

**WISCONSIN DEPARTMENT OF NATURAL RESOURCES
CREEL SURVEY REPORT**

LAKE METONGA

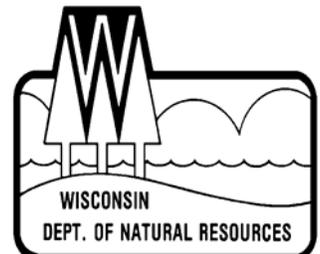
FOREST COUNTY

2007-08



Treaty Fisheries Publication

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Wisconsin DNR
Woodruff, Wisconsin**



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Fish Graphics: Virgil Beck, Stevens Point, WI

INTRODUCTION

Fish populations can fluctuate due to natural forces (weather, predation, competition), management actions (stocking, regulations, habitat improvement), inappropriate development (habitat degradation), and harvest impacts. Wisconsin Department of Natural Resources fisheries crews regularly conduct fishery surveys on area lakes and reservoirs to gather the information needed to monitor changes, identify concerns, evaluate past management actions, and to prescribe good fishery management strategies. Netting and electrofishing surveys are used to gather data on the status of fish populations and communities (species composition, population size, reproductive success, size/age distribution, and growth rates). But the other key component of the fishery that we often need to measure is the harvest.

On many lakes in the Ceded Territory of northern Wisconsin, harvest of fish is divided between sport anglers and the six Chippewa 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.

We also measure the sport harvest to assess its impact on the fishery. But because it would be highly impractical and very costly to conduct a complete census of every angler who fishes on a lake, 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 of harvest and other fishery parameters. Creel survey clerks work on randomly-selected

days and shifts, forty hours per week during the open season for gamefish from the first Saturday in May through the first Sunday in March, except during the month of 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 numbers of anglers on a lake at predetermined times, and to interview anglers who have completed their fishing trip to collect data on what species they fished for, catch, harvest, lengths of fish harvested, marks (finclips or tags), and hours of fishing effort. Collecting completed-trip data 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 make projections of total catch and harvest of each species, catch and harvest rates, and total fishing effort, by month and for the year in total. Keep in mind that these are only projections based on the best information available, and not a complete accounting of effort, catch, and harvest. Accurate projections require that we sample a sufficient and representative portion of the angling activity on a lake. The accuracy of creel survey results, therefore, depends on good cooperation and truthful responses by anglers when a creel clerk interviews them.

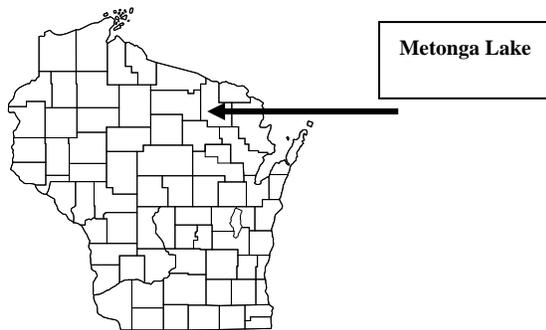
You may have encountered a DNR creel survey clerk on a recent fishing trip. We appreciate your cooperation during an interview. The survey only takes a moment of your time and it gives the Department valuable information needed for management of the fishery.

This report provides projections of:

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

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

GENERAL LAKE INFORMATION



Location

Metonga Lake is located in Forest County within the town of Crandon.

Physical Characteristics

Metonga Lake is a 1991-acre drainage lake that contains one inlet and one outlet. The inlet stream is drainage from Rocky Siding Creek and the outlet flows to Swamp Creek. Metonga Lake has a maximum depth of 79 feet, a mean depth of 25 feet, and has 7.9 miles of shoreline. Littoral substrate is comprised primarily of sand, with lesser amounts of gravel, muck, and rock. Metonga Lake is a medium hard water lake having slightly alkaline, clear water of very high transparency.

Seasons Surveyed

The period referred to in this report as the 2007 fishing season ran from May 5, 2008 through March 2, 2002. The open water

creel survey ran from May 5 through October 31, 2007 and the ice fishing creel survey ran from December 1, 2007 through March 2, 2008.

Weather

Ice-out on Metonga Lake was around mid-April, 2007 which is considered normal for northern Wisconsin. Spring and summer weather was normal. Fishable-ice formed on Metonga Lake around mid-to-late December. Fishable-ice typically forms on northern Wisconsin lakes by late November or early December.

Sportfishing Regulations

The following seasons, daily bag limits, and length limits were in place on Metonga Lake during the 2007-fishing season:

Species	Season	Bag Limit	Min. Size
Largemouth Bass&	5/05-6/15	Catch&Release	
Smallmouth Bass	6/16-3/02	5	14"
Northern Pike	5/05-3/02	5	none
Walleye	5/05-3/02	2*	15"
Panfish	all year	25	none
Rock Bass	all year	none	none

* The statewide bag limit was 5 fish, but due to tribal declarations it was reduced on Metonga Lake.

SPECIES CATCH AND HARVEST INFORMATION

Angling information is summarized for each species (Figures 1-9) with effort and/or catch information. Information presented about species whose fishing season extends beyond March 1 should be considered minimum estimates. Each species page has up to five graphs depicting the following:

1. **PROJECTED FISHING EFFORT**
Total calculated number of hours during each month that anglers spent

fishing for a species.

2. PROJECTED SPECIFIC CATCH AND HARVEST RATES

Calculated 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.

3. PROJECTED CATCH AND HARVEST

Calculated number of fish of the indicated species caught or harvested by all anglers, regardless of targeted species.

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

Monthly largest and average length of harvested fish of a species. Only those fish measured by the creel survey clerk are reported.

CREEL SURVEY RESULTS AND DISCUSSION

Survey Logistics

The creel survey went well. We encountered no unusual problems conducting the survey or calculating the projections contained in the report. This was the third time the department conducted a creel survey on Metonga Lake. The last survey took place in 2004.

General Angler Information

Anglers spent 42,749 hours or 21.5 hours

per acre fishing Metonga Lake during the 2007 season (Table 1). That was lower than the statewide average of 33.6 hours per acre and the Forest County average of 28.4 hours per acre. January was the most heavily fished month (4.0 hours per acre). Fishing effort was lightest in October (0.4 hours per acre).

SPECIES INFORMATION

Walleye (Table 2, Figure 1)

Walleye received the second most fishing pressure in Metonga Lake during the 2007 season. Anglers spent 13,816 hours targeting walleye. Walleye fishing effort was greatest in January (3,202 hours). February had the least amount of walleye fishing effort (256 hours).

Catch was 1,615 fish and harvest 444 fish. Highest catch (583fish) and harvest (141 fish) occurred in May. Anglers fished 8.9 hours to catch and 31.3 hours to harvest a walleye during 2007.

The mean length of harvested walleye was 17.0 inches and the largest walleye measured was a 23.4-inch fish harvested in January.

Northern Pike (Table 2, Figure 2)

Fishing effort directed at northern pike was 5,639 hours during the 2007 season.

Northern pike fishing effort was greatest in January (2,452 hours). October had the least amount of northern pike effort (41 hours).

Catch was 1,099 fish and harvest 444 fish. Highest catch (498 fish) occurred in May and highest harvest (180 fish) occurred in January. Anglers fished 9.5 hours to catch and 17.5 hours to harvest a northern pike during 2007.

The mean length of harvested northern pike

was 24.8 inches and the largest northern pike measured was a 38.7-inch fish harvested in October.

Smallmouth Bass (Table 2, Figure 3)
Fishing effort targeted at smallmouth bass 6,628 hours during the 2007 season. Smallmouth bass fishing effort was greatest in July (2,373 hours).

Catch was 6,451 fish and harvest 270 fish. Highest catch (1,590 fish) occurred in August and harvest (100 fish) occurred in June. Anglers fished 1.7 hours to catch and 28.7 hours to harvest a smallmouth bass during 2007.

The mean length of harvested smallmouth bass was 16.9 inches and the largest smallmouth bass measured was 21.9-inch fish harvested in August.

Largemouth Bass (Table 2, Figure 4)
Fishing effort directed at largemouth bass was 2,321 hours during the 2007 season. Largemouth bass fishing effort was greatest in July (1,669 hours).

Catch was 102 fish and harvest 0 fish. Highest catch (59 fish) occurred in May. Anglers fished 75.2 hours to catch a Largemouth bass during 2007.

Panfish (Table 2, Figures 5-9)
Panfish effort was 28,528 hours during the 2007 season, up about 35% from the 2004 survey.

Yellow perch (Table 2, Figure 6)
Yellow perch was the most sought after panfish during the survey. Yellow perch comprised 97% of the panfish effort, 95% of the panfish catch and 99% of the panfish harvest.

