

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

**Wheeler Lake**

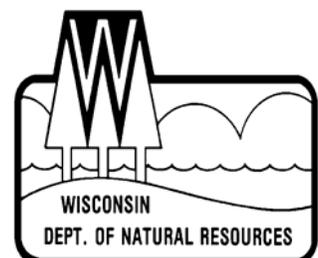
**Oconto County**

**2008-09**



**Treaty Fisheries Publication**

**Compiled by Tim Tobias  
Treaty Fisheries Technician**



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**Cover Art:** Steve Hilt, Minocqua, WI  
**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.

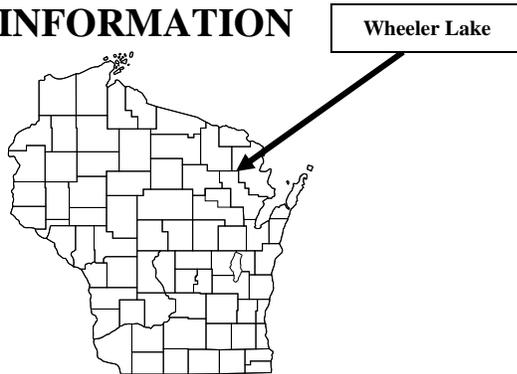
You may have encountered a DNR creel survey clerk on a recent fishing trip. We appreciate your cooperation during an interview. The survey only takes a moment of your time and it gives the Department valuable information needed for management of the fishery.

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 of Wheeler Lake; discussion of results of the survey; and detailed summaries, by species of fishing effort, catch and harvest.

## GENERAL LAKE INFORMATION



### Location

Wheeler Lake is located in north central Oconto County approximately 3.5 miles east of the town of Lakewood.

### Physical Characteristics

Wheeler Lake is a 293-acre seepage lake of moderate fertility, clear water and a maximum depth of 35 feet. Littoral substrate consists primarily of gravel, rubble and sand.

### Seasons Surveyed

The period referred to in this report as the 2008-09 fishing season ran from May 3, 2008 through March 1, 2009. The open water creel survey ran from May 3 through October 31, 2008 and the ice fishing creel survey ran from December 1, 2008 through March 1, 2009.

### Weather

Ice-out on Wheeler Lake was around April

26. Spring, summer and fall weather was normal. Fishable-ice formed on Wheeler Lake in December.

### Sportfishing Regulations

The following seasons, daily bag limits, and length limits were in place on Wheeler Lake during the 2008-09-fishing season:

Species	Season	Bag Limit	Min. Size
Largemouth Bass & Smallmouth Bass	5/03-6/20	Catch & Release	
Northern Pike	6/21-3/01	5	14"
Walleye	5/03-3/01	5	none
Panfish	5/03-3/01	2	15"
Rock Bass	year round	25	none
	year round	none	none

## SPECIES CATCH AND HARVEST INFORMATION

Angling information is summarized for each species (Figures 1-10) 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.

### **General Angler Information**

Anglers spent 12,614 hours or 43.0 hours per acre fishing Wheeler Lake during the 2008 season (Table 1). That was more than the statewide average of 33.6 hours per acre. February was the most heavily fished month (7.2 hours per acre). Fishing effort was lightest in October (0.4 hours per acre).

## **SPECIES INFORMATION**

### **Walleye** (Table 2, Figure 1)

Fishing effort targeted at walleye was 5,497 hours. Walleye fishing effort was greatest in January (1,296 hours). October had the least amount of walleye fishing effort (41 hours).

Catch was 193 fish with a harvest of 154 fish. Highest catch (81 fish) and harvest (78 fish) occurred in August. Anglers fished 28.6 hours to catch a walleye and 36.0 hours to harvest during 2008.

The mean length of harvested walleye was 17.1 inches and the largest walleye measured was a 18.5-inch fish harvested in August.

### **Northern Pike** (Table 2, Figure 2)

There were 5,077 hours of directed effort for northern pike on Wheeler Lake during the 2008 season.

Catch was 899 fish with a harvest of 403 fish. Highest catch (248 fish) occurred in December. Anglers fished 6.4 hours to catch a northern pike during the 2008 season.

The mean length of harvested northern pike was 20.8 inches and the largest northern pike measured was a 28.5-inch fish harvested in May.

### **Smallmouth Bass** (Table 2, Figure 3)

There were 1,283 hours of directed effort for smallmouth bass on Wheeler Lake during the 2008 season.

Catch was 818 fish with a harvest of 11 fish. Highest catch (456 fish) occurred in July. Anglers fished 1.9 hours to catch a smallmouth bass during the 2008 season.

### **Largemouth Bass** (Table 2, Figure 4)

There were 4,810 hours of directed effort for Largemouth Bass on Wheeler Lake during the 2008 season.

Catch was 3,391 fish with a harvest of 133 fish. Highest catch (1,063 fish) occurred in May. Anglers fished 1.7 hours to catch a Largemouth Bass during the 2008 season.

The mean length of harvested largemouth bass was 15.6 inches and the largest largemouth bass measured was a 19.0-inch fish harvested in October.

**Panfish** (Table 2, Figures 5-8)  
Panfish accounted for 37 percent of the total directed effort or 9,951 hours during the 2008 season.

**Bluegill** (Table 2, Figure 6)  
Bluegill was the most sought after panfish species with 20 percent of the directed effort. Bluegill fishing effort was greatest in June (1,325 hours). October had the least amount of bluegill effort (20 hours).

Catch was 2,046 fish with a harvest of 893 fish. Highest catch (859 fish) occurred in June. Anglers fished 2.6 hours to catch a bluegill and 6.1 hours to harvest during the 2008 season.

The mean length of harvested bluegill was 8.6 inches and the largest bluegill measured was a 10.5 inch fish harvested in June.

**Yellow Perch** (Table 2, Figure 5)  
Yellow perch was the second most sought after panfish species with 11 percent or 3,047 hours of the total directed effort. Yellow perch effort peaked in January (730 hours).

The total estimated catch of yellow perch was 983 with an estimated harvest of 507 fish.

The mean length of harvested yellow perch was 9.8 inches and the largest measured was 12.7 inches caught in July.

Black crappie and rock bass were also caught, but in lower numbers.

## ACKNOWLEDGMENTS

Treaty staff responsible for ensuring completion of this survey includes Steve Kramer, Joelle Underwood, Marty Kiepeke, Tim Tobias, Jason Halverson and Jeff Blonski. Neal Lowery and Keith Worrall were the creel clerks on Wheeler Lake during the survey period.

