

CORRESPONDENCE/MEMORANDUM

DATE: November 16, 2005
TO: Mike Vogelsang, Woodruff
FROM: Bob Young, Woodruff
SUBJECT: Scattered Rice Lake, Forest County

Attached is the 2003 Comprehensive Fisheries Survey Report for Scattered Rice Lake in Forest County.

APPROVALS: _____
Mike Vogelsang, Headwaters Fishery Supervisor

Steve AveLallemant, NOR Fisheries Coordinator

NOTED: _____
Andy Fayram, FH/3

Cc: Tom Bashaw, Rhinelander

**Wisconsin Department of Natural Resources
Comprehensive Fisheries Survey Report**

Scattered Rice Lake, Forest County

2003



Lake and Location:

Scattered Rice Lake, Forest County, T36N-R14E-Sec 25 (WBIC 555200)

Physical/Chemical Attributes:

Morphometry: 486 acres, maximum depth 10 feet

Lake Type: Impoundment (two inlets, Birch Creek and Rat River; one outlet to Rat River)

Basic Water Chemistry: Mod. hard water - alkalinity 68 mg/l, conductance 157 umhos

Littoral substrate: 100% muck. Stumps and woody cover in about 40% of basin

Aquatic vegetation: Moderate to heavy coverage throughout the lake basin

Shoreline character: 80% upland, 20% wetland; adjacent to Village of Laona

Level of shoreline development: Low (avg. 1 structure about every 1400 feet of shoreline)

Winterkill: None reported

Other features: Lumber mill and dam at outlet with 6ft. head

Purpose of Survey: Assess status of gamefish, panfish and non-game species. Develop management recommendations.

Dates of Field Work: April 24, 2003 to September 22, 2003

Survey and Data Personnel: Matt Andre, Dave Brum, Ben Heimbach, Marty Kiepke, Joelle Underwood, Jordan Weeks, Mike Vogelsang, Keith Worrall, Bob Young

Report Author: Bob Young, Fisheries Biologist, Woodruff

Report Date: March 10, 2004

I. SUMMARY

Scattered Rice Lake was surveyed in 2003 with a variety of sampling gear to assess the status of all major fish communities. Sampling began with early spring fyke netting and electroshocking, targeted at adult gamefish abundance, and concluded with fall electroshocking for gamefish young-of-year recruitment. Included between those periods was late spring electroshocking for adult bass, late spring fyke netting targeted at panfish, and summer mini-fyke netting for panfish and non-game species.

A fish community consisting of 3 gamefish, 5 panfish, 2 bullhead, 1 sucker and 1 minnow species was sampled during the survey period (Figure1). Northern pike was the most commonly encountered gamefish, followed by largemouth bass (LMB) and a small number of muskellunge. Among the panfish, yellow perch were collected in relatively greater abundance than bluegill, pumpkinseed, black crappie or rock bass. All species encountered are maintained by natural reproduction, with the possible exception of muskellunge.

Largemouth bass were numerous, had a good size structure, and were growing at slightly above average rates. Muskellunge were very few in number and ranged in size from 23.3 to 46.5 inches in length. While no musky stocking has occurred in Scattered Rice Lake since 1979, muskies do have access to the lake from Wabicon Lake, 3.5 miles upstream on the Rat River. Northern pike were quite numerous (estimated at 9.8 adults per acre), with a poor size structure, and growing at average rates.

Among the panfish, a naturally reproducing population of black crappies with a good size structure and near average growth rates was found in Scattered Rice Lake. Bluegills, pumpkinseeds, and yellow perch were naturally reproducing, had fair to marginal size structures, and were growing at slightly above average rates. Rockbass were quite scarce. The somewhat small size structure of most panfish species, in spite of decent growth rates, is possibly related to high angling pressure on larger sizes.

Management recommendations are as follows:

Largemouth Bass - No active management of largemouth bass is recommended at this time. The current regulation of 5 daily bag, 14 inches minimum length is appropriate.

Muskellunge - No active management of muskellunge in Scattered Rice Lake is recommended at this time. The current regulation of 1 daily bag, 34 inches minimum length is appropriate.

Northern Pike - No active management of northern pike is recommended at this time. The current regulation of 5 bag, no minimum size is appropriate.

Black Crappie, Bluegill, Pumpkinseed, Yellow Perch - No active management of these panfish species is recommended at this time. Future work should be directed at assessing the need for, and potential success of a reduced panfish daily bag limit and/or minimum size limits for panfish.

General Lake Condition and Habitat – There is an abundance of habitat in the form of stumps and logs. There is no need for habitat enhancements or additions in Scattered Rice Lake.

Public Access – The current level of public access is adequate.

II. PAST MANAGEMENT AND SURVEYS

Known Stocking History

LM Bass – fingerlings, 1946-53

Muskellunge – fingerlings, 1965-79

Past Surveys and Findings

There is no record of any management surveys ever being conducted in Scattered Rice Lake.

III. METHODS

Scattered Rice Lake – Forest County 2003 Comprehensive Survey Sampling Summary

<u>Dates</u>	<u>Gear Type</u>	<u>Sampling Effort</u>	<u>Primary Objective</u>	<u>Other Objectives</u>
April 24 - 28, 2003	Fyke Nets	6 - 4 Foot, 27 Lifts	Gamefish Population Estimates (Marking). Yp and BC, LF and Age Data.	Collect Gamefish; Lengths Mark, and Aging Data. Gamefish and Nongamefish. CPE.
April 30, 2003	Electrofishing	4.6 Miles	Gamefish Population Estimates (1 st Run) Recapture Run	Collect Gamefish; Lengths, Mark, and Aging Data.
May 19, 2003	Electrofishing	4.6 Miles	Gamefish Population Estimates (2 nd Run)	Collect Gamefish; Lengths, Mark, and Aging Data.
May 27, 2003	Electrofishing	4.6 Miles	Gamefish Population Estimates (3 rd Run)	Collect Gamefish; Lengths, Mark, and Aging Data. CPE by Station.
June 3 - 6, 2003	Fyke Nets	4 - 4 Foot, 16 Lifts	Panfish Survey, CPE	Collect Panfish Aging Data. Gamefish Lengths.
July 30, 2003	Minifyke	6 Nets, 6 Lifts	Young of year and Nongame Species	Lengths and CPE
September 22, 2003	Electrofishing	4.0 Miles	2 Index and 2 Gamefish Stations	Lengths and CPE

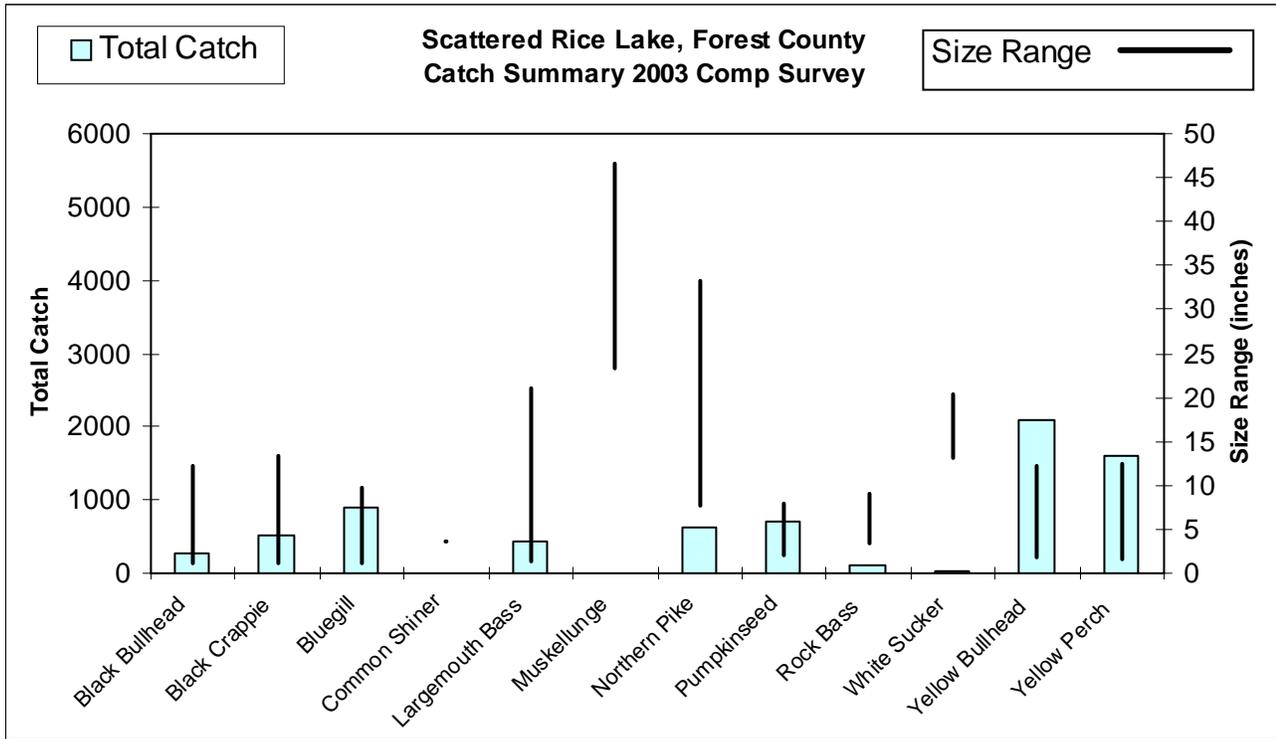
IV. SURVEY RESULTS

Results are summarized below. Corresponding data tables are in the Appendix.

CATCH SUMMARY

A fish community consisting of 3 gamefish, 5 panfish, 2 bullhead, 1 sucker and 1 minnow species was samples during the survey period (Figure1). Northern pike was the most commonly encountered gamefish, followed by largemouth bass (LMB) and a small number of muskellunge. Among the panfish, yellow perch were collected in relatively greater abundance than bluegill, pumpkinseed, black crappie or rock bass.

Figure 1.



GAMEFISH RELATIVE ABUNDANCE

Early and late spring fyke netting yielded relatively more northern pike than bass and muskies (Figure 2). Spring electroshocking (first 3 runs combined) collected good numbers of largemouth bass, compared to northern pike and muskies (Figure 3). Fall electroshocking yielded good numbers of both largemouth bass and northern pike, with pike being relatively more common.

Figure 2.

