

FISHERIES - ILLINOIS DEPT. NAT. RESOURCES

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March 27, 2001

Mr. Kevin Bevard  
RR #5 Lake Santa Fe Estates  
Box 17  
Metamora, IL 61548

**RE: Lake Santa Fe Sample - 10/12/00**

Dear Mr Bevard:

On October 12, 2000, we sampled Lake Santa Fe for 45 minutes, total time. Part of that sample time was after darkness. We sub-sampled bluegill for thirty minutes. We obtained an excellent sample despite At the time of sample water conditions were as follows:

Air temp. ----- 64 F.  
Water temp ----- 61 F.  
p.H. ----- 7.0  
Tot. alk ----- 168  
Conductivity ----- 250  
Transparency ----- 96"

A fringe of aquatic vegetation was present along the shoreline. Coverage was not more than 15% of the lake area.

We were able to collect 111 largemouth bass during our 45 minute sampling effort. This equates to 2.47 largemouth per electro fishing minute. This indicates a very high abundance of bass in the population. A good number of fish in the sample were of quality size (<15" long). Relative weights of largemouth in the collection were within normal limits, indicating adequate growth rates. Because of the great abundance of largemouth bass, condition and growth of bluegill at Lake Santa Fe is quite good. A large number of bluegill collected were from 7.0 to 8.0 inches in length. Growth rate of bluegill is exceptional in your lake as relative weights were above 100% in most length ranges.

Mr. Kevin Bevard

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Based on the sample, I offer the following recommendations:

1. Treat vegetation with Aquathol, as needed and where needed. Treat problem algae areas using 5 pounds of copper sulfate per 1000 feet of shoreline.
2. Stock channel catfish at a rate of 10 fish per acre, 8-10 inches long every 2nd year.
3. Stock walleye every other year at a rate of 20 fish, 4-6 inches long per acre.
4. Maintain the slot length limit on largemouth bass that is now in place.

Sincerely,



Wayne Herndon  
Conservation Resource Specialist

WEH/weh  
Enclosure

2000 SANTA FE LAKE. LMB STOCK INDEX TABLE

YEAR	STOCK N 20cm, 7.9in	YAR (N) 10cm, 3.9in	PSD (N) 30cm, 11.8in	RSD1 (N) 35cm, 13.8in	RSD2 (N) 38cm, 15.0in	RSD3 (N) 40cm, 15.7in
2000	99	0.1 (6)	44.4 (44)	31.3 (31)	19.2 (19)	12.1 (12)

2000 SANTA FE LAKE. BLG STOCK INDEX TABLE

YEAR	STOCK N 8cm, 3.1in	YAR (N) 10cm, 3.9in	PSD (N) 15cm, 5.9in	RSD1 (N) 17cm, 6.7in	RSD2 (N) 18cm, 7.1in	RSD3 (N) 19cm, 7.5in
2000	208	0.4 (38)	48.6 (101)	30.3 (63)	16.8 (35)	9.1 (19)

