

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

MANSON LAKE

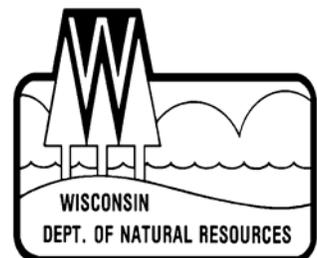
ONEIDA COUNTY

2006-07



Treaty Fisheries Publication

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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.

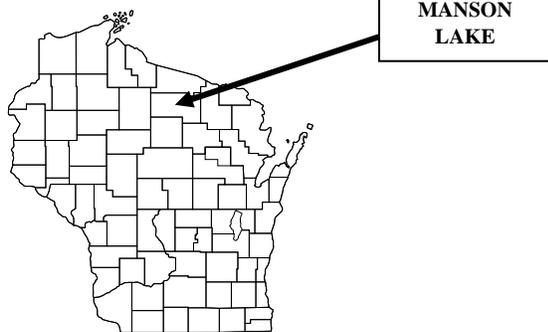
You may have encountered a DNR creel survey clerk on a recent fishing trip. We appreciate your cooperation during an interview. The survey only takes a moment of your time and it gives the Department valuable information needed for management of the fishery.

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

GENERAL LAKE INFORMATION



Location

Manson Lake is located in Oneida County east of the town of Heafford Junction.

Physical Characteristics

Manson Lake is a 236-acre drainage lake with moderate fertility. Littoral substrate consists primarily of sand, with lesser amounts of rubble, boulders and gravel.

Seasons Surveyed

The period referred to in this report ran from May 6, 2006 through March 4, 2007. The open water creel survey ran from May 6 through October 31, 2006 and the ice fishing creel survey ran from December 1, 2006 through March 4, 2007.

Weather

Ice-out on Manson Lake was around April 10, 2007 which is about a week early for

northern Wisconsin. Spring, summer and fall weather was normal. Fishable-ice formed on Manson Lake in early December.

Sportfishing Regulations

The following seasons, daily bag limits, and length limits were in place on Manson Lake during the 2006-fishing season:

Species	Season	Bag Limit	Min. Size
Largemouth Bass & Smallmouth Bass	5/06-6/16	Catch & Release	
	6/17-03/04	5	14"
Musky	5/15-11/30	1	34"
Northern Pike	5/06-3/04	5	none
Walleye	5/06-3/04	3*	1 > 14"
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 Manson Lake.

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 12,466 hours or 52.8 hours per acre fishing Manson Lake during the 2006 season (Table 1). That was higher than the statewide average of 33.6 hours per acre and the Oneida County average of 38.7 hours per acre. July was the most heavily fished month (12.6 hours per acre). Fishing effort was lightest in December (1.7 hours per acre).

SPECIES INFORMATION

Walleye (Table 2, Figure 1)

Anglers spent 2,665 hours targeting walleye. Walleye fishing effort was greatest in January (786 hours). October had the least amount of walleye fishing effort (48 hours).

Catch was 173 fish and harvest 36 fish. Highest catch (52 fish) occurred in January. Anglers fished 23.1 hours to catch and 87 hours to harvest a walleye during 2006.

The mean length of harvested walleye was 20 inches and the largest walleye measured was a 26.5-inch fish harvested in January.

Northern Pike (Table 2, Figure 2)

Fishing effort directed at northern pike was 1,587 hours during the 2006 season. Northern pike fishing effort was greatest in January (733 hours).

Catch was 794 fish and harvest 42 fish. Anglers fished 8 hours to catch a northern pike during 2006.

The mean length of harvested northern pike was 25.4 inches and the largest northern pike measured was a 37.2-inch fish harvested in July.

Muskellunge (Table 2, Figure 3)

Anglers spent 2,927 hours targeting muskellunge during the 2006 season. Muskellunge fishing effort was greatest in June (789 hours).

Catch was 140 fish and harvest was 0 fish. Highest catch (76 fish) occurred in July. Anglers fished 30 hours to catch a muskellunge during 2006.

Smallmouth Bass (Table 2, Figure 4)

Fishing effort targeted at smallmouth bass

was 2,117 hours during the 2006 season. Smallmouth bass fishing effort was greatest in July (832 hours).

Catch was 2,159 fish. Highest catch (843 fish) occurred in August. Mean length of fish harvested was 14.8 inches.

Largemouth Bass (Table 2, Figure 5)
Fishing effort directed at largemouth bass was 1,616 hours during the 2006 season. Largemouth bass estimated catch was greatest in July (528 fish).

Anglers fished 2 hours to catch a Largemouth Bass during 2006. Mean length of harvested fish measured was 15.9 inches.

Panfish (Table 2, Figures 6-10)

Bluegill was the most sought after fish during the survey. Fishing effort directed at bluegill was 4,746 hours during the 2006 season. Catch was 17,566 fish and harvest 4,649 fish. The mean length of harvested bluegill was 7.0 inches.

Anglers caught 3,413 and harvested 1,660 yellow perch. The mean length of harvested yellow perch was 8.2 inches.

Fishing effort directed at Black Crappie was 2,423 hours during the 2006 season. Total catch was 801 and harvest of 548 fish. The mean length of Black Crappie harvested was 10.8 inches.

Other panfish caught were Rock Bass (4,552 fish) and Pumpkinseed (44 fish).

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 includes Steve Kramer, Tim Tobias, Joelle Underwood, Marty Kiepke, Jeff Blonski, and Jason Halverson. Dave Stahmer and Bill Brener were the creel clerks on Manson Lake during the survey period.

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.

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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Michael.Coshun@dnr.state.wi.us

Table 1. Sportfishing effort summary, Manson Lake, 2006-07 season.

Month	Total Angler Hours	Total Angler Hours/Acre	Oneida County Average Hours/Acre	Statewide Average Hours/Acre
May	1140	4.8	5.6	5.8
June	2422	10.3	7.6	6.1
July	2979	12.6	8.7	6.4
August	2748	11.6	6.5	5.4
September	1074	4.6	3.9	3.8
October	511	2.2	1.8	1.6
December	390	1.7	1.3	1.7
January	808	3.4	1.6	1.5
February	396	1.7	1.5	1.3
March			0.2	**
*Summer Total	10873	46.1	34.1	29.1
*Winter Total	1594	6.8	4.6	4.5
Grand Total	12466	52.8	38.7	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 Manson 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 Manson 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 Manson Lake to other lakes statewide.

Table 2. Creel survey synopses, Manson Lake, 2006-07 fishing season.

