

Weber Lake
Spencer County
Supplemental Survey

Date of Survey: June 9, 2008

Biologist: Michelle L. Cain

Survey Objective: Evaluate the 2006 stocking of 52 adult largemouth bass, 70 adult bluegill, and 27 adult redear sunfish.

Methods: Fish sampling effort consisted of 0.47 h of pulsed DC daytime electrofishing with two dippers. All fish collected were measured to the nearest 0.1 in TL. Average weights were estimated by using the Fish Management District 7 averages. Scales were removed from a subsample of sport fish for age and growth analysis.

Summary: Weber Lake is a 9.0-acre reclaimed strip mine lake located in Lincoln State Park. There is a 0.7 mi gravel walking trail that leads to the lake and the majority of the shoreline is accessible for bank fishing. An unimproved boat ramp is available for carry-in boats only. Standard state park fees apply for entry to the park and boat launching. The 2005 supplemental survey revealed a fishery dominated by green sunfish. The stocking of largemouth bass, bluegill, and redear sunfish fingerlings in 2003 was not successful. Therefore, an additional stocking of adult bass, bluegill, and redear was recommended.

A total of 109 fish, representing four species, was sampled that weighed 38 lbs. Largemouth bass dominated the sample by number (73%) followed by bluegill (11%), green sunfish (10%), and redear sunfish (6%). Largemouth bass also ranked first by weight (81%), followed by green sunfish (7%), bluegill (7%), and redear sunfish (6%).

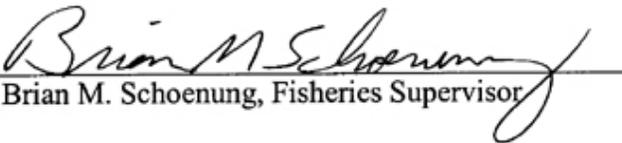
A total of 79 largemouth bass was sampled that weighed 31 lbs. They ranged in length from 5.7 to 12.4 in. The electrofishing catch rate was 168.1/h compared to the 2005 rate of 22.2/h. Twelve bluegill were sampled that ranged in length from 1.3 to 8.7 in. The bluegill electrofishing catch rate was 25.5/h compared to 0.0/h in 2005. A total

of seven redear sunfish were sampled that ranged in length from 2.5 to 9.3 in. The redear electrofishing catch rate was 14.9/h compared to 2.2/h in 2005.

The 2006 stocking at Weber Lake was successful. The largemouth bass population is successfully reproducing and bluegill and redear sunfish have established themselves. Additionally, the green sunfish population has decreased by 46% to an electrofishing catch rate of 23.4/h. Green sunfish only comprise 10% of the population now compared to 68% in 2005. This decrease should allow for bluegill and redear sunfish populations to increase in number and grow quickly since competition for resources is greatly reduced.

Submitted by: Michelle L. Cain, Assistant Fisheries Biologist
Date: August 26, 2008

Approved by: Daniel P. Carnahan, Fisheries Biologist

Approved by: 
Brian M. Schoenung, Fisheries Supervisor

Date: December 24, 2008

LAKE SURVEY REPORT

Type of Survey	<input type="checkbox"/> Initial Survey	<input checked="" type="checkbox"/> Re-Survey
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Lake Name Weber Lake	County Spencer	Date of survey (Month, day, year) June 9, 2008
Biologist's name Michelle L. Cain		Date of approval (Month, day, year) December 24, 2008

LOCATION		
Quadrangle Name Chrisney	Range 5W	Section 6
Township Name 5S	Nearest Town Gentryville	

ACCESSIBILITY					
State owned public access site gravel boat ramp		Privately owned public access site		Other access site	
Surface acres 9.0	Maximum depth 20.0 ft	Average depth Unknown	Acre feet Unknown	Water level	Extreme fluctuations None
Location of benchmark Approximately 1,000 ft southeast of lake near "Rockport Junction" of Southern Railroad.					