We also thank DNR fisheries management staff Mike Donofrio, Justine Hasz, Mike Hawley, Greg Kornely, Cliff Sebero, Larry Vander Kelen and Cory Wienandt for performing the netting and shocking survey of the fish community.

The department thanks the cooperator, Tony and Jean Kerscher, who generously allowed the department to keep a boat and snowmobile on their property during this survey.

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 report was reviewed by Mike Coshun and Dennis Scholl of the 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, Wheeler Lake, 2008-09 season.**

<b>Month</b>	<b>Total Angler Hours</b>	<b>Total Angler Hours/Acre</b>	<b>Oconto County Average Hours/Acre</b>	<b>Statewide Average Hours/Acre</b>
May	1259	4.3	6.7	5.8
June	1670	5.7	16.3	6.1
July	2012	6.9	14.6	6.4
August	1731	5.9	12.9	5.4
September	744	2.5	4.2	3.8
October	104	0.4	1.3	1.6
December	1002	3.4	4.7	1.7
January	1960	6.7	5.3	1.5
February	2110	7.2	4.5	1.3
March	23	0.1	0.1	**
*Summer Total	7519	25.7	56.0	29.1
*Winter Total	5095	17.4	14.6	4.5
Grand Total	12614	43.0	70.6	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 Wheeler 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 Wheeler 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 Wheeler Lake to other lakes statewide.

**Table 2. Comparison of creel survey synopses, Wheeler Lake, 2008-09 fishing seasons.**

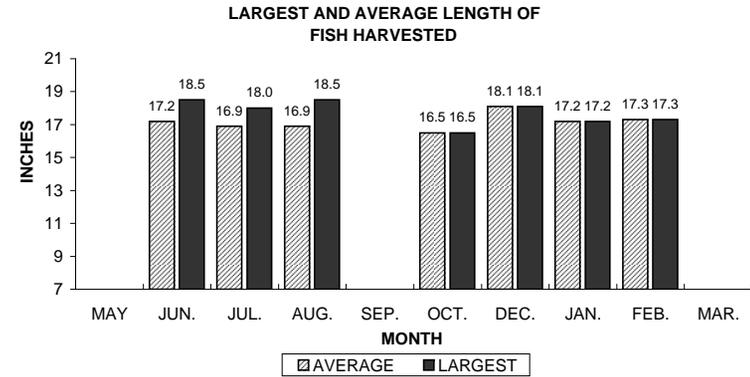
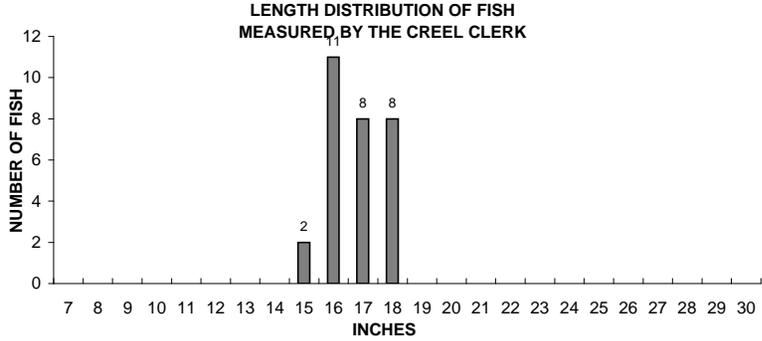
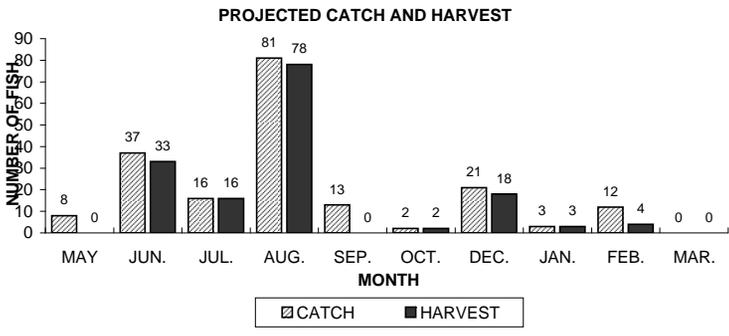
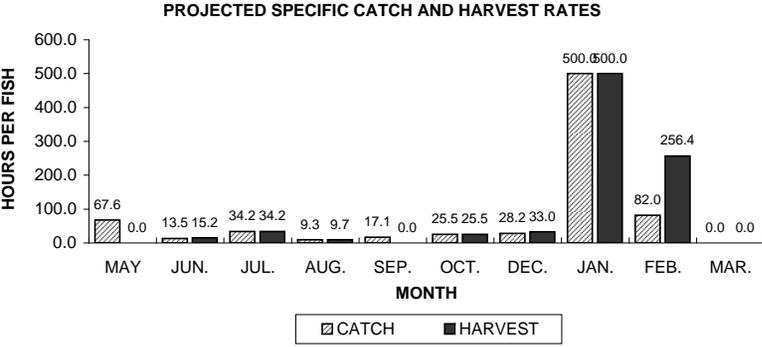
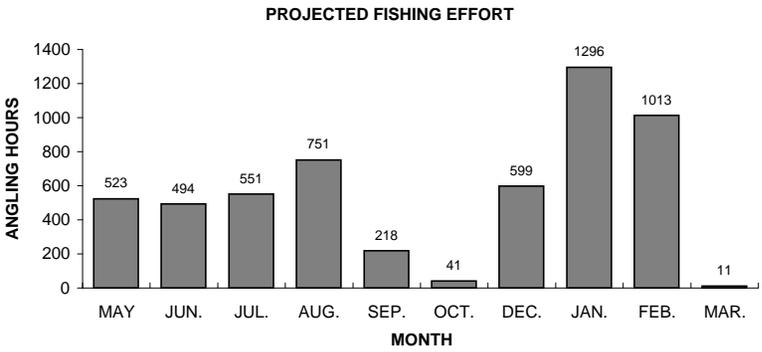
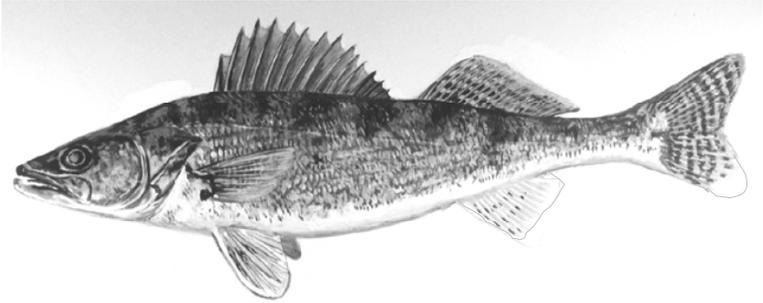
CREEL YEAR: 2008-09