## 2000 SANTA FE LAKE. LMB LENGTH FREQUENCY/CONDITION

LENGTH MM	GROUP INCHES	TOTAL L-FREQ	MEAN WEIGHT		NO. WEIGHED	MEAN CONDITION	
			GRAMS	LBS		WR (95%)	KN (95%)
60 - 69	2.4 - 2.8	2	-	-	0	-	-
70 - 79	2.8 - 3.1	4	-	-	0	-	-
80 - 89	3.1 - 3.5	0	-	-	0	-	-
90 - 99	3.5 - 3.9	0	-	-	0	-	-
100 - 109	3.9 - 4.3	0	-	-	0	-	-
110 - 119	4.3 - 4.7	0	-	-	0	-	-
120 - 129	4.7 - 5.1	0	-	-	0	-	-
130 - 139	5.1 - 5.5	0	-	-	0	-	-
140 - 149	5.5 - 5.9	0	-	-	0	-	-
150 - 159	5.9 - 6.3	0	-	-	0	-	-
160 - 169	6.3 - 6.7	0	-	-	0	-	-
170 - 179	6.7 - 7.1	1	65.0	0.14	1	98	0.97
180 - 189	7.1 - 7.5	5	75.0	0.17	3	97 ( 14)	0.97 ( 0.1)
190 - 199	7.5 - 7.9	0	-	-	0	-	-
200 - 209	7.9 - 8.3	4	116.7	0.26	3	109 ( 22)	1.09 ( 0.2)
210 - 219	8.3 - 8.7	3	125.0	0.28	3	97 ( 1)	0.97 ( 0.0)
220 - 229	8.7 - 9.1	0	-	-	0	-	-
230 - 239	9.1 - 9.4	10	160.0	0.35	3	96 ( 12)	0.97 ( 0.1)
240 - 249	9.4 - 9.8	7	181.7	0.40	3	95 ( 18)	0.96 ( 0.2)
250 - 259	9.8 - 10.2	16	223.3	0.49	3	100 ( 9)	1.02 ( 0.1)
260 - 269	10.2 - 10.6	7	230.0	0.51	3	91 ( 12)	0.93 ( 0.1)
270 - 279	10.6 - 11.0	4	268.3	0.59	3	97 ( 3)	0.99 ( 0.0)
280 - 289	11.0 - 11.4	3	285.0	0.63	3	90 ( 9)	0.92 ( 0.1)
290 - 299	11.4 - 11.8	1	360.0	0.79	1	105	1.07
300 - 309	11.8 - 12.2	2	372.5	0.82	2	94 ( 14)	0.97 ( 0.1)
310 - 319	12.2 - 12.6	3	438.3	0.97	3	97 ( 12)	0.99 ( 0.1)
320 - 329	12.6 - 13.0	4	493.3	1.09	3	98 ( 0)	1.01 ( 0.0)
330 - 339	13.0 - 13.4	2	540.0	1.19	2	102 ( 148)	1.06 ( 1.5)
340 - 349	13.4 - 13.8	2	520.0	1.15	2	86 ( 153)	0.89 ( 1.6)
350 - 359	13.8 - 14.2	8	606.7	1.34	3	93 ( 25)	0.97 ( 0.3)
360 - 369	14.2 - 14.6	2	670.0	1.48	2	94 ( 41)	0.98 ( 0.4)
370 - 379	14.6 - 15.0	2	730.0	1.61	2	95 ( 62)	0.99 ( 0.6)
380 - 389	15.0 - 15.4	4	795.0	1.75	3	95 ( 9)	0.99 ( 0.1)
390 - 399	15.4 - 15.7	3	830.0	1.83	3	89 ( 18)	0.93 ( 0.2)
400 - 409	15.7 - 16.1	5	910.0	2.01	3	90 ( 9)	0.94 ( 0.1)
410 - 419	16.1 - 16.5	3	944.3	2.08	3	87 ( 14)	0.91 ( 0.2)
420 - 429	16.5 - 16.9	1	1000.0	2.20	1	87	0.91
430 - 439	16.9 - 17.3	2	1180.0	2.60	2	93 ( 40)	0.98 ( 0.4)
440 - 449	17.3 - 17.7	1	1325.0	2.92	1	99	1.04
TOTALS:		111			64		

## 2000 SANTA FE LAKE. GSF LENGTH FREQUENCY/CONDITION

LENGTH GROUP		TOTAL L-FREQ	MEAN WEIGHT		NO. WEIGHED	MEAN CONDITION	
MM	INCHES		GRAMS	LBS		WR (95%)	KN (95%)
90 - 99	3.5 - 3.9	1	20.0	0.04	1	134	- 1.48 -
100 - 109	3.9 - 4.3	0	-	-	0	-	- - -
110 - 119	4.3 - 4.7	0	-	-	0	-	- - -
120 - 129	4.7 - 5.1	0	-	-	0	-	- - -
130 - 139	5.1 - 5.5	0	-	-	0	-	- - -
140 - 149	5.5 - 5.9	0	-	-	0	-	- - -
150 - 159	5.9 - 6.3	2	75.0	0.17	2	101 ( 0)	1.05 ( 0.0)
TOTALS:		3			3		

