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RESEARCH AND ANALYSIS OF FISHERIES IN ILLINOIS

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F-69-R-(22)

Annual Report
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EXECUTIVE SUMMARY

The goal of Project F-69-R is to provide researchers and managers with the information necessary to manage, sustain, and improve the health of fisheries resources in Illinois lakes and streams. As such, there were four primary objectives identified during Segment 22: (1) conduct annual creel surveys on selected lakes; (2) provide programming support for the Fisheries Analysis System (FAS); (3) provide development and maintenance support to DNR Fisheries for the FAS public website; and (4) incorporate FAS databases to aid in the analysis of ongoing research projects and pertinent management questions.

Creel surveys were conducted on 7 lakes in Illinois during Segment 22, bringing the total to 334 total creel surveys on Illinois lakes since 1987. Funding for Segment 22 was extended to June 30, 2009 and seven creel surveys were initiated in the spring of 2009 using additional funds providing through the extended segment. Creel surveys for 2009 are in progress and will be completed using funding provided in Segment 23. Results from 2009 creel surveys will be reported in the Segment 23 Annual Report. All of these lake creels were funded by Project F-69-R with additional financial support from IDNR Division of Fisheries.

This project has continued to support the FAS Lakes and FAS Streams databases through the end of Segment 21. Management of the statewide Fisheries Analysis System (FAS) has been transferred from the Illinois Natural History Survey (INHS) to the Office of Resource Conservation (ORC) Watershed Protection Section effective February 29, 2008, and will no longer be included in this Federal Aid Project. As a result, complete large rivers, streams, stream habitat and lakes FAS Paradox databases, as well as an IBI summary table and a revision of the stand-alone IBI program were all delivered to DNR Fisheries at the end of the previous segment. Access to existing and future fisheries data is critical to the successful management of sport fish in Illinois. The long-standing cooperative relationship between fisheries managers in the Division of Fisheries and researchers at the Illinois Natural History Survey has been successful in large part due to data and information sharing between the parties. To ensure the success of various current and future research projects, access to existing and future fisheries data by INHS researchers is critical, and a process for access to future FAS data by INHS researchers is needed.

An Illinois fisheries information website, www.ifishillinois.org, has been and will continue to be developed and maintained for use by the public. This effort puts a public face on the FAS Program and continues to provide

immeasurable benefit to current and prospective anglers in Illinois. The website will provide summary data on and increasing number of Illinois lakes and streams.

FAS lakes data for 1981-2004 and streams data for 1999-2003 have been shared with MARIS (Multi-state Aquatic Resources Information System, <http://www.marisdata.org/>). Cooperative efforts with MARIS meet the needs of the Project to deliver data to the public, and also serve to benefit the goals and objectives of the National Fish Habitat Initiative.

MARIS representation for the State of Illinois shifted to DNR Office of Resource Conservation with the move of FAS database management (see Job 101.2) to DNR. Project staff is still committed to the success of MARIS and recognize the value sharing of data and information across jurisdictions to both research and management of the resource. Continued collaboration and partnership between INHS, Fisheries, and MARIS is strongly encouraged.

Evaluation of fish stocking programs in Illinois lakes was identified as an important objective of Project F-69-R. These evaluations are generally lake-specific, and little has been done to evaluate stocking on a statewide level. Analyses regarding effects of stocking largemouth bass are still underway using the creel results for the F-135-R study lakes.

This report serves as an annual project report covering Segment 22 for Project F-69-R (2008). Creel data collected during Segment 28 (Table 1) are significant additions to existing creel data for Illinois Lakes and provide important information to researchers working on related fisheries projects. Analysis of cumulative creel data continues and long-term trends will be analyzed to provide fisheries managers with additional perspective for making management decisions. Statewide averages of creel survey estimates covering 1997 - 2007 have been calculated for comparisons with single year estimates, providing much needed context for evaluating individual survey results. Additionally, creel data and other statewide fisheries databases are being used to develop important research topics relevant to fisheries management in Illinois.

JOB 101.1 ANGLER SURVEYS

OBJECTIVE

The following components constitute the overall objective for Job 101.1:

- Conduct annual creel surveys on selected lakes and rivers within Illinois
- Manage (coordinate and supervise personnel, analyze and report data) the creels conducted on these lakes.

PROCEDURES

In 2008, creel surveys were conducted on the following lakes and streams during Segment 22: Charleston Side Channel, Devil's Kitchen, Mingo, Monee, Otter, Shabbona, and Springfield (Appendix B). In 2009, creel surveys were initiated on the following lakes and streams during Segment 22: McMaster, Emiquon, Ponderosa, Shelbyville, Paradise, Walnut Point, Beaver, and Eagle. Lakes were chosen to be surveyed based upon needs identified by IDNR-Fisheries biologists, and the recognized value of long-term data on select lakes.

The level of funding historically provided for Job 1 in recent segments has not kept pace with actualized costs. Increasing costs associated with creel surveys include rising fuel costs and higher minimum wage requirements. Additionally,

the cost of conducting creel surveys on larger lakes and reservoirs (e.g., Crab Orchard, Lake Springfield) limits the overall number of surveys that can be conducted in a given season, as these larger lakes can cost up to three times as much to survey. These trends force a choice between conducting fewer surveys and including some larger lakes, limiting surveys to small impoundments, or increasing funding for Job 1. It was determined by the Division of Fisheries that upon completion of Job 2 in Segment 21, that portion of funding originally allocated to Job 1 in Segment 22 was to be used to offset increasing creel costs and maintain the normal number of lakes surveyed relative to recent years.

FINDINGS

Results for angler effort, harvest and catch on lakes surveyed in 2008 are summarized here and in Appendix B. Results from creel surveys conducted in 2009 will be reported in Segment 23 Annual Report.

Angler Effort. Total estimated fishing pressure was highest on Lake Shabbona at 156,733 angler-hours, Monee Reservoir at 55,789 angler-hours, and Springfield Lake at 37,950 angler-hours. The lowest fishing effort among the lakes surveyed was estimated in Devil's Kitchen Lake at 13,174 angler-

hours. Monee Reservoir had the highest fishing pressure per area at 1213 angler-hours/acre, approximately 40 times higher than the 1998-2007 state average. Lake Shabbona also had remarkably high angling pressure at 515 angler hours/acre, nearly 15 times higher than the state average. Angler effort estimates for lakes are summarized in Table B1 in Appendix B.

Harvest. Lake Mingo (3787 fish, 3212 pounds) experienced the lowest levels of estimated harvest. The highest harvest levels were observed on Lake Shabbona (78,862 fish; 39,180 pounds), Monee Reservoir (16,433 fish; 4,641 pounds), and Otter Lake (16,128 fish; 9,681 pounds). Lake Springfield (0.200 fish/angler-hour) had a harvest rate below the state average, and only Lake Shabbona (0.510 fish/angler-hour) had a harvest rate higher than the average. Results for estimated harvest levels for lakes are summarized in Table B2 in Appendix B.

Catch. Bluegill (*Lepomis macrochirus*), largemouth bass (*Micropterus salmoides*), channel catfish (*Ictalurus punctatus*), and black crappie (*Pomoxis nigromaculatus*) were the most frequently caught species on surveyed lakes in 2008. Charleston Side Channel Lake and Otter Lake also had significant numbers of white crappie (*P. annularis*) in the creel. Lake Shabbona supported a notable walleye (*Sander vitreus*) fishery, and Lake Sprnigfield produced some catch of white bass (*Morone chrysops*). Catch frequency is summarized in Table B3 in Appendix B.

Estimated catch rates (# caught per angler-hour) for the five most frequently caught species were variable across lakes. (Table B4, Appendix B). Lake Shabbona had notably higher catch rates for black crappie (0.424 fish per angler-hour), while Charleston Side Channel Lake and Otter Lake supported high catch rates for white crappie. Devil's Kitchen had the highest catch rates for bluegill (0.609 fish per angler-hour) and largemouth bass (0.314 fish per angler-hour). Charleston Side Channel also had the highest catch rate for channel catfish (0.270 fish per angler-hour).

Charleston Side Channel. Channel catfish and white crappie dominated angler catch in 2008, making up a combined 92% of total catch. Channel catfish was the target species of 28% of anglers, while 24% of anglers targeted crappie species and 38% of anglers (51%) were not targeting any one species. Anglers harvested 28% of all fish caught, white crappie (with 53% of harvest), channel catfish (30% of harvest) and bluegill (12% of harvest) making most of the harvested fish. Length frequency histograms of harvested and released black crappie, bluegill, channel catfish, saugeye, and white crappie are presented in Figures B1-10 in Appendix B.

Devil's Kitchen. The Devil's Kitchen fishery had a significant panfish component in 2008. Bluegill comprised 42% of total catch and 33% of total harvest, while black crappie

made up 11% of both total catch and total harvest. Green sunfish (*Lepomis cyanellus*), longear sunfish (*L. megalotis*), redear sunfish (*L. microlophus*) and warmouth (*L. gulosus*) also made up small proportions of the panfish fishery. Largemouth bass was 29% of both total catch and total harvest. Although rainbow trout also appeared in the 2008 creel, too few were caught by anglers to generate highly reliable estimates of catch and harvest. Rainbow trout (*Oncorhynchus mykiss*) that were caught averaged a little over 0.5 lbs, and only 5% of anglers specifically targeted this species. Anglers harvested 38% of total catch, and targeted primarily largemouth bass (59%), crappie species (8%), bluegill (6%), and rainbow trout (5%). Length frequency histograms of harvested and released black crappie, bluegill, largemouth bass, and rainbow trout are presented in Figures B11-18 in Appendix B.

Lake Mingo. Anglers visiting Lake Mingo primarily targeted largemouth bass (39% of anglers), black crappie (18% of anglers), and channel catfish (16% of anglers), with another 20% of anglers having no species preference. Largemouth bass made up the largest portion of total catch (31%), with black crappie (28%), bluegill (20%), and channel catfish (19%) rounding out the majority of total catch. Anglers harvested 20% of largemouth bass caught, with harvested largemouth averaging 15.9" in total length. Angler harvest was comprised of black crappie (38% of

total harvest), channel catfish (37%), largemouth bass (16%), and bluegill (6%). Length frequency histograms of harvested and released black crappie, bluegill, channel catfish, and largemouth bass are presented in Figures B19-26 in Appendix B.

Monee Reservoir. Total catch was dominated by pan fish, making up over 78% of total catch and over 40% of biomass caught. Bluegill and black crappie dominated the pan fish catch, with bluegill comprising 57% of total catch and 21% of total biomass, and black crappie making up 21% of total catch and 19 % of total biomass. Redear sunfish, white crappie, and other assorted pan fish species also made small contributions to the total catch on Monee Reservoir. Largemouth bass made up 15% of total catch and 44% of total biomass, with harvested largemouth bass averaging 15.9". Anglers primarily targeted largemouth bass (27% of anglers) and crappie species (14%), with a large proportion of anglers (48%) having no species preference. Anglers primarily harvested bluegill (51% of harvest) and black crappie (38%), with channel catfish, redear sunfish, and white crappie making up most of the remaining fish harvested. Length frequency histograms of harvested and released black crappie, bluegill, channel catfish, largemouth bass, and redear sunfish are presented in Figures B27-36 in Appendix B.

Otter Lake. The fishery on Otter Lake is dominated by white crappie, which made up 77% of total catch and 86% of total

harvest. Nearly 41% of anglers targeted crappie species, with another 31% targeting largemouth bass. Largemouth bass comprised 13% of total catch but was a negligible portion of total harvest. Bluegill was a small part of the fishery, making up 5% of total catch and 8% of total harvest. White crappie made up 50% of total biomass caught by anglers, and 73% of harvested biomass in 2008. Channel catfish was a small component of the fishery, making up 3% of total catch, 4% of total harvest, and 10% of the harvested biomass. Length frequency histograms of harvested and released bluegill, channel catfish, largemouth bass, and white crappie are presented in Figures B37-44 in Appendix B.

Lake Shabbona. Black crappie (37% of total catch) and bluegill (35%) were the two most common species caught from Lake Shabbona in 2008. Largemouth bass (17%) was also important component of the fishery. Anglers harvested nearly 42% of total catch, with black crappie (53% of harvest) and bluegill (38% of harvest) comprising most of what anglers harvested in 2008. Anglers targeted largemouth bass (25% of anglers), crappie species (22%), channel catfish (14%), muskellunge (12%), and walleye (7%), with another 14% of anglers having no species preference. Length frequency histograms of harvested and released black crappie, bluegill, channel catfish, largemouth bass, and walleye are presented in Figures B45-54 in Appendix B.

Lake Springfield. Catch was comprised primarily of largemouth bass (37% of total catch) and bluegill (28%), with channel catfish (13%), white bass (11%), and black crappie (5%) rounding out the fishery. Anglers harvested 22% of total catch, with channel catfish making up 36% of harvested fish, followed by white bass (35%) and bluegill (14%). Anglers targeted primarily channel catfish (40% of anglers) and largemouth bass (35%), with only 3% of anglers targeting white bass and 13% of anglers indicating no species preference. Length frequency histograms of harvested and released black crappie, bluegill, channel catfish, largemouth bass and white bass are presented in Figures B55-64 in Appendix B.

RECOMMENDATIONS

The information collected by creel surveys is an important tool for assessing the interaction between the angler and the resource, and the continuation of lake creel surveys is essential to evaluate management concerns and needs. Project staff should continue to meet with IDNR Division of Fisheries staff on a regular basis to discuss the needs of creel survey data for lake management objectives.

The benefits of efforts to analyze the historical creel database are demonstrated by the comparison of current creel survey results with results from previous years. Historical

comparisons provide managers with important information regarding long-term changes in the fishery and allow for the identification of trends and improved interpretation of fishery dynamics. Historical perspectives should continue to be provided and enhanced in future reports of survey results.

Lake creel data is important for evaluating the impact of largemouth bass stocking efforts under Project F-135-R, as well as for use in support of other critical research efforts. Analyses are underway to use the creel database on specific lakes to assess the effect of impacts of recreational fisheries on fish populations for largemouth bass.

TABLE 1. Creel lakes and streams surveyed during segments 19-21.

Segment 19 (2005)

<u>Lake/Stream</u>	<u>County</u>
Apple Canyon	JoDaviess
Bullfrog	Cook
Carlyle Main Lake	Clinton, Bond & Fayette
Carlyle Tailwater	Clinton
Forbes	Marion
Lake of the Woods	Champaign
Pana	Christian, Shelby
Sam Parr	Jasper
Siloam Springs	Adams
Spring Lake South	Tazewell

Segment 20 (2006)

<u>Lake/Stream</u>	<u>County</u>
Banner Marsh	Peoria & Fulton
Beaver Dam	Macoupin
Crab Orchard	Williamson
Decatur	Macon
Evergreen	McLean, Woodford
Heidecke	Grundy
Mill Creek	Clark
Powerton	Tazewell

Segment 21 (2007)

<u>Lake/Stream</u>	<u>County</u>
Braidwood	Will
Coffeen	Montgomery
LaSalle	LaSalle
Little Grassy	Williamson
Mallard	DuPage
Mattoon	Shelby & Coles
Mermet	Massaac
Storey	Knox

TABLE 1, continued. Creel lakes and streams surveyed during segments 19-23.

Segment 21 (2007)

<u>Lake/Stream</u>	<u>County</u>
Charleston Side Channel	Coles
Devil's Kitchen	Williamson
Mingo	Vermillion
Monee	Will
Otter	Macoupin
Shabbona	Dekalb
Springfield	Sangamon

Segment 22 (2008)

<u>Lake/Stream</u>	<u>County</u>
Charleston Side Channel	Coles
Devil's Kitchen	Williamson
Mingo	Vermillion
Monee Reservoir	Will
Otter	Macoupin
Shabbona	Dekalb
Springfield	Sangamon

Segment 23 (2009)

<u>Lake/Stream</u>	<u>County</u>
Beaver (PRK)	Randolph
Eagle (PRK)	Randolph
Emiquon	Fulton
McMaster	Knox
Paradise	Coles
Ponderosa	Kankakee
Shelbyville	Shelby & Moultrie
Walnut Point	Douglas

JOB 101.2 FISHERIES DATABASE ENHANCEMENT

OBJECTIVE

The following components constitute the overall objective for Job 101.2:

- Support and Enhance the FAS Software and Databases
- Coordinate assembly and management of all three FAS databases with the IDNR Division of Fisheries
- Provide DNR personnel with access to FAS data, software, and documentation via the support website.

PROCEDURES

This project had continued to support the FAS Lakes and FAS Streams databases through the end of the previous segment. Management of the statewide Fisheries Analysis System (FAS) was transferred from the Illinois Natural History Survey (INHS) to the Office of Resource Conservation (ORC) Watershed Protection Section effective at the end of the previous segment (February 29, 2008), and is no longer included in this Federal Aid Project. The FAS database will be integrated into a new server-based technology as part of the ORC Management Activity Tracking System (MATS). This transfer is being initiated to fully comply with existing State of Illinois database standards.

FINDINGS

None.

RECOMMENDATIONS

Access to existing and future fisheries data is critical to the successful management of sport fish in Illinois. The long-standing cooperative relationship between fisheries managers in the Division of Fisheries and researchers at the Illinois Natural History Survey has been successful in large part due to data and information sharing between the parties. To ensure the success of research projects underway in Job 101.4, as well as other Federal Aid projects (i.e., F-135-R, F-151-R), we continue to emphasize the critical need for INHS researchers to access existing and future fisheries data now managed by DNR Watershed Protection Section. DNR Fisheries should develop a procedure to make current and future FAS data available to INHS. This procedure needs to be in place as soon as possible so that up-to-date FAS data may be incorporated into research projects underway in Job 101.4, and in time to deliver research findings in the F-69-R final report in 2010.

JOB 101.3 WEB INTERFACE ENHANCEMENT

OBJECTIVE

The following components constitute the overall objective for Job 101.3:

- Provide development and maintenance support to DNR Fisheries for the FAS public website
- Develop a web-based graphical interface for communicating FAS summary data to the public, and develop additional site enhancements upon request

PROCEDURES

An Illinois fisheries information website, www.ifishillinois.org, has been developed for use by the public. This effort continues to put a public face on the FAS Program and continue to provide immeasurable benefit to current and prospective anglers in Illinois. The website will provide summary data on an increasing number of Illinois lakes and streams. Development of a dynamic interface for querying FAS databases will allow access to FAS summary data that best suits the needs of the user. As the FAS Database grows in future years, so will the public interface and the information it provides anglers.

FINDINGS

The website continues to provide general information about angling opportunities in Illinois, as well as lake specific information using FAS data. Site usage has significantly increased since the initial rollout on April 1, 2004, with the average number of monthly visits having increased 254% over the past 5 years. The greatest usage continues to occur during the spring and summer months where the average increase in visits is 371% since 2004. Large increases in usage over the previous year continue to be seen in April and May, while smaller increases are seen in other months. Site usage statistics are summarized in Appendix C.

New sections were added to the family fishing area to include the new IHSA Bass Fishing Tournament and the Entice program, and fish species status reports were also created for many species. Weekly fishing reports continue to be a very popular area of the website. These reports detail the fish being caught, the types of bait being used and the quality of the water. The addition of historical FAS summary data for rivers, streams, and lakes is ongoing, and additional creel data was incorporated into the Science section.

The site was converted to the use of cascading style sheets in 2008, allowing for more efficient site management, faster download times, and less memory load on the server.

RECOMMENDATIONS

Work on www.ifishillinois.org should continue to build the capacity of the web interface to provide FAS data to the public in a meaningful and easily understood manner. Efforts should be made to provide increased lakes, rivers and streams summary data from FAS, and fishing reports for additional lakes should be added to assist the fishing public in selecting a lake or stream to fish.

The integration of summary creel and fisheries data with the website continues to grow the offerings of this project to the public, and provides centralized repository of information for resource managers as well. Detailed information regarding individual fish species will continue to be added, and should allow for a more educated angler.

JOB 101.4 COORDINATION WITH ONGOING FISHERIES RESEARCH PROJECTS

OBJECTIVE

The following components constitute the overall objective for Job 101.4:

- Use the existing creel and FAS databases to provide supportive information to help define fish populations in study lakes associated with ongoing bluegill (F-128-R) and largemouth bass (F-135-R) projects.
- Analyze the impact of two strategies for changing size structure of fish populations through experimental harvest regulations and predator/habitat manipulations.
- Coordinate with DNR Fisheries personnel to develop and execute experimental approaches to understanding solutions to critical fisheries management questions, using FAS databases as a foundation for research projects.

PROCEDURES

Past research programs in Illinois have often been based on experimental approaches aimed at assessing population-based fishery questions. As such, most if not all of the analytical process was contained within the bounds of the experiments themselves and the research personnel running those projects. The ongoing bluegill and largemouth bass projects, however, are

designed to assess how experimental management actually impacts the fishery of selected study lakes. To achieve a successful assessment at that level, we have targeted past creel surveys toward these study lakes, and will continue to dedicate project personnel toward interfacing directly with biologists participating in those research projects. This integration will involve including key staff from F-69-R into the planning meetings associated with the two research projects (committees of research staff, Regional and District biologists, and Division of Fisheries administration). In addition, routine progress meetings among the research groups for all three projects are conducted to maximize awareness among researchers of the capabilities and design of the various databases on hand and being generated by each project. Taking this approach one step further, some experimental approaches aimed at assessing population-based fishery questions can be addressed using the data collected through F-69-R. To this end, we are also dedicating project personnel toward designing, implementing and reporting the results of specific research projects using FAS data.

FINDINGS

Project F-128-R. Pre- and post-treatment creel surveys were conducted on 32 project lakes during segments 3-18, and incorporated in Project F-128-R final report.

Project F-135-R. Analyses regarding the effects of stocking largemouth bass are still underway using the creel results for the F-135-R study lakes.

Project F-151-R. Coordination with this project has recently become an additional component of Job 101.4. Analyses regarding the biology and management of muskellunge (*Esox masquinongy*) are underway, and will include contributions from creel surveys conducted on study lakes

RECOMMENDATIONS

Creel surveys are an essential component of Project F-128-R, and benefits of these surveys to Project F-151-R are being explored and analytical strategies are being developed. Creel surveys should continue to be carried out under Project F-69-R to allow for the assessment of current adaptive management programs and their impact to the recreational fishery. Most importantly, however, intensive efforts have continued to bring the other two FAS databases (FAS Lakes and FAS Streams) on line as usable resources. Continued progress has been made on this front in Segment 22, and this effort is sufficiently complete to

make analytical assessments of largemouth bass and muskellunge project study lakes in future segments. Continued access to future FAS data (now under ORC management; see Job 101.2) is critical to the successful coordination between F-69-R and other federal aid projects.

Upon completion of Job 2 in Segment 21, staff previously assigned to provide FAS database management and support were reassigned to Job 4. In this capacity, project personnel provided research analysis for specific questions generated within F-69-R, as well as in coordination with Projects F-101-R (Illinois River Project), F-128-R (Bluegill Project), F-135-R (Largemouth Bass Project), and F-151-R (Muskellunge Project), utilizing historical FAS databases and creel survey data. We recommend that coordination with these Federal Aid Projects continue, and that additional coordinated research efforts be pursued.

TABLE 2. Segment 22 Job Costs - Budget v. Actual.

	<u>Budget</u>	<u>Actual</u>	<u>over/ (under)</u>
Job 101.1 Angler Surveys	\$786,249	\$789,026	\$2,777
Job 101.2 Fisheries Database Enhancement	\$0	\$0	\$0
Job 101.3 Support and Enhance Web Interface	\$96,935	\$96,419	(\$516)
Job 101.4 Coordination with Ongoing Fisheries research	\$193,868	\$191,607	(\$2,261)
TOTAL COSTS	\$1,077,052	\$1,077,052	\$0
Federal Share	\$807,788	\$807,788	\$0
State Share	\$269,264	\$269,264	\$0

APPENDIX A. INTERPRETIVE GUIDE TO CREEL SURVEY RESULTS

The following guide is intended to be included with every distribution of the creel survey results. It has been updated from an earlier guide published by Steve Sobaski (IDNR - Watershed Management Section, personal communication).

What's Included in the INHS Interim and Final Creel Reports

To help you interpret the Interim and Final Creel Reports from the Illinois Natural History Survey, we've included this guide to explain the contents of various pages. Another useful reference is *Statistical Design and Calculation of Each Creel*, Appendix A. of the 1990 Illinois Natural History Survey report 90/10: *Creel Survey Manual for the District Fisheries Analysis System (FAS): A Package for Fisheries Management and Research*. This appendix describes how the creel data are collected, their subdivision for analysis by five different categories: specifically the Year Period, Lake Section, Day Period (Morning, Midday, Afternoon), Day Type (Weekday vs. Weekend/Holidays), and Fishing Mode (Boat vs. Shore) that the data were collected from (in other words, the stratification scheme applied to the creel data), and the statistical methodology used to calculate the estimated total hours of fishing, harvest, and catch.

Each creel report is composed of the following information (in this order):

STRATIFICATION SUMMARY

Information presented here is intended to provide some background as to the pre- and post-stratification methods used in analysis. Creel surveys will be either day or night surveys, and this will be indicated first. Reported next will be the range of sampling dates for which estimates are made. No attempt is made to extrapolate estimates out to months in which no data are collected, unless otherwise noted.

SAMPLING RATIO

The SAMPLING RATIO value, listed directly below STRATIFICATION SUMMARY, is the ratio of the number of Day Periods sampled divided by the total number of day periods included in the estimates. In short, the SAMPLING RATIO gives an index of the intensity of the sampling schedule. For example, suppose 128 Day Periods were sampled between 3/15 and 6/15. To calculate the SAMPLING RATIO, the total number of Day Periods sampled is divided by the total number of possible Day Periods occurring during that span

of dates. In this example, there are 93 days within the span of 3/15 to 6/15, thus 3 x 93 or 279 day periods. The Sampling Ratio = $(128/279) \times 100\%$, or 45.8%.

NUMBER OF INTERVIEWS

This is the total number of all angler interviews conducted during the season.

PART ONE: EFFORT, HARVEST, AND CATCH ESTIMATES

TABLE 1. TOTAL FISHING EFFORT

This table reports the estimated total angler-hours of fishing by all anglers. Unless otherwise noted, reports will always apply to all pole and line fishing activity on the entire lake.

As described in *The Statistical Design and Calculation of Each Creel*, the effort estimate, i.e. the estimated total angler-hours of fishing, is calculated separately for boat and shore anglers as well as for all anglers for each Day Period sampled. These estimates are based on the instantaneous counts of anglers and are scaled up by the effective hours available for fishing for that time of day and year, rather than on the hours of fishing reported in

angler interviews. An estimated average effort is then calculated for each combination (i.e. stratum) of Year Period, Lake Section, Day Period, Day Type, and Fishing Mode by averaging the total hours of fishing from all days sampled within the stratum. Stratum averages are scaled up over all possible days in the stratum to provide an estimated stratum total effort. Finally, each stratum total effort is added together to give the separate estimates of total hours of fishing for boat and shore anglers for the lake and time period of interest.

A weighted estimate of the total hours of fishing for anglers is calculated using a stratified approach. Rather than combining the boat and shore instantaneous counts for each sample and ignoring any potential difference in the day-to-day variability of boat versus shore fishing, the stratified approach first calculates separate estimates of total effort for boat and for shore anglers for the entire period being reported. These totals and their variances are then combined to give the overall total estimated hours of fishing.

The **FISHING MODE** column will usually include BOAT, SHORE, and BOAT & SHORE. Estimates are made separately for boat

and for shore fishing, and these estimates are later combined into an overall total estimate of both boat and shore.

The **DAY TYPE** column shows estimates for WEEKDAY and HOLIDAY. The WEEKDAY estimates only include Monday through Friday fishing, excluding holidays that fall on weekdays. The HOLIDAY estimates include all holidays and all weekend days (Saturdays and Sundays). Days that are considered holidays for the purposes of this creel only include: New Year's Day, Martin Luther King Jr.'s Birthday Observed, Presidents' Day, Memorial Day Observed, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day, and Christmas Day.

Estimates of the total hours of fishing (the **ANGLER-HOURS** column) by BOAT anglers, SHORE anglers, and BOAT & SHORE anglers are reported in separate blocks in the table. The strata total estimates for each type of angler are further subdivided by Day Type (WEEKDAY versus HOLIDAY).

The **95% CI** columns follow estimated totals, such as ANGLER HOURS in TABLE 1, and in TABLES 3-8. These report the 95% confidence interval for the estimated totals. In other

words, 95% of the time we'd expect the true total to fall within that given range. In cases where the lower limit of the confidence interval is a negative number, a value of zero is shown in the table. The percentage listed in () after the confidence interval is another indicator of the precision of the estimate. This percentage is calculated as: $(\text{Upper value of the 95\% CI} - \text{Estimated Total}) / \text{Estimated Total}$. The larger this percentage is, the less accurate the estimate. For example, if the Total Angler Hours Estimate is 30,293, with an upper 95% confidence interval of 34,952, the precision percentage is calculated as $(34,952 - 30,293) / 30,293$ or 15.38%. The percentage is rounded to the nearest integer for the tabular output.

The **HOURS/ACRE** column gives the Hours of Fishing per acre of lake surface area. This is calculated by dividing the ANGLER HOURS value in each row by the acreage value shown at the top of the page.

The % **EFF INTVD** column, located on the right margin of the effort table, is the percentage of the estimated total effort actually accounted for by angler interviews. This number is calculated by summing the total hours of fishing reported by anglers from each stratum (i.e. Day Period,

Year Period, Day Type, and Fishing Mode combination) and dividing it by the estimated total fishing effort (calculated from the instantaneous counts) for that period. For instance, a total of 120 hours of weekday fishing might be reported by BOAT anglers for Day Period 1 (Sunrise to 10:00 A.M.) between 6/01/94 and 6/15/94. The estimated total BOAT effort, however, based on the average BOAT angler instantaneous counts of Day Period 1 extrapolated by the 11 weekdays within 6/01/94 and 6/15/94, turns out to be 360 hours. The % EFF INTVD value for this stratum would be: $(120 \text{ angler-hours from interviews}) / (360 \text{ angler-hours from instantaneous counts}) \times 100 = 33.33\%$. Like SAMPLING RATIO, this number gives an indication of the effectiveness of the sampling intensity. A higher % EFF INTVD value indicates a more complete job of obtaining information on all of the angling activity for that type of angler. If you sampled every day within a stratum and interviewed every angler (in other words conducted a census rather than a survey), this percentage would approach or possibly exceed 100%.

TABLE 2. TOTAL FISHING HARVEST AND HARVEST RATES, IN NUMBERS OF FISH

The **# HARVESTED** column is the estimated total number of fish harvested for the season, by species. The top number in this column will always contain the estimated total number of all fish harvested for the season, as indicated by "All species" under the SPECIES column header. For any given species, a "**** NOT RECORDED ****" entry indicates that no harvested fish were recorded from the angler interviews, and therefore no estimate of the total harvest could be made.

The **95% CI** column next to the # HARVESTED column contains the 95% confidence interval estimate of the # HARVESTED value. The lower confidence limit is shown on the left and is separated by a dash from the upper confidence limit shown on the right. In cases where the lower limit of the confidence interval is a negative number, a value of zero is shown in the table. A negative or zero value for the lower 95% confidence interval is usually the result of very few fish of a particular species being sampled in the angler interviews. Next to the upper confidence limit, in

parentheses, is an additional estimate of the precision of the # HARVESTED estimate, and is calculated as:

$$((\text{Upper } 95\% \text{ CI} - \# \text{ HARVESTED}) / \# \text{ HARVESTED}) \times 100\%$$

The **#/HOUR** estimate is the population harvest rate, and is defined as the number of fish harvested per angler-hour of fishing. Note that angler-hours are the same units as are reported in TABLE 1. Also, note that this is not an estimate of the average harvest rate per angler. Rate estimates with a value of .000 have a harvest rate that is less than 0.001 but greater than zero. A zero rate is not recorded.

The **95% CI** column next to the #/HOUR column is the 95% Confidence Interval estimate of the #/HOUR estimate, and is calculated similarly to the methods described earlier.

The **#/HA** column is the estimated total number of fish harvested per hectare of lake surface area. One hectare is equivalent to 2.4711 acres.

The **#/ACRE** column is the estimated total number of fish harvested per acre of lake surface area. Lake surface area is reported at the top of Page 1.

The **SPECIES** column lists all species recorded in angler interviews. Note that this is different from the original Apple II/e creel analysis reports. These original reports were memory-limited to only 9 species per table.

Additional species were either included in an additional table or were listed under "MSC" (Miscellaneous species) in the harvest table. Beginning with the 1999 creel analysis reports, all species recorded in angler interviews will be listed in Table 2 through Table 7. Any species that does not appear in these tables was not recorded in angler interviews, and therefore no estimate could be made of the harvest or catch for that species.

TABLE 3. TOTAL FISHING HARVEST AND HARVEST RATES, IN KILOGRAMS.

Table 3 contains the estimated total fishing harvest and harvest rates in kilograms, and is structurally similar to TABLE 2. See TABLE 2 for a further discussion of the estimates under the 95% CI and SPECIES headers. Unique features of TABLE 3 are discussed below.

The **KG HARVESTED** column contains the estimated total harvest biomass, in kilograms.

The **KG/HOUR** column is the estimated total harvest biomass per angler-hour of fishing effort.

The **KG/HA** column is the estimated total harvest biomass per hectare of lake surface area.

The **AVE KG** column is the estimated average weight per harvested fish, in kilograms. Note that TABLES 3,4,6,and 7 do not contain a per acre estimate of harvest or catch.

TABLE 4. TOTAL FISHING HARVEST AND HARVEST RATES, IN POUNDS.

TABLE 4 is structurally similar to TABLE 3, except that all biomass estimates are reported in pounds rather than in kilograms. For a discussion of the organization of TABLE 4, see the discussion for TABLE 2 and TABLE 3.

TABLES 5-7. TOTAL FISHING CATCH AND CATCH RATES

TABLES 5-7 are structurally similar to TABLES 2-4, respectively, except that all harvest estimates are replaced with catch estimates. Catch estimates contain estimates of both harvested fish and released fish. For a discussion of the organization of TABLES 5-7, see the discussions for TABLES 2-4, respectively.

A NOTE ON BIOMASS ESTIMATES

Rather than measuring fish weights directly during interviews, weights are estimated based on the standard length to weight relationship:

These length-weight relationships were developed for each species from IDNR population survey data stored in the Illinois STATE FAS database, or from fisheries literature. Average fish weights reported in the AVG KG and AVG LB are calculated by dividing the estimated total biomass caught (e.g. KG CAUGHT) by the estimated total number caught (e.g. # CAUGHT) for each species.

PART TWO: SUPPLEMENTAL INTERVIEW INFORMATION

The pages following the effort, harvest, and catch tables summarize various data collected during angler interviews. Numbers reported here differ from those of the previous tables since these numbers are unweighted averages based solely on interview data rather than estimated totals for an entire year. Rather than stratifying these data as is done for the effort, harvest, and catch estimates, these tables take all interview data, combine it regardless of when it was collected during the survey and report simple averages.

TABLE 8. TRIP LENGTH, DISTANCE TRAVELED, AND SUCCESS RATING

TABLE 8 contains summary statistics for fishing trip length, distance traveled from home to the fishing site, and fishing success rating. Fishing trip length is identified by the header HOURS PER COMPLETED TRIP, and is defined as the number of decimal hours between the start and end of an angler's fishing trip on a given day. MILES TRAVELED is defined as the number of miles that an angler traveled from home to arrive at the fishing site. SUCCESS RATING is an angler's interpretation of his or her fishing

success during the trip for which he or she was interviewed. The angler can provide an answer on a scale from 1 to 10, with 10 being the most successful. While this rating is subjected to each individual angler's interpretation, anglers are asked not to consider social or other factors influencing their fishing experience, and to focus only on their catch.

The **MEAN** is calculated as a simple, unweighted, and unstratified average.

The **95% CI** column is the 95% confidence interval of the MEAN. (For a discussion of the 95% CI, see the discussion of TABLE 1.)

The **MIN** and **MAX** columns represent the range of values reported in the interviews, or the minimum value and maximum value, respectively.

The **#SAMPLES** column contains the sample size, or number of interviews, used in the calculations.

Two footnotes appear at the bottom of TABLE 8. The first footnote indicates the number of split interviews used in

the calculation of HOURS PER COMPLETED TRIP. A split interview is defined as an interview that falls over two or three Day Periods (Morning, Midday, and Afternoon). For example, a fishing trip that began at 7:00am and ended at 12:00pm falls over both the Morning Day Period and the Midday Day Period. The second footnote indicates the percentage of all interviews that were completed trip interviews. All other interviews are considered incomplete, and are defined as interviews of anglers that are still actively fishing at the time of the interview.

ILLEGAL HARVEST

Illegally harvested fish are defined as fish that are in the possession of the angler at the time of the interview that have been harvested in violation of (1) the Illinois Fishing Information regulation booklet, published by the Illinois Department of Natural Resources, or (2) any additional site-specific regulations not outlined in the regulation booklet. Creel clerks witnessing harvest violations do not notify the angler, nor do they notify the authorities. The ILLEGAL HARVEST information reported here is simply a tally of the number of interviews that had illegally harvested fish at the time of the interview.

TABLE 9. FREQUENCY DISTRIBUTION OF ANGLER PARTY SIZE

An angler party is defined as a group of anglers fishing together and combined into a single angler interview. For example, two anglers fishing in the same boat are often interviewed together as an angler party size of 2. TABLE 9 shows the frequency distribution of angler party sizes for boat and shore interviews.

TABLE 10. TARGETED SPECIES

TABLE 10 is a tally of all species that anglers are targeting, along with a percentage of the total in parentheses. During an interview, anglers are asked what species they are trying to catch, or are *targeting*. Anglers can respond by saying they are targeting a specific species (i.e. bluegill), a family of species (i.e. sunfish), or any fish at all.

TABLE 11. CATCH FREQUENCY DISTRIBUTION

TABLE 11 is a frequency distribution of anglers reporting a given number of harvested and released fish, by species, for completed trip interviews only. It examines each interview for the number of fish of a single species or

species group reported as harvested and released. It then calculates the average harvest and catch per angler by dividing the total number harvested and the total released for that species by the number of anglers in the party. The table reports the number of anglers, broken down by their catch rate. An example of this table, for walleye reported as harvested in 500 completed trip interviews might be:

# OF FISH:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15+
Walleye																
HARVEST	651	50	7	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	578	101	26	3	-	-	-	-	-	-	-	-	-	-	-	-

The 500 completed trip interviews actually cover the catch of 708 anglers in this case, since a number of angler parties had more than one angler. Of these 708 anglers, 651 anglers reported no walleye harvested on their trip (or averaged less than 1 walleye per angler per angler party), 50 anglers were in parties that harvested an average of 1 walleye/angler, and 7 anglers were in parties that harvested an average of 2 walleye/angler. No anglers were in parties that harvested more than 2 walleye/angler. Each zero value is represented by a dash.

APPENDIX B. 2008 CREEL SURVEY RESULTS

The following pages contain the final results from the seven 2008 day creel surveys conducted on Illinois lakes, funded by Project F-69-R-20. Results are presented in the order listed in the table below, by lake name. Following the individual lake results presented in Appendix B are four tables providing comparisons between lakes (Tables B1-4).

LAKE	ACRES	COUNTY	REGION	DISTRICT	BIOLOGIST
Charleston Side Channel	317	Coles	3	11	Mike Mounce
Devil's Kitchen	704	Williamson	5	22	Chris Bickers
Mingo	172	Vermillion	3	10	Mike Garthaus
Monee	46	Will	2	9	Rob Miller
Otter	765	Macoupin	4	15	Jeff Pontnack
Shabbona	304	DeKalb	1	1	Wayne Herndon
Springfield	3866	Sangamon	4	14	Dan Stephenson

ILLINOIS NATURAL HISTORY SURVEY
 CENTER FOR AQUATIC ECOLOGY
 2008 CREEL SURVEY RESULTS

2008 CHARLESTON SIDE CHANNEL

317 ACRES
 REGION 3, DISTRICT 11

STRATIFICATION SUMMARY:

Day creel only.
 Results cover 03/15/2008 through 10/31/2008
 Year periods stratified.
 Fishing modes (boat vs. shore) stratified.
 Day types (weekday vs. weekend/holiday) stratified.
 Day periods (morning, midday, and afternoon) stratified.

SAMPLING RATIO: 283/693 = 40.8%

NUMBER OF INTERVIEWS: 1042

Table 1. Total fishing effort, by fishing mode and day type.

FISHING MODE	DAYTYPE	ANGLER-HOURS	95% CI	HOURS/ACRE	95% CI	% EFF
BOAT	WEEKDAY	4021	3276-4767 (19%)	13	10-15 (19%)	18%
	HOLIDAY	4521	3994-5048 (12%)	14	13-16 (12%)	32%
	TOTAL	8542	7642-9442 (11%)	27	24-30 (11%)	25%
SHORE	WEEKDAY	2744	2283-3206 (17%)	9	7-10 (17%)	21%
	HOLIDAY	3024	2244-3804 (26%)	10	7-12 (26%)	43%
	TOTAL	5768	4918-6619 (15%)	18	16-21 (15%)	32%
BOAT & SHORE	WEEKDAY	6766	5889-7643 (13%)	21	19-24 (13%)	19%
	HOLIDAY	7545	6672-8418 (12%)	24	21-27 (12%)	36%
	TOTAL	14311	13122-15499 (8%)	45	41-49 (8%)	28%

Table 2. Total fishing harvest and harvest rates, in numbers of fish.

