

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

MOEN CHAIN

SECOND & THIRD LAKES

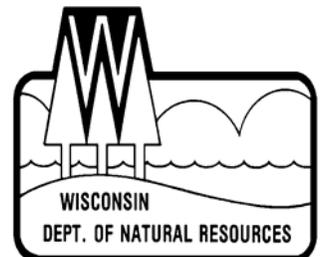
ONEIDA COUNTY

2007-08



Treaty Fisheries Publication

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Wisconsin DNR
Woodruff, Wisconsin**



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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.

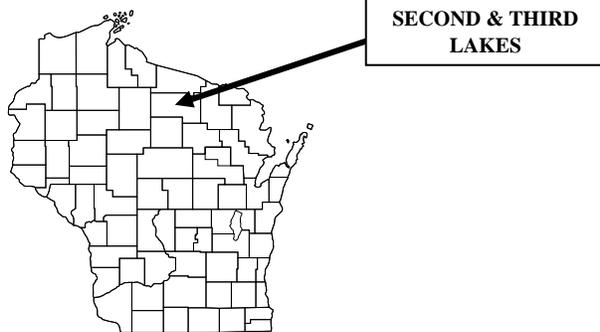
You may have encountered a DNR creel survey clerk on a recent fishing trip. We appreciate your cooperation during an interview. The survey only takes a moment of your time and it gives the Department valuable information needed for management of the fishery.

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 Second & Third Lakes; discussion of results of the survey; and detailed summaries, by species of fishing effort, catch and harvest.

GENERAL LAKE INFORMATION



Location

Second & Third Lakes are located in Oneida County east of the town of Rhinelander and are part of the Moen's Chain.

Physical Characteristics

Second & Third Lakes is a combined 213-acres. Both are drainage lakes with low fertility with medium brown water of low transparency. Littoral substrate consists primarily of Muck, with lesser amounts of sand, gravel and rock.

Seasons Surveyed

The period referred to in this report ran from May 5, 2007 through March 2, 2008. 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 Second & Third Lakes was around April 14, 2007. Spring, summer and fall weather was normal. Fishable-ice formed on Second & Third Lakes in early December.

Sportfishing Regulations

The following seasons, daily bag limits, and length limits were in place on Second & Third Lakes during the 2007-fishing season:

Species	Season	Bag Limit	Min. Size
Largemouth Bass & Smallmouth Bass	5/05-6/15	Catch & Release	
Musky	6/16-03/02	5	14"
Northern Pike	5/26-11/30	1	34"
Walleye	5/05-3/02	5	none
Panfish	5/05-3/02	3*	1 > 14"
Rock Bass	all year	25	none
	all year	none	none

* The statewide bag limit was 5 fish, but due to tribal declarations it was reduced on Second & Third Lakes.

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 4,172 hours or 19.5 hours per acre fishing Second & Third Lakes during the 2007 season (Table 1). That was lower than the statewide average of 33.6 hours per acre and the Oneida County average of 38.7 hours per acre. June was the most heavily fished month (3.9 hours per acre). Fishing effort was lightest in December (0.2 hours per acre).

SPECIES INFORMATION

Walleye (Table 2, Figure 1)

Anglers spent 156 hours targeting walleye. Walleye fishing effort was greatest in June (38 hours).

Catch was 4 fish and harvest was 4 fish.

Northern Pike (Table 2, Figure 2)

Fishing effort directed at northern pike was 342 hours during the 2007 season. Northern pike fishing effort was greatest in July (194 hours).

Catch was 253 northern pike and harvest was 6 fish. Anglers fished 54.4 hours to catch a northern pike during 2006.

The only pike measured was a 27.8-inch fish harvested in July.

Muskellunge (Table 2, Figure 3)

Anglers spent 2,080 hours targeting muskellunge during the 2007 season. Muskellunge fishing effort was greatest in October (662 hours).

Catch was 205 fish and harvest was 0 fish. Highest catch (185 fish) occurred in October. Anglers fished 10.3 hours to catch a muskellunge during 2007.

Smallmouth Bass (Table 2, Figure 4)

Smallmouth bass were a minor part of Second & Third Lakes fishery. Angler effort accounted for less than one percent of the total.

The total catch of smallmouth bass was 19.

Largemouth Bass (Table 2, Figure 5)

Largemouth bass directed effort was only 59 hours during the 2007 season.

Anglers caught 95 and harvested 10 largemouth bass during 2007.

Mean length of harvested fish measured was 15.8 inches.

Panfish (Table 2, Figures 6-10)

Black crappie was the most sought after panfish species with 1,387 hours of directed effort during the 2007 season. Total catch was 3,141 with a harvest of 1000 fish. The mean length of black crappie harvested was 9.5 inches.

Bluegill was the second most sought after panfish during the survey. Fishing effort directed at bluegill was 562 hours during the 2007 season. Catch was 1,396 fish with a harvest of 100 fish. The mean length of harvested bluegill was 7.4 inches.

Anglers caught 1,818 and harvested 160 yellow perch. The mean length of harvested yellow perch was 8.2 inches.

Other panfish caught were rock bass (25 fish) and pumpkinseed (164 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, Jeff Blonski, and Jason Halverson. Marty Kiepke was the creel clerk on Second & Third Lakes 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.

This creel survey report was reviewed by Mike Coshun, John Kubisiak 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, Second & Third Lakes, 2007-08 season.

Month	Total Angler Hours	Total Angler Hours/Acre	Oneida County Average Hours/Acre	Statewide Average Hours/Acre
May	734	3.4	5.6	5.8
June	842	3.9	7.6	6.1
July	745	3.5	8.7	6.4
August	757	3.5	6.5	5.4
September	246	1.1	3.9	3.8
October	417	1.9	1.8	1.6
December	39	0.2	1.3	1.7
January	198	0.9	1.6	1.5
February	167	0.8	1.5	1.3
March	29	0.1	0.2	**
*Summer Total	3741	17.5	34.1	29.1
*Winter Total	432	2.0	4.6	4.5
Grand Total	4172	19.5	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 Second & Third Lakes 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 Second & Third Lakes 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 Second & Third Lakes to other lakes statewide.

Table 2. Creel survey synopses, Second & Third Lake, 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	156	3.01%	4		4		17.5
Northern Pike	342	6.60%	253	54.3	6	54.3	27.8
Muskellunge	2080	40.14%	205	10.3	0		
Smallmouth Bass	4	0.08%	19	1.0	0		
Largemouth Bass	59	1.14%	95	2.8	10	5.6	15.8
Yellow Perch	549	10.59%	1818	1.1	160	4.3	8.2
Bluegill	562	10.85%	1396	0.6	100	7.5	7.4
Pumpkinseed	43	0.83%	164	0.7	27	1.6	7.8
Rock Bass	0	0.00%	25		0		
Black Crappie	1387	26.77%	3141	0.4	1000	1.4	9.5