CREEL YEAR: 2006-07

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	2665	12.73%	173	23.1	36	87.0	20.0
Northern Pike	1587	7.58%	13	8.0	12	75.8	25.4
Muskellunge	2927	13.99%	140	30.0	0		
Smallmouth Bass	2117	10.12%	2159	1.5	29	100.0	14.8
Largemouth Bass	1616	7.72%	1759	2.0	46	41.2	15.9
Yellow Perch	2630	12.57%	3413	0.9	1660	1.8	8.2
Bluegill	4746	22.68%	17566	0.3	4649	1.1	7.0
Pumpkinseed	4	0.02%	44	1.2	0		
Rock Bass	212	1.01%	4552	0.8	513	2.2	8.1
Black Crappie	2423	11.58%	801	3.4	548	4.8	10.8

* 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

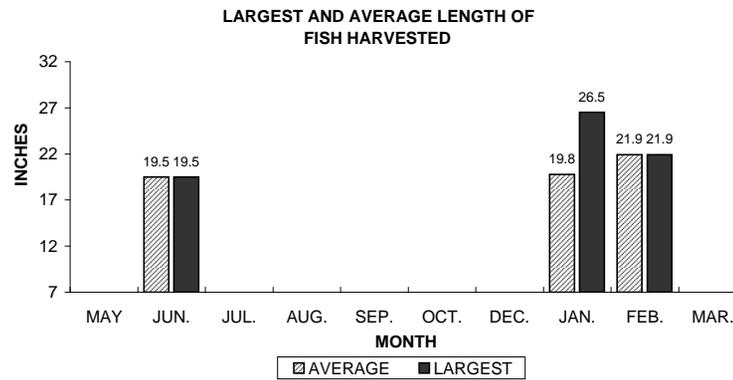
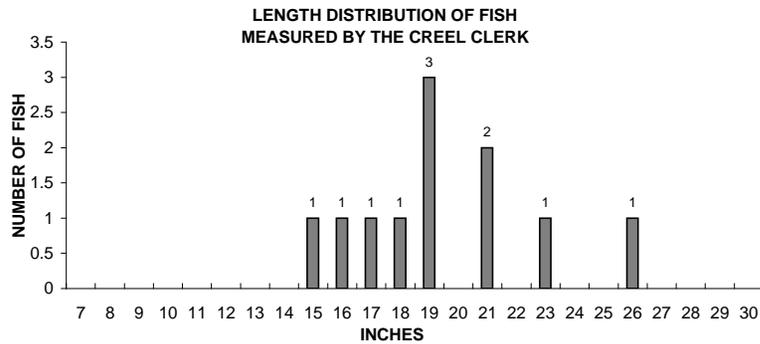
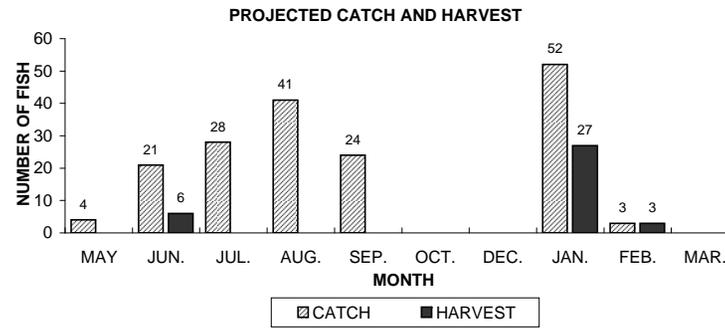
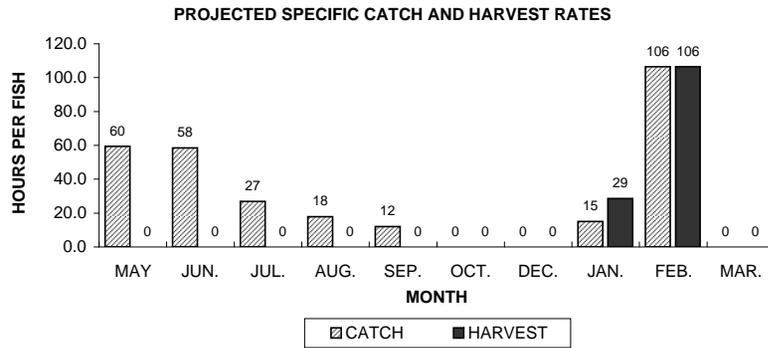
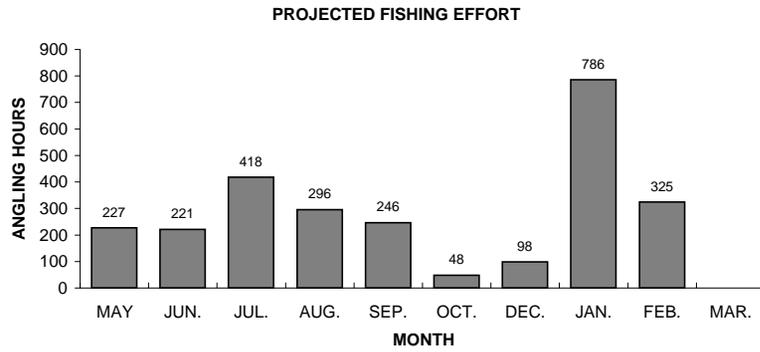
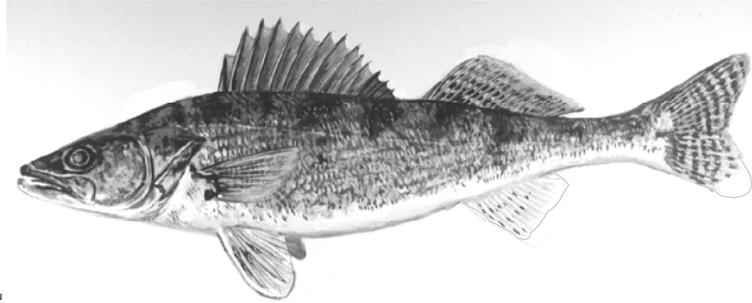


Figure 1. Walleye sportfishing effort, catch, harvest, and length distribution, Manson Lake, during 2006-07.