<b>SPECIES</b>	<b>DIRECTED EFFORT (Hours)</b>	<b>PERCENT OF TOTAL</b>	<b>TOTAL CATCH</b>	<b>SPECIFIC CATCH RATE (Hrs/Fish) *</b>	<b>TOTAL HARVEST</b>	<b>SPECIFIC HARVEST RATE (Hrs/Fish) **</b>	<b>MEAN LENGTH OF HARVESTED FISH</b>
Walleye	5497	20.65%	193	28.6	154	36.0	17.1
Northern Pike	5077	19.07%	899	6.4	403	13.0	20.8
Smallmouth Bass	1283	4.82%	818	1.9	11	188.7	15.8
Largemouth Bass	4810	18.07%	3391	1.7	133	36.0	15.6
Yellow Perch	3047	11.45%	983	3.3	507	6.2	9.8
Bluegill	5358	20.13%	2046	2.6	893	6.1	8.6
Rock Bass	106	0.40%	851	0.6	51	2.2	9.1
Black Crappie	1442	5.42%	322	4.5	216	6.8	10.2

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

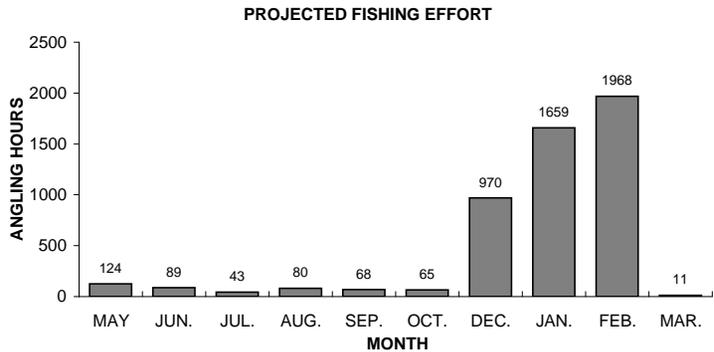
\*\* A blank cell in this column indicates that no fish of a given species were harvested by anglers who specifically targeted that species.

# WALLEYE

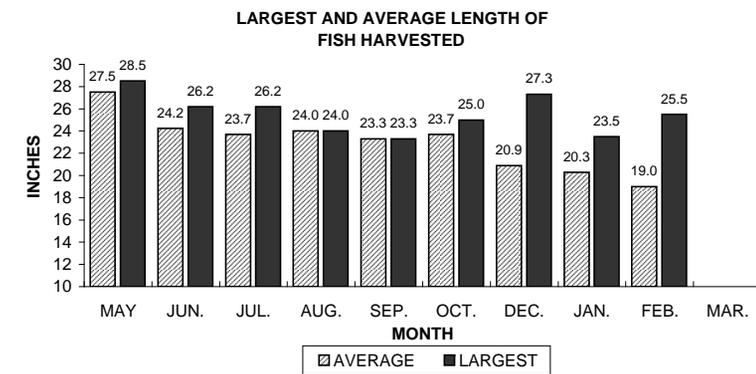
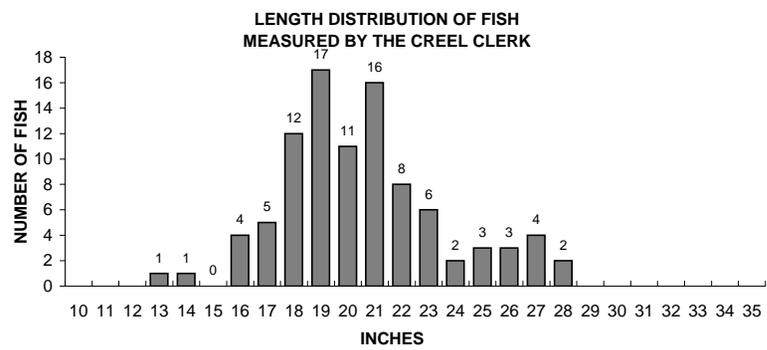
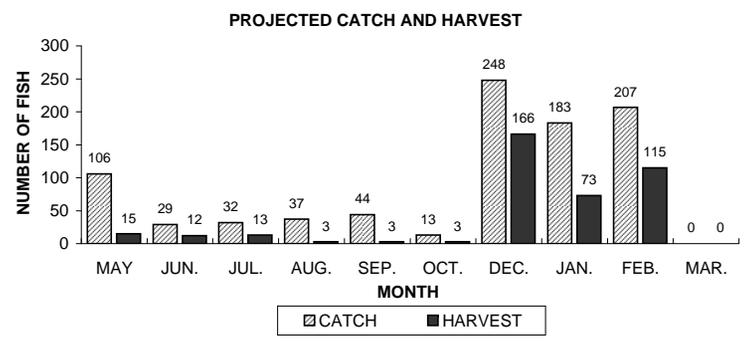
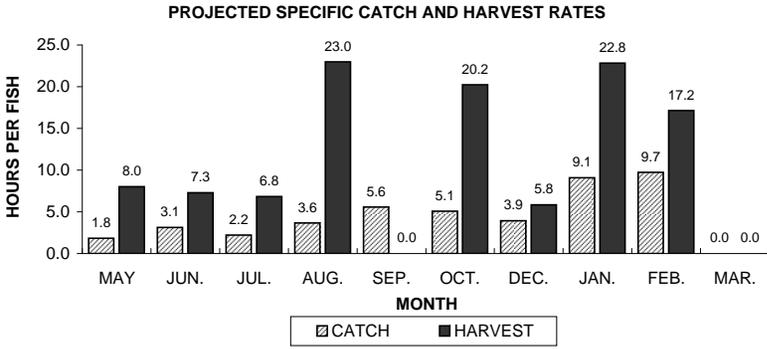
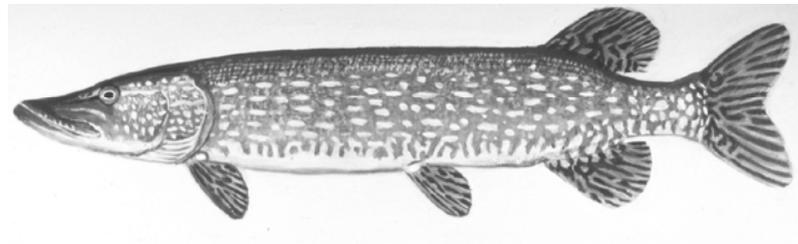


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Figure 1. Walleye sportfishing effort, catch, harvest, and length distribution, Wheeler Lake, during 2008-09.