# HARVESTED	95% CI	#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
8636	7068-10204 (18%)	.425	.235-.615 (45%)	67.32	27.24	All species
289	0-992 (243%)	.053	.000-.198 (271%)	2.25	0.91	Black crappie
1072	549-1595 (49%)	.056	.026-.086 (54%)	8.36	3.38	Bluegill
		****	NOT RECORDED ****			Carp
2584	1634-3534 (37%)	.132	.100-.165 (25%)	20.14	8.15	Channel catfish
24	0-91 (278%)	.001	.000-.004 (278%)	0.19	0.08	Crappie spp.
44	0-140 (220%)	.002	.000-.007 (220%)	0.34	0.14	Flathead catfish
		****	NOT RECORDED ****			Green sunfish
10	0-22 (110%)	.000	.000-.001 (120%)	0.08	0.03	Largemouth bass
		****	NOT RECORDED ****			Longear sunfish
4	0-12 (218%)	.000	.000-.001 (216%)	0.03	0.01	Striped bass x Whit
		****	NOT RECORDED ****			Warmouth
4562	3613-5511 (21%)	.178	.125-.231 (30%)	35.56	14.39	White crappie
47	0-107 (126%)	.002	.000-.004 (129%)	0.37	0.15	Walleye x Sauger hy
		****	NOT RECORDED ****			Yellow bullhead
		****	NOT RECORDED ****			Yellow bass

Table 3. Total fishing harvest and harvest rates, in kilograms.

KG HARVESTED	95% CI	KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
3319	1951-4687 (41%)	.172	.092-.252 (46%)	25.87	0.384	All species
129	0-459 (255%)	.025	.000-.093 (273%)	1.01	0.448	Black crappie
99	47-152 (53%)	.005	.002-.008 (57%)	0.77	0.092	Bluegill
		****	NOT RECORDED ****			Carp
1946	614-3278 (68%)	.097	.065-.129 (33%)	15.17	0.753	Channel catfish
3	0-14 (318%)	.000	.000-.001 (318%)	0.03	0.137	Crappie spp.
34	0-109 (223%)	.002	.000-.006 (220%)	0.26	0.769	Flathead catfish
		****	NOT RECORDED ****			Green sunfish
10	0-21 (104%)	.000	.000-.001 (122%)	0.08	0.999	Largemouth bass
		****	NOT RECORDED ****			Longear sunfish
5	0-15 (216%)	.000	.000-.001 (218%)	0.04	1.222	Striped bass x Whit
		****	NOT RECORDED ****			Warmouth
1092	851-1333 (22%)	.042	.028-.057 (34%)	8.51	0.239	White crappie
		****	NOT RECORDED ****			Walleye x Sauger hy
		****	NOT RECORDED ****			Yellow bullhead
		****	NOT RECORDED ****			Yellow bass

Table 4. Total fishing harvest and harvest rates, in pounds.

LB HARVESTED	95% CI	LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
7316	4301-10332 (41%)	.379	.203-.555 (46%)	23.08	0.847	All species
285	0-1012 (255%)	.055	.000-.205 (273%)	0.90	0.987	Black crappie
218	103-334 (53%)	.011	.005-.017 (57%)	0.69	0.204	Bluegill
		****	NOT RECORDED ****			Carp
4290	1354-7227 (68%)	.214	.143-.285 (33%)	13.53	1.661	Channel catfish
7	0-30 (318%)	.000	.000-.001 (318%)	0.02	0.303	Crappie spp.
74	0-240 (223%)	.004	.000-.012 (220%)	0.23	1.696	Flathead catfish
		****	NOT RECORDED ****			Green sunfish
23	0-46 (104%)	.001	.000-.002 (122%)	0.07	2.203	Largemouth bass
		****	NOT RECORDED ****			Longear sunfish
10	0-33 (218%)	.001	.000-.002 (218%)	0.03	2.695	Striped bass x Whit
		****	NOT RECORDED ****			Warmouth
2407	1877-2938 (22%)	.094	.062-.125 (34%)	7.59	0.528	White crappie
		****	NOT RECORDED ****			Walleye x Sauger hy
		****	NOT RECORDED ****			Yellow bullhead
		****	NOT RECORDED ****			Yellow bass

Table 5. Total fishing catch and catch rates, in numbers of fish.
Catch includes both harvested and released fish.

# CAUGHT	95% CI	#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
31255	25807-36702 (17%)	1.446	1.007-1.884 (30%)	243.63	98.60	All species
1218	0-2515 (106%)	.140	.000-.412 (194%)	9.50	3.84	Black crappie
7129	5103-9155 (28%)	.352	.268-.437 (24%)	55.57	22.49	Bluegill
13	0-30 (133%)	.001	.000-.004 (220%)	0.10	0.04	Carp
5647	3022-8273 (46%)	.270	.207-.334 (24%)	44.02	17.82	Channel catfish
24	0-91 (278%)	.001	.000-.004 (278%)	0.19	0.08	Crappie spp.
48	0-145 (203%)	.003	.000-.008 (192%)	0.37	0.15	Flathead catfish
599	0-1331 (122%)	.027	.002-.053 (93%)	4.67	1.89	Green sunfish
483	268-697 (44%)	.021	.012-.031 (46%)	3.76	1.52	Largemouth bass
6	0-32 (430%)	.000	.000-.000 (318%)	0.05	0.02	Longear sunfish
158	6-311 (96%)	.007	.000-.016 (109%)	1.23	0.50	Striped bass x Whit
818	0-3107 (280%)	.008	.000-.017 (130%)	6.37	2.58	Warmouth
14560	11293-17827 (22%)	.583	.374-.793 (36%)	113.50	45.93	White crappie
97	0-212 (118%)	.004	.000-.009 (114%)	0.76	0.31	Walleye x Sauger hy
417	189-644 (55%)	.025	.011-.039 (56%)	3.25	1.31	Yellow bullhead
37	0-135 (266%)	.002	.000-.008 (303%)	0.29	0.12	Yellow bass

Table 6. Total fishing catch and catch rates, in kilograms.

KG CAUGHT	95% CI	KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
5581	3606-7556 (35%)	.282	.182-.382 (36%)	43.50	0.179	All species
195	0-573 (194%)	.031	.000-.108 (248%)	1.52	0.160	Black crappie
387	211-563 (45%)	.021	.009-.033 (55%)	3.02	0.054	Bluegill
18	0-56 (205%)	.003	.000-.009 (256%)	0.14	1.435	Carp
2800	896-4704 (68%)	.133	.093-.173 (30%)	21.83	0.496	Channel catfish
3	0-14 (318%)	.000	.000-.001 (318%)	0.03	0.137	Crappie spp.
121	0-343 (183%)	.010	.000-.031 (207%)	0.95	2.546	Flathead catfish
26	0-61 (138%)	.001	.000-.002 (87%)	0.20	0.043	Green sunfish
188	86-291 (54%)	.008	.003-.012 (60%)	1.47	0.390	Largemouth bass
0	0-2 (430%)	.000	.000-.000 (318%)	0.00	0.070	Longear sunfish
58	0-158 (175%)	.004	.000-.011 (217%)	0.45	0.364	Striped bass x Whit
27	0-100 (272%)	.000	.000-.001 (155%)	0.21	0.033	Warmouth
1727	1351-2103 (22%)	.069	.045-.094 (36%)	13.46	0.119	White crappie
		****	NOT RECORDED ****			Walleye x Sauger hy
29	14-44 (52%)	.002	.001-.003 (53%)	0.23	0.070	Yellow bullhead
1	0-3 (284%)	.000	.000-.000 (309%)	0.01	0.023	Yellow bass

Table 7. Total fishing catch and catch rates, in pounds.

LB CAUGHT	95% CI	LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
12304	7950-16657 (35%)	.622	.401-.842 (36%)	38.81	0.394	All species
429	0-1264 (194%)	.069	.000-.239 (248%)	1.35	0.352	Black crappie
854	466-1241 (45%)	.046	.021-.072 (55%)	2.69	0.120	Bluegill
41	0-124 (205%)	.006	.000-.020 (256%)	0.13	3.164	Carp
6173	1975-10371 (68%)	.294	.205-.382 (30%)	19.47	1.093	Channel catfish
7	0-30 (318%)	.000	.000-.001 (318%)	0.02	0.303	Crappie spp.
268	0-757 (183%)	.022	.000-.069 (207%)	0.84	5.612	Flathead catfish
57	0-135 (138%)	.002	.000-.004 (87%)	0.18	0.094	Green sunfish
415	190-641 (54%)	.017	.007-.027 (60%)	1.31	0.860	Largemouth bass
1	0-5 (430%)	.000	.000-.000 (318%)	0.00	0.155	Longear sunfish
127	0-349 (175%)	.008	.000-.025 (217%)	0.40	0.802	Striped bass x Whit
59	0-221 (272%)	.001	.000-.001 (155%)	0.19	0.073	Warmouth
3807	2978-4636 (22%)	.153	.098-.208 (36%)	12.01	0.261	White crappie
		****	NOT RECORDED ****			Walleye x Sauger hy
64	31-98 (52%)	.004	.002-.006 (53%)	0.20	0.155	Yellow bullhead
2	0-7 (284%)	.000	.000-.000 (309%)	0.01	0.052	Yellow bass

Table 8. Hours per completed trip and supplementary questions for all trips.

	MEAN	95% CI		MIN	MAX	#SAMPLES
HOURS PER COMPLETED TRIP*						
BOAT	4.1	3.9-4.4	(6%)	0.5	12.5	312
SHORE	1.7	1.6-1.8	(6%)	0.1	11.0	408
BOAT & SHORE	2.8	2.6-2.9	(6%)	0.1	12.5	720
MILES TRAVELED	10.6	9.4-11.9	(12%)	1	195	807
SUCCESS RATING (1-10)	8.3	8.2-8.5	(2%)	1	10	807

*199 samples were from split interviews of completed trips.
 87.2% of all 826 interviews were completed trips.

ILLEGAL HARVEST: Clerk noted 1 out of 826 interviews with illegal harvests.

Table 9. Frequency distribution of angler party size for all interviews.

PARTY SIZE:	1	2	3	4	5	6	7	8	9	10+
BOAT INTERVIEWS	118	170	23	2	1					
SHORE INTERVIEWS	244	131	91	28	9	5	3	1		

Table 10. Number of interviews (and %) per species sought for all interviews.

313 (37.9%)	ANY	All species
22 (2.7%)	BLG	Bluegill
1 (0.1%)	CAP	Carp
1 (0.1%)	CAT	Unidentified catfish
229 (27.7%)	CCF	Channel catfish
194 (23.5%)	CRP	Crappie spp.
1 (0.1%)	GSF	Green sunfish
33 (4.0%)	LMB	Largemouth bass
7 (0.8%)	SBH	Striped bass x White bass hybrid (Wiper)
17 (2.1%)	WHC	White crappie
8 (1.0%)	WSH	Walleye x Sauger hybrid (Saugeye)

Table 11. Number of anglers with a given harvest & release for completed trips

# OF FISH:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15+
Black crappie																
HARVEST	1288	6	-	-	-	-	-	-	-	-	1	-	-	-	-	-
RELEASE	1274	4	4	3	2	-	-	-	1	-	-	1	1	1	-	4
Bluegill																
HARVEST	1236	10	11	10	7	6	3	1	-	1	4	2	-	1	-	3
RELEASE	917	94	92	50	29	28	9	11	20	9	5	3	7	6	-	15
Carp																
HARVEST	1295	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	1294	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Channel catfish																
HARVEST	1074	76	30	44	29	7	34	-	-	-	-	-	-	-	1	-
RELEASE	1027	116	52	37	23	20	5	-	5	2	-	1	1	3	1	2
Crappie spp.																
HARVEST	1293	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-
RELEASE	1295	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Flathead catfish																
HARVEST	1293	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-
RELEASE	1294	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Green sunfish																
HARVEST	1295	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	1273	5	1	5	3	1	-	1	1	-	-	-	1	-	-	4
Largemouth bass																
HARVEST	1291	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	1233	28	18	8	2	3	-	1	-	2	-	-	-	-	-	-
Longear sunfish																
HARVEST	1295	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	1294	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Striped bass x White bass hybrid (Wiper)																
HARVEST	1295	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	1279	12	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Warmouth																
HARVEST	1295	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	1269	5	2	-	-	2	1	-	2	-	1	2	1	2	2	6
White crappie																
HARVEST	1075	20	21	14	17	15	15	20	21	9	27	6	3	2	3	27
RELEASE	970	71	31	33	17	23	11	8	13	8	7	3	7	13	3	77

Table 11. (Cont.) Number of anglers with a given harvest & release for completed trips

# OF FISH:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15+
Walleye x Sauger hybrid (Saugeye)																
HARVEST	1291	2	-	-	-	-	-	-	-	-	2	-	-	-	-	-
RELEASE	1285	6	2	-	-	-	-	-	-	-	-	2	-	-	-	-
Yellow bullhead																
HARVEST	1295	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	1251	20	8	6	4	4	-	1	1	-	-	-	-	-	-	-
Yellow bass																
HARVEST	1295	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	1292	2	-	1	-	-	-	-	-	-	-	-	-	-	-	-

Figure B1. Length-frequency histogram for harvested black crappie on Charleston Side Channel Lake in 2008.

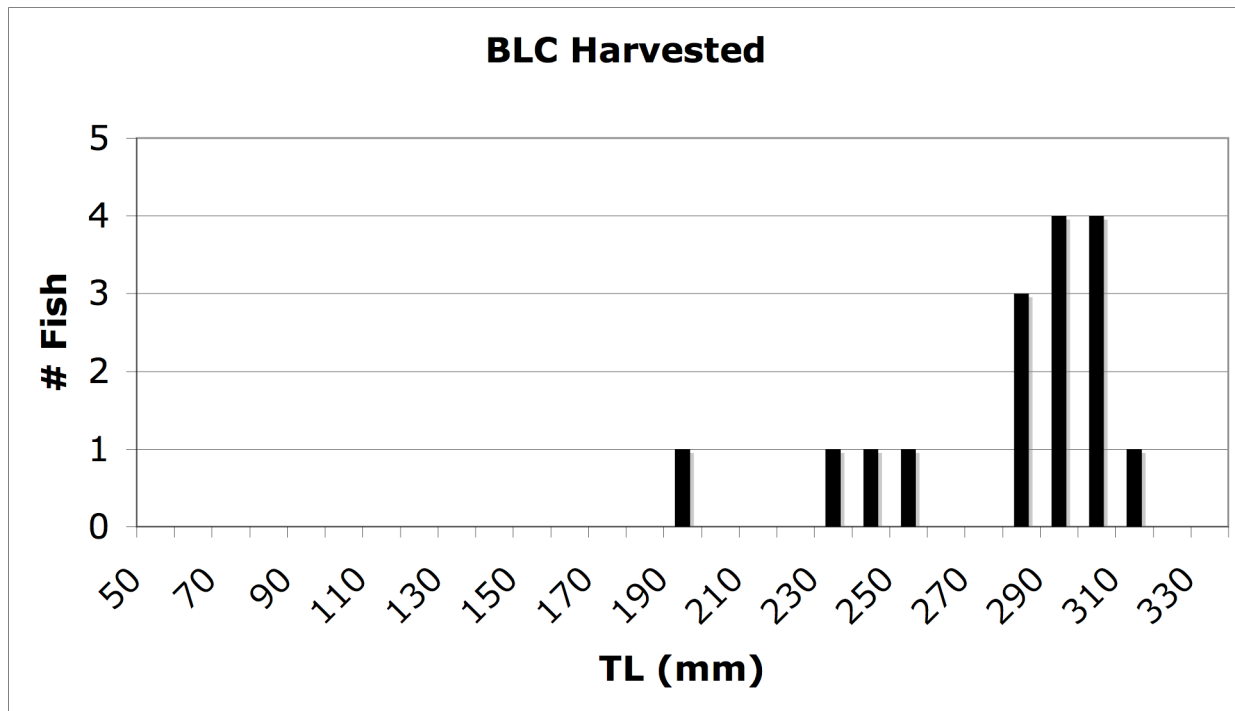


Figure B2. Length-frequency histogram for released black crappie on Charleston Side Channel Lake in 2008.

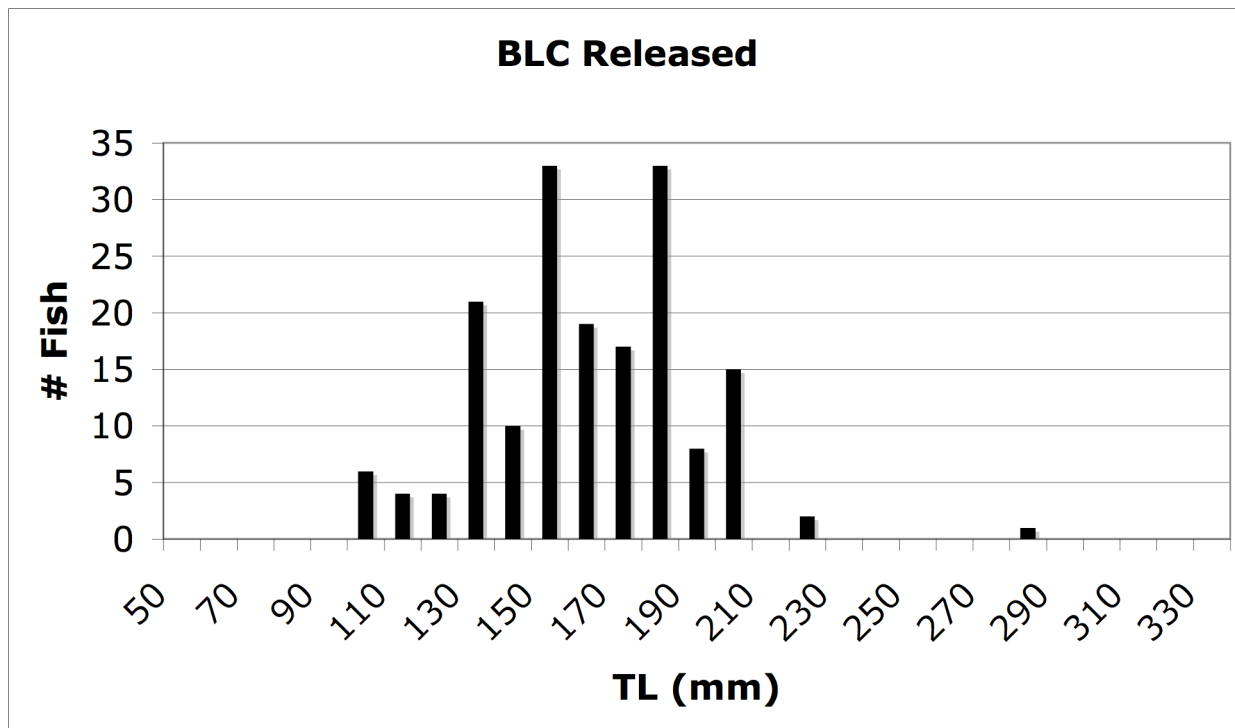


Figure B3. Length-frequency histogram for harvested bluegill on Charleston Side Channel Lake in 2008.

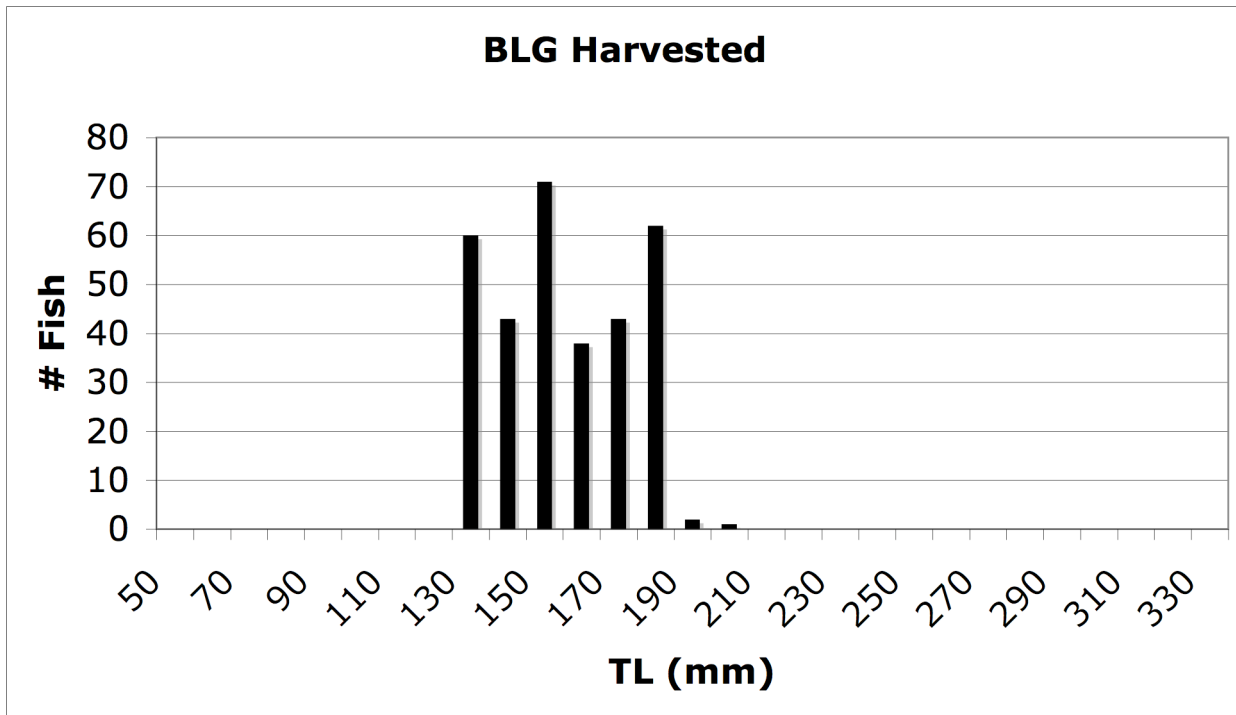


Figure B4. Length-frequency histogram for released bluegill on Charleston Side Channel Lake in 2008.

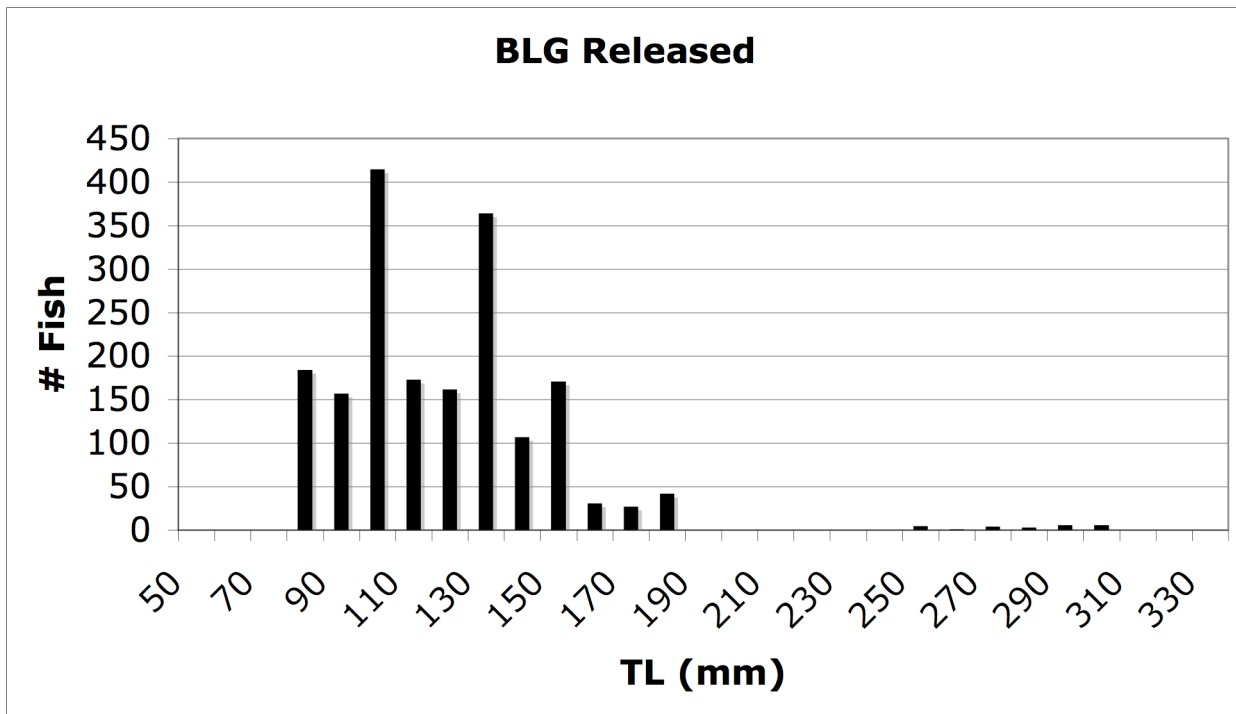


Figure B5. Length-frequency histogram for harvested channel catfish on Charleston Side Channel Lake in 2008.

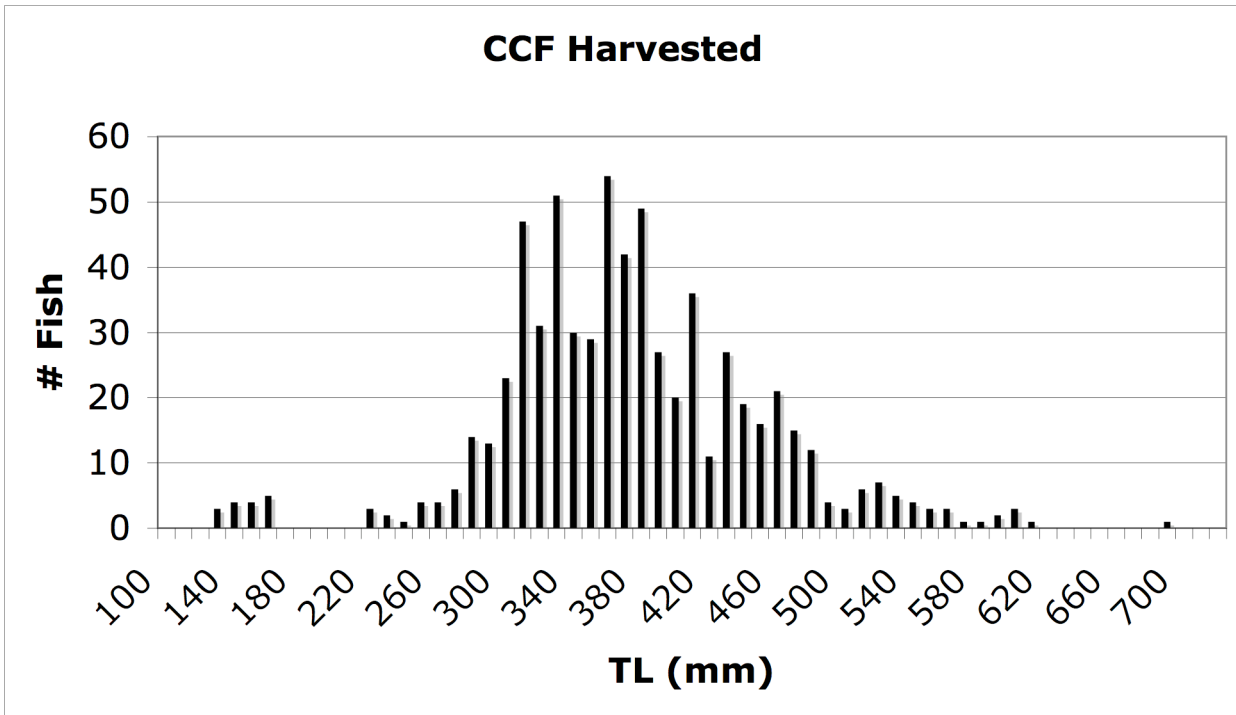


Figure B6. Length-frequency histogram for released channel catfish on Charleston Side Channel Lake in 2008.

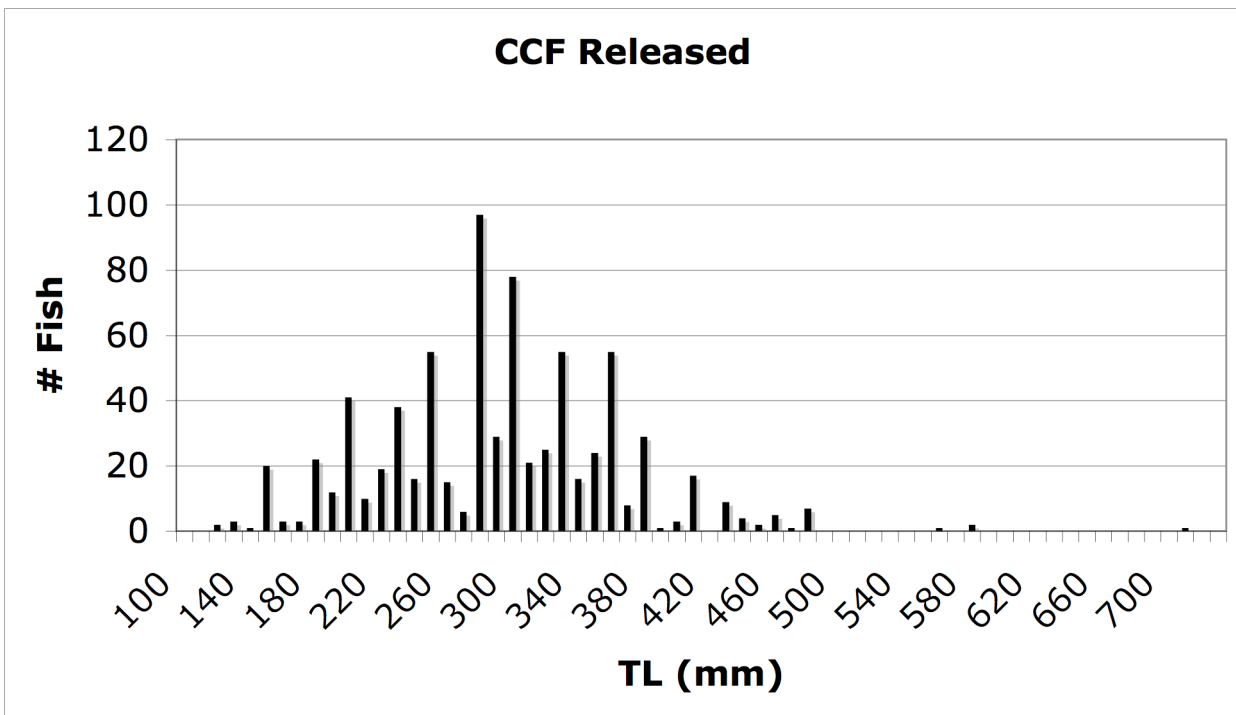


Figure B7. Length-frequency histogram for harvested white crappie on Charleston Side Channel Lake in 2008.

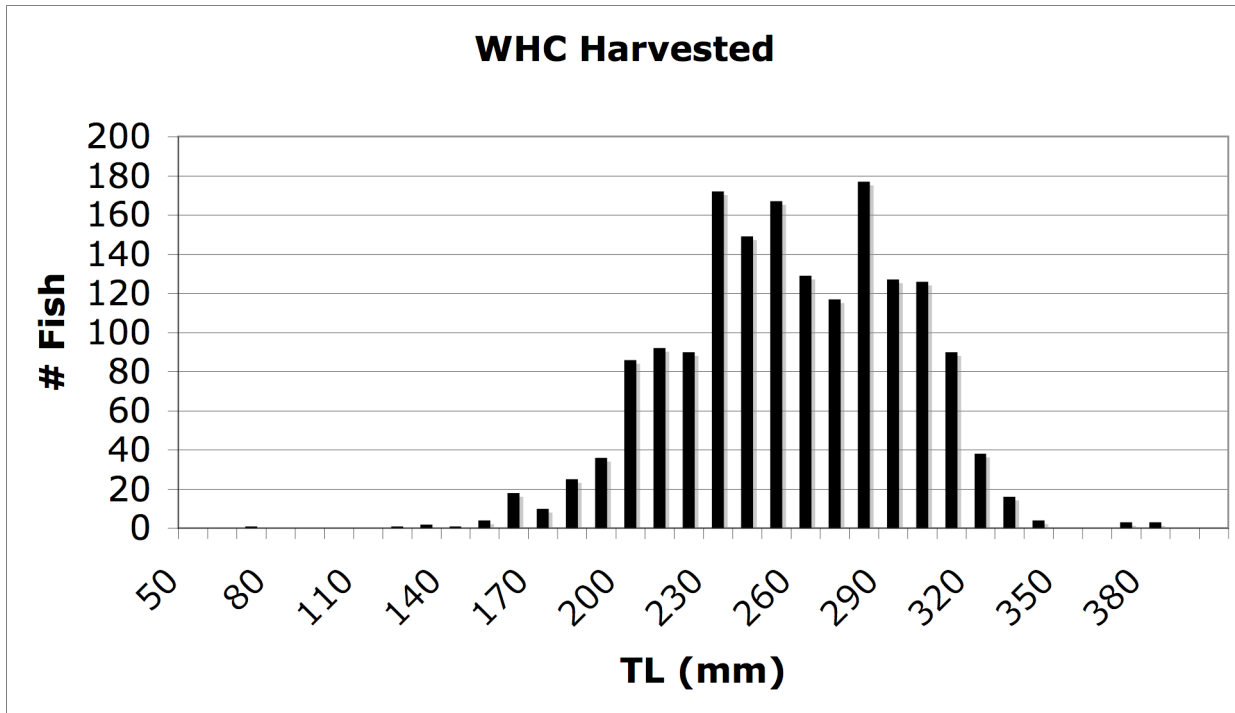


Figure B8. Length-frequency histogram for released white crappie on Charleston Side Channel Lake in 2008.

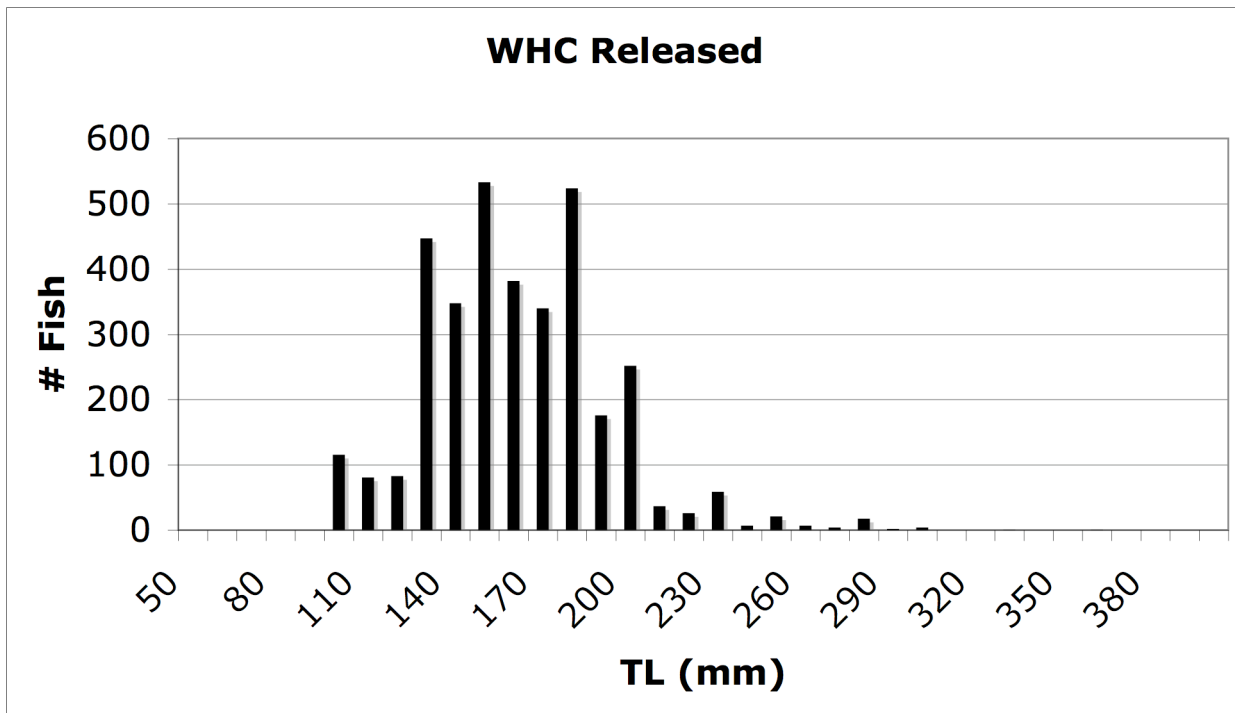


Figure B9. Length-frequency histogram for harvested saugeye on Charleston Side Channel Lake in 2008.

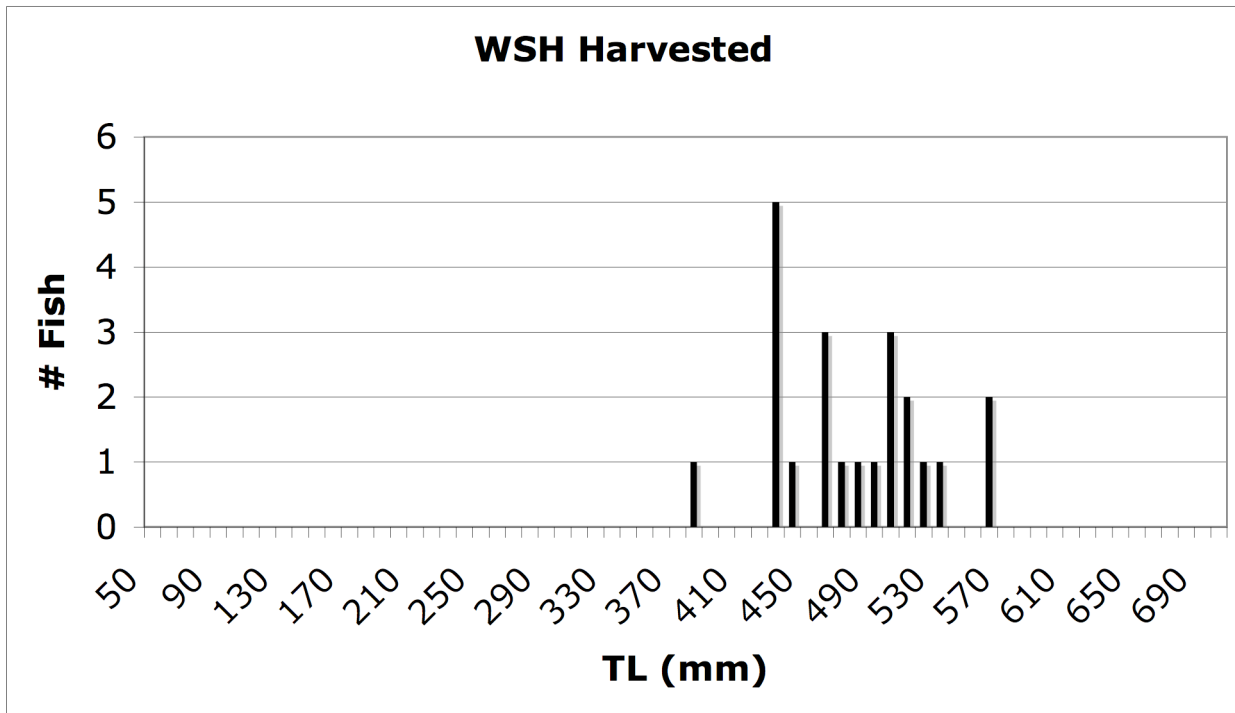
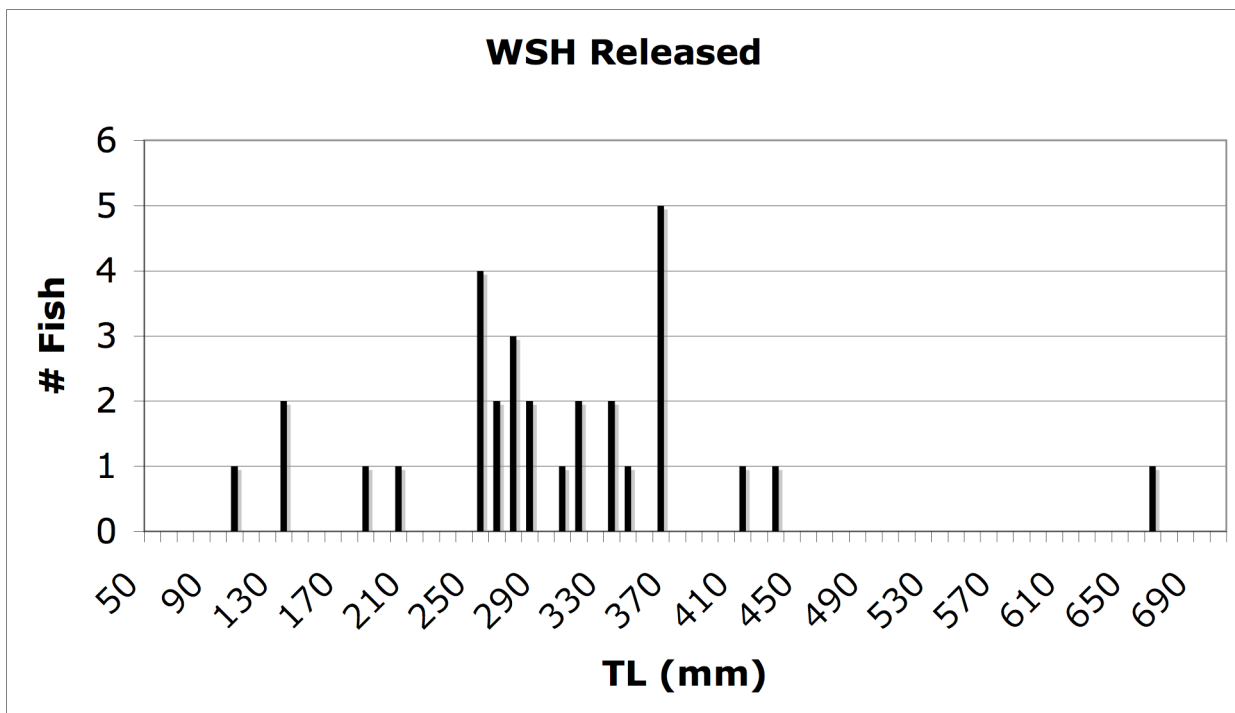


Figure B10. Length-frequency histogram for released saugeye on Charleston Side Channel Lake in 2008.



