

EVALUATION OF THE FISH COMMUNITY AND WALLEYE
STOCKINGS AT EAGLE CREEK RESERVOIR

Marion County

2008 Fish Management Report

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EXECUTIVE SUMMARY

- Eagle Creek Reservoir is a 1,350 acre water supply impoundment located 10 mi northwest of downtown Indianapolis.
- Largemouth bass sampling was conducted one night a week from April 15 to April 29, 2008.
- A total of 313 largemouth bass was collected that weighed an estimated 426 lbs. Largemouth ranged in length from 2.8 to 21.5 in and averaged 13.2 in, similar to the 2003 spring bass sampling average of 13.1 in. Of the bass collected, only 4% were age-1 and 83% were age-3 or older. Overall, 42% of largemouth collected were 14 in or larger.
- The fish community survey was conducted May 12 to 14 and 19 to 21, 2008.
- There were 5,277 fish collected that weighed 1,560 lbs. Twenty-four species and hybrid sunfish comprised the sample.
- The predominant species collected by number were gizzard shad (29%), white crappie (24%), and bluegill (19%). White crappie was first in abundance by weight (20%), followed by channel catfish (19%), gizzard shad (18%), common carp (14%), and largemouth bass (13%).
- There were 1,519 shad collected that weighed 277 lbs. Shad ranged in length from 4.2 to 13.7 in and averaged 8.3 in. Ninety-eight percent of shad collected were 7.0 in or larger. Only 2% of shad collected were age 1.
- A total of 1,283 white crappie was collected that weighed 312 lbs. Only 28% of the white crappie collected were 8.5 in or larger compared to 80% in 2003. However, 68% of the white crappie sampled were age 2 and they averaged 7.4 in.
- The fall walleye evaluation was conducted September 30 to October 1, 2008.
- A total of 68 walleye was collected that weighed 23.90 lbs. Walleye ranged in length from 7.8 to 16.0 in and averaged 10.0 in. Walleye electrofishing CPUE was 17.0/h. The electrofishing CPUE of YOY walleye was 11.8/h. Twenty-one age-1 walleye were collected at a rate of 5.3/h of electrofishing. Age-1 walleye up to 16.0 in were found and they averaged 12.7 in.
- The stocking of 135,000 (100/acre) fingerling walleye should continue on an annual basis. A creel survey to determine angler effort and harvest is tentatively scheduled for 2011 under the impoundment black bass management plan, where the walleye fishery will be a focus as well.
- Future consideration should be given to stocking muskellunge.

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INTRODUCTION

Eagle Creek Reservoir is a 1,350 acre water supply impoundment located 10 mi northwest of downtown Indianapolis. The reservoir is owned by the city of Indianapolis and maintained by Indy Parks and Recreation. There are daily entrance and boat launching fees or an annual entrance pass is available. Gasoline motors are restricted to 10 horsepower or less. More information about the park and current fees can be found on the park's internet site at www.indyparks.org.

Construction of the reservoir was completed in 1968 and a pre-impoundment eradication of undesirable fish was conducted. Unfortunately, the renovation was not successful as gizzard shad and other non-game species were found the following year. Shad quickly became the primary forage fish in the reservoir. Predator stockings have been used at the reservoir to utilize the abundant forage base. White bass, northern pike, hybrid striped bass, and walleye have been stocked at one time or another throughout the history of the lake.

Walleye stockings began in 1997 and are the only predators currently stocked. Following several years of unsuccessful walleye fry stockings at Eagle Creek, it was determined that walleye fingerlings should be stocked (Long 2006). The current stocking goal is 100 fingerlings/acre (Table 1). The last fall walleye evaluation was conducted in 2007.

The last fish community survey was conducted in 2003 (Keller 2004). Bluegill was the most numerous species collected, while shad numbers were down due to the harsh winter conditions of 2002-2003. Largemouth bass abundance had improved and nearly half of the bass sampled were 14 in or larger. The last spring largemouth bass survey was conducted in 2003.

The present survey was conducted to evaluate the fish community at Eagle Creek Reservoir. Intensive largemouth bass sampling was conducted in the spring to evaluate the quality of the bass fishery. In addition, a fall evaluation was conducted to evaluate the success of the 2008 walleye stockings along with survival and growth of previously stocked walleye.

METHODS

Largemouth Bass Sampling

Largemouth bass sampling was conducted one night a week from April 15 to 29, 2008. Bass were collected via night DC electrofishing for 2 h a night for a total of 6 h (24, 15-min stations). Largemouth were measured to the nearest 0.1 in TL and weights were estimated using central Indiana averages. Scale samples were collected for age and growth determination. Approximately 70% of the reservoir shoreline was sampled.

Fish Community Survey

The fish community survey was conducted May 12 to 14 and 19 to 21, 2008. Physical and chemical characteristics of the lake were measured and collected according to DFW survey guidelines (2001).

Fish were collected via night DC electrofishing for 2 h (8, 15-min stations) using two dippers, 15 standard experimental gill net lifts, and 8 trap net lifts. Normally, 16 gill nets are deployed on a standard survey, but one gill net was determined unusable during the sampling process. The collected fish were measured to the nearest 0.1 in TL. Scale samples were collected for age and growth analysis. Weight estimates of all species were calculated using central Indiana averages. Proportional stock density (PSD) was calculated for bluegill and largemouth bass (Anderson and Neumann 1996). The Bluegill Fishing Potential Index (BGFP) was used to describe the bluegill fishery (Ball and Tousignant 1996).

Fall Walleye Evaluation

The fall walleye evaluation was conducted September 30 to October 1, 2008. Survey effort consisted of 4 h of night DC electrofishing. Electrofishing stations duplicated those of previous fall walleye evaluations. Walleye were measured to the nearest 0.1 in TL and weighed to the nearest 0.01 lb. Scale samples were collected for age and growth determination.

RESULTS

Largemouth Bass Sampling

Cooler spring weather kept the water temperature relatively low the first week as it was 50°F the first night of sampling. The air temperature increased the following weeks and on the second and third nights of sampling the water temperature was 58°F.

A total of 313 largemouth bass was collected that weighed an estimated 426 lbs. Electrofishing catch rates were 34.0/h the first night, 71.5/h the second night, and 51.5/h the third night. The catch rate for all three nights was 52.2/h, compared to 79.3/h for all three nights in 2003. Largemouth ranged in length from 2.8 to 21.5 in and averaged 13.2 in, similar to the 2003 spring bass sampling average of 13.1 in. The percentage of bass collected that met or exceeded the 14-in minimum size limit was 38% the first night, 48% the second night, and 35% the third night. Overall, 42% of largemouth collected were 14 in or larger. Of the bass collected, only 4% were age-1 and 83% were age-3 or older. Largemouth PSD (74) was similar to spring sampling in 2003 (73). Bass are reaching the 14-in minimum size limit in approximately four years.

Fish Community Survey

The surface temperature at Eagle Creek Reservoir on May 12 was 61.9°F. Dissolved oxygen concentrations were suitable for fish survival down to 42 ft. Conductivity was 400 µS and the Secchi disk measurement was 2.5 ft.