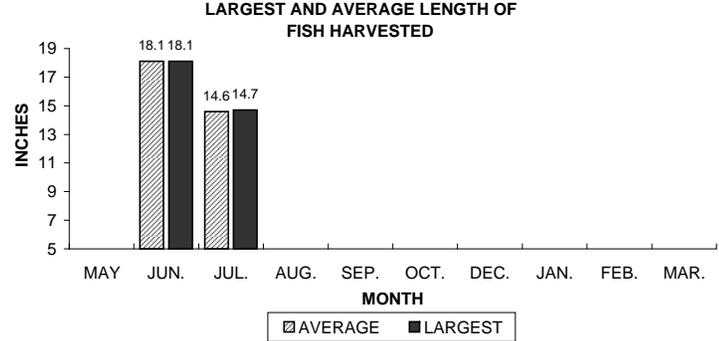
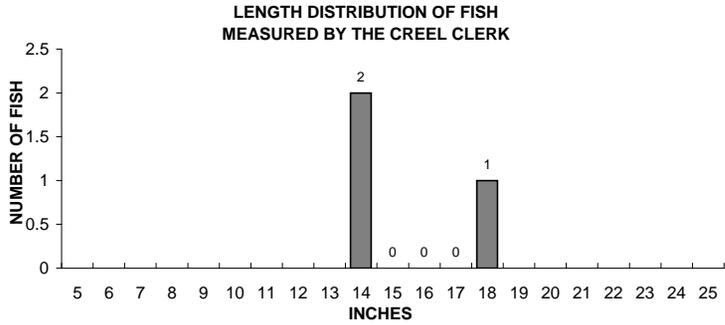
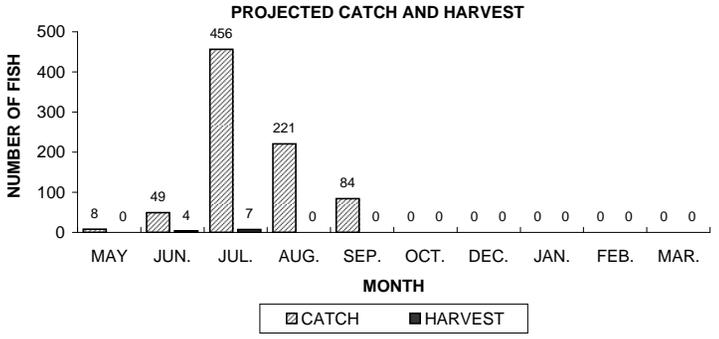
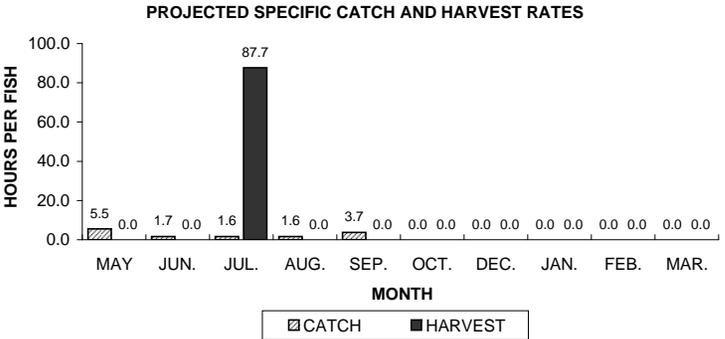
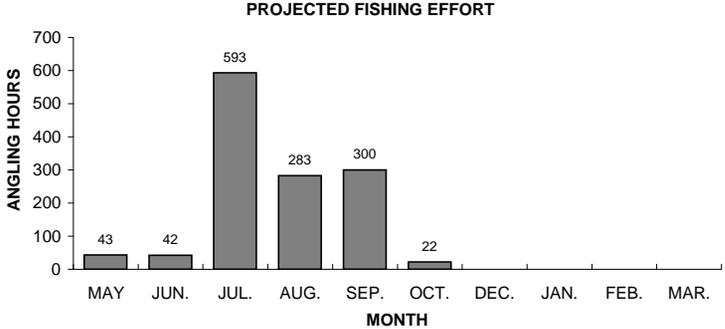
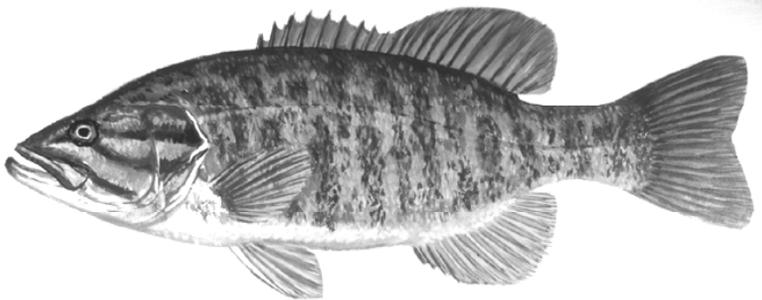
# NORTHERN PIKE



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Figure 2. Northern pike sportfishing effort, catch, harvest, and length distribution, Wheeler Lake, during 2008-09.

# SMALLMOUTH BASS



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Figure 3. Smallmouth bass sportfishing effort, catch, harvest, and length distribution, Wheeler Lake, during 2008-09.