* 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

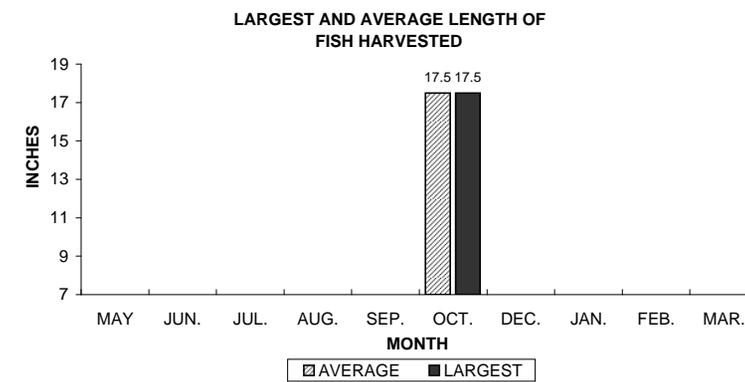
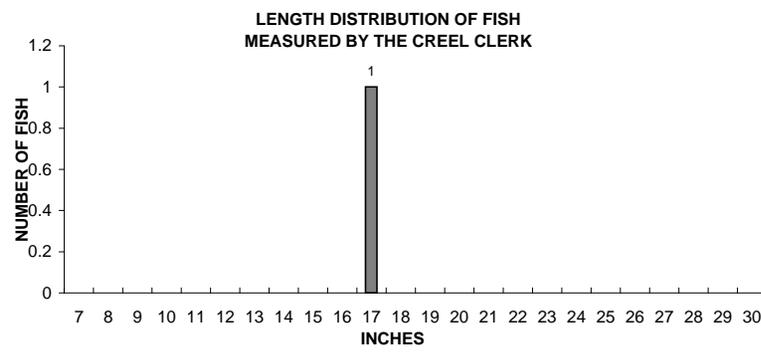
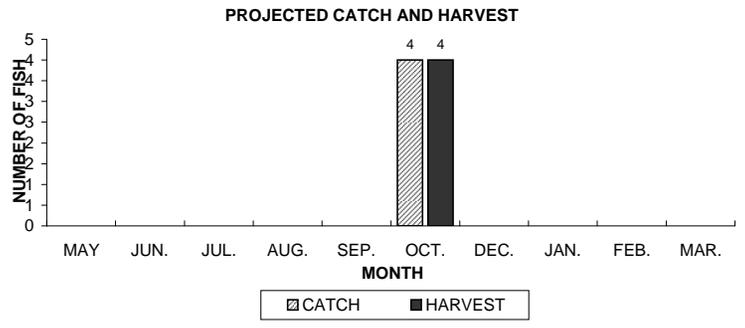
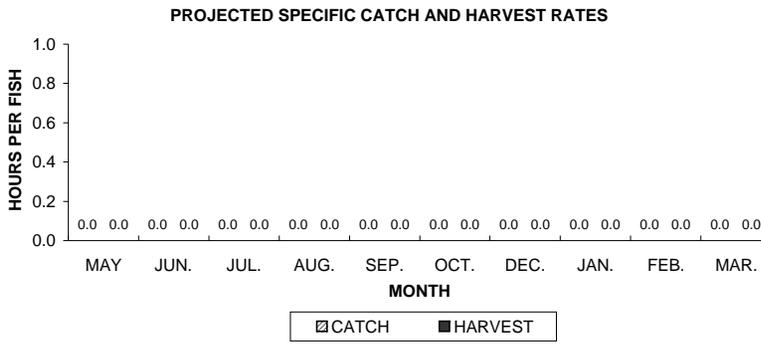
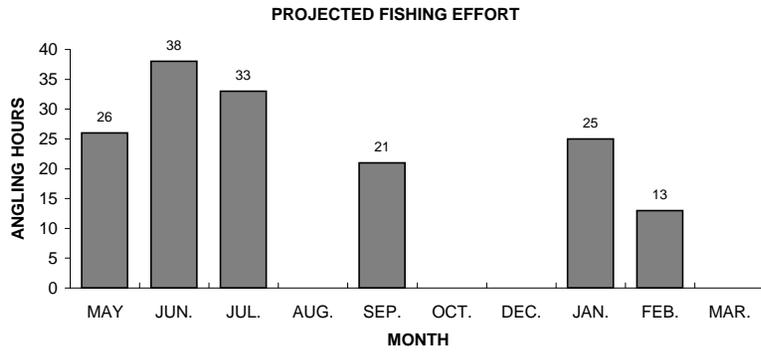
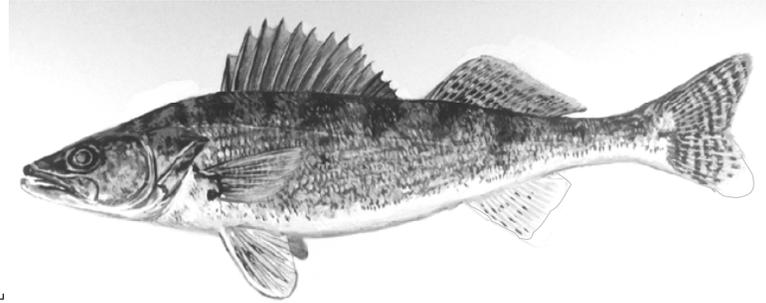


Figure 1. Walleye sportfishing effort, catch, harvest, and length distribution, Second and Third Lakes, during 2007-08.