There were 5,277 fish collected that weighed 1,560 lbs. Twenty-four species and hybrid sunfish comprised the sample. The predominant species collected by number were gizzard shad (29%), white crappie (24%), and bluegill (19%). Yellow bass, channel catfish, and longear sunfish were the only other species that accounted for at least 5% of the sample by number. White crappie was first in abundance by weight (20%), followed by channel catfish (19%), gizzard shad (18%), common carp (14%), and largemouth bass (13%). Other notable species sampled were black crappie, walleye, white bass, and flathead catfish.

Gizzard shad was the most abundant species collected by number (29%) and third most collected by weight (18%). In 2003, shad accounted for 21% of the sample number and 8% of the sample weight. Gill net CPUE increased to 67.9/lift (12.8/lift in 2003), but

electrofishing CPUE (233.5/h) stayed very similar to 2003 (234.0/h). There were 1,519 shad collected that weighed 277 lbs. Shad ranged in length from 4.2 to 13.7 in and averaged 8.3 in. Ninety-eight percent of shad collected were 7.0 in or larger. Only 2% of shad collected were age 1. Age-2 and age-3 shad comprised 83% of the collection.

A total of 1,283 white crappie was collected that weighed 312 lbs. White crappie abundance by number (24%) and weight (20%) increased substantially compared to 2003 (14% and 13%, respectively). Electrofishing (35.5/h) and trap net (127.0/lift) catch rates were dramatically higher than the 2003 electrofishing (5.0/h) and trap net (48.3/lift) catch rates. White crappie ranged in length from 4.4 to 14.4 in and averaged 8.0 in. Only 28% of the white crappie collected were 8.5 in or larger compared to 80% in 2003. However, 68% of the white crappie sampled were age 2 and averaged 7.4 in. Age-1 white crappie accounted for just 4% of the collection.

Bluegill ranked third in abundance by number (19%) and sixth in abundance by weight (6%). There were 1,001 bluegill collected weighing 98 lbs. Bluegill CPUE was 365.0/h of electrofishing and 33.1/gill net lift. Bluegill ranged in length from 2.2 to 7.8 in and averaged 5.2 in. The percentage of 6.0 in or larger bluegill collected increased from 18% in 2003 to 26%. Only 44 age-1 bluegill were collected. Age-2 and age-3 bluegill accounted for 75% of the collection. Bluegill PSD was 15. The BGFP score was 13 which equates to a “fair” rating for the bluegill fishery.

Yellow bass ranked fourth in abundance with 349 collected. Yellow bass from 4.2 to 10.5 in were found and they averaged 6.3 in. Total weight for yellow bass was 38 lbs, compared to 4 lbs in 2003.

Two hundred and seventy-one channel catfish weighing 292 lbs were collected. Channels ranked fifth in abundance by number (5%) and second in abundance by weight (19%). CPUE of channel catfish was 16.1/gill net lift and 9.5/h of electrofishing. Channels were found up to 28.9 in and they averaged 13.4 in. Fifty-two percent of the catfish were 12.0 in or larger (62% in 2003) and 17% were 18.0 in and longer (19% in 2003).

There were 147 largemouth bass collected weighing 195 lbs. The electrofishing CPUE of largemouth (72.5/h) was comparable to 2003 (63.5/h). Bass abundance by number (3%) and weight (13%) were similar to 2003 (4% and 14%, respectively).

Largemouth ranged in length from 2.7 to 21.3 in and averaged 12.9 in. Forty-one percent of the bass collected met or exceeded the 14-in minimum size limit, compared to 48% in 2003. Largemouth bass PSD was 82 during the community survey, slightly higher than the 2003 community survey PSD of 76.

A total of 77 common carp that weighed 222 lbs was collected. Carp was the most abundant species by weight in 2003 (26%) and only fourth by weight (14%) in the present survey. Carp as large as 25.7 in were found and averaged 17.4 in.

Walleye represented less than 1% of the sample by number and weight. A total of 24 walleye was collected that weighed 7 lbs. Walleye from 5.4 to 13.0 in were found while the average length was 9.2 in. CPUE of walleye was 8.5/h of electrofishing and 0.5/gill net lift. Twenty-two age-1 walleye were collected that ranged in length from 5.4 to 12.6 in. The remaining two walleye were both age 2.

The remaining 16 species and hybrid sunfish accounted for 11% of the sample by number and 8% by weight. Notable species of interest to anglers were black and brown bullheads, black crappie, flathead catfish, longear sunfish, and white bass.

Fall Walleye Evaluation

A total of 68 walleye was collected that weighed 23.90 lbs. Walleye ranged in length from 7.8 to 16.0 in and averaged 10.0 in. Walleye electrofishing CPUE was 17.0/h. Only 6% of the walleye collected were 14 in or larger.

There were 47 YOY walleye collected. YOY ranged in length from 7.8 to 9.8 in and averaged 8.8 in, an increase from 7.2 in in 2007 (Smyth 2008). The electrofishing CPUE of YOY walleye was 11.8/h, compared to 32.0/h in 2007 (Table 1). Twenty-one age-1 walleye were collected at a rate of 5.3/h of electrofishing. Age-1 walleye up to 16.0 in were found and they averaged 12.7 in.

DISCUSSION

Eagle Creek Reservoir continues to have a fluctuating gizzard shad population. By number, shad are atop the fish community again. Shad of any age feed heavily on zooplankton, negatively affecting recruitment of most other species in the reservoir by competing with them for food. Since the reservoir is a water supply source for the city of

Indianapolis, manipulation of the water level and/or gizzard shad selectives are not an option. Management efforts have focused on maintaining a strong predator base to utilize the abundance of forage, while providing anglers with an extra opportunity at the same time. Harsh winter conditions at Eagle Creek have led to shad kills in the past and could lead to improved recruitment and growth of many species in the reservoir if winter conditions cooperate once again.

There were relatively few age-1 shad, crappie, bluegill, and bass collected. The weak 2007 year class of gizzard shad and game species could be attributed to a few different factors. The exceptionally large 2006 year class of white crappie could have had a substantial impact on 2007 recruitment through predation. While not always considered voracious predators, crappie sometimes can be given the right situation. Also, the combination of high discharge levels during the spawning period and the extended drought conditions in 2007 could have negatively affected recruitment as well. Muddy water and the high discharge levels could have seriously impacted recruitment of fish spawning during that period. The lower water levels associated with the drought conditions might have eliminated crucial habitat for young of the year fish and left them more vulnerable to predation.

The largemouth bass population was relatively unchanged since 2003. Although the 2008 bass sampling CPUE (52.2/h) was substantially lower than it was in 2003 (79.3/h), this was more likely a result of cooler water temperatures than it was a decline in bass abundance. Warmer water in the spring moves largemouth up into the shallows, promoting spawning activity and increasing their susceptibility to being caught via electrofishing. The average water temperature over the course of the three week survey was 55°F and the three week average in 2003 was 61°F. Catch rates during the community survey were more similar, and in fact the 2008 CPUE (72.5/h) was slightly better than it was in 2003 (63.5/h). Size structure was still excellent with 41% of bass at or above the 14-in minimum size limit and 8% at or above 18 in. Although 2007 was a weak year class, excellent numbers of young-of-the-year bass were seen in 2008 during the fall evaluation for walleye. Though largemouth abundance was still fairly low, bass exhibited good growth.