The number of yellow perch caught in 2007

(73,109) was over three times the catch of the 2004-05 (23,480) season. Also, the 2007 estimated harvest (28,716) of yellow perch during 2007 was three times the 2004 harvest (8,656). Highest catch (18,530 fish) occurred in August.

Anglers fished 24 minutes to catch and 1.0 hour to harvest a yellow perch during 2007. The mean length of harvested yellow perch was 8.1 inches and the largest yellow perch measured was a 13.3-inch fish harvested in February.

Other panfish caught during the 2007 survey included bluegill, rock bass, black crappie and pumpkinseed.

ACKNOWLEDGMENTS

Completion of this survey was possible because of the efforts of the technical staff of the Treaty Fisheries Unit. Treaty staff responsible for ensuring completion of this survey include Jeff Blonski, Steve Kramer, Joelle Underwood and Tim Tobias. Scott Yonker and Keith Worrall were the creel clerks on Metonga Lake during the survey period.

We also thank Mike Preul, Mole Lake tribal fisheries biologist and staff who worked in conjunction with the creel survey performing in-water sampling of the fish community.

We also 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.

This creel survey report was reviewed by Mike Coshun and Dennis Scholl, Wisconsin Department of Natural Resources, Woodruff, Wisconsin.

Additional copies of this report, and those covering other local lakes, can be obtained from the Woodruff DNR. Requests should be directed to:

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Table 1. Sportfishing effort summary, Metonga Lake, 2007-08 fishing seasons.

Month	Total Angler Hours	Total Angler Hours/Acre	Forest County Average Hours/Acre	Statewide Average Hours/Acre
May	3889	2.0	4.2	5.8
June	5776	2.9	5.3	6.1
July	6842	3.4	6.0	6.4
August	5612	2.8	4.9	5.4
September	3585	1.8	2.5	3.8
October	865	0.4	0.8	1.6
December	4056	2.0	1.1	1.7
January	7913	4.0	1.8	1.5
February	4044	2.0	1.7	1.3
March	167	0.1	0.1	**
*Summer Total	26569	13.3	23.7	29.1
*Winter Total	16179	8.1	4.7	4.5
Grand Total	42749	21.5	28.4	33.6

*"Summer" is May-October; "Winter" is December-March

**Too few lakes have been surveyed in March to give a meaningful statewide average.

Total Angler Hours is the estimated total number of hours that anglers spent fishing on Metonga Lake 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 if you wish to compare effort on Metonga Lake 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 can be useful in comparisons as well.

Statewide Average Hours/Acre is the average angler effort in hours per acre for inland lakes in the state surveyed between 1990 and 1995. This value can be used to compare Metonga Lake to other lakes statewide.

Table 2. Comparison of creel survey synopses, Metonga Lake, 2004-05 and 2007-08 fishing seasons.

CREEL YEAR: 2007-08

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	13816	24.21%	1615	8.9	444	31.3	17.0
Northern Pike	5639	9.88%	1099	9.5	444	17.5	24.8
Muskellunge	9	0.02%	0		0		
Smallmouth Bass	6628	11.62%	6451	1.7	270	28.7	16.9
Largemouth Bass	2321	4.07%	102	75.2	0		
Yellow Perch	27545	48.28%	73109	0.4	28716	1.0	8.1
Bluegill	875	1.53%	1653	1.3	206	20.7	7.4
Pumpkinseed	0	0.00%	160		14		6.8
Rock Bass	9	0.02%	2127		143		8.0
Black Crappie	99	0.17%	150	10.5	9	10.5	9.5
Black Bullhead	116	0.20%	3747	1.5	809	1.5	10.7

* A blank cell in this column indicates that no fish of a given species were caught by anglers who specifically targeted that species.

** A blank cell in this column indicates that no fish of a given species were harvested by anglers who specifically targeted that species.

CREEL YEAR: 2004-05

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	14388	32.63%	2792	6.3	370	41.7	17.6
Northern Pike	3284	7.45%	1319	14.4	159	40.8	24.0
Muskellunge	0	0.00%	0	0.0	0	0.0	
Smallmouth Bass	7371	16.71%	5006	2.1	407	23.0	16.5
Largemouth Bass	447	1.01%	124	7.1	0		
Yellow Perch	16610	37.66%	23480	0.7	8656	2.0	8.8
Bluegill	1046	2.37%	1280	2.9	464	8.0	6.7
Pumpkinseed	387	0.88%	273	4.9	150	9.8	6.4
Rock Bass	121	0.27%	938	1.6	253	1.6	8.2
Black Crappie	447	1.01%	6		3		8.8