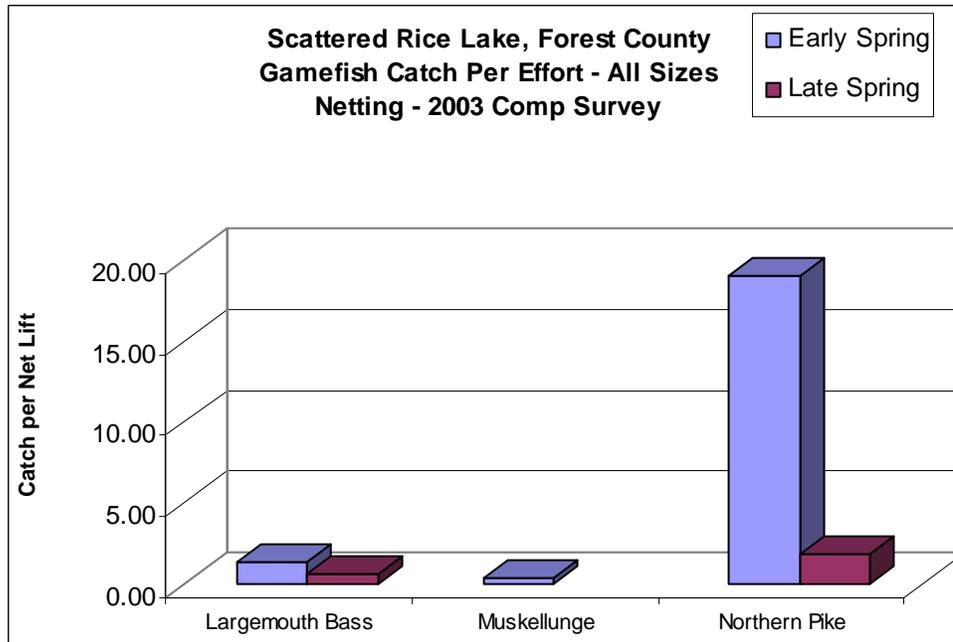
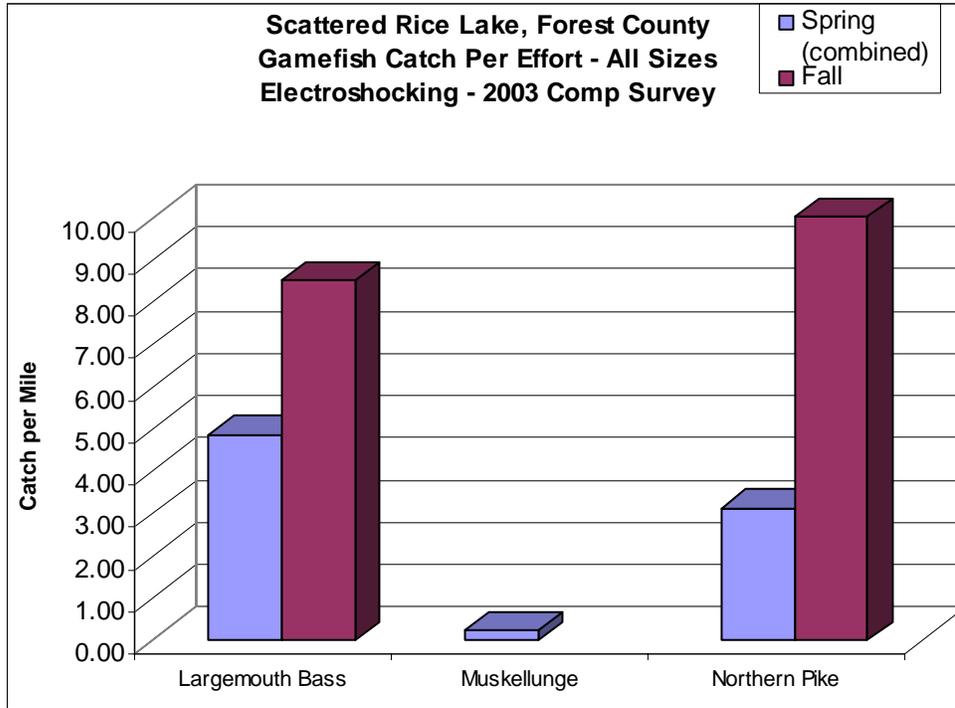


Figure 3.

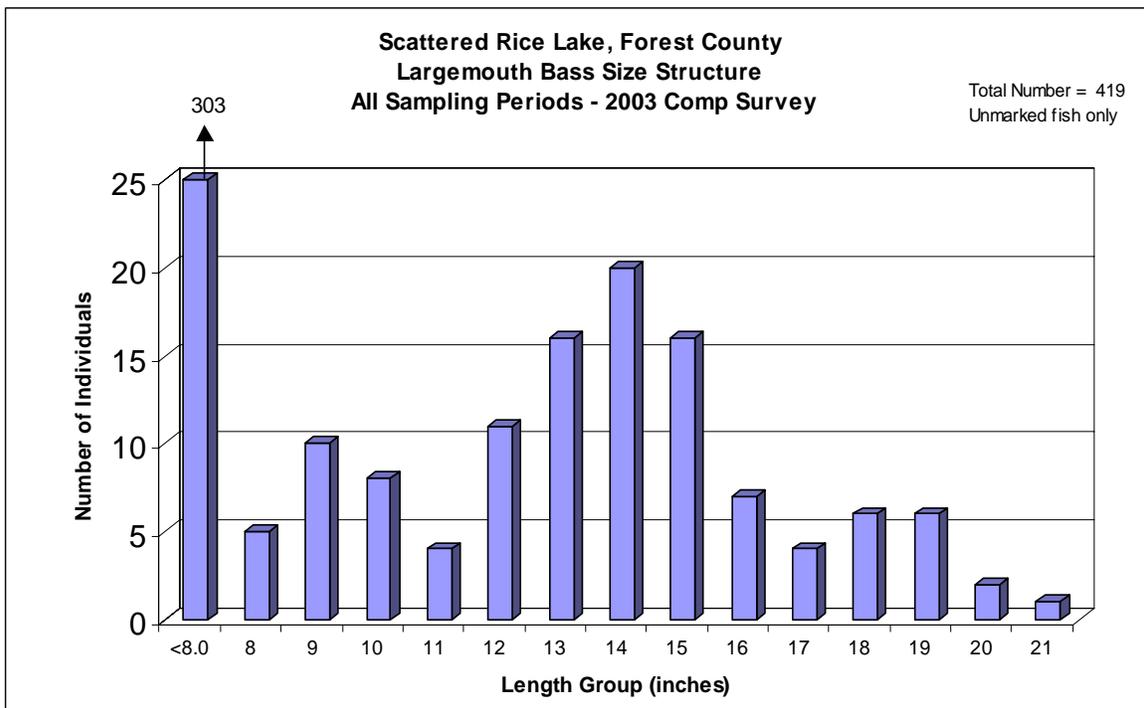


LARGEMOUTH BASS

Size Structure

A total of 419 largemouth bass (LMB) were measured for total length (TL) during the survey period (Figure 4). For the 116 LMB larger than 8.0 inches TL, the modal (most common) size was 14 inches, and the average was 13.6 inches TL. We found good numbers of LMB above the legal minimum size of 14 inches.

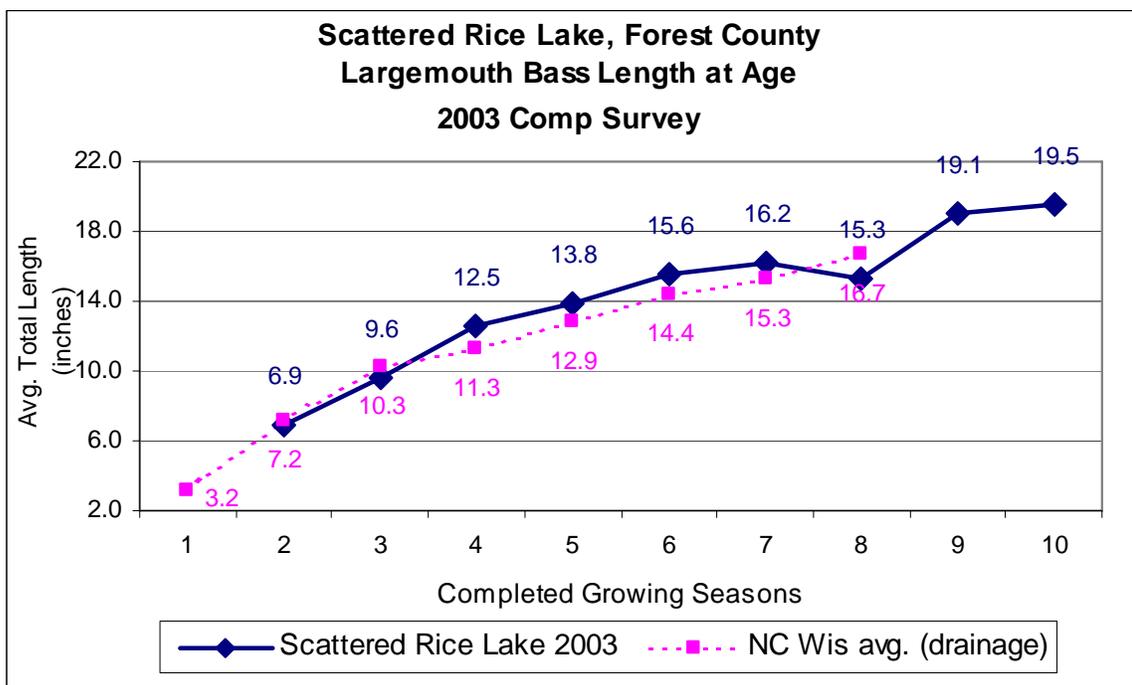
Figure 4.



Growth

A total of 82 largemouth bass (LMB) were aged by examining scales. Growth, as inferred from length at age, was generally above the average for similar north central Wisconsin lakes (Figure 5).

Figure 5.



Abundance

A mark/recapture, Chapman-modified, Schnabel sampling method used to calculate abundance estimated the adult LMB population at 1405 fish, or 2.9 per acre. Only 2 marked bass were subsequently recaptured. Based on 95% confidence intervals, the actual numbers could range from 391 to 14,041 fish, or 0.8 to 28.9 fish per acre. Due to the low number of recaptures, the coefficient of variation for the estimate was 71%, far beyond the acceptable maximum of 40%.