ILLINOIS NATURAL HISTORY SURVEY
 CENTER FOR AQUATIC ECOLOGY
 2008 CREEL SURVEY RESULTS

2008 DEVIL'S KITCHEN
 704 ACRES
 REGION 5, DISTRICT 22

STRATIFICATION SUMMARY:

Day creel only.
 Results cover 03/15/2008 through 10/31/2008
 Year periods stratified.
 Fishing modes (boat vs. shore) stratified.
 Day types (weekday vs. weekend/holiday) stratified.
 Day periods (morning, midday, and afternoon) stratified.

SAMPLING RATIO: 324/693 = 46.8%

NUMBER OF INTERVIEWS: 839

Table 1. Total fishing effort, by fishing mode and day type.

FISHING MODE	DAYTYPE	ANGLER-HOURS	95% CI	HOURS/ACRE	95% CI	% EFF
BOAT	WEEKDAY	4955	4163-5747 (16%)	7	6-8 (16%)	17%
	HOLIDAY	3989	3151-4827 (21%)	6	4-7 (21%)	33%
	TOTAL	8944	7791-10097 (13%)	13	11-14 (13%)	24%
SHORE	WEEKDAY	2770	2221-3318 (20%)	4	3-5 (20%)	12%
	HOLIDAY	1460	1096-1825 (25%)	2	2-3 (25%)	25%
	TOTAL	4230	3572-4888 (16%)	6	5-7 (16%)	17%
BOAT & SHORE	WEEKDAY	7725	6762-8688 (12%)	11	10-12 (12%)	15%
	HOLIDAY	5449	4535-6363 (17%)	8	6-9 (17%)	31%
	TOTAL	13174	11846-14502 (10%)	19	17-21 (10%)	22%

Table 2. Total fishing harvest and harvest rates, in numbers of fish.

# HARVESTED	95% CI	#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
8911	6398-11424 (28%)	.463	.360-.567 (22%)	31.28	12.66	All species
1004	662-1346 (34%)	.054	.005-.104 (91%)	3.53	1.43	Black crappie
2964	2138-3790 (28%)	.161	.109-.212 (32%)	10.41	4.21	Bluegill
32	0-84 (162%)	.002	.000-.004 (142%)	0.11	0.05	Channel catfish
137	32-243 (77%)	.011	.001-.020 (90%)	0.48	0.20	Green sunfish
		****	NOT RECORDED ****			Gizzard shad
2577	2026-3129 (21%)	.127	.098-.157 (23%)	9.05	3.66	Largemouth bass
222	77-368 (65%)	.016	.004-.028 (76%)	0.78	0.32	Longear sunfish
1754	0-4079 (133%)	.079	.000-.162 (104%)	6.16	2.49	Rainbow trout
182	65-300 (65%)	.010	.002-.017 (83%)	0.64	0.26	Redear sunfish
		****	NOT RECORDED ****			Unidentified Sunfis
38	0-102 (171%)	.004	.000-.011 (162%)	0.13	0.05	Warmouth

Table 3. Total fishing harvest and harvest rates, in kilograms.

KG HARVESTED	95% CI	KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
2329	1655-3003 (29%)	.113	.086-.140 (24%)	8.18	0.261	All species
360	230-490 (36%)	.018	.002-.033 (87%)	1.26	0.359	Black crappie
373	266-481 (29%)	.019	.013-.025 (32%)	1.31	0.126	Bluegill
28	0-71 (155%)	.001	.000-.003 (142%)	0.10	0.861	Channel catfish
14	4-24 (71%)	.001	.000-.002 (84%)	0.05	0.104	Green sunfish
		****	NOT RECORDED ****			Gizzard shad
992	779-1204 (21%)	.047	.037-.058 (22%)	3.48	0.385	Largemouth bass
27	13-41 (52%)	.002	.001-.003 (68%)	0.09	0.122	Longear sunfish
500	0-1126 (125%)	.023	.000-.045 (98%)	1.75	0.285	Rainbow trout
31	10-51 (66%)	.002	.000-.003 (84%)	0.11	0.168	Redear sunfish
		****	NOT RECORDED ****			Unidentified Sunfis
4	0-12 (187%)	.000	.000-.001 (175%)	0.01	0.113	Warmouth

Table 4. Total fishing harvest and harvest rates, in pounds.

LB HARVESTED	95% CI	LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
5134	3649-6620 (29%)	.249	.190-.308 (24%)	7.30	0.576	All species
794	508-1081 (36%)	.039	.005-.073 (87%)	1.13	0.791	Black crappie
823	586-1060 (29%)	.042	.028-.055 (32%)	1.17	0.278	Bluegill
61	0-155 (155%)	.003	.000-.007 (142%)	0.09	1.898	Channel catfish
32	9-54 (71%)	.002	.000-.004 (84%)	0.04	0.230	Green sunfish
		****	NOT RECORDED ****			Gizzard shad
2186	1717-2655 (21%)	.105	.081-.128 (22%)	3.11	0.848	Largemouth bass
60	28-91 (52%)	.004	.001-.006 (68%)	0.08	0.268	Longear sunfish
1102	0-2483 (125%)	.051	.001-.100 (98%)	1.57	0.628	Rainbow trout
68	23-112 (66%)	.003	.001-.006 (84%)	0.10	0.371	Redear sunfish
		****	NOT RECORDED ****			Unidentified Sunfis
9	0-27 (187%)	.001	.000-.003 (175%)	0.01	0.248	Warmouth

Table 5. Total fishing catch and catch rates, in numbers of fish.
Catch includes both harvested and released fish.

# CAUGHT	95% CI	#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
23479	19583-27376 (17%)	1.269	1.059-1.479 (17%)	82.44	33.36	All species
2553	1336-3769 (48%)	.105	.045-.164 (57%)	8.96	3.63	Black crappie
9896	7721-12070 (22%)	.609	.455-.764 (25%)	34.74	14.06	Bluegill
44	0-100 (129%)	.003	.000-.006 (125%)	0.15	0.06	Channel catfish
827	559-1096 (32%)	.051	.033-.070 (35%)	2.90	1.18	Green sunfish
20	0-51 (149%)	.001	.000-.003 (149%)	0.07	0.03	Gizzard shad
6762	5698-7826 (16%)	.314	.263-.365 (16%)	23.74	9.61	Largemouth bass
857	378-1337 (56%)	.060	.032-.089 (48%)	3.01	1.22	Longear sunfish
2190	0-4915 (124%)	.103	.005-.201 (95%)	7.69	3.11	Rainbow trout
194	76-312 (61%)	.010	.002-.018 (79%)	0.68	0.28	Redear sunfish
18	0-46 (159%)	.001	.000-.003 (146%)	0.06	0.02	Unidentified Sunfis
119	22-216 (81%)	.011	.000-.021 (97%)	0.42	0.17	Warmouth

Table 6. Total fishing catch and catch rates, in kilograms.

KG CAUGHT	95% CI	KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
4345	3545-5145 (18%)	.217	.184-.250 (15%)	15.26	0.185	All species
497	288-706 (42%)	.022	.007-.036 (68%)	1.74	0.195	Black crappie
813	631-995 (22%)	.049	.036-.061 (26%)	2.85	0.082	Bluegill
33	0-76 (135%)	.002	.000-.004 (119%)	0.11	0.747	Channel catfish
68	47-88 (31%)	.004	.003-.006 (35%)	0.24	0.082	Green sunfish
8	0-20 (146%)	.000	.000-.001 (146%)	0.03	0.403	Gizzard shad
2244	1877-2611 (16%)	.106	.087-.125 (18%)	7.88	0.332	Largemouth bass
73	29-117 (60%)	.005	.002-.008 (53%)	0.26	0.085	Longear sunfish
570	0-1230 (116%)	.026	.002-.050 (91%)	2.00	0.260	Rainbow trout
32	12-52 (64%)	.002	.000-.003 (81%)	0.11	0.165	Redear sunfish
		****	NOT RECORDED ****			Unidentified Sunfis
8	0-17 (106%)	.001	.000-.002 (107%)	0.03	0.067	Warmouth

Table 7. Total fishing catch and catch rates, in pounds.

LB CAUGHT	95% CI	LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
9579	7815-11344 (18%)	.478	.405-.551 (15%)	13.61	0.408	All species
1095	635-1555 (42%)	.048	.015-.080 (68%)	1.56	0.429	Black crappie
1792	1390-2194 (22%)	.107	.079-.135 (26%)	2.55	0.181	Bluegill
72	0-168 (135%)	.004	.000-.009 (119%)	0.10	1.647	Channel catfish
149	104-195 (31%)	.009	.006-.013 (35%)	0.21	0.180	Green sunfish
18	0-45 (146%)	.001	.000-.002 (146%)	0.03	0.889	Gizzard shad
4947	4138-5755 (16%)	.234	.191-.276 (18%)	7.03	0.732	Largemouth bass
161	64-257 (60%)	.011	.005-.017 (53%)	0.23	0.187	Longear sunfish
1258	0-2711 (116%)	.058	.005-.111 (91%)	1.79	0.574	Rainbow trout
71	26-115 (64%)	.003	.001-.006 (81%)	0.10	0.364	Redear sunfish
		****	NOT RECORDED ****			Unidentified Sunfis
18	0-36 (106%)	.002	.000-.004 (107%)	0.03	0.149	Warmouth

Table 8. Hours per completed trip and supplementary questions for all trips.

	MEAN	95% CI		MIN	MAX	#SAMPLES
HOURS PER COMPLETED TRIP*						
BOAT	3.9	3.6-4.2	(7%)	0.5	12.7	270
SHORE	1.7	1.5-1.8	(9%)	0.2	6.8	218
BOAT & SHORE	2.9	2.7-3.1	(7%)	0.2	12.7	488
MILES TRAVELED	19.1	16.8-21.4	(12%)	1	350	593
SUCCESS RATING (1-10)	6.8	6.5-7.1	(5%)	1	10	592

*215 samples were from split interviews of completed trips.
 79.6% of all 613 interviews were completed trips.

ILLEGAL HARVEST: Clerk noted 5 out of 613 interviews with illegal harvests.

Table 9. Frequency distribution of angler party size for all interviews.

PARTY SIZE:	1	2	3	4	5	6	7	8	9	10+
BOAT INTERVIEWS	134	209	23	3						
SHORE INTERVIEWS	139	77	10	7	8	1	1	1		

Table 10. Number of interviews (and %) per species sought for all interviews.

131 (21.4%)	ANY	All species
1 (0.2%)	BLC	Black crappie
35 (5.7%)	BLG	Bluegill
8 (1.3%)	CAT	Unidentified catfish
48 (7.8%)	CRP	Crappie spp.
362 (59.1%)	LMB	Largemouth bass
28 (4.6%)	RBT	Rainbow trout

Table 11. Number of anglers with a given harvest & release for completed trips

# OF FISH:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15+
Black crappie																
HARVEST	764	21	8	2	8	3	2	4	2	5	3	-	-	1	-	1
RELEASE	771	18	-	7	3	3	9	2	1	2	1	-	2	1	-	4
Bluegill																
HARVEST	711	17	8	23	7	11	6	7	4	5	6	4	5	2	3	5
RELEASE	600	54	26	22	38	9	13	8	2	5	7	2	6	2	-	30
Channel catfish																
HARVEST	824	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	819	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Green sunfish																
HARVEST	811	8	2	1	2	-	-	-	-	-	-	-	-	-	-	-
RELEASE	727	61	18	12	2	-	4	-	-	-	-	-	-	-	-	-
Gizzard shad																
HARVEST	824	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	821	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Largemouth bass																
HARVEST	670	37	17	14	10	7	65	2	1	1	-	-	-	-	-	-
RELEASE	452	189	63	24	30	17	14	9	6	6	3	1	2	2	2	4
Longear sunfish																
HARVEST	803	10	5	3	2	1	-	-	-	-	-	-	-	-	-	-
RELEASE	788	16	6	3	1	1	3	-	-	-	1	-	2	2	-	1
Rainbow trout																
HARVEST	774	22	9	4	2	9	3	-	-	-	-	-	-	-	-	1
RELEASE	781	36	5	-	2	-	-	-	-	-	-	-	-	-	-	-
Redear sunfish																
HARVEST	804	13	1	-	4	-	-	-	-	1	1	-	-	-	-	-
RELEASE	820	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unidentified Sunfish hybrid																
HARVEST	824	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	820	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Warmouth																
HARVEST	822	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	803	15	4	2	-	-	-	-	-	-	-	-	-	-	-	-

Figure B11. Length-frequency histogram for harvested black crappie on Devil's Kitchen in 2008.

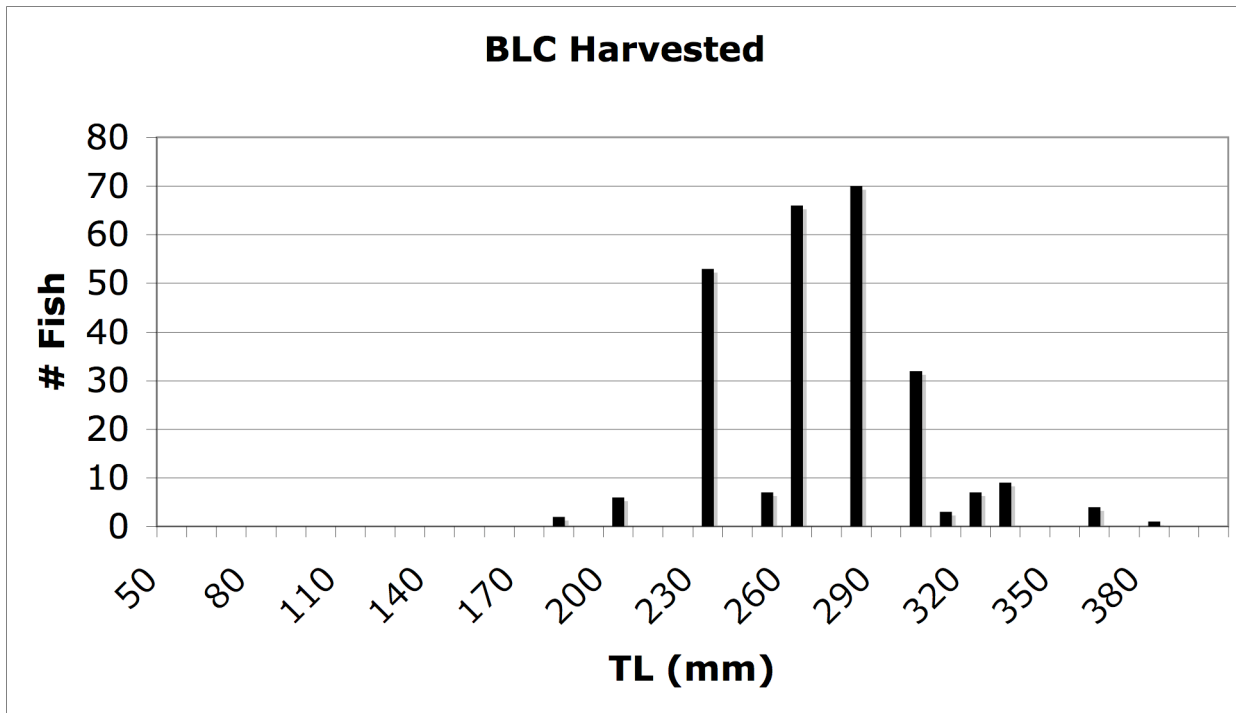


Figure B12. Length-frequency histogram for released black crappie on Devil's Kitchen in 2008.

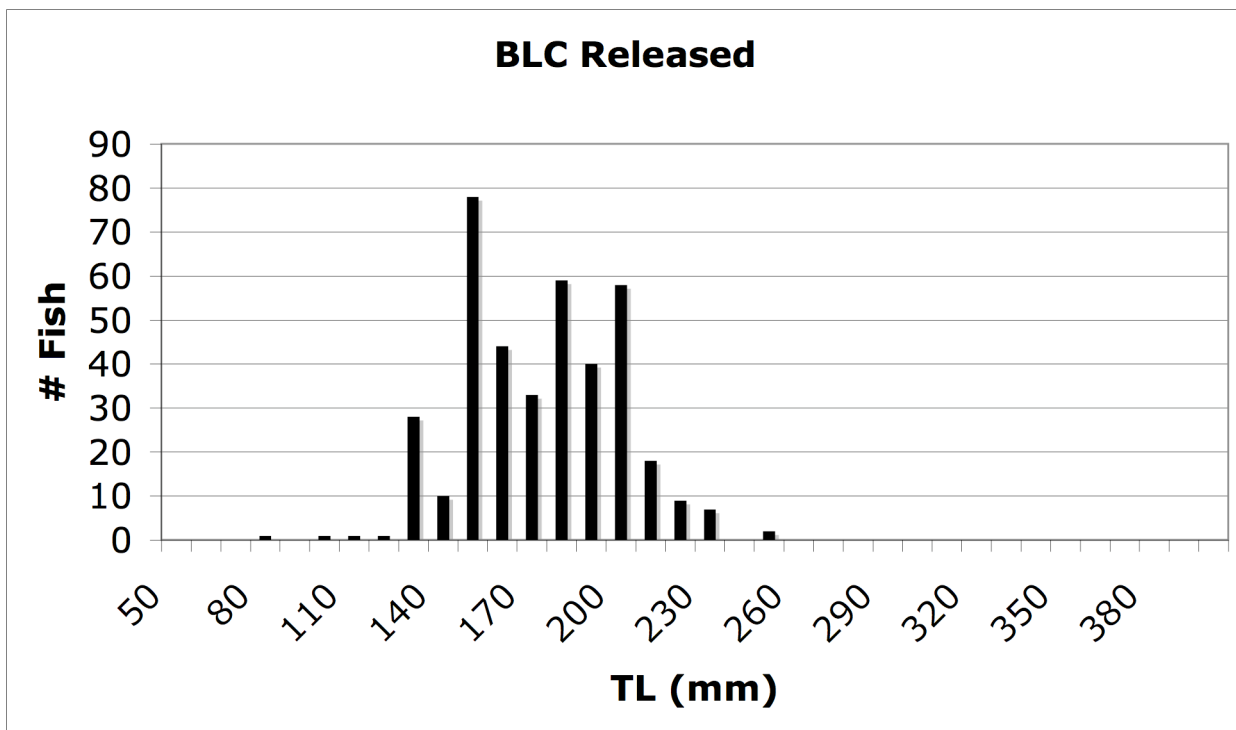


Figure B13. Length-frequency histogram for harvested bluegill on Devil's Kitchen in 2008.

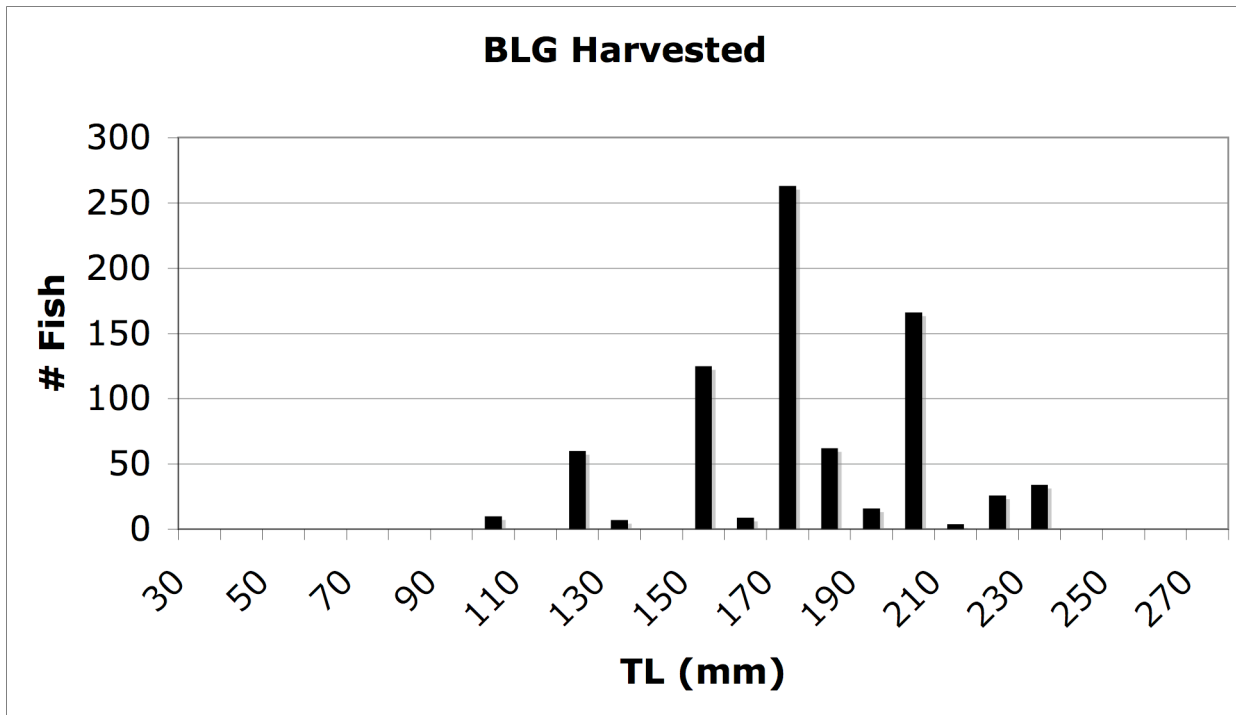


Figure B14. Length-frequency histogram for released bluegill on Devil's Kitchen in 2008.

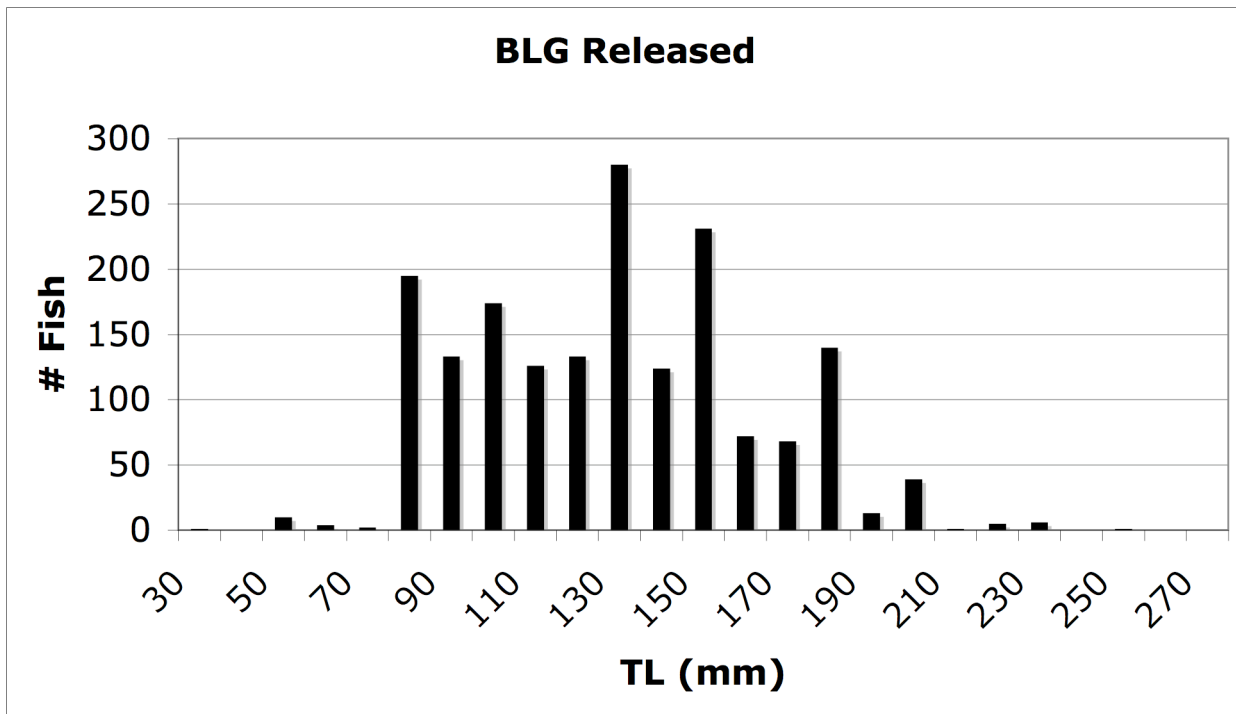


Figure B15. Length-frequency histogram for harvested largemouth bass on Devil's Kitchen in 2008.

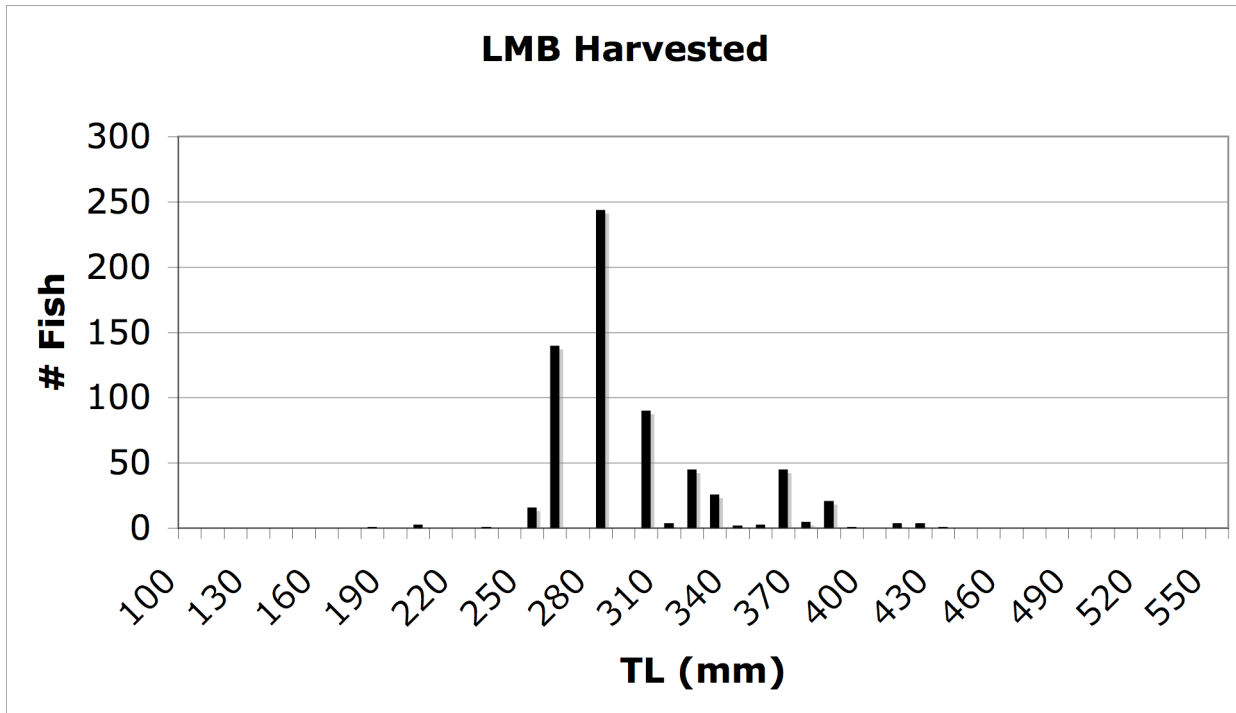


Figure B16. Length-frequency histogram for released largemouth bass on Devil's Kitchen in 2008.

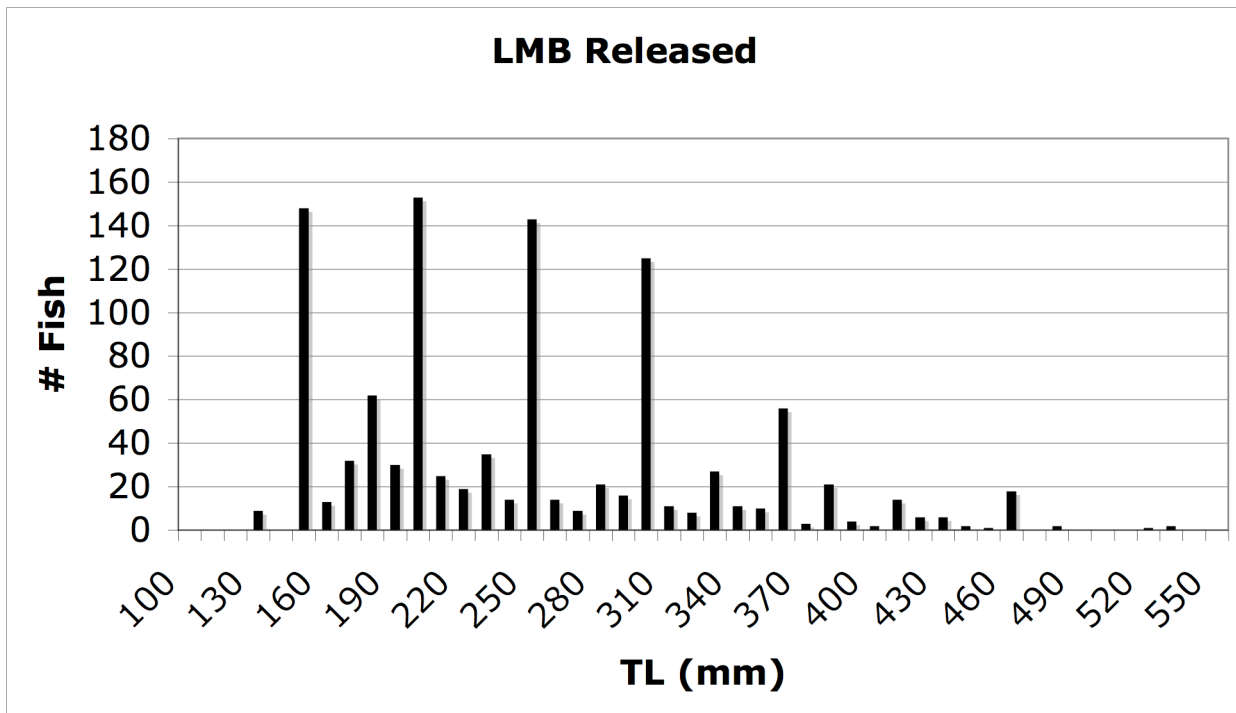


Figure B17. Length-frequency histogram for harvested rainbow trout on Devil's Kitchen in 2008.

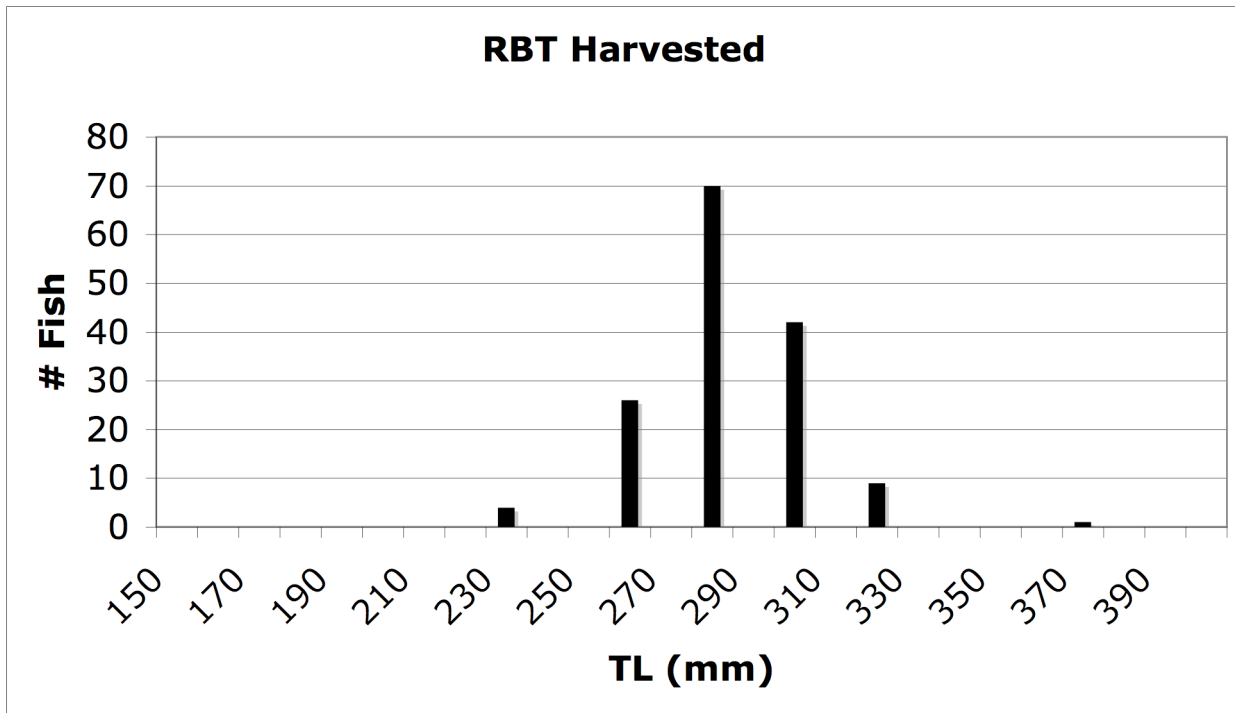
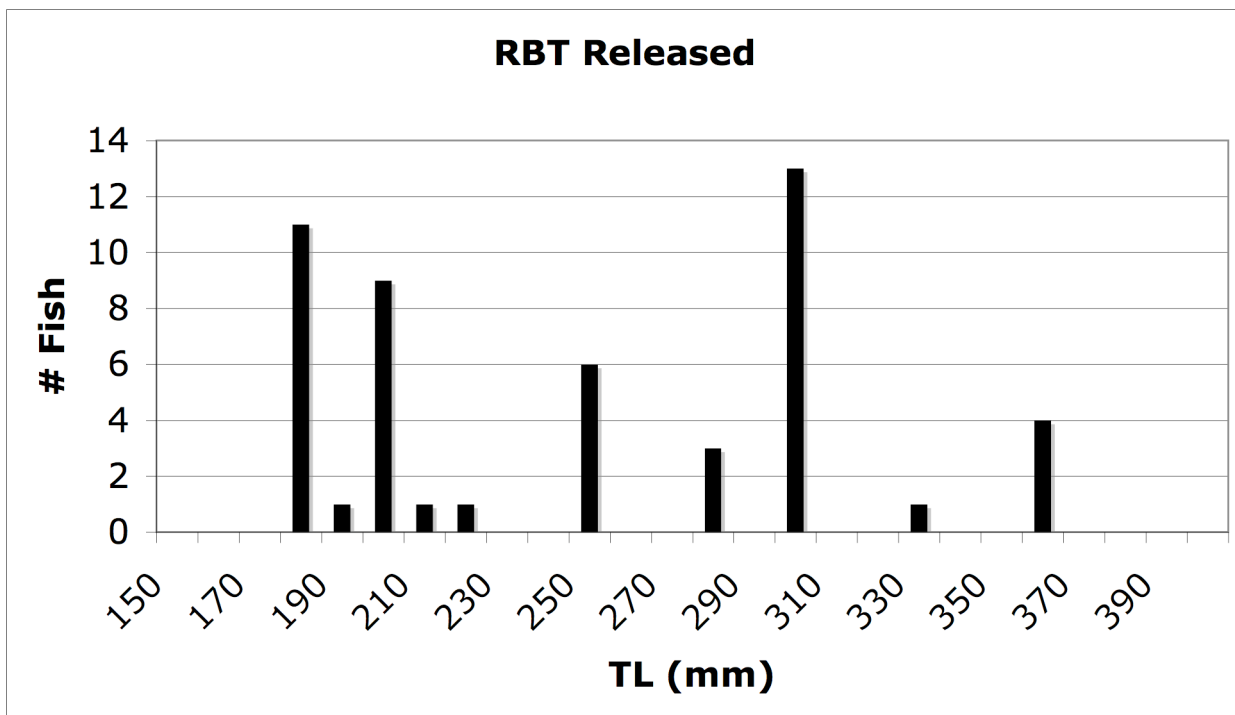


Figure B18. Length-frequency histogram for released rainbow trout on Devil's Kitchen in 2008.



ILLINOIS NATURAL HISTORY SURVEY
 CENTER FOR AQUATIC ECOLOGY
 2008 CREEL SURVEY RESULTS

2008 LAKE MINGO
 172 ACRES
 REGION 3, DISTRICT 10

STRATIFICATION SUMMARY:

Day creel only.
 Results cover 03/15/2008 through 10/31/2008
 Year periods stratified.
 Fishing modes (boat vs. shore) stratified.
 Day types (weekday vs. weekend/holiday) stratified.
 Day periods (morning, midday, and afternoon) stratified.

SAMPLING RATIO: 298/693 = 43.0%

NUMBER OF INTERVIEWS: 995

Table 1. Total fishing effort, by fishing mode and day type.

FISHING MODE	DAYTYPE	ANGLER-HOURS	95% CI	HOURS/ACRE	95% CI	% EFF
BOAT	WEEKDAY	5466	4624-6308 (15%)	32	27-37 (15%)	22%
	HOLIDAY	4364	3803-4926 (13%)	25	22-29 (13%)	49%
	TOTAL	9830	8818-10842 (10%)	57	51-63 (10%)	34%
SHORE	WEEKDAY	3052	2418-3686 (21%)	18	14-21 (21%)	17%
	HOLIDAY	1712	1388-2037 (19%)	10	8-12 (19%)	29%
	TOTAL	4764	4083-5446 (14%)	28	24-32 (14%)	21%
BOAT & SHORE	WEEKDAY	8518	7480-9556 (12%)	50	43-56 (12%)	20%
	HOLIDAY	6077	5435-6718 (11%)	35	32-39 (11%)	44%
	TOTAL	14595	13375-15815 (8%)	85	78-92 (8%)	30%

Table 2. Total fishing harvest and harvest rates, in numbers of fish.

# HARVESTED	95% CI		#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
3787	3201-4373	(15%)	.253	.168-.339 (34%)	54.41	22.02	All species
1451	1001-1900	(31%)	.076	.056-.097 (26%)	20.84	8.43	Black crappie
229	118-339	(48%)	.017	.009-.025 (48%)	3.28	1.33	Bluegill
2	0-8	(245%)	.000	.000-.000 (245%)	0.03	0.01	Carp
			****	NOT RECORDED ****			Unidentified catfis
1410	1043-1777	(26%)	.114	.018-.211 (84%)	20.26	8.20	Channel catfish
622	454-790	(27%)	.043	.020-.066 (54%)	8.93	3.62	Largemouth bass
1	0-4	(245%)	.000	.000-.000 (245%)	0.02	0.01	Muskellunge
			****	NOT RECORDED ****			Redear sunfish
			****	NOT RECORDED ****			Smallmouth bass
20	0-47	(132%)	.001	.000-.002 (223%)	0.29	0.12	White crappie
31	0-84	(171%)	.001	.000-.004 (202%)	0.44	0.18	Yellow bullhead
18	0-58	(231%)	.000	.000-.000 (226%)	0.25	0.10	Yellow perch
4	0-15	(278%)	.000	.000-.001 (257%)	0.06	0.02	Yellow bass

Table 3. Total fishing harvest and harvest rates, in kilograms.

KG HARVESTED	95% CI		KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
1457	1235-1678	(15%)	.085	.070-.099 (17%)	20.93	0.385	All species
316	213-418	(33%)	.016	.012-.021 (27%)	4.53	0.218	Black crappie
13	6-20	(51%)	.001	.000-.001 (49%)	0.19	0.057	Bluegill
15	0-51	(245%)	.000	.000-.001 (257%)	0.21	6.520	Carp
			****	NOT RECORDED ****			Unidentified catfis
497	373-621	(25%)	.033	.023-.044 (32%)	7.14	0.353	Channel catfish
595	433-757	(27%)	.033	.023-.044 (32%)	8.55	0.957	Largemouth bass
12	0-40	(236%)	.000	.000-.001 (245%)	0.17	9.461	Muskellunge
			****	NOT RECORDED ****			Redear sunfish
			****	NOT RECORDED ****			Smallmouth bass
4	0-8	(129%)	.000	.000-.000 (187%)	0.05	0.177	White crappie
5	0-13	(180%)	.000	.000-.001 (184%)	0.07	0.152	Yellow bullhead
1	0-2	(231%)	.000	.000-.000 (231%)	0.01	0.040	Yellow perch
0	0-1	(257%)	.000	.000-.000 (257%)	0.01	0.102	Yellow bass

Table 4. Total fishing harvest and harvest rates, in pounds.