WALLEYE

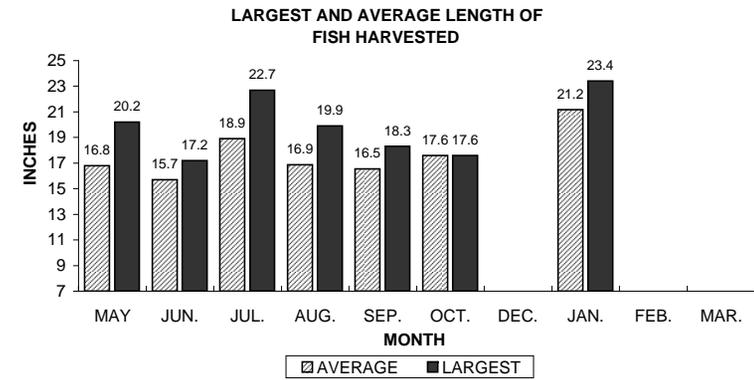
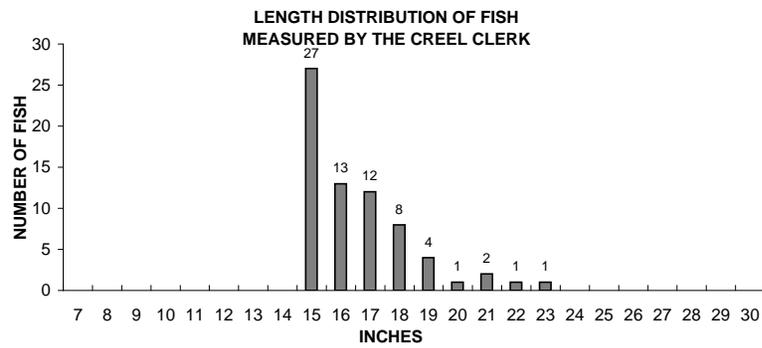
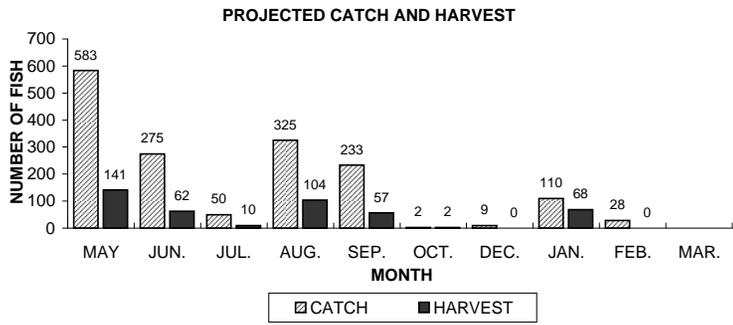
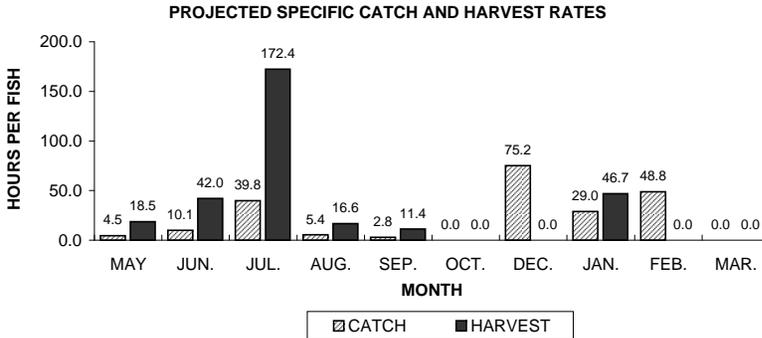
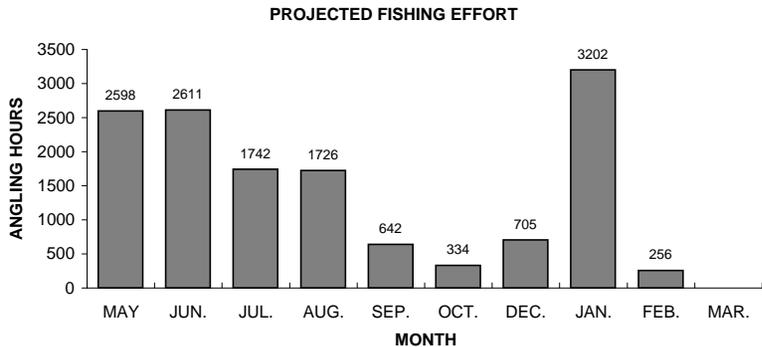
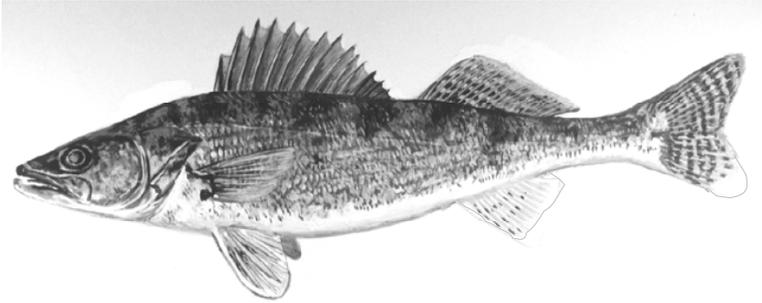
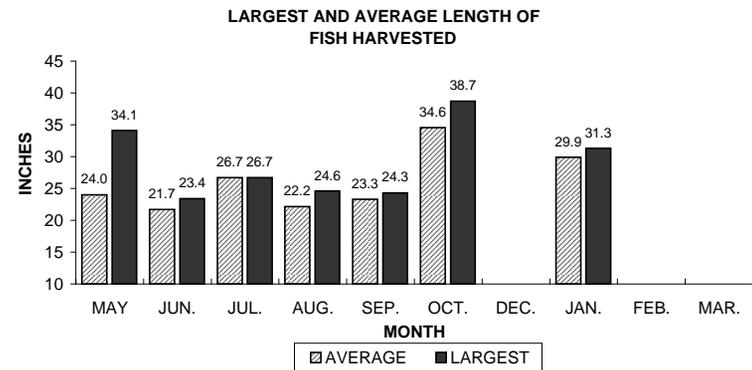
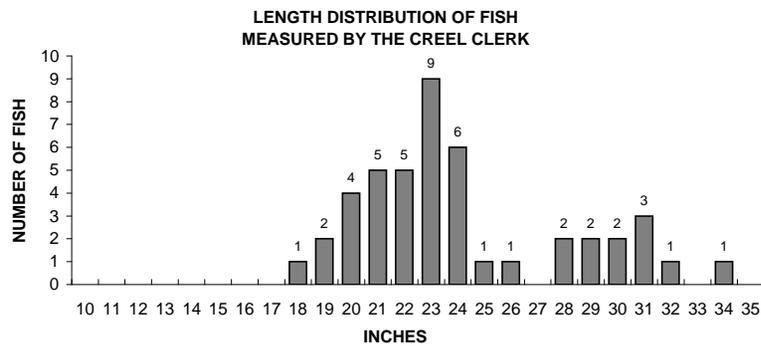
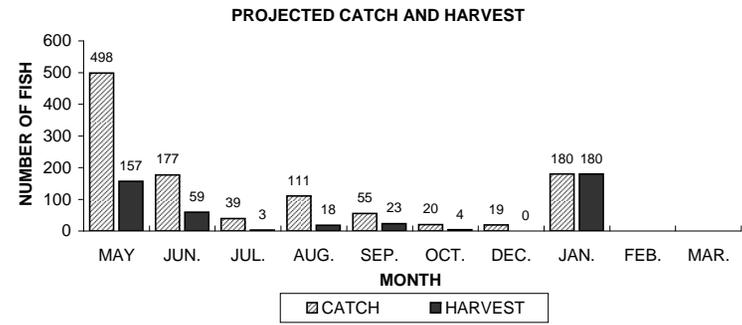
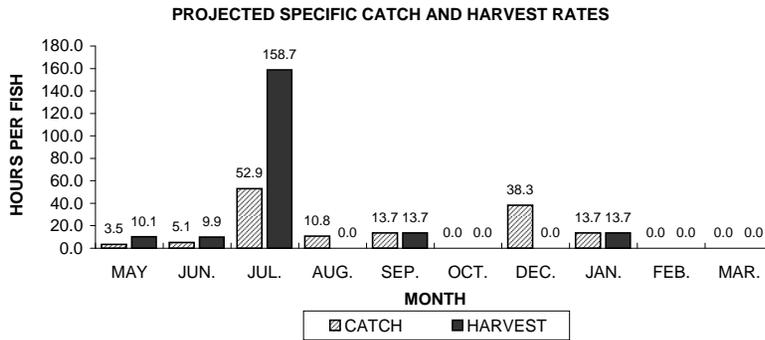
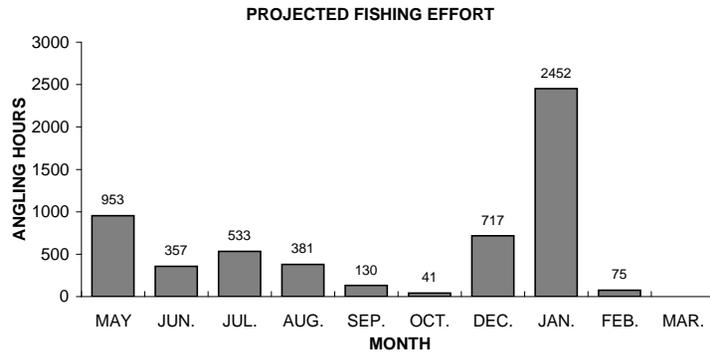
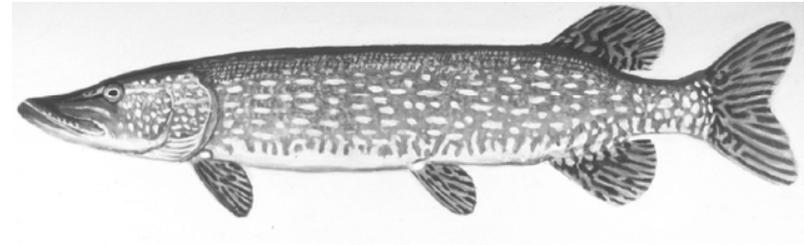


Figure 1. Walleye sportfishing effort, catch, harvest, and length distribution, Metonga Lake, during 2007-08.

NORTHERN PIKE



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Figure 2. Northern pike sportfishing effort, catch, harvest, and length distribution, Metonga Lake, during 2007-08.

