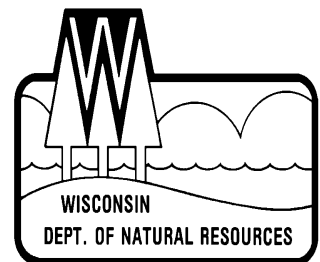


WISCONSIN DEPARTMENT OF NATURAL RESOURCES
CREEL SURVEY REPORT

BIG SAND LAKE
BURNETT COUNTY
2009-2010



Treaty Fisheries Publication
2010



INTRODUCTION

The Wisconsin Department of Natural Resources regularly conducts netting and electrofishing surveys of area lakes and reservoirs to determine what species of fish are present, how many of each there are, and what is the health of these populations. Information is also needed to determine the impact sport anglers are having on fish populations. To gather this information we conduct creel surveys.

A creel survey is a management tool used to measure the fishing activities of the anglers on a body of water. The key word in the last sentence is **SURVEY**. We can not practically interview every angler (census) who fishes on a lake. Creel surveys are designed to have a creel survey clerk on a lake, working random shifts, forty hours each week throughout the fishing season. Each month these shifts cover a sample of all the daylight hours. A computer program is then used to accurately calculate estimates of all angler activity. This data is summarized by month using information collected by the creel survey clerk.

Creel survey clerks travel around their assigned lakes using a boat or snowmobile to count and interview anglers. Typically only anglers that have completed their fishing trip are interviewed. We prefer not to disturb anglers while they are fishing.

You may have encountered one of the department's clerks on a recent fishing trip and were interviewed. It only takes a moment of your time, but it helps us determine quite a lot about the fishery.

This creel survey report will provide you with four types of estimated information for this body of water:

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 in this report are physical information about the lake; discussion of results of the survey; and detailed summaries, by species, of what anglers caught.

Additional copies of this report and those covering other local lakes can be obtained from the Spooner DNR. Written requests should be sent to:

Treaty Fisheries Biologist
WDNR Spooner Office
810 West Maple Street
Spooner WI 54801

GENERAL INFORMATION

Seasons Surveyed

The creel survey started on opening day (5/2) of the 2009 gamefish season and ran through March 7, 2010. The only period not covered by the survey during this time was November 1 through November 30, due to unsafe ice conditions.

Harvest Regulations

The following seasons, daily bag limits, and length limits were in place on this lake in 2009-2010:

Species	Season	Bag Limit	Min. Size
Largemouth Bass	05/02-3/07	5	14"
Smallmouth Bass	05/02-3/07	5	14"
Musky	5/23-11/30	1	40"
Northern Pike	5/02-3/07	5	none
Walleye	5/02-3/07	5	15"
Panfish	all year	25	none

SPECIES CATCH AND HARVEST INFORMATION

Angling information is summarized on a single page for each species. If a page for a particular species is not present in this section it is because no one reported they were fishing for that species and/or none were caught. Each species page has up to five graphs covering the following:

1. ESTIMATED FISHING EFFORT

Total calculated number of hours during each month that anglers spent fishing for this species.

2. ESTIMATED ANGLER 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 this species is reported here.

3. ESTIMATED ANGLER CATCH AND HARVEST

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

4. LENGTH DISTRIBUTION OF HARVESTED FISH MEASURED BY THE CREEL CLERK

All fish of this species that were measured by the clerk during the entire creel survey season.

5. AVERAGE LENGTH AND LARGEST FISH HARVESTED

Average length and the largest fish

of this species harvested each month. Only those fish measured by the creel survey clerk are reported here.

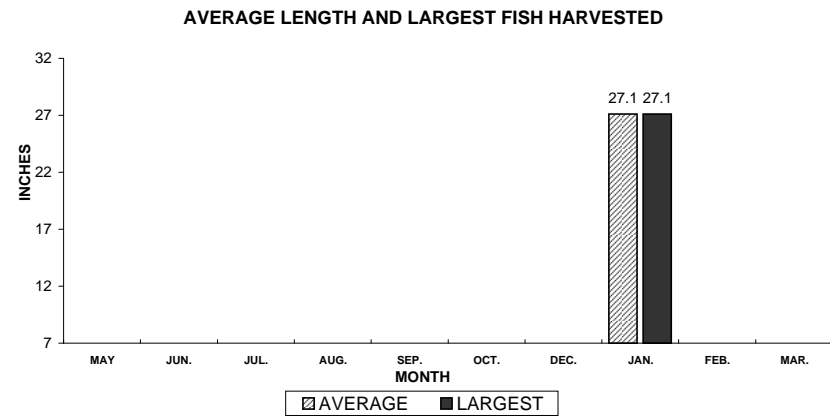
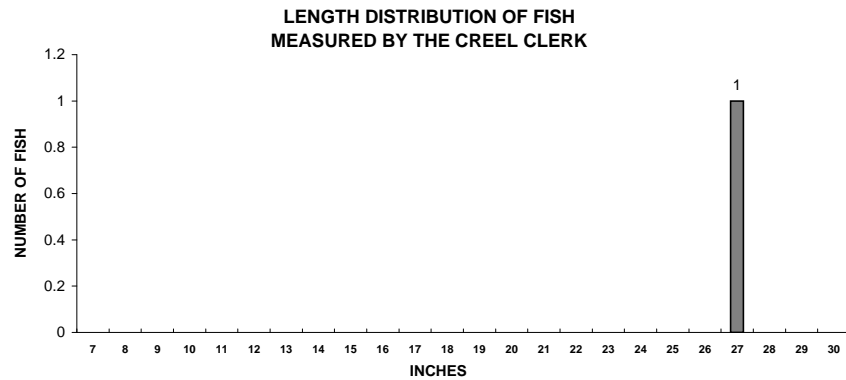
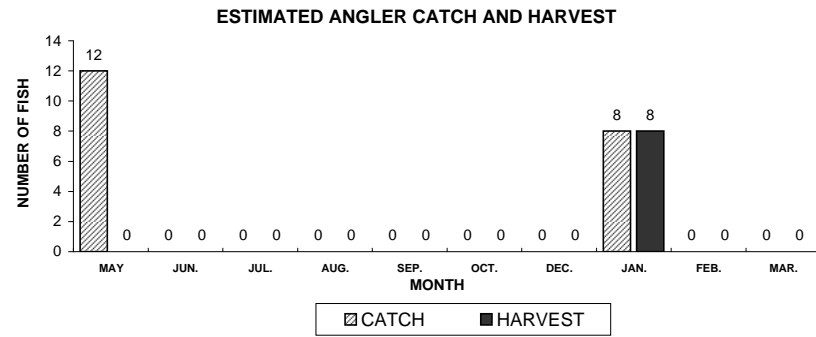
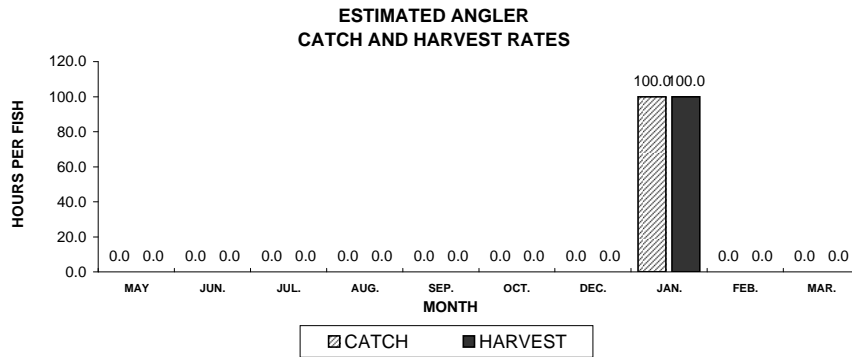
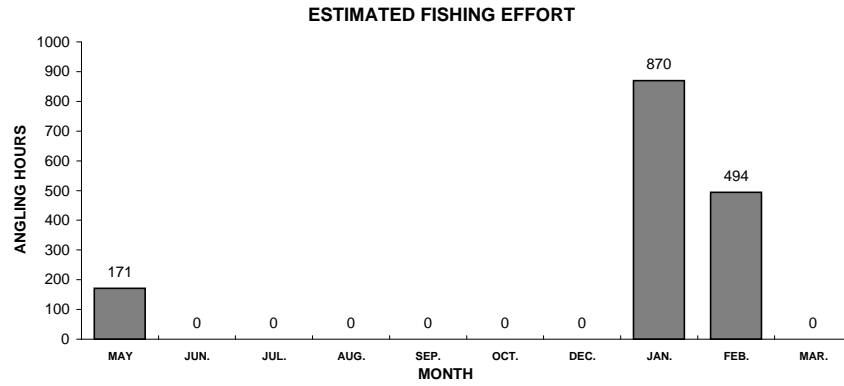
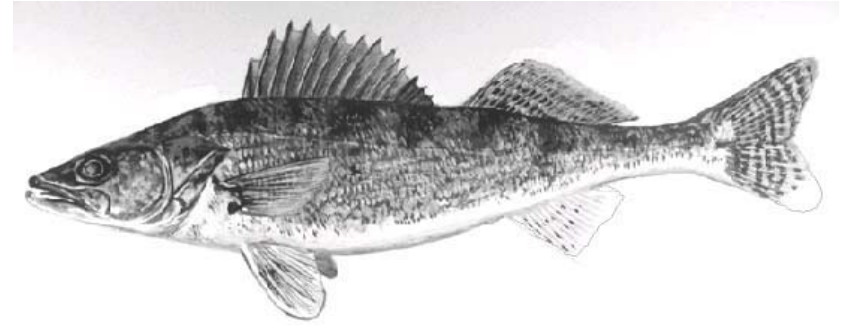
ACKNOWLEDGEMENTS