MUSKELLUNGE

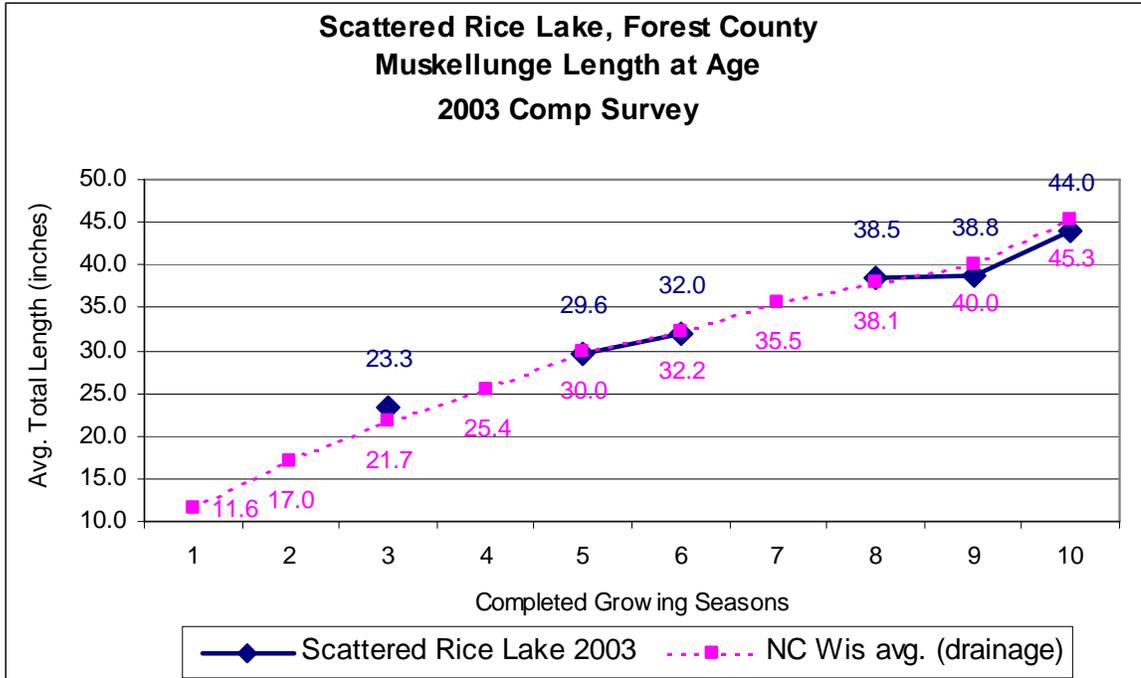
Size Structure and Abundance

A total of 12 muskies were captured during the survey period, ranging in size from 23.3 to 46.5 inches TL.

Growth

A total of 10 muskies were aged by examining scales. Growth, as inferred from length at age, was near the average for similar north central Wisconsin lakes (Figure 6).

Figure 6.

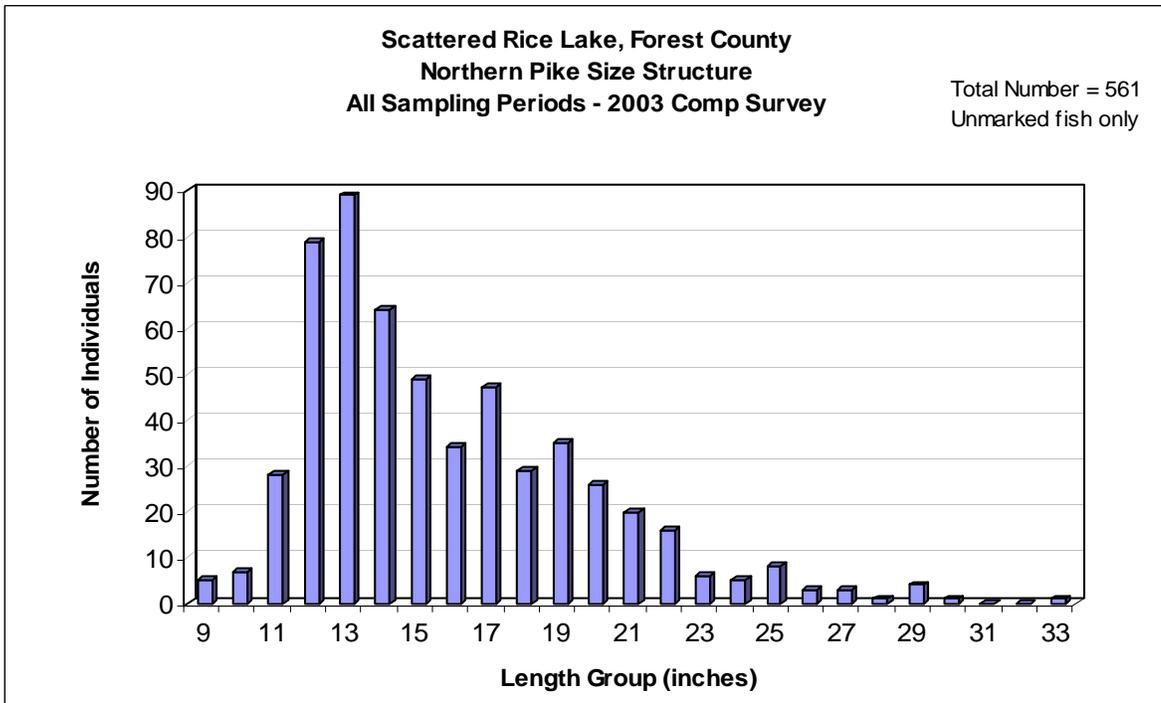


NORTHERN PIKE

Size Structure

A total of 561 northern pike (NP) were measured for total length (TL) during the survey period (Figure 7). The modal size was 13 inches, and the average was 15.3 inches TL. Although we found good numbers of pike, few were of quality size.

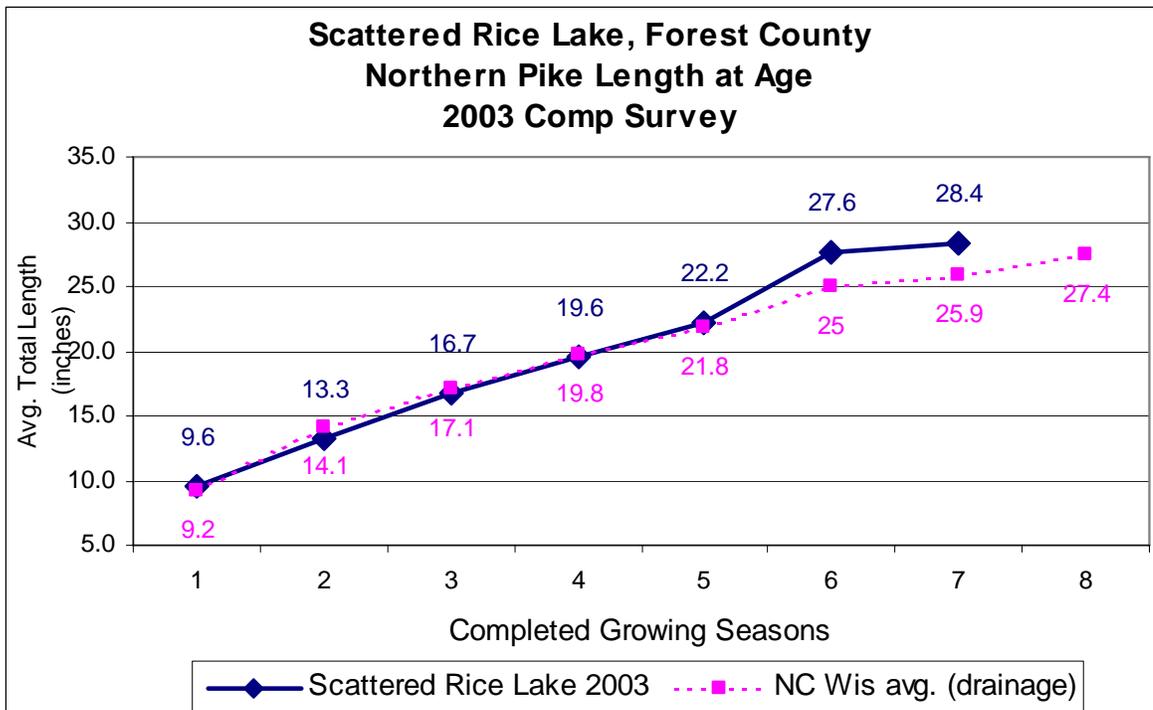
Figure 7.



Growth

A total of 289 northern pike were aged by examining scales. Growth, as inferred from length at age, was near the average for similar north central Wisconsin lakes up to age 5, but above average for older ages (Figure 8).

Figure 8.



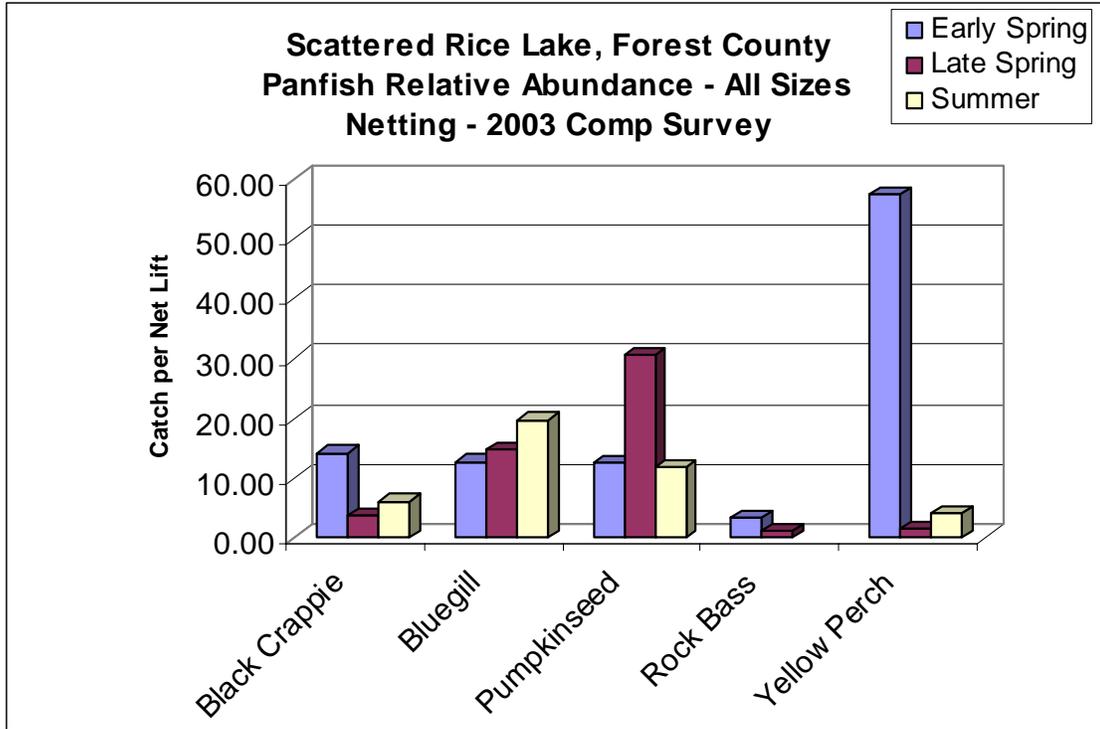
Abundance

A mark/recapture, Chapman-modified, Schnabel sampling method used to calculate abundance estimated the adult NP population at 4779 fish, or 9.8 per acre. Based on 95% confidence intervals, the actual numbers could range from 3167 to 7618 fish, or 6.5 to 15.7 fish per acre. The coefficient of variation for the estimate was 21.3%, well below the acceptable maximum of 40%.

PANFISH RELATIVE ABUNDANCE

Yellow perch were relatively much more numerous than the other panfish in the early spring nets, which were targeted at percids and esocids (Figure 9). Late spring netting, which targeted centrarchid panfish, yielded relatively more pumpkinseed than the other panfish, including bluegill. Bluegills were relatively greater in abundance than the other panfish during summer netting for young-of-year panfish.