MUSKELLUNGE

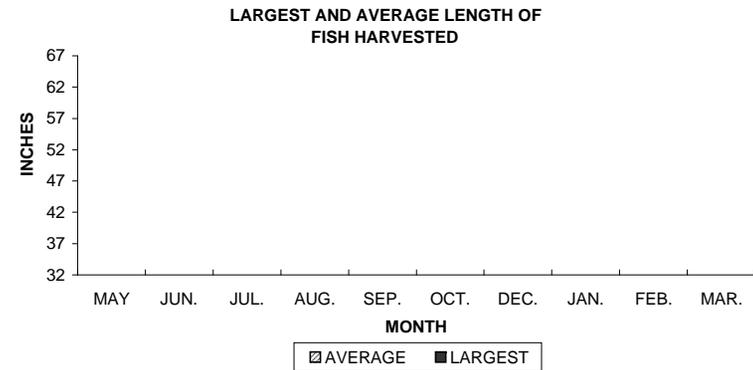
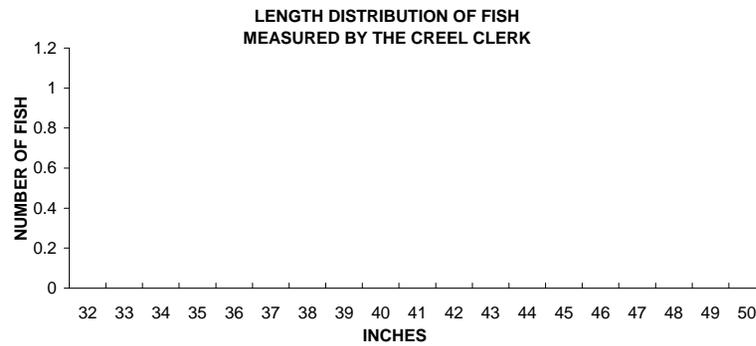
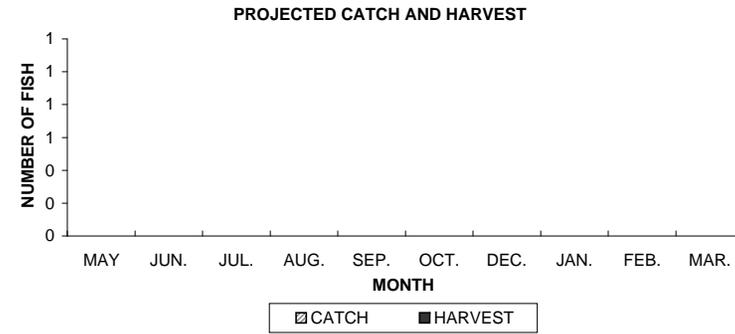
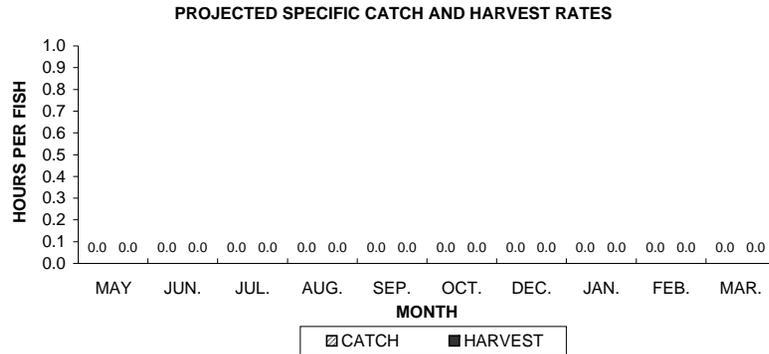
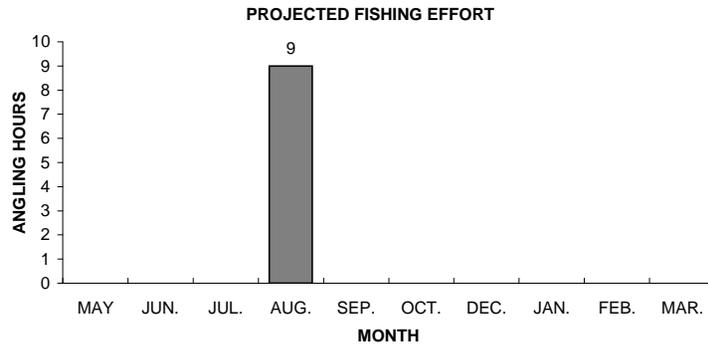
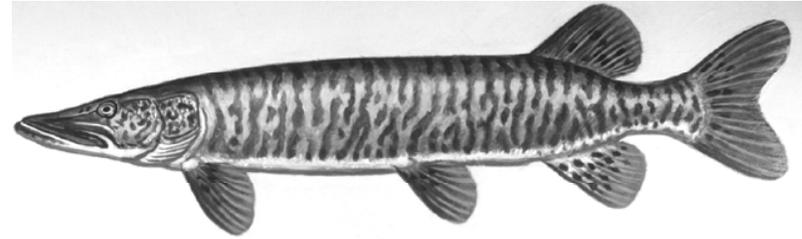


Figure 3. Muskellunge sportfishing effort, catch, harvest, and length distribution, Metonga Lake, during 2007-08.

SMALLMOUTH BASS

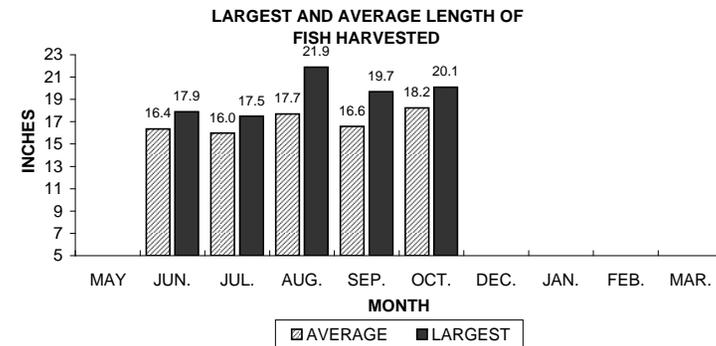
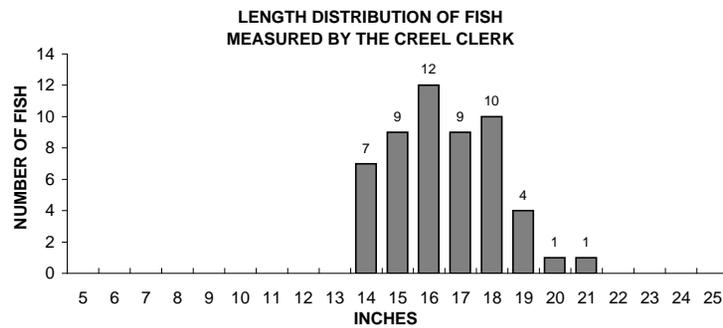
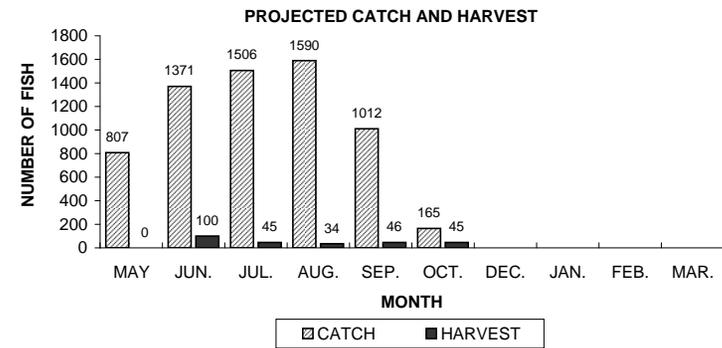
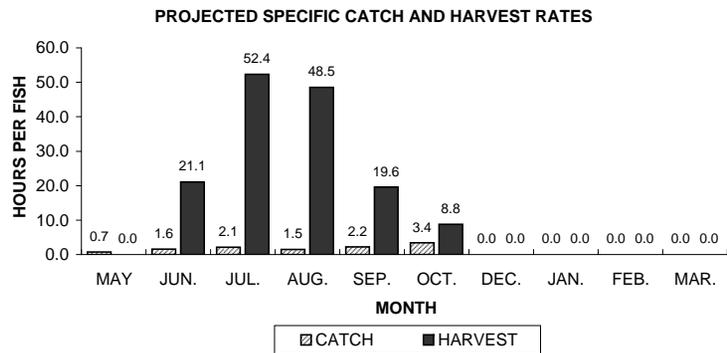
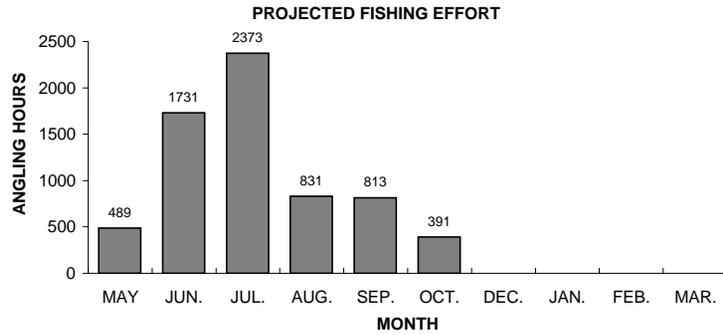
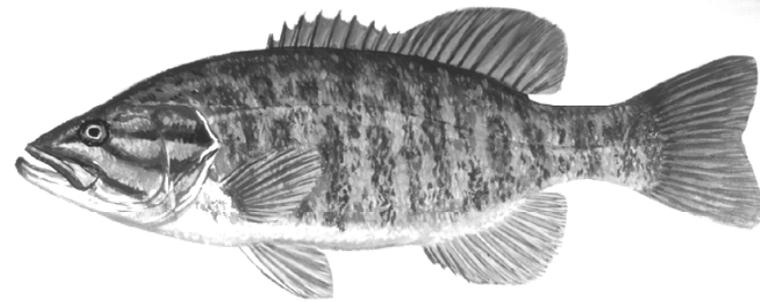


Figure 4. Smallmouth bass sportfishing effort, catch, harvest, and length distribution, Metonga Lake, during 2007-08.