Abby Medis and Misty Rood were the survey clerks on the lake. They collected the angler interview information that makes this report possible.

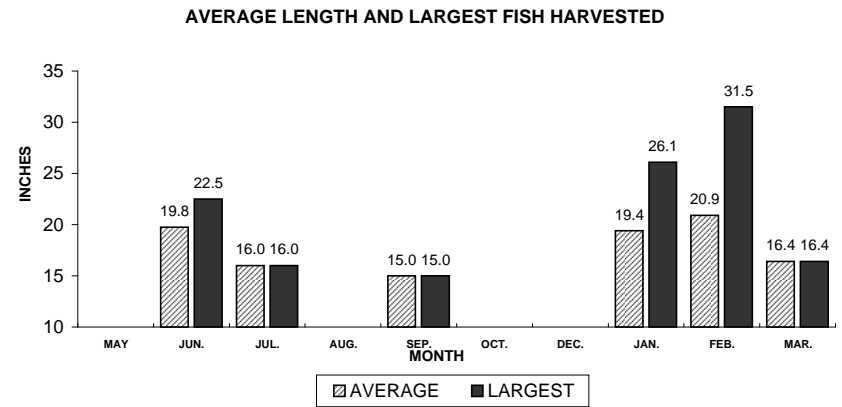
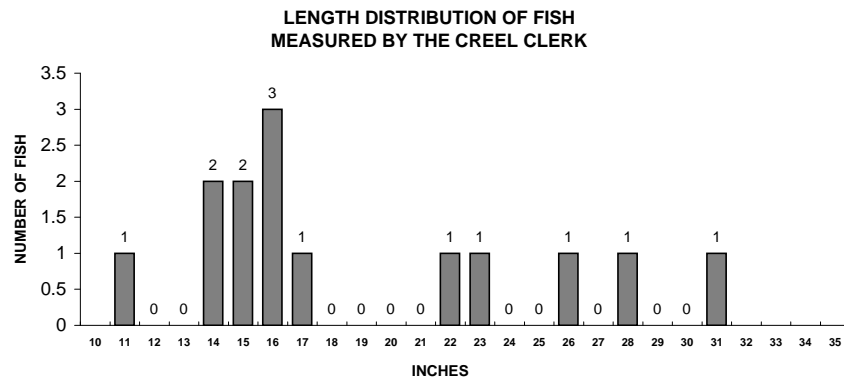
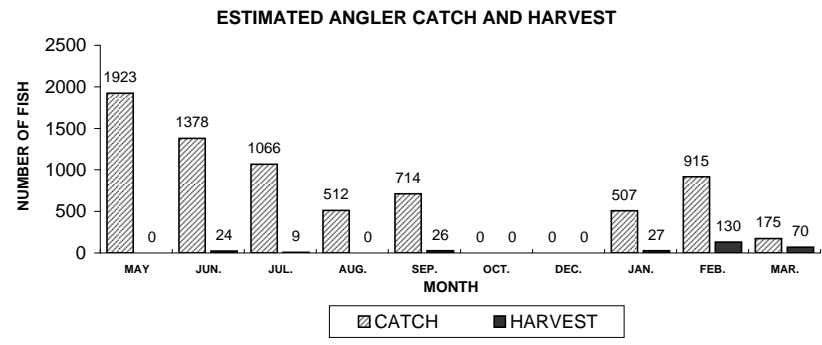
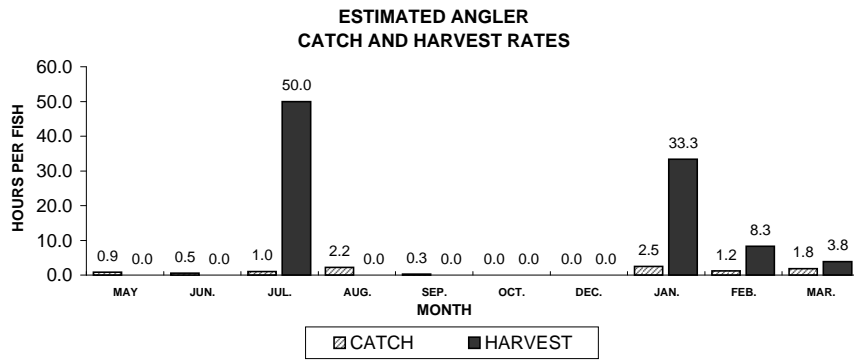
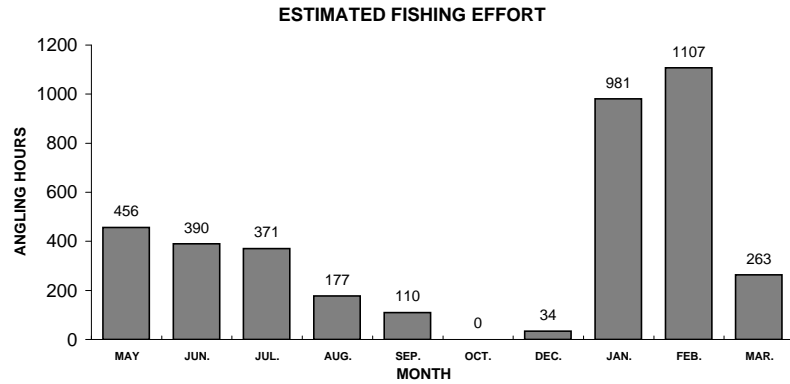
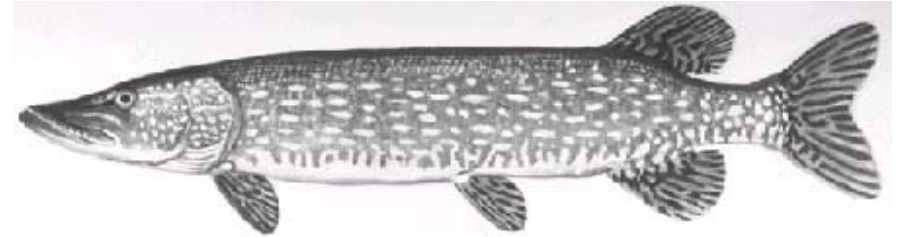
The Department would like to thank Jerry and Pat Tjader. They generously allowed the department to keep a boat and snowmobile at their property during this survey.