NORTHERN PIKE

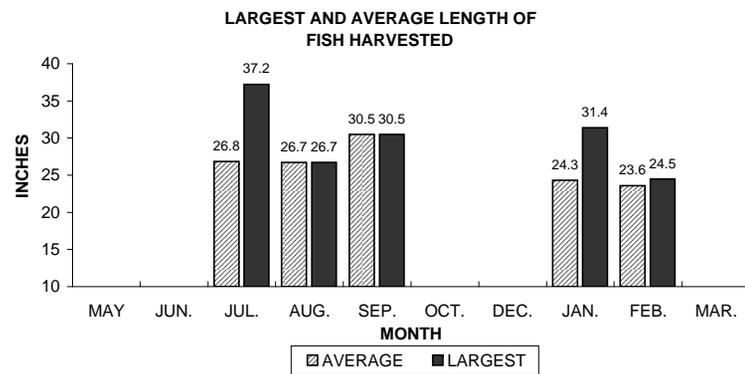
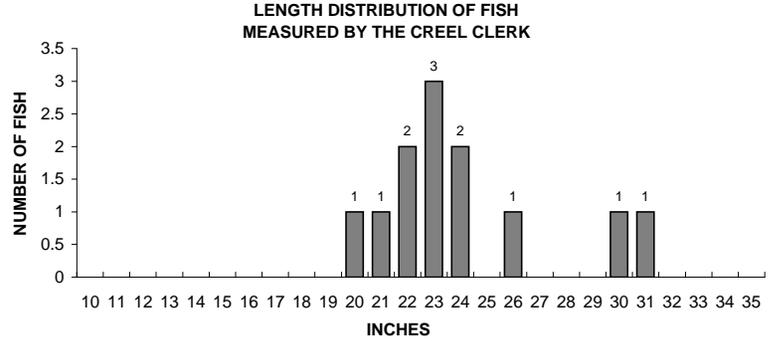
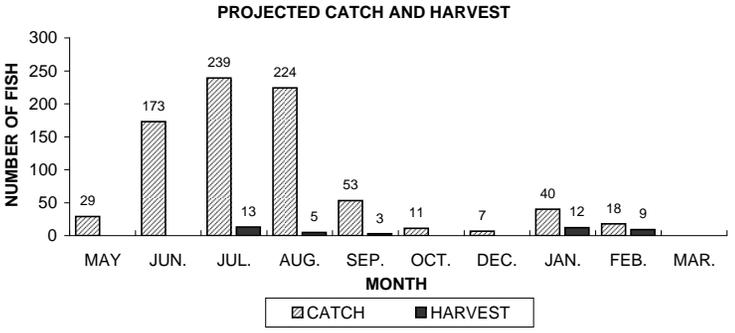
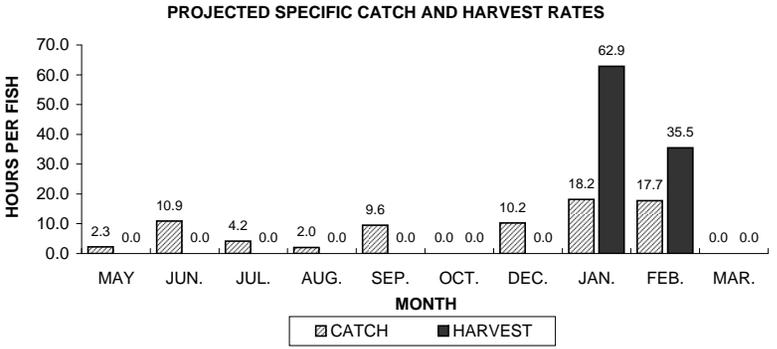
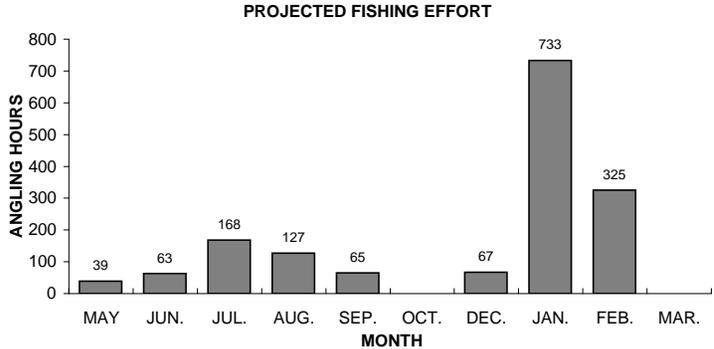
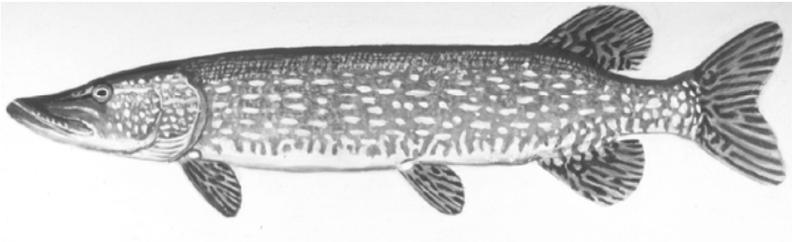


Figure 2. Northern pike sportfishing effort, catch, harvest, and length distribution, Manson Lake, during 2006-07.

MUSKELLUNGE

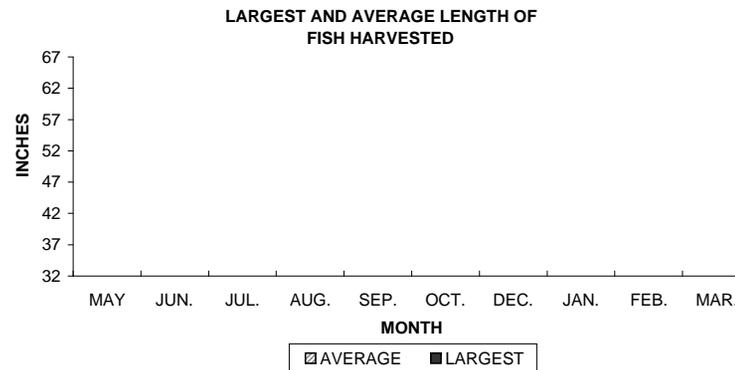
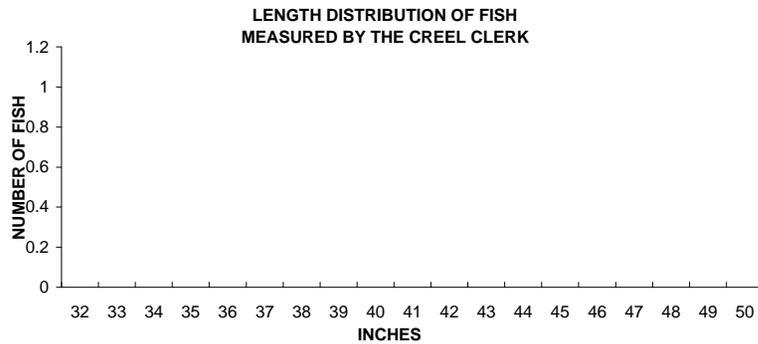
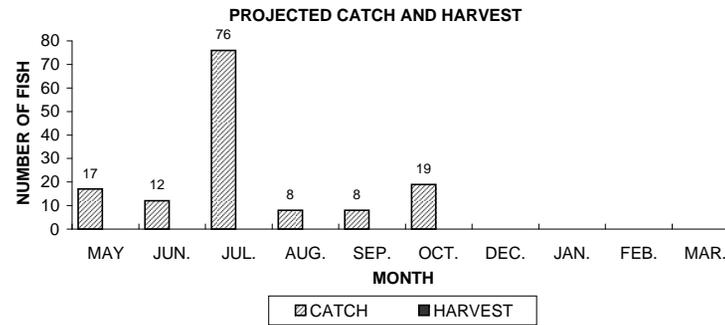
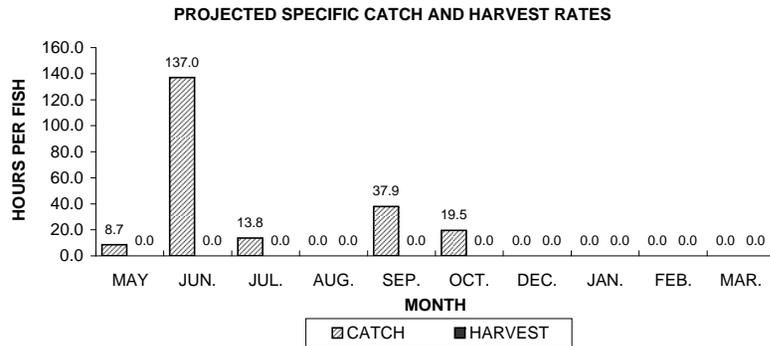
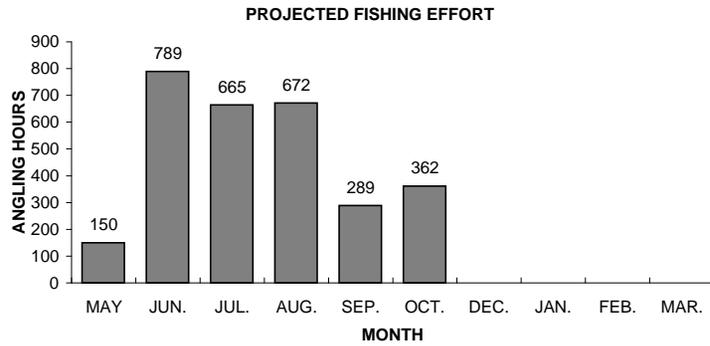
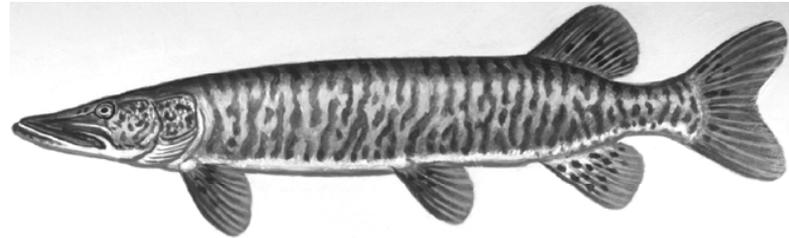


Figure 3. Muskellunge sportfishing effort, catch, harvest, and length distribution, Manson Lake, during 2006-07.