White crappie made a substantial increase in abundance from the 2003 survey. Cyclic in nature, white crappie appear to be at or near peak abundance in Eagle Creek. The 2006 year class (age 2) dominated the collection and changed the size structure from 2003. White crappie are exemplifying good initial growth as age-2 fish are averaging 7.4 in. Anglers should have excellent opportunities for harvestable size white crappie for the next few years.

The Division of Fish and Wildlife (DFW) criteria for walleye stocking success is the collection of at least seven YOY walleye/h of electrofishing. The 2008 stocking was successful with a CPUE of 11.8 YOY/h. The 1997 to 2005 YOY CPUE average when fry were stocked was 9.5/h (includes 2000 and 2001 when surplus fingerlings were also stocked). However, from 2002 to 2005 the YOY CPUE average was only 2.8/h, and the walleye population had dwindled substantially. In years when only fingerlings were stocked (1999, 2007, and 2008) the average YOY CPUE was 33.5/h. The stockings have far surpassed the success criteria each year the DFW has stocked only fingerlings. Therefore, the stocking of 135,000 (100/acre) fingerling walleye should continue on an annual basis. A creel survey to determine angler effort and harvest is tentatively scheduled for 2011 under the impoundment black bass management plan, where the walleye fishery will be a focus as well.

Eagle Creek Reservoir should be considered a future site for muskellunge stockings. With the abundance of gizzard shad and other non-game species, muskies would have plenty of forage to utilize. Currently the DFW's statewide muskellunge program does not produce enough fish to stock Eagle Creek. If future changes allow the production of more muskies, Eagle Creek could be a potential candidate. However, since Eagle Creek is not used for flood control and excess water is immediately discharged over the dam, there is concern whether muskies would stay in the lake after being stocked.

RECOMMENDATIONS

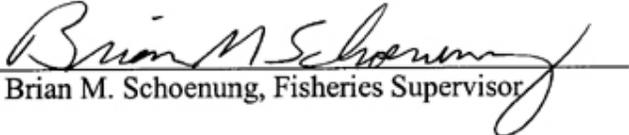
- The stocking of 135,000 (100/acre) fingerling walleye should continue on an annual basis.
- Future consideration should be given to stocking muskellunge.

LITERATURE CITED

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Submitted by: Jamie L. Smyth, Assistant Fisheries Biologist
Date: February 26, 2009

Approved by: J. Rhett Wisener, Fisheries Biologist

Approved by: 
Brian M. Schoenung, Fisheries Supervisor

Date: June 4, 2009

Table 1. Walleye stockings at Eagle Creek Reservoir from 1997 to 2008.

Year	Number	Size	% of recommended stocking	YOY CPUE
1997	1,780,125	Fry	44	8.3
1998	1,756,625	Fry	43	No fall evaluation
1999	143,064	Fingerling	106	56.8
2000	2,413,450	Fry	60	17.8
	6,411	Fingerling	5	
2001	3,318,200	Fry	82	22.7
	25,000	Fingerling	19	
2002	3,882,200	Fry	96	2.3
2003	4,830,425	Fry	119	5.5
2004	***** No stocking *****			
2005	4,305,200	Fry	106	0.5
2006	4,145,400	Fry	102	No fall evaluation
2007	120,609	Fingerling	89	32.0
2008	122,059	Fingerling	90	11.8

LAKE SURVEY REPORT

Type of Survey	<input type="checkbox"/> Initial Survey	<input checked="" type="checkbox"/> Re-Survey
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Lake Name Eagle Creek Reservoir	County Marion	Date of survey (Month, day, year) 4/15/08-5/21/08
Biologist's name Jamie L. Smyth, Assistant Fisheries Biologist		Date of approval (Month, day, year) 6/4/2009

LOCATION		
Quadrangle Name Clermont, Zionsville	Range 2E	Section 15, 16, 3, 4, 9, 10, 33, 28
Township Name 17N, 16N	Nearest Town Indianapolis	

ACCESSIBILITY					
State owned public access site		Privately owned public access site		Other access site	
Surface acres 1,350	Maximum depth 45 ft	Average depth 18 ft	Acre feet 24,300	Water level 783 msl	Extreme fluctuations Approx 8 ft
Location of benchmark BM 790, T16N, R2E, S15, SW 1/4, NE 1/4					

INLETS		
Name Eagle Creek	Location North	Origin T18N, R2E, S23
Shoal Branch	West	T17N, R2E, S36
Fishback Creek	Northwest	T18N, R2E, S29

OUTLETS																
Name Eagle Creek	Location South (outlet is at east end of dam)															
Water level control																
POOL	ELEVATION (Feet MSL)	ACRES														
TOP OF DAM	825															
TOP OF FLOOD CONTROL POOL	811.5	2,650														
TOP OF CONSERVATION POOL	790	1,350														
TOP OF MINIMUM POOL	790	1,350														
STREAMBED	750															
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<input checked="" type="checkbox"/>	Clay															
<input type="checkbox"/>	Marl															

Watershed use Primarily residential, some commercial and industrial. Some agriculture in the upper part of watershed.
Development of shoreline Large boat ramp complex in the southern part of the lake, small boat ramp in the northern part of the lake. Eagle Creek Park, beach, picnic areas, shore fishing areas, private boat docks and residences, and sailing marina.
Previous surveys and investigations Pre-impoundment survey: 1966. Pre-impoundment eradication and restocking: 1968. Fish community surveys: 1969, 1971, 1973, 1975, 1978, 1984, 1998, 2003. Predator stocking evaluations and spot-checks: 1979, 1980, 1986, 1988, 1990, 1994, 1995, 1997, 1999, 2000, 2001, 2002, 2003, 2005, 2007.

