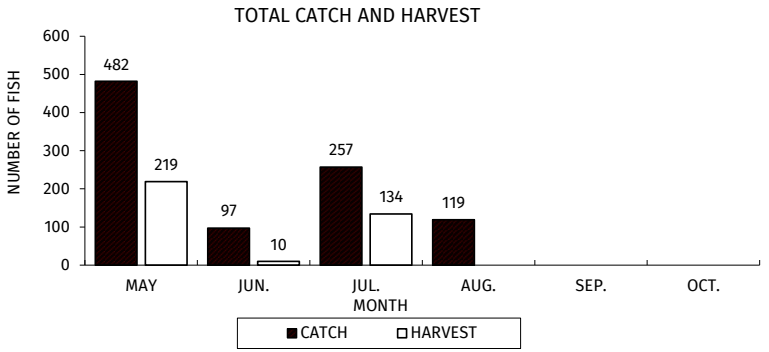


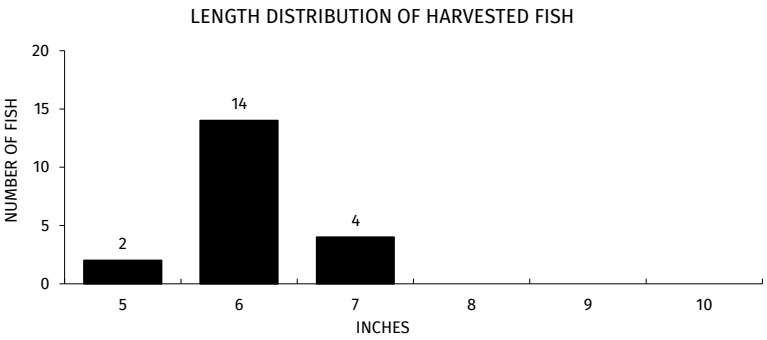
Figure 8. Black Crappie sportfishing effort, catch, harvest, and length distribution, Musser Flowage, during 2024.

PUMPKINSEED









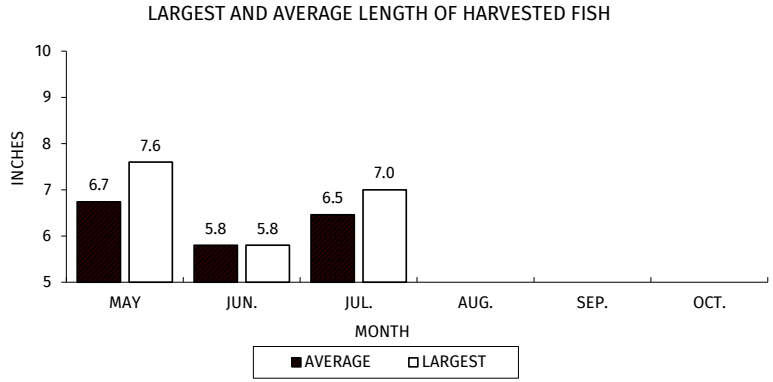
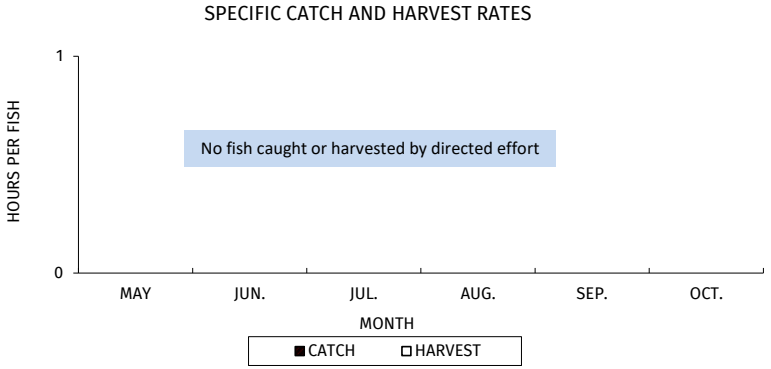
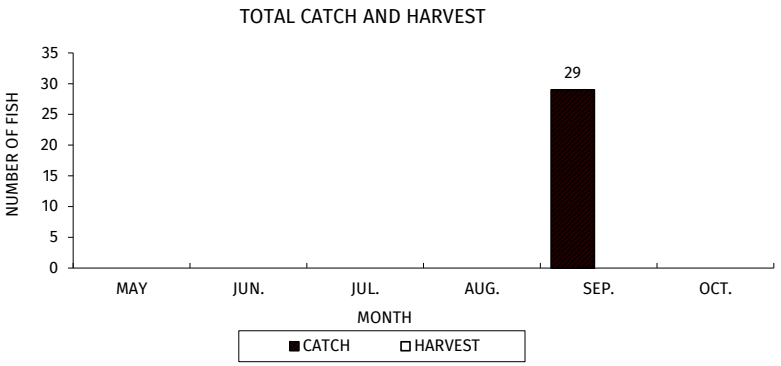
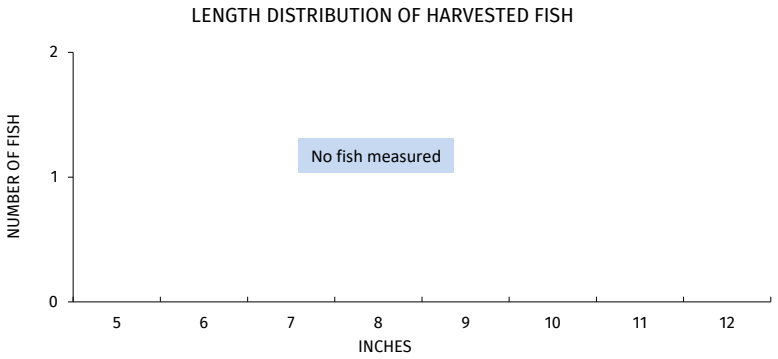


Figure 9. Pumpkinseed sportfishing effort, catch, harvest, and length distribution, Musser Flowage, during 2024.

ROCK BASS







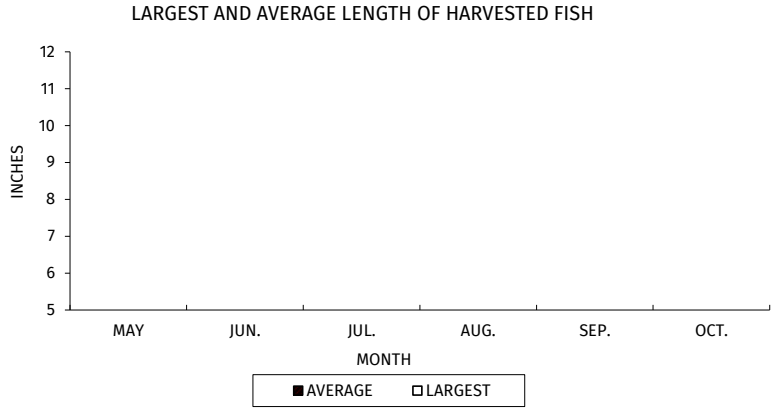


Figure 10. Rock Bass sportfishing effort, catch, harvest, and length distribution, Musser Flowage, during 2024.