SMALLMOUTH BASS

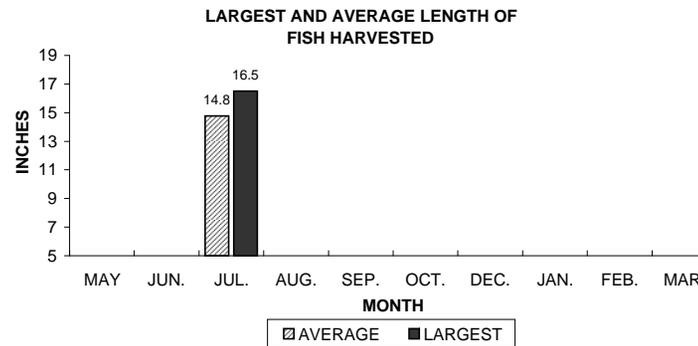
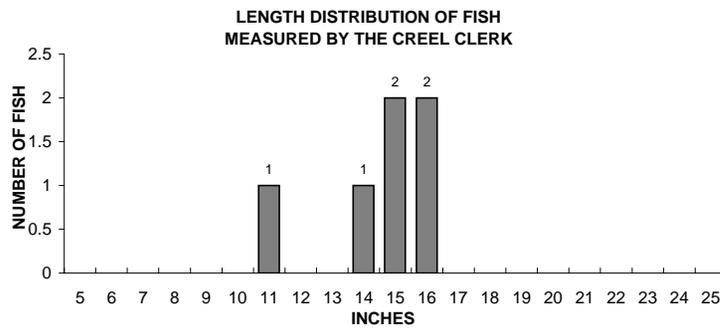
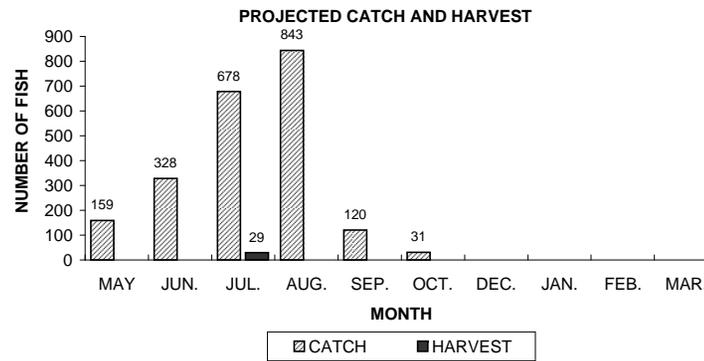
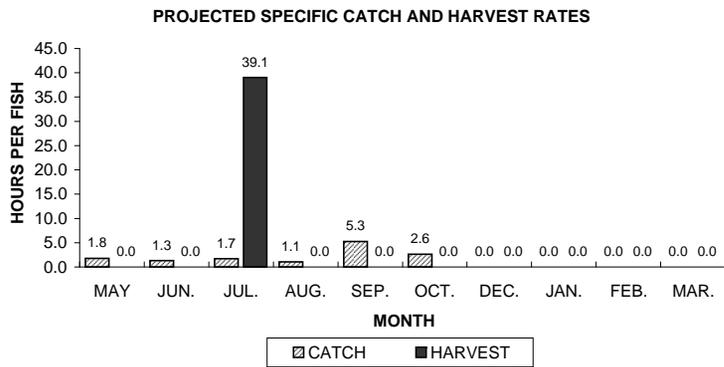
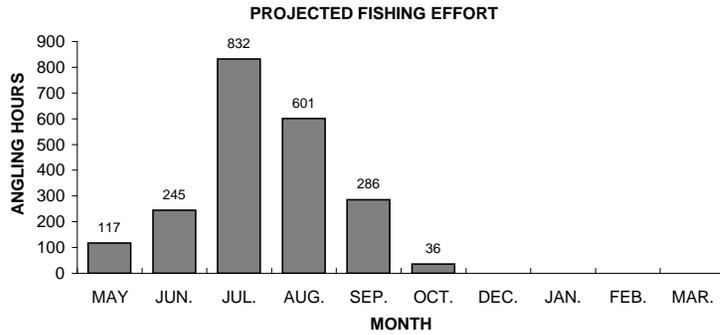
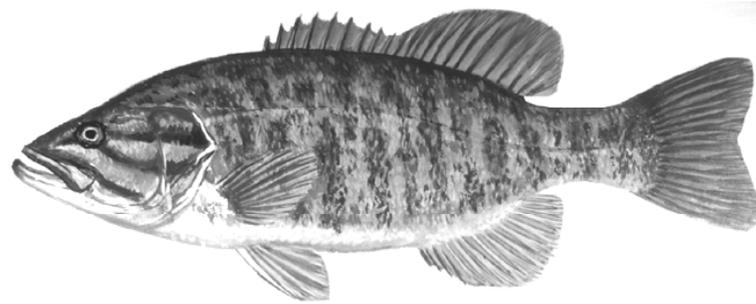


Figure 4. Smallmouth bass sportfishing effort, catch, harvest, and length distribution, Manson Lake, during 2006-07.