LB HARVESTED	95% CI		LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
3212	2723-3700	(15%)	.187	.154-.219 (17%)	18.67	0.848	All species
696	469-922	(33%)	.036	.026-.045 (27%)	4.05	0.480	Black crappie
29	14-43	(51%)	.002	.001-.003 (49%)	0.17	0.125	Bluegill
33	0-117	(257%)	.000	.000-.001 (245%)	0.19	14.375	Carp
			****	NOT RECORDED ****			Unidentified catfis
1096	822-1370	(25%)	.074	.050-.098 (32%)	6.37	0.777	Channel catfish
1312	954-1670	(27%)	.073	.050-.097 (32%)	7.63	2.109	Largemouth bass
26	0-90	(245%)	.001	.000-.003 (245%)	0.15	20.858	Muskellunge
			****	NOT RECORDED ****			Redear sunfish
			****	NOT RECORDED ****			Smallmouth bass
8	0-18	(129%)	.000	.000-.001 (187%)	0.05	0.390	White crappie
10	0-29	(180%)	.000	.000-.001 (184%)	0.06	0.336	Yellow bullhead
2	0-5	(231%)	.000	.000-.000 (226%)	0.01	0.089	Yellow perch
1	0-3	(257%)	.000	.000-.000 (257%)	0.01	0.224	Yellow bass

Table 5. Total fishing catch and catch rates, in numbers of fish.
Catch includes both harvested and released fish.

# CAUGHT	95% CI		#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
9798	8505-11091	(13%)	.573	.481-.664 (16%)	140.76	56.96	All species
2715	2016-3414	(26%)	.152	.115-.188 (24%)	39.01	15.79	Black crappie
1953	1369-2538	(30%)	.130	.095-.164 (26%)	28.06	11.36	Bluegill
8	0-24	(212%)	.000	.000-.000 (263%)	0.11	0.04	Carp
6	0-18	(226%)	.000	.000-.000 (226%)	0.08	0.03	Unidentified catfis
1860	1381-2340	(26%)	.135	.049-.220 (63%)	26.73	10.82	Channel catfish
3025	2480-3570	(18%)	.147	.113-.182 (24%)	43.46	17.59	Largemouth bass
39	4-75	(89%)	.001	.000-.002 (65%)	0.57	0.23	Muskellunge
2	0-6	(318%)	.000	.000-.000 (278%)	0.02	0.01	Redear sunfish
1	0-4	(245%)	.000	.000-.000 (236%)	0.02	0.01	Smallmouth bass
54	1-106	(97%)	.002	.000-.005 (134%)	0.77	0.31	White crappie
71	0-178	(152%)	.003	.000-.007 (119%)	1.02	0.41	Yellow bullhead
26	0-68	(164%)	.000	.000-.001 (152%)	0.37	0.15	Yellow perch
39	2-75	(94%)	.002	.000-.004 (96%)	0.55	0.22	Yellow bass

Table 6. Total fishing catch and catch rates, in kilograms.

KG CAUGHT	95% CI	KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
3060	2614-3507 (15%)	.158	.133-.183 (16%)	43.97	0.312	All species
462	327-597 (29%)	.029	.015-.042 (47%)	6.64	0.170	Black crappie
93	61-125 (35%)	.006	.004-.007 (27%)	1.33	0.048	Bluegill
15	0-52 (240%)	.000	.000-.001 (237%)	0.22	1.970	Carp
		****	NOT RECORDED ****			Unidentified catfis
560	424-696 (24%)	.037	.026-.048 (30%)	8.04	0.301	Channel catfish
1825	1451-2199 (20%)	.084	.063-.104 (24%)	26.22	0.603	Largemouth bass
86	1-171 (99%)	.002	.001-.004 (73%)	1.24	2.185	Muskellunge
0	0-0 (278%)	.000	.000-.000 (278%)	0.00	0.020	Redear sunfish
1	0-4 (245%)	.000	.000-.000 (236%)	0.01	0.823	Smallmouth bass
5	0-12 (116%)	.000	.000-.000 (117%)	0.08	0.102	White crappie
8	0-20 (138%)	.000	.000-.001 (118%)	0.12	0.120	Yellow bullhead
1	0-2 (199%)	.000	.000-.000 (179%)	0.01	0.032	Yellow perch
3	0-7 (102%)	.000	.000-.000 (132%)	0.05	0.087	Yellow bass

Table 7. Total fishing catch and catch rates, in pounds.

LB CAUGHT	95% CI	LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
6747	5762-7731 (15%)	.348	.293-.403 (16%)	39.23	0.689	All species
1019	722-1316 (29%)	.063	.033-.092 (47%)	5.92	0.375	Black crappie
205	134-276 (35%)	.012	.009-.016 (27%)	1.19	0.105	Bluegill
34	0-114 (240%)	.000	.000-.001 (237%)	0.19	4.343	Carp
		****	NOT RECORDED ****			Unidentified catfis
1234	934-1534 (24%)	.082	.058-.107 (30%)	7.17	0.663	Channel catfish
4024	3199-4848 (20%)	.184	.140-.229 (24%)	23.39	1.330	Largemouth bass
190	3-377 (99%)	.005	.001-.008 (73%)	1.10	4.816	Muskellunge
0	0-0 (278%)	.000	.000-.000 (318%)	0.00	0.045	Redear sunfish
2	0-8 (245%)	.000	.000-.000 (245%)	0.01	1.814	Smallmouth bass
12	0-26 (116%)	.000	.000-.001 (117%)	0.07	0.225	White crappie
19	0-45 (138%)	.001	.000-.001 (118%)	0.11	0.264	Yellow bullhead
2	0-5 (199%)	.000	.000-.000 (179%)	0.01	0.070	Yellow perch
7	0-15 (102%)	.000	.000-.001 (132%)	0.04	0.192	Yellow bass

Table 8. Hours per completed trip and supplementary questions for all trips.

	MEAN	95% CI		MIN	MAX	#SAMPLES
HOURS PER COMPLETED TRIP*						
BOAT	4.2	4.0-4.4	(5%)	0.6	10.9	445
SHORE	3.0	2.7-3.4	(11%)	0.8	8.5	107
BOAT & SHORE	4.0	3.8-4.2	(5%)	0.6	10.9	552
MILES TRAVELED	15.1	13.7-16.4	(9%)	2	180	632
SUCCESS RATING (1-10)	4.3	4.0-4.5	(5%)	1	10	625

*301 samples were from split interviews of completed trips.
 81.2% of all 680 interviews were completed trips.

ILLEGAL HARVEST: Clerk noted 29 out of 680 interviews with illegal harvests.

Table 9. Frequency distribution of angler party size for all interviews.

PARTY SIZE:	1	2	3	4	5	6	7	8	9	10+
BOAT INTERVIEWS	159	288	39	3						
SHORE INTERVIEWS	46	99	41	4	1					

Table 10. Number of interviews (and %) per species sought for all interviews.

134 (19.7%)	ANY	All species
125 (18.4%)	BLC	Black crappie
15 (2.2%)	BLG	Bluegill
2 (0.3%)	CAP	Carp
10 (1.5%)	CAT	Unidentified catfish
106 (15.6%)	CCF	Channel catfish
1 (0.1%)	CRP	Crappie spp.
268 (39.4%)	LMB	Largemouth bass
18 (2.6%)	MUE	Muskellunge
1 (0.1%)	WHC	White crappie

Table 11. Number of anglers with a given harvest & release for completed trips

# OF FISH:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15+
Black crappie																
HARVEST	841	37	45	26	10	14	5	-	4	3	2	-	-	2	-	2
RELEASE	806	72	57	20	11	13	2	-	3	-	1	3	1	1	-	1
Bluegill																
HARVEST	959	3	17	7	3	1	1	-	-	-	-	-	-	-	-	-
RELEASE	793	69	78	38	12	-	1	-	-	-	-	-	-	-	-	-
Unidentified catfish																
HARVEST	991	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	989	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-
Channel catfish																
HARVEST	830	66	68	16	8	1	2	-	-	-	-	-	-	-	-	-
RELEASE	919	39	21	6	2	4	-	-	-	-	-	-	-	-	-	-
Largemouth bass																
HARVEST	866	58	45	14	6	1	-	-	-	-	1	-	-	-	-	-
RELEASE	643	123	129	39	25	10	4	6	1	3	1	1	2	-	-	4
Muskellunge																
HARVEST	990	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	965	25	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Smallmouth bass																
HARVEST	991	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	989	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
White crappie																
HARVEST	988	2	-	-	1	-	-	-	-	-	-	-	-	-	-	-
RELEASE	983	4	3	1	-	-	-	-	-	-	-	-	-	-	-	-
Yellow bullhead																
HARVEST	987	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	989	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yellow bass																
HARVEST	990	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	984	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Figure B19. Length-frequency histogram for harvested black crappie on Mingo in 2008.

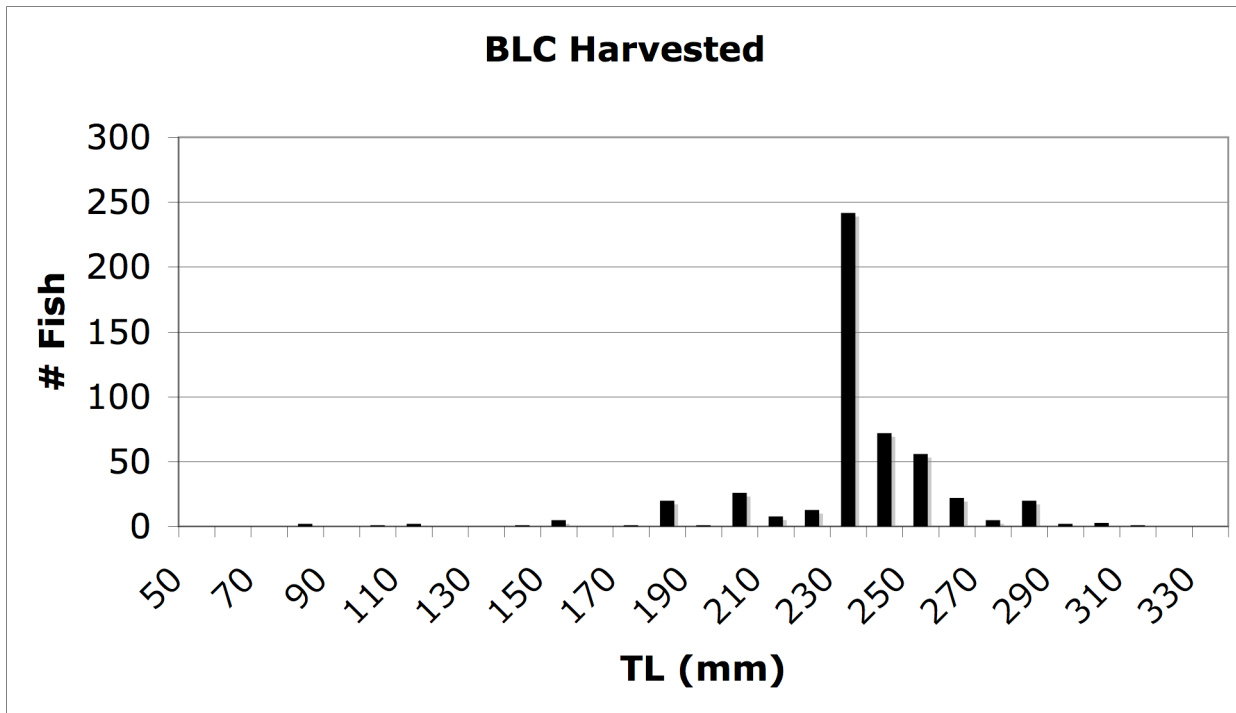


Figure B20. Length-frequency histogram for released black crappie on Mingo in 2008.

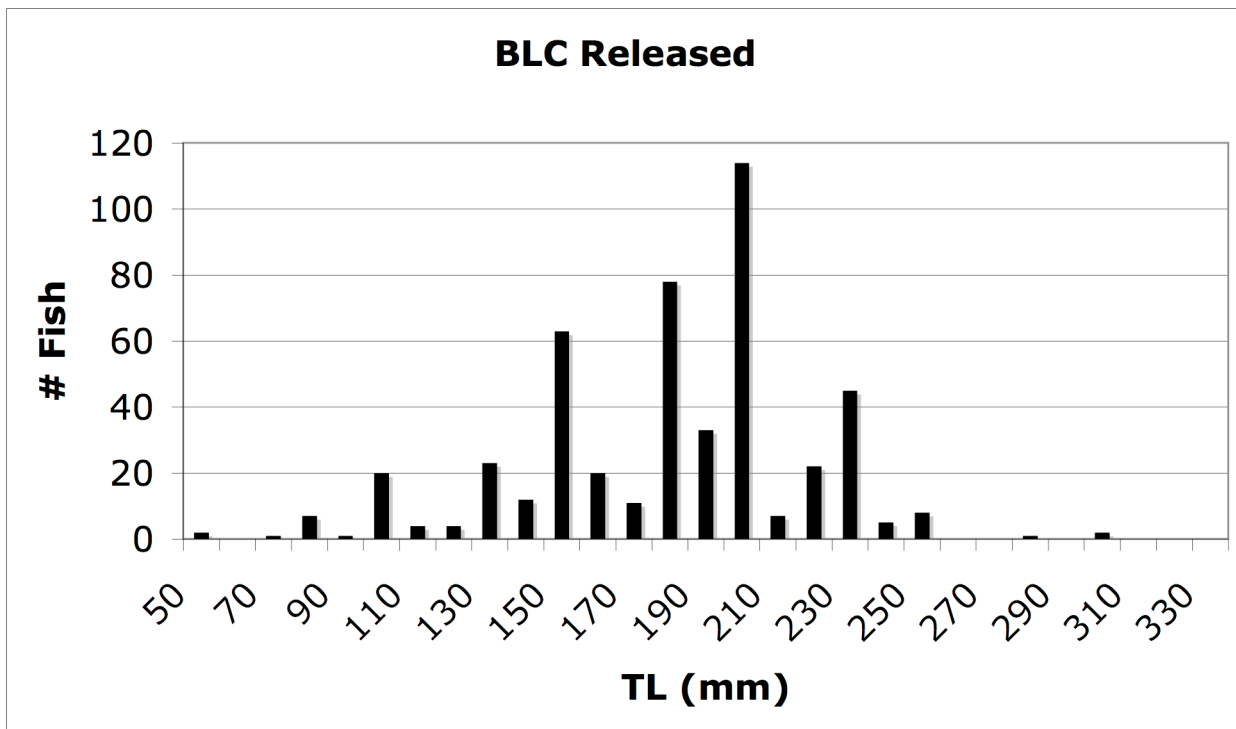


Figure B21. Length-frequency histogram for harvested bluegill on Mingo in 2008.

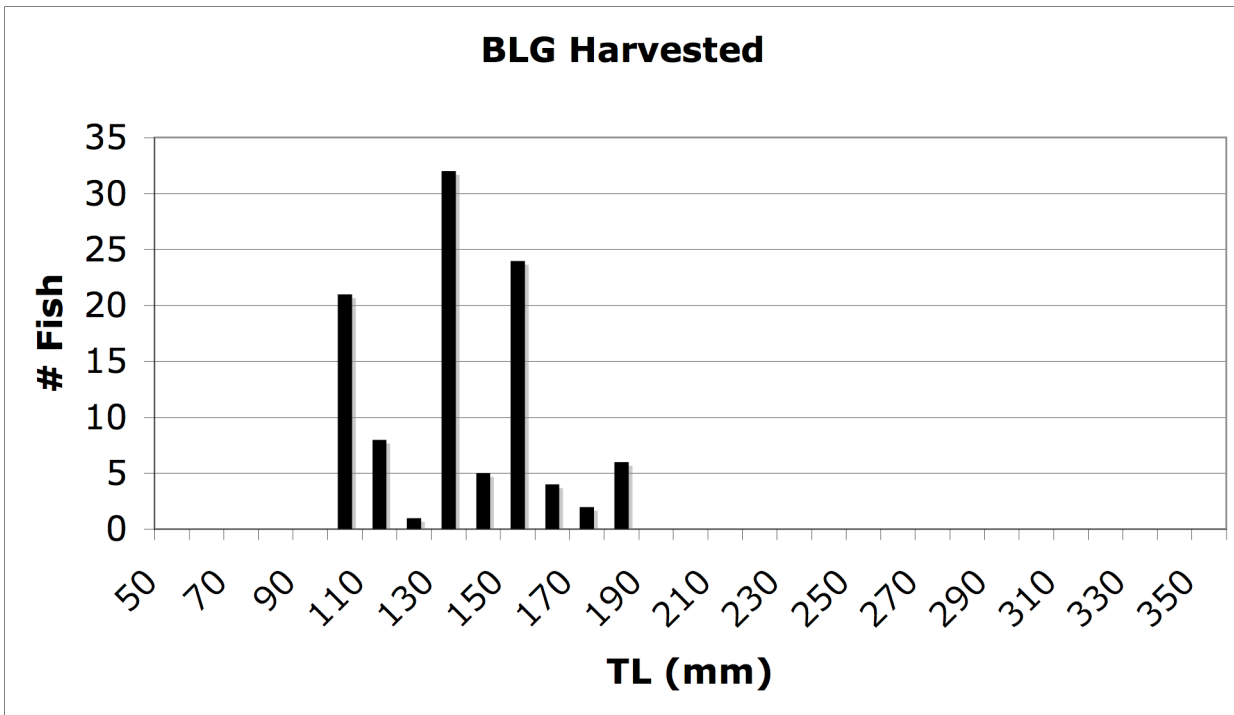


Figure B22. Length-frequency histogram for released bluegill on Mingo in 2008.

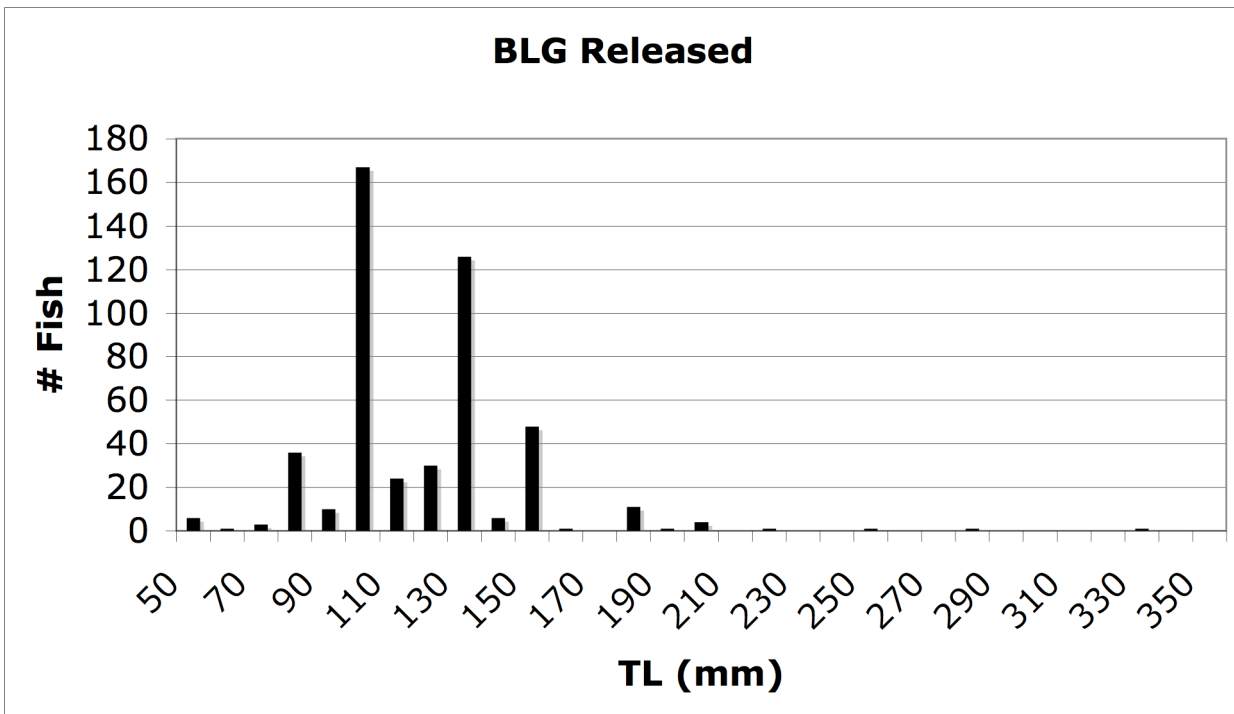


Figure B23. Length-frequency histogram for harvested channel catfish on Mingo in 2008.

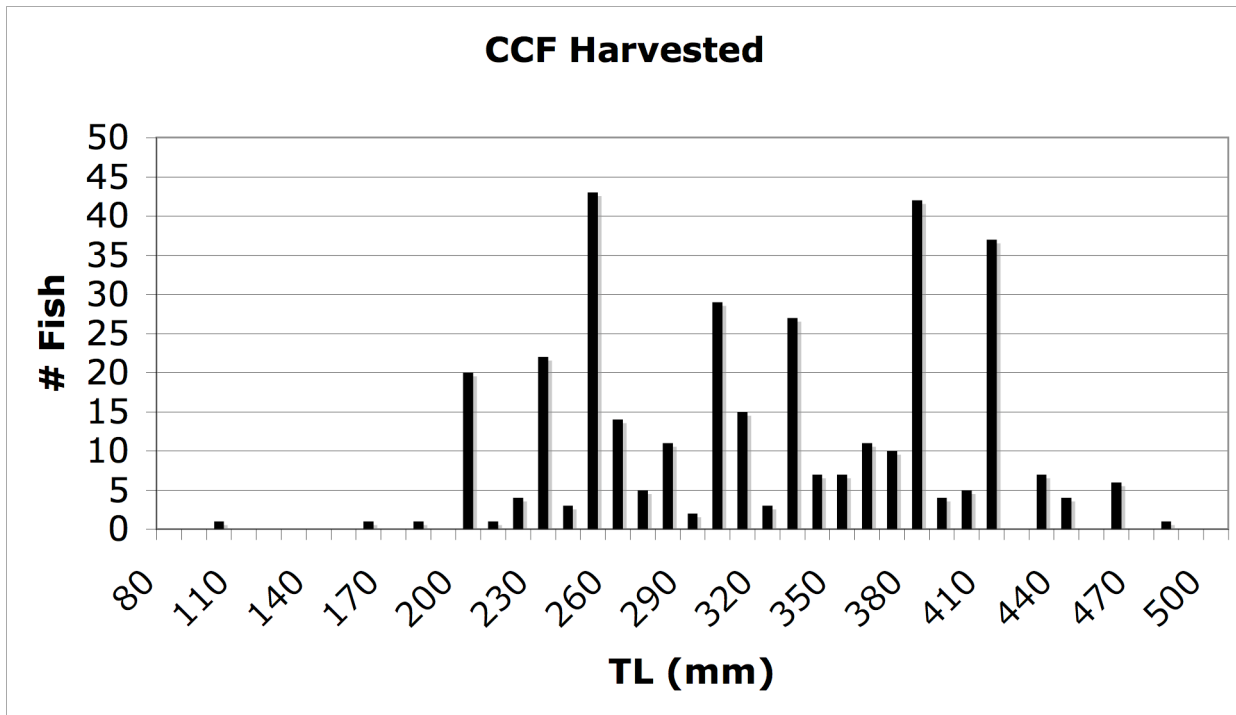


Figure B24. Length-frequency histogram for released channel catfish on Mingo in 2008.

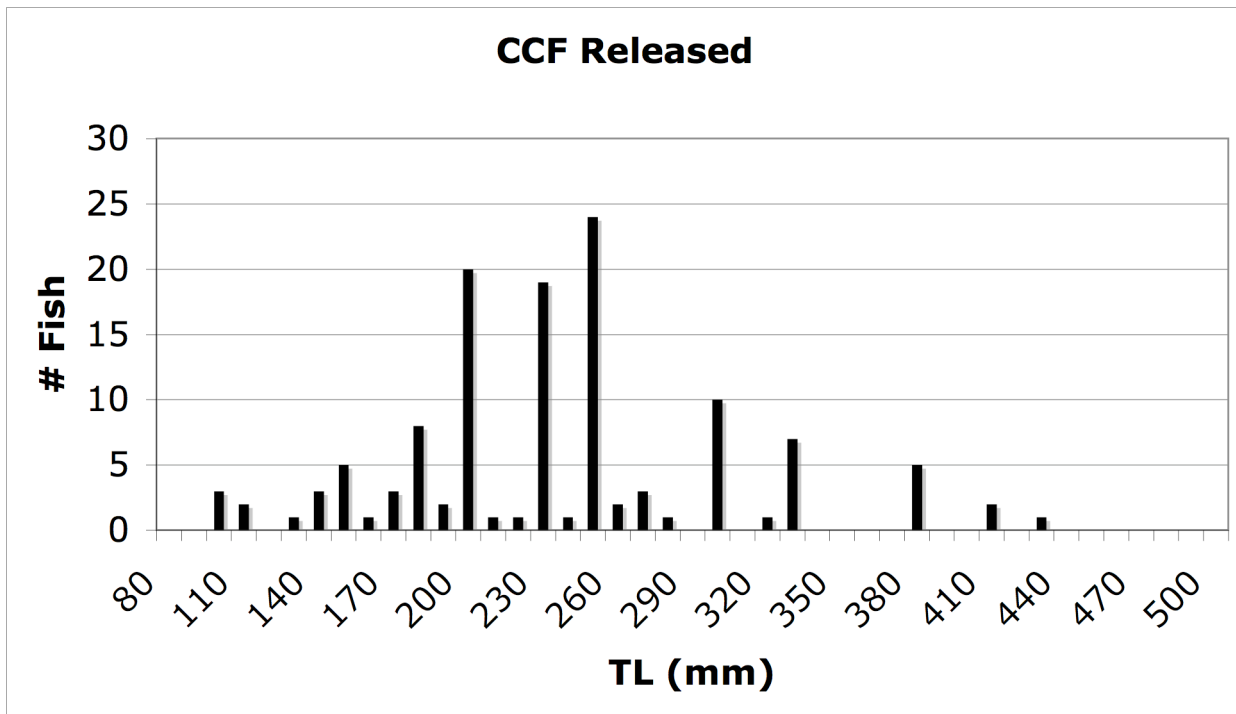


Figure B25. Length-frequency histogram for harvested largemouth bass on Mingo in 2008.

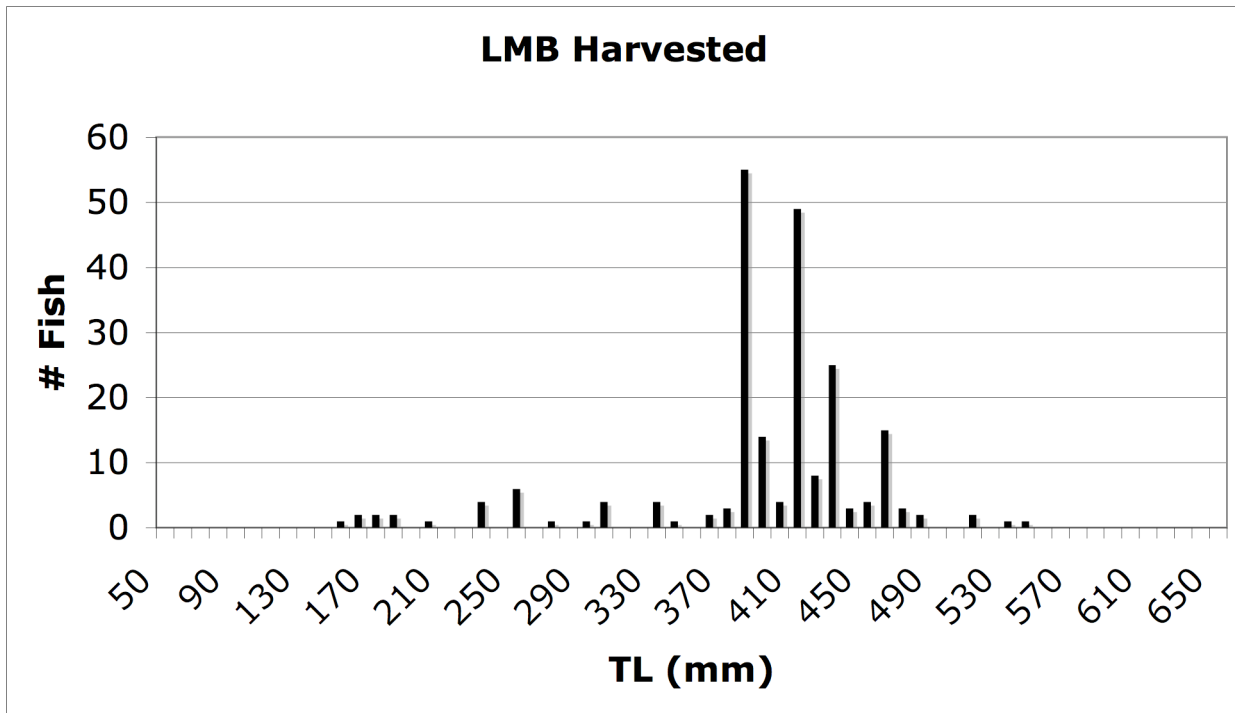
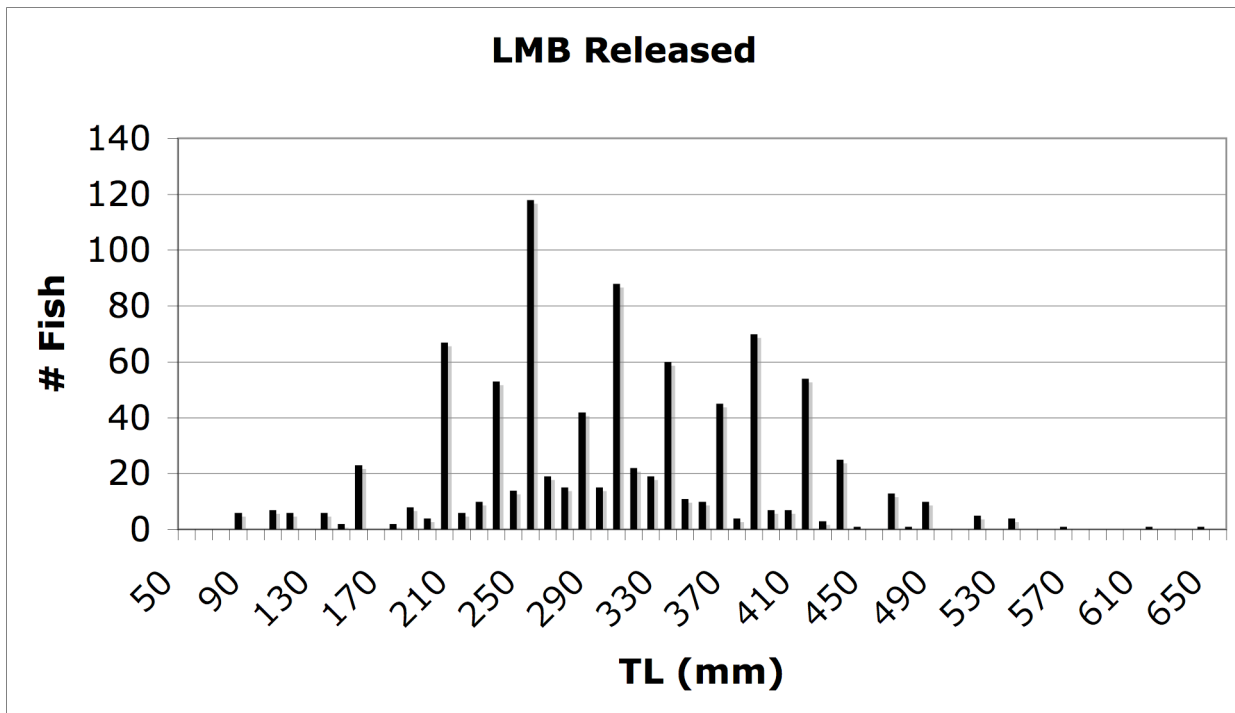


Figure B26. Length-frequency histogram for released largemouth bass on Mingo in 2008.



ILLINOIS NATURAL HISTORY SURVEY
 CENTER FOR AQUATIC ECOLOGY
 2008 CREEL SURVEY RESULTS

2008 MONEE RESERVOIR
 46 ACRES
 REGION 2, DISTRICT 9

STRATIFICATION SUMMARY:

Day creel only.
 Results cover 04/01/2008 through 10/31/2008
 Year periods stratified.
 Fishing modes (boat vs. shore) stratified.
 Day types (weekday vs. weekend/holiday) stratified.
 Day periods (morning, midday, and afternoon) stratified.

SAMPLING RATIO: 218/642 = 34.0%

NUMBER OF INTERVIEWS: 3251

Table 1. Total fishing effort, by fishing mode and day type.

FISHING MODE	DAYTYPE	ANGLER-HOURS	95% CI	HOURS/ACRE	95% CI	% EFF
BOAT	WEEKDAY	5736	4526-6945 (21%)	125	98-151 (21%)	22%
	HOLIDAY	8636	7617-9654 (12%)	188	166-210 (12%)	36%
	TOTAL	14371	12790-15952 (11%)	312	278-347 (11%)	31%
SHORE	WEEKDAY	23346	20179-26513 (14%)	508	439-576 (14%)	17%
	HOLIDAY	18072	14766-21377 (18%)	393	321-465 (18%)	32%
	TOTAL	41418	37254-45581 (10%)	900	810-991 (10%)	23%
BOAT & SHORE	WEEKDAY	29082	25719-32444 (12%)	632	559-705 (12%)	18%
	HOLIDAY	26707	23428-29986 (12%)	581	509-652 (12%)	33%
	TOTAL	55789	51376-60201 (8%)	1213	1117-1309 (8%)	25%

Table 2. Total fishing harvest and harvest rates, in numbers of fish.

# HARVESTED	95% CI	#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
16433	13667-19198 (17%)	.279	.214-.343 (23%)	882.73	357.24	All species
6113	4295-7932 (30%)	.112	.074-.151 (34%)	328.38	132.89	Black crappie
8527	6414-10639 (25%)	.135	.067-.203 (50%)	458.04	185.37	Bluegill
5	0-16 (218%)	.000	.000-.000 (218%)	0.26	0.11	Bluegill x Redear s
1	0-5 (278%)	.000	.000-.000 (318%)	0.07	0.03	Unidentified catfis
636	0-2710 (326%)	.012	.000-.058 (379%)	34.16	13.82	Channel catfish
		****	NOT RECORDED ****			Crappie spp.
4	0-18 (318%)	.000	.000-.000 (278%)	0.24	0.10	Green sunfish
180	71-290 (61%)	.003	.000-.015 (458%)	9.68	3.92	Largemouth bass
2	0-5 (216%)	.000	.000-.000 (218%)	0.09	0.04	Northern pike
		****	NOT RECORDED ****			Pumpkinseed
36	5-67 (87%)	.001	.000-.002 (95%)	1.94	0.78	Rock bass
478	330-626 (31%)	.008	.005-.011 (40%)	25.66	10.39	Redear sunfish
		****	NOT RECORDED ****			Shorthead redhorse
		****	NOT RECORDED ****			Smallmouth bass
		****	NOT RECORDED ****			Sunfish spp. exclud
49	0-133 (169%)	.001	.000-.008 (849%)	2.66	1.08	Warmouth
378	0-817 (116%)	.006	.000-.013 (110%)	20.31	8.22	White crappie
23	0-70 (205%)	.000	.000-.001 (206%)	1.24	0.50	Yellow perch

Table 3. Total fishing harvest and harvest rates, in kilograms.

KG HARVESTED	95% CI	KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
2105	1720-2491 (18%)	.037	.027-.047 (27%)	113.09	0.128	All species
754	453-1054 (40%)	.013	.009-.018 (35%)	40.49	0.123	Black crappie
603	187-1018 (69%)	.011	.000-.050 (356%)	32.37	0.071	Bluegill
1	0-2 (216%)	.000	.000-.000 (218%)	0.04	0.139	Bluegill x Redear s
		****	NOT RECORDED ****			Unidentified catfis
479	212-746 (56%)	.009	.002-.016 (80%)	25.73	0.753	Channel catfish
		****	NOT RECORDED ****			Crappie spp.
0	0-2 (318%)	.000	.000-.000 (278%)	0.02	0.103	Green sunfish
168	58-278 (65%)	.003	.000-.007 (163%)	9.04	0.934	Largemouth bass
3	0-9 (216%)	.000	.000-.000 (216%)	0.16	1.823	Northern pike
		****	NOT RECORDED ****			Pumpkinseed
3	0-5 (84%)	.000	.000-.000 (90%)	0.16	0.082	Rock bass
62	43-82 (32%)	.001	.001-.001 (41%)	3.34	0.130	Redear sunfish
		****	NOT RECORDED ****			Shorthead redhorse
		****	NOT RECORDED ****			Smallmouth bass
		****	NOT RECORDED ****			Sunfish spp. exclud
2	0-19 (797%)	.000	.000-.000 (250%)	0.11	0.042	Warmouth
29	0-63 (115%)	.000	.000-.001 (113%)	1.57	0.078	White crappie
1	0-3 (198%)	.000	.000-.000 (199%)	0.05	0.044	Yellow perch

Table 4. Total fishing harvest and harvest rates, in pounds.

LB HARVESTED	95% CI		LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
4641	3792-5491	(18%)	.082	.060-.105 (27%)	100.90	0.282	All species
1662	999-2325	(40%)	.030	.019-.040 (35%)	36.13	0.272	Black crappie
1328	412-2244	(69%)	.024	.000-.111 (356%)	28.88	0.156	Bluegill
2	0-5	(218%)	.000	.000-.000 (216%)	0.03	0.306	Bluegill x Redear s
			****	NOT RECORDED ****			Unidentified catfis
1056	468-1644	(56%)	.019	.004-.035 (80%)	22.95	1.660	Channel catfish
			****	NOT RECORDED ****			Crappie spp.
1	0-4	(278%)	.000	.000-.000 (318%)	0.02	0.228	Green sunfish
371	128-613	(65%)	.006	.000-.015 (163%)	8.06	2.058	Largemouth bass
7	0-21	(218%)	.000	.000-.000 (216%)	0.14	4.020	Northern pike
			****	NOT RECORDED ****			Pumpkinseed
6	1-12	(84%)	.000	.000-.000 (90%)	0.14	0.180	Rock bass
137	94-181	(32%)	.002	.001-.003 (41%)	2.98	0.287	Redear sunfish
			****	NOT RECORDED ****			Shorthead redhorse
			****	NOT RECORDED ****			Smallmouth bass
			****	NOT RECORDED ****			Sunfish spp. exclud
5	0-41	(797%)	.000	.000-.000 (250%)	0.10	0.092	Warmouth
65	0-139	(115%)	.001	.000-.002 (113%)	1.41	0.171	White crappie
2	0-7	(198%)	.000	.000-.000 (199%)	0.05	0.096	Yellow perch

Table 5. Total fishing catch and catch rates, in numbers of fish.
Catch includes both harvested and released fish.

# CAUGHT	95% CI		#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
56593	49616-63570	(12%)	.866	.773-.958 (11%)	3040.031	1230.28	All species
11609	9248-13971	(20%)	.216	.162-.271 (25%)	623.63	252.38	Black crappie
32729	27059-38399	(17%)	.401	.327-.474 (18%)	1758.12	711.50	Bluegill
5	0-16	(218%)	.000	.000-.000 (218%)	0.26	0.11	Bluegill x Redear s
1	0-5	(278%)	.000	.000-.000 (318%)	0.07	0.03	Unidentified catfis
1365	793-1937	(42%)	.027	.014-.040 (49%)	73.33	29.68	Channel catfish
537	0-1087	(102%)	.008	.000-.023 (183%)	28.85	11.67	Crappie spp.
17	0-59	(258%)	.000	.000-.000 (154%)	0.89	0.36	Green sunfish
8178	6253-10104	(24%)	.178	.147-.210 (18%)	439.32	177.79	Largemouth bass
12	0-26	(113%)	.000	.000-.001 (212%)	0.66	0.27	Northern pike
8	0-17	(128%)	.000	.000-.001 (173%)	0.41	0.17	Pumpkinseed
215	0-492	(129%)	.003	.001-.005 (62%)	11.54	4.67	Rock bass
1065	757-1372	(29%)	.017	.010-.023 (38%)	57.19	23.14	Redear sunfish
1	0-5	(231%)	.000	.000-.000 (231%)	0.07	0.03	Shorthead redhorse
70	28-112	(60%)	.001	.000-.001 (72%)	3.75	1.52	Smallmouth bass
11	11-11	(0%)	.000	.000-.004 (1271%)	0.60	0.24	Sunfish spp. exclud
130	21-239	(84%)	.002	.000-.004 (142%)	6.98	2.82	Warmouth
556	108-1004	(81%)	.010	.003-.018 (75%)	29.86	12.08	White crappie
82	21-144	(75%)	.002	.000-.003 (85%)	4.42	1.79	Yellow perch

Table 6. Total fishing catch and catch rates, in kilograms.