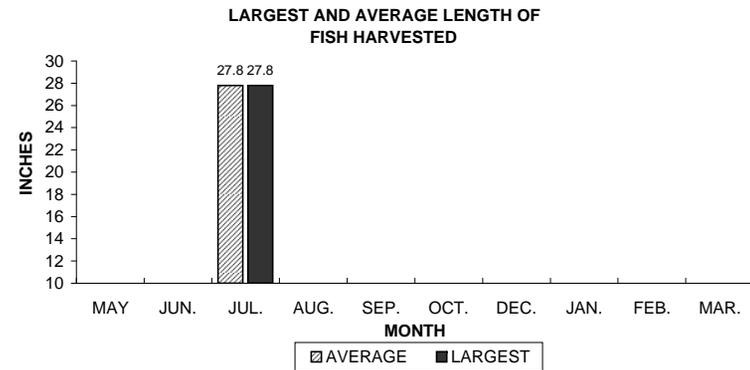
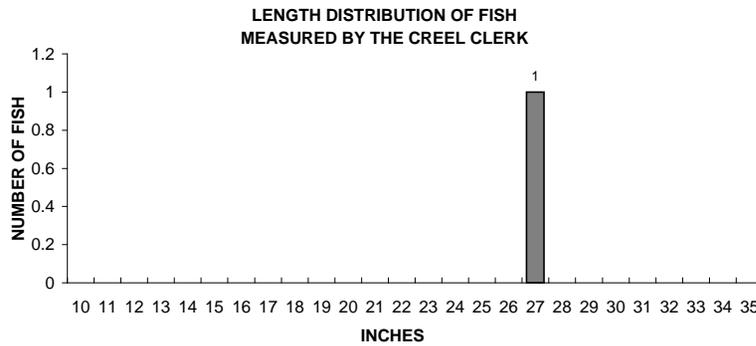
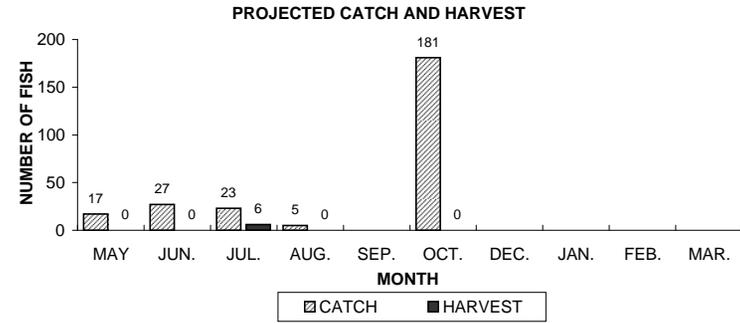
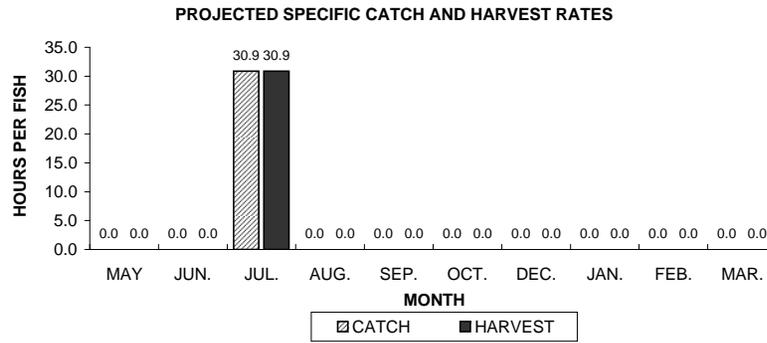
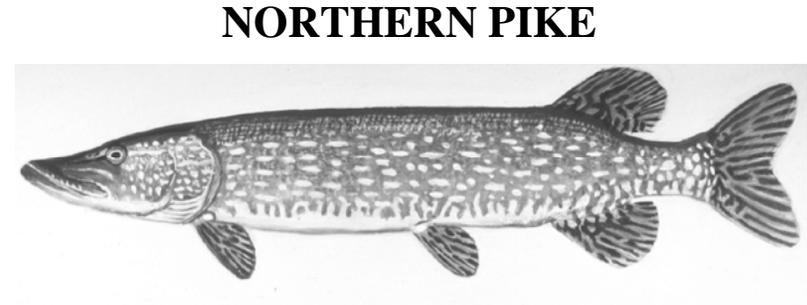
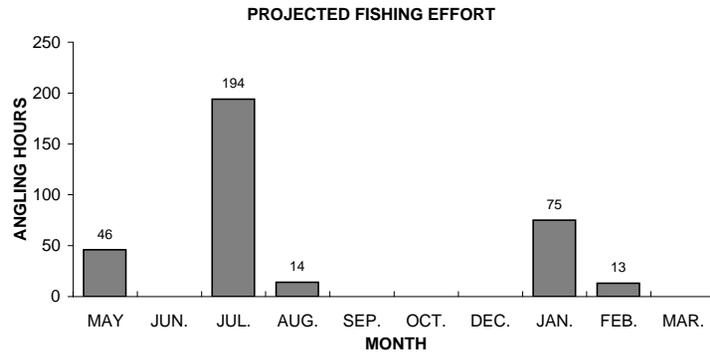


Figure 2. Northern pike sportfishing effort, catch, harvest, and length distribution, Second and Third Lakes, during 2007-08.

MUSKELLUNGE

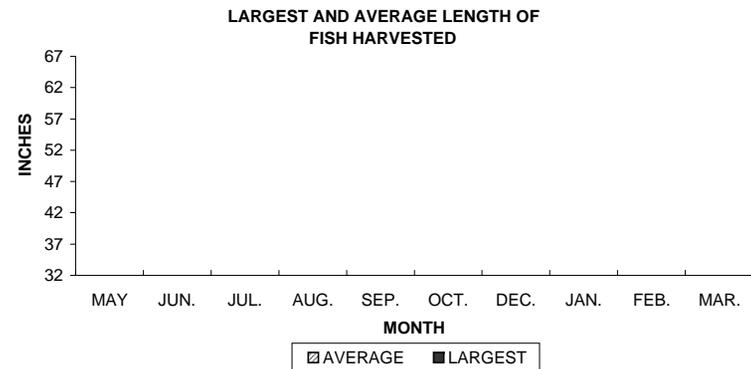
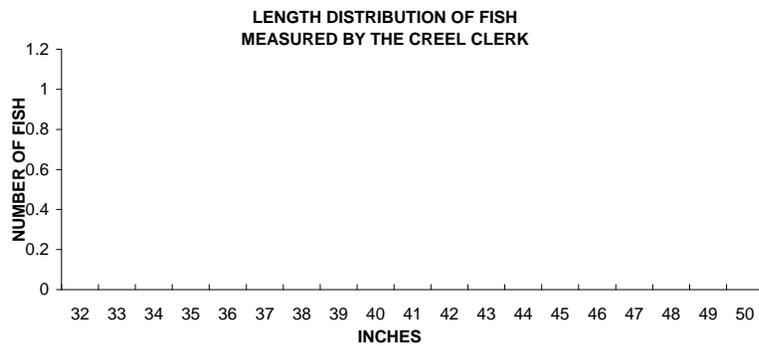
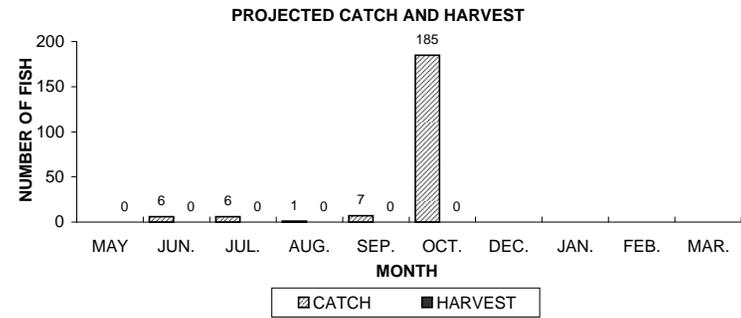
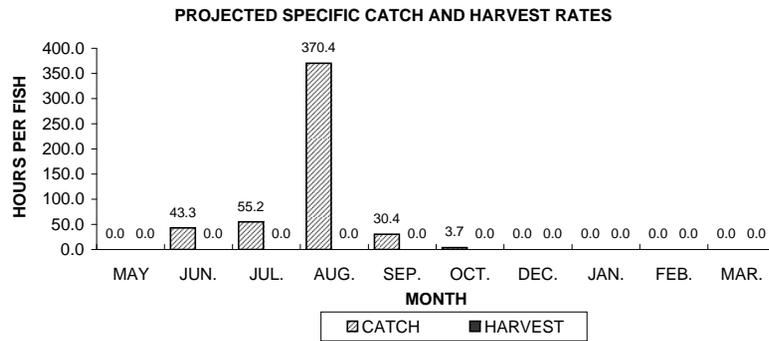
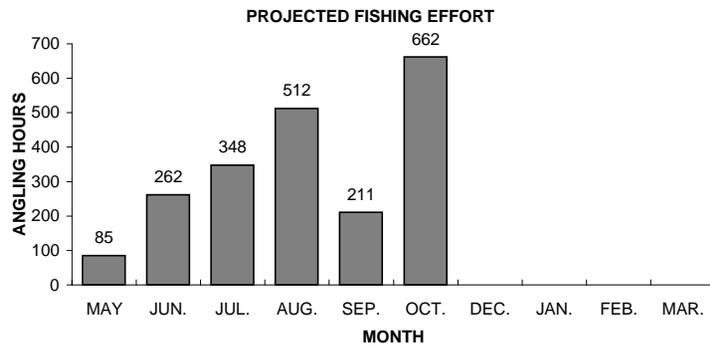
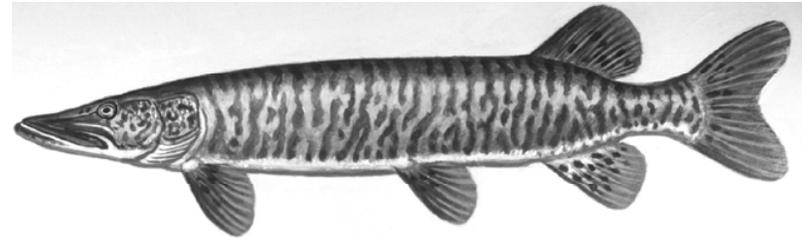


Figure 3. Muskellunge sportfishing effort, catch, harvest, and length distribution, Second and Third Lakes, during 2007-08.