Figure 9.



BLACK CRAPPIE

Size Structure

A total of 311 crappies were measured for TL in spring fyke nets. Average size was 8.7 inches, while the maximum was 13.2 inches (Figure 10). Black crappie size quality as determined by proportional and relative stock indices revealed 62% were larger than a “quality” size of 8 inches, and 32% larger than a “preferred” size of 10 inches (Figure 11).

Figure 10.

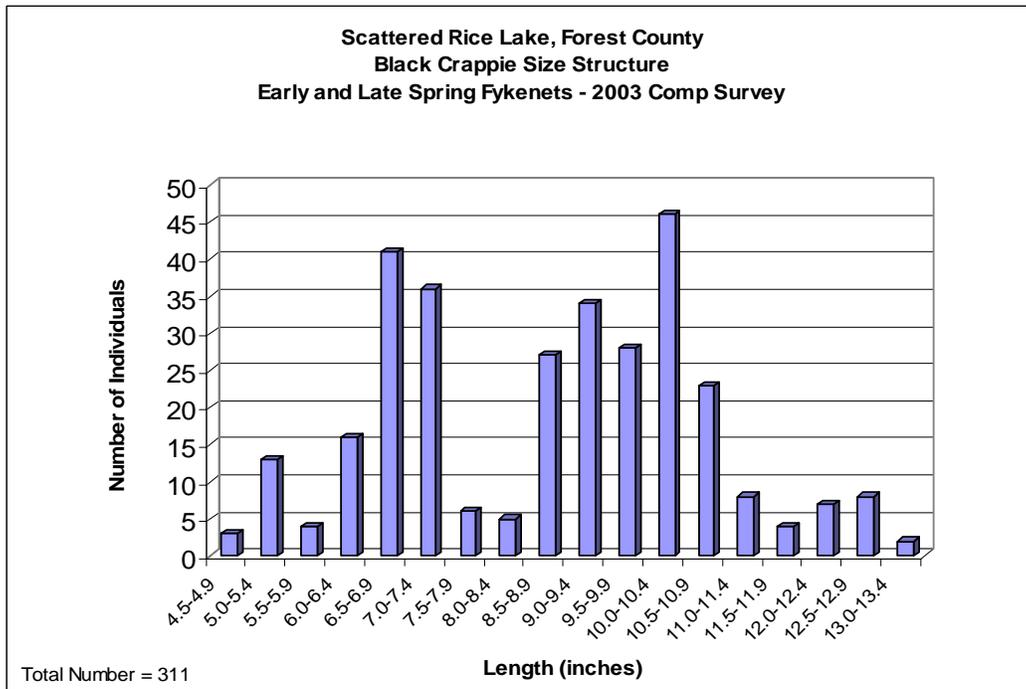
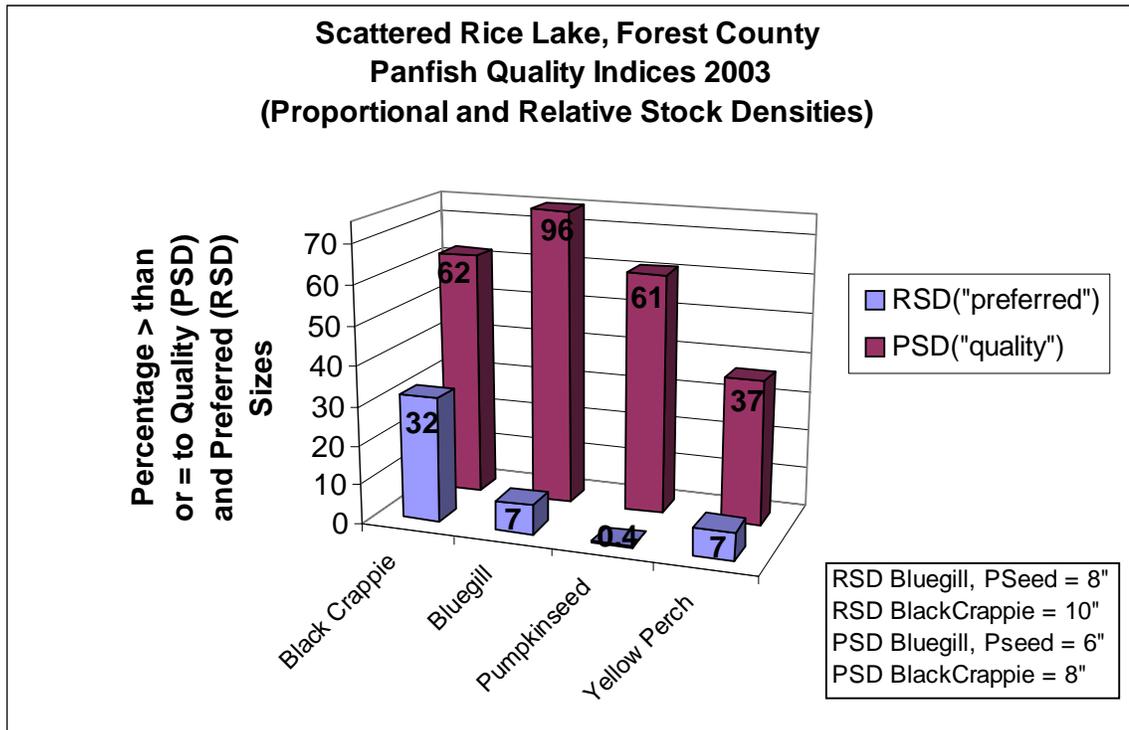


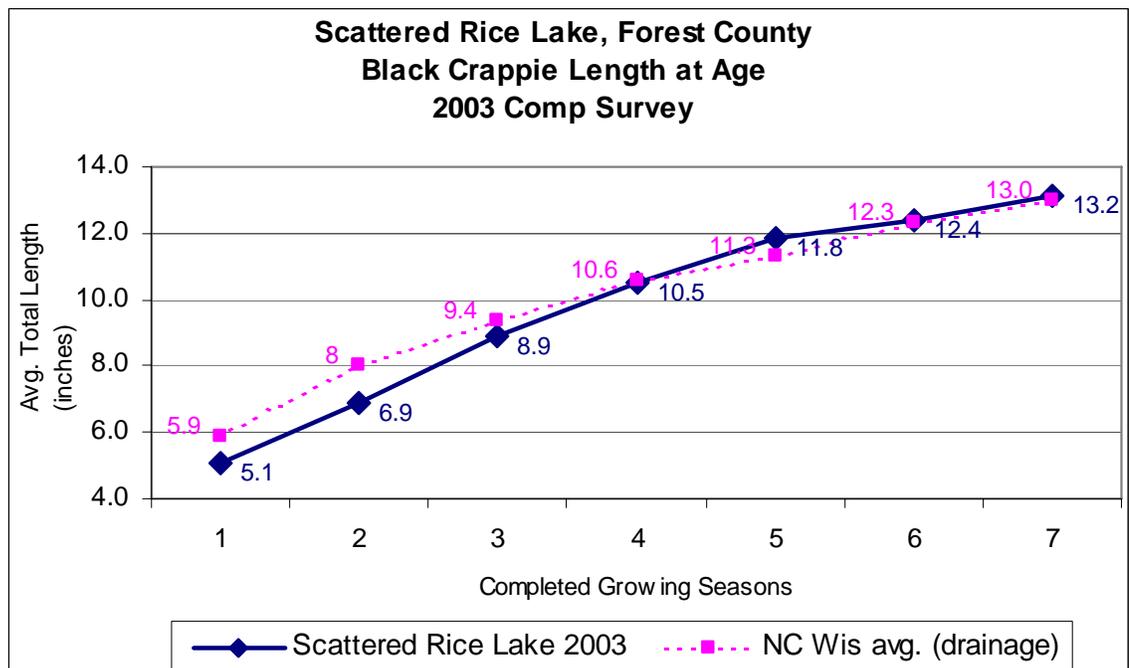
Figure 11.



Growth

A total of 145 black crappies were aged by examining scales. Growth, as inferred from length at age, was somewhat below average for crappies to age 3, and about average for older fish when compared to similar north central Wisconsin lakes (Figure 12).

Figure 12.

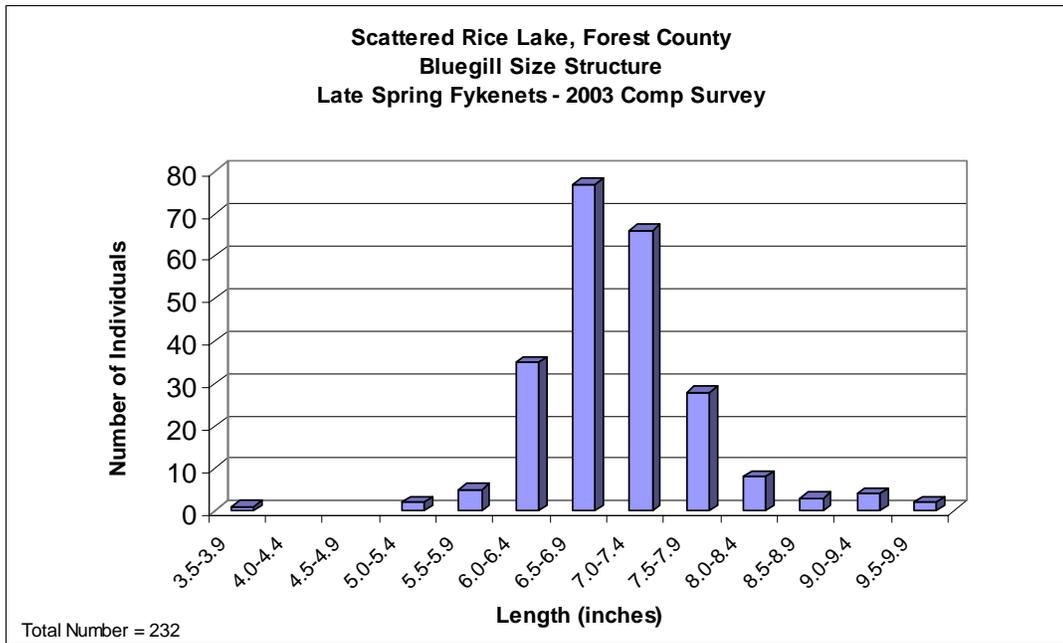


BLUEGILL

Size Structure

A total of 232 bluegills were measured for TL in late spring fyke nets. Modal size was 6.7 inches, while the maximum was 9.7 inches (Figure 13). Bluegill size quality as determined by proportional and relative stock indices revealed 96% were larger than a “quality” size of 6 inches, but only 7% larger than a “preferred” size of 8 inches (Figure 11).