# LARGEMOUTH BASS

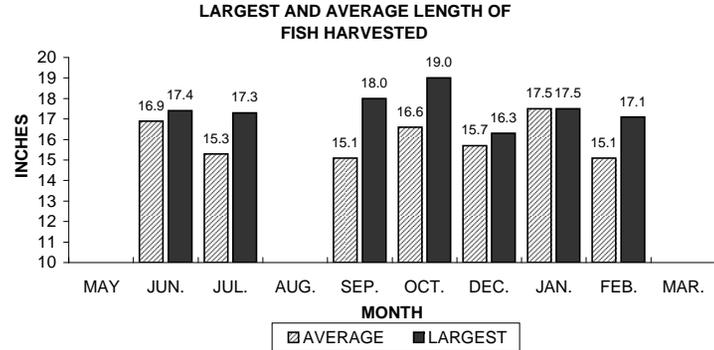
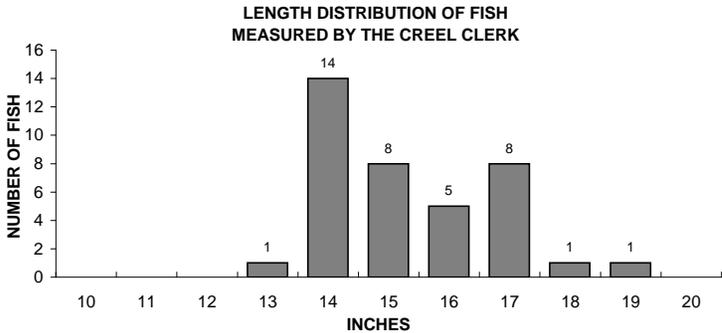
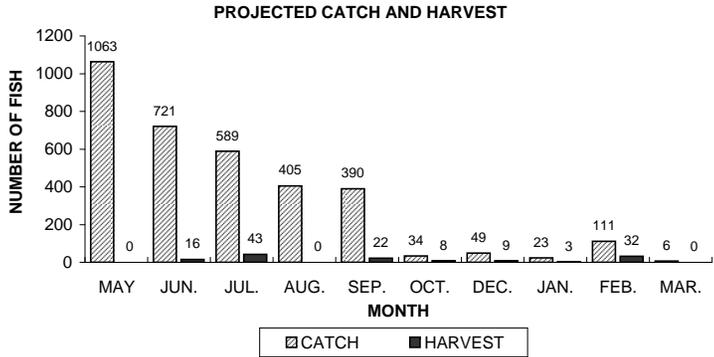
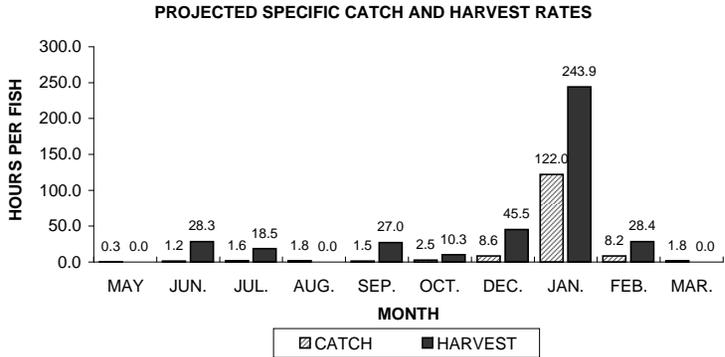
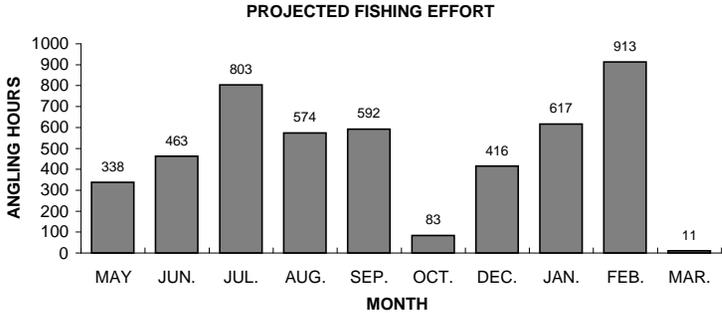
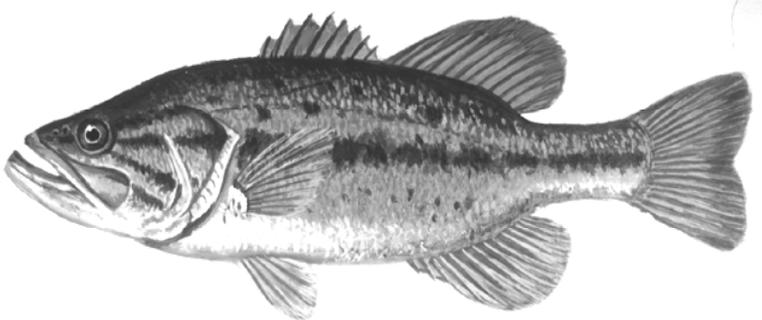


Figure 4. Largemouth bass sportfishing effort, catch, harvest, and length distribution, Wheeler Lake, during 2008-09.