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

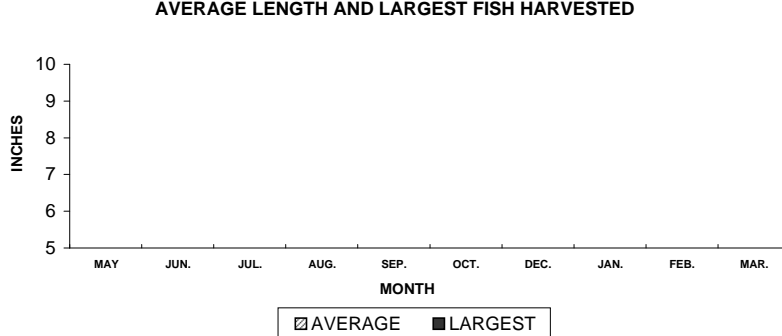
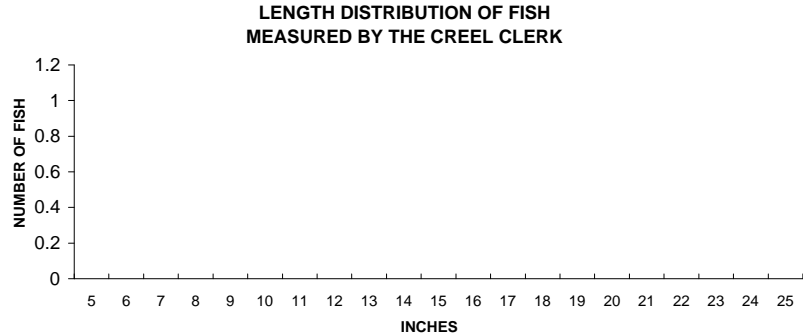
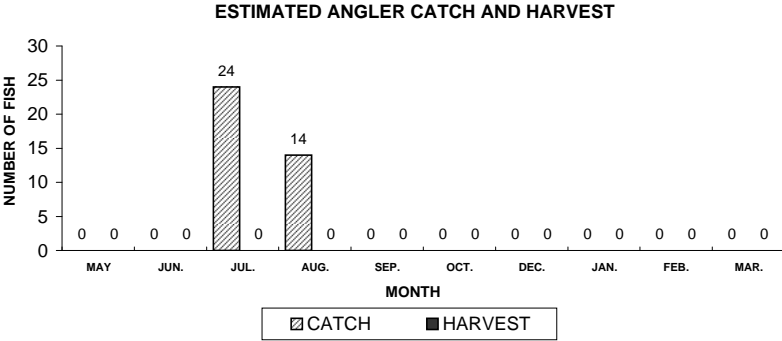
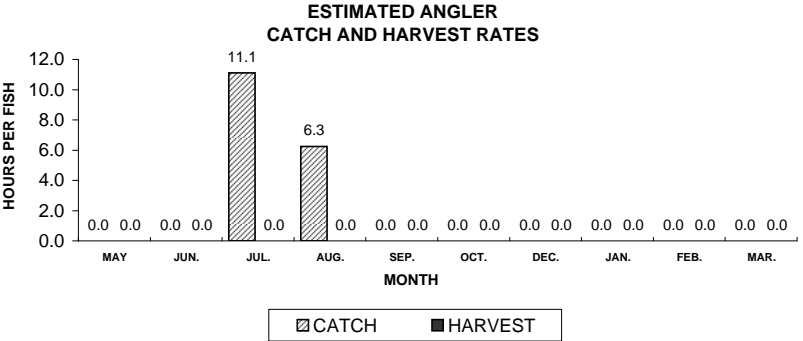
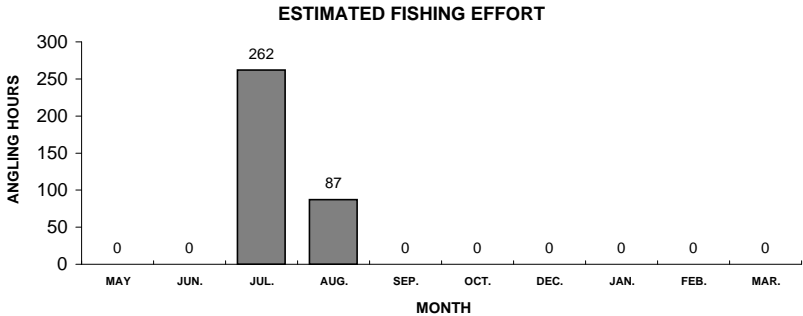
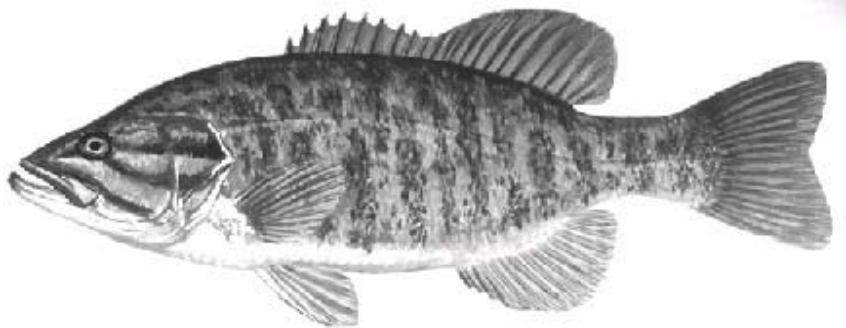
WALLEYE