SAMPLING EFFORT					
ELECTROFISHING	Bass sampling (night hours)		Standard survey (night hours)		Total hours
	6		2		6 and 2
TRAP NETS	Number of traps		Number of Lifts		Total effort
	2		8		8
GILL NETS	Number of nets		Number of Lifts		Total effort
	4		15		15
ROTENONE	Gallons	ppm	Acre Feet Treated	SHORELINE SEINING	Number of 100 Foot Seine Hauls

PHYSICAL AND CHEMICAL CHARACTERISTICS			
Color		Turbidity	
Brown		2 Feet	6 Inches (SECCHI DISK)
Alkalinity (ppm)*		pH	
Surface: 188.1 Bottom: 153.9		Surface: 9.2	Bottom: 9.0
Conductivity:		Air temperature:	
400 microsiemens		°F	
Water chemistry GPS coordinates:			
N		W	

TEMPERATURE AND DISSOLVED OXYGEN (D.O.)								
DEPTH (FEET)	Degrees (°F)	D.O. (ppm)	DEPTH (FEET)	DEGREES (°F)	D.O. (ppm)	DEPTH (FEET)	DEGREES (°F)	D.O. (ppm)
SURFACE	61.9	10.3	36	58.8	7.6	72		
2	61.7	10.2	38	57.7	7.3	74		
4	61.5	10.0	40	57.2	7.3	76		
6	61.3	9.8	42	56.8	7.1	78		
8	61.3	9.8	44			80		
10	61.2	9.6	46			82		
12	60.6	9.0	48			84		
14	60.6	8.8	50			86		
16	60.4	8.8	52			88		
18	60.4	8.7	54			90		
20	60.3	8.7	56			92		
22	60.3	8.6	58			94		
24	59.9	8.3	60			96		
26	59.9	8.2	62			98		
28	59.7	8.2	64			100		
30	59.7	8.2	66					
32	59.5	8.0	68					
34	59.2	7.7	70					

COMMENTS

*ppm-parts per million

SPECIES AND RELATIVE ABUNDANCE OF FISHES COLLECTED BY NUMBER AND WEIGHT					
*COMMON NAME OF FISH	NUMBER	PERCENT	LENGTH RANGE (inches)	WEIGHT (pounds)	PERCENT
Gizzard shad	1519	28.8	4.2 - 13.7	276.49	17.7
White crappie	1283	24.3	4.4 - 14.4	311.51	20.0
Bluegill	1001	19.0	2.2 - 7.8	97.87	6.3
Yellow bass	349	6.6	4.2 - 10.5	38.44	2.5
Channel catfish	271	5.1	6.1 - 28.9	292.07	18.7
Longear sunfish	269	5.1	2.5 - 5.6	13.19	0.8
Largemouth bass	147	2.8	2.7 - 21.3	195.44	12.5
Green sunfish	107	2.0	2.5 - 7.2	5.17	0.3
Common carp	77	1.5	6.8 - 25.7	222.00	14.2
Spotted sucker	71	1.3	4.9 - 15.9	39.16	2.5
Black crappie	34	0.6	4.3 - 9.2	5.52	0.4
Walleye	24	0.5	5.4 - 13.0	6.74	0.4
Brown bullhead	23	0.4	4.7 - 11.1	7.58	0.5
Hybrid sunfish	23	0.4	3.3 - 7.2	1.90	0.1
Black bullhead	14	0.3	5.6 - 11.6	7.55	0.5
White catfish	13	0.2	6.3 - 10.1	2.52	0.2
Warmouth	10	0.2	3.0 - 7.0	1.16	0.1
White bass	9	0.2	4.6 - 13.9	4.17	0.3
Quillback	9	0.2	8.8 - 22.1	24.54	1.6
Golden shiner	8	0.2	4.2 - 7.7	0.56	< 0.1
Spotfin shiner	6	0.1	2.0 - 2.7	0.06	< 0.1
Logperch	4	0.1	4.0 - 4.3	0.04	< 0.1
Flathead catfish	3	0.1	10.8 - 21.6	5.92	0.4
Brook silverside	2	< 0.1	3.6 - 3.7	0.44	< 0.1
White sucker	1	< 0.1	10.3	0.02	< 0.1
TOTAL	5,277			1,560.06	

*Common names of fishes recognized by the American Fisheries Society.

NUMBER, PERCENTAGE, WEIGHT, AND AGE OF GIZZARD SHAD

TOTAL LENGTH (inches)	NUMBER COLLECTED	PERCENT OF FISH COLLECTED	AVERAGE WEIGHT (pounds)	AGE OF FISH	TOTAL LENGTH (inches)	NUMBER COLLECTED	PERCENT OF FISH COLLECTED	AVERAGE WEIGHT (pounds)	AGE OF FISH
1.0					19.0				
1.5					19.5				
2.0					20.0				
2.5					20.5				
3.0					21.0				
3.5					21.5				
4.0	2	0.1	0.03	not aged	22.0				
4.5	17	1.1	0.03	not aged	22.5				
5.0	8	0.5	0.04	not aged	23.0				
5.5					23.5				
6.0					24.0				
6.5	5	0.3	0.09	1	24.5				
7.0	101	6.6	0.11	2,3	25.0				
7.5	489	32.2	0.14	2,3	25.5				
8.0	337	22.2	0.17	3	26.0				
8.5	282	18.6	0.21	3,4	TOTAL	1,519			
9.0	168	11.1	0.24	3					
9.5	63	4.1	0.29	not aged					
10.0	15	1.0	0.34	not aged					
10.5	12	0.8	0.39	not aged					
11.0	9	0.6	0.45	not aged					
11.5	7	0.5	0.52	not aged					
12.0	2	0.1	0.58	not aged					
12.5									
13.0									
13.5	2	0.1	0.91	not aged					
14.0									
14.5									
15.0									
15.5									
16.0									
16.5									
17.0									
17.5									
18.0									
18.5									

ELECTROFISHING CATCH	233.5 / h	GILL NET CATCH	67.9 / lift	TRAP NET CATCH	4.1 / lift
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NUMBER, PERCENTAGE, WEIGHT, AND AGE OF WHITE CRAPPIE

TOTAL LENGTH (inches)	NUMBER COLLECTED	PERCENT OF FISH COLLECTED	AVERAGE WEIGHT (pounds)	AGE OF FISH	TOTAL LENGTH (inches)	NUMBER COLLECTED	PERCENT OF FISH COLLECTED	AVERAGE WEIGHT (pounds)	AGE OF FISH
1.0					19.0				
1.5					19.5				
2.0					20.0				
2.5					20.5				
3.0					21.0				
3.5					21.5				
4.0	1	0.1	0.03	not aged	22.0				
4.5	34	2.7	0.04	1	22.5				
5.0	25	1.9	0.05	1,2	23.0				
5.5	1	0.1	0.07	2	23.5				
6.0	20	1.6	0.10	2	24.0				
6.5	162	12.6	0.12	2	24.5				
7.0	445	34.7	0.16	2	25.0				
7.5	188	14.6	0.19	2,3	25.5				
8.0	51	4.0	0.22	2	26.0				
8.5	29	2.3	0.27	2,3	TOTAL	1,283			
9.0	66	5.1	0.33	2,3					
9.5	81	6.3	0.38	2,3					
10.0	73	5.7	0.45	3,4					
10.5	30	2.3	0.53	3,4					
11.0	27	2.1	0.61	3,4					
11.5	20	1.6	0.72	3,4,5					
12.0	13	1.0	0.84	4,5					
12.5	10	0.8	0.98	4,5					
13.0	4	0.3	1.11	4,5					
13.5	2	0.2	1.27	5					
14.0	1	0.1	1.51	6					
14.5									
15.0									
15.5									
16.0									
16.5									
17.0									
17.5									
18.0									
18.5									

ELECTROFISHING CATCH	35.5 / h	GILL NET CATCH	13.1 / lift	TRAP NET CATCH	127.0 / lift
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NUMBER, PERCENTAGE, WEIGHT, AND AGE OF BLUEGILL