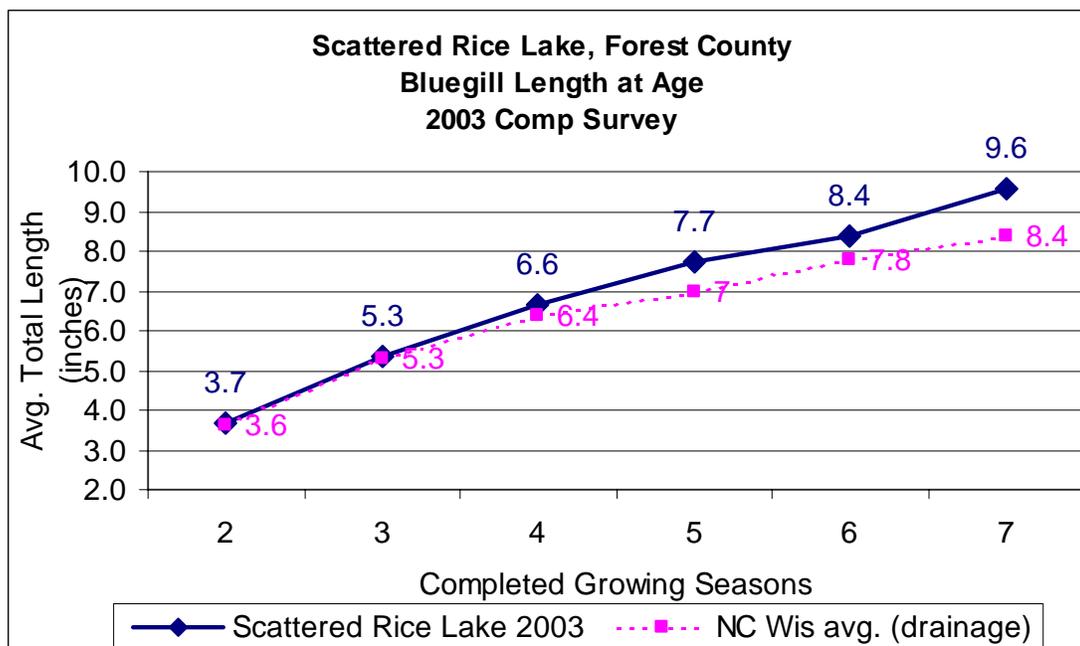
Figure 13.



Growth

A total of 64 bluegills were aged by examining scales. Growth, as inferred from length at age, was generally above the average for similar north central Wisconsin lakes (Figure 14).

Figure 14.

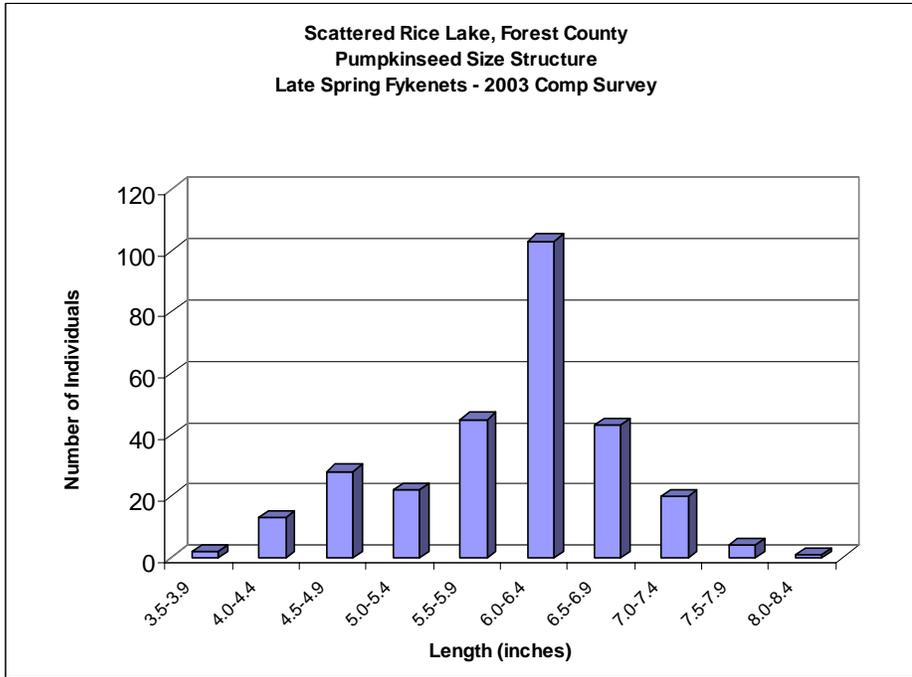


PUMPKINSEED

Size Structure

A total of 281 pumpkinseed sunfish were measured for TL in late spring fyke nets (Figure 15). Those that appeared to be bluegill x pumpkinseed hybrids were counted as pumpkinseeds. Modal size was 6.0-6.4 inches, while the maximum was 8.4 inches. Pumpkinseed size quality as determined by proportional and relative stock indices revealed 61% were larger than a “quality” size of 6 inches, but only 0.4% larger than a “preferred” size of 8 inches (Figure 11).

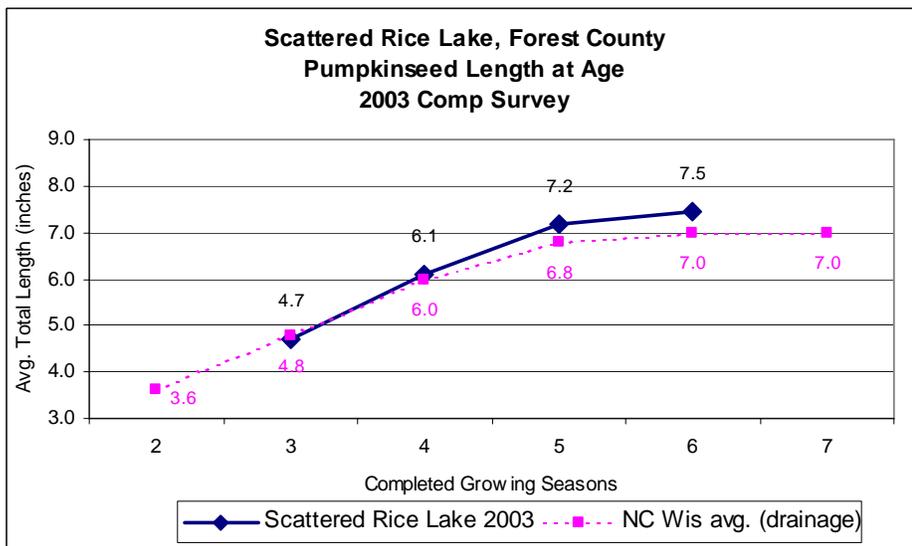
Figure 15.



Growth

A total of 75 pumpkinseeds were aged by examining scales. Growth, as inferred from length at age, was average to slightly above the average for similar north central Wisconsin lakes (Figure 16).

Figure 16.



ROCKBASS

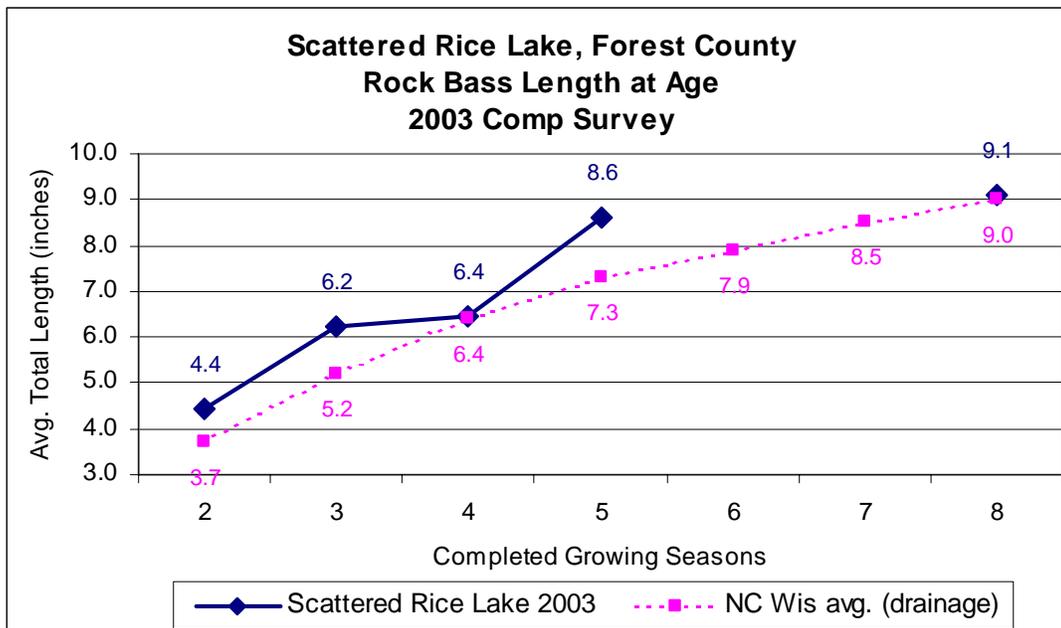
Size Structure

A total of 16 rockbass were measured for TL in late spring fyke nets, ranging in size from 3.5 to 9.4 inches. Modal size was 6.0-6.4 inches.

Growth

Fifteen rockbass were aged by examining scales. Growth, as inferred from length at age, was above the average for similar north central Wisconsin lakes (Figure 17).

Figure 17.

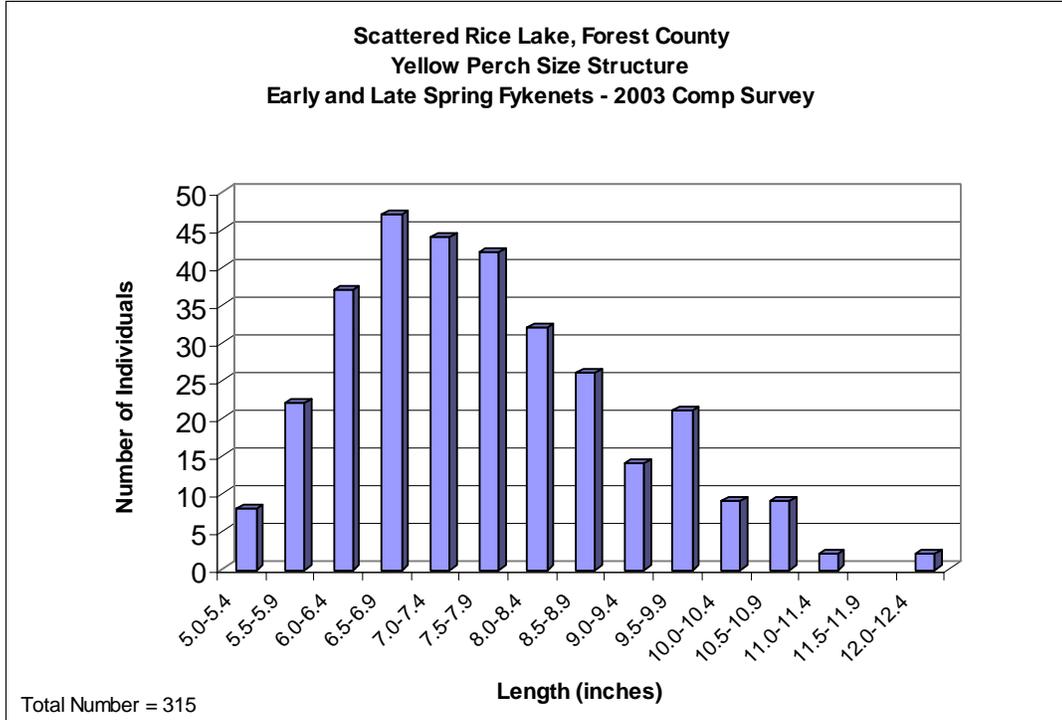


YELLOW PERCH

Size Structure

A total of 315 yellow perch were measured for TL in spring fyke nets (Figure 18). Modal size was 6.5-6.9 inches, while the maximum was 12.4 inches. Yellow perch size quality as determined by proportional and relative stock indices revealed 37% were larger than a “quality” size of 8 inches, but only 7% larger than a “preferred” size of 10 inches (Figure 11).