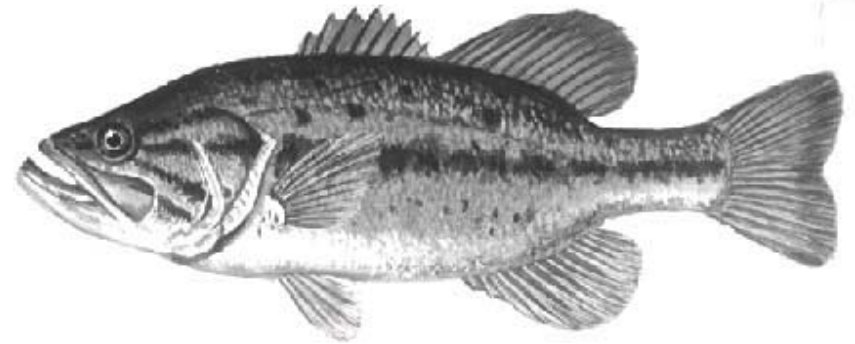
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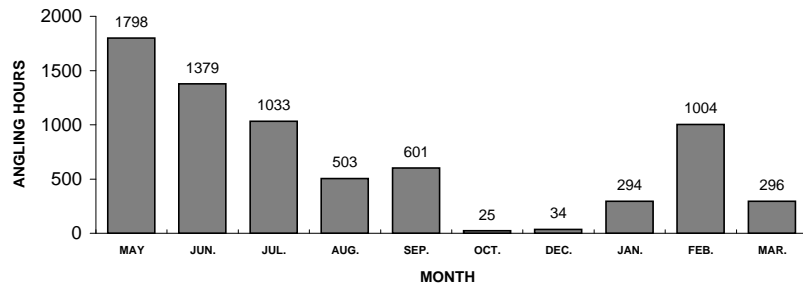
SMALLMOUTH BASS



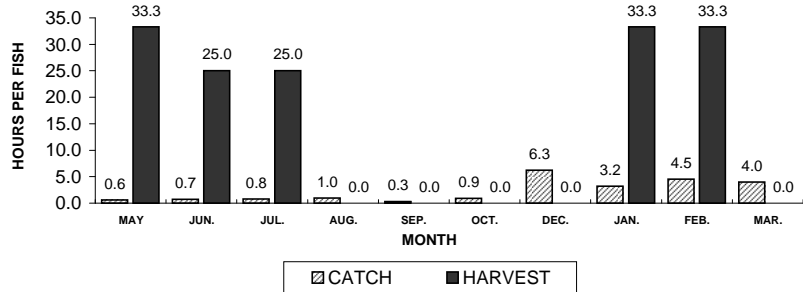
LARGEMOUTH BASS



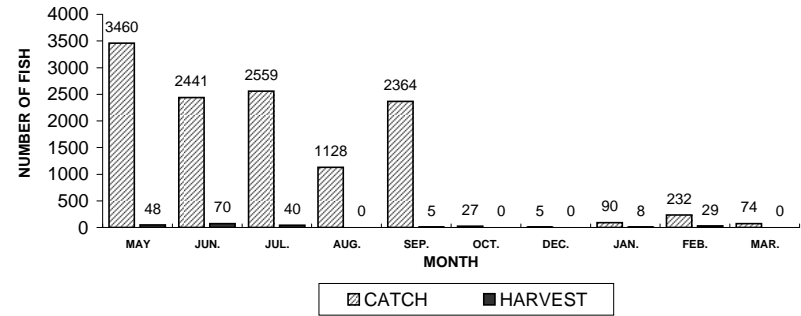
ESTIMATED FISHING EFFORT



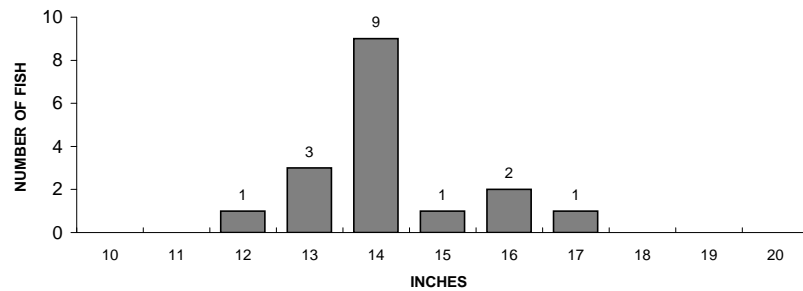
ESTIMATED ANGLER CATCH AND HARVEST RATES