INLETS		
Name	Location	Origin Mostly forested ground

OUTLETS														
Name Unnamed stream	Location Southwest corner of lake													
Water level control														
POOL	ELEVATION (Feet MSL)	ACRES												
TOP OF DAM														
TOP OF FLOOD CONTROL POOL														
TOP OF CONSERVATION POOL		9.0												
TOP OF MINIMUM POOL														
STREAMBED														
<table border="0"> <tr> <td>Bottom type</td> <td><input type="checkbox"/> Boulder</td> </tr> <tr> <td></td> <td><input type="checkbox"/> Gravel</td> </tr> <tr> <td></td> <td><input type="checkbox"/> Sand</td> </tr> <tr> <td></td> <td><input checked="" type="checkbox"/> Muck</td> </tr> <tr> <td></td> <td><input checked="" type="checkbox"/> Clay</td> </tr> <tr> <td></td> <td><input type="checkbox"/> Marl</td> </tr> </table>			Bottom type	<input type="checkbox"/> Boulder		<input type="checkbox"/> Gravel		<input type="checkbox"/> Sand		<input checked="" type="checkbox"/> Muck		<input checked="" type="checkbox"/> Clay		<input type="checkbox"/> Marl
Bottom type	<input type="checkbox"/> Boulder													
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	<input type="checkbox"/> Sand													
	<input checked="" type="checkbox"/> Muck													
	<input checked="" type="checkbox"/> Clay													
	<input type="checkbox"/> Marl													

Watershed use Lincoln State Park- forest, strip pits, limited agriculture
Development of shoreline Currently undeveloped
Previous surveys and investigations Fish management report 1987.
Supplemental fish survey 2005.

SAMPLING EFFORT					
ELECTROFISHING	Day hours		Night hours		Total hours
	0.47				0.47
TRAP NETS	Number of traps		Number of Lifts		Total effort
GILL NETS	Number of nets		Number of Lifts		Total effort
ROTENONE	Gallons	ppm	Acre Feet Treated	SHORELINE SEINING	Number of 100 Foot Seine Hauls

PHYSICAL AND CHEMICAL CHARACTERISTICS					
Color			Turbidity		
			Feet	Inches (SECCHI DISK)	
Alkalinity (ppm)*			pH		
Surface:		Bottom:	Surface:		Bottom:
Conductivity:			Air temperature:		
micromhos			°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			36			72		
2			38			74		
4			40			76		
6			42			78		
8			44			80		
10			46			82		
12			48			84		
14			50			86		
16			52			88		
18			54			90		
20			56			92		
22			58			94		
24			60			96		
26			62			98		
28			64			100		
30			66					
32			68					
34			70					

COMMENTS
Chemical characteristics not measured.

*ppm-parts per million

NUMBER, PERCENTAGE, WEIGHT, AND AGE OF LARGEMOUTH 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					22.5				
5.0					23.0				
5.5	1	1.3	0.08	0	23.5				
6.0	4	5.1	0.10	1, 2	24.0				
6.5	7	8.9	0.13	1	24.5				
7.0	5	6.3	0.16	1	25.0				
7.5	4	5.1	0.20	1, 2	25.5				
8.0	2	2.5	0.24	1, 2	26.0				
8.5	1	1.3	0.28	2	TOTAL	79			
9.0	5	6.3	0.33	3, 4					
9.5	10	12.7	0.39	3, 4					
10.0	19	24.1	0.46	3, 4					
10.5	12	15.2	0.53	3, 4					
11.0	4	5.1	0.62	3, 4					
11.5	2	2.5	0.71	3, 4					
12.0	3	3.8	0.80	3, 4					
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	168.1/h	GILL NET CATCH	N/A	TRAP NET CATCH	N/A
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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	1	8.3	0.01	0	19.0				
1.5	1	8.3	0.01	0	19.5				
2.0	1	8.3	0.01	1	20.0				
2.5	1	8.3	0.01	1	20.5				
3.0					21.0				
3.5	1	8.3	0.03	1	21.5				
4.0	1	8.3	0.05	1	22.0				
4.5					22.5				
5.0					23.0				
5.5					23.5				
6.0					24.0				
6.5	1	8.3	0.22	3	24.5				
7.0					25.0				
7.5					25.5				
8.0	4	33.3	0.41	2, 3, 5	26.0				
8.5	1	8.3	0.49	5	TOTAL	12			
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	25.5/h	GILL NET CATCH	N/A	TRAP NET CATCH	N/A
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NUMBER, PERCENTAGE, WEIGHT, AND AGE OF REDEAR SUNFISH