KG CAUGHT	95% CI	KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
6537	5912-7161 (10%)	.136	.118-.153 (13%)	351.14	0.116	All species
1216	894-1538 (27%)	.023	.016-.030 (29%)	65.32	0.105	Black crappie
1381	1039-1722 (25%)	.020	.000-.060 (206%)	74.16	0.042	Bluegill
1	0-2 (216%)	.000	.000-.000 (218%)	0.04	0.139	Bluegill x Redear s
		****	NOT RECORDED ****			Unidentified catfis
830	502-1158 (40%)	.016	.009-.023 (45%)	44.57	0.608	Channel catfish
37	0-79 (113%)	.001	.000-.001 (135%)	1.98	0.069	Crappie spp.
1	0-3 (178%)	.000	.000-.000 (205%)	0.05	0.057	Green sunfish
2879	2526-3232 (12%)	.073	.060-.086 (18%)	154.64	0.352	Largemouth bass
12	0-24 (104%)	.000	.000-.001 (202%)	0.64	0.973	Northern pike
0	0-1 (171%)	.000	.000-.000 (208%)	0.02	0.054	Pumpkinseed
10	1-18 (87%)	.000	.000-.000 (51%)	0.52	0.045	Rock bass
110	82-138 (26%)	.002	.001-.003 (48%)	5.91	0.103	Redear sunfish
0	0-0 (231%)	.000	.000-.000 (231%)	0.01	0.084	Shorthead redhorse
8	2-15 (79%)	.000	.000-.000 (101%)	0.45	0.121	Smallmouth bass
2	0-25 (1271%)	.000	.000-.000 (0%)	0.10	0.163	Sunfish spp. exclud
5	0-10 (92%)	.000	.000-.000 (92%)	0.28	0.041	Warmouth
43	8-77 (81%)	.001	.000-.001 (79%)	2.30	0.077	White crappie
3	1-5 (80%)	.000	.000-.000 (79%)	0.15	0.033	Yellow perch

Table 7. Total fishing catch and catch rates, in pounds.

LB CAUGHT	95% CI	LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
14411	13034-15788 (10%)	.299	.261-.337 (13%)	313.28	0.255	All species
2681	1970-3391 (27%)	.051	.036-.066 (29%)	58.27	0.231	Black crappie
3044	2290-3797 (25%)	.043	.000-.132 (206%)	66.17	0.093	Bluegill
2	0-5 (218%)	.000	.000-.000 (216%)	0.03	0.306	Bluegill x Redear s
		****	NOT RECORDED ****			Unidentified catfis
1829	1106-2552 (40%)	.035	.019-.051 (45%)	39.76	1.340	Channel catfish
81	0-174 (113%)	.001	.000-.003 (135%)	1.77	0.151	Crappie spp.
2	0-6 (178%)	.000	.000-.000 (205%)	0.05	0.125	Green sunfish
6347	5569-7124 (12%)	.160	.131-.189 (18%)	137.97	0.776	Largemouth bass
26	0-53 (104%)	.001	.000-.003 (202%)	0.57	2.146	Northern pike
1	0-2 (171%)	.000	.000-.000 (208%)	0.02	0.118	Pumpkinseed
21	3-40 (87%)	.000	.000-.000 (51%)	0.47	0.100	Rock bass
243	180-305 (26%)	.004	.002-.006 (48%)	5.28	0.228	Redear sunfish
0	0-1 (236%)	.000	.000-.000 (236%)	0.01	0.185	Shorthead redhorse
19	4-33 (79%)	.000	.000-.000 (101%)	0.40	0.267	Smallmouth bass
4	0-55 (1271%)	.000	.000-.001 (1271%)	0.09	0.360	Sunfish spp. exclud
12	1-22 (92%)	.000	.000-.000 (92%)	0.25	0.090	Warmouth
94	18-171 (81%)	.002	.000-.003 (79%)	2.05	0.170	White crappie
6	1-11 (80%)	.000	.000-.000 (79%)	0.13	0.073	Yellow perch

Table 8. Hours per completed trip and supplementary questions for all trips.

	MEAN	95% CI		MIN	MAX	#SAMPLES
HOURS PER COMPLETED TRIP*						
BOAT	4.1	3.9-4.3	(4%)	0.7	12.6	519
SHORE	2.7	2.6-2.7	(3%)	0.2	11.7	1440
BOAT & SHORE	3.0	2.9-3.1	(3%)	0.2	12.6	1959
MILES TRAVELED	13.6	13.2-14.0	(3%)	1	70	2238
SUCCESS RATING (1-10)	4.6	4.5-4.7	(3%)	1	10	2230

*888 samples were from split interviews of completed trips.
 84.2% of all 2326 interviews were completed trips.

ILLEGAL HARVEST: Clerk noted 7 out of 2326 interviews with illegal harvests.

Table 9. Frequency distribution of angler party size for all interviews.

PARTY SIZE:	1	2	3	4	5	6	7	8	9	10+
BOAT INTERVIEWS	103	369	84	12	4					
SHORE INTERVIEWS	760	566	249	94	48	17	6	4	2	8

Table 10. Number of interviews (and %) per species sought for all interviews.

1104 (47.5%)	ANY	All species
3 (0.1%)	BLC	Black crappie
151 (6.5%)	BLG	Bluegill
90 (3.9%)	CAT	Unidentified catfish
23 (1.0%)	CCF	Channel catfish
315 (13.5%)	CRP	Crappie spp.
631 (27.1%)	LMB	Largemouth bass
4 (0.2%)	NOP	Northern pike
2 (0.1%)	RSF	Redear sunfish
2 (0.1%)	SMB	Smallmouth bass
1 (0.0%)	SUN	Sunfish spp. excluding Crappie and Black Bass

Table 11. Number of anglers with a given harvest & release for completed trips

# OF FISH:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15+
Black crappie																
HARVEST	3711	91	48	34	14	14	12	10	10	16	9	2	2	4	10	21
RELEASE	3569	235	65	39	30	12	16	8	8	2	4	-	2	3	-	15
Bluegill																
HARVEST	3638	96	69	30	24	30	17	5	16	6	12	6	8	9	7	35
RELEASE	2465	580	283	220	150	70	47	20	38	10	31	12	9	15	1	57
Bluegill x Redear sunfish hybrid																
HARVEST	4006	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	4008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unidentified catfish																
HARVEST	4006	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	4008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Channel catfish																
HARVEST	3900	85	16	4	2	1	-	-	-	-	-	-	-	-	-	-
RELEASE	3899	76	20	10	-	3	-	-	-	-	-	-	-	-	-	-
Crappie spp.																
HARVEST	4008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	3978	14	8	2	-	2	-	-	3	1	-	-	-	-	-	-
Green sunfish																
HARVEST	4005	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	4005	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-
Largemouth bass																
HARVEST	3972	33	3	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	2935	648	221	111	32	27	12	7	6	-	4	2	2	1	-	-
Northern pike																
HARVEST	4006	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	4005	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pumpkinseed																
HARVEST	4008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	4004	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rock bass																
HARVEST	3993	13	2	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	3976	25	6	1	-	-	-	-	-	-	-	-	-	-	-	-
Redear sunfish																
HARVEST	3890	88	23	1	4	-	-	-	-	2	-	-	-	-	-	-
RELEASE	3920	56	14	11	-	5	2	-	-	-	-	-	-	-	-	-

Table 11. (Cont.) Number of anglers with a given harvest & release for completed trips

# OF FISH:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15+
Shorthead redhorse																
HARVEST 4008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE 4008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Smallmouth bass																
HARVEST 4008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE 3990	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sunfish spp. excluding Crappie and Black Bass																
HARVEST 4008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE 4006	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Warmouth																
HARVEST 4000	6	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE 3997	9	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-
White crappie																
HARVEST 3980	10	6	2	4	2	-	-	2	-	2	-	-	-	-	-	-
RELEASE 3965	29	5	4	4	-	1	-	-	-	-	-	-	-	-	-	-
Yellow perch																
HARVEST 4005	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE 3989	14	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Figure B27. Length-frequency histogram for harvested black crappie on Monee Reservoir in 2008.

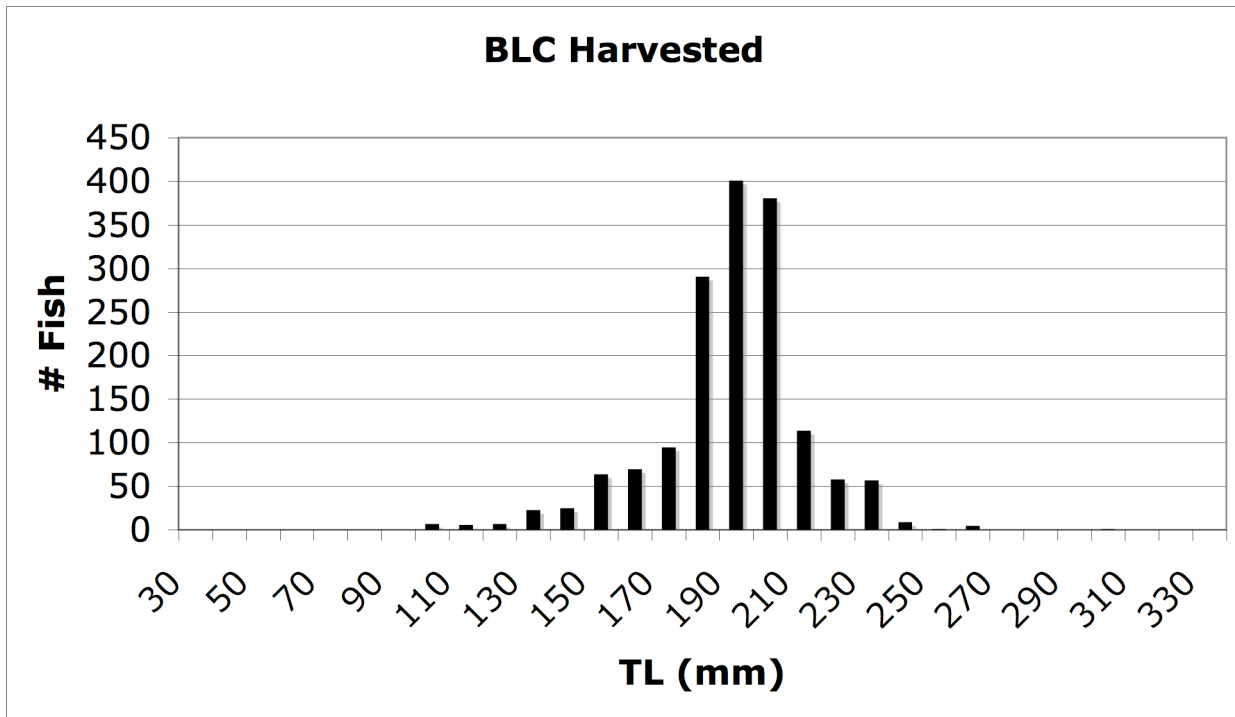


Figure B28. Length-frequency histogram for released black crappie on Monee Reservoir in 2008.

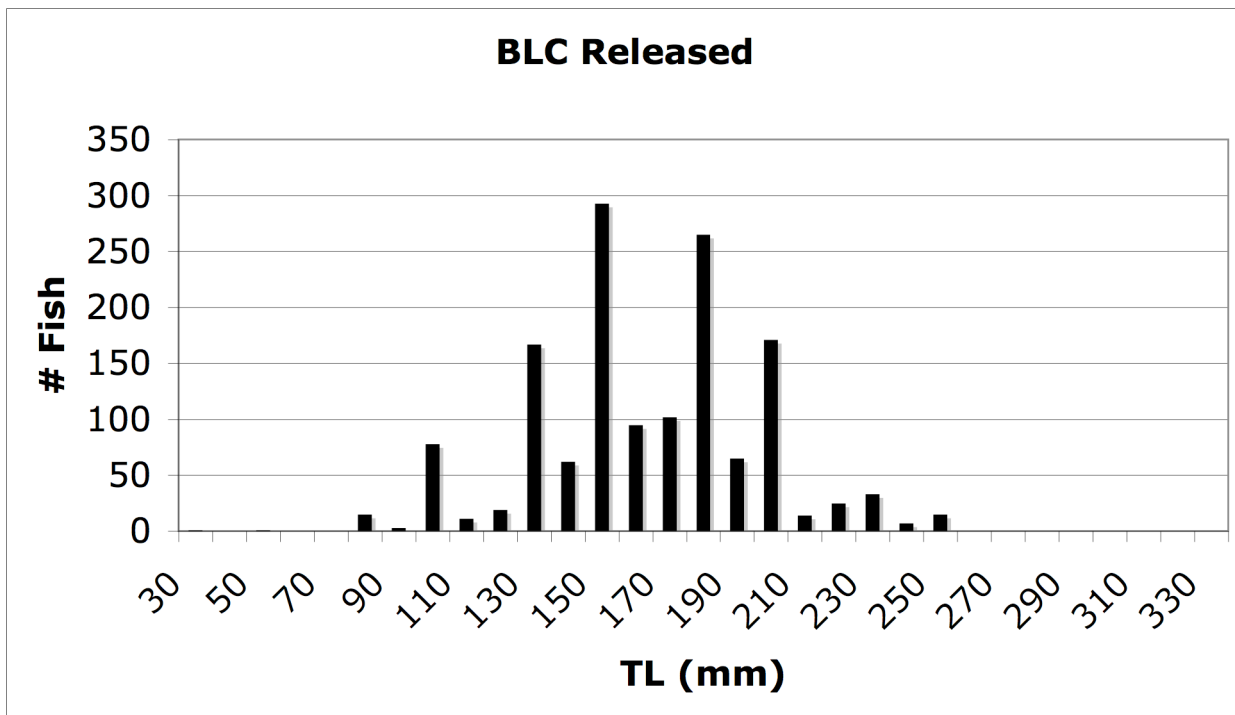


Figure B29. Length-frequency histogram for harvested bluegill on Monee Reservoir in 2008.

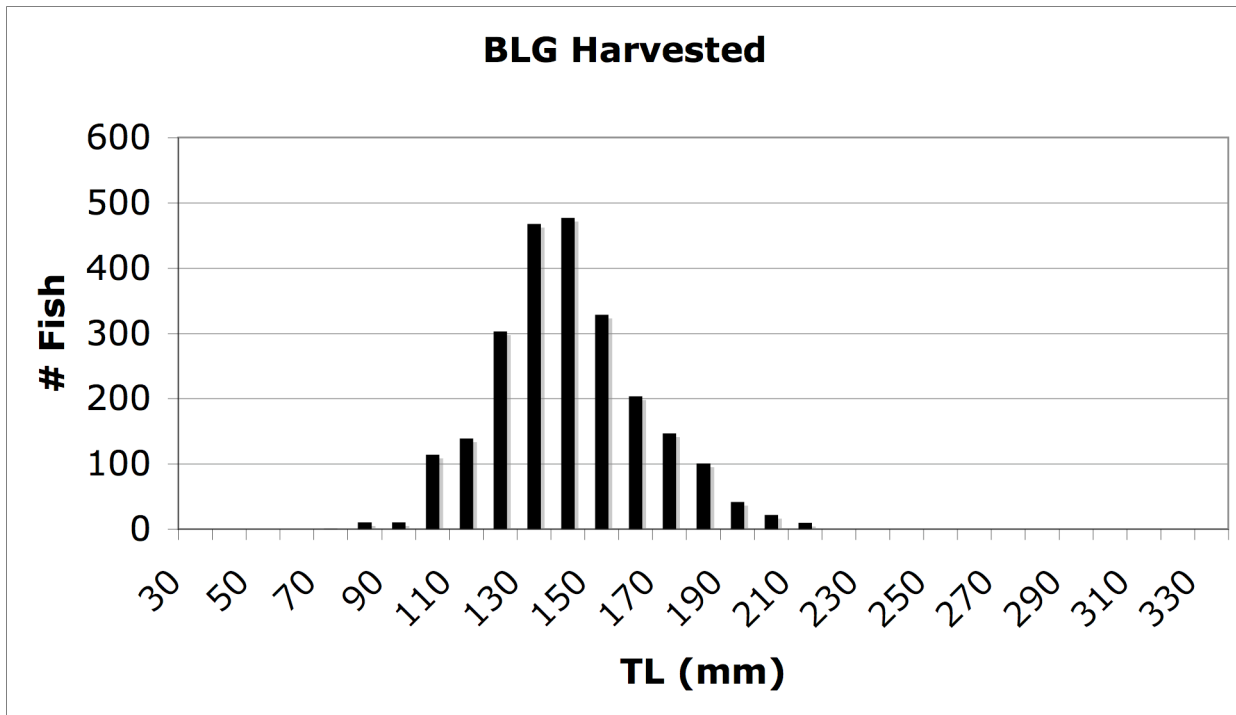


Figure B30. Length-frequency histogram for released bluegill on Monee Reservoir in 2008.

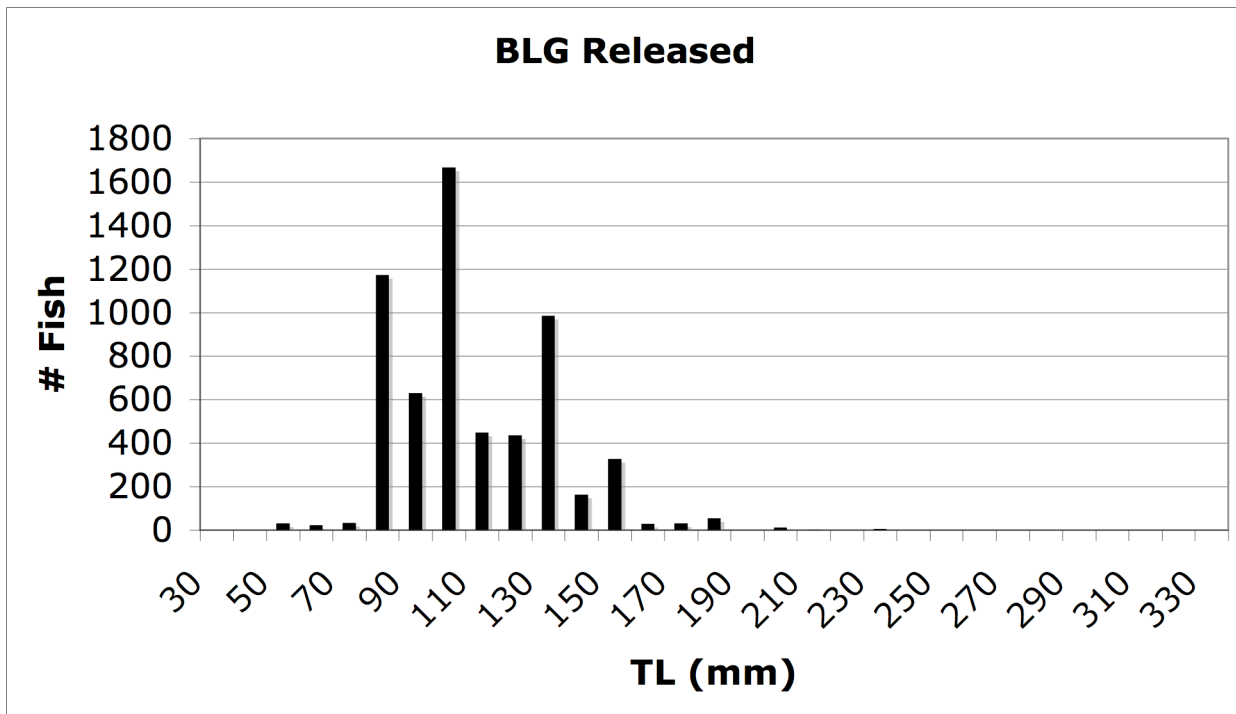


Figure B31. Length-frequency histogram for harvested channel catfish on Monee Reservoir in 2008.

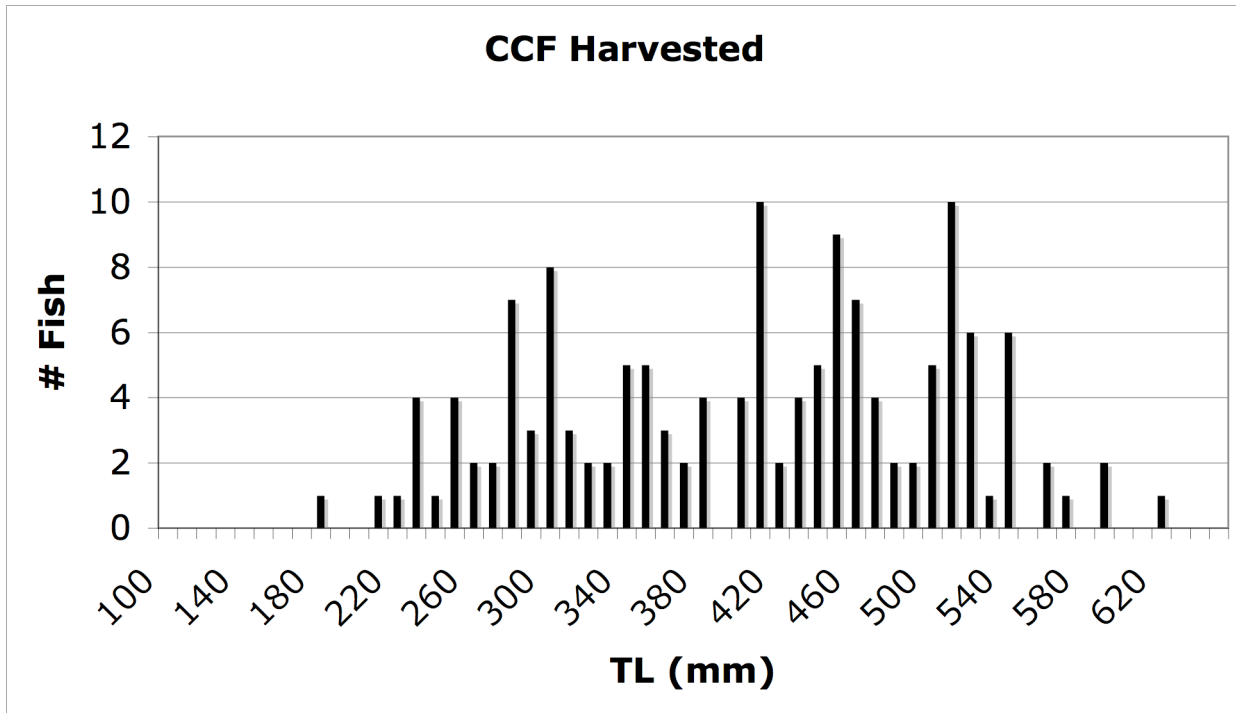


Figure B32. Length-frequency histogram for released channel catfish on Monee Reservoir in 2008.

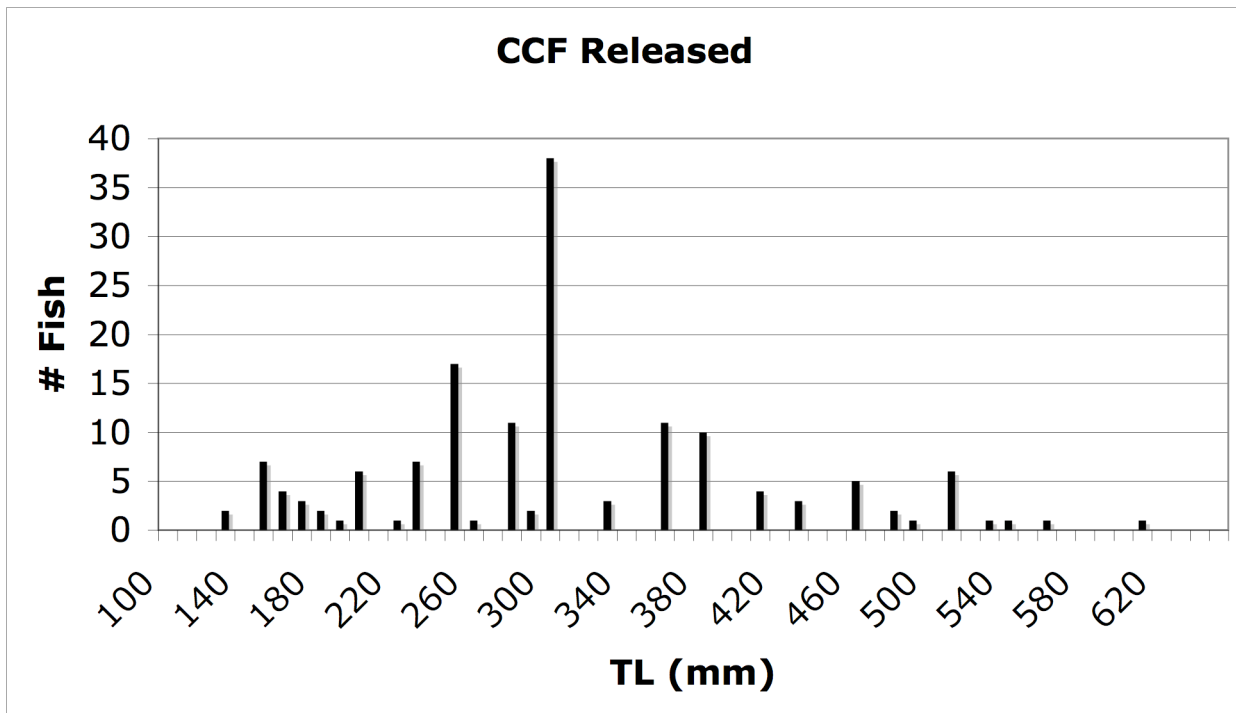


Figure B33. Length-frequency histogram for harvested largemouth bass on Monee Reservoir in 2008.

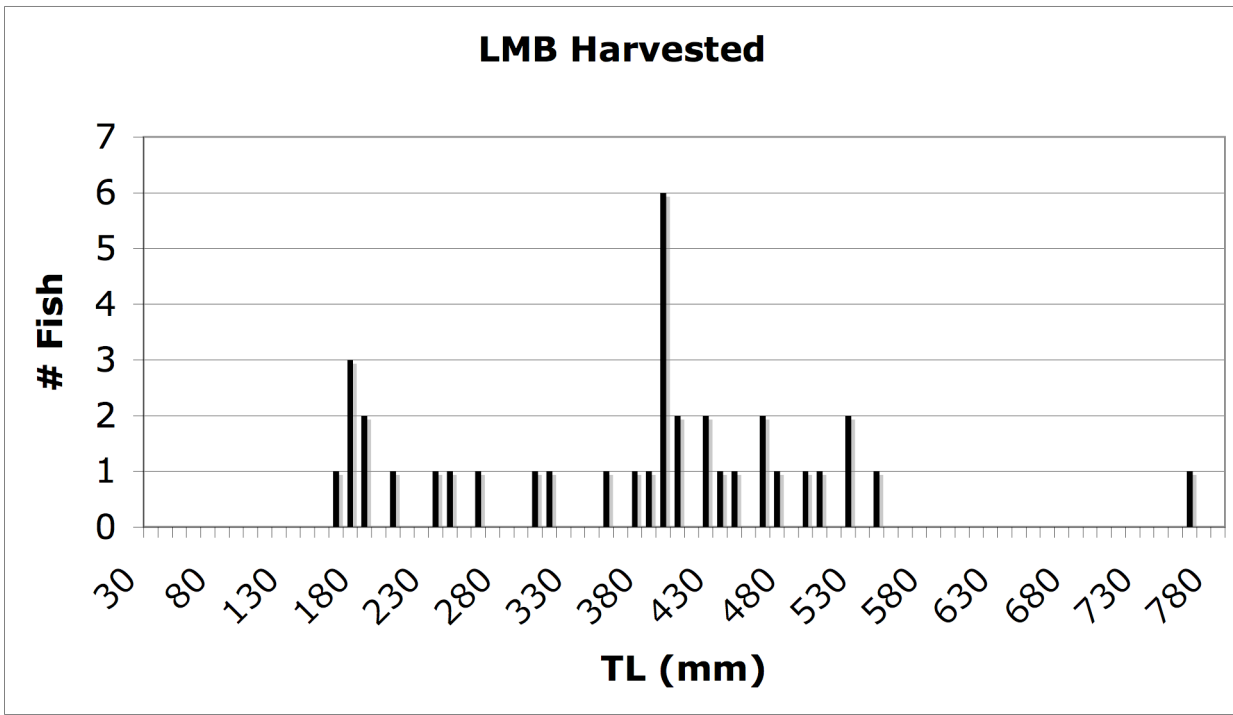


Figure B34. Length-frequency histogram for released largemouth bass on Monee Reservoir in 2008.

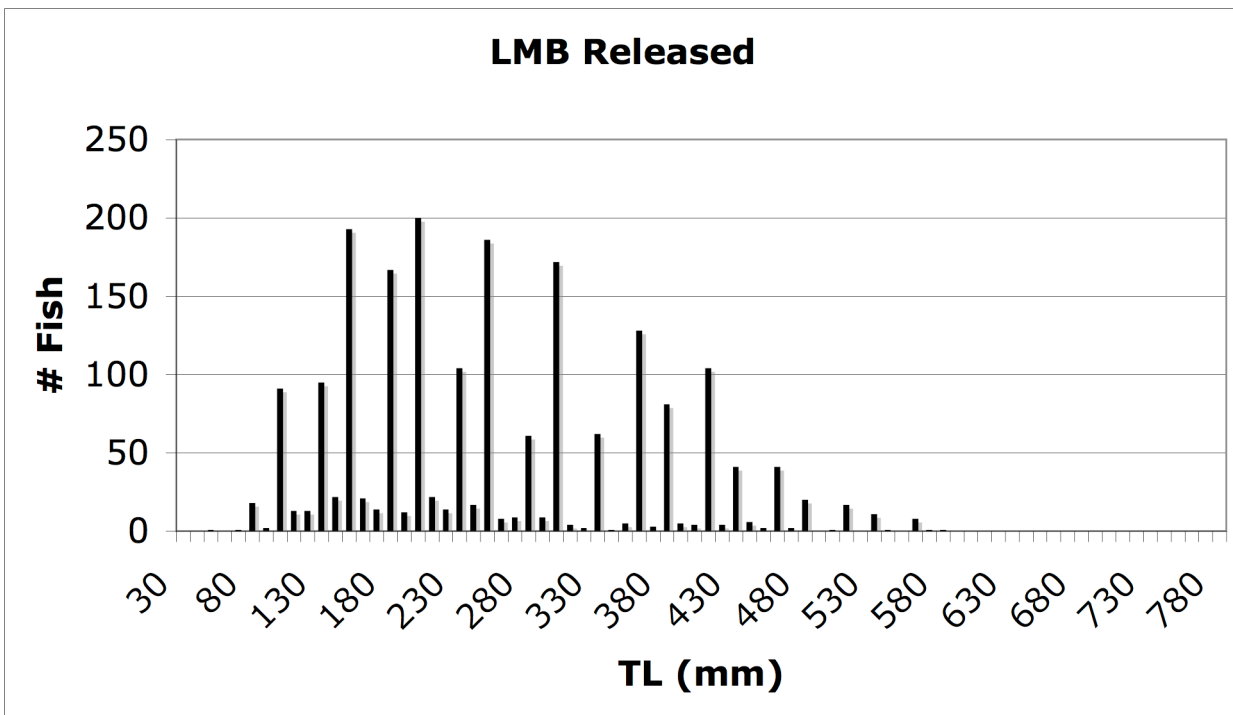


Figure B35. Length-frequency histogram for harvested redear sunfish on Monee Reservoir in 2008.

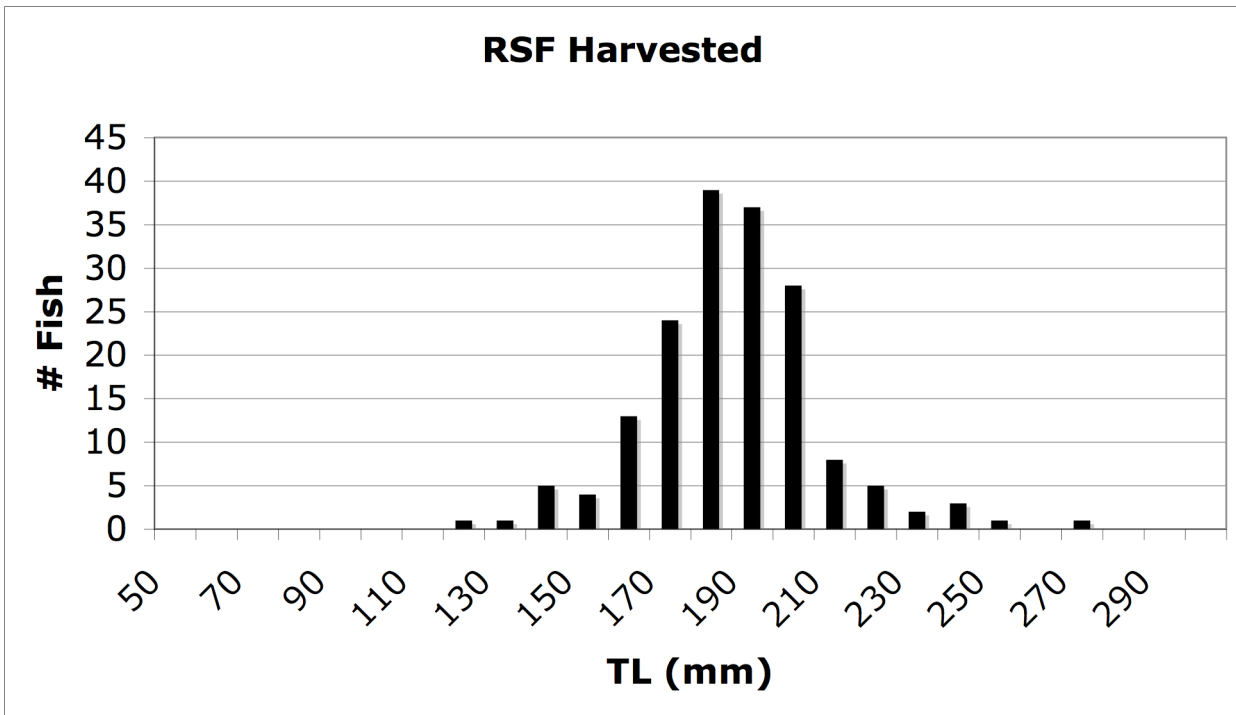
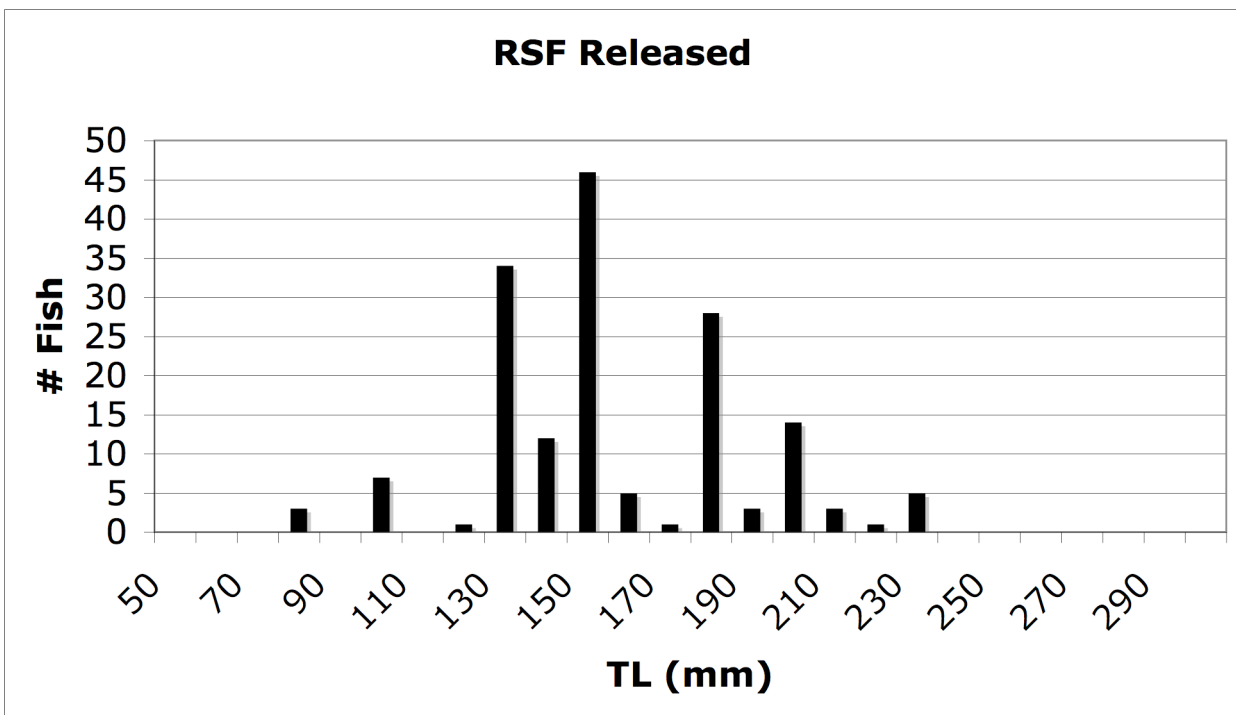


Figure B36. Length-frequency histogram for released redear sunfish on Monee Reservoir in 2008.



ILLINOIS NATURAL HISTORY SURVEY
 CENTER FOR AQUATIC ECOLOGY
 2008 CREEL SURVEY RESULTS

2008 OTTER LAKE
 765 ACRES
 REGION 4, DISTRICT 15

STRATIFICATION SUMMARY:

Day creel only.
 Results cover 03/15/2008 through 10/31/2008
 Year periods stratified.
 Fishing modes (boat vs. shore) stratified.
 Day types (weekday vs. weekend/holiday) stratified.
 Day periods (morning, midday, and afternoon) stratified.

SAMPLING RATIO: 294/693 = 42.4%

NUMBER OF INTERVIEWS: 723

Table 1. Total fishing effort, by fishing mode and day type.

FISHING MODE	DAYTYPE	ANGLER-HOURS	95% CI	HOURS/ACRE	95% CI	% EFF
BOAT	WEEKDAY	7507	5818-9197 (23%)	10	8-12 (23%)	7%
	HOLIDAY	8523	7170-9877 (16%)	11	9-13 (16%)	14%
	TOTAL	16031	13866-18196 (14%)	21	18-24 (14%)	11%
SHORE	WEEKDAY	1190	554-1827 (53%)	2	1-2 (53%)	4%
	HOLIDAY	1476	1056-1897 (28%)	2	1-2 (28%)	15%
	TOTAL	2666	1903-3430 (29%)	3	2-4 (29%)	10%
BOAT & SHORE	WEEKDAY	8698	6892-10503 (21%)	11	9-14 (21%)	6%
	HOLIDAY	10000	8582-11417 (14%)	13	11-15 (14%)	14%
	TOTAL	18697	16402-20993 (12%)	24	21-27 (12%)	11%

Table 2. Total fishing harvest and harvest rates, in numbers of fish.

# HARVESTED	95% CI	#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
16128	12582-19675 (22%)	.316	.254-.379 (20%)	52.10	21.08	All species
15	0-45 (208%)	.004	.000-.011 (208%)	0.05	0.02	Black bullhead
53	2-105 (97%)	.001	.000-.003 (139%)	0.17	0.07	Black crappie
1238	500-1977 (60%)	.029	.007-.051 (74%)	4.00	1.62	Bluegill
		****	NOT RECORDED ****			Carp
612	359-864 (41%)	.026	.012-.039 (53%)	1.98	0.80	Channel catfish
		****	NOT RECORDED ****			Crappie spp.
51	0-125 (147%)	.001	.000-.001 (113%)	0.16	0.07	Largemouth bass
		****	NOT RECORDED ****			Muskellunge
104	6-201 (94%)	.003	.000-.007 (178%)	0.33	0.14	Striped bass x Whit
32	0-93 (191%)	.000	.000-.001 (195%)	0.10	0.04	Striped bass
		****	NOT RECORDED ****			White bass
13899	10620-17178 (24%)	.252	.197-.307 (22%)	44.89	18.17	White crappie
15	0-41 (172%)	.000	.000-.001 (164%)	0.05	0.02	Yellow bullhead
110	0-250 (127%)	.001	.000-.002 (123%)	0.36	0.14	Yellow bass

Table 3. Total fishing harvest and harvest rates, in kilograms.

KG HARVESTED	95% CI	KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
4391	3434-5349 (22%)	.089	.068-.111 (24%)	14.18	0.272	All species
1	0-2 (209%)	.000	.000-.000 (209%)	0.00	0.040	Black bullhead
7	1-12 (81%)	.000	.000-.001 (178%)	0.02	0.127	Black crappie
61	25-98 (60%)	.001	.000-.003 (77%)	0.20	0.049	Bluegill
		****	NOT RECORDED ****			Carp
451	196-707 (57%)	.020	.003-.038 (87%)	1.46	0.738	Channel catfish
		****	NOT RECORDED ****			Crappie spp.
25	0-61 (142%)	.000	.000-.001 (133%)	0.08	0.499	Largemouth bass
		****	NOT RECORDED ****			Muskellunge
545	0-1297 (138%)	.010	.000-.022 (112%)	1.76	5.258	Striped bass x Whit
86	0-267 (211%)	.001	.000-.004 (212%)	0.28	2.702	Striped bass
		****	NOT RECORDED ****			White bass
3206	2434-3977 (24%)	.055	.043-.068 (22%)	10.35	0.231	White crappie
2	0-5 (157%)	.000	.000-.000 (153%)	0.01	0.121	Yellow bullhead
8	0-22 (166%)	.000	.000-.000 (162%)	0.03	0.075	Yellow bass

Table 4. Total fishing harvest and harvest rates, in pounds.

LB HARVESTED	95% CI	LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
9681	7571-11792 (22%)	.197	.149-.245 (24%)	12.65	0.600	All species
1	0-4 (208%)	.000	.000-.001 (209%)	0.00	0.088	Black bullhead
15	3-27 (81%)	.000	.000-.001 (178%)	0.02	0.281	Black crappie
135	54-215 (60%)	.003	.001-.006 (77%)	0.18	0.109	Bluegill
		****	NOT RECORDED ****			Carp
995	432-1558 (57%)	.044	.006-.083 (87%)	1.30	1.627	Channel catfish
		****	NOT RECORDED ****			Crappie spp.
56	0-135 (142%)	.001	.000-.001 (133%)	0.07	1.100	Largemouth bass
		****	NOT RECORDED ****			Muskellunge
1201	0-2860 (138%)	.023	.000-.048 (112%)	1.57	11.593	Striped bass x Whit
190	0-589 (211%)	.003	.000-.009 (212%)	0.25	5.958	Striped bass
		****	NOT RECORDED ****			White bass
7067	5366-8769 (24%)	.122	.095-.150 (22%)	9.24	0.508	White crappie
4	0-10 (153%)	.000	.000-.000 (153%)	0.01	0.267	Yellow bullhead
18	0-48 (166%)	.000	.000-.000 (162%)	0.02	0.164	Yellow bass

Table 5. Total fishing catch and catch rates, in numbers of fish.
Catch includes both harvested and released fish.