SMALLMOUTH BASS

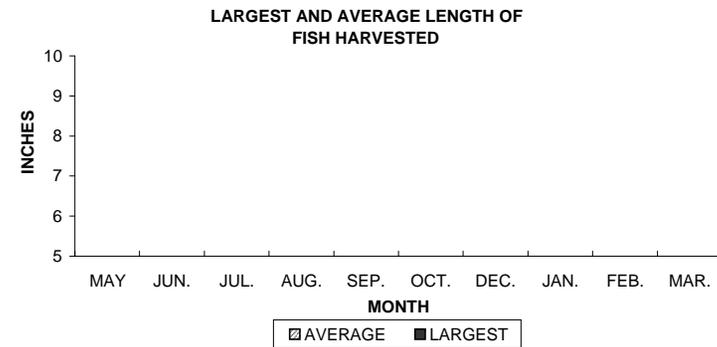
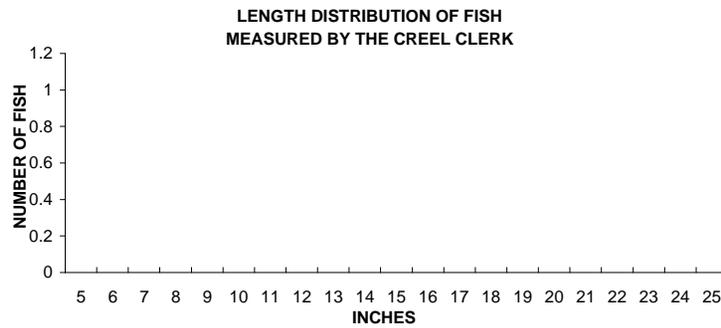
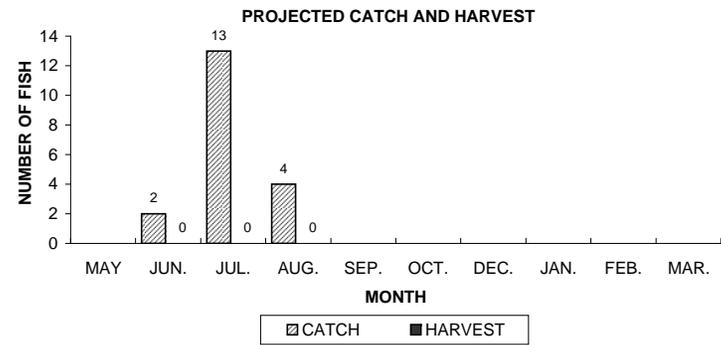
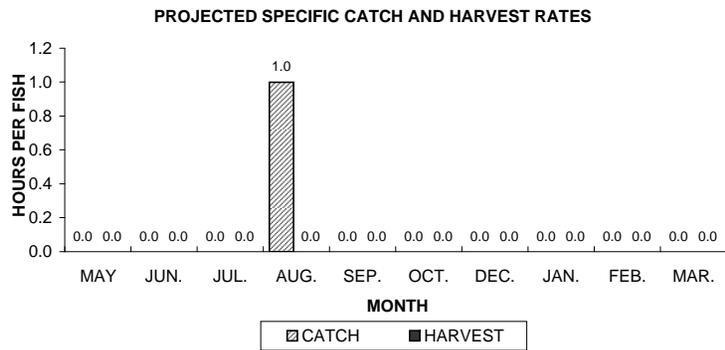
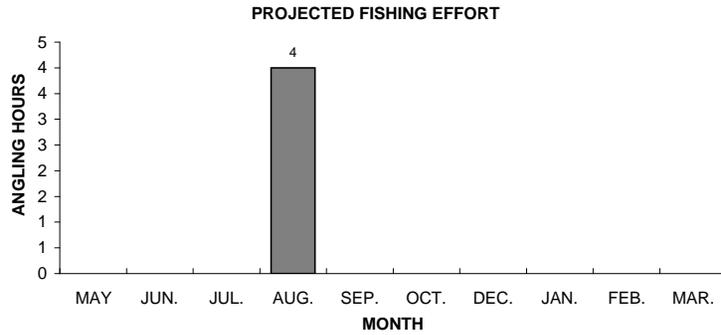
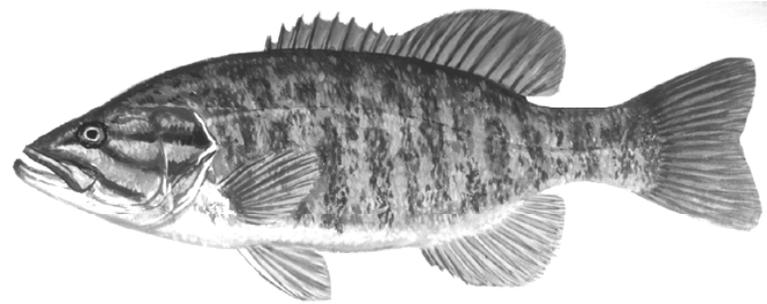


Figure 4. Smallmouth bass sportfishing effort, catch, harvest, and length distribution, Second and Third Lakes, during 2007-08.