TOTAL LENGTH (inches)	NUMBER COLLECTED	PERCENT OF FISH COLLECTED	AVERAGE WEIGHT (pounds)	AGE OF FISH	TOTAL LENGTH (inches)	NUMBER COLLECTED	PERCENT OF FISH COLLECTED	AVERAGE WEIGHT (pounds)	AGE OF FISH
1.0					19.0				
1.5					19.5				
2.0	10	1.0	0.01	1	20.0				
2.5	16	1.6	0.01	1	20.5				
3.0	23	2.3	0.02	1,2	21.0				
3.5	35	3.5	0.03	2	21.5				
4.0	154	15.4	0.04	2,3	22.0				
4.5	138	13.8	0.06	2	22.5				
5.0	158	15.8	0.08	3	23.0				
5.5	206	20.6	0.11	3,4	23.5				
6.0	149	14.9	0.15	3,4	24.0				
6.5	87	8.7	0.20	4,5	24.5				
7.0	19	1.9	0.25	4,5,6	25.0				
7.5	6	0.6	0.31	5,6	25.5				
8.0					26.0				
8.5					TOTAL	1,001			
9.0									
9.5									
10.0									
10.5									
11.0									
11.5									
12.0									
12.5									
13.0									
13.5									
14.0									
14.5									
15.0									
15.5									
16.0									
16.5									
17.0									
17.5									
18.0									
18.5									

ELECTROFISHING CATCH	365.0 / h	GILL NET CATCH	0.4 / lift	TRAP NET CATCH	33.1 / lift
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NUMBER, PERCENTAGE, WEIGHT, AND AGE OF CHANNEL CATFISH

TOTAL LENGTH (inches)	NUMBER COLLECTED	PERCENT OF FISH COLLECTED	AVERAGE WEIGHT (pounds)	AGE OF FISH	TOTAL LENGTH (inches)	NUMBER COLLECTED	PERCENT OF FISH COLLECTED	AVERAGE WEIGHT (pounds)	AGE OF FISH
1.0					19.0	7	2.6	2.46	
1.5					19.5	5	1.8	2.69	
2.0					20.0	5	1.8	2.95	
2.5					20.5	4	1.5	3.09	
3.0					21.0	3	1.1	3.43	
3.5					21.5	4	1.5	3.73	
4.0					22.0	3	1.1	3.98	
4.5					22.5	3	1.1	4.53	
5.0					23.0	1	0.4	4.74	
5.5					23.5	2	0.7	5.23	
6.0	1	0.4	0.06	not aged	24.0				
6.5	1	0.4	0.08		24.5	3	1.1	5.88	
7.0					25.0				
7.5					25.5				
8.0	3	1.1	0.15		26.0				
8.5	12	4.4	0.17		26.5	1	0.4	7.83	
9.0	33	12.2	0.20		27.0				
9.5	21	7.7	0.23		27.5				
10.0	23	8.5	0.28		28.0				
10.5	17	6.3	0.33		28.5	1	0.4	10.91	
11.0	9	3.3	0.38		29.0				
11.5	9	3.3	0.43		TOTAL	271			
12.0	9	3.3	0.49						
12.5	14	5.2	0.56						
13.0	12	4.4	0.67						
13.5	9	3.3	0.73						
14.0	12	4.4	0.83						
14.5	8	3.0	0.94						
15.0	3	1.1	1.03						
15.5	10	3.7	1.17						
16.0	3	1.1	1.33						
16.5	2	0.7	1.51						
17.0	6	2.2	1.66						
17.5	7	2.6	1.81						
18.0	2	0.7	2.02						
18.5	3	1.1	2.20						

ELECTROFISHING CATCH	9.5 / h	GILL NET CATCH	16.1 / lift	TRAP NET CATCH	1.4 / lift
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NUMBER, PERCENTAGE, WEIGHT, AND AGE OF LARGEMOUTH BASS (May standard survey)									
TOTAL LENGTH (inches)	NUMBER COLLECTED	PERCENT OF FISH COLLECTED	AVERAGE WEIGHT (pounds)	AGE OF FISH	TOTAL LENGTH (inches)	NUMBER COLLECTED	PERCENT OF FISH COLLECTED	AVERAGE WEIGHT (pounds)	AGE OF FISH
1.0					19.0	3	2.0	3.82	
1.5					19.5	1	0.7	4.19	
2.0					20.0				
2.5	1	0.7	0.01	not aged	20.5				
3.0	3	2.0	0.01		21.0	1	0.7	5.23	
3.5	2	1.4	0.02		21.5				
4.0	4	2.7	0.03		22.0				
4.5	3	2.0	0.04		22.5				
5.0	1	0.7	0.05		23.0				
5.5	1	0.7	0.07		23.5				
6.0	1	0.7	0.09		24.0				
6.5					24.5				
7.0					25.0				
7.5	1	0.7	0.19		25.5				
8.0	1	0.7	0.23		26.0				
8.5	1	0.7	0.28		TOTAL	147			
9.0	3	2.0	0.33						
9.5	5	3.4	0.40						
10.0	2	1.4	0.46						
10.5	4	2.7	0.54						
11.0	2	1.4	0.63						
11.5	5	3.4	0.72						
12.0	11	7.5	0.82						
12.5	10	6.8	0.95						
13.0	17	11.6	1.08						
13.5	8	5.4	1.20						
14.0	6	4.1	1.38						
14.5	11	7.5	1.56						
15.0	11	7.5	1.74						
15.5	6	4.1	1.92						
16.0	8	5.4	2.15						
16.5	3	2.0	2.36						
17.0	1	0.7	2.62						
17.5	2	1.4	2.84						
18.0	3	2.0	3.18						
18.5	5	3.4	3.54						
ELECTROFISHING CATCH	72.5 / h			GILL NET CATCH	0.1 / lift		TRAP NET CATCH	0.0 / lift	

NUMBER, PERCENTAGE, WEIGHT, AND AGE OF COMMON CARP

TOTAL LENGTH (inches)	NUMBER COLLECTED	PERCENT OF FISH COLLECTED	AVERAGE WEIGHT (pounds)	AGE OF FISH	TOTAL LENGTH (inches)	NUMBER COLLECTED	PERCENT OF FISH COLLECTED	AVERAGE WEIGHT (pounds)	AGE OF FISH
1.0					19.0	6	7.8	3.17	
1.5					19.5	4	5.2	3.39	
2.0					20.0	7	9.1	3.72	
2.5					20.5	6	7.8	3.97	
3.0					21.0	3	3.9	4.23	
3.5					21.5	3	3.9	4.62	
4.0					22.0	4	5.2	4.95	
4.5					22.5	3	3.9	5.36	
5.0					23.0				
5.5					23.5				
6.0					24.0				
6.5	1	1.3	0.15	not aged	24.5				
7.0	1	1.3	0.19		25.0	2	2.6	7.15	
7.5	1	1.3	0.22		25.5	1	1.3	8.11	
8.0	3	3.9	0.27		26.0				
8.5	3	3.9	0.31		TOTAL	77			
9.0	2	2.6	0.36						
9.5									
10.0	4	5.2	0.49						
10.5	2	2.6	0.57						
11.0									
11.5	1	1.3	0.75						
12.0									
12.5									
13.0									
13.5									
14.0									
14.5									
15.0									
15.5									
16.0	3	3.9	1.89						
16.5	2	2.6	2.05						
17.0	4	5.2	2.24						
17.5	4	5.2	2.48						
18.0	5	6.5	2.68						
18.5	2	2.6	2.90						
ELECTROFISHING CATCH	23.0 / h			GILL NET CATCH	1.6 / lift		TRAP NET CATCH	0.9 / lift	