# CAUGHT	95% CI	#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
32267	26538-37996 (18%)	.679	.560-.799 (18%)	104.22	42.18	All species
15	0-45 (208%)	.004	.000-.011 (208%)	0.05	0.02	Black bullhead
53	2-105 (97%)	.001	.000-.003 (139%)	0.17	0.07	Black crappie
1479	677-2281 (54%)	.051	.021-.080 (58%)	4.78	1.93	Bluegill
22	0-70 (213%)	.000	.000-.000 (214%)	0.07	0.03	Carp
840	462-1218 (45%)	.032	.018-.047 (45%)	2.71	1.10	Channel catfish
119	0-371 (212%)	.001	.000-.003 (187%)	0.38	0.16	Crappie spp.
4298	3075-5521 (28%)	.089	.063-.115 (30%)	13.88	5.62	Largemouth bass
38	0-132 (247%)	.001	.000-.006 (287%)	0.12	0.05	Muskellunge
104	6-201 (94%)	.003	.000-.007 (178%)	0.33	0.14	Striped bass x Whit
32	0-93 (191%)	.000	.000-.001 (195%)	0.10	0.04	Striped bass
3	0-11 (245%)	.000	.000-.000 (245%)	0.01	0.00	White bass
24992	19748-30237 (21%)	.489	.379-.599 (22%)	80.73	32.67	White crappie
90	23-157 (75%)	.005	.000-.010 (95%)	0.29	0.12	Yellow bullhead
182	24-340 (87%)	.003	.000-.007 (136%)	0.59	0.24	Yellow bass

Table 6. Total fishing catch and catch rates, in kilograms.

KG CAUGHT	95% CI		KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
7684	6266-9102	(18%)	.154	.125-.182 (19%)	24.82	0.238	All species
1	0-2	(209%)	.000	.000-.000 (209%)	0.00	0.040	Black bullhead
7	1-12	(81%)	.000	.000-.001 (178%)	0.02	0.127	Black crappie
70	30-109	(56%)	.002	.001-.004 (60%)	0.22	0.047	Bluegill
1	0-3	(214%)	.000	.000-.000 (213%)	0.00	0.038	Carp
492	214-771	(57%)	.022	.004-.040 (84%)	1.59	0.586	Channel catfish
9	0-34	(291%)	.000	.000-.000 (280%)	0.03	0.073	Crappie spp.
2496	1722-3269	(31%)	.045	.031-.058 (30%)	8.06	0.581	Largemouth bass
117	0-335	(185%)	.004	.000-.015 (271%)	0.38	3.085	Muskellunge
545	0-1297	(138%)	.010	.000-.022 (112%)	1.76	5.258	Striped bass x Whit
86	0-267	(211%)	.001	.000-.004 (212%)	0.28	2.702	Striped bass
0	0-1	(245%)	.000	.000-.000 (257%)	0.00	0.048	White bass
3840	2956-4724	(23%)	.068	.053-.083 (22%)	12.40	0.154	White crappie
10	2-18	(78%)	.001	.000-.001 (88%)	0.03	0.115	Yellow bullhead
11	0-25	(125%)	.000	.000-.000 (113%)	0.04	0.061	Yellow bass

Table 7. Total fishing catch and catch rates, in pounds.

LB CAUGHT	95% CI		LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
16940	13814-20067	(18%)	.339	.276-.402 (19%)	22.14	0.525	All species
1	0-4	(208%)	.000	.000-.001 (209%)	0.00	0.088	Black bullhead
15	3-27	(81%)	.000	.000-.001 (178%)	0.02	0.281	Black crappie
153	67-240	(56%)	.005	.002-.008 (60%)	0.20	0.104	Bluegill
2	0-6	(214%)	.000	.000-.000 (214%)	0.00	0.083	Carp
1085	471-1699	(57%)	.048	.008-.089 (84%)	1.42	1.292	Channel catfish
19	0-75	(291%)	.000	.000-.001 (280%)	0.03	0.162	Crappie spp.
5502	3797-7208	(31%)	.099	.069-.128 (30%)	7.19	1.280	Largemouth bass
258	0-738	(185%)	.009	.000-.033 (271%)	0.34	6.801	Muskellunge
1201	0-2860	(138%)	.023	.000-.048 (112%)	1.57	11.593	Striped bass x Whit
190	0-589	(211%)	.003	.000-.009 (212%)	0.25	5.958	Striped bass
0	0-1	(245%)	.000	.000-.000 (245%)	0.00	0.106	White bass
8466	6516-10416	(23%)	.150	.118-.182 (22%)	11.07	0.339	White crappie
23	5-41	(78%)	.001	.000-.002 (88%)	0.03	0.254	Yellow bullhead
25	0-55	(125%)	.000	.000-.001 (113%)	0.03	0.135	Yellow bass

Table 8. Hours per completed trip and supplementary questions for all trips.

	MEAN	95% CI		MIN	MAX	#SAMPLES
HOURS PER COMPLETED TRIP*						
BOAT	3.7	3.1-4.3	(16%)	1.0	8.0	42
SHORE	1.0	0.8-1.3	(25%)	0.5	2.5	17
BOAT & SHORE	2.9	2.4-3.5	(18%)	0.5	8.0	59
MILES TRAVELED	30.9	28.5-33.2	(8%)	1	400	660
SUCCESS RATING (1-10)	5.0	4.8-5.1	(3%)	1	10	660

*20 samples were from split interviews of completed trips.
 8.4% of all 700 interviews were completed trips.

ILLEGAL HARVEST: Clerk noted 1 out of 700 interviews with illegal harvests.

Table 9. Frequency distribution of angler party size for all interviews.

PARTY SIZE:	1	2	3	4	5	6	7	8	9	10+
BOAT INTERVIEWS	170	327	63	12						
SHORE INTERVIEWS	55	39	11	12	5	4	1		1	

Table 10. Number of interviews (and %) per species sought for all interviews.

88 (12.6%)	ANY	All species
3 (0.4%)	BLG	Bluegill
64 (9.1%)	CCF	Channel catfish
277 (39.6%)	CRP	Crappie spp.
217 (31.0%)	LMB	Largemouth bass
26 (3.7%)	MUE	Muskellunge
9 (1.3%)	SBH	Striped bass x White bass hybrid (Wiper)
8 (1.1%)	STB	Striped bass
2 (0.3%)	WAE	Walleye
6 (0.9%)	WHC	White crappie

Table 11. Number of anglers with a given harvest & release for completed trips

# OF FISH:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15+
Bluegill																
HARVEST	106	9	-	3	6	-	-	-	-	-	-	-	-	-	-	-
RELEASE	111	-	-	6	-	-	7	-	-	-	-	-	-	-	-	-
Largemouth bass																
HARVEST	124	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	92	5	15	-	4	6	1	-	1	-	-	-	-	-	-	-
Striped bass x White bass hybrid (Wiper)																
HARVEST	122	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	124	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
White crappie																
HARVEST	94	4	3	3	1	-	-	-	7	4	-	-	2	3	-	3
RELEASE	97	1	2	5	-	4	5	-	4	-	2	-	-	-	-	4
Yellow bullhead																
HARVEST	124	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	123	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yellow bass																
HARVEST	124	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	115	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Figure B37. Length-frequency histogram for harvested bluegill on Otter Lake in 2008.

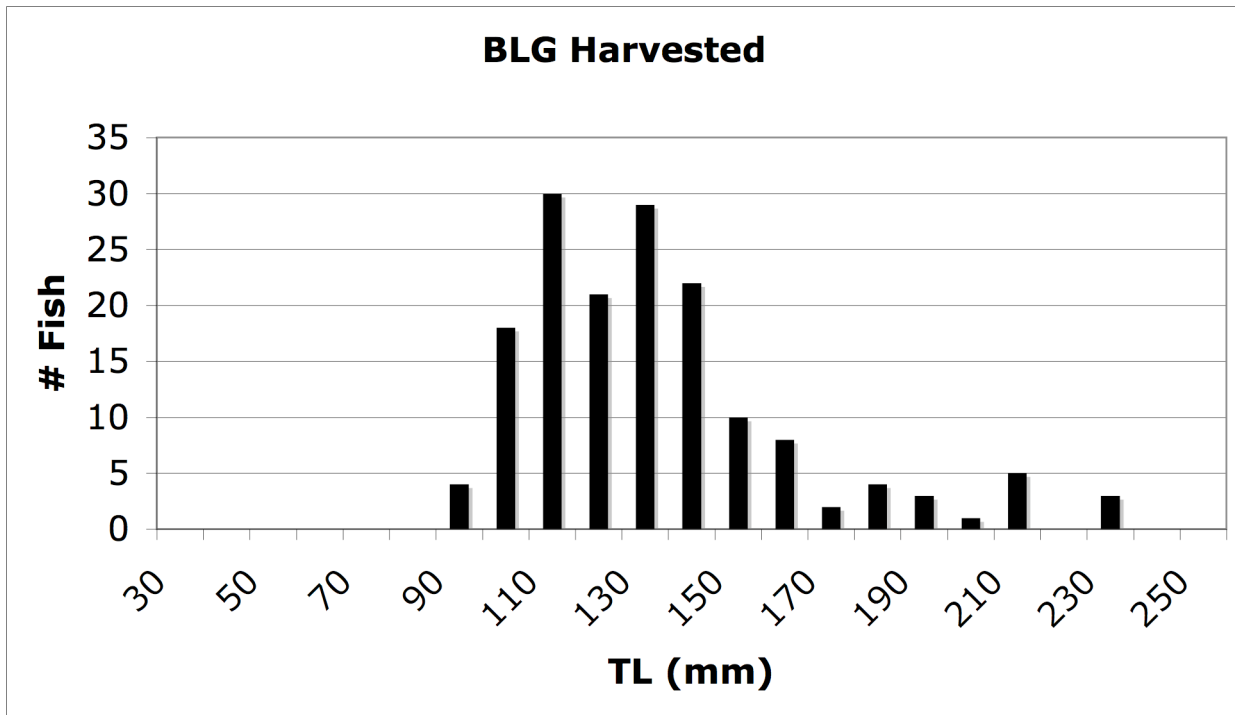


Figure B38. Length-frequency histogram for released bluegill on Otter Lake in 2008.

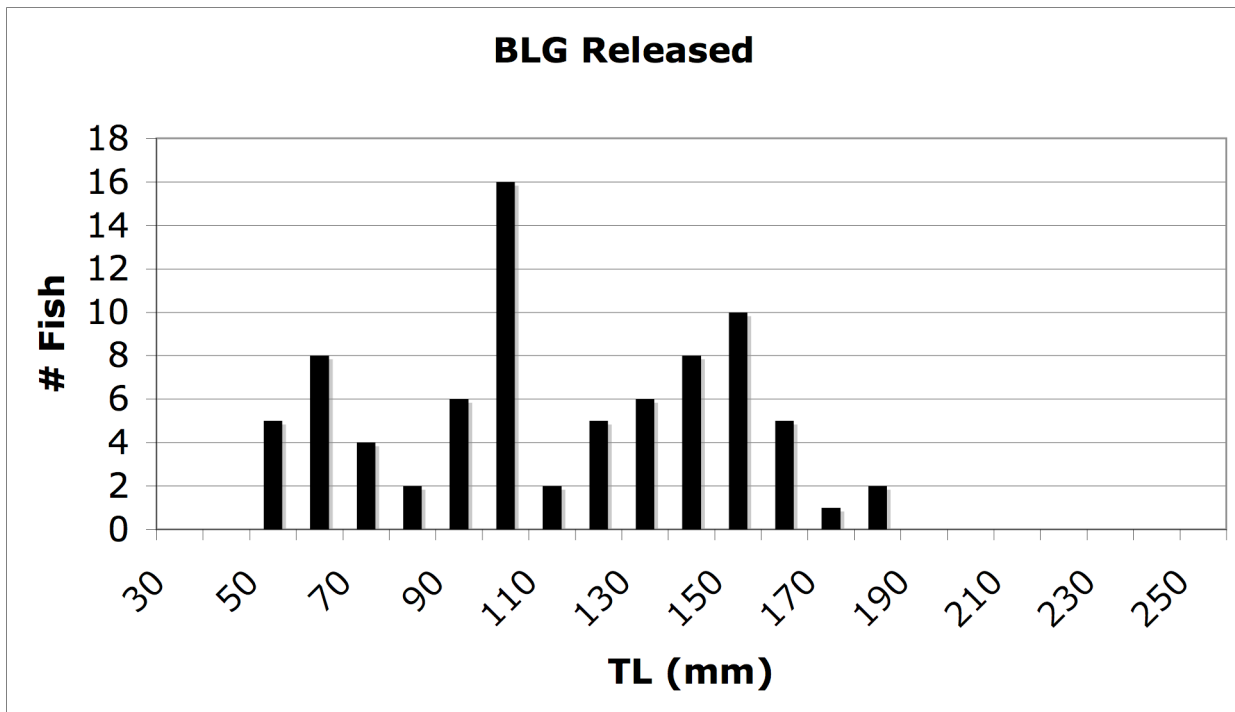


Figure B39. Length-frequency histogram for harvested channel catfish on Otter Lake in 2008.

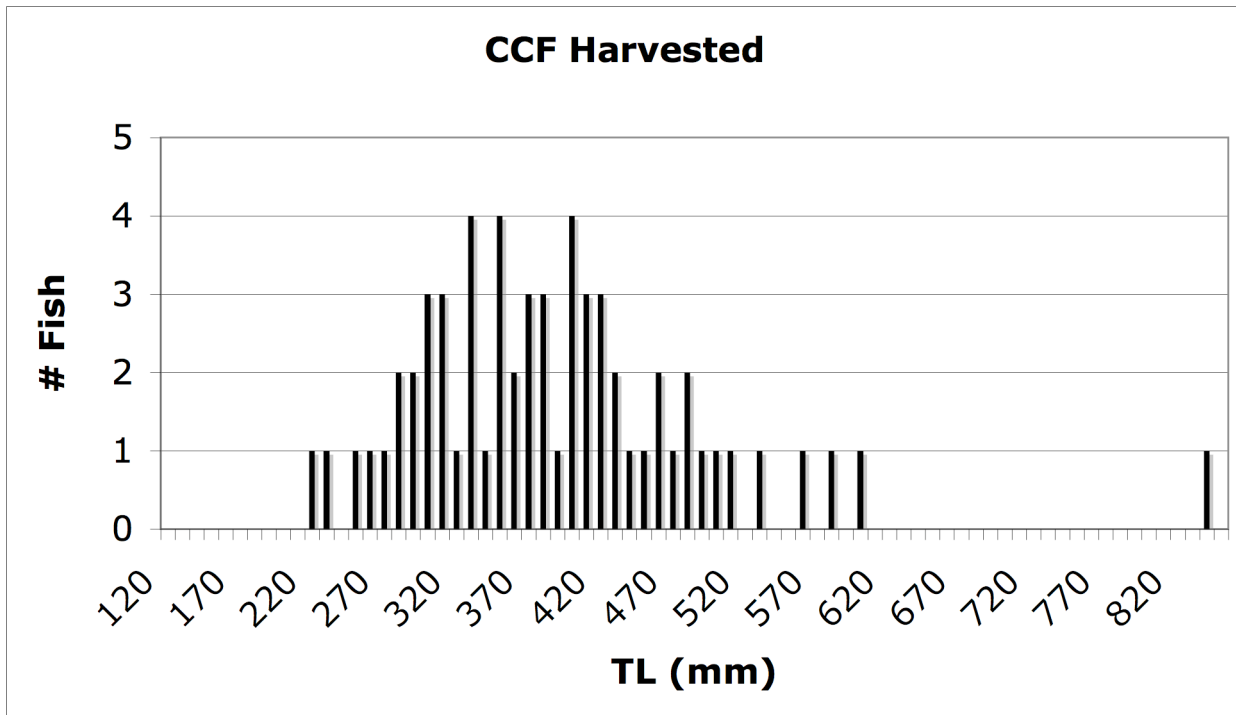


Figure B40. Length-frequency histogram for released channel catfish on Otter Lake in 2008.

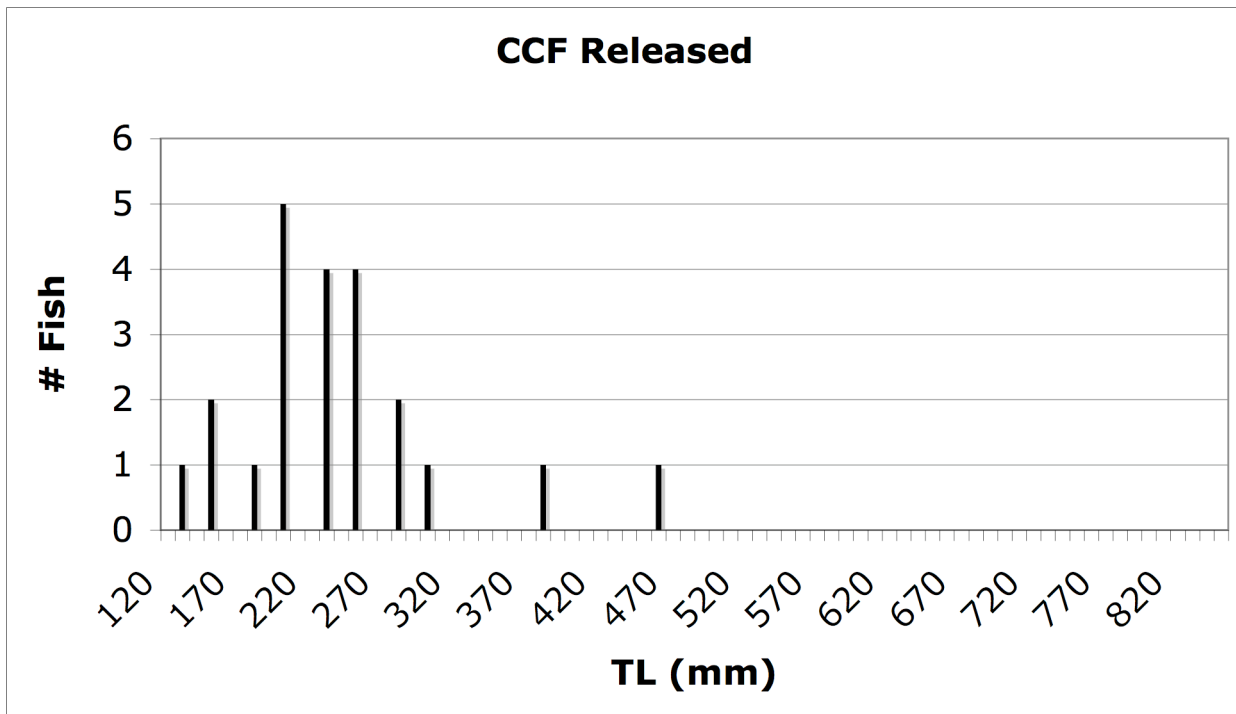


Figure B41. Length-frequency histogram for harvested largemouth bass on Otter Lake in 2008.

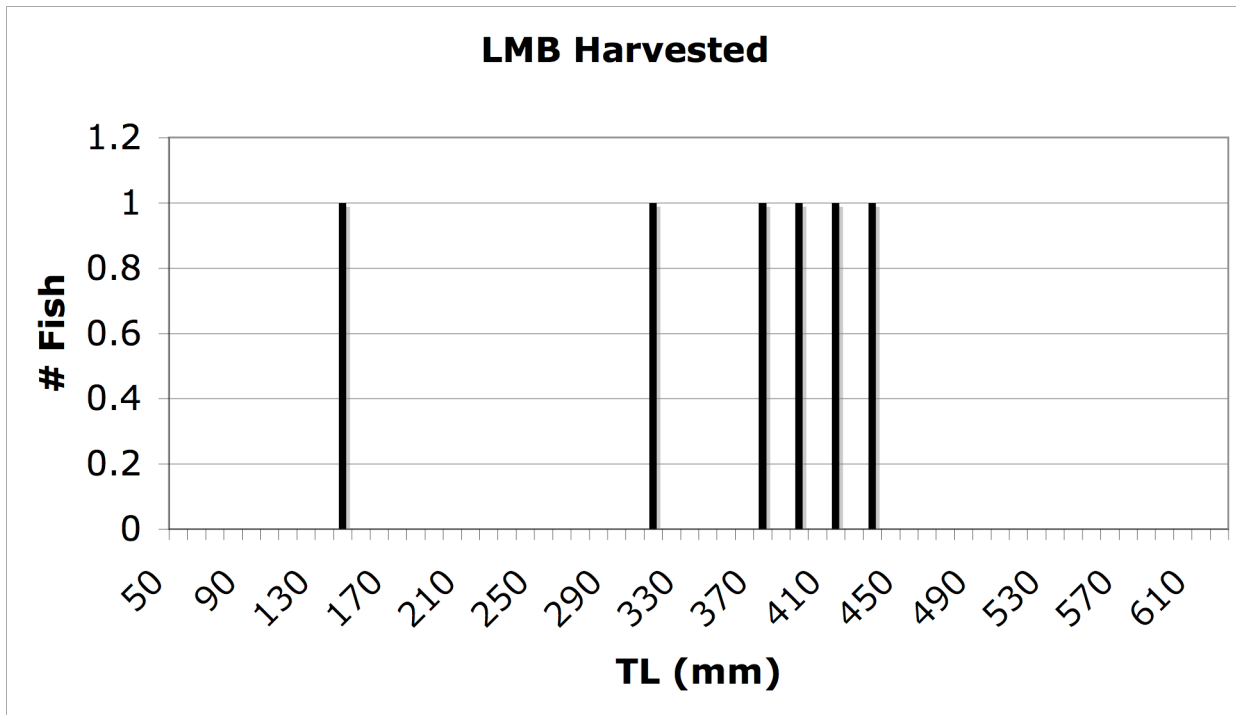


Figure B42. Length-frequency histogram for released largemouth bass on Otter Lake in 2008.

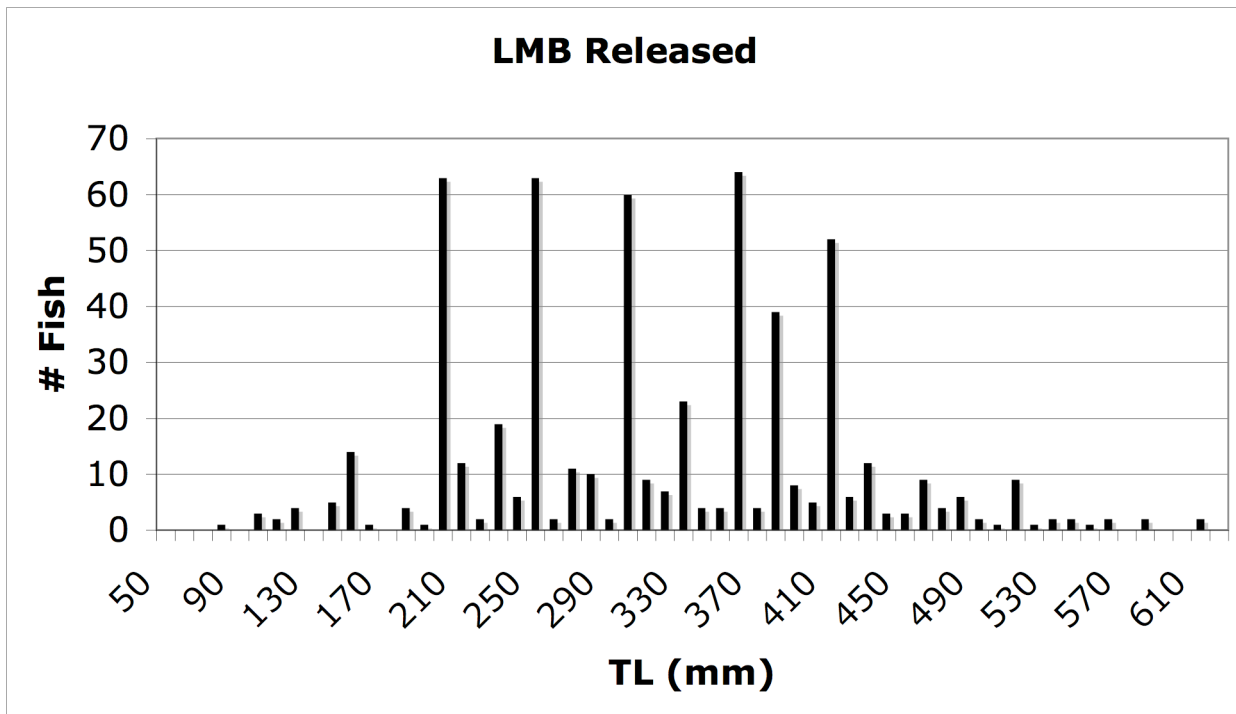


Figure B43. Length-frequency histogram for harvested white crappie on Otter Lake in 2008.

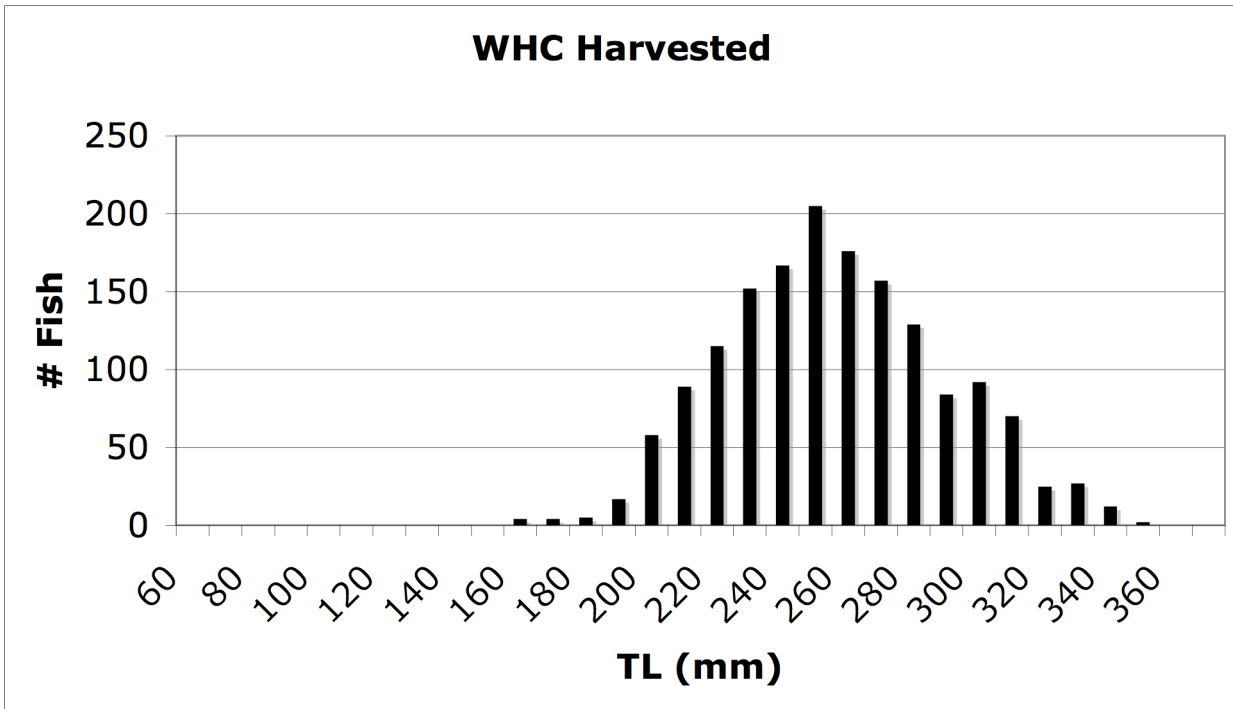
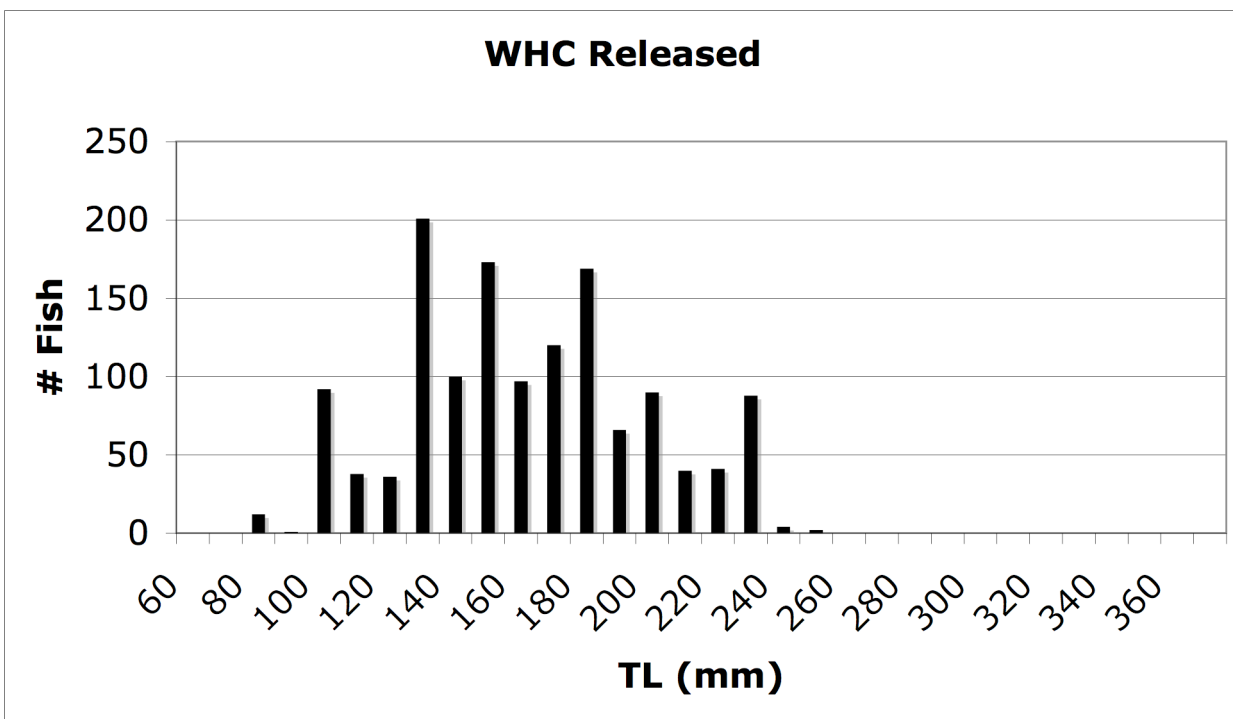


Figure B44. Length-frequency histogram for released white crappie on Otter Lake in 2008.



ILLINOIS NATURAL HISTORY SURVEY
 CENTER FOR AQUATIC ECOLOGY
 2008 CREEL SURVEY RESULTS

2008 SHABBONA LAKE
 304 ACRES
 REGION 1, DISTRICT 1

STRATIFICATION SUMMARY:

Day creel only.
 Results cover 04/01/2008 through 10/31/2008
 Year periods stratified.
 Fishing modes (boat vs. shore) stratified.
 Day types (weekday vs. weekend/holiday) stratified.
 Day periods (morning, midday, and afternoon) stratified.

SAMPLING RATIO: 280/642 = 43.6%

NUMBER OF INTERVIEWS: 8186

Table 1. Total fishing effort, by fishing mode and day type.

FISHING MODE	DAYTYPE	ANGLER-HOURS	95% CI	HOURS/ACRE	95% CI	% EFF
BOAT	WEEKDAY	54577	49402-59752 (9%)	179	162-196 (9%)	19%
	HOLIDAY	60557	55649-65465 (8%)	199	183-215 (8%)	27%
	TOTAL	115134	108002-122266 (6%)	378	355-402 (6%)	23%
SHORE	WEEKDAY	20140	18414-21865 (9%)	66	61-72 (9%)	20%
	HOLIDAY	21459	19474-23444 (9%)	71	64-77 (9%)	37%
	TOTAL	41599	38969-44228 (6%)	137	128-145 (6%)	29%
BOAT & SHORE	WEEKDAY	74717	69262-80171 (7%)	246	228-263 (7%)	19%
	HOLIDAY	82016	76722-87310 (6%)	270	252-287 (6%)	30%
	TOTAL	156733	149131-164334 (5%)	515	490-540 (5%)	25%

Table 2. Total fishing harvest and harvest rates, in numbers of fish.

# HARVESTED	95% CI	#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
78862	72750-84973 (8%)	.510	.474-.547 (7%)	640.38	259.16	All species
144	83-206 (43%)	.001	.000-.001 (53%)	1.17	0.47	Black bullhead
42010	38087-45934 (9%)	.267	.241-.293 (10%)	341.14	138.06	Black crappie
29815	27128-32502 (9%)	.189	.171-.207 (10%)	242.11	97.98	Bluegill
3	0-8 (220%)	.000	.000-.000 (220%)	0.02	0.01	Brown bullhead
		****	NOT RECORDED ****			Bullhead spp.
10	0-22 (119%)	.000	.000-.000 (140%)	0.08	0.03	Carp
4654	4117-5191 (12%)	.037	.031-.043 (15%)	37.79	15.29	Channel catfish
		****	NOT RECORDED ****			Crappie spp.
		****	NOT RECORDED ****			Flathead catfish
		****	NOT RECORDED ****			Freshwater drum
294	189-399 (36%)	.002	.001-.004 (52%)	2.39	0.97	Green sunfish
350	249-450 (29%)	.002	.001-.003 (33%)	2.84	1.15	Largemouth bass
6	0-22 (278%)	.000	.000-.000 (278%)	0.05	0.02	Muskellunge
		****	NOT RECORDED ****			Northern pike
		****	NOT RECORDED ****			Sauger
83	32-134 (62%)	.000	.000-.001 (73%)	0.67	0.27	Striped bass x Whit
		****	NOT RECORDED ****			Smallmouth bass
281	193-368 (31%)	.001	.001-.002 (48%)	2.28	0.92	Walleye
575	388-762 (32%)	.005	.003-.007 (43%)	4.67	1.89	White crappie
41	12-70 (70%)	.000	.000-.001 (78%)	0.33	0.14	Yellow bullhead
596	347-846 (42%)	.004	.001-.007 (80%)	4.84	1.96	Yellow perch

Table 3. Total fishing harvest and harvest rates, in kilograms.

KG HARVESTED	95% CI	KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
17772	16305-19239 (8%)	.119	.109-.128 (8%)	144.31	0.225	All species
31	17-44 (44%)	.000	.000-.000 (53%)	0.25	0.214	Black bullhead
7328	6630-8025 (10%)	.046	.042-.051 (10%)	59.50	0.174	Black crappie
3486	3163-3809 (9%)	.022	.020-.024 (9%)	28.31	0.117	Bluegill
1	0-2 (223%)	.000	.000-.000 (220%)	0.00	0.225	Brown bullhead
		****	NOT RECORDED ****			Bullhead spp.
34	0-88 (163%)	.000	.000-.001 (165%)	0.27	3.349	Carp
5965	5092-6839 (15%)	.045	.037-.052 (17%)	48.44	1.282	Channel catfish
		****	NOT RECORDED ****			Crappie spp.
		****	NOT RECORDED ****			Flathead catfish
		****	NOT RECORDED ****			Freshwater drum
20	13-27 (36%)	.000	.000-.000 (55%)	0.16	0.067	Green sunfish
251	171-331 (32%)	.001	.001-.002 (32%)	2.04	0.718	Largemouth bass
3	0-12 (257%)	.000	.000-.000 (257%)	0.03	0.601	Muskellunge
		****	NOT RECORDED ****			Northern pike
		****	NOT RECORDED ****			Sauger
117	47-186 (60%)	.000	.000-.001 (71%)	0.95	1.407	Striped bass x Whit
		****	NOT RECORDED ****			Smallmouth bass
320	217-424 (32%)	.002	.001-.003 (51%)	2.60	1.141	Walleye
148	106-190 (28%)	.001	.001-.002 (37%)	1.20	0.258	White crappie
7	2-12 (72%)	.000	.000-.000 (76%)	0.06	0.169	Yellow bullhead
62	37-86 (40%)	.000	.000-.001 (69%)	0.50	0.103	Yellow perch

Table 4. Total fishing harvest and harvest rates, in pounds.

LB HARVESTED	95% CI	LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
39180	35946-42415 (8%)	.262	.241-.282 (8%)	128.75	0.497	All species
68	38-98 (44%)	.000	.000-.001 (53%)	0.22	0.472	Black bullhead
16155	14617-17692 (10%)	.102	.092-.112 (10%)	53.09	0.385	Black crappie
7685	6973-8398 (9%)	.048	.043-.052 (9%)	25.26	0.258	Bluegill
1	0-4 (220%)	.000	.000-.000 (220%)	0.00	0.496	Brown bullhead
		****	NOT RECORDED ****			Bullhead spp.
74	0-195 (163%)	.001	.000-.002 (165%)	0.24	7.384	Carp
13151	11225-15078 (15%)	.098	.082-.115 (17%)	43.22	2.826	Channel catfish
		****	NOT RECORDED ****			Crappie spp.
		****	NOT RECORDED ****			Flathead catfish
		****	NOT RECORDED ****			Freshwater drum
43	28-59 (36%)	.000	.000-.001 (55%)	0.14	0.147	Green sunfish
553	376-731 (32%)	.003	.002-.004 (32%)	1.82	1.582	Largemouth bass
8	0-29 (278%)	.000	.000-.000 (278%)	0.03	1.326	Muskellunge
		****	NOT RECORDED ****			Northern pike
		****	NOT RECORDED ****			Sauger
257	103-411 (60%)	.001	.000-.002 (71%)	0.84	3.103	Striped bass x Whit
		****	NOT RECORDED ****			Smallmouth bass
706	477-935 (32%)	.004	.002-.006 (51%)	2.32	2.515	Walleye
327	234-420 (28%)	.003	.002-.004 (37%)	1.07	0.568	White crappie
15	4-27 (72%)	.000	.000-.000 (76%)	0.05	0.374	Yellow bullhead
136	81-191 (40%)	.001	.000-.002 (69%)	0.45	0.228	Yellow perch

Table 5. Total fishing catch and catch rates, in numbers of fish.
Catch includes both harvested and released fish.

# CAUGHT	95% CI	#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
189750	176890-202610 (7%)	1.152	1.083-1.220 (6%)	1540.83	623.56	All species
144	83-206 (43%)	.001	.000-.001 (53%)	1.17	0.47	Black bullhead
69512	63159-75864 (9%)	.424	.382-.467 (10%)	564.45	228.43	Black crappie
66325	60120-72529 (9%)	.401	.364-.439 (9%)	538.57	217.96	Bluegill
3	0-8 (220%)	.000	.000-.000 (220%)	0.02	0.01	Brown bullhead
118	70-167 (41%)	.002	.001-.003 (62%)	0.96	0.39	Bullhead spp.
228	164-293 (28%)	.002	.001-.004 (49%)	1.85	0.75	Carp
7462	6720-8204 (10%)	.060	.053-.068 (12%)	60.59	24.52	Channel catfish
1793	1114-2472 (38%)	.011	.005-.017 (55%)	14.56	5.89	Crappie spp.
3	0-10 (220%)	.000	.000-.000 (223%)	0.03	0.01	Flathead catfish
4	0-11 (160%)	.000	.000-.000 (210%)	0.04	0.01	Freshwater drum
305	200-410 (34%)	.003	.001-.004 (51%)	2.48	1.00	Green sunfish
32491	29753-35229 (8%)	.178	.165-.192 (8%)	263.84	106.77	Largemouth bass
1540	1301-1780 (16%)	.008	.007-.010 (19%)	12.51	5.06	Muskellunge
3	0-10 (236%)	.000	.000-.000 (231%)	0.02	0.01	Northern pike
9	0-23 (159%)	.000	.000-.000 (159%)	0.07	0.03	Sauger
366	255-477 (30%)	.002	.001-.003 (48%)	2.97	1.20	Striped bass x Whit
794	478-1111 (40%)	.005	.003-.007 (42%)	6.45	2.61	Smallmouth bass
6015	5223-6808 (13%)	.036	.029-.043 (20%)	48.85	19.77	Walleye
1275	864-1686 (32%)	.010	.007-.013 (28%)	10.35	4.19	White crappie
76	35-118 (54%)	.001	.000-.001 (66%)	0.62	0.25	Yellow bullhead
1282	924-1641 (28%)	.007	.004-.010 (48%)	10.41	4.21	Yellow perch

Table 6. Total fishing catch and catch rates, in kilograms.