LARGEMOUTH BASS

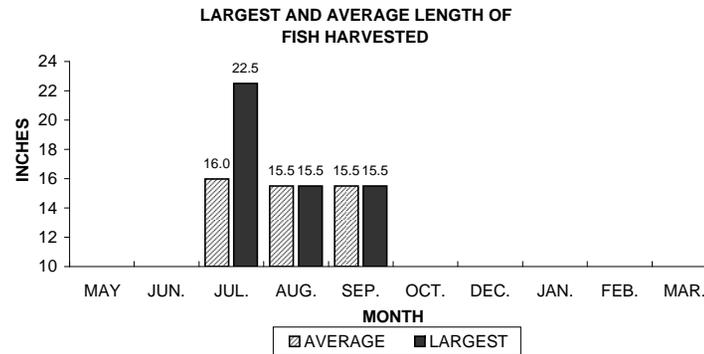
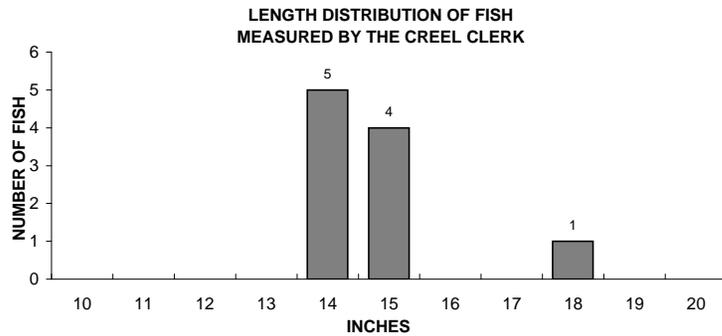
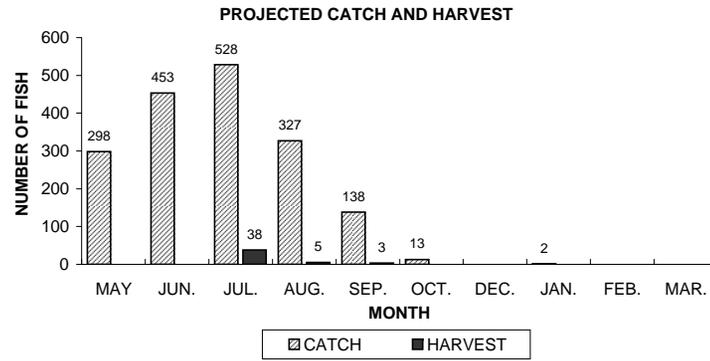
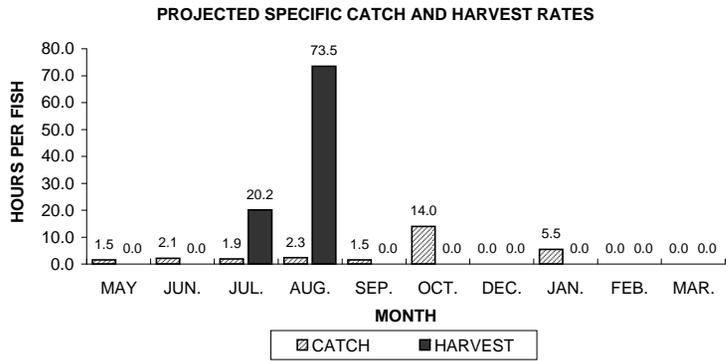
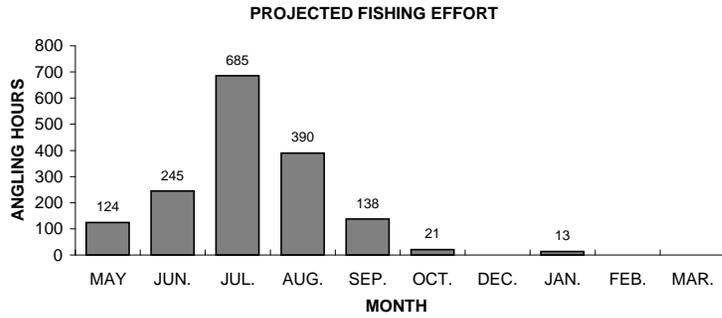
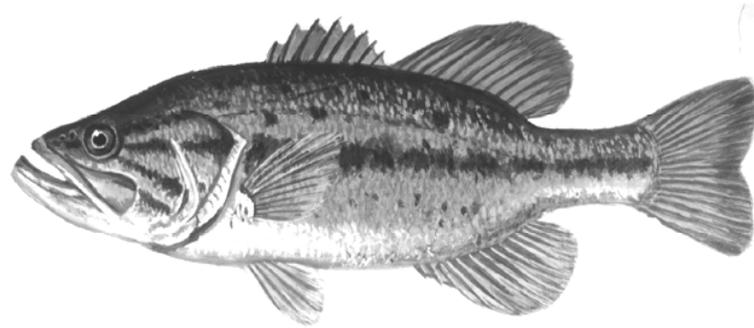


Figure 5. Largemouth bass sportfishing effort, catch, harvest, and length distribution, Manson Lake, during 2006-07.

YELLOW PERCH

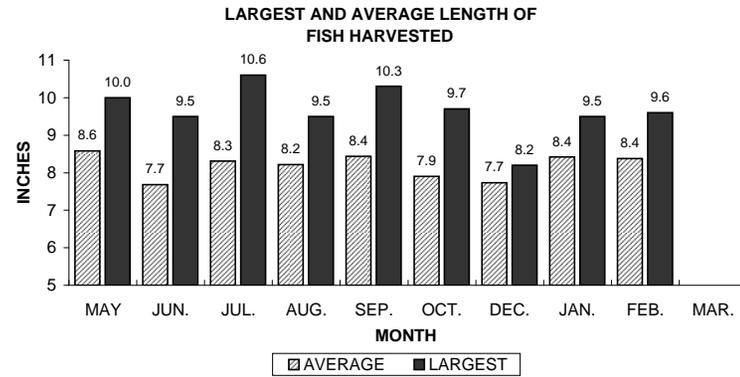
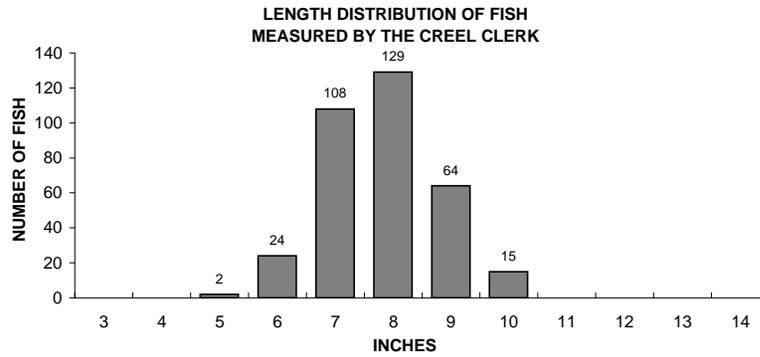
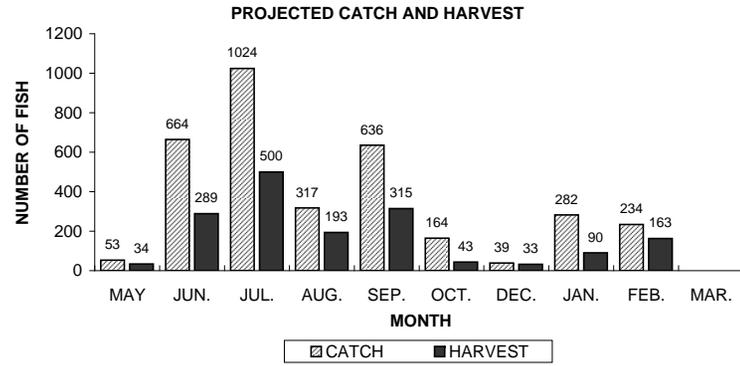
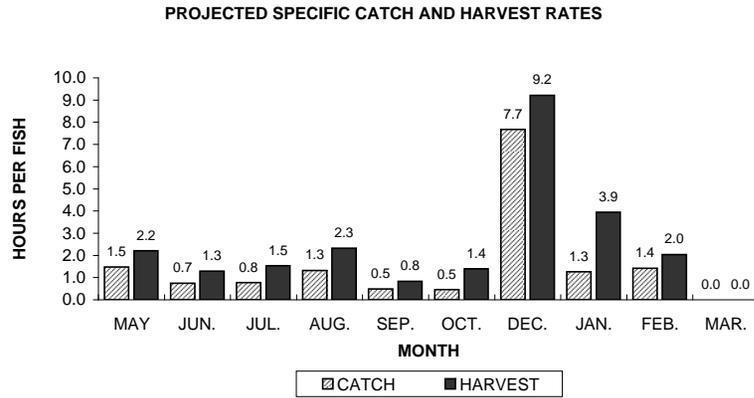
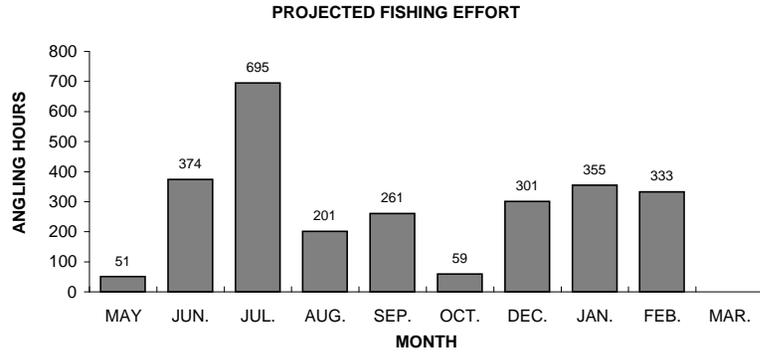


Figure 6. Yellow perch sportfishing effort, catch, harvest, and length distribution, Manson Lake, during 2006-07.