LARGEMOUTH BASS

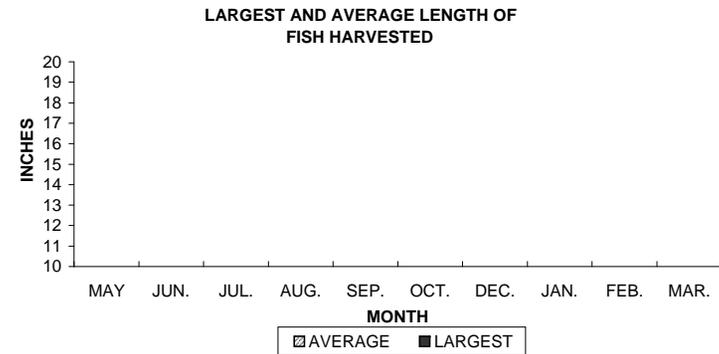
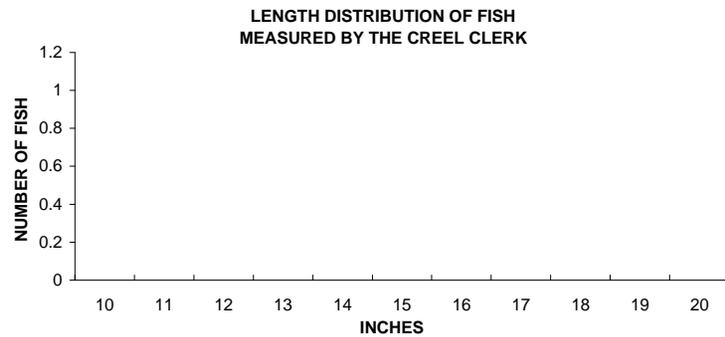
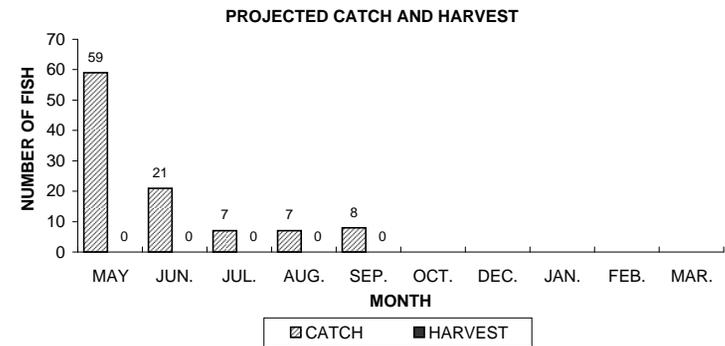
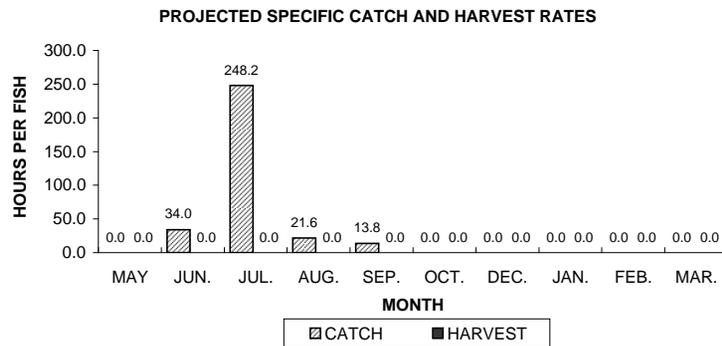
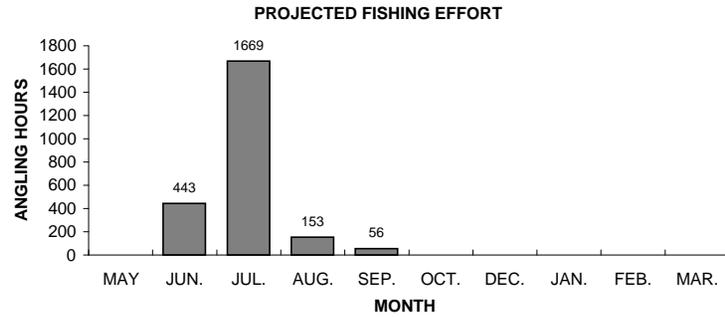
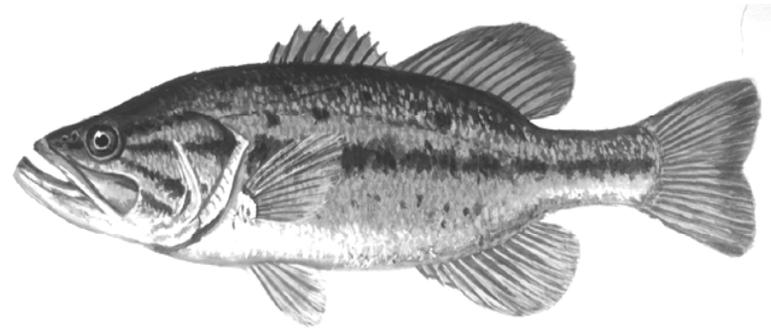
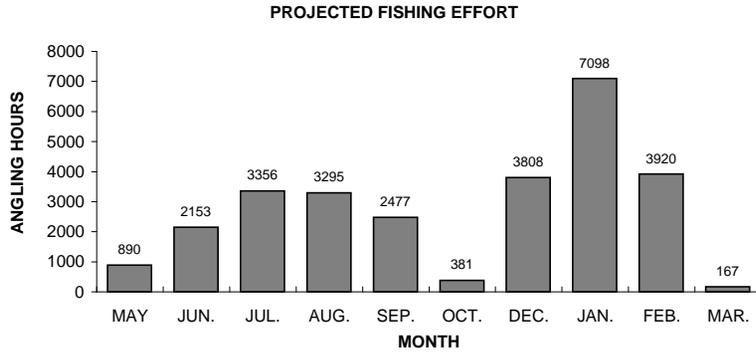
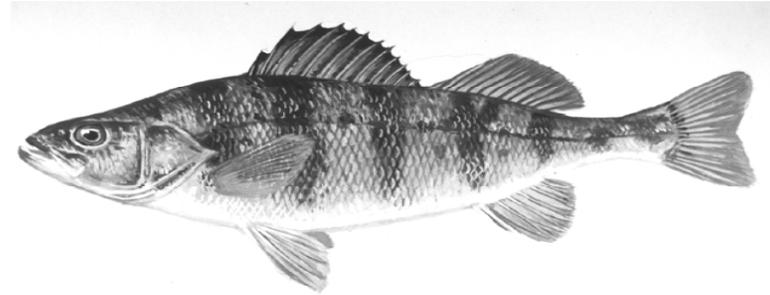
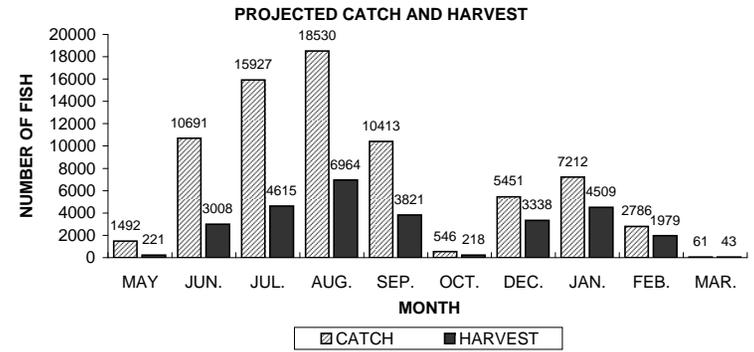
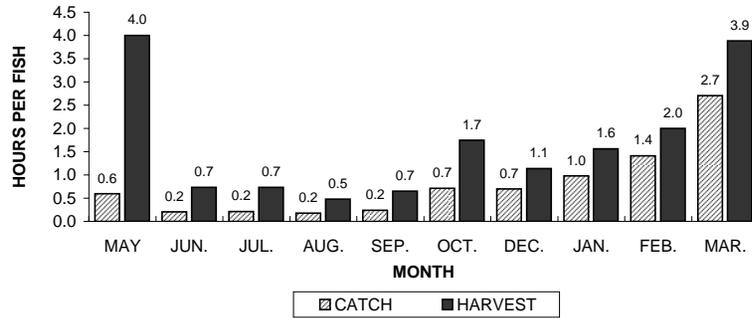


Figure 5. Largemouth bass sportfishing effort, catch, harvest, and length distribution, Metonga Lake, during 2007-08.

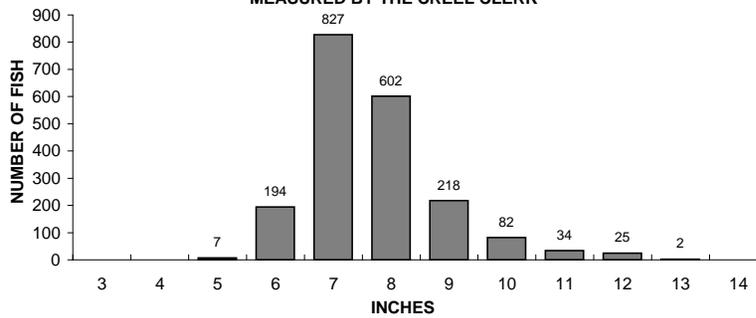
YELLOW PERCH



PROJECTED SPECIFIC CATCH AND HARVEST RATES



LENGTH DISTRIBUTION OF FISH MEASURED BY THE CREEL CLERK



LARGEST AND AVERAGE LENGTH OF FISH HARVESTED

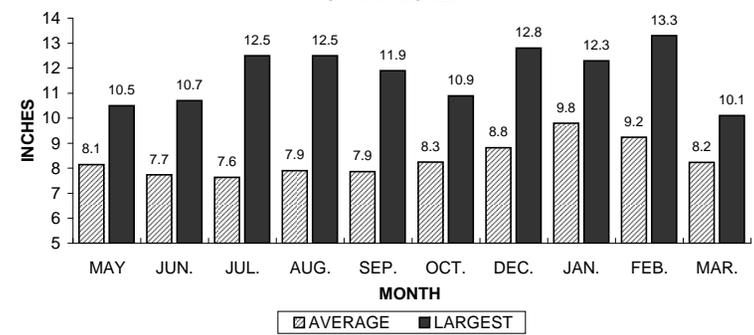


Figure 6. Yellow perch sportfishing effort, catch, harvest, and length distribution, Metonga Lake, during 2007-08.