LARGEMOUTH BASS

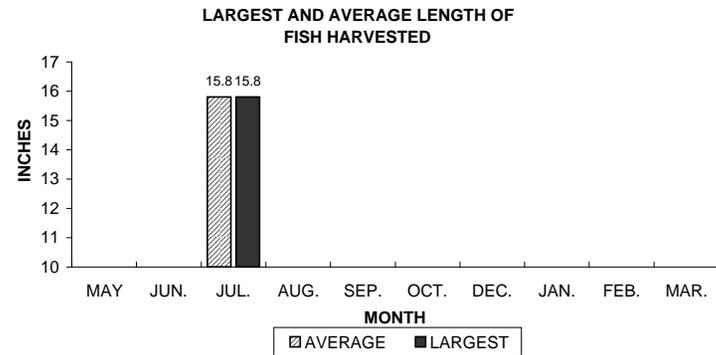
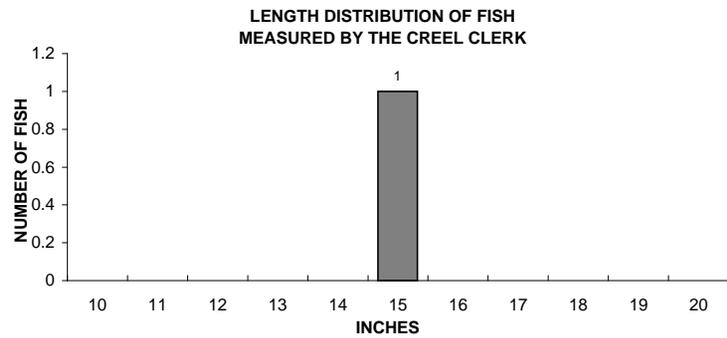
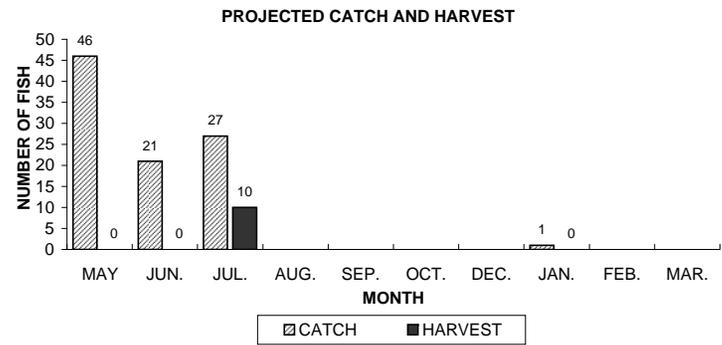
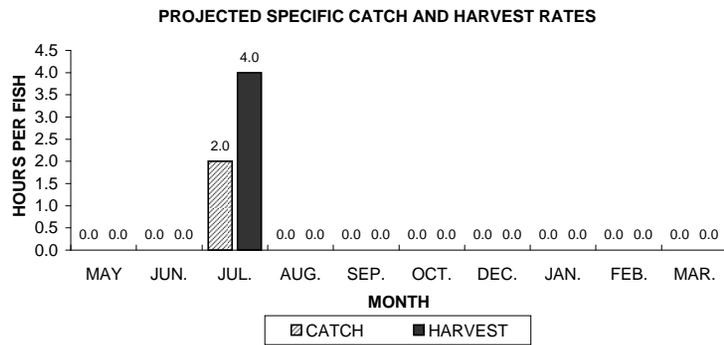
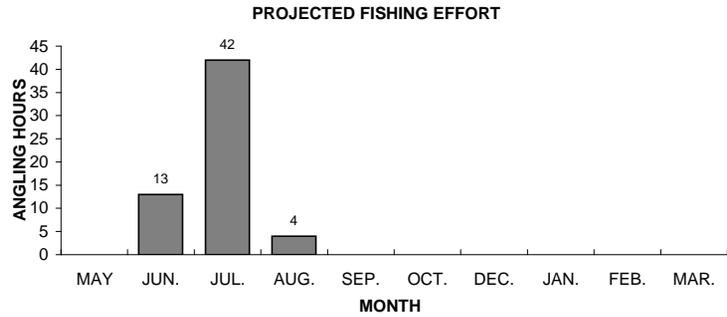
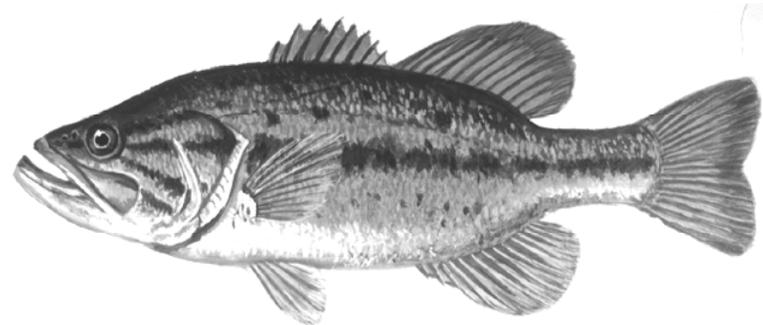


Figure 5. Largemouth bass sportfishing effort, catch, harvest, and length distribution, Second and Third Lakes, during 2007-08.

YELLOW PERCH

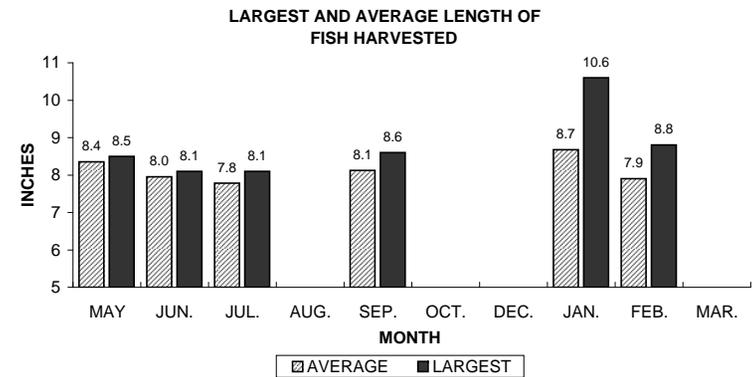
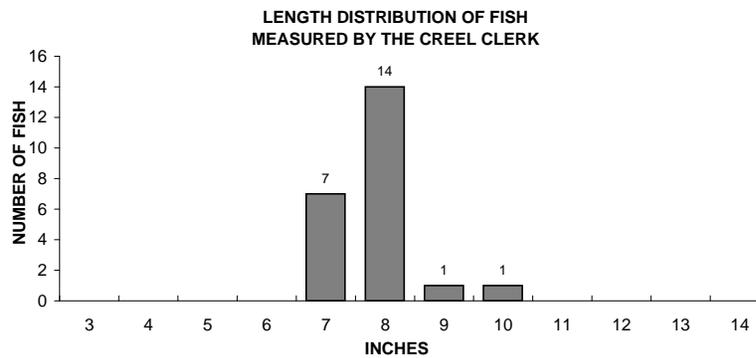
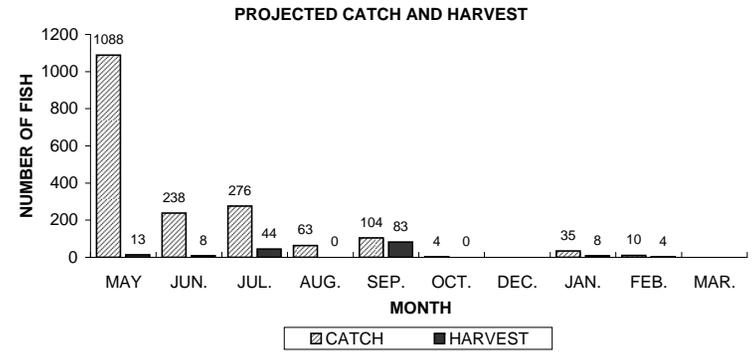
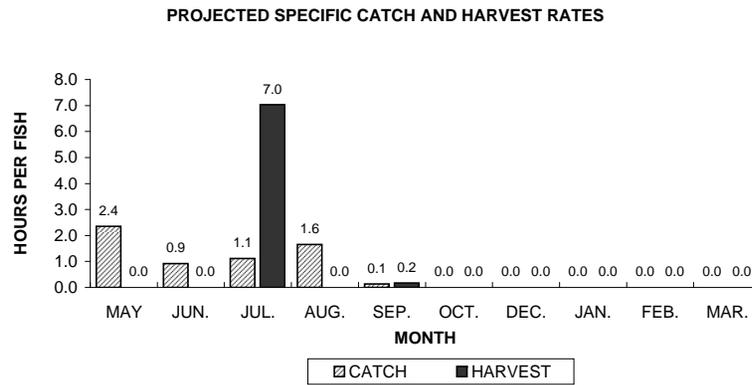
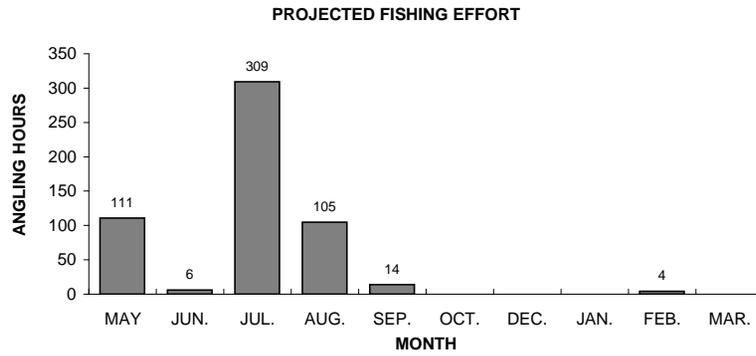
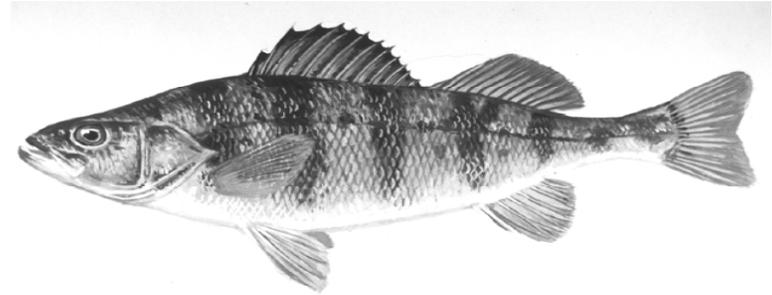