BLUEGILL

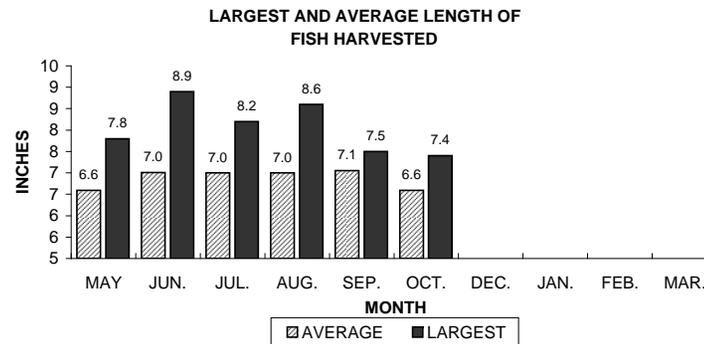
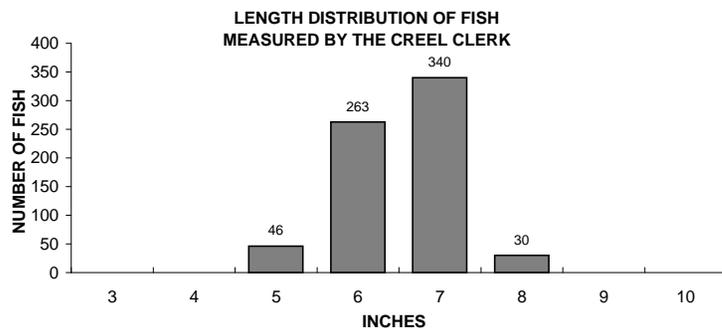
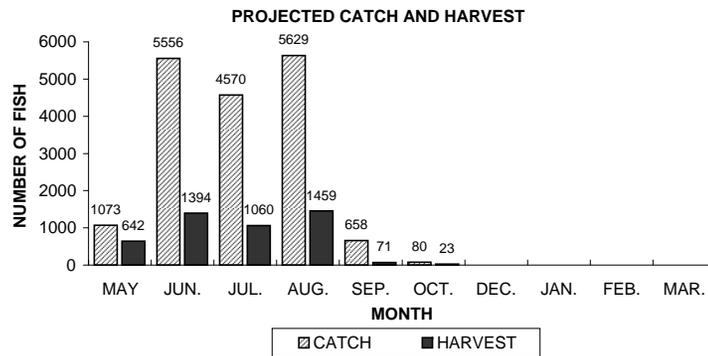
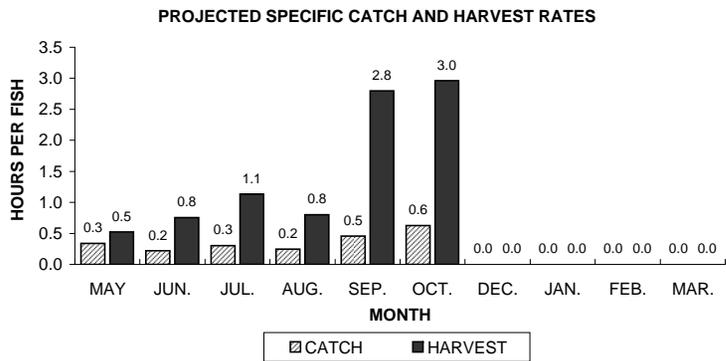
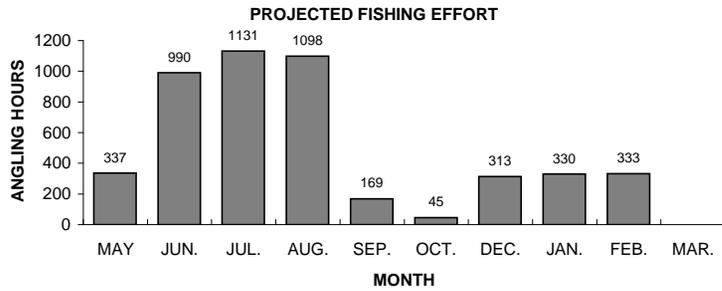
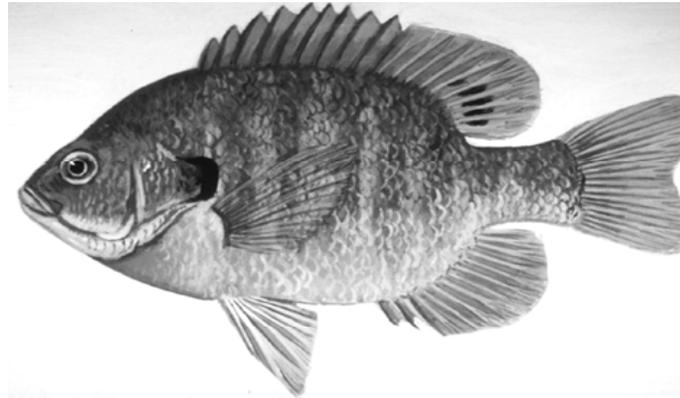


Figure 7. Bluegill sportfishing effort, catch, harvest, and length distribution, Manson Lake, during 2006-07.