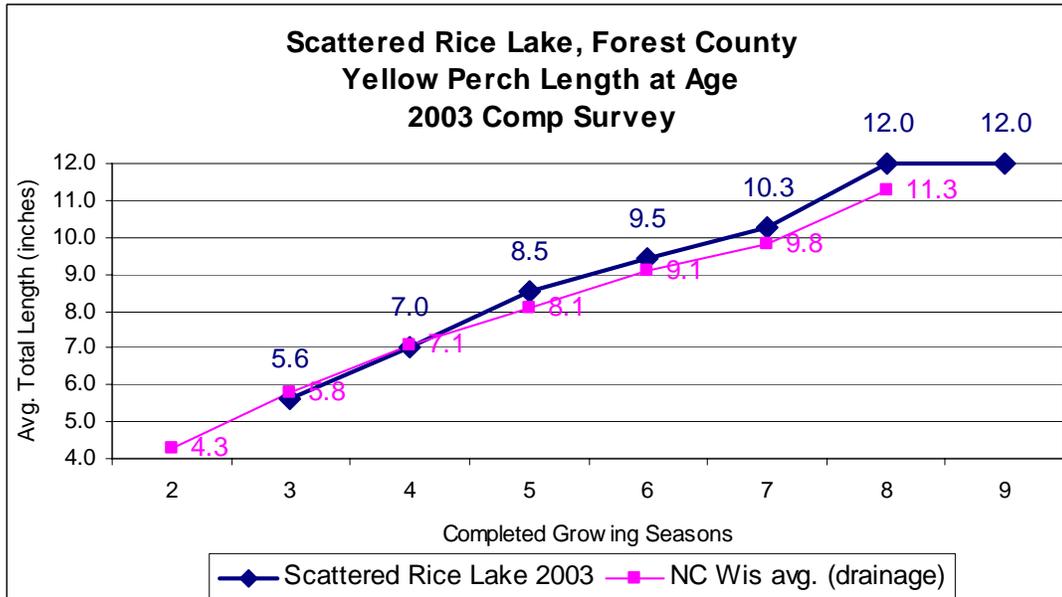
Figure 18.



Growth

A total of 126 yellow perch were aged by examining scales. Growth, as inferred from length at age, was slightly above the average for similar north central Wisconsin lakes (Figure 19).

Figure 19.



V. DISCUSSION AND RECOMMENDATIONS

GAMEFISH

Largemouth Bass – A naturally reproducing population with good size structure and above average growth rates is presently in Scattered Rice Lake. Although the population estimate was poor due to the small numbers of recaptures, it appears LMB are quite numerous. Habitat in the form of woody cover is extensive, and likely is a major factor in the quality bass population of Scattered Rice Lake.

Recommendation: No active management of largemouth bass in Pine Lake is recommended at this time. The current regulation of 5 daily bag, 14 inches minimum length is appropriate.

Muskellunge – Few muskies were captured, and little can be said with certainty about the status of their population. No muskies have been stocked into Scattered Rice Lake since 1979, which would suggest all the muskies captured during this survey were naturally reproduced. However, Wabicon Lake is regularly stocked with muskie fingerlings, and is about 3.5 miles upstream from Scattered Rice Lake on the Rat River. Muskies will probably continue to be present in low numbers in Scattered Rice Lake, either by natural reproduction or migration from Wabicon Lake.

Recommendation: No active management of muskellunge in Scattered Rice Lake is recommended at this time. The current regulation of 1 daily bag, 34 inches minimum length is appropriate.

Northern Pike – A naturally reproducing, large population with poor size structure and average growth rates is presently in Scattered Rice Lake. Few pike are growing to quality sizes.

Recommendation: No active management of northern pike in Pine Lake is recommended at this time. The current regulation of 5 bag, no minimum size is appropriate.

PANFISH

Black Crappie– A naturally reproducing population of black crappies with a good size structure and average growth rates is presently in Scattered Rice Lake. Catch rates of black crappies in spring nets were fairly high, suggesting a sizable population.

Bluegill and Pumpkinseed - Naturally reproducing populations of bluegills and pumpkinseeds with fair to marginal size structures and slightly above average growth rates is presently in Scattered Rice Lake. The combined catch rate for both species in late spring nets was good, suggesting sizable populations. We found relatively few fish of either species over 8 inches in length, in spite of decent growth rates, which could be a result of angler harvest. While creel data are not available, we observed many anglers on Scattered Rice Lake in early summer 2003, most likely targeting centrarchid panfish.

Yellow Perch - A naturally reproducing population of yellow perch with a fair size structure and slightly above average growth rates is presently in Scattered Rice Lake. As with the centrarchid panfish, we found relatively few perch over a “preferred” size, in spite of decent growth rates. Angler harvest of larger individuals may also be a significant factor in structuring the sizes of the perch population.

Recommendation: No active management of black crappie, bluegill, pumpkinseed or yellow perch in Scattered Rice Lake is recommended at this time. The appropriateness of a reduced panfish daily bag limit and/or minimum size limits for panfish should be evaluated following a creel survey.

Other Panfish - Rockbass were relatively very low in abundance compared to the other panfish. No management recommendations for this species are needed at this time.

GENERAL LAKE CONDITION and HABITAT

As mentioned above, woody cover in the form of stumps and logs is very abundant in Scattered Rice Lake (Figure 20). On a seasonal basis, a significant portion of the lake basin also supports a dense growth of wild rice. The great amount of cover provides much habitat and also limits angler access, especially for largemouth bass and black crappies. There is no need for habitat enhancements or additions in Scattered Rice Lake.

Figure 20.



PUBLIC ACCESS

The current boat access just upstream of the railroad bridge is adequate for the amount of use.

APPENDIX

Appendix Table numbering corresponds with Figures in the SURVEY RESULTS section.

Table 1. Scattered Rice Lake, Forest County 2003 Comprehensive Fisheries Survey

Catch Summary

Fish Species		Catch (and Size Range in Inches) by Sampling Period												Total Catch		
		Early Spring			Late Spring			Summer			Fall					
		Common Name	Scientific Name	Catch	MinSize	MaxSize	Catch	MinSize	MaxSize	Catch	MinSize	MaxSize	Catch	MinSize	MaxSize	Catch
Black Bullhead	<i>Ictalurus melas</i>	162	ND	ND	93	5.0	12.3	4	1.1	1.9	6	6.6	9.9	265	1.1	12.3
Black Crappie	<i>Pomoxis nigromaculatus</i>	380	5.0	13.4	60	4.9	13.2	36	1.2	2.0	46	3.1	12.8	522	1.2	13.4
Bluegill	<i>Lepomis macrochirus</i>	340	ND	ND	232	3.4	9.7	118	1.1	3.5	204	1.3	8.4	894	1.1	9.7
Common Shiner	<i>Notropis cornutus</i>										1	3.7	3.7	1	3.7	3.7
Largemouth Bass	<i>Micropterus salmoides</i>	105	4.5	20.1	10	6.1	8.4	272	1.4	4	34	8	21.1	421	1.4	21.1
Muskellunge	<i>Esox masquinongy</i>	12	23.3	46.5										12	23.3	46.5
Northern Pike	<i>Esox lucius</i>	556	8.0	33.2	24	11.5	21.2				40	7.6	26.9	620	7.6	33.2
Pumpkinseed	<i>Lepomis gibbosus</i>	338	ND	ND	281	3.6	8.0	71	2.1	3.4	19	2.9	6.9	709	2.1	8.0
Rock Bass	<i>Ambloplites rupestris</i>	93	ND	ND	17	3.5	9.1				1	8.8	8.8	111	3.5	9.1
White Sucker	<i>Catostomus commersoni</i>	21	ND	ND	2	16.5	20.3				8	13.1	19	31	13.1	20.3
Yellow Bullhead	<i>Ictalurus natalis</i>	1665	ND	ND	389	4.4	12.2	2	1.8	6.4	33	5.8	11.8	2089	1.8	12.2
Yellow Perch	<i>Perca flavescens</i>	1550	8	12.4	23	5.9	11	24	1.6	2.5	18	3.9	10	1615	1.6	12.4

ND = No Data

Table 2. Gamefish CPE's - Netting - Scattered Rice L

2003	Early	Late
	Spring	Spring
Largemouth Bass	1.41	0.63
Muskellunge	0.33	
Northern Pike	19.00	1.81

Table 3. Gamefish CPE's - Shocking - Scattered Rice L

2003		
	Spring (combined)	Fall
Largemouth Bass	4.86	8.50
Muskellunge	0.22	
Northern Pike	3.12	10.00

unmarked fish only				
INCH				
GROUP	04/24 - 06/06/03	7/29-30/03	9/22/03	Totals
<8.0	31	272		303
8	3		2	5
9	2		8	10
10	4		4	8
11	2		2	4
12	8		3	11
13	15		1	16
14	15		5	20
15	15		1	16
16	4		3	7
17	4			4
18	5		1	6
19	4		2	6
20	1		1	2
21	0		1	1
22	0			0
23	0			0
24	0			0
25+	0			0
				0
TOTAL	113	272	34	419

Scattered Rice Lake 2003		NC Wis avg. (drainage)
age	survey avg length	length
1		3.2
2	6.9	7.2
3	9.6	10.3
4	12.5	11.3
5	13.8	12.9
6	15.6	14.4
7	16.2	15.3
8	15.3	16.7
9	19.1	
10	19.5	

Scattered Rice Lake 2003		NC Wis avg. (drainage)
age	survey avg length	length
1		11.6
2		17.0
3	23.3	21.7
4		25.4
5	29.6	30.0
6	32.0	32.2
7		35.5
8	38.5	38.1
9	38.8	40.0
10	44.0	45.3