Figure 6. Yellow perch sportfishing effort, catch, harvest, and length distribution, Second and Third Lakes, during 2007-08.

BLUEGILL

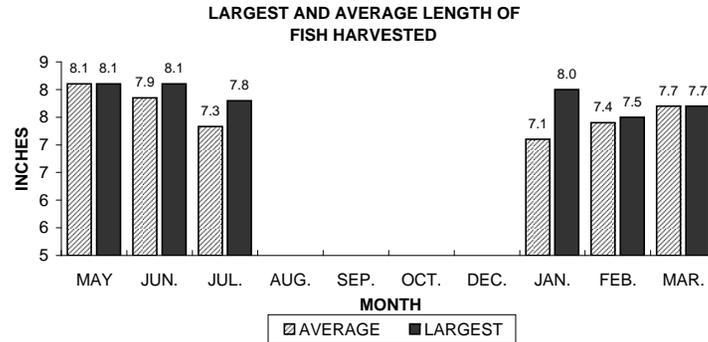
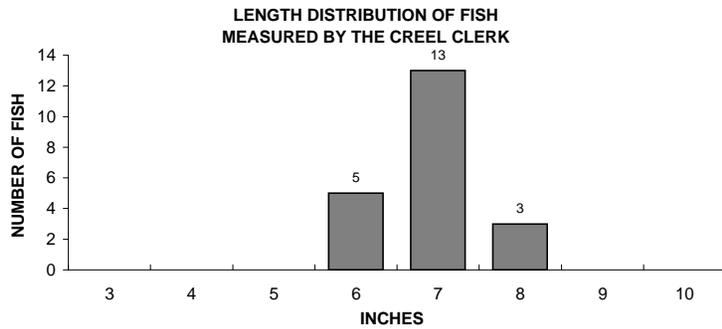
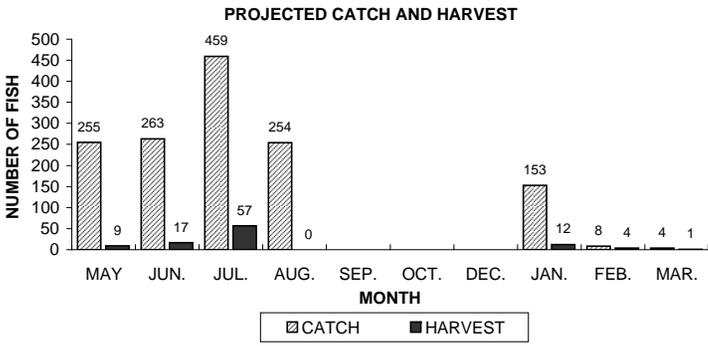
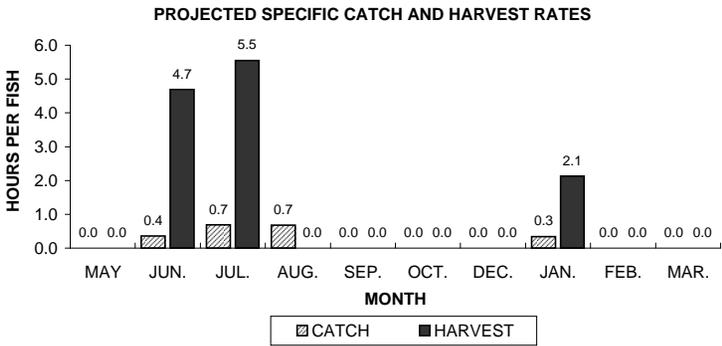
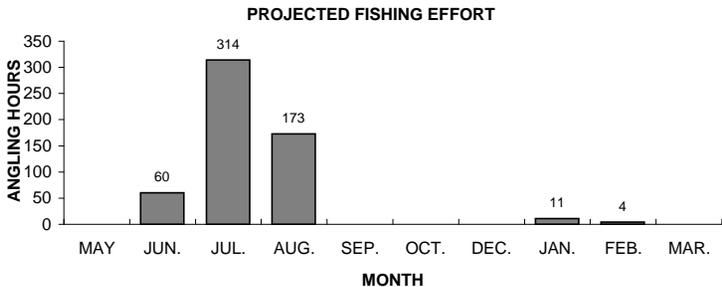
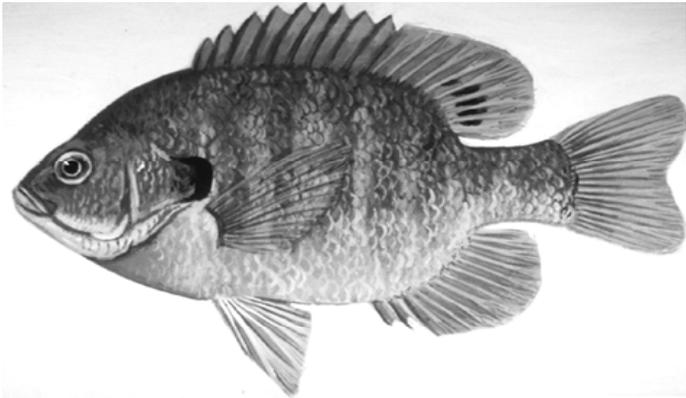


Figure 7. Bluegill sportfishing effort, catch, harvest, and length distribution, Second and Third Lakes, during 2007-08.