PUMPKINSEED

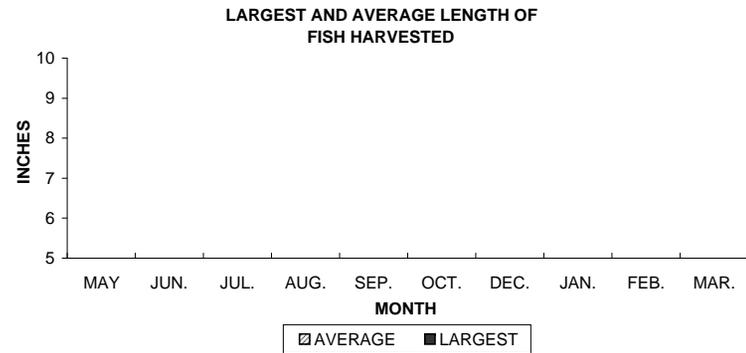
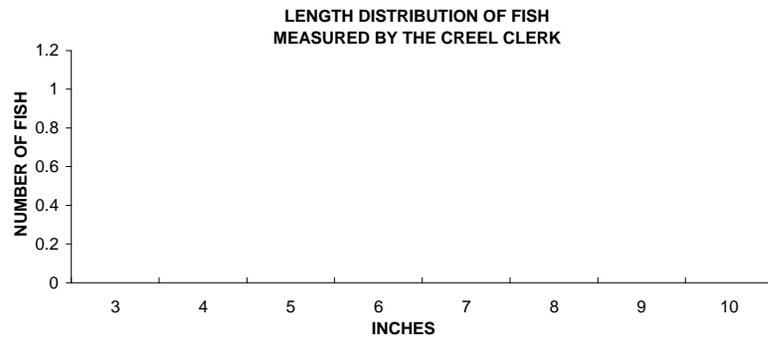
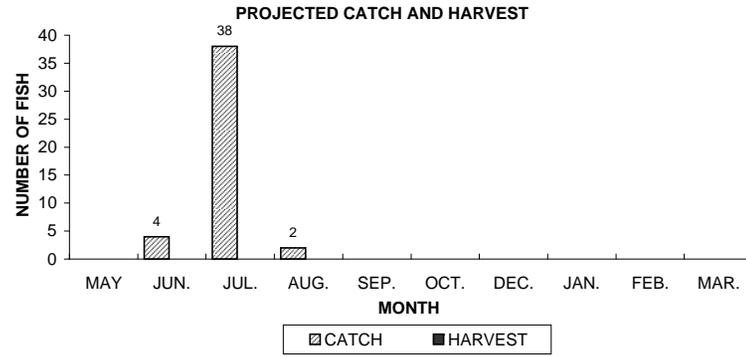
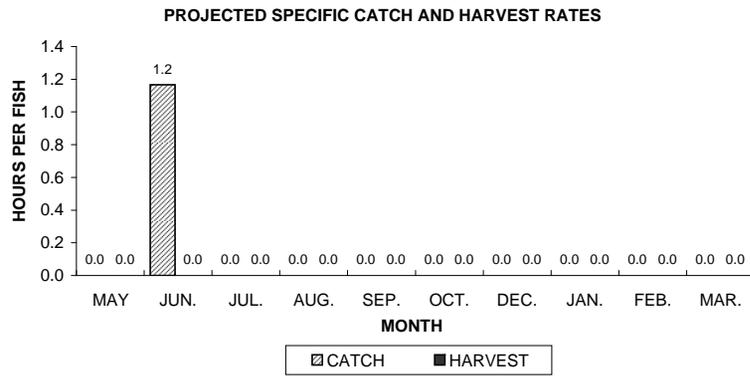
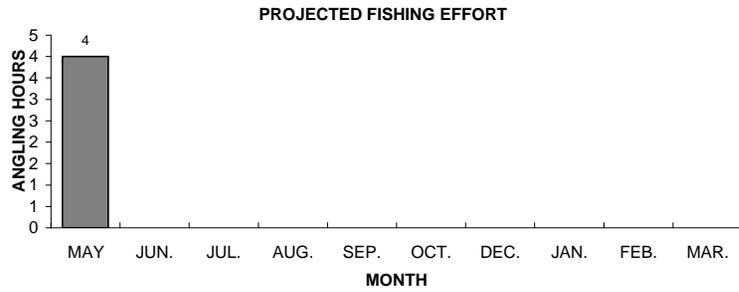
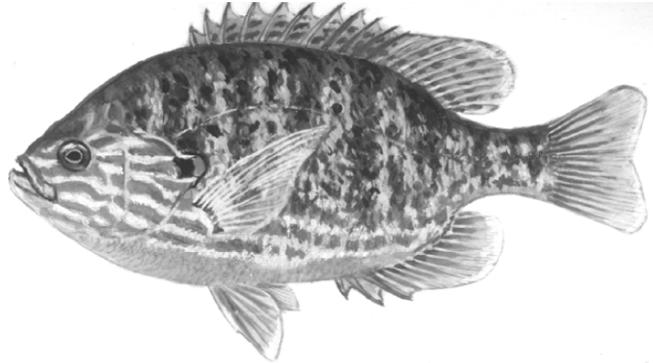


Figure 8. Pumpkinseed sportfishing effort, catch, harvest, and length distribution, Manson Lake, during 2006-07.

ROCK BASS

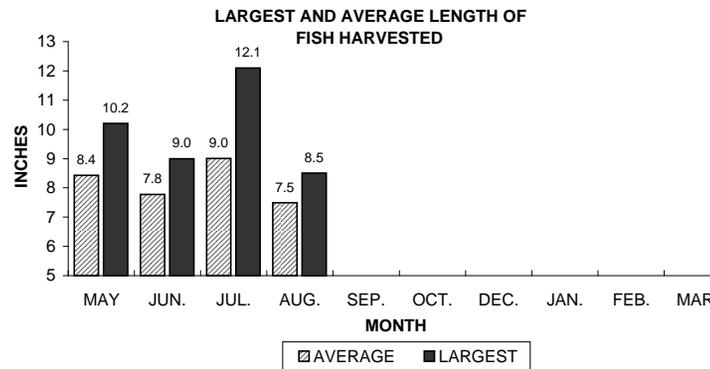
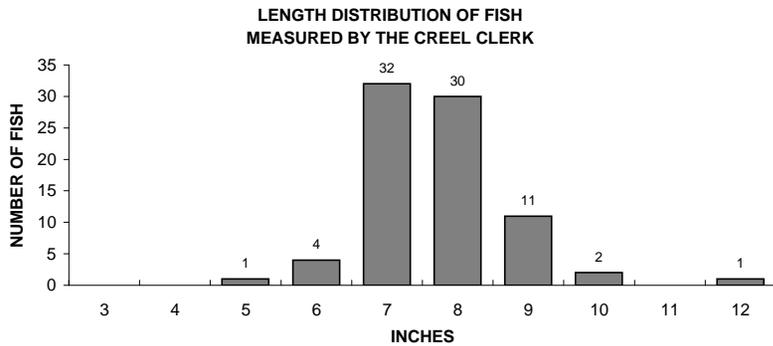
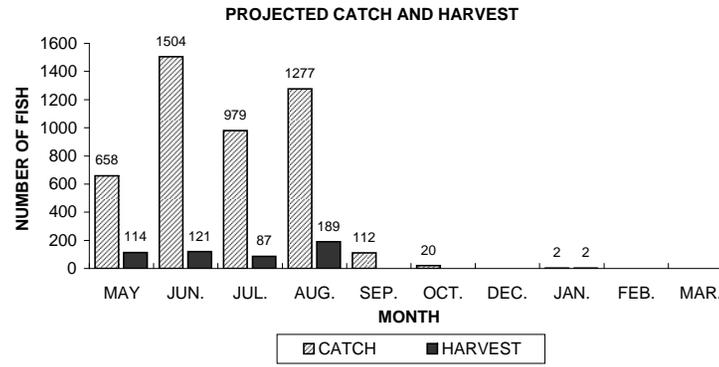
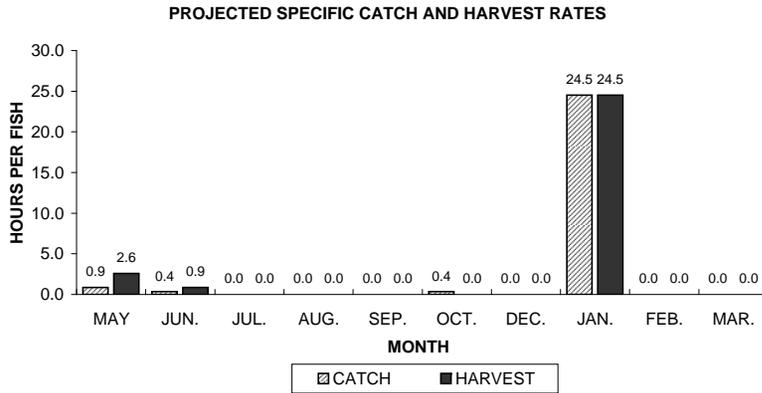
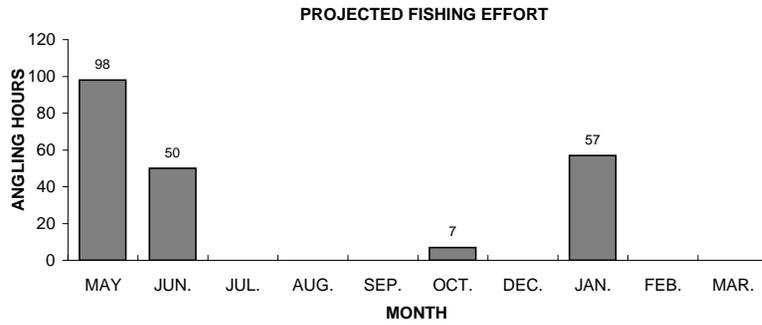
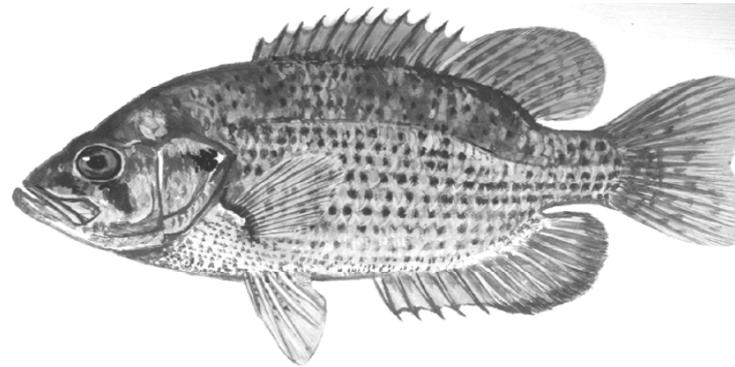