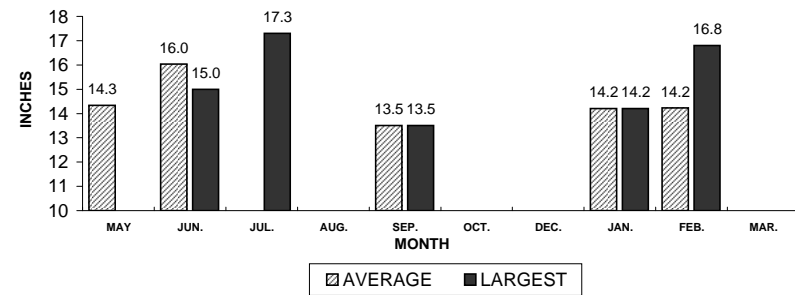
ESTIMATED ANGLER CATCH AND HARVEST



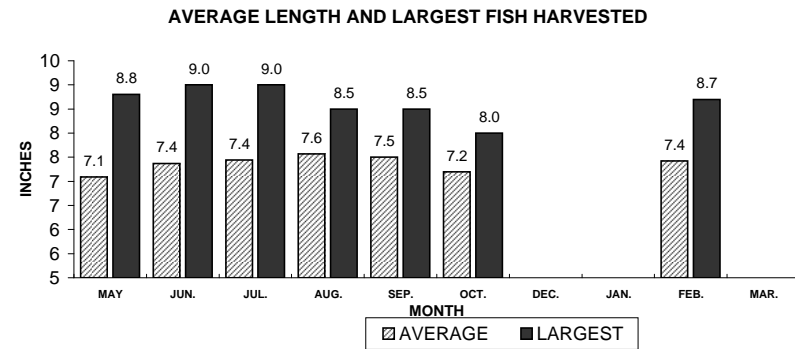
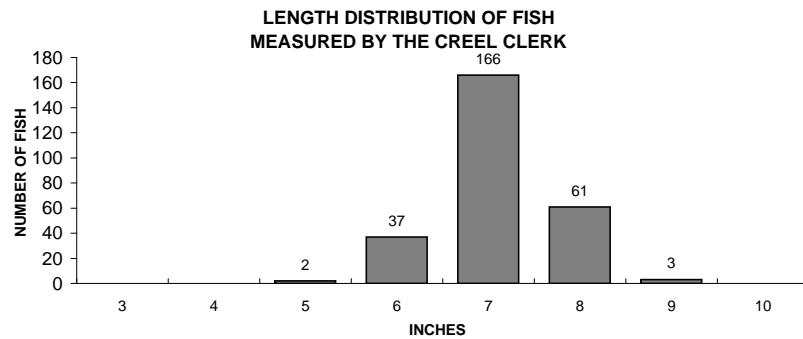
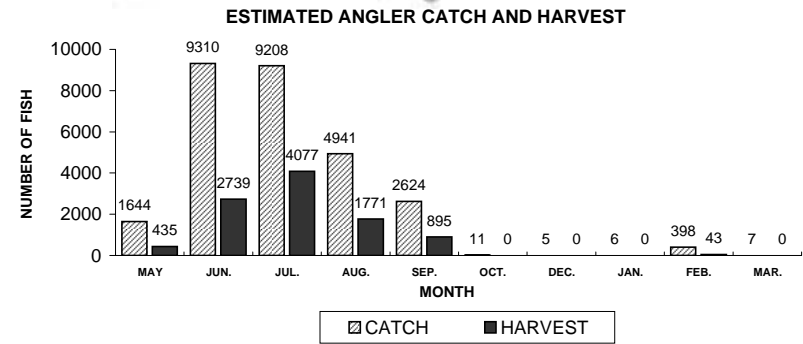
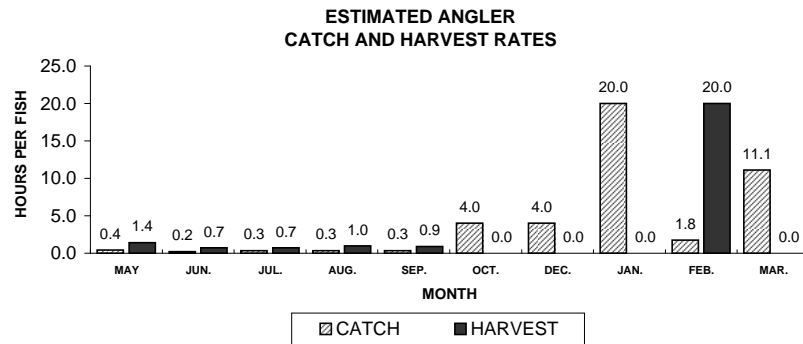
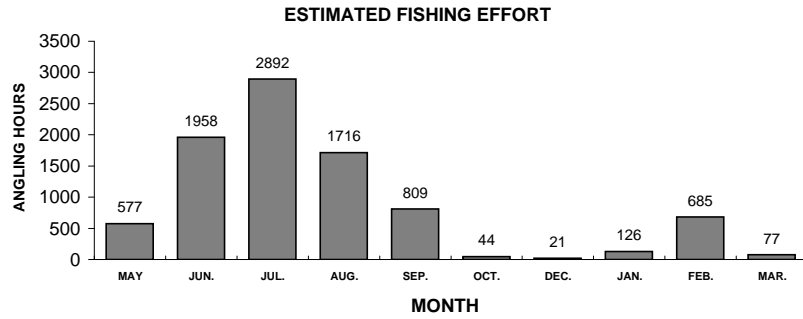
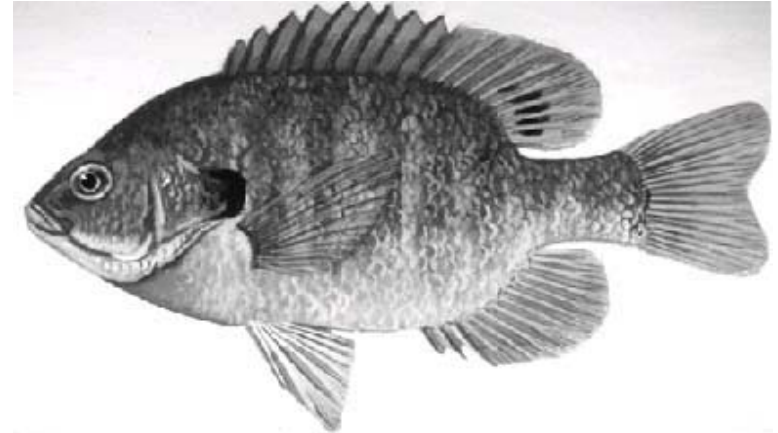
LENGTH DISTRIBUTION OF FISH MEASURED BY THE CREEL CLERK