KG CAUGHT	95% CI	KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
45518	42552-48484 (7%)	.265	.251-.280 (5%)	369.62	0.240	All species
31	17-44 (44%)	.000	.000-.000 (53%)	0.25	0.214	Black bullhead
9863	8944-10781 (9%)	.060	.054-.066 (10%)	80.09	0.142	Black crappie
5703	5169-6237 (9%)	.034	.031-.036 (9%)	46.31	0.086	Bluegill
1	0-2 (223%)	.000	.000-.000 (220%)	0.00	0.225	Brown bullhead
14	8-21 (44%)	.000	.000-.000 (63%)	0.12	0.122	Bullhead spp.
355	245-466 (31%)	.004	.002-.006 (50%)	2.88	1.557	Carp
7786	6860-8712 (12%)	.057	.049-.065 (14%)	63.22	1.043	Channel catfish
105	66-143 (37%)	.001	.000-.001 (43%)	0.85	0.058	Crappie spp.
11	0-35 (223%)	.000	.000-.000 (220%)	0.09	3.342	Flathead catfish
2	0-4 (160%)	.000	.000-.000 (210%)	0.01	0.344	Freshwater drum
20	13-27 (35%)	.000	.000-.000 (54%)	0.16	0.066	Green sunfish
14628	13302-15954 (9%)	.072	.065-.079 (10%)	118.78	0.450	Largemouth bass
3247	2685-3809 (17%)	.017	.013-.021 (21%)	26.37	2.108	Muskellunge
3	0-10 (231%)	.000	.000-.000 (231%)	0.03	1.096	Northern pike
1	0-2 (150%)	.000	.000-.000 (184%)	0.01	0.077	Sauger
235	152-319 (35%)	.001	.001-.002 (40%)	1.91	0.643	Striped bass x Whit
226	87-365 (62%)	.001	.000-.002 (69%)	1.84	0.284	Smallmouth bass
2923	2533-3312 (13%)	.016	.013-.019 (18%)	23.73	0.486	Walleye
263	192-333 (27%)	.002	.001-.003 (29%)	2.13	0.206	White crappie
11	5-17 (56%)	.000	.000-.000 (65%)	0.09	0.143	Yellow bullhead
92	65-119 (29%)	.001	.000-.001 (53%)	0.75	0.072	Yellow perch

Table 7. Total fishing catch and catch rates, in pounds.

LB CAUGHT	95% CI	LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
100350	93811-106889 (7%)	.585	.553-.617 (5%)	329.77	0.529	All species
68	38-98 (44%)	.000	.000-.001 (53%)	0.22	0.472	Black bullhead
21744	19719-23769 (9%)	.132	.119-.145 (10%)	71.46	0.313	Black crappie
12572	11395-13749 (9%)	.074	.068-.080 (9%)	41.32	0.190	Bluegill
1	0-4 (220%)	.000	.000-.000 (220%)	0.00	0.496	Brown bullhead
32	18-46 (44%)	.000	.000-.001 (63%)	0.10	0.269	Bullhead spp.
783	539-1027 (31%)	.009	.004-.013 (50%)	2.57	3.432	Carp
17164	15123-19206 (12%)	.125	.107-.143 (14%)	56.41	2.300	Channel catfish
231	146-315 (37%)	.001	.001-.002 (43%)	0.76	0.129	Crappie spp.
24	0-78 (223%)	.000	.000-.000 (220%)	0.08	7.367	Flathead catfish
3	0-9 (160%)	.000	.000-.000 (210%)	0.01	0.759	Freshwater drum
44	29-59 (35%)	.000	.000-.001 (54%)	0.14	0.145	Green sunfish
32250	29326-35173 (9%)	.159	.144-.174 (10%)	105.98	0.993	Largemouth bass
7158	5918-8398 (17%)	.037	.029-.045 (21%)	23.52	4.647	Muskellunge
7	0-23 (236%)	.000	.000-.001 (231%)	0.02	2.417	Northern pike
1	0-4 (150%)	.000	.000-.000 (184%)	0.00	0.171	Sauger
519	335-703 (35%)	.002	.001-.003 (40%)	1.71	1.419	Striped bass x Whit
498	191-806 (62%)	.003	.001-.004 (69%)	1.64	0.627	Smallmouth bass
6443	5584-7302 (13%)	.035	.029-.041 (18%)	21.17	1.071	Walleye
579	424-734 (27%)	.004	.003-.006 (29%)	1.90	0.454	White crappie
24	11-38 (56%)	.000	.000-.000 (65%)	0.08	0.315	Yellow bullhead
203	144-262 (29%)	.001	.001-.002 (53%)	0.67	0.158	Yellow perch

Table 8. Hours per completed trip and supplementary questions for all trips.

	MEAN	95% CI		MIN	MAX	#SAMPLES
HOURS PER COMPLETED TRIP*						
BOAT	5.3	5.2-5.4	(2%)	0.8	13.8	2349
SHORE	3.1	3.0-3.3	(4%)	0.3	11.2	679
BOAT & SHORE	4.8	4.7-4.9	(2%)	0.3	13.8	3028
MILES TRAVELED	40.7	39.9-41.4	(2%)	1	703	4930
SUCCESS RATING (1-10)	3.7	3.6-3.8	(2%)	1	10	4860

*2280 samples were from split interviews of completed trips.
53.8% of all 5631 interviews were completed trips.

ILLEGAL HARVEST: Clerk noted 58 out of 5631 interviews with illegal harvests.

Table 9. Frequency distribution of angler party size for all interviews.

PARTY SIZE:	1	2	3	4	5	6	7	8	9	10+
BOAT INTERVIEWS	721	1497	425	116	61	9	1	1		
SHORE INTERVIEWS	993	1252	378	104	53	11	4	2	2	1

Table 10. Number of interviews (and %) per species sought for all interviews.

801 (14.2%)	ANY	All species
6 (0.1%)	BLC	Black crappie
292 (5.2%)	BLG	Bluegill
1 (0.0%)	BSS	Black bass spp.
14 (0.2%)	CAP	Carp
38 (0.7%)	CAT	Unidentified catfish
783 (13.9%)	CCF	Channel catfish
1237 (22.0%)	CRP	Crappie spp.
1400 (24.9%)	LMB	Largemouth bass
670 (11.9%)	MUE	Muskellunge
1 (0.0%)	NOP	Northern pike
1 (0.0%)	SBH	Striped bass x White bass hybrid (Wiper)
1 (0.0%)	SMB	Smallmouth bass
11 (0.2%)	SUN	Sunfish spp. excluding Crappie and Black Bass
371 (6.6%)	WAE	Walleye
4 (0.1%)	YEP	Yellow perch

Table 11. Number of anglers with a given harvest & release for completed trips

# OF FISH:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15+
Black bullhead																
HARVEST	6010	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	6017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Black crappie																
HARVEST	4836	97	102	88	86	94	73	88	57	98	381	8	6	1	1	1
RELEASE	5132	238	113	94	45	50	37	28	43	18	30	9	18	30	5	127
Bluegill																
HARVEST	5154	138	132	133	97	79	45	41	48	50	86	7	4	-	3	-
RELEASE	4806	254	160	201	119	108	81	23	69	15	69	2	18	17	7	68
Brown bullhead																
HARVEST	6015	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	6017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bullhead spp.																
HARVEST	6017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	6008	7	2	-	-	-	-	-	-	-	-	-	-	-	-	-
Carp																
HARVEST	6014	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	6002	13	-	2	-	-	-	-	-	-	-	-	-	-	-	-
Channel catfish																
HARVEST	5654	242	70	30	14	6	1	-	-	-	-	-	-	-	-	-
RELEASE	5683	289	20	10	10	2	2	-	-	-	-	-	1	-	-	-
Crappie spp.																
HARVEST	6017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	5926	25	15	22	2	5	10	2	-	-	3	3	3	-	1	-
Flathead catfish																
HARVEST	6017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	6015	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Freshwater drum																
HARVEST	6017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	6015	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Green sunfish																
HARVEST	6004	10	1	2	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	6017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Largemouth bass																
HARVEST	5974	38	3	1	1	-	-	-	-	-	-	-	-	-	-	-
RELEASE	34371278	528	312	179	115	69	35	12	16	8	7	4	3	3	11	

Table 11. (Cont.) Number of anglers with a given harvest & release for completed trips

# OF FISH:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15+
Muskellunge																
HARVEST	6016	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	5646	353	12	6	-	-	-	-	-	-	-	-	-	-	-	-
Northern pike																
HARVEST	6017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	6017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sauger																
HARVEST	6017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	6014	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Striped bass x White bass hybrid (Wiper)																
HARVEST	6002	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	5964	46	4	1	-	-	2	-	-	-	-	-	-	-	-	-
Smallmouth bass																
HARVEST	6017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	5918	79	8	5	1	2	1	1	1	-	-	1	-	-	-	-
Walleye																
HARVEST	5961	54	2	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	5311	521	83	40	20	17	9	3	5	1	1	2	1	2	-	1
White crappie																
HARVEST	5927	79	8	3	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	5913	87	2	3	4	2	2	-	-	-	-	-	-	2	-	2
Yellow bullhead																
HARVEST	6016	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	6006	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yellow perch																
HARVEST	5970	27	11	2	1	1	5	-	-	-	-	-	-	-	-	-
RELEASE	5881	91	24	16	-	2	2	-	1	-	-	-	-	-	-	-

Figure B45. Length-frequency histogram for harvested black crappie on Lake Shabbona in 2008.

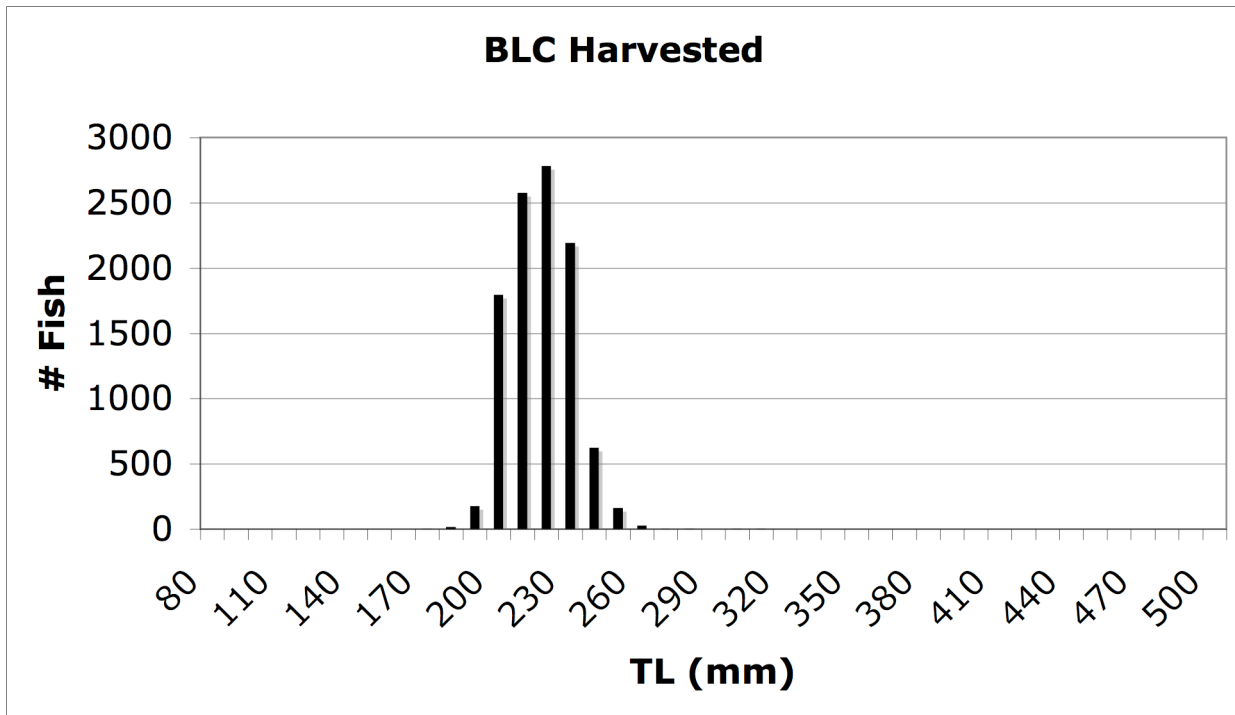


Figure B46. Length-frequency histogram for released black crappie on Lake Shabbona in 2008.

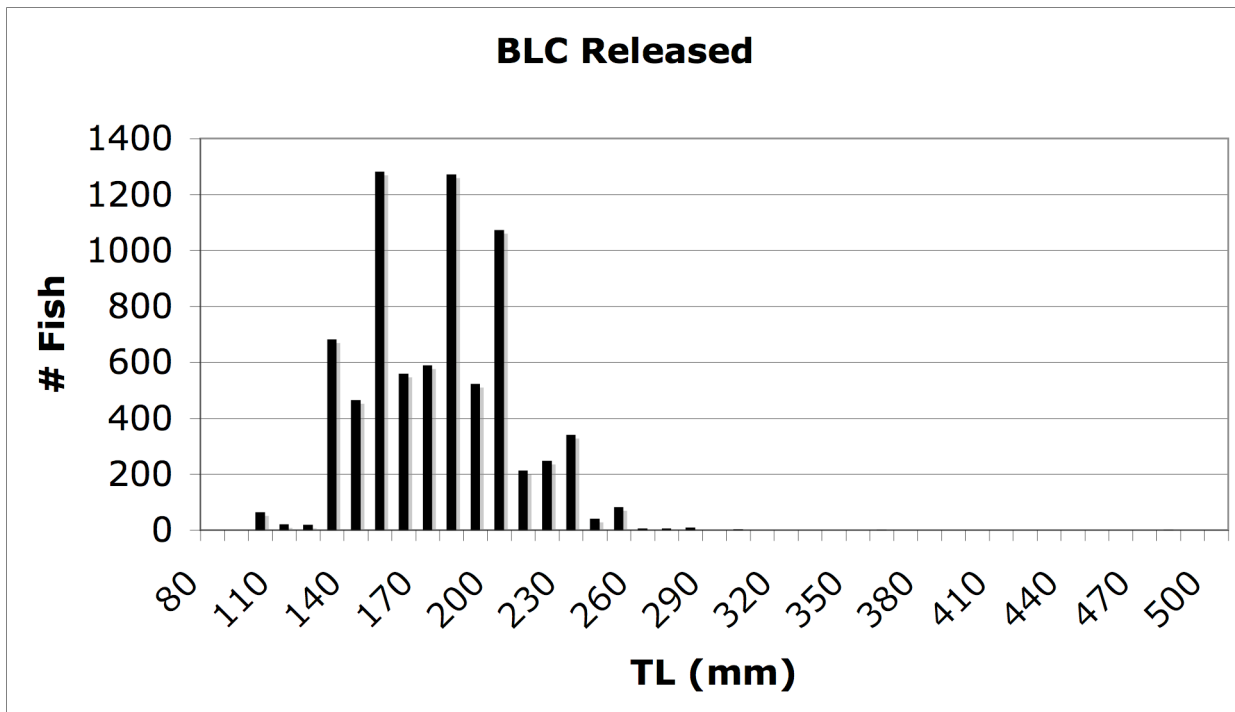


Figure B47. Length-frequency histogram for harvested bluegill on Lake Shabbona in 2008.

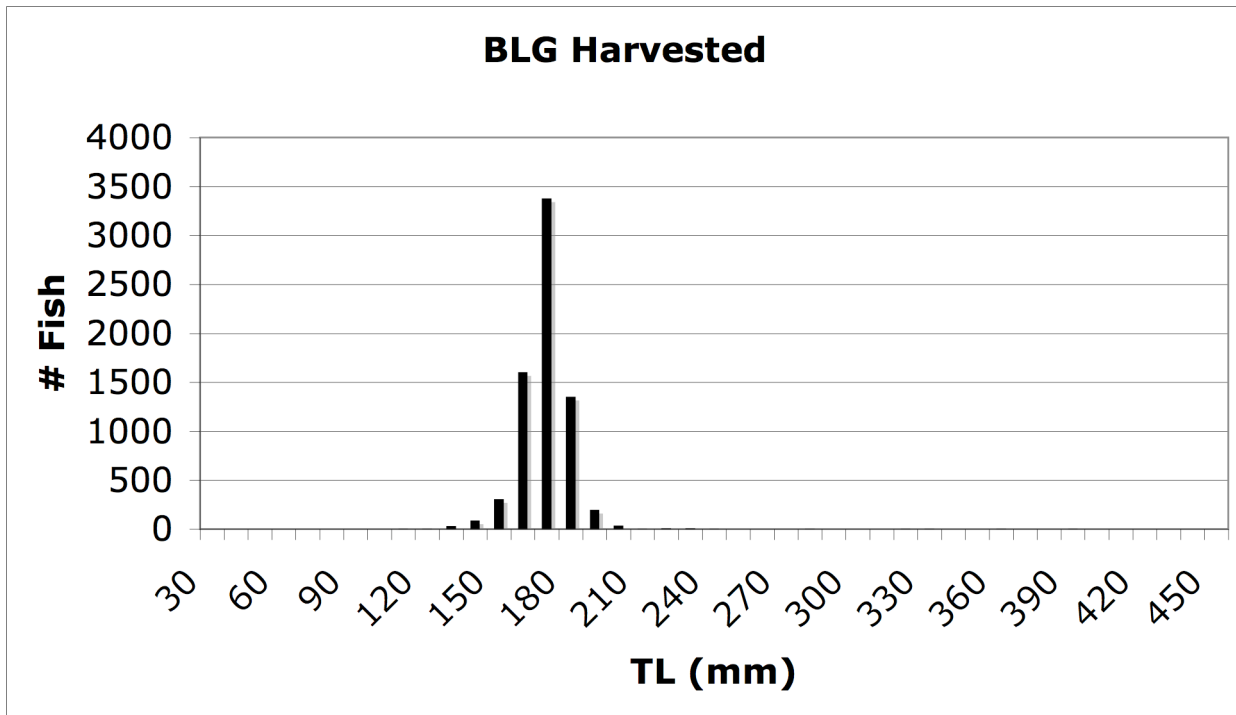


Figure B48. Length-frequency histogram for released bluegill on Lake Shabbona in 2008.

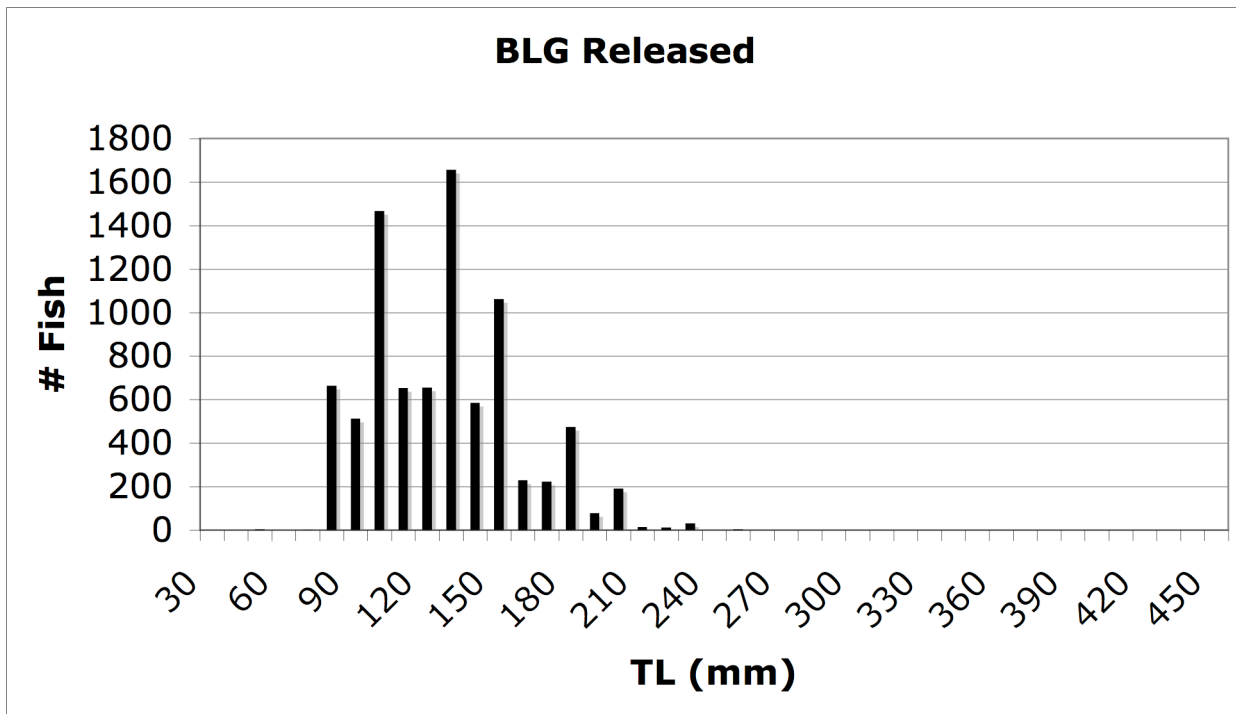


Figure B49. Length-frequency histogram for harvested channel catfish on Lake Shabbona in 2008.

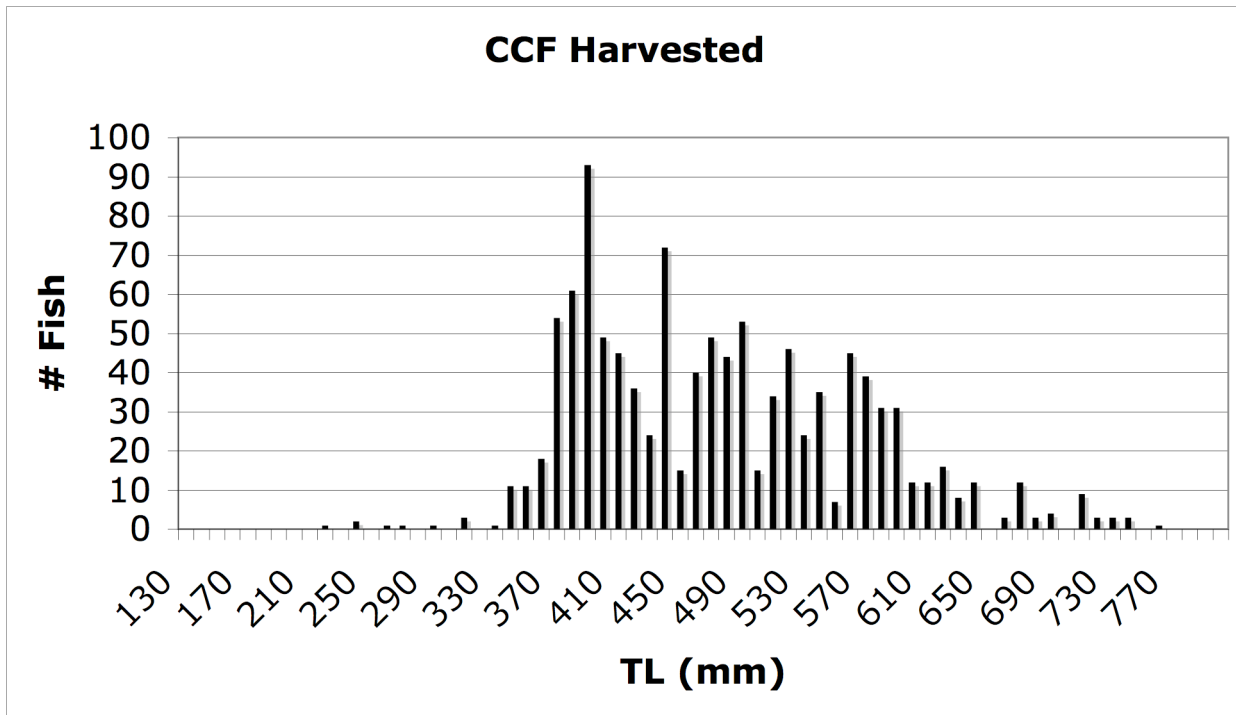


Figure B50. Length-frequency histogram for released channel catfish on Lake Shabbona in 2008.

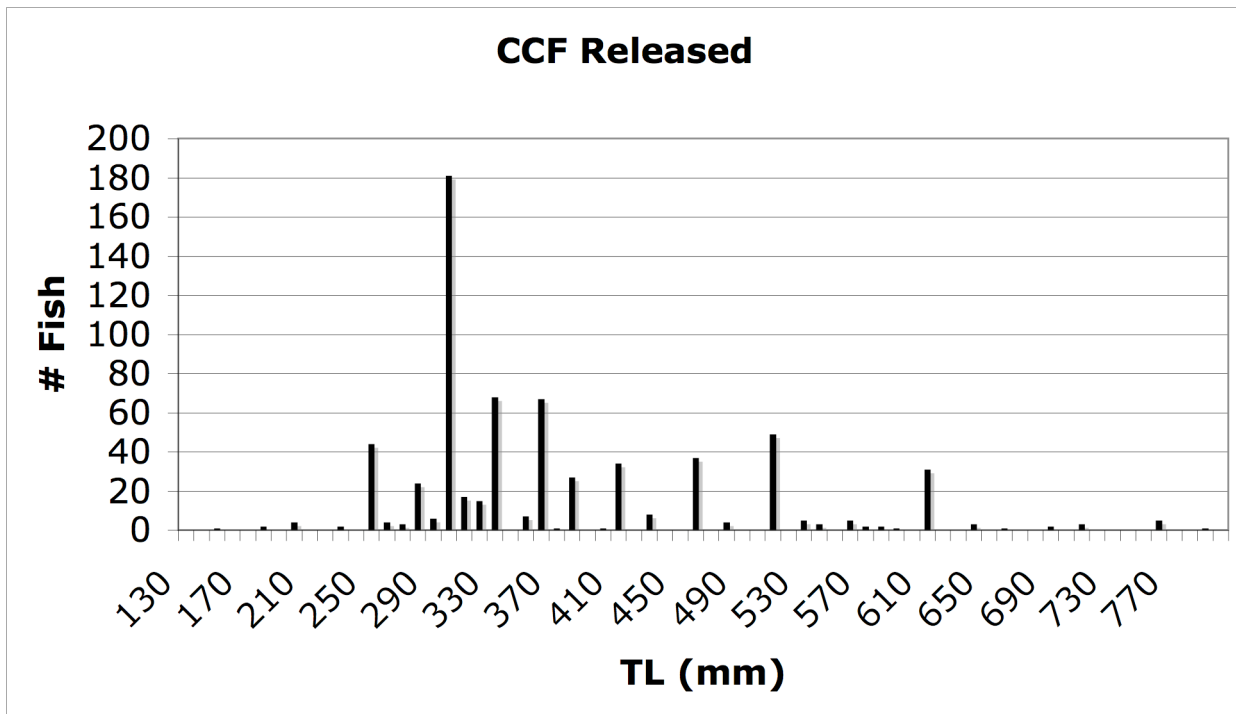


Figure B51. Length-frequency histogram for harvested largemouth bass on Lake Shabbona in 2008.

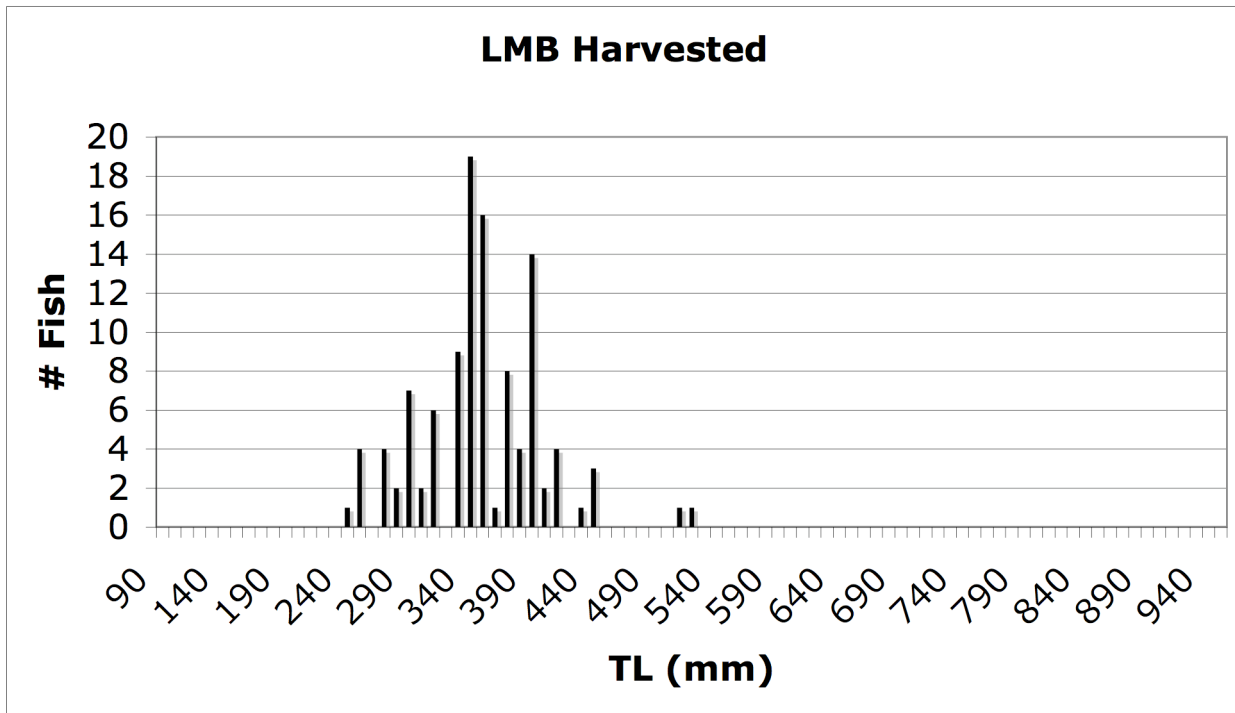


Figure B52. Length-frequency histogram for released largemouth bass on Lake Shabbona in 2008.

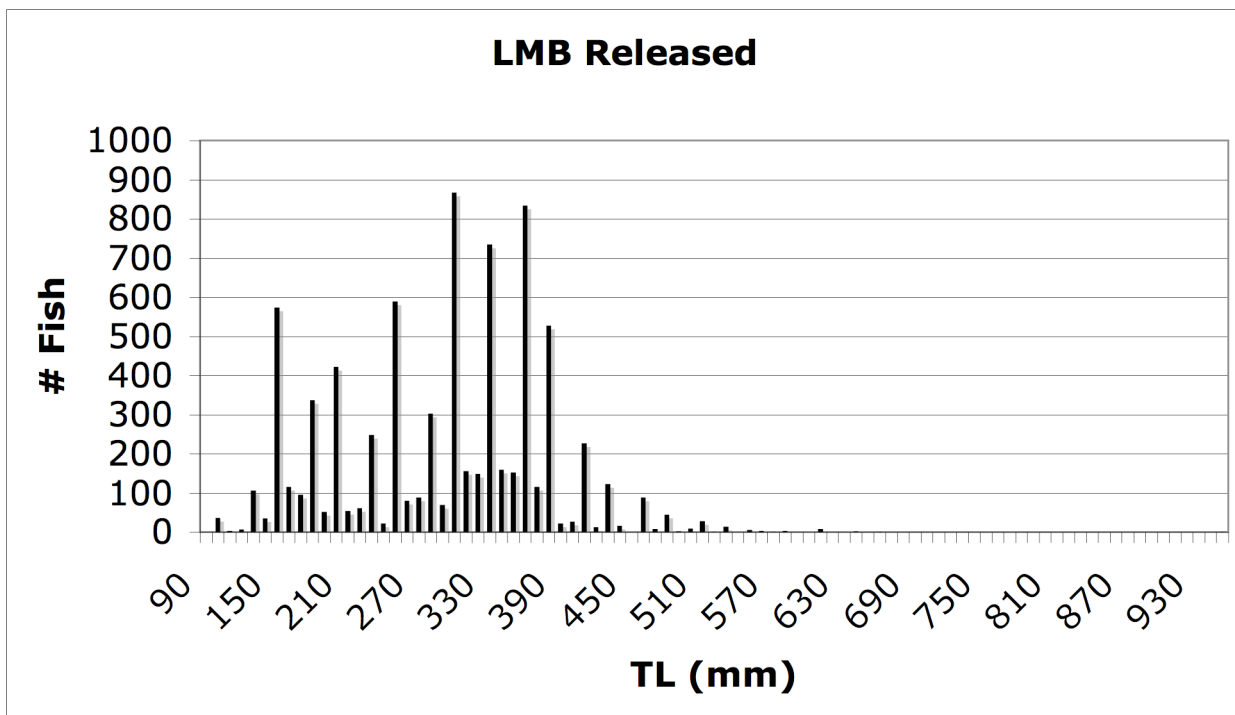


Figure B53. Length-frequency histogram for harvested walleye on Lake Shabbona in 2008.

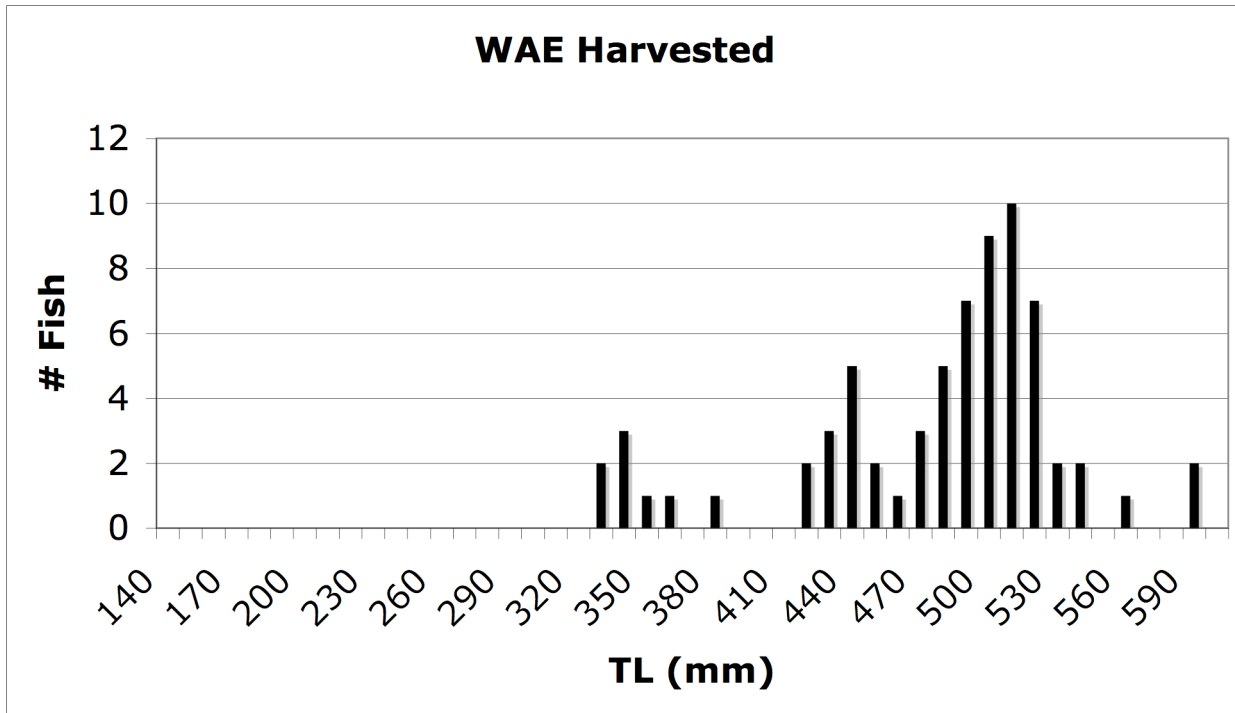
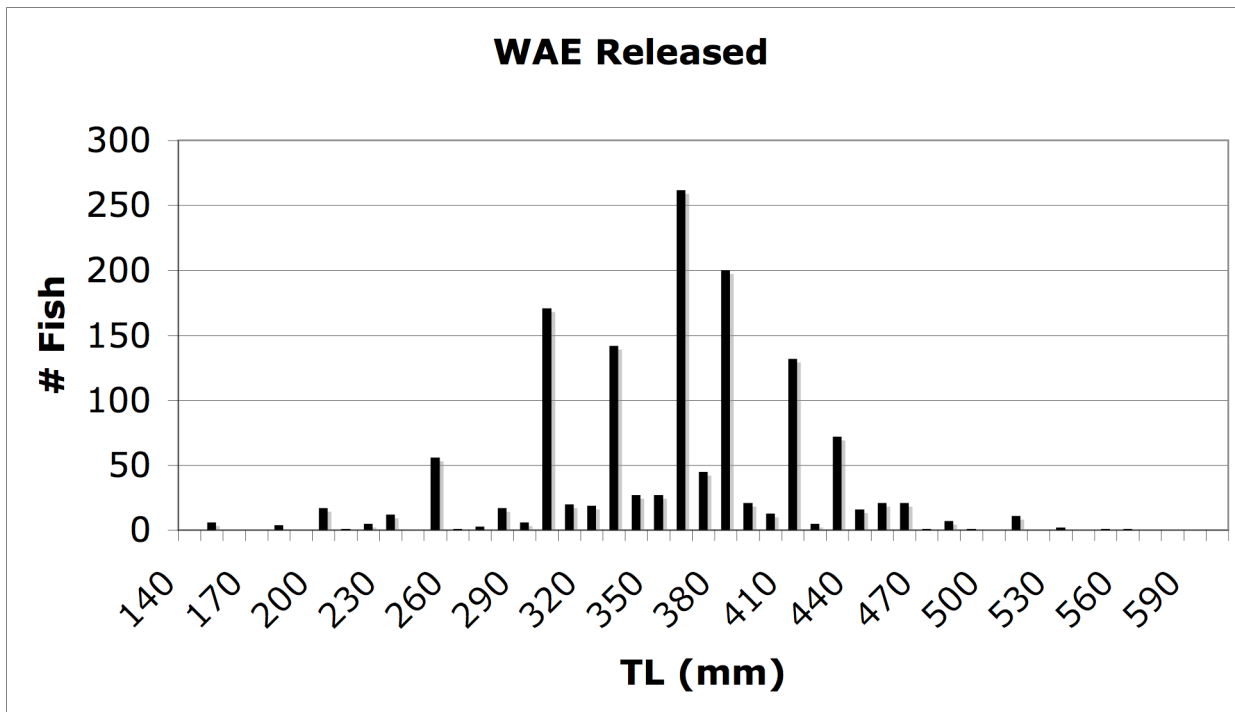


Figure B54. Length-frequency histogram for released walleye on Lake Shabbona in 2008.



ILLINOIS NATURAL HISTORY SURVEY
 CENTER FOR AQUATIC ECOLOGY
 2008 CREEL SURVEY RESULTS

2008 LAKE SPRINGFIELD
 3866 ACRES
 REGION 4, DISTRICT 14

STRATIFICATION SUMMARY:

Day creel only.
 Results cover 03/15/2008 through 10/31/2008
 Year periods stratified.
 Fishing modes (boat vs. shore) stratified.
 Day types (weekday vs. weekend/holiday) stratified.
 Day periods (morning, midday, and afternoon) stratified.

SAMPLING RATIO: 354/693 = 51.1%

NUMBER OF INTERVIEWS: 1330

Table 1. Total fishing effort, by fishing mode and day type.

FISHING MODE	DAYTYPE	ANGLER-HOURS	95% CI	HOURS/ACRE	95% CI	% EFF
BOAT	WEEKDAY	10369	8053-12686 (22%)	3	2-3 (22%)	8%
	HOLIDAY	14885	12202-17568 (18%)	4	3-5 (18%)	22%
	TOTAL	25254	21709-28799 (14%)	7	6-7 (14%)	16%
SHORE	WEEKDAY	6912	5532-8291 (20%)	2	1-2 (20%)	7%
	HOLIDAY	5784	4728-6841 (18%)	1	1-2 (18%)	16%
	TOTAL	12696	10958-14434 (14%)	3	3-4 (14%)	11%
BOAT & SHORE	WEEKDAY	17281	14585-19977 (16%)	4	4-5 (16%)	7%
	HOLIDAY	20669	17786-23553 (14%)	5	5-6 (14%)	20%
	TOTAL	37950	34002-41898 (10%)	10	9-11 (10%)	14%

Table 2. Total fishing harvest and harvest rates, in numbers of fish.

# HARVESTED	95% CI	#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
12630	7340-17919 (42%)	.200	.122-.279 (39%)	8.07	3.27	All species
71	0-184 (157%)	.001	.000-.001 (146%)	0.05	0.02	Blue catfish
923	237-1608 (74%)	.021	.000-.049 (140%)	0.59	0.24	Black crappie
1727	499-2956 (71%)	.056	.000-.126 (124%)	1.10	0.45	Bluegill
		****	NOT RECORDED ****			Carp
4607	3454-5760 (25%)	.069	.052-.086 (25%)	2.95	1.19	Channel catfish
4	0-14 (223%)	.000	.000-.000 (220%)	0.00	0.00	Flathead catfish
40	0-94 (134%)	.001	.000-.002 (146%)	0.03	0.01	Freshwater drum
43	0-143 (231%)	.001	.000-.002 (226%)	0.03	0.01	Green sunfish
287	68-506 (76%)	.003	.001-.005 (61%)	0.18	0.07	Largemouth bass
		****	NOT RECORDED ****			Striped bass
4483	0-9163 (104%)	.041	.008-.074 (80%)	2.87	1.16	White bass
279	70-488 (75%)	.003	.001-.006 (84%)	0.18	0.07	White crappie
		****	NOT RECORDED ****			Yellow bullhead
2	0-8 (223%)	.000	.000-.000 (220%)	0.00	0.00	Yellow perch
162	0-395 (144%)	.005	.000-.012 (146%)	0.10	0.04	Yellow bass

Table 3. Total fishing harvest and harvest rates, in kilograms.