PUMPKINSEED

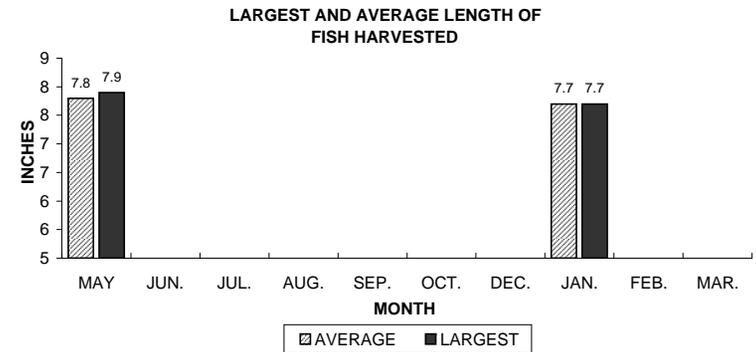
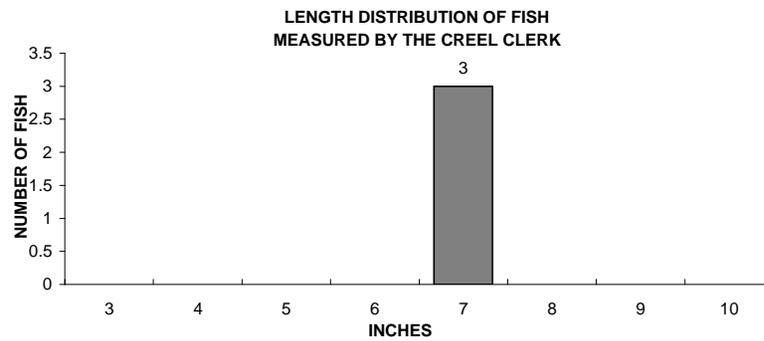
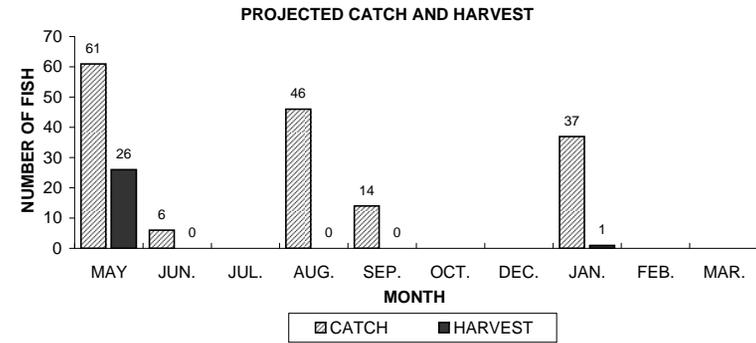
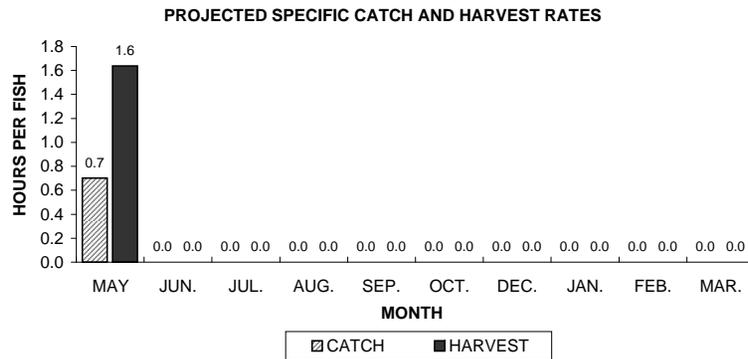
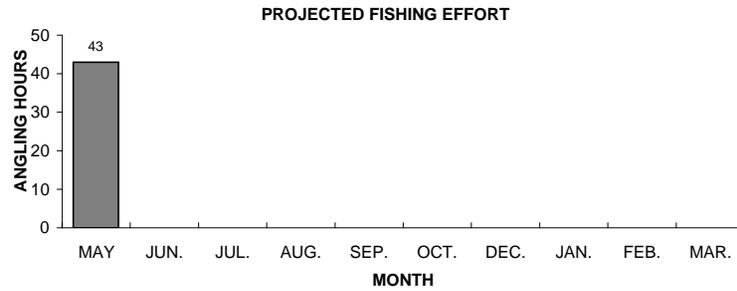
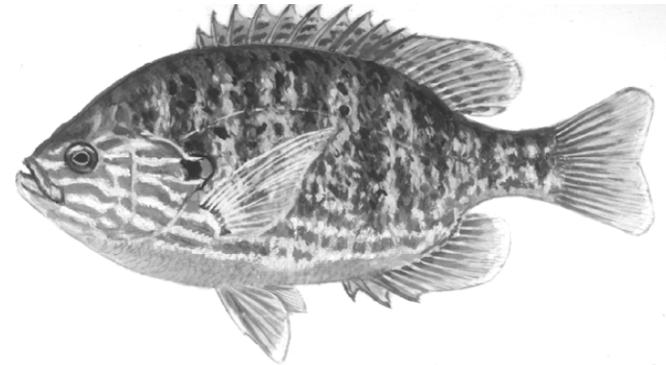


Figure 8. Pumpkinseed sportfishing effort, catch, harvest, and length distribution, Second and Third Lakes, during 2007-08.

ROCK BASS

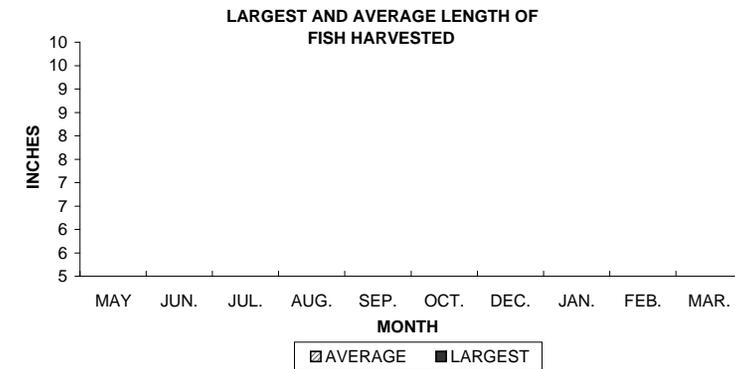
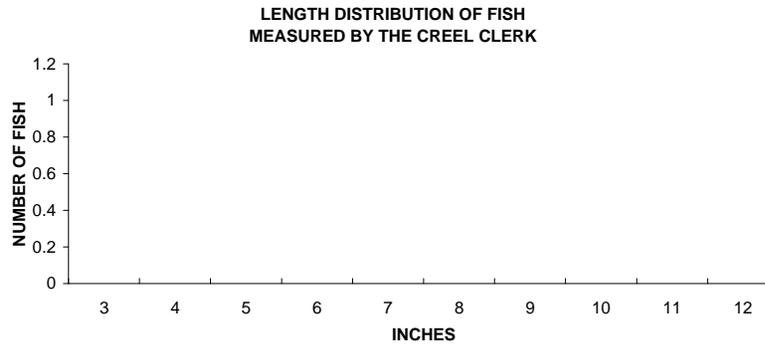
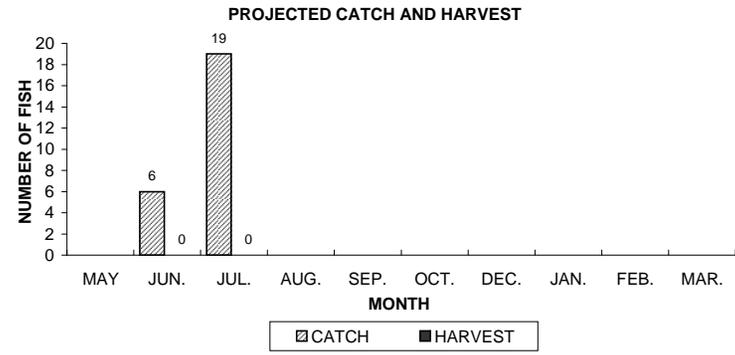
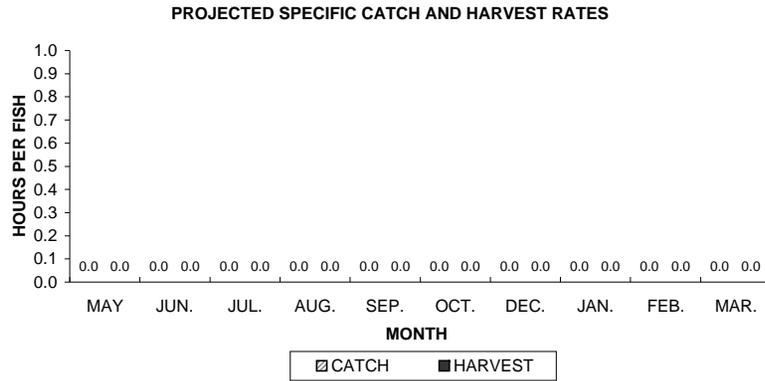
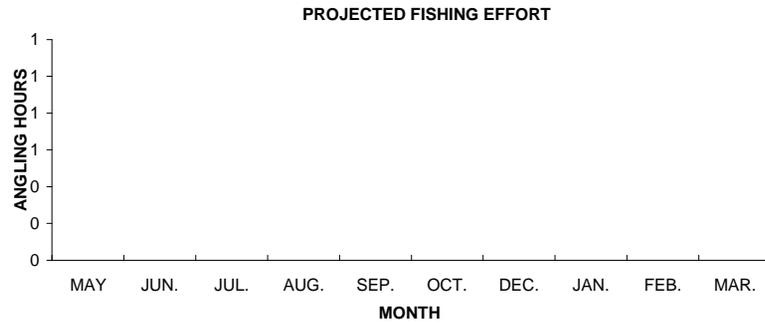
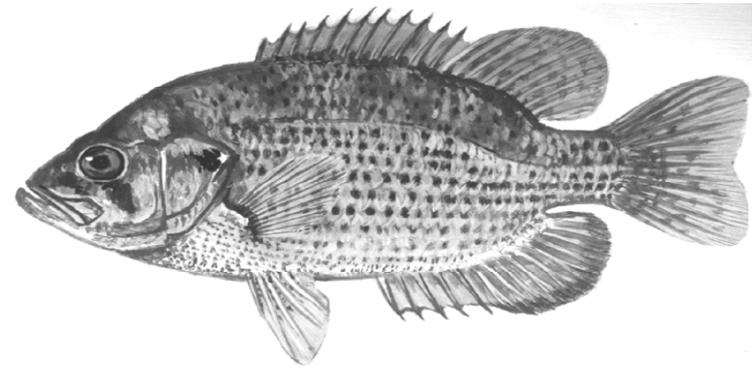