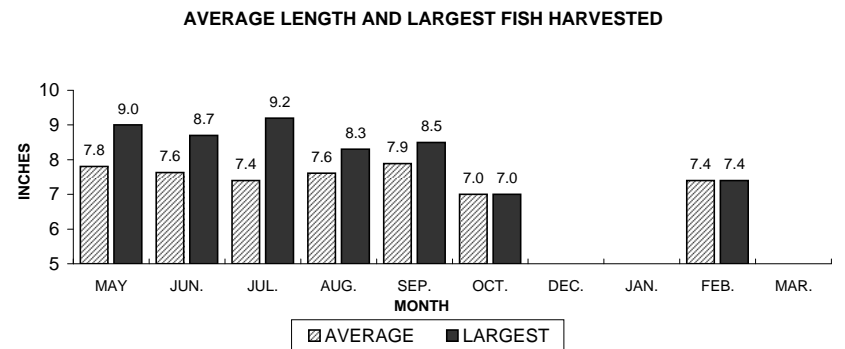
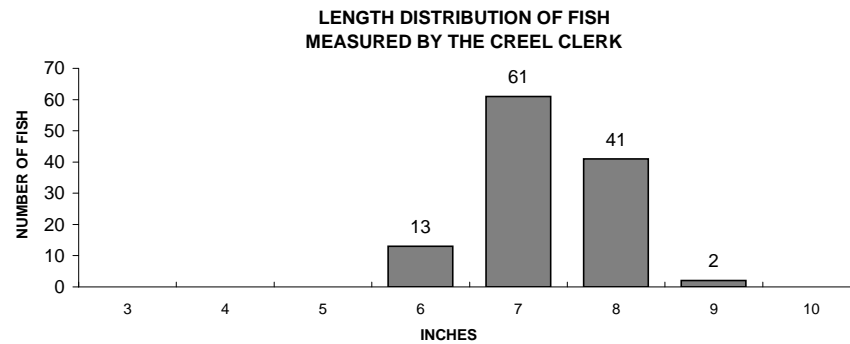
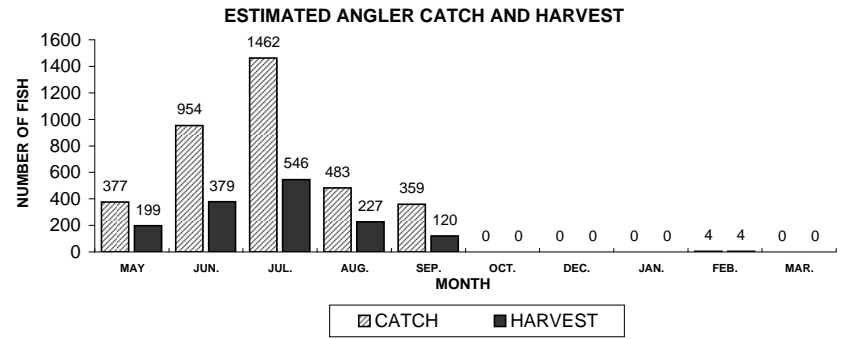
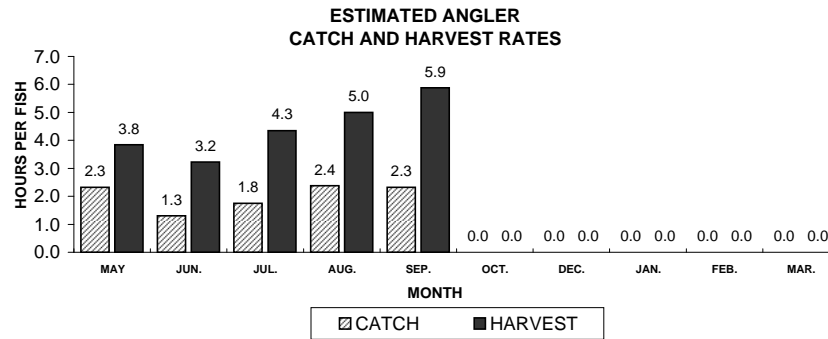
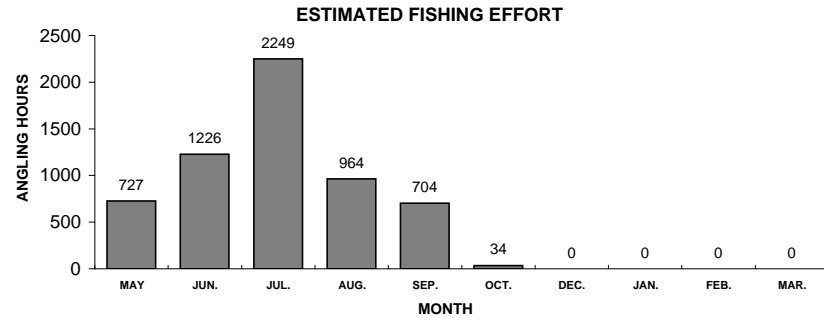
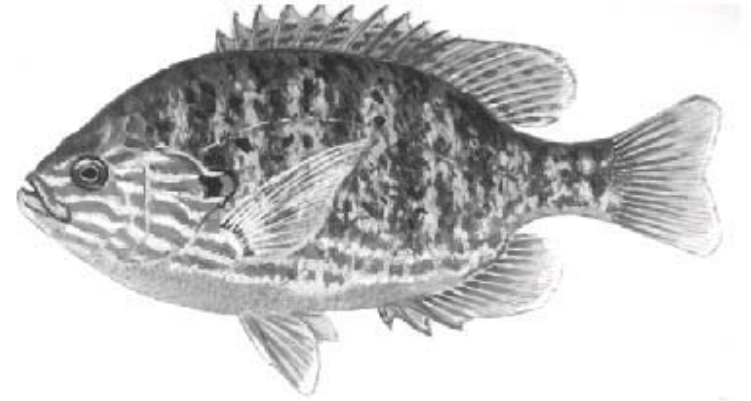
AVERAGE LENGTH AND LARGEST FISH HARVESTED



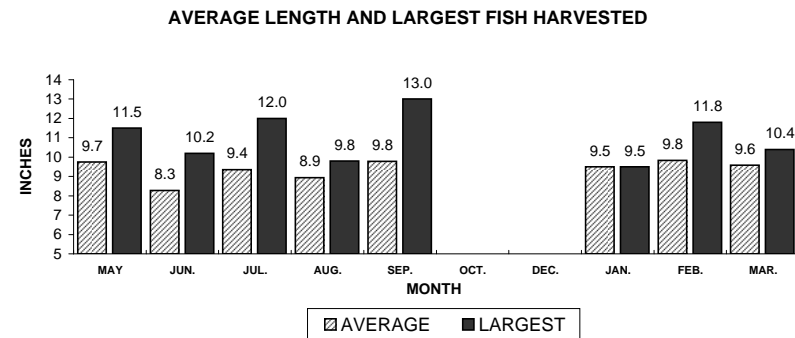
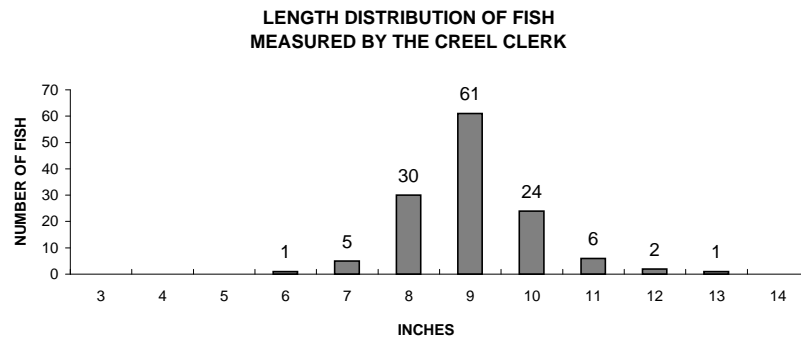
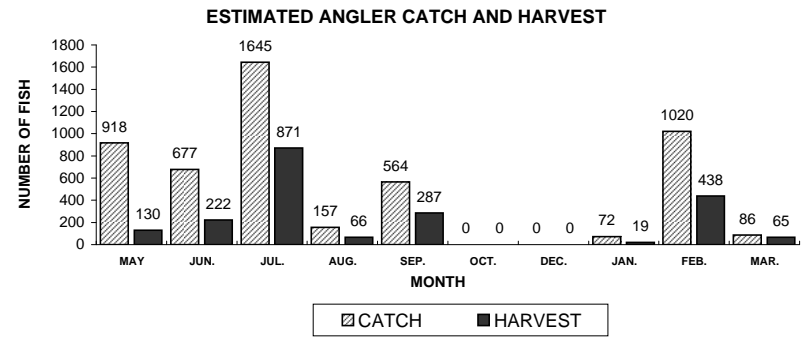
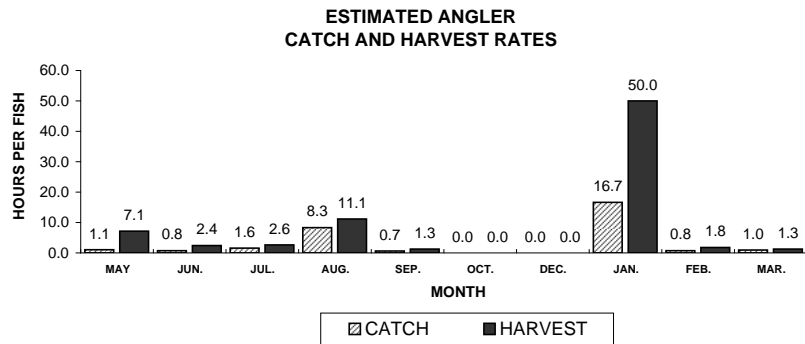
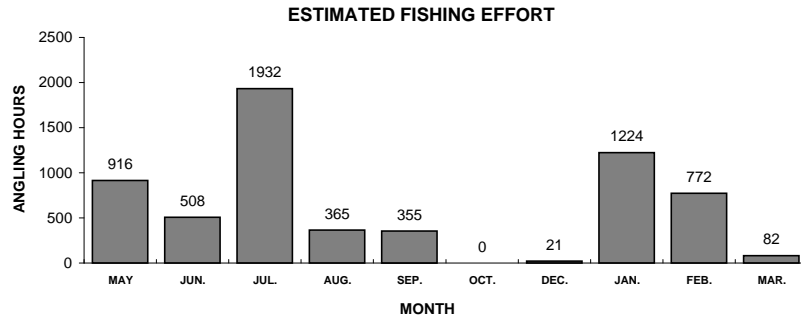
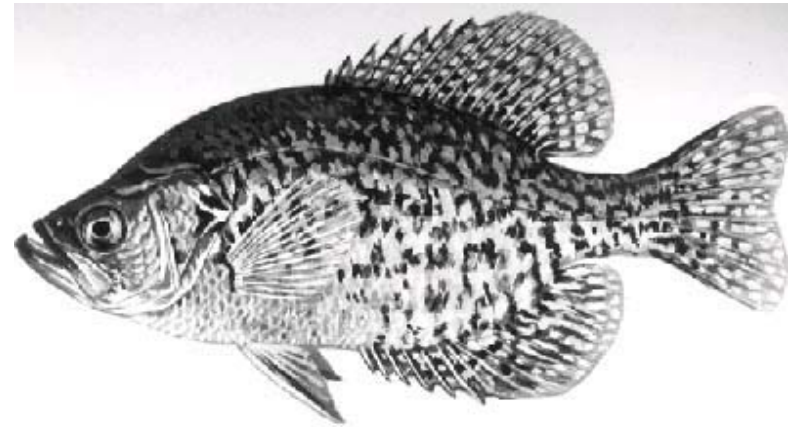
BLUEGILL