KG HARVESTED	95% CI	KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
4776	3435-6117 (28%)	.073	.051-.095 (30%)	3.05	0.378	All species
27	0-67 (145%)	.000	.000-.001 (135%)	0.02	0.383	Blue catfish
314	33-595 (89%)	.008	.000-.021 (161%)	0.20	0.341	Black crappie
189	0-463 (145%)	.006	.000-.014 (156%)	0.12	0.110	Bluegill
		****	NOT RECORDED ****			Carp
2758	1791-3725 (35%)	.041	.025-.057 (39%)	1.76	0.599	Channel catfish
6	0-20 (220%)	.000	.000-.000 (223%)	0.00	1.409	Flathead catfish
69	0-154 (123%)	.001	.000-.002 (137%)	0.04	1.711	Freshwater drum
1	0-4 (226%)	.000	.000-.000 (226%)	0.00	0.029	Green sunfish
261	53-469 (80%)	.003	.001-.005 (61%)	0.17	0.911	Largemouth bass
		****	NOT RECORDED ****			Striped bass
1038	45-2032 (96%)	.012	.001-.023 (88%)	0.66	0.232	White bass
64	15-114 (77%)	.001	.000-.001 (91%)	0.04	0.230	White crappie
		****	NOT RECORDED ****			Yellow bullhead
1	0-2 (220%)	.000	.000-.000 (220%)	0.00	0.230	Yellow perch
46	0-95 (106%)	.001	.000-.003 (117%)	0.03	0.285	Yellow bass

Table 4. Total fishing harvest and harvest rates, in pounds.

LB HARVESTED	95% CI	LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
10529	7574-13485 (28%)	.161	.113-.209 (30%)	2.72	0.834	All species
60	0-148 (145%)	.001	.000-.001 (135%)	0.02	0.844	Blue catfish
693	74-1312 (89%)	.017	.000-.045 (161%)	0.18	0.751	Black crappie
418	0-1022 (145%)	.012	.000-.031 (156%)	0.11	0.242	Bluegill
		****	NOT RECORDED ****			Carp
6081	3949-8213 (35%)	.091	.055-.126 (39%)	1.57	1.320	Channel catfish
13	0-43 (223%)	.000	.000-.000 (220%)	0.00	3.106	Flathead catfish
152	0-339 (123%)	.002	.000-.005 (137%)	0.04	3.772	Freshwater drum
3	0-9 (226%)	.000	.000-.000 (231%)	0.00	0.063	Green sunfish
576	118-1034 (80%)	.006	.002-.010 (61%)	0.15	2.009	Largemouth bass
		****	NOT RECORDED ****			Striped bass
2289	98-4479 (96%)	.027	.003-.051 (88%)	0.59	0.511	White bass
142	33-251 (77%)	.002	.000-.003 (91%)	0.04	0.508	White crappie
		****	NOT RECORDED ****			Yellow bullhead
1	0-4 (223%)	.000	.000-.000 (223%)	0.00	0.506	Yellow perch
102	0-209 (106%)	.003	.000-.006 (117%)	0.03	0.628	Yellow bass

Table 5. Total fishing catch and catch rates, in numbers of fish.

Catch includes both harvested and released fish.

# CAUGHT	95% CI	#/HOUR	95% CI	#/HA	#/ACRE	SPECIES
57394	46379-68409 (19%)	.764	.640-.888 (16%)	36.69	14.85	All species
76	0-189 (147%)	.001	.000-.002 (128%)	0.05	0.02	Blue catfish
3034	954-5113 (69%)	.051	.014-.088 (73%)	1.94	0.78	Black crappie
16079	12681-19476 (21%)	.289	.206-.372 (29%)	10.28	4.16	Bluegill
40	0-110 (177%)	.000	.000-.001 (176%)	0.03	0.01	Carp
7694	6205-9183 (19%)	.121	.092-.149 (24%)	4.92	1.99	Channel catfish
101	6-195 (94%)	.001	.000-.002 (98%)	0.06	0.03	Flathead catfish
253	141-365 (44%)	.006	.002-.009 (70%)	0.16	0.07	Freshwater drum
957	195-1720 (80%)	.022	.000-.044 (99%)	0.61	0.25	Green sunfish
21073	15366-26781 (27%)	.185	.139-.232 (25%)	13.47	5.45	Largemouth bass
66	9-124 (87%)	.001	.000-.002 (138%)	0.04	0.02	Striped bass
6072	1253-10890 (79%)	.059	.024-.094 (60%)	3.88	1.57	White bass
596	163-1028 (73%)	.008	.001-.015 (91%)	0.38	0.15	White crappie
66	0-172 (162%)	.001	.000-.004 (159%)	0.04	0.02	Yellow bullhead
1055	0-2309 (119%)	.014	.000-.030 (123%)	0.67	0.27	Yellow perch
232	3-462 (99%)	.006	.000-.013 (119%)	0.15	0.06	Yellow bass

Table 6. Total fishing catch and catch rates, in kilograms.

KG CAUGHT	95% CI	KG/HOUR	95% CI	KG/HA	AVE KG	SPECIES
18550	14284-22816 (23%)	.192	.158-.227 (18%)	11.86	0.323	All species
31	0-71 (131%)	.000	.000-.001 (112%)	0.02	0.402	Blue catfish
621	173-1068 (72%)	.012	.000-.027 (119%)	0.40	0.205	Black crappie
628	337-919 (46%)	.013	.004-.022 (70%)	0.40	0.039	Bluegill
145	0-415 (187%)	.002	.000-.005 (185%)	0.09	3.648	Carp
3895	2616-5173 (33%)	.051	.034-.067 (33%)	2.49	0.506	Channel catfish
787	0-2270 (188%)	.004	.000-.011 (154%)	0.50	7.831	Flathead catfish
272	128-417 (53%)	.005	.002-.008 (69%)	0.17	1.075	Freshwater drum
16	4-27 (75%)	.000	.000-.001 (99%)	0.01	0.016	Green sunfish
10372	7428-13317 (28%)	.085	.063-.107 (26%)	6.63	0.492	Largemouth bass
20	1-39 (96%)	.000	.000-.000 (97%)	0.01	0.301	Striped bass
1521	472-2570 (69%)	.016	.005-.027 (69%)	0.97	0.250	White bass
87	27-147 (69%)	.001	.000-.002 (85%)	0.06	0.147	White crappie
17	0-48 (180%)	.000	.000-.001 (146%)	0.01	0.260	Yellow bullhead
83	0-185 (124%)	.001	.000-.003 (125%)	0.05	0.078	Yellow perch
55	4-106 (93%)	.001	.000-.003 (108%)	0.04	0.237	Yellow bass

Table 7. Total fishing catch and catch rates, in pounds.

LB CAUGHT	95% CI	LB/HOUR	95% CI	LB/ACRE	AVE LB	SPECIES
40895	31490-50300 (23%)	.424	.349-.500 (18%)	10.58	0.713	All species
68	0-157 (131%)	.001	.000-.002 (112%)	0.02	0.887	Blue catfish
1369	382-2355 (72%)	.027	.000-.058 (119%)	0.35	0.451	Black crappie
1384	743-2026 (46%)	.028	.008-.048 (70%)	0.36	0.086	Bluegill
319	0-915 (187%)	.004	.000-.011 (185%)	0.08	8.043	Carp
8586	5768-11405 (33%)	.112	.075-.148 (33%)	2.22	1.116	Channel catfish
1735	0-5004 (188%)	.009	.000-.024 (154%)	0.45	17.264	Flathead catfish
601	283-918 (53%)	.011	.003-.018 (69%)	0.16	2.371	Freshwater drum
35	9-61 (75%)	.001	.000-.001 (99%)	0.01	0.036	Green sunfish
22867	16377-29358 (28%)	.188	.140-.236 (26%)	5.92	1.085	Largemouth bass
44	2-86 (96%)	.000	.000-.001 (97%)	0.01	0.663	Striped bass
3353	1041-5666 (69%)	.036	.011-.060 (69%)	0.87	0.552	White bass
193	60-325 (69%)	.002	.000-.004 (85%)	0.05	0.323	White crappie
38	0-106 (180%)	.001	.000-.002 (146%)	0.01	0.573	Yellow bullhead
182	0-408 (124%)	.002	.000-.006 (125%)	0.05	0.173	Yellow perch
121	9-234 (93%)	.003	.000-.006 (108%)	0.03	0.522	Yellow bass

Table 8. Hours per completed trip and supplementary questions for all trips.

	MEAN	95% CI		MIN	MAX	#SAMPLES
HOURS PER COMPLETED TRIP*						
BOAT	6.2	5.9-6.6	(6%)	0.3	11.5	168
SHORE	2.6	2.0-3.1	(21%)	0.4	10.8	46
BOAT & SHORE	5.4	5.1-5.8	(7%)	0.3	11.5	214
MILES TRAVELED	20.6	17.8-23.3	(13%)	1	290	906
SUCCESS RATING (1-10)	4.2	4.0-4.3	(4%)	1	10	907

*165 samples were from split interviews of completed trips.
18.4% of all 1163 interviews were completed trips.

ILLEGAL HARVEST: Clerk noted 3 out of 1163 interviews with illegal harvests.

Table 9. Frequency distribution of angler party size for all interviews.

PARTY SIZE:	1	2	3	4	5	6	7	8	9	10+
BOAT INTERVIEWS	170	494	45	2						
SHORE INTERVIEWS	194	203	50	3	2					

Table 10. Number of interviews (and %) per species sought for all interviews.

149 (12.8%)	ANY	All species
59 (5.1%)	BLC	Black crappie
16 (1.4%)	BLG	Bluegill
2 (0.2%)	CAP	Carp
469 (40.3%)	CCF	Channel catfish
25 (2.1%)	CRP	Crappie spp.
402 (34.6%)	LMB	Largemouth bass
2 (0.2%)	SUN	Sunfish spp. excluding Crappie and Black Bass
39 (3.4%)	WHB	White bass

Table 11. Number of anglers with a given harvest & release for completed trips

# OF FISH:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15+
Blue catfish																
HARVEST	393	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	391	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Black crappie																
HARVEST	383	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	379	1	1	-	4	4	2	-	-	1	-	-	-	-	-	1
Bluegill																
HARVEST	393	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	332	8	10	12	3	6	8	1	6	2	-	-	2	2	-	1
Channel catfish																
HARVEST	360	14	12	-	4	1	-	1	-	-	-	-	1	-	-	-
RELEASE	333	19	8	8	4	5	6	1	3	-	-	-	-	2	2	2
Flathead catfish																
HARVEST	393	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	386	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Freshwater drum																
HARVEST	393	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	378	10	5	-	-	-	-	-	-	-	-	-	-	-	-	-
Green sunfish																
HARVEST	393	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	383	2	-	2	2	4	-	-	-	-	-	-	-	-	-	-
Largemouth bass																
HARVEST	385	6	2	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	181	17	16	8	8	15	13	6	4	12	14	10	9	12	6	62
Striped bass																
HARVEST	393	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	387	5	-	1	-	-	-	-	-	-	-	-	-	-	-	-
White bass																
HARVEST	387	2	-	-	-	-	-	-	-	-	4	-	-	-	-	-
RELEASE	356	22	4	6	2	-	-	-	2	-	1	-	-	-	-	-
Yellow bullhead																
HARVEST	393	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	387	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yellow perch																
HARVEST	393	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	391	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-

2008 LAKE SPRINGFIELD

DAY CREEL

03/15/2008 - 10/31/2008

Table 11.(Cont.) Number of anglers with a given harvest & release for completed trips

# OF FISH:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15+
Yellow bass																
HARVEST	391	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-
RELEASE	390	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Figure B55. Length-frequency histogram for harvested black crappie on Lake Springfield in 2008.

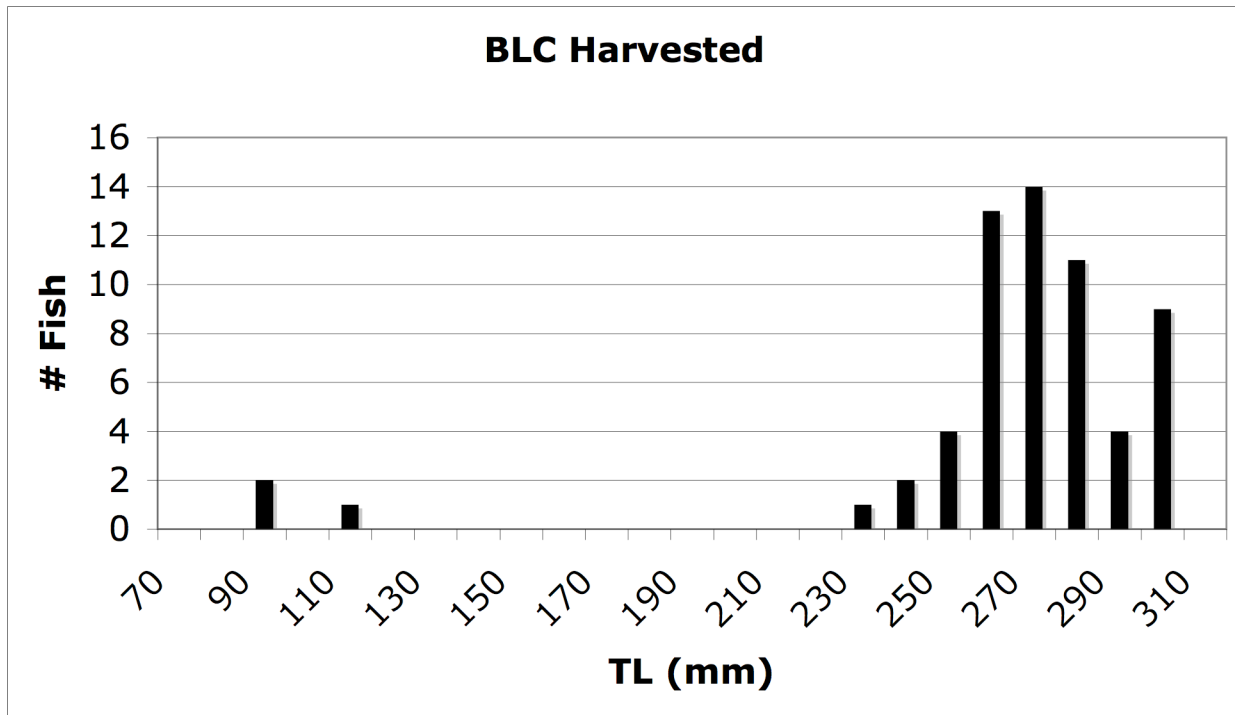


Figure B56. Length-frequency histogram for released black crappie on Lake Springfield in 2008.

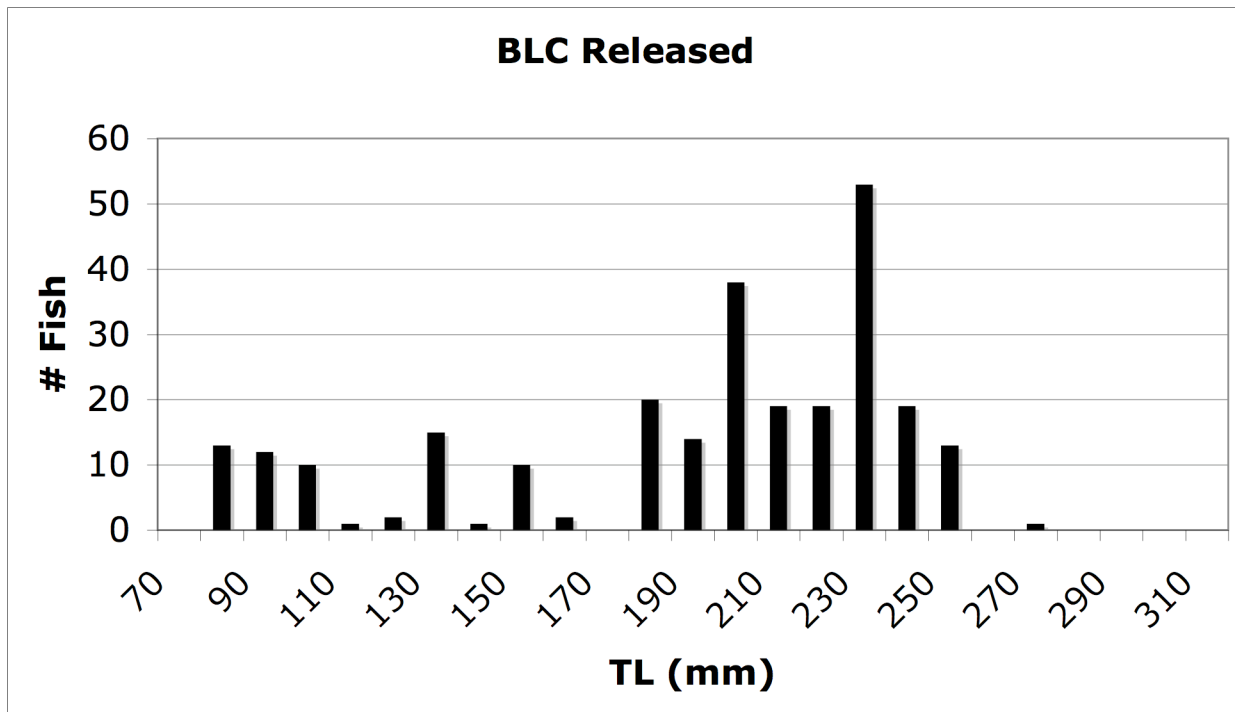


Figure B57. Length-frequency histogram for harvested bluegill on Lake Springfield in 2008.

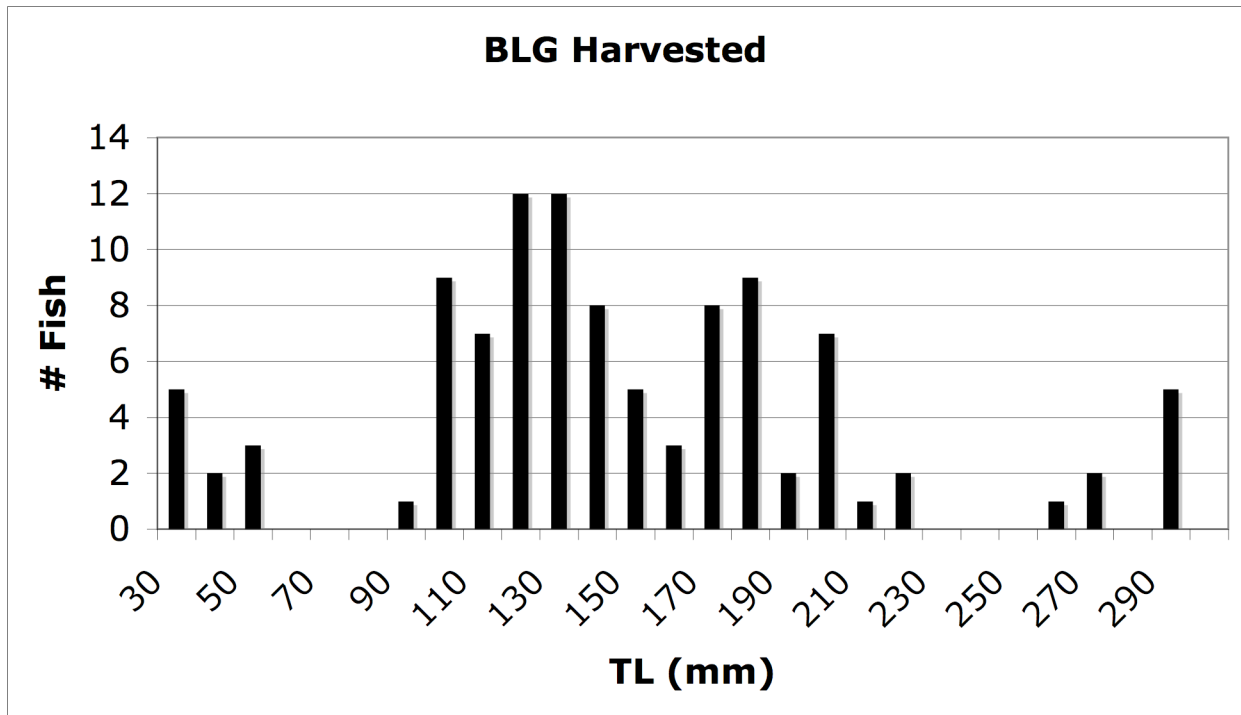


Figure B58. Length-frequency histogram for released bluegill on Lake Springfield in 2008.

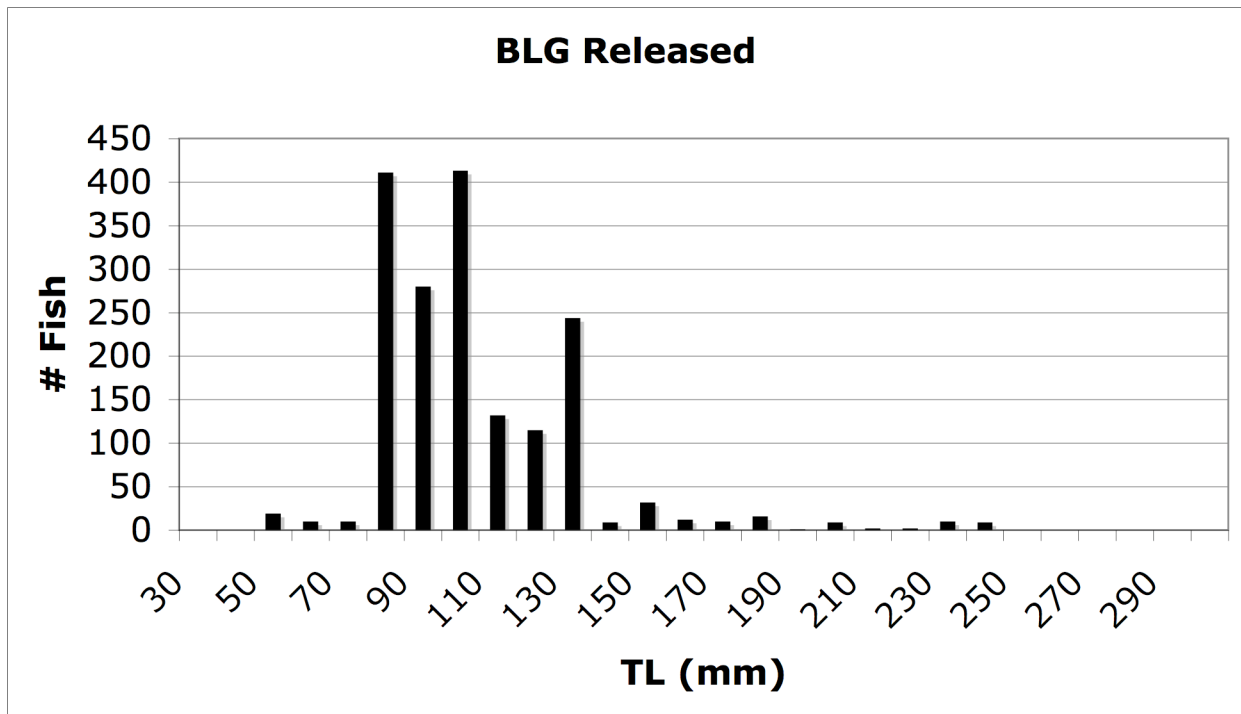


Figure B59. Length-frequency histogram for harvested channel catfish on Lake Springfield in 2008.

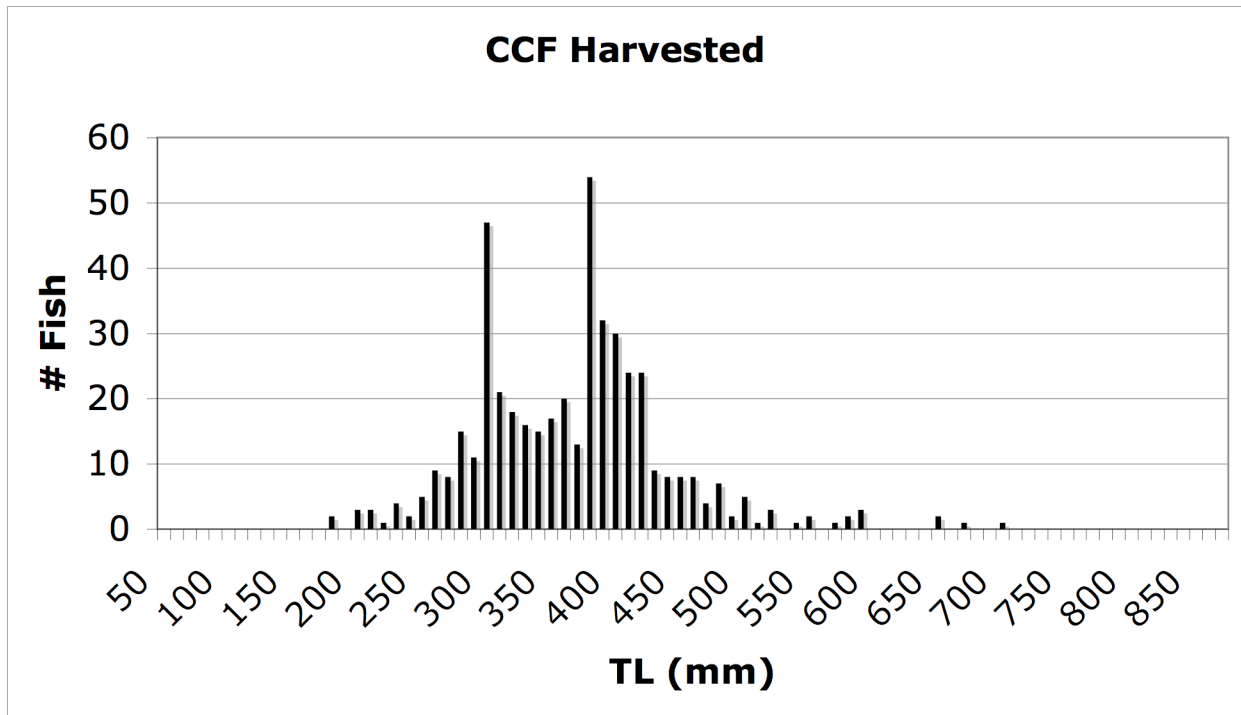


Figure B60. Length-frequency histogram for released channel catfish on Lake Springfield in 2008.

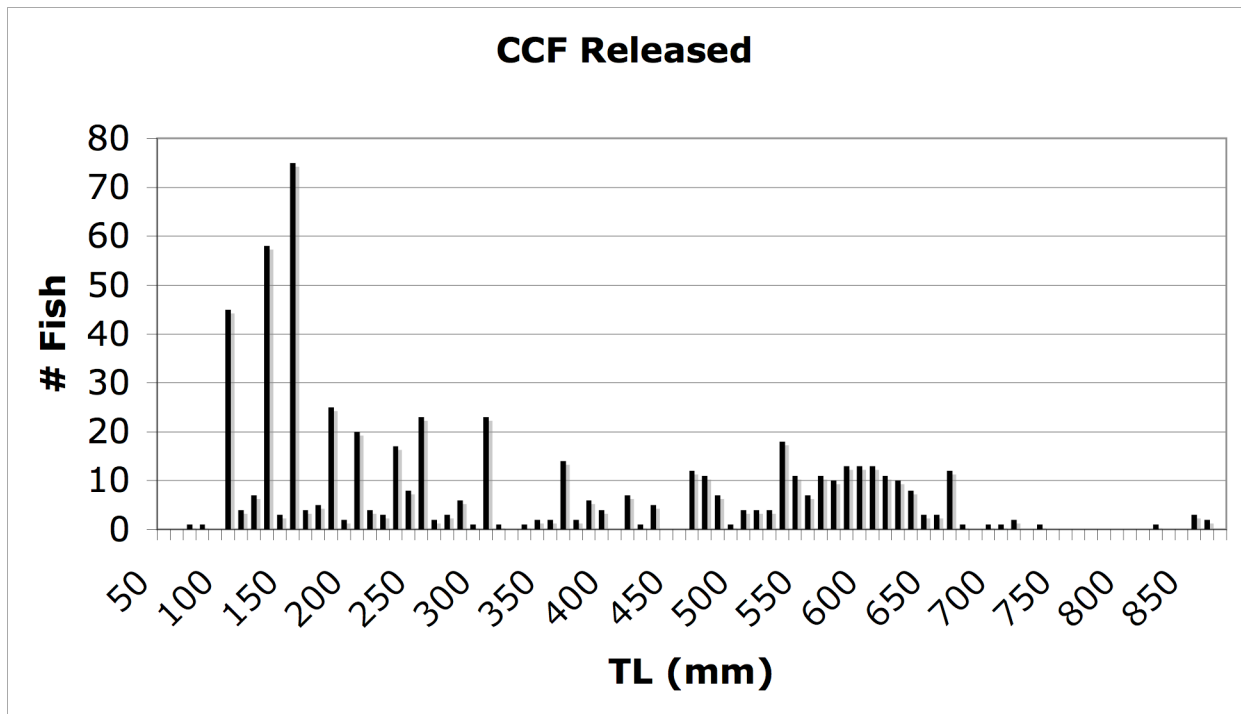


Figure B61. Length-frequency histogram for harvested largemouth bass on Lake Springfield in 2008.

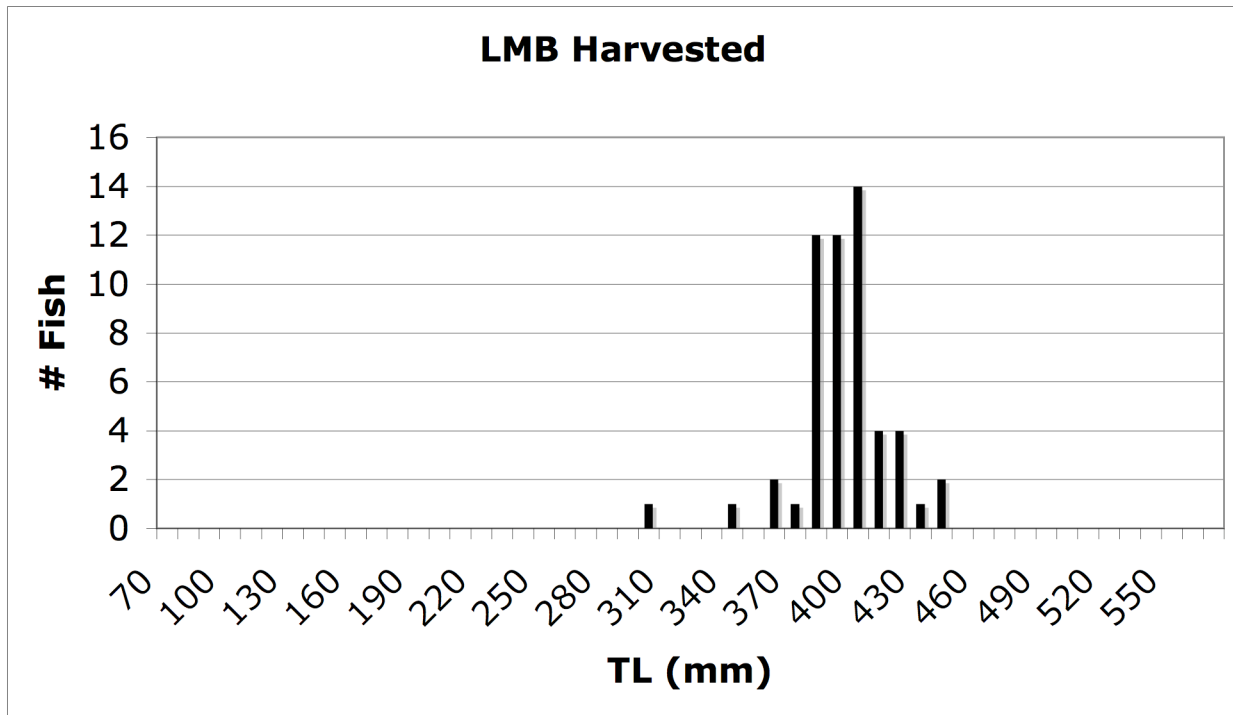


Figure B62. Length-frequency histogram for released largemouth bass on Lake Springfield in 2008.

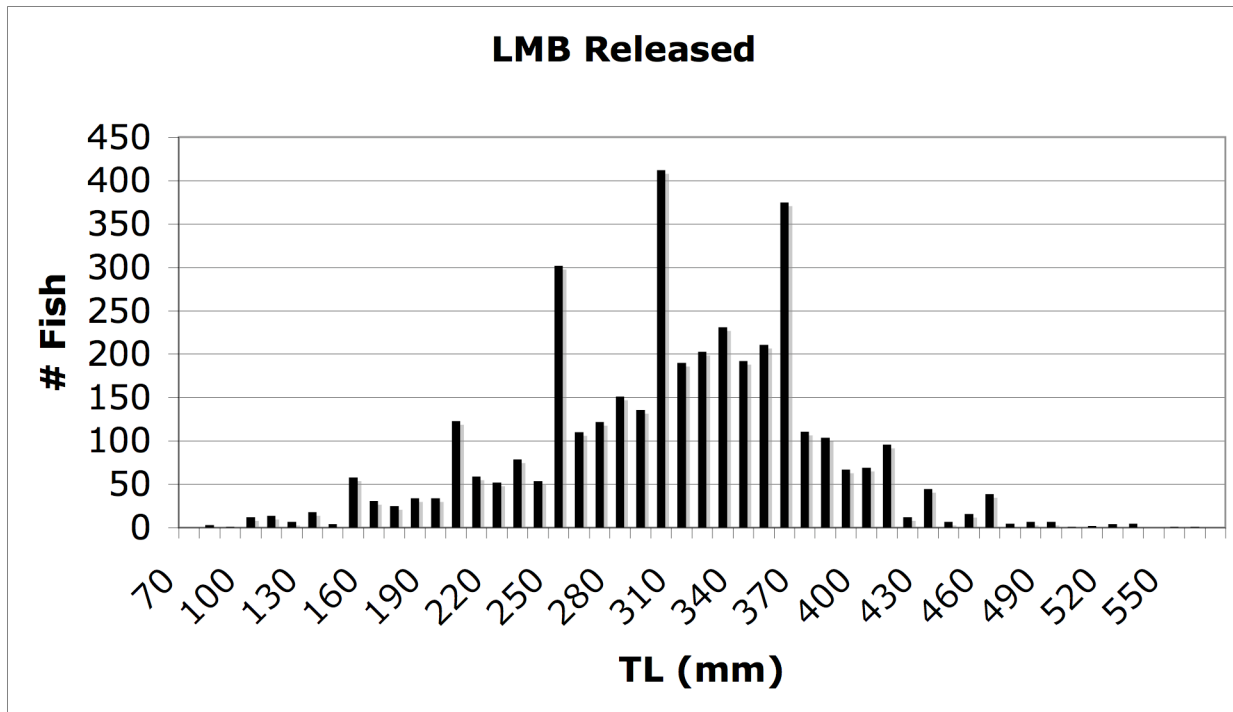


Figure B63. Length-frequency histogram for harvested white bass on Lake Springfield in 2008.

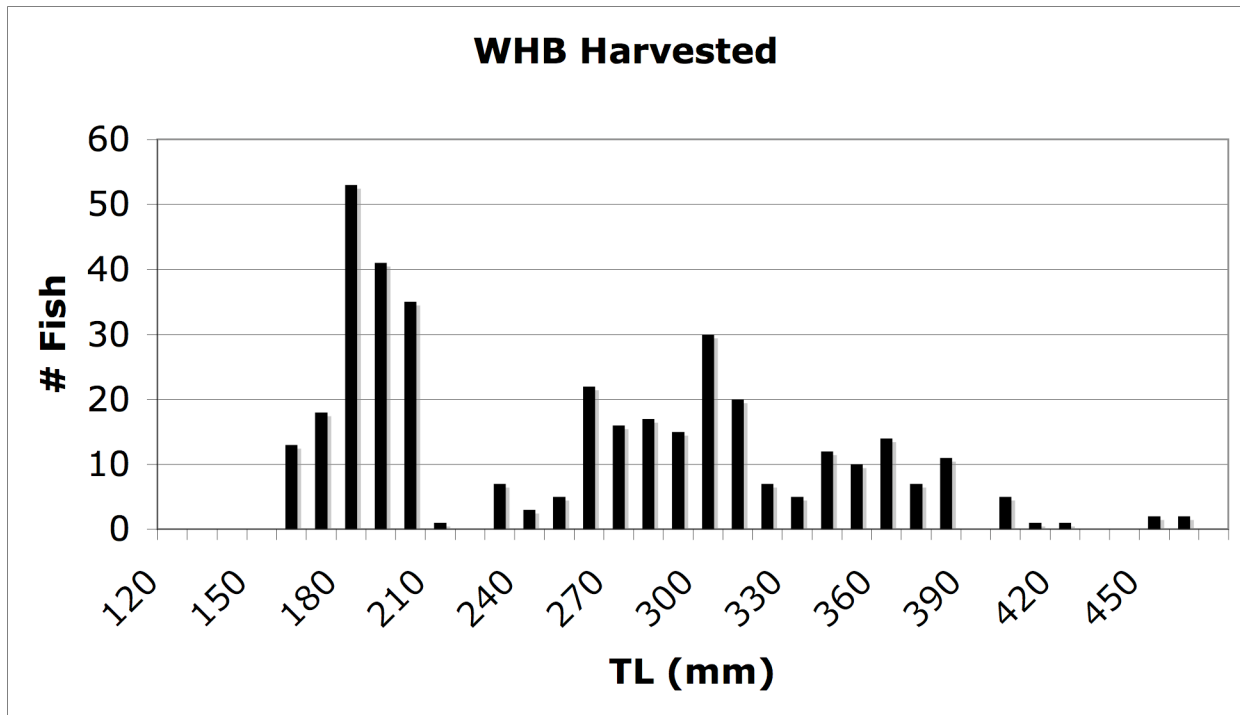


Figure B64. Length-frequency histogram for released white bass on Lake Springfield in 2008.

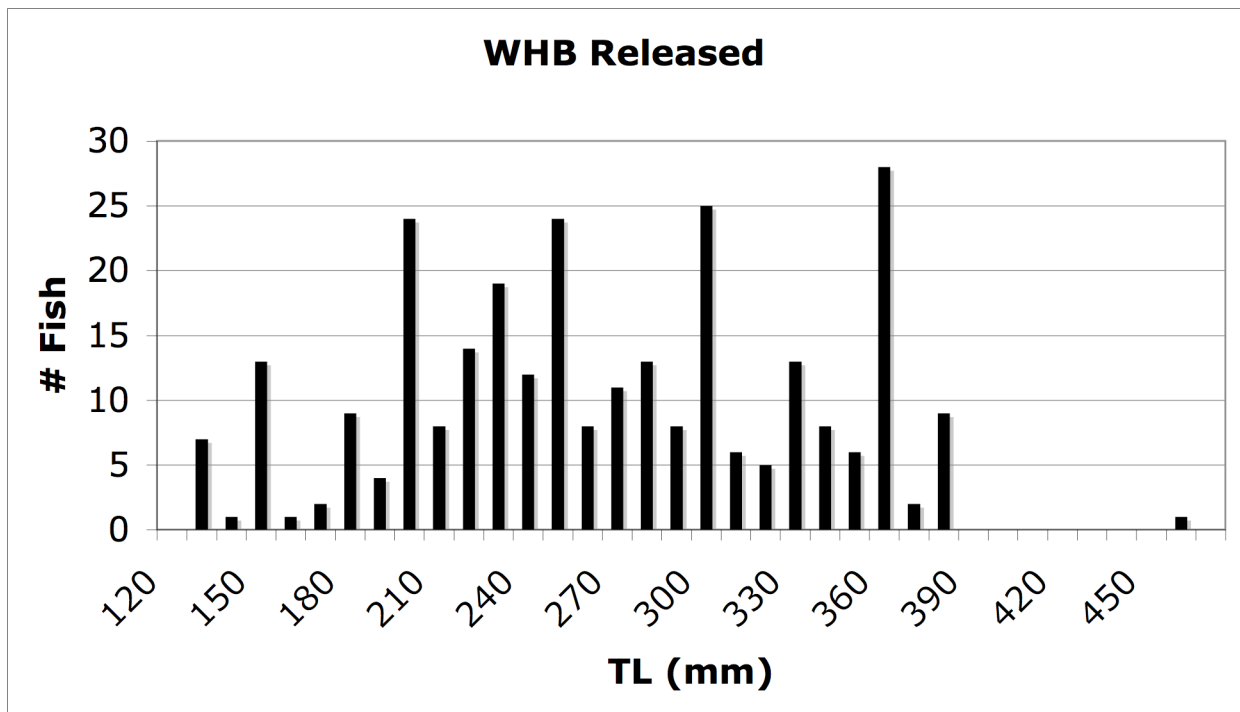


Table B1. Angler Effort and Angler Effort per Acre for all 2008 Lakes. Estimates higher than state average are in **bold**.

<u>Lake</u>	<u>Angler Hours</u>	<u>Angler Hours per Acre</u>
Charleston Side Channel	14311	45
Devil's Kitchen	13174	19
Mingo	14595	85
Monee	55789	1213
Otter	18697	24
Shabbona	156733	515
Springfield	37950	10
State Average('98-'07)	44631	34

Table B2. Estimated harvest for all species for all 2008 Lakes. Estimates higher than state average are in **bold**.

<u>Lake</u>	<u>Harvest</u>	<u>Harvest/Hour</u>	<u>Harvest (lbs)</u>	<u>Harvest/Hour (lbs)</u>
Charleston Side Channel	8636	0.425	7316	0.379
Devil's Kitchen	8911	0.463	5134	0.249
Mingo	3787	0.253	3212	0.187
Monee	16433	0.279	4641	0.082
Otter	16128	0.316	9681	0.197
Shabbona	78862	0.510	39180	0.262
Springfield	12630	0.200	10529	0.161
State Average ('98-'07)	20974	0.470	12598	0.282