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	1	14.3	0.02	1	20.5				
3.0					21.0				
3.5					21.5				
4.0					22.0				
4.5					22.5				
5.0					23.0				
5.5	1	14.3	0.13	2	23.5				
6.0					24.0				
6.5					24.5				
7.0					25.0				
7.5					25.5				
8.0	4	57.1	0.40	3, 4	26.0				
8.5					TOTAL	7			
9.0	1	14.3	0.57	4					
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	14.9/h	GILL NET CATCH	N/A	TRAP NET CATCH	N/A
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LARGEMOUTH BASS AGE-LENGTH KEY

Length group (in)	Total number	Sub-sample	AGE			
			1	2	3	4
5.5	1	1				
6.0	4	4	3	1		
6.5	7	4	7			
7.0	5	6	5			
7.5	4	4	2	2		
8.0	2	2	1	1		
8.5	1	1		1		
9.0	5	4			4	1
9.5	10	6			3	7
10.0	19	4			10	9
10.5	12	7			9	3
11.0	4	3			1	3
11.5	2	2			1	1
12.0	3	3			1	2
Totals	79	51	18	5	28	26

AGE-LENGTH KEY SUMMARY						
Age	Number	Mean			Lower 95%CI	Upper 95%CI
		TL	Var	SE		
1	18	7.0	0.30	0.13	6.7	7.3
2	5	7.8	0.88	0.42	6.9	8.6
3	28	10.4	0.50	0.13	10.1	10.6
4	26	10.4	0.61	0.15	10.1	10.8

BLUEGILL AGE-LENGTH KEY

Length group (in)	Total number	Sub-sample	AGE				
			1	2	3	4	5
1.0	1						
1.5	1						
2.0	1	1					
2.5	1	1					
3.0							
3.5	1	1					
4.0	1	1					
4.5							
5.0							
5.5							
6.0							
6.5	1			1			
7.0							
7.5							
8.0	4		1	1			2
8.5	1						1
Totals	7	4	1	2			3

AGE-LENGTH KEY SUMMARY						
Age	Number	Mean			Lower 95%CI	Upper 95%CI
		TL	Var	SE		
1	4	3.3	0.83	0.46	2.3	4.2
2	1	8.3				
3	2	7.5	1.13	0.75	6.0	9.0
4						
5	3	8	0.1	0.17	8.1	8.8

REDEAR SUNFISH AGE-LENGTH KEY

Length group (in)	Total number	Sub-sample	AGE			
			1	2	3	4
2.5	1	1	1			
3	0					
3.5	0					
4.0	0					
4.5	0					
5.0	0					
5.5	1	1		1		
6.0	0					
6.5	0					
7.0	0					
7.5	0					
8.0	4	4			3	1
8.5	0					
9.0	1	1				1
Totals	7	7	1	1	3	2

AGE-LENGTH KEY SUMMARY						
Age	Number	Mean			Lower 95%CI	Upper 95%CI
		TL	Var	SE		
1	1	2.8				
2	1	5.8				
3	3	8.3	0.00	0.00	8.3	8.3
4	2	8.8	0.50	0.50	7.8	9.8

GPS LOCATION OF SAMPLING EQUIPMENT

GILL NETS			TRAP NETS			ELECTROFISHING		
1	N	W	1	N	W	1	N 38.11068	W -87.01085
2	N	W	2	N	W		N 38.11068	W -87.01085
3	N	W	3	N	W	2	N	W
4	N	W	4	N	W		N	W
5	N	W	5	N	W	3	N	W
6	N	W	6	N	W		N	W
7	N	W	7	N	W	4	N	W
8	N	W	8	N	W		N	W
9	N	W	9	N	W	5	N	W
10	N	W	10	N	W		N	W
11	N	W	11	N	W	6	N	W
12	N	W	12	N	W		N	W
13	N	W	13	N	W	7	N	W
14	N	W	14	N	W		N	W
15	N	W	15	N	W	8	N	W
16	N	W	16	N	W		N	W
17	N	W	17	N	W	9	N	W
18	N	W	18	N	W		N	W
19	N	W	19	N	W	10	N	W
20	N	W	20	N	W		N	W
						11	N	W
							N	W
						12	N	W
							N	W
						13	N	W
							N	W
						14	N	W
							N	W
						15	N	W
							N	W
						16	N	W
							N	W
						17	N	W
							N	W
						18	N	W
							N	W
						19	N	W
							N	W
						20	N	W
							N	W