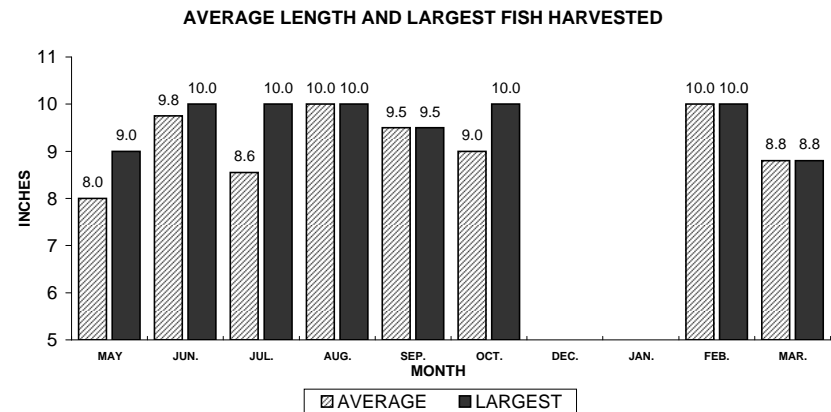
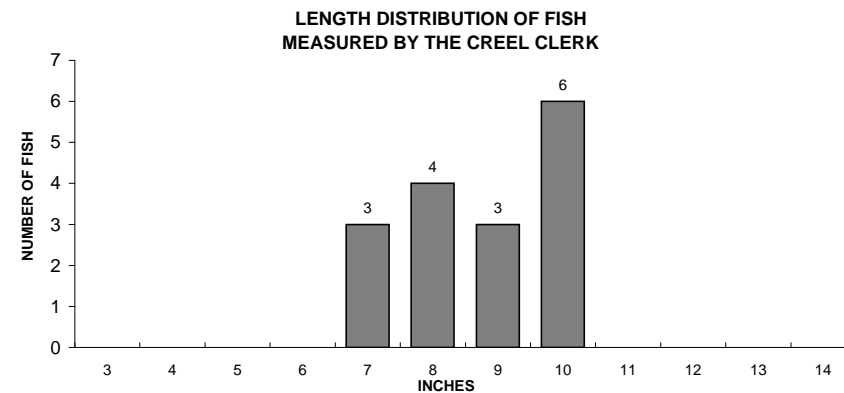
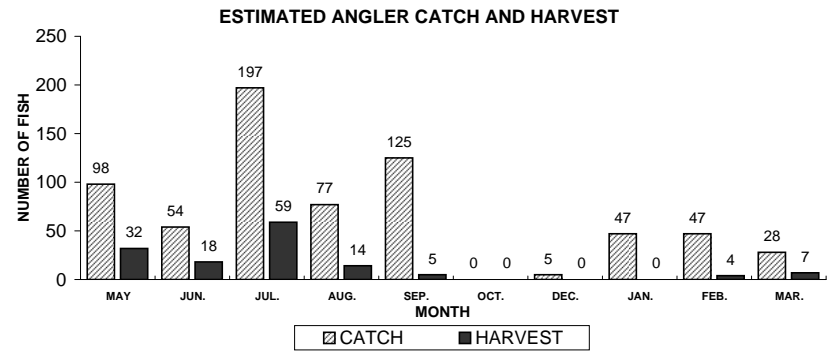
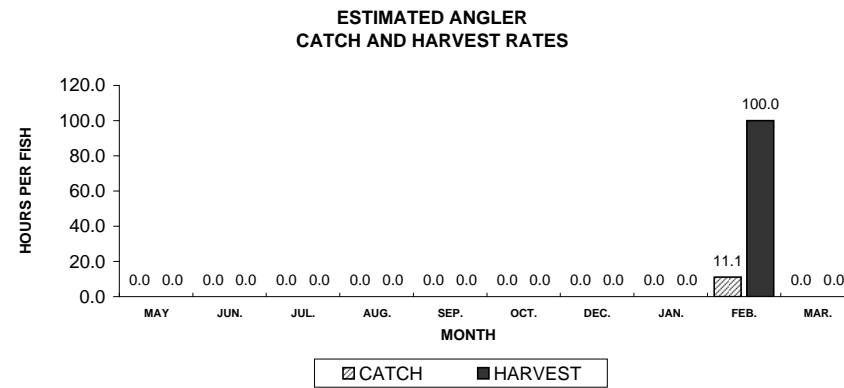
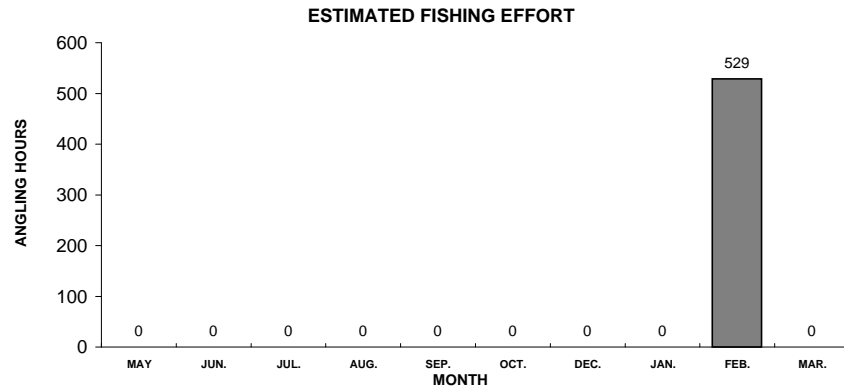
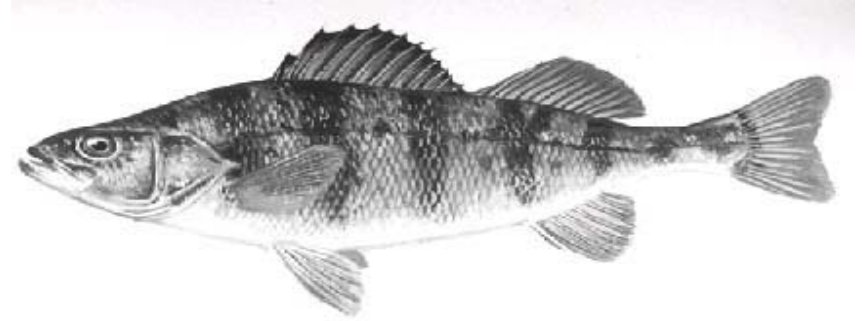
PUMPKINSEED