# YELLOW PERCH

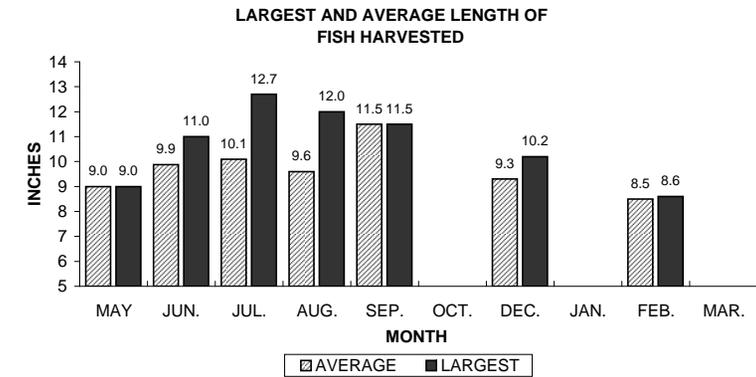
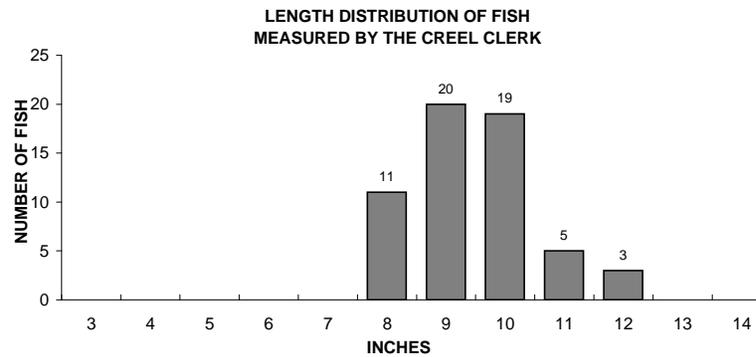
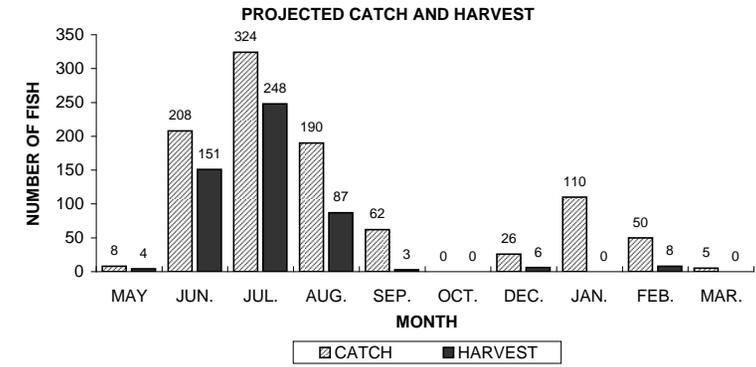
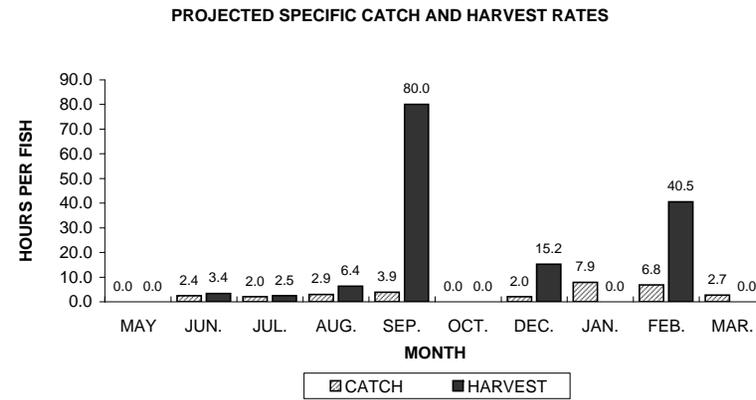
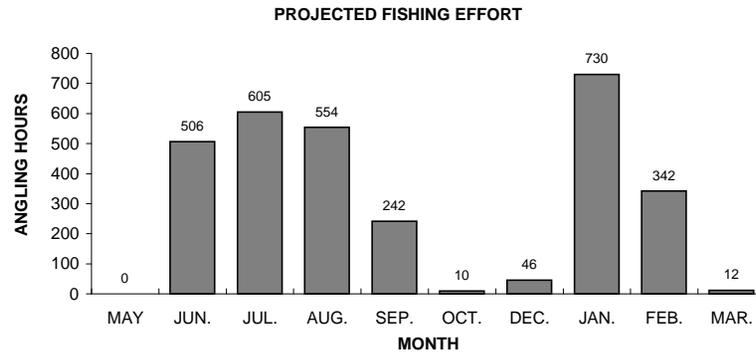
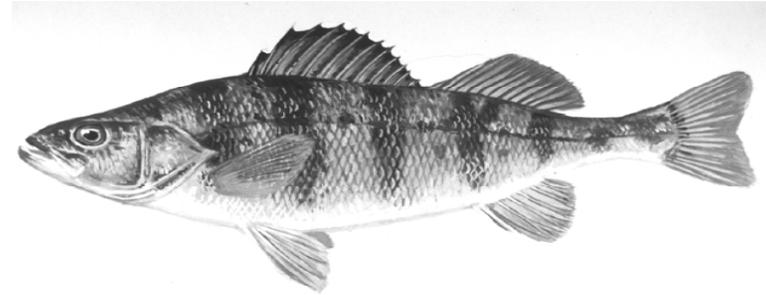


Figure 5. Yellow perch sportfishing effort, catch, harvest, and length distribution, Wheeler Lake, during 2008-09.

# BLUEGILL

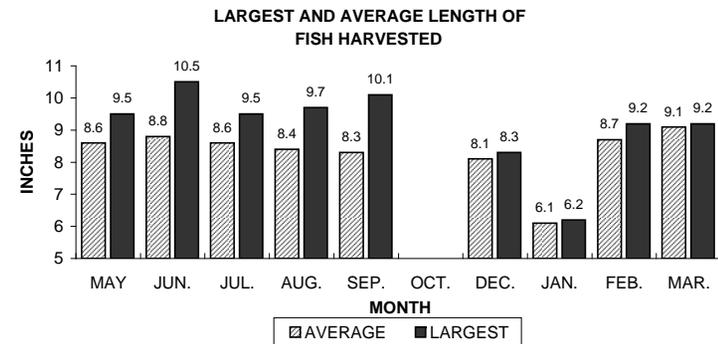
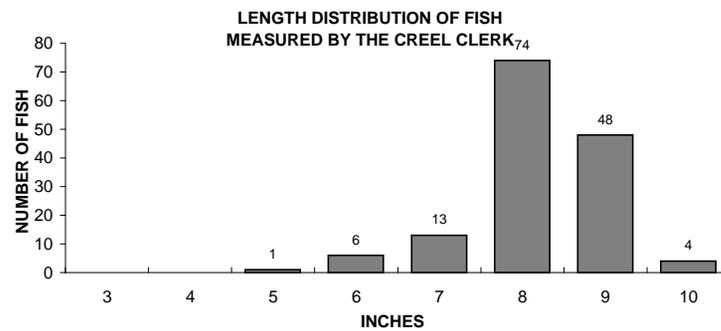
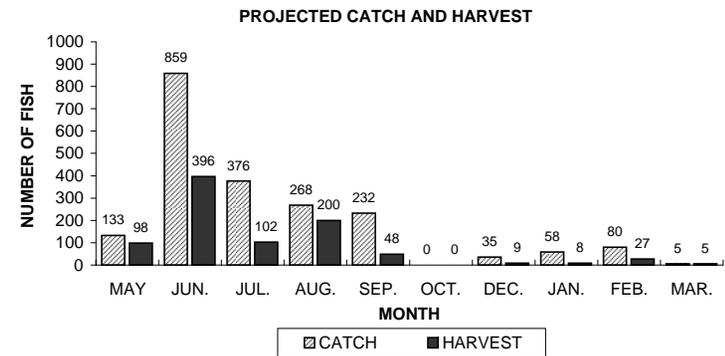
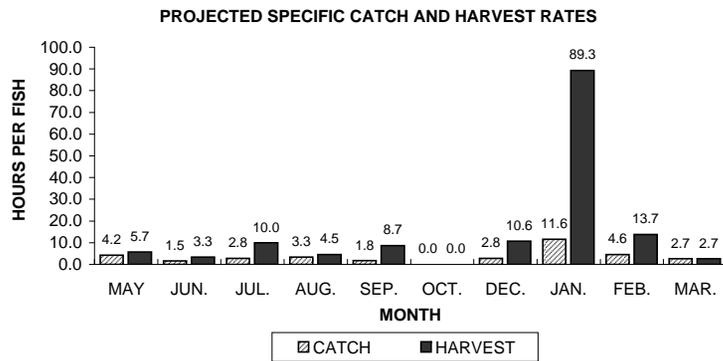
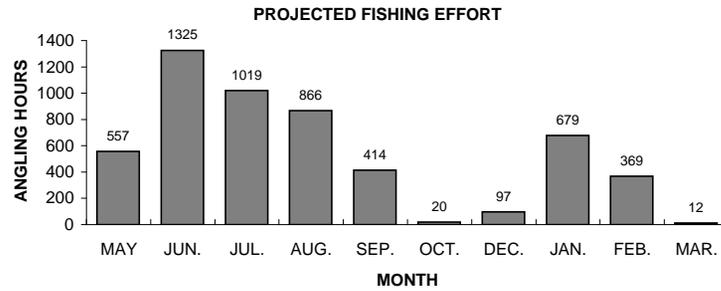
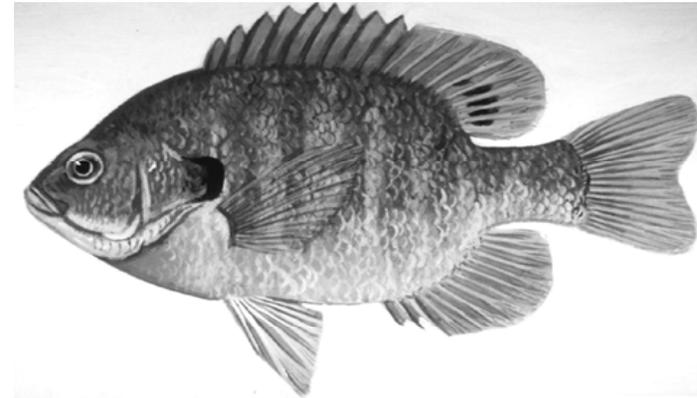