NUMBER, PERCENTAGE, WEIGHT, AND AGE OF BLACK CRAPPIE

TOTAL LENGTH (inches)	NUMBER COLLECTED	PERCENT OF FISH COLLECTED	AVERAGE WEIGHT (pounds)	AGE OF FISH	TOTAL LENGTH (inches)	NUMBER COLLECTED	PERCENT OF FISH COLLECTED	AVERAGE WEIGHT (pounds)	AGE OF FISH
1.0					19.0				
1.5					19.5				
2.0					20.0				
2.5					20.5				
3.0					21.0				
3.5					21.5				
4.0	1	3.0	0.03	1	22.0				
4.5	2	5.9	0.04	1	22.5				
5.0	3	8.8	0.06	1	23.0				
5.5					23.5				
6.0	5	14.7	0.11	2	24.0				
6.5	8	23.5	0.14	2	24.5				
7.0	4	11.8	0.18	2	25.0				
7.5	5	14.7	0.22	2,3	25.5				
8.0	4	11.8	0.26	3,4	26.0				
8.5	1	3.0	0.32	3	TOTAL	34			
9.0	1	3.0	0.38	5					
9.5									
10.0									
10.5									
11.0									
11.5									
12.0									
12.5									
13.0									
13.5									
14.0									
14.5									
15.0									
15.5									
16.0									
16.5									
17.0									
17.5									
18.0									
18.5									

ELECTROFISHING CATCH	4.0 / h	GILL NET CATCH	0.5 / lift	TRAP NET CATCH	2.4 / lift
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NUMBER, PERCENTAGE, WEIGHT, AND AGE OF WALLEYE (May standard survey)

TOTAL LENGTH (inches)	NUMBER COLLECTED	PERCENT OF FISH COLLECTED	AVERAGE WEIGHT (pounds)	AGE OF FISH	TOTAL LENGTH (inches)	NUMBER COLLECTED	PERCENT OF FISH COLLECTED	AVERAGE WEIGHT (pounds)	AGE OF FISH
1.0					19.0				
1.5					19.5				
2.0					20.0				
2.5					20.5				
3.0					21.0				
3.5					21.5				
4.0					22.0				
4.5					22.5				
5.0	1	4.2	0.04	1	23.0				
5.5					23.5				
6.0	2	8.3	0.06	1	24.0				
6.5	4	16.7	0.08	1	24.5				
7.0	2	8.3	0.10	1	25.0				
7.5	1	4.2	0.13	1	25.5				
8.0	1	4.2	0.15	1	26.0				
8.5	1	4.2	0.18	1	TOTAL	24			
9.0									
9.5	1	4.2	0.27	1					
10.0	1	4.2	0.31	1					
10.5	2	8.3	0.36	1					
11.0	3	12.5	0.42	1					
11.5									
12.0	2	8.3	0.54	1					
12.5	2	8.3	0.62	1,2					
13.0	1	4.2	0.72	2					
13.5									
14.0									
14.5									
15.0									
15.5									
16.0									
16.5									
17.0									
17.5									
18.0									
18.5									

ELECTROFISHING CATCH	8.5 / h	GILL NET CATCH	0.5 / lift	TRAP NET CATCH	0.0 / lift
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NUMBER, PERCENTAGE, WEIGHT, AND AGE OF WHITE BASS

TOTAL LENGTH (inches)	NUMBER COLLECTED	PERCENT OF FISH COLLECTED	AVERAGE WEIGHT (pounds)	AGE OF FISH	TOTAL LENGTH (inches)	NUMBER COLLECTED	PERCENT OF FISH COLLECTED	AVERAGE WEIGHT (pounds)	AGE OF FISH
1.0					19.0				
1.5					19.5				
2.0					20.0				
2.5					20.5				
3.0					21.0				
3.5					21.5				
4.0					22.0				
4.5	3	33.3	0.05	1	22.5				
5.0	1	11.1	0.05	1	23.0				
5.5					23.5				
6.0					24.0				
6.5					24.5				
7.0					25.0				
7.5					25.5				
8.0					26.0				
8.5					TOTAL	9			
9.0									
9.5									
10.0	1	11.1	0.42	2					
10.5	1	11.1	0.49	2					
11.0									
11.5									
12.0									
12.5	1	11.1	0.86	not aged					
13.0									
13.5	2	22.2	1.10	4					
14.0									
14.5									
15.0									
15.5									
16.0									
16.5									
17.0									
17.5									
18.0									
18.5									

ELECTROFISHING CATCH	2.5 / h	GILL NET CATCH	0.1 / lift	TRAP NET CATCH	0.3 / lift
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NUMBER, PERCENTAGE, WEIGHT, AND AGE OF LARGEMOUTH BASS (spring sampling)

TOTAL LENGTH (inches)	NUMBER COLLECTED	PERCENT OF FISH COLLECTED	AVERAGE WEIGHT (pounds)	AGE OF FISH	TOTAL LENGTH (inches)	NUMBER COLLECTED	PERCENT OF FISH COLLECTED	AVERAGE WEIGHT (pounds)	AGE OF FISH
1.0					19.0	6	1.9	3.82	not aged
1.5					19.5				
2.0					20.0	3	1.0	4.57	not aged
2.5	1	0.3	0.01	1	20.5				
3.0	2	0.6	0.01	1	21.0				
3.5	1	0.3	0.02	1	21.5	1	0.3	5.62	not aged
4.0	4	1.3	0.03	1	22.0				
4.5	1	0.3	0.04	1	22.5				
5.0	2	0.6	0.05	1	23.0				
5.5					23.5				
6.0					24.0				
6.5	2	0.6	0.12	1,2	24.5				
7.0	4	1.3	0.15	1,2	25.0				
7.5	1	0.3	0.19	2	25.5				
8.0	1	0.3	0.23	1	26.0				
8.5	11	3.5	0.28	2	TOTAL	313			
9.0	11	3.5	0.33	2					
9.5	18	5.8	0.40	2,3					
10.0	8	2.6	0.46	2,3					
10.5	5	1.6	0.54	2,3					
11.0	9	2.9	0.63	2,3					
11.5	15	4.8	0.72	3					
12.0	19	6.1	0.82	3					
12.5	28	8.9	0.95	3,4					
13.0	20	6.4	1.08	3,4					
13.5	22	7.0	1.20	3,4					
14.0	20	6.4	1.38	3,4,5					
14.5	13	4.2	1.56	4					
15.0	16	5.1	1.74	4,5					
15.5	9	2.9	1.92	4,5					
16.0	15	4.8	2.15	not aged					
16.5	6	1.9	2.36	not aged					
17.0	12	3.8	2.62	not aged					
17.5	11	3.5	2.84	not aged					
18.0	10	3.2	3.18	not aged					
18.5	6	1.9	3.54	not aged					