BLUEGILL

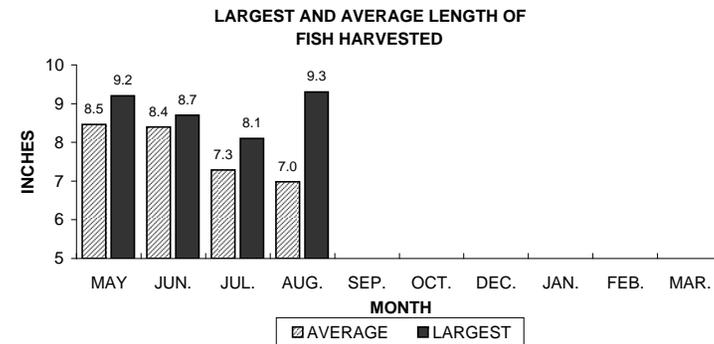
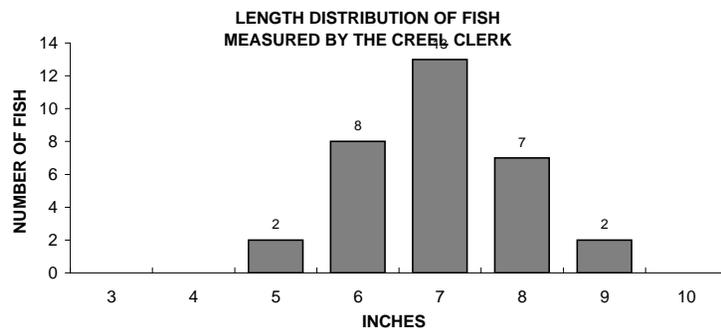
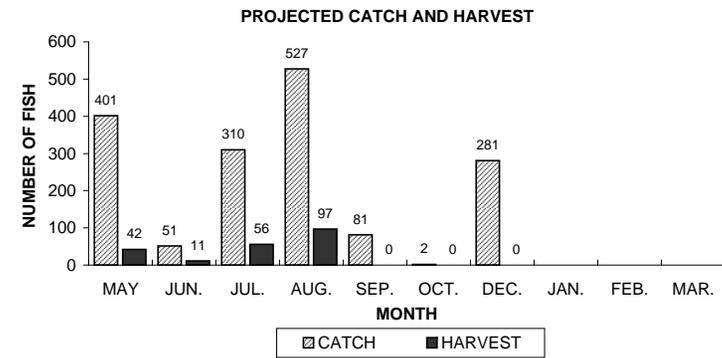
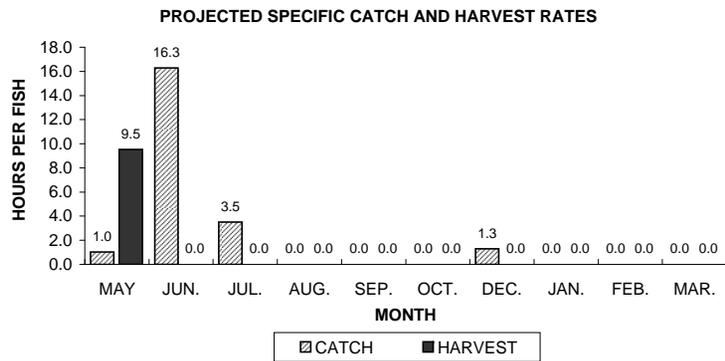
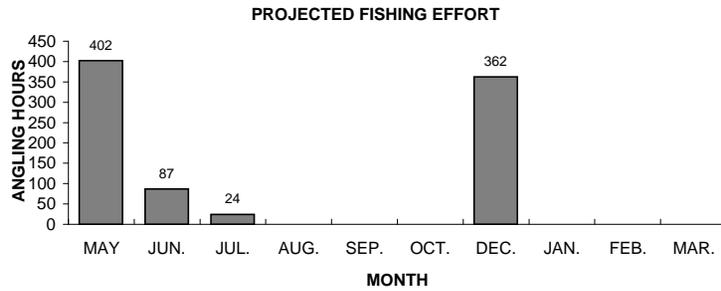
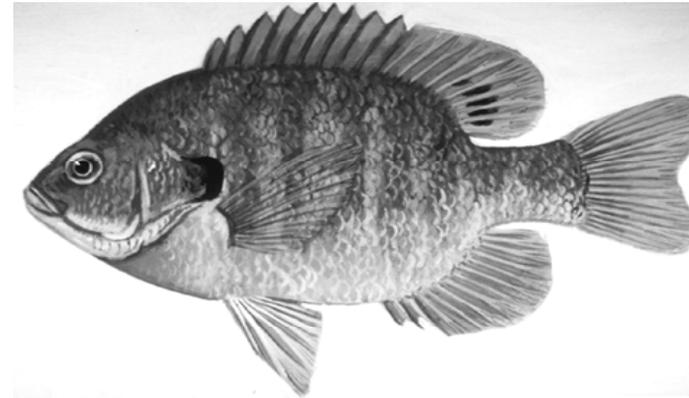


Figure 7. Bluegill sportfishing effort, catch, harvest, and length distribution, Metonga Lake, during 2007-08.

PUMPKINSEED

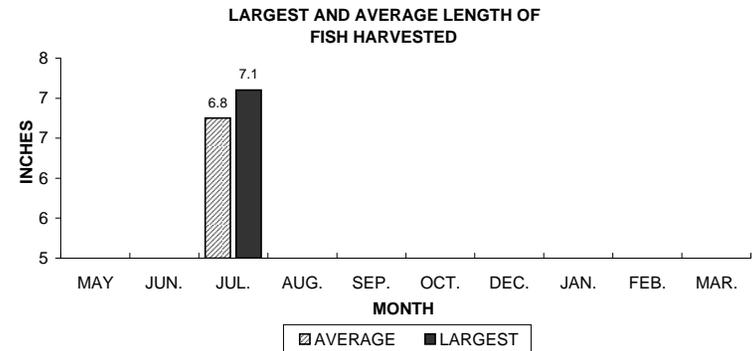
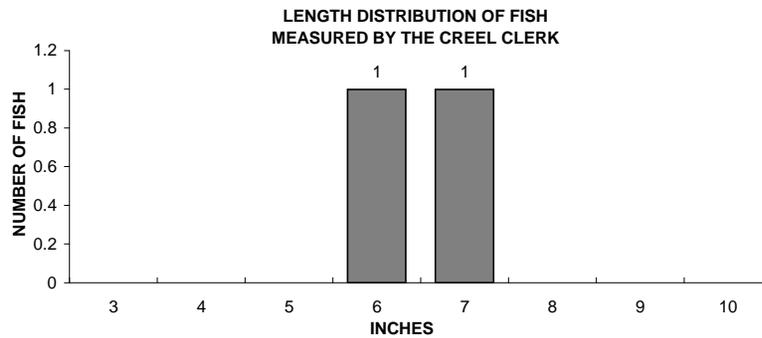
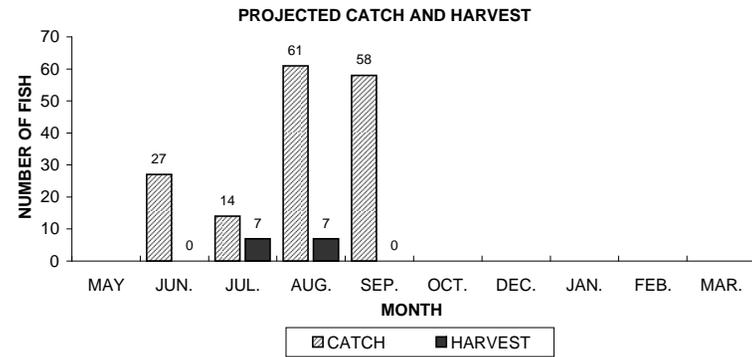
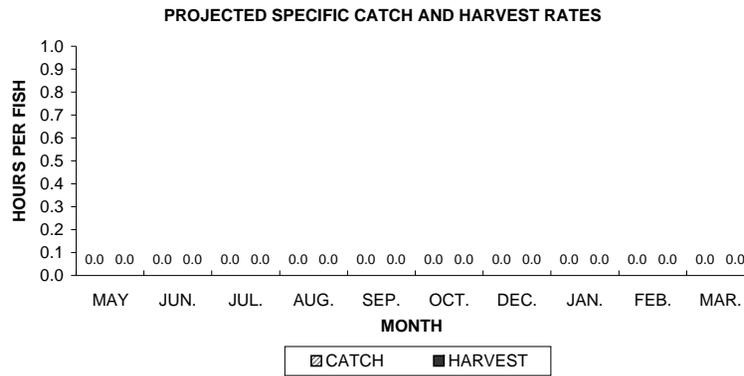
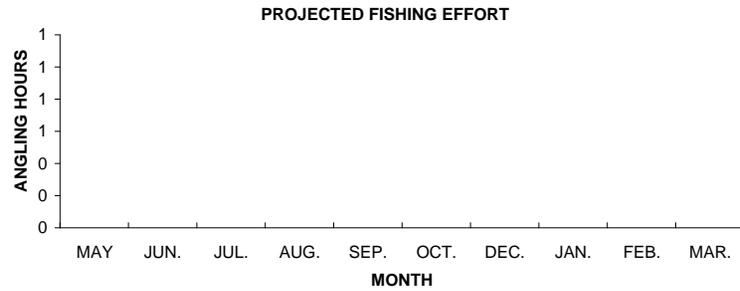
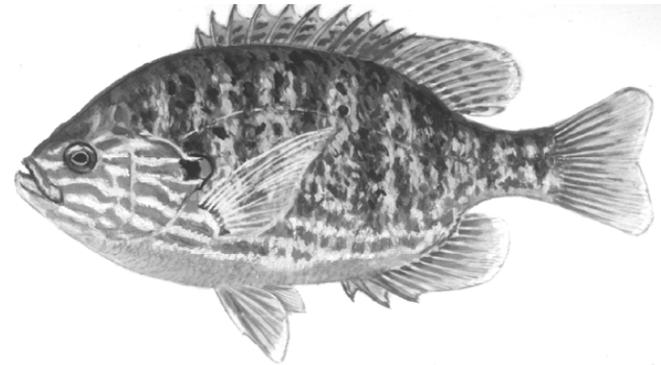