Figure 6. Bluegill sportfishing effort, catch, harvest, and length distribution, Wheeler Lake, during 2008-09.

# ROCK BASS

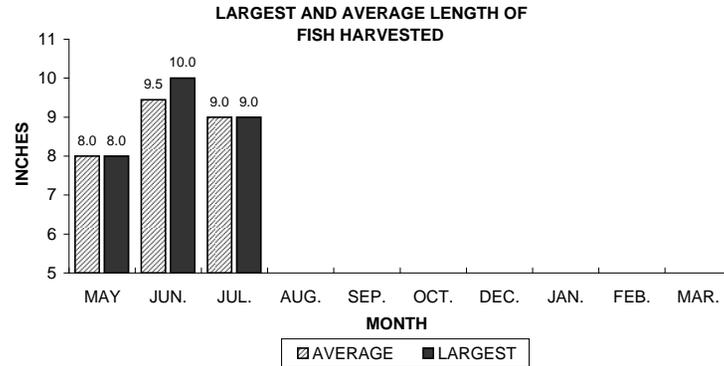
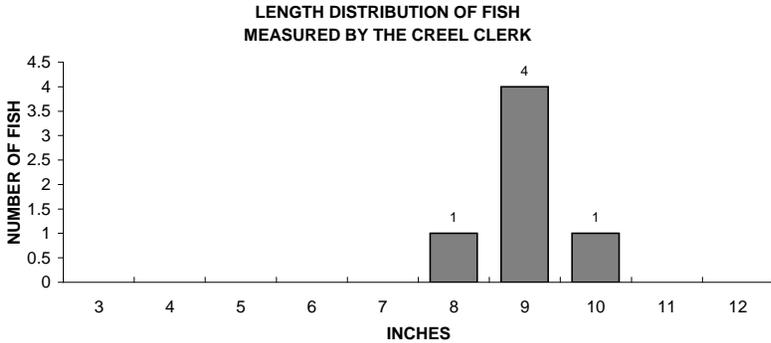
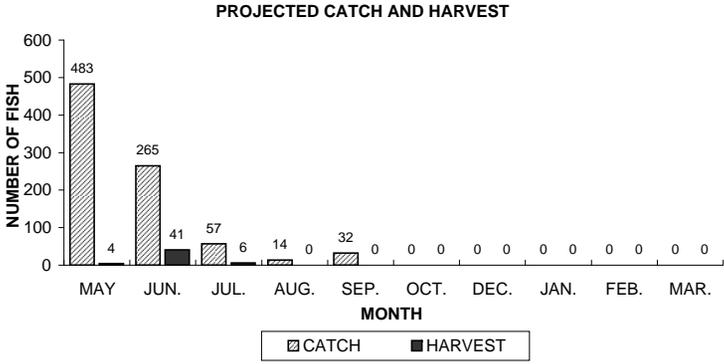
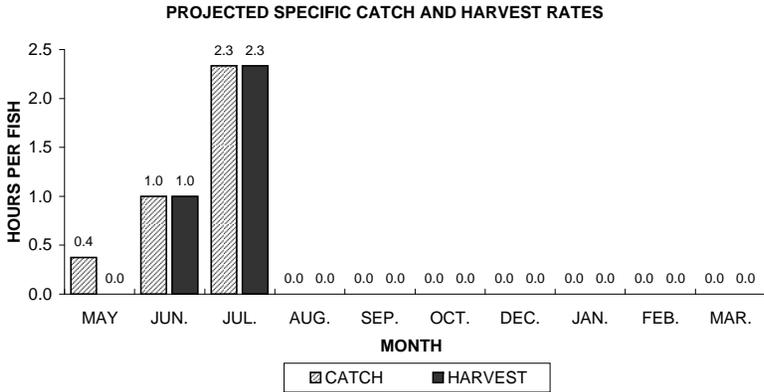
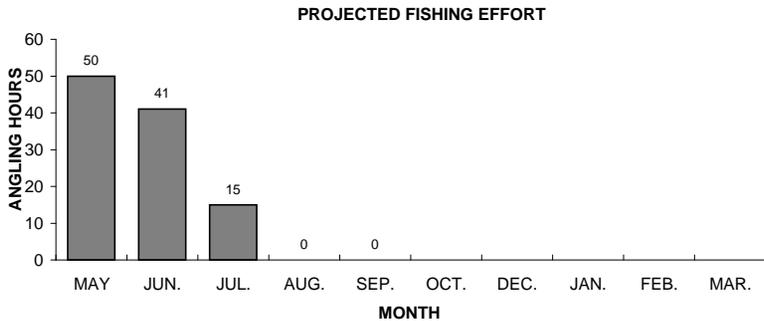
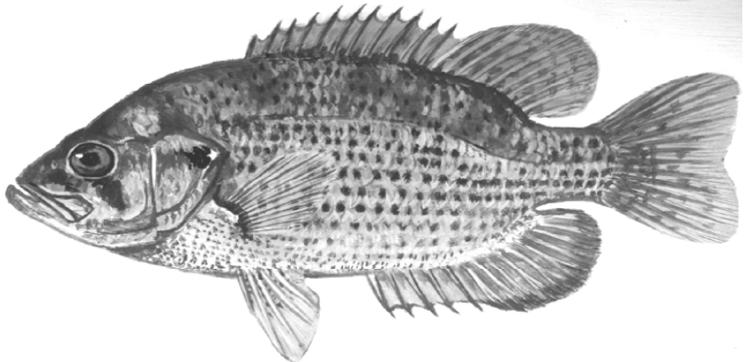