INCH	04/23 - 06/05/03	9/22/03	totals
unmarked fish only			
GROUP	04/23 - 06/05/03	9/22/03	totals
<8.0		1	1
8			0
9	3	2	5
10	6	1	7
11	28		28
12	75	4	79
13	82	7	89
14	58	6	64
15	46	3	49
16	34		34
17	42	5	47
18	25	4	29
19	33	2	35
20	24	2	26
21	18	2	20
22	16		16
23	6		6
24	5		5
25	8		8
26	2	1	3
27	3		3
28	1		1
29	4		4
30	1		1
31	0		0
32	0		0
33	1		1
TOTALS	521	40	561

age	Scattered Rice Lake 2003 survey avg length	NC Wis avg. (drainage) length
1	9.6	9.2
2	13.3	14.1
3	16.7	17.1
4	19.6	19.8
5	22.2	21.8
6	27.6	25
7	28.4	25.9
8		27.4

Nets	Early	Late	Summer
	Spring	Spring	
Black Crappie	14.11	3.75	6.00
Bluegill	12.59	14.69	19.67
Pumpkinseed	12.52	30.56	11.83
Rock Bass	3.26	1.06	
Yellow Perch	57.41	1.44	4.00

Table 10. Black Crappie LF Scattered Rice Lake 200 fyke nets early and late spring

Size Range	number BC
4.5-4.9	3
5.0-5.4	13
5.5-5.9	4
6.0-6.4	16
6.5-6.9	41
7.0-7.4	36
7.5-7.9	6
8.0-8.4	5
8.5-8.9	27
9.0-9.4	34
9.5-9.9	28
10.0-10.4	46
10.5-10.9	23
11.0-11.4	8
11.5-11.9	4
12.0-12.4	7
12.5-12.9	8
13.0-13.4	2
Total	311

Table 11. Scattered Rice Lake Panfish Proportional and Relative Stock Densities							
		number >=	number >=	number >=			
		min pref	min quality	min stock			
species	sample	length *	length *	length	RSD("preferred")	PSD("quality")	No. of Fish
Black Crappie	early and late spring fyke nets	98	192	308	32	62	311
Bluegill	late spr fykes	17	223	232	7	96	232
Pumpkinseed	late spr fykes	1	171	281	0.4	61	281
Yellow Perch	early and late spring fyke nets	22	115	315	7	37	315

* Bluegill & Pumpkinseed PSD6" RSD8"

* Black Crappie & Perch PSD8" RSD10"

Table 12. Black Crappie length at age (inches)

	Scattered Rice Lake 2003		NC Wis avg. (drainage)
age	survey avg length		length
1	5.1		5.9
2	6.9		8
3	8.9		9.4
4	10.5		10.6
5	11.8		11.3
6	12.4		12.3
7	13.2		13.0

Table 13. Bluegill LF Scattered Rice Lake 2003

fyke nets June 3-6	
Size Range	number BG
<2	
2.0-2.4	
2.5-2.9	
3.0-3.4	1
3.5-3.9	1
4.0-4.4	
4.5-4.9	
5.0-5.4	2
5.5-5.9	5
6.0-6.4	35
6.5-6.9	77
7.0-7.4	66
7.5-7.9	28
8.0-8.4	8
8.5-8.9	3
9.0-9.4	4
9.5-9.9	2
Totals	232

Table 14. Bluegill length at age (inches)

	Scattered Rice Lake 2003		NC Wis avg. (drainage)
age	survey avg length		length
2	3.7		3.6
3	5.3		5.3
4	6.6		6.4
5	7.7		7
6	8.4		7.8
7	9.6		8.4

Table 15. Pumpkinseed LF Scattered Rice Lake 2003

fyke nets June 3-6	
Size Range	number PS
<2	
2.0-2.4	
2.5-2.9	
3.0-3.4	
3.5-3.9	2
4.0-4.4	13
4.5-4.9	28
5.0-5.4	22
5.5-5.9	45
6.0-6.4	103
6.5-6.9	43
7.0-7.4	20
7.5-7.9	4
8.0-8.4	1
8.5-8.9	
9.0-9.4	
9.5-9.9	
Totals	281

Table 16. Pumpkinseed length at age (inches)

Scattered Rice Lake 2003		
age	survey avg length	NC Wis avg. (drainage) length
2		3.6
3	4.7	4.8
4	6.1	6.0
5	7.2	6.8
6	7.5	7.0
7		7.0

Table 17. Rockbass length at age (inches)

Scattered Rice Lake 2003		
age	survey avg length	NC Wis avg. (drainage) length
2	4.4	3.7
3	6.2	5.2
4	6.4	6.4
5	8.6	7.3
6		7.9
7		8.5
8	9.1	9.0

Table 18. Yellow Perch LF Scattered Rice Lake 2003 fyke nets early and late spring

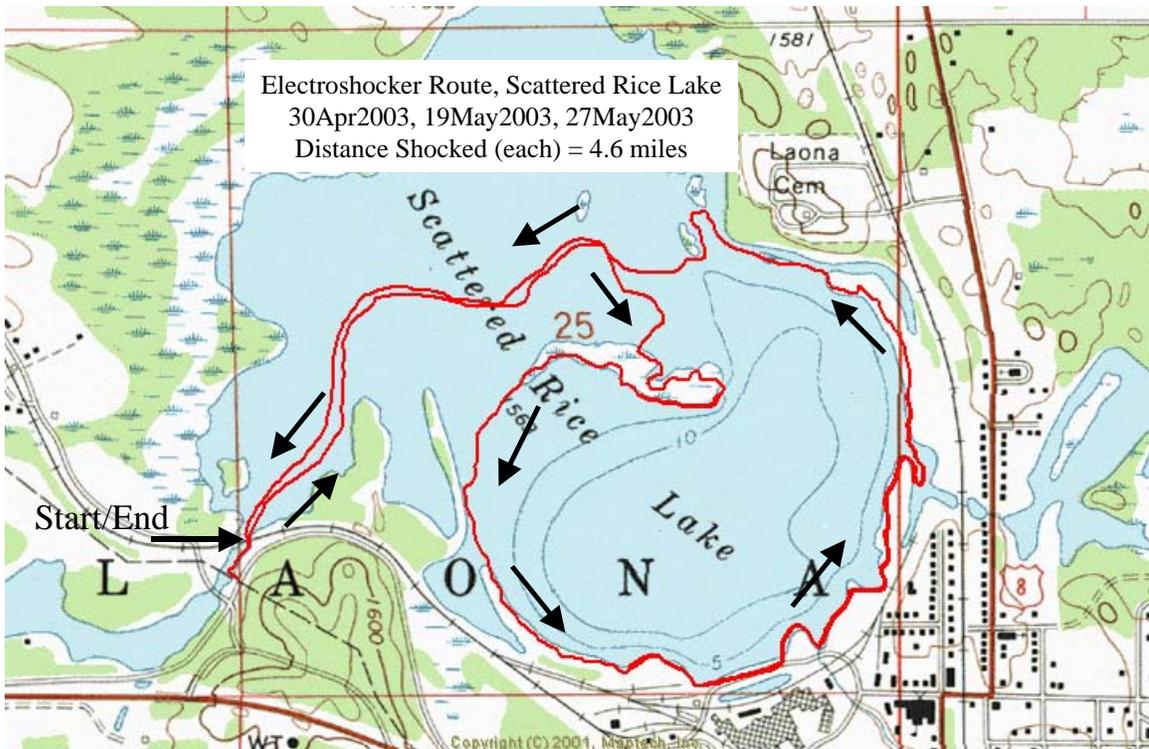
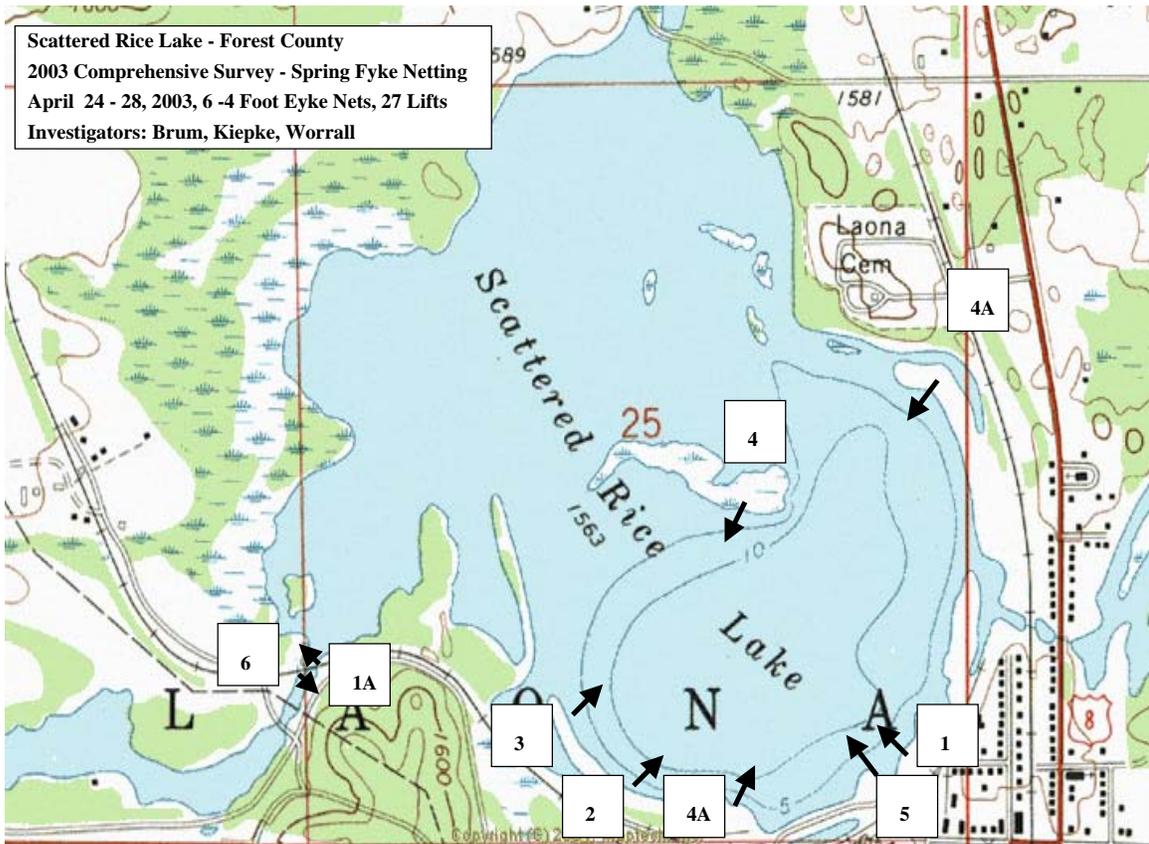
Size Range	number YP
<2	
2.0-2.4	
2.5-2.9	
3.0-3.4	
3.5-3.9	
4.0-4.4	
4.5-4.9	
5.0-5.4	8
5.5-5.9	22
6.0-6.4	37
6.5-6.9	47
7.0-7.4	44
7.5-7.9	42
8.0-8.4	32
8.5-8.9	26
9.0-9.4	14
9.5-9.9	21
10.0-10.4	9
10.5-10.9	9
11.0-11.4	2
11.5-11.9	
12.0-12.4	2
12.5-12.9	
13.0-13.4	