Figure 9. Rock bass sportfishing effort, catch, harvest, and length distribution, Manson Lake, during 2006-07.

BLACK CRAPPIE

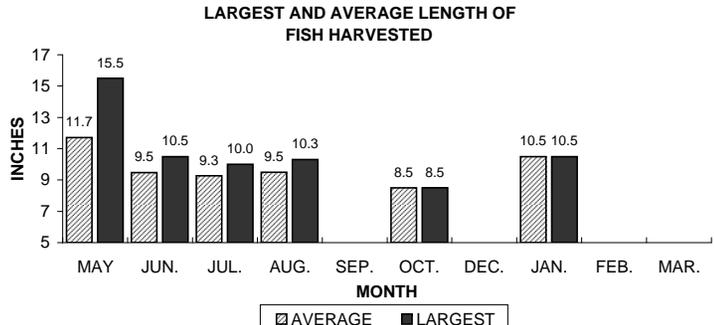
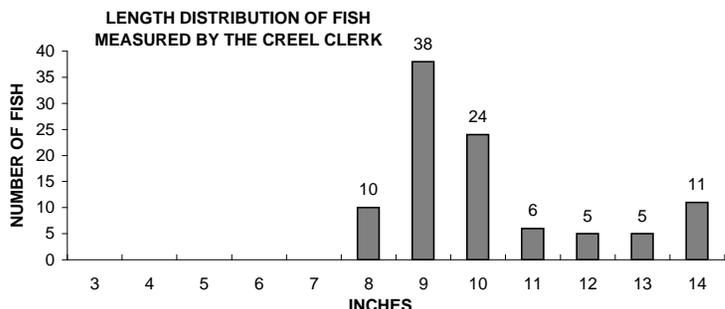
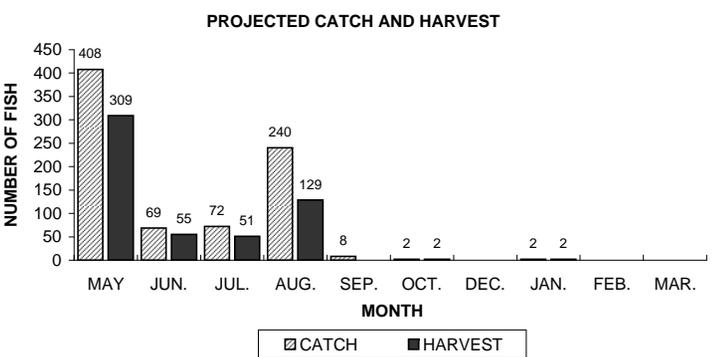
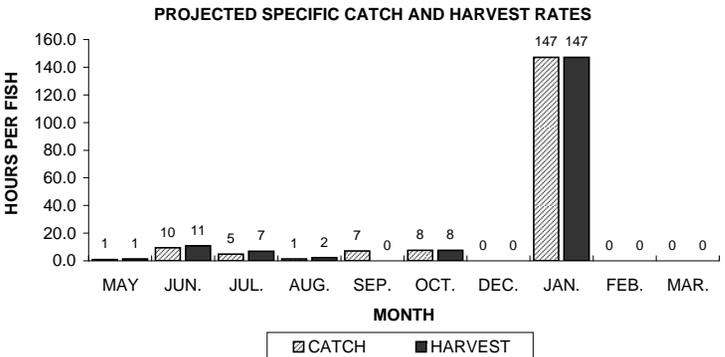
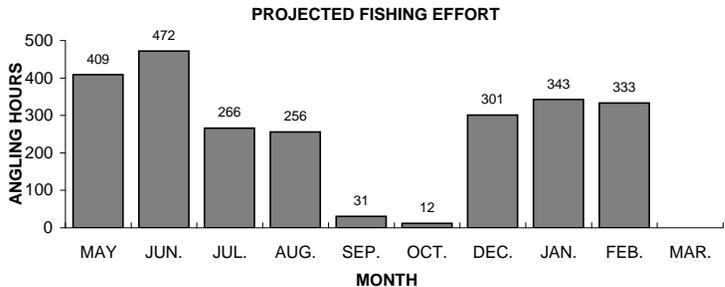
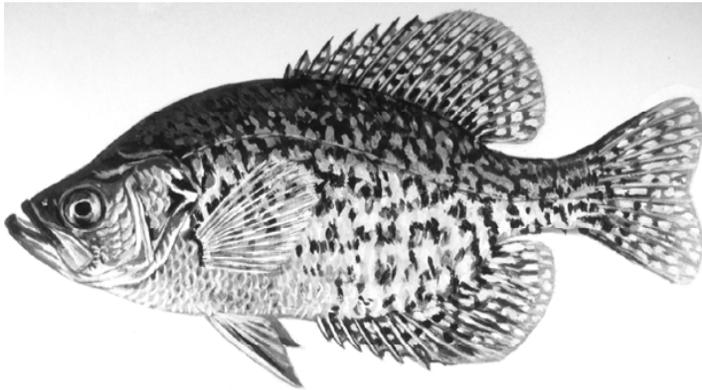


Figure 10. Black crappie sportfishing effort, catch, harvest, and length distribution, Manson Lake, during 2006-07.