Figure 9. Rock bass sportfishing effort, catch, harvest, and length distribution, Second and Third Lakes, during 2007-08.

BLACK CRAPPIE

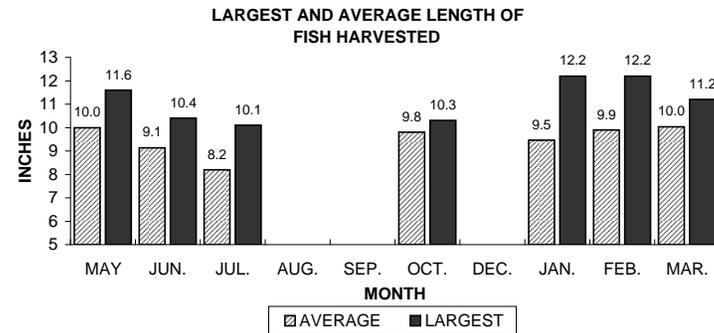
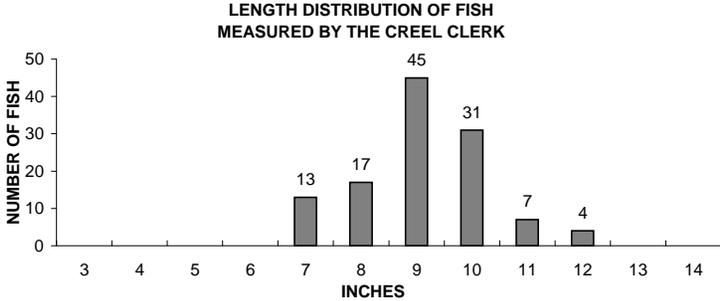
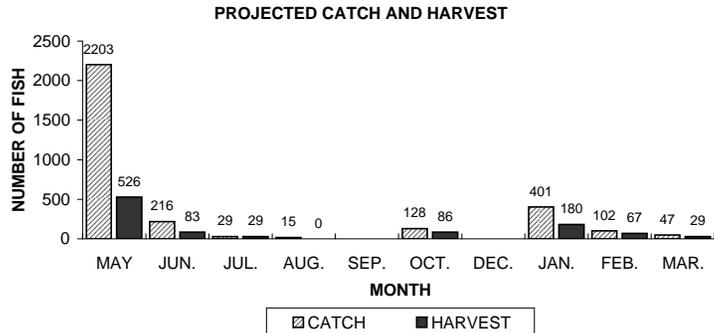
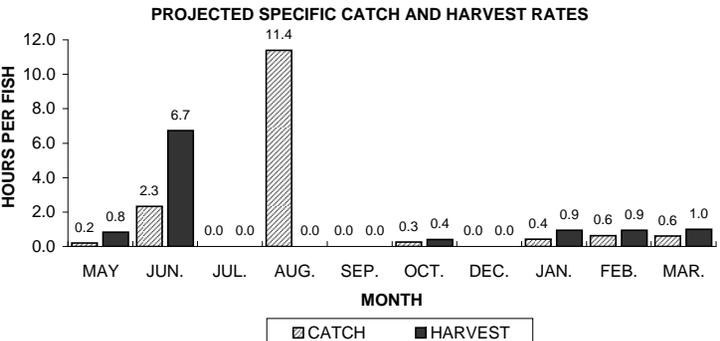
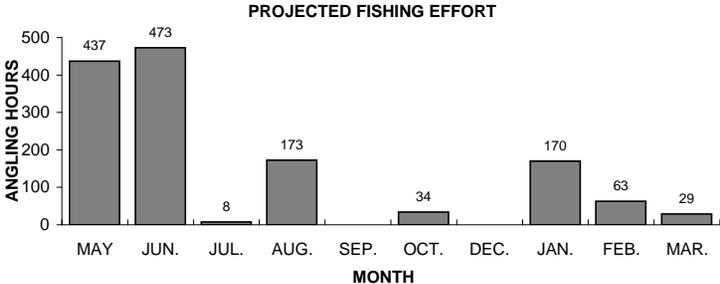
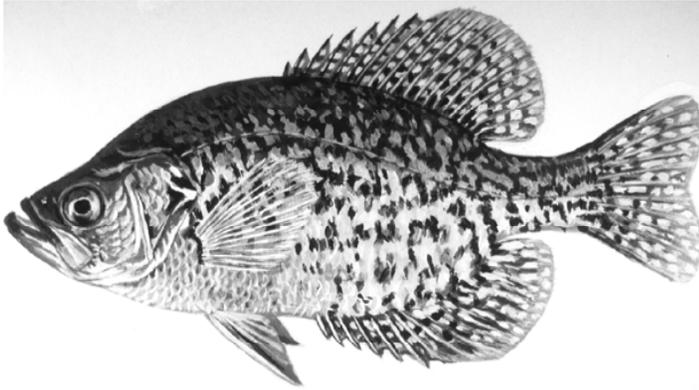


Figure 10. Black crappie sportfishing effort, catch, harvest, and length distribution, Second and Third Lakes, during 2007-08.