## 2000 SANTA FE LAKE. CCF LENGTH FREQUENCY/CONDITION

LENGTH GROUP		TOTAL L-FREQ	MEAN WEIGHT		NO. WEIGHED	MEAN CONDITION	
MM	INCHES		GRAMS	LBS		WR (95%)	KN (95%)
590 - 599	23.2 - 23.6	1	2450.0	5.40	1	109	1.27
600 - 609	23.6 - 24.0	0	-	-	0	-	-
610 - 619	24.0 - 24.4	0	-	-	0	-	-
620 - 629	24.4 - 24.8	0	-	-	0	-	-
630 - 639	24.8 - 25.2	0	-	-	0	-	-
640 - 649	25.2 - 25.6	0	-	-	0	-	-
650 - 659	25.6 - 26.0	0	-	-	0	-	-
660 - 669	26.0 - 26.4	0	-	-	0	-	-
670 - 679	26.4 - 26.8	0	-	-	0	-	-
680 - 689	26.8 - 27.2	1	4100.0	9.04	1	115	1.34
TOTALS:		2			2		

## 2000 SANTA FE LAKE. BLG LENGTH FREQUENCY/CONDITION

LENGTH MM	GROUP INCHES	TOTAL L-FREQ	MEAN WEIGHT		NO. WEIGHED	MEAN CONDITION	
			GRAMS	LBS		WR (95%)	KN (95%)
60 - 69	2.4 - 2.8	3	-	-	0	-	-
70 - 79	2.8 - 3.1	4	-	-	0	-	-
80 - 89	3.1 - 3.5	10	-	-	0	-	-
90 - 99	3.5 - 3.9	12	20.7	0.05	3	134 ( 33)	1.35 ( 0.3)
100 - 109	3.9 - 4.3	9	25.0	0.06	2	122 ( 140)	1.25 ( 1.3)
110 - 119	4.3 - 4.7	9	25.0	0.06	3	91 ( 7)	0.96 ( 0.1)
120 - 129	4.7 - 5.1	18	46.7	0.10	3	124 ( 40)	1.34 ( 0.4)
130 - 139	5.1 - 5.5	21	41.7	0.09	3	89 ( 46)	0.97 ( 0.5)
140 - 149	5.5 - 5.9	28	63.3	0.14	3	102 ( 42)	1.14 ( 0.5)
150 - 159	5.9 - 6.3	19	75.0	0.17	3	102 ( 19)	1.16 ( 0.2)
160 - 169	6.3 - 6.7	19	115.0	0.25	3	119 ( 14)	1.38 ( 0.2)
170 - 179	6.7 - 7.1	28	136.3	0.30	3	122 ( 20)	1.43 ( 0.2)
180 - 189	7.1 - 7.5	16	158.0	0.35	3	109 ( 15)	1.31 ( 0.2)
190 - 199	7.5 - 7.9	16	205.0	0.45	3	122 ( 8)	1.48 ( 0.1)
200 - 209	7.9 - 8.3	1	210.0	0.46	1	111	1.35
210 - 219	8.3 - 8.7	0	-	-	0	-	-
220 - 229	8.7 - 9.1	1	230.0	0.51	1	89	1.11
230 - 239	9.1 - 9.4	1	300.0	0.66	1	93	1.19
TOTALS:		215			35		

## 2000 SANTA FE LAKE. BLC LENGTH FREQUENCY/CONDITION

LENGTH GROUP		TOTAL L-FREQ	MEAN WEIGHT		NO. WEIGHED	MEAN CONDITION	
MM	INCHES		GRAMS	LBS		WR (95%)	KN (95%)
210 - 219	8.3 - 8.7	1	170.0	0.37	1	113	- 1.27 -
220 - 229	8.7 - 9.1	0	-	-	0	-	- - -
230 - 239	9.1 - 9.4	0	-	-	0	-	- - -
240 - 249	9.4 - 9.8	0	-	-	0	-	- - -
250 - 259	9.8 - 10.2	0	-	-	0	-	- - -
260 - 269	10.2 - 10.6	0	-	-	0	-	- - -
270 - 279	10.6 - 11.0	1	400.0	0.88	1	115	- 1.40 -
TOTALS:		2			2		



2000 SANTA FE LAKE. SPECIES FREQUENCY

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BLC 2            BLG 215            CCF 2            GSF 3            LMB 111

Total frequency: 333.