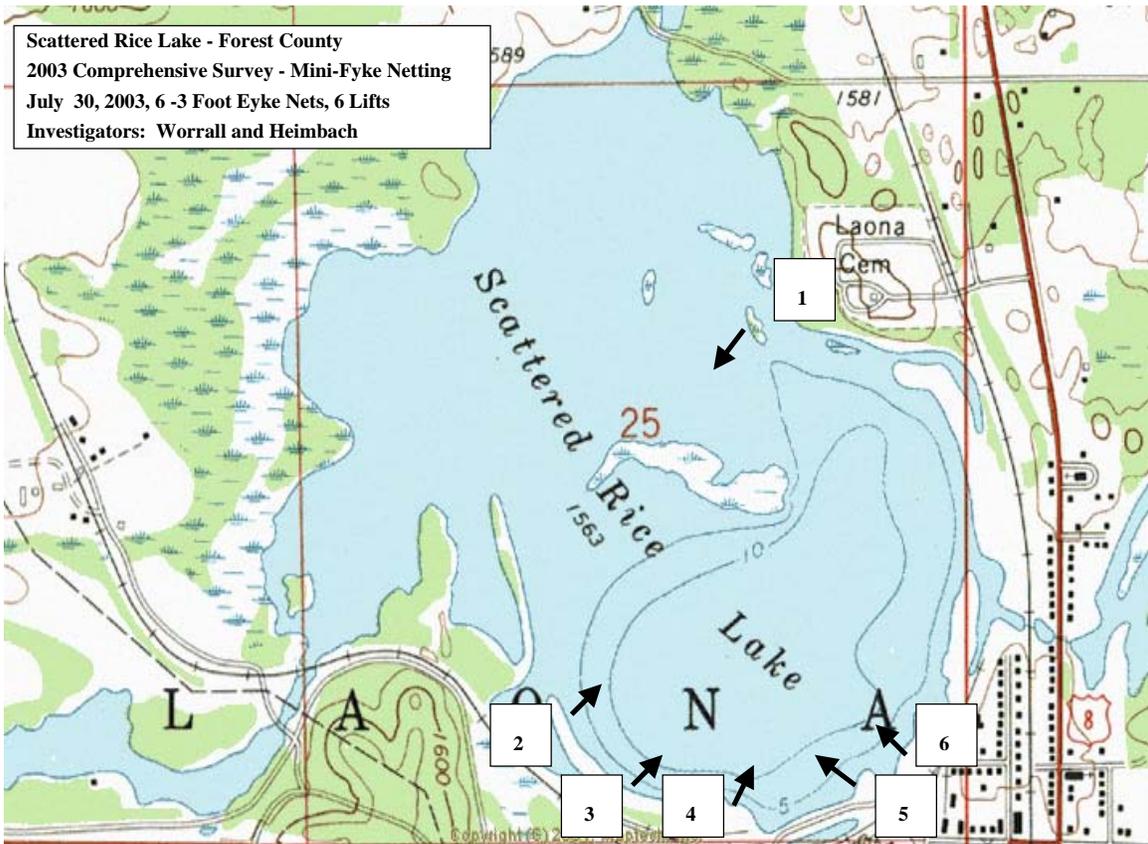
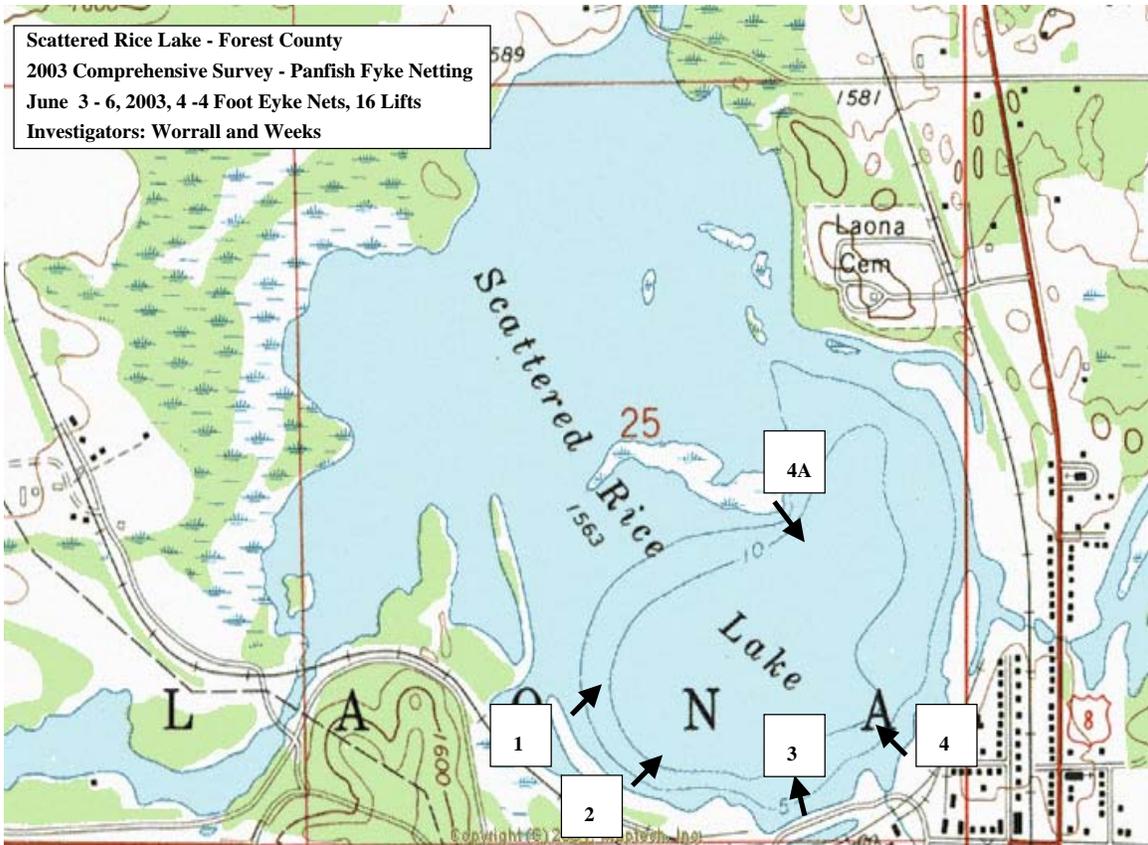
Total 315

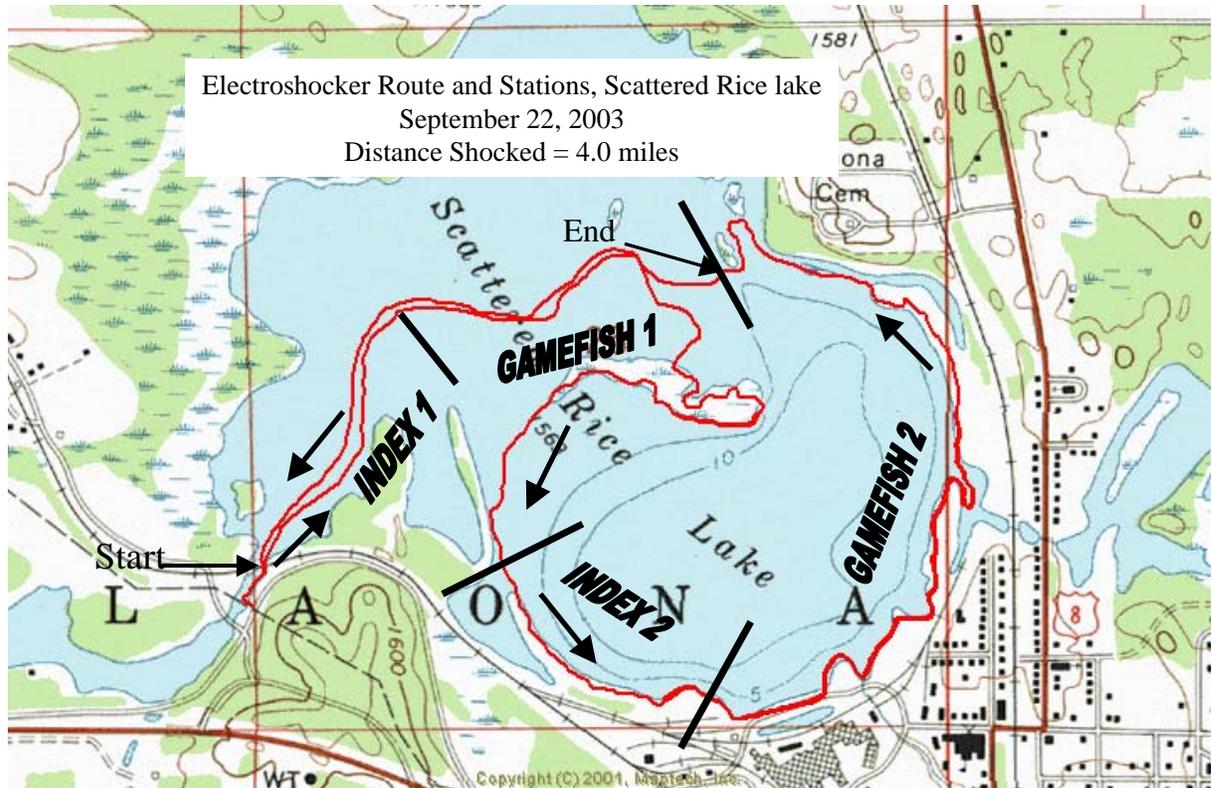
Table 19. Yellow perch length at age (inches)

age	Scattered Rice Lake 2003 NC Wis avg. (drainage)	
	survey avg length	length
2		4.3
3	5.6	5.8
4	7.0	7.1
5	8.5	8.1
6	9.5	9.1
7	10.3	9.8
8	12.0	11.3
9	12.0	

SAMPLE LOCATIONS







SAMPLE LOCATION COORDINATES

Scattered Rice Lake, Forest County
2003 Comp Survey

Station Locations
Map Datum WGS84

STATIONS

Date	Station	Latitude Degrees	Latitude Minutes	Longitude Degrees	Longitude Degrees
September 22, 2003	End Index 1/Start Gamefish 1	45 N	34.385	88 W	41.474
September 22, 2003	End Gamefish 1/Start Index 2	45 N	34.102	88 W	41.298
September 22, 2003	End Index 2/Start Gamefish 2	45 N	33.906	88 W	40.920
September 22, 2003	End Gamefish 2	45 N	34.458	88 W	40.888