ELECTROFISHING CATCH	52.2 / h	GILL NET CATCH	NA	TRAP NET CATCH	NA
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NUMBER, PERCENTAGE, WEIGHT, AND AGE OF WALLEYE (fall evaluation)									
TOTAL LENGTH (inches)	NUMBER COLLECTED	PERCENT OF FISH COLLECTED	AVERAGE WEIGHT (pounds)	AGE OF FISH	TOTAL LENGTH (inches)	NUMBER COLLECTED	PERCENT OF FISH COLLECTED	AVERAGE WEIGHT (pounds)	AGE OF FISH
1.0					19.0				
1.5					19.5				
2.0					20.0				
2.5					20.5				
3.0					21.0				
3.5					21.5				
4.0					22.0				
4.5					22.5				
5.0					23.0				
5.5					23.5				
6.0					24.0				
6.5					24.5				
7.0					25.0				
7.5	1	1.5	0.13	YOY	25.5				
8.0	8	11.8	0.16	YOY	26.0				
8.5	18	26.5	0.19	YOY	TOTAL	68			
9.0	17	25.0	0.22	YOY					
9.5	3	4.4	0.28	YOY					
10.0									
10.5	1	1.5	0.33	1					
11.0	3	4.4	0.44	1					
11.5	4	5.9	0.50	1					
12.0	4	5.9	0.53	1					
12.5	3	4.4	0.63	1					
13.0	1	1.5	0.72	1					
13.5	1	1.5	0.68	1					
14.0									
14.5	1	1.5	1.07	1					
15.0	2	2.9	1.05	1					
15.5									
16.0	1	1.5	1.25	1					
16.5									
17.0									
17.5									
18.0									
18.5									
ELECTROFISHING CATCH	17.0 / h		GILL NET CATCH	NA		TRAP NET CATCH		NA	

GPS LOCATION OF SAMPLING EQUIPMENT DURING MAY STANDARD SURVEY

GILL NETS			TRAP NETS			ELECTROFISHING		
1	N 39 50.376	W 86 18.112	1	N 39 50.417	W 86 18.029	1	N 39 50.513	W 86 18.097
	N	W	2	N 39 49.943	W 86 18.756		N	W
2	N 39 50.507	W 86 18.091	3	N 39 50.285	W 86 18.678	2	N 39 51.181	W 86 18.287
	N	W	4	N 39 50.973	W 86 18.085		N	W
3	N 39 50.760	W 86 18.105	5	N 39 50.948	W 86 18.836	3	N 39 51.932	W 86 18.223
	N	W	6	N 39 51.370	W 86 18.626		N	W
4	N 39 51.144	W 86 18.267	7	N 39 51.524	W 86 18.574	4	N 39 51.370	W 86 18.626
	N	W	8	N 39 51.978	W 86 18.664		N	W
5	N 39 51.627	W 86 18.147	9	N	W	5	N 39 50.602	W 86 18.611
	N	W	10	N	W		N	W
6	N 39 51.816	W 86 18.377	11	N	W	6	N 39 50.767	W 86 19.188
	N	W	12	N	W		N	W
7	N Not	W deployed	13	N	W	7	N 39 49.978	W 86 18.852
	N	W	14	N	W		N	W
8	N 39 51.167	W 86 18.491	15	N	W	8	N 39 49.584	W 86 18.559
	N	W	16	N	W		N	W
9	N 39 50.922	W 86 18.646	17	N	W	9	N	W
	N	W	18	N	W		N	W
10	N 39 50.599	W 86 18.559	19	N	W	10	N	W
	N	W	20	N	W		N	W
11	N 39 50.142	W 86 18.535				11	N	W
	N	W					N	W
12	N 39 49.853	W 86 18.494				12	N	W
	N	W					N	W
13	N 39 49.920	W 86 18.947				13	N	W
	N	W					N	W
14	N 39 49.781	W 86 18.615				14	N	W
	N	W					N	W
15	N 39 49.473	W 86 18.387				15	N	W
	N	W					N	W
16	N 39 49.513	W 86 18.046				16	N	W
	N	W					N	W
17	N	W				17	N	W
	N	W					N	W
18	N	W				18	N	W
	N	W					N	W
19	N	W				19	N	W
	N	W					N	W
20	N	W				20	N	W
	N	W					N	W

Largemouth bass Age-length Key (spring bass sampling)

Length group (in)	Total #	Sub-sample	Age														
			1	2	3	4	5	6	7	8	9	10	11	12	13		
1.0																	
1.5																	
2.0																	
2.5	1	1	1														
3.0	2	2	2														
3.5	1	1	1														
4.0	4	3	4														
4.5	1	1	1														
5.0	2	2	1														
5.5																	
6.0																	
6.5	2	2	1	1													
7.0	4	4	1	3													
7.5	1	1		1													
8.0	1	1	1														
8.5	11	5		9													
9.0	11	4		6													
9.5	18	5		11	7												
10.0	8	5		5	3												
10.5	5	6		1	3												
11.0	9	5		5	2												
11.5	15	5			15												
12.0	19	5			15												
12.5	28	5			17	6											
13.0	20	5			8	8											
13.5	22	5			4	18											
14.0	20	5			4	12	4										
14.5	13	5				10											
15.0	16	5				6	6										
15.5	9	4				5	5										
16.0	15																
16.5	6																
17.0	12																
17.5	11																
18.0	10																
18.5	6																
19.0	6																
19.5																	
20.0	3																
20.5																	
21.0																	
21.5	1																
22.0																	
Total	313	92	13	41	79	65	15	0									

Gizzard shad Age-length Key

Length group (in)	Total #	Sub-sample	Age												
			1	2	3	4	5	6	7	8	9	10	11	12	13
1.0															
1.5															
2.0															
2.5															
3.0															
3.5															
4.0	2	0													
4.5	17	0													
5.0	8	0													
5.5															
6.0															
6.5	5	2	5												
7.0	101	4		76	25										
7.5	489	3		326	163										
8.0	337	6			337										
8.5	282	5			169	113									
9.0	168	6			168										
9.5	63	0													
10.0	15	0													
10.5	12	0													
11.0	9	0													
11.5	7	0													
12.0	2	0													
12.5															
13.0															
13.5	2	0													
14.0															
Total	1519	26	5	402	862	113	0								