Figure 8. Pumpkinseed sportfishing effort, catch, harvest, and length distribution, Metonga Lake, during 2007-08.

ROCK BASS

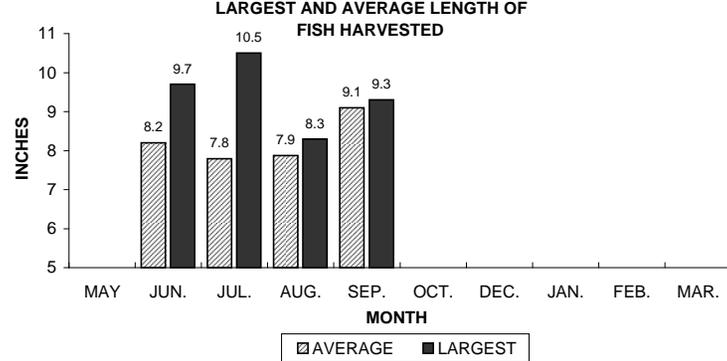
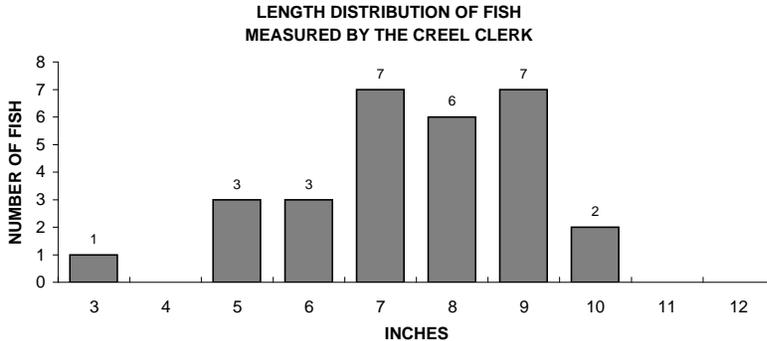
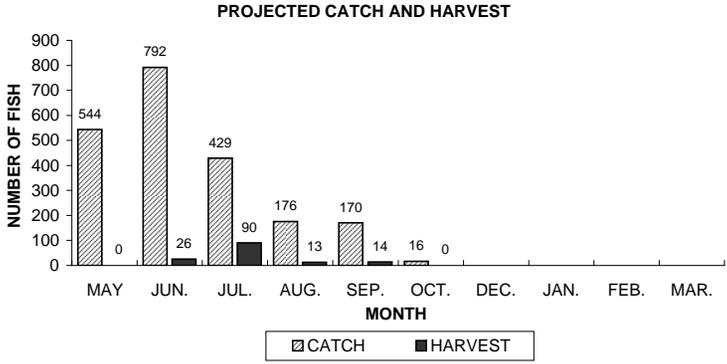
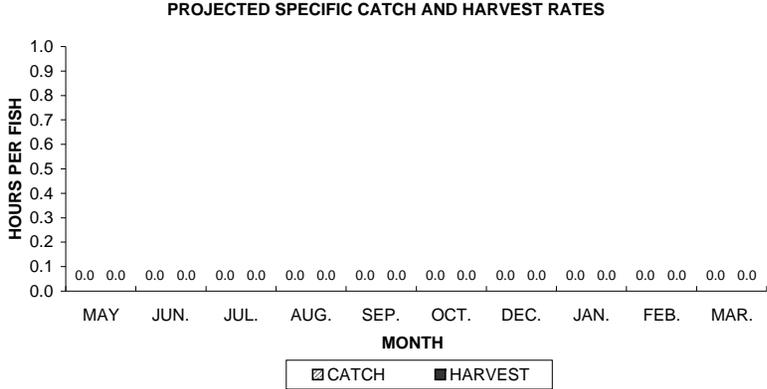
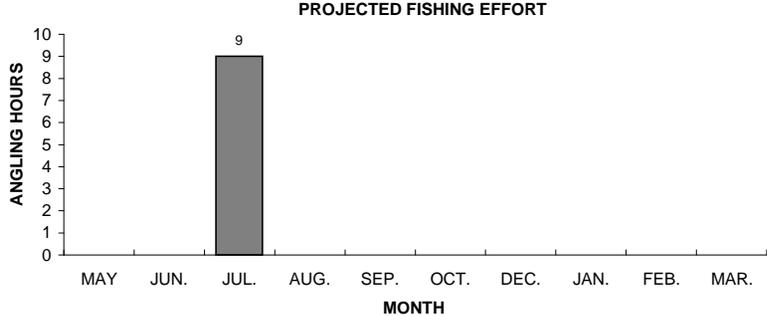
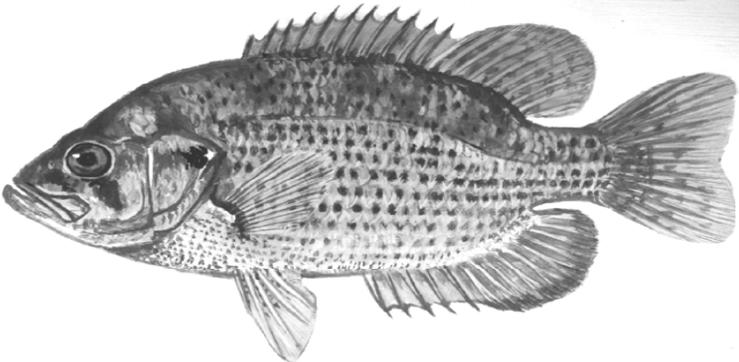


Figure 9. Rock bass sportfishing effort, catch, harvest, and length distribution, Metonga Lake, during 2007-08.