Figure 7. Rock bass sportfishing effort, catch, harvest, and length distribution, Wheeler Lake, during 2008-09.

# BLACK CRAPPIE

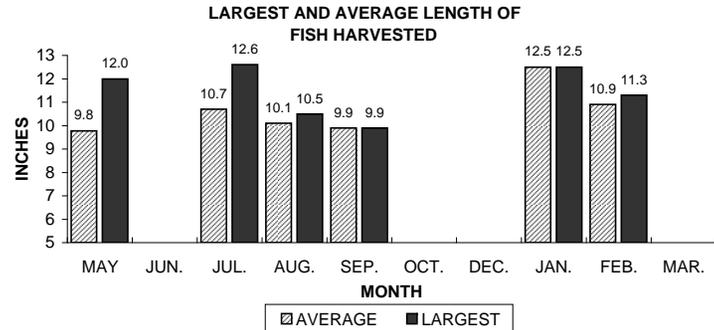
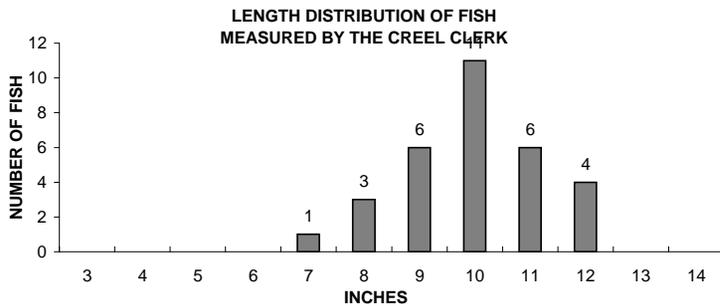
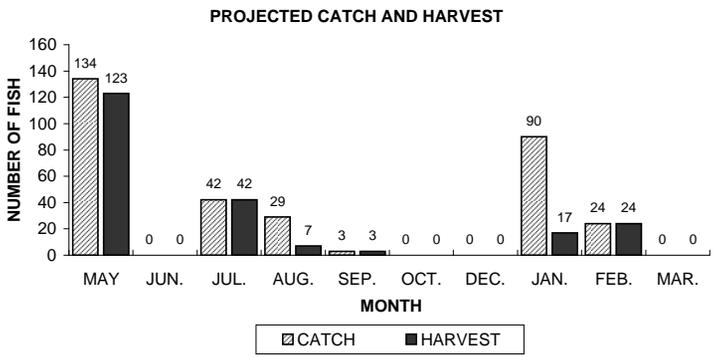
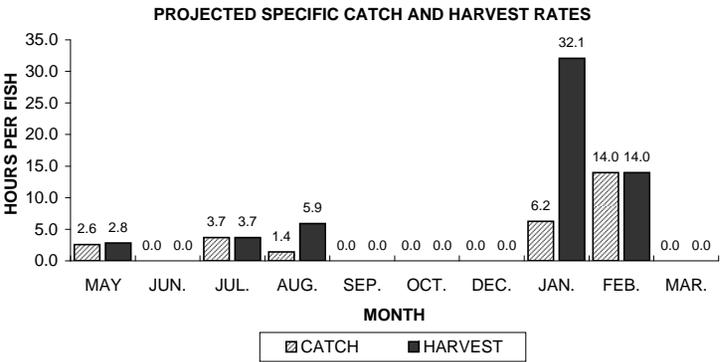
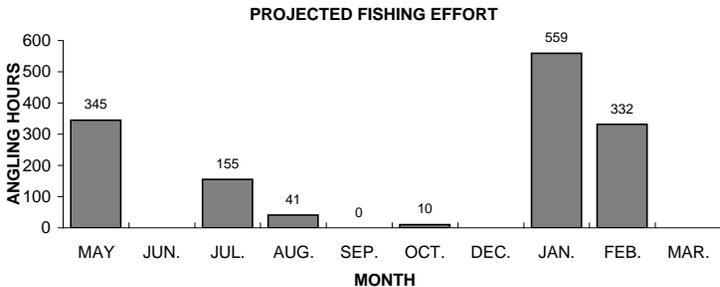
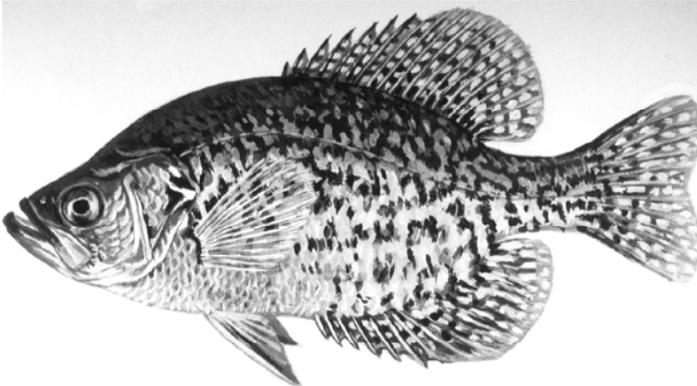


Figure 8. Black crappie sportfishing effort, catch, harvest, and length distribution, Wheeler Lake, during 2008-09.