White crappie Age-length Key

Length group (in)	Total #	Sub-sample	Age													
			1	2	3	4	5	6	7	8	9	10	11	12	13	
1.0																
1.5																
2.0																
2.5																
3.0																
3.5																
4.0	1															
4.5	34	6	34													
5.0	25	4	19	6												
5.5	1	1		1												
6.0	20	4		20												
6.5	162	4		162												
7.0	445	7		445												
7.5	188	6		157	31											
8.0	51	5		51												
8.5	29	5		6	23											
9.0	66	5		13	53											
9.5	81	5		16	65											
10.0	73	6			49	24										
10.5	30	5			24	6										
11.0	27	8			14	14										
11.5	20	5			4	4	12									
12.0	13	5				3	10									
12.5	10	5				4	6									
13.0	4	3				1	3									
13.5	2	2					2									
14.0	1	1						1								
14.5																
Total	1283	92	53	877	263	56	33	1	0	0	0	0	0	0	0	0

Bluegill Age-length Key

Length group (in)	Total #	Sub-sample	Age													
			1	2	3	4	5	6	7	8	9	10	11	12	13	
1.0																
1.5																
2.0	10	5	10													
2.5	16	5	16													
3.0	23	5	18	5												
3.5	35	5		35												
4.0	154	5		123	31											
4.5	138	5		138												
5.0	158	5			158											
5.5	206	6			172	34										
6.0	149	5			89	60										
6.5	87	5				70	17									
7.0	19	5				4	11	4								
7.5	6	4					3	3								
8.0																
Total	1001	60	44	301	450	168	31	7	0	0	0	0	0	0	0	0

Black crappie Age-length Key

Length group (in)	Total #	Sub-sample	Age													
			1	2	3	4	5	6	7	8	9	10	11	12	13	
1.0																
1.5																
2.0																
2.5																
3.0																
3.5																
4.0	1	1	1													
4.5	2	2	2													
5.0	3	3	3													
5.5																
6.0	5	5		5												
6.5	8	6		8												
7.0	4	4		4												
7.5	5	5		1	4											
8.0	4	4			1	3										
8.5	1	1			1											
9.0	1	1						1								
9.5																
Total	34	32	6	18	6	3	1	0	0	0	0	0	0	0	0	0

Walleye Age-length Key (May standard survey)

Length group (in)	Total #	Sub-sample	Age													
			1	2	3	4	5	6	7	8	9	10	11	12	13	
1.0																
1.5																
2.0																
2.5																
3.0																
3.5																
4.0																
4.5																
5.0	1	1	1													
5.5																
6.0	2	2	2													
6.5	4	3	4													
7.0	2	2	2													
7.5	1	1	1													
8.0	1	1	1													
8.5	1	1	1													
9.0																
9.5	1	1	1													
10.0	1	1	1													
10.5	2	1	2													
11.0	3	3	3													
11.5																
12.0	2	2	2													
12.5	2	2	1	1												
13.0	1	1		1												
13.5																
Total	24	22	22	2	0	0	0	0	0	0	0	0	0	0	0	0

White bass Age-length Key

Length group (in)	Total #	Sub-sample	Age													
			1	2	3	4	5	6	7	8	9	10	11	12	13	
1.0																
1.5																
2.0																
2.5																
3.0																
3.5																
4.0																
4.5	3	3	3													
5.0	1	1	1													
5.5																
6.0																
6.5																
7.0																
7.5																
8.0																
8.5																
9.0																
9.5																
10.0	1	1		1												
10.5	1	1		1												
11.0																
11.5																
12.0																
12.5	1	0														
13.0																
13.5	2	2				2										
14.0																
Total	9	8	4	2	0	2	0									

Walleye Age-length Key (fall evaluation)															
Length group (in)	Total #	Sub-sample	Age												
			1	2	3	4	5	6	7	8	9	10	11	12	13
1.0															
1.5															
2.0															
2.5															
3.0															
3.5															
4.0															
4.5															
5.0															
5.5															
6.0															
6.5															
7.0															
7.5	1	0													
8.0	8	0													
8.5	18	0													
9.0	17	0													
9.5	3	0													
10.0															
10.5	1	1	1												
11.0	3	3	3												
11.5	4	4	4												
12.0	4	4	4												
12.5	3	3	3												
13.0	1	1	1												
13.5	1	1	1												
14.0															
14.5	1	1	1												
15.0	2	2	2												
15.5															
16.0	1	1	1												
16.5															
Total	68	21	21	0											

Mean Length at Capture

Gizzard shad

Age	Number	Mean TL	Var	SE	Lo 95%CI	Up 95%CI
1	5	6.8	0.00	0.00	6.8	6.8
2	402	7.7	0.04	0.01	7.6	7.7
3	862	8.4	0.29	0.02	8.4	8.5
4	113	8.8	0.00	0.00	8.8	8.8

White crappie

Age	Number	Mean TL	Var	SE	Lo 95%CI	Up 95%CI
1	53	4.9	0.06	0.03	4.9	5.0
2	877	7.4	0.38	0.02	7.3	7.4
3	262	9.6	0.92	0.06	9.5	9.7
4	56	11.0	0.73	0.11	10.8	11.2
5	33	12.3	0.36	0.10	12.1	12.5
6	1	14.3	NA	NA	NA	NA

Bluegill

Age	Number	Mean TL	Var	SE	Lo 95%CI	Up 95%CI
1	44	2.8	0.15	0.06	2.7	3.0
2	301	4.4	0.14	0.02	4.4	4.4
3	450	5.6	0.26	0.02	5.5	5.6
4	167	6.4	0.16	0.03	6.3	6.4
5	32	7.0	0.11	0.06	6.9	7.1
6	7	7.5	0.07	0.10	7.3	7.7

Black crappie

Age	Number	Mean TL	Var	SE	Lo 95%CI	Up 95%CI
1	6	4.9	0.17	0.17	4.6	5.3
2	18	6.8	0.19	0.10	6.6	7.0
3	6	8.0	0.18	0.17	7.7	8.3
4	3	8.3	0.00	0.00	8.3	8.3
5	1	9.3	NA	NA	NA	NA

White bass

Age	Number	Mean TL	Var	SE	Lo 95%CI	Up 95%CI
1	4	4.9	0.06	0.13	4.6	5.1
2	2	10.5	0.13	0.25	10.0	11.0
3	0	0.0	0.00	0.00	0.0	0.0
4	2	13.8	0.00	0.00	13.8	13.8

Walleye (May standard survey)

Age	Number	Mean TL	Var	SE	Lo 95%CI	Up 95%CI
1	22	8.9	5.54	0.50	7.9	9.9
2	2	13.0	0.13	0.25	12.5	13.5

Mean Length at Capture

Largemouth bass (spring bass sampling)

Age	Number	Mean TL	Var	SE	Lo 95%CI	Up 95%CI
1	13	4.8	2.77	0.46	3.9	5.7
2	41	9.4	1.30	0.18	9.1	9.8
3	79	12.2	1.39	0.13	11.9	12.4
4	65	14.1	0.68	0.10	13.9	14.3
5	15	15.1	0.35	0.15	14.8	15.4

Walleye (fall evaluation)

Age	Number	Mean TL	Var	SE	Lo 95%CI	Up 95%CI
1	21	12.7	2.29	0.33	12.1	13.4