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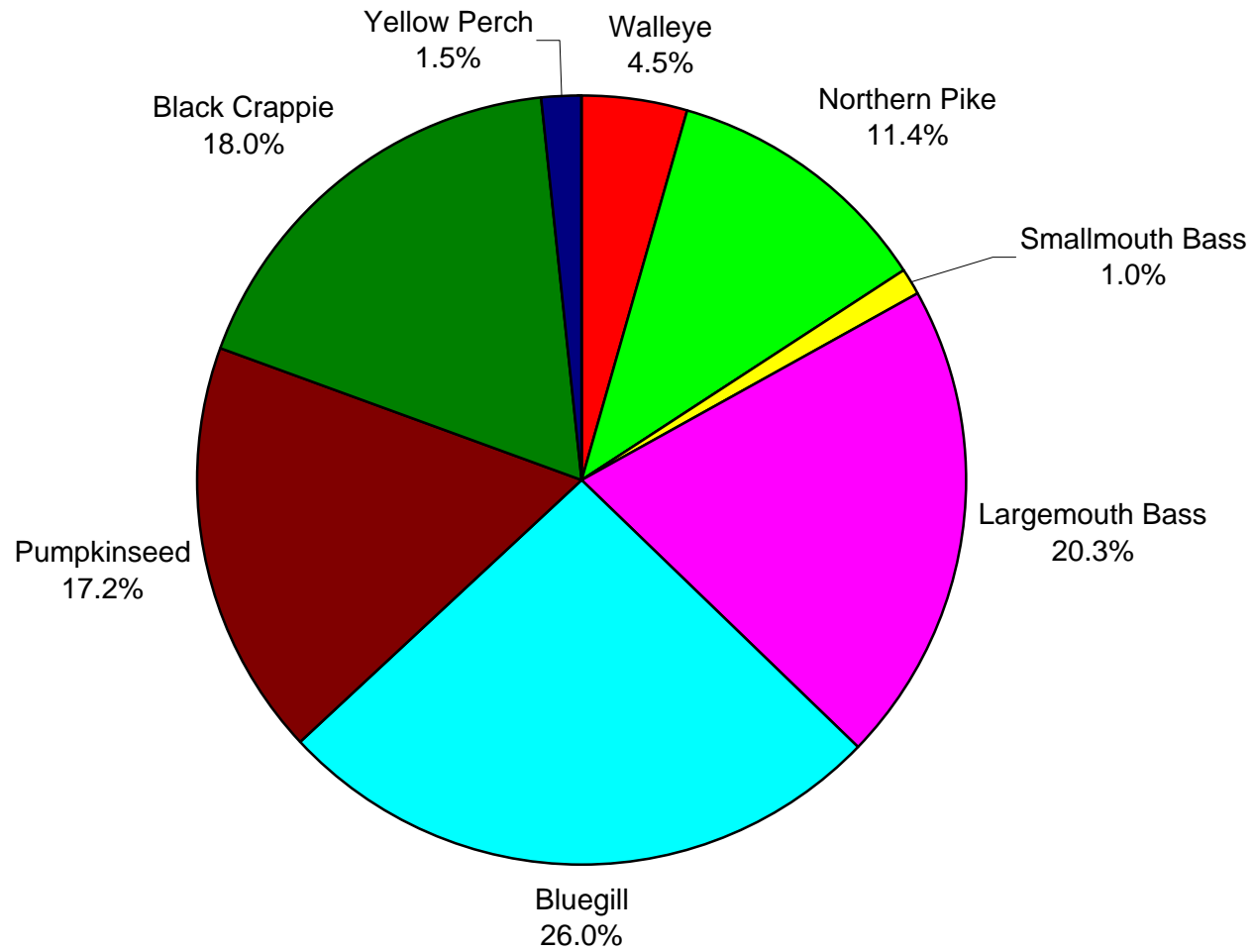


YELLOW PERCH



TOTAL ANNUAL ANGLER DIRECTED EFFORT BY SPECIES Big Sand Lake 2009-10

This graph illustrates the percentage of time that anglers spent fishing for each species during the entire creel survey. The percentages are based on the species of fish anglers told the clerk they were fishing for, not what they actually caught. If a particular species is not present in the graph it is because no one reported they were fishing for that species.



SEASONAL ANGLER EFFORT SUMMARY

2009-10

Estimated angler fishing effort on Big Sand Lake for each month surveyed and by season.

Month	Total Angler Hours	Total Angler Hours/Acre	Burnett County Average Hours/Acre	Statewide Average Hours/Acre
May	2696	1.9	3.8	5.8
June	3068	2.2	3.9	6.1
July	4469	3.2	3.9	6.4
August	2303	1.6	3.1	5.4
September	1558	1.1	1.9	3.8
October	69	0.0	0.5	1.6
December	113	0.1	1.1	1.7
January	1635	1.2	1.4	1.5
February	1398	1.0	1.7	1.3
March	336	0.2		**
*Summer Total	14163	10.1	17.1	29.1
*Winter Total	3482	2.5	4.2	4.5
Grand Total	17645	12.6	21.3	33.6

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

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

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

Total Angler Hours is the estimated total number of hours that anglers spent fishing on this 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 this lake to others.

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 this lake to other lakes statewide.

CREEL SURVEY HISTORY/SYNOPSIS

BIG SAND LAKE, BURNETT COUNTY

CREEL YEAR: 2009-10

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	1535	4.48%	20	100.0	8	100.0	27.1
Northern Pike	3889	11.35%	7190	1.1	286	16.7	19.2
Muskellunge	0	0.00%	0		0		0.0
Smallmouth Bass	349	1.02%	38	9.1	0		0.0
Largemouth Bass	6967	20.34%	12380	0.8	200	33.3	14.5
Bluegill	8905	26.00%	28154	0.3	9960	0.9	7.4
Pumpkinseed	5904	17.24%	3639	1.8	1475	4.2	7.6
Black Crappie	6175	18.03%	5139	1.4	2098	3.2	9.4
Yellow Perch	529	1.54%	678	11.1	139	100.0	8.9