BLACK CRAPPIE

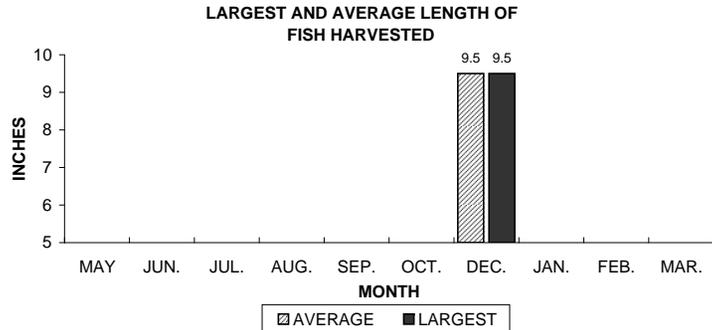
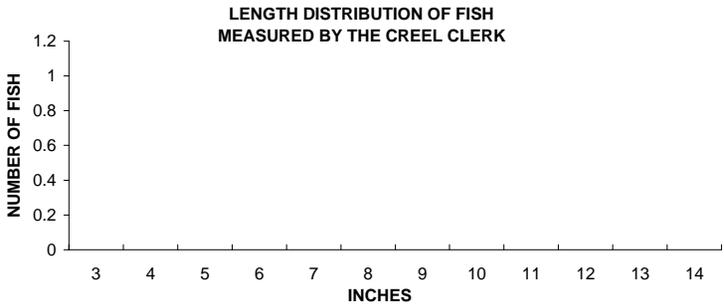
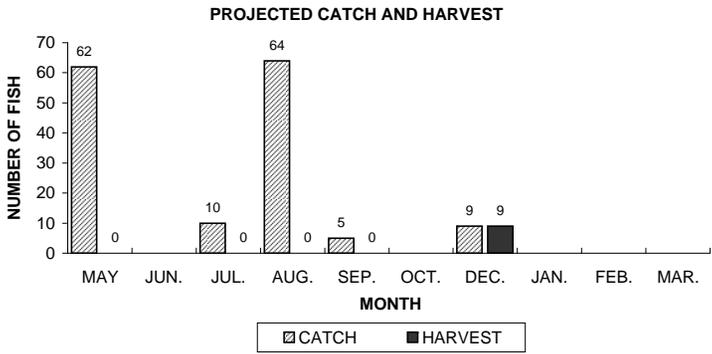
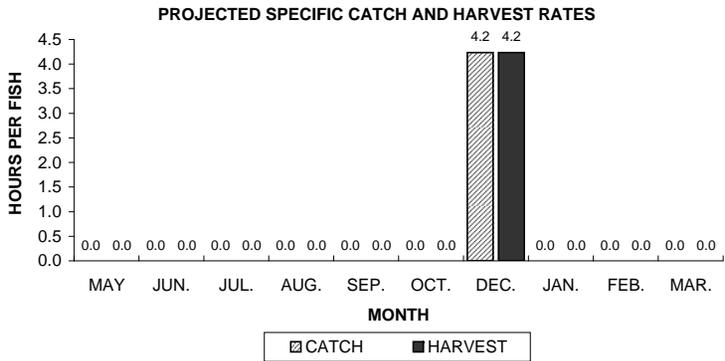
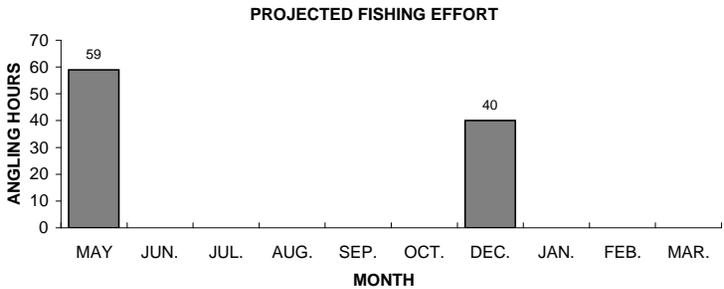
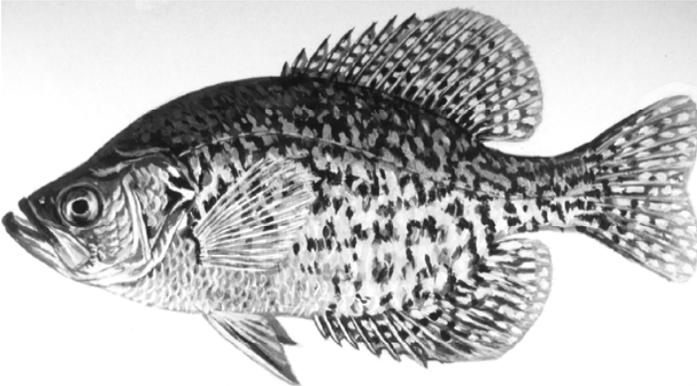
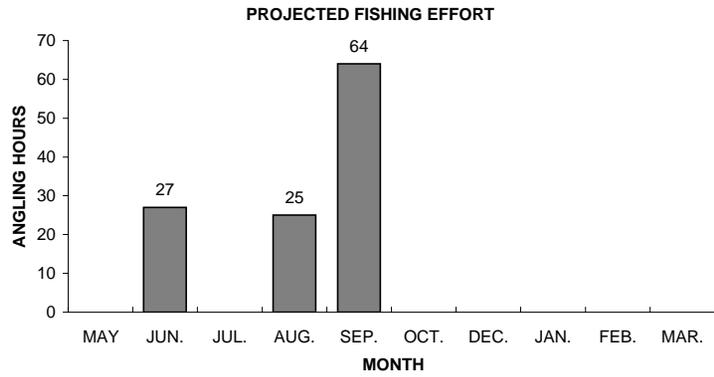


Figure 10. Black crappie sportfishing effort, catch, harvest, and length distribution, Metonga Lake, during 2007-08.



Black Bullhead

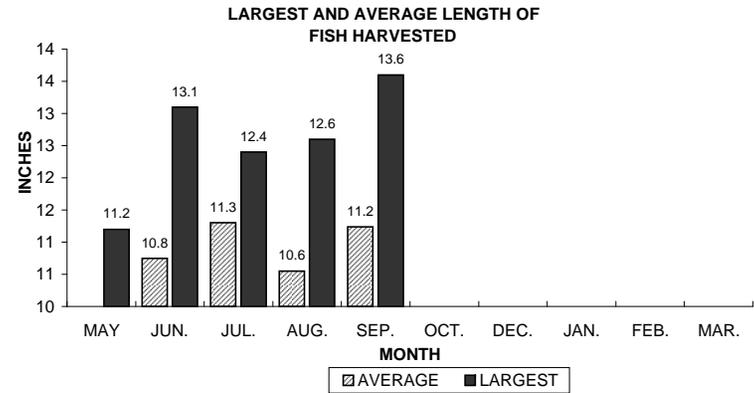
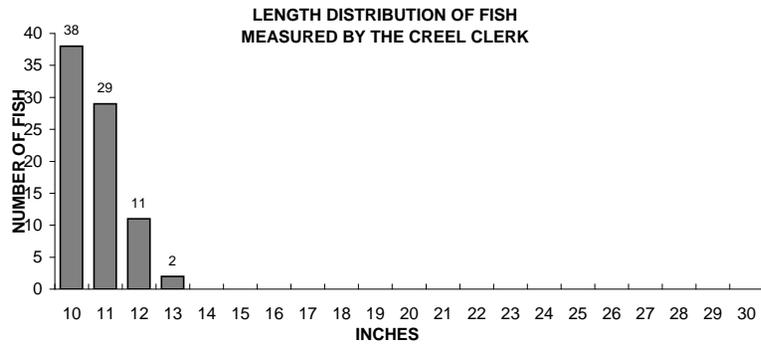
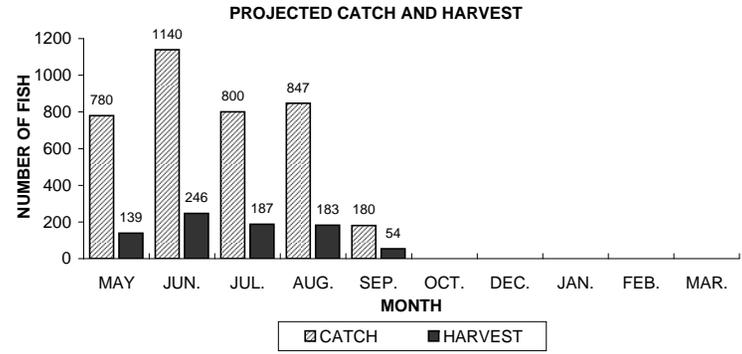
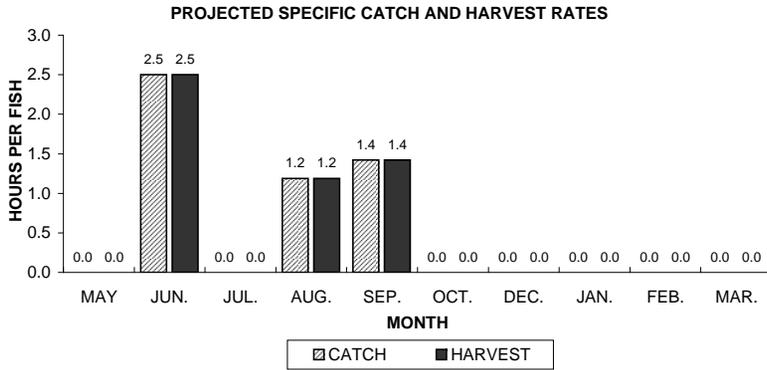


Figure 11. Black Bullhead sportfishing effort, catch, harvest, and length distribution, Metonga Lake, during 2007-08.