Comprehensive Fisheries Survey Report

Lake and Location:

Trump Lake, Forest County, T35N-R15E-Sec31 (WBIC 0479300)

Physical/Chemical Attributes:

Morphometry: 172 acres, maximum depth 20 feet, estimated mean depth 9 feet

Lake Type: Drained (no inlet, one outlet to Eugene Lake)

Basic Water Chemistry: Soft - low alkalinity and conductance (21mg/l and 51umhos)

Littoral substrate: 50% sand, 35% muck, 10% gravel, 5% rubble **Aquatic vegetation**: moderate to heavy growth of submerged species

Shoreline character: 85% upland, 15% wetland

Level of shoreline development: Intense (avg. 1 structure < every 147 feet of shoreline)

Winterkill: none reported or expected

Other features: Clear water

<u>Purpose of Survey</u>: Assess status of gamefish, panfish and non-game species. Develop management

recommendations.

<u>Dates of Field Work</u>: April 8, 1998 to September 24, 1998

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Timler, Gary Muench, Steve Kramer, Marty Kiepke,

Report Author: Bob Young, Fisheries Biologist, Woodruff

Report Date: January 14, 2002

I. SUMMARY

Trump Lake was surveyed in 1998 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.

Five gamefish, 6 panfish and 7 non-game species were captured during the survey period. Largemouth bass (LMB) was the most commonly encountered gamefish, followed by walleye and northern pike (NP). Muskellunge and smallmouth bass appear to exist as only remnant populations. LMB size structure is indicative of heavy angling pressure and harvest of individuals greater than 14" total length (TL). Restrictive LMB harvest regulations (18" minimum length/1 bag) were in place for only 2 seasons at the time of survey, apparently not long enough to improve LMB adult size structure. The adult walleye population was estimated to be 0.8 per acre, on the low side of what is generally considered to be a "fishable" (> 1.0/acre) density. Northern pike are quite low in relative abundance and probably provide little angling opportunity. LMB and muskellunge growth

rates are lower than average while growth rates for walleye and NP are about average when compared to similar North Central Wisconsin lakes.

Among the panfish, bluegill were relatively much more abundant than either black crappie, pumpkinseed, rock bass, warmouth, or yellow perch. Based on the abundance data, it is likely bluegill provide the vast majority of the panfish angling opportunity. While in past decades bluegill over-abundance and poor size structure warranted panfish removal efforts, 1998 sampling indicated improved size structure and angling quality, as measured by higher maximum, modal, and proportion of larger sizes. Growth rates for all panfish sampled except pumpkinseeds were slower than the average for comparable north central Wisconsin lakes. Pumpkinseed growth was similar to the average for comparable north central Wisconsin lakes. In light of the improved bluegill size structure and low relative abundance of the other panfish, the slow growth rates are likely related to the lake's inherent nutrient-poor chemistry and resultant low productivity.

Management recommendations are as follows:

<u>Largemouth bass</u> - Assess LMB relative abundance and size structure by 2004 to determine the impact of the 18"minimum size/1 bag regulation.

Muskellunge - No active management of muskellunge in Trump Lake is recommended at this time.

<u>Northern pike</u> - No active management of northern pike in Trump Lake is recommended at this time.

<u>Smallmouth bass</u> - No active management of smallmouth bass in Trump Lake is recommended at this time.

<u>Walleye</u> - Continue to periodically monitor walleye abundance and size structure. Continue to allow private stocking of walleye to maintain a low density stocked fishery.

Bluegill - No active management of bluegill in Trump Lake is recommended at this time.

Other panfish - No active management of other panfish in Trump Lake is recommended at this time.

II. PAST MANAGEMENT AND SURVEYS

Known Stocking

Black Crappie – unknown size, 1937-38

Bluegill – unknown size, 5 of 7 years from 1937-43

Bullhead (sp.?) – unknown size, 1941

LM Bass – unknown size, 7 of 12 years from 1937-48; fingerlings, 1988-91

Muskellunge – fingerlings, 1969 and 1988

Northern Pike – unknown size, 9 of 20 years from 1940-59; fry and fingerling, 1960-61

Pumpkinseed – unknown size, 1937, 1939, 1941

Rock Bass – unknown size, 1939

SM Bass – unknown size, 1943

Walleye – unknown size, 1937, 1956-57; small and large fingerlings, 20 of 33 years from 1965-01 Yellow Perch – unknown size, 4 of 7 years from 1937-43

Panfish Removals

1959 through 1961 - 2,400 to 3000 lbs. (14-17 lbs./acre) each year, mostly bluegills, some crappies 1988 and 1989 - 3300 and 2750 lbs. (19 and 16 lbs./acre), mostly bluegills

Surveys and Findings

1944-76, various dates and gear – panfish abundant, mostly bluegill. LM bass common, N pike common, walleye present in low numbers

1981, fall shock – bluegills very abundant, NP common, LMB present, no walleyes

1992, fyke net, unknown date and number of lifts – moderate improvements in bluegill growth rates and size structure following 1988-89 removal

1995-97, fall shock – no YOY walleyes, LM bass present, NP present

III. INVESTIGATIONS SINCE 1998

2000, fall shock – 1 YOY walleye, Serns Index .08 YOY/acre. (1255 walleye fgl. stocked in 2000, date unknown)

IV. METHODS

Table 1. Sampling Summary of 1998 Trump Lake, Forest County, Comprehensive Fisheries Survey

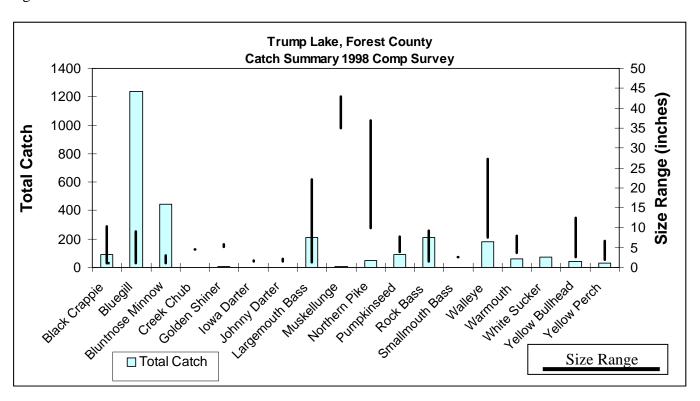
DATES	GEAR TYPE	SAMPLING EFFORT	PRIMARY OBJECTIVE	OTHER OBJECTIVES
April 8-12, 1998	Fyke Nets	5 - 4ft. nets, 24 lifts	Gamefish population estimate - marking	Game-, pan- and nongame fish catch per effort, length at age
April 13, 1998	Boomshocker	Entire shoreline 2.8 miles	Adult walleye recapture - 1st Run	Gamefish catch per effort, length at age. Mark new/unmarked gamefish.
April 28, 1998	Boomshocker	Entire shoreline 2.8 miles	Total walleye recapture - 2nd Run	Gamefish catch per effort, length at age. Mark new/unmarked gamefish.
May 19, 1998	Boomshocker	Entire shoreline 2.8 miles	Bass PE marking - 3rd Run	Gamefish catch per effort, length at age. Mark new/unmarked gamefish.
May 26, 1998	Boomshocker	Entire shoreline 2.8 miles	Bass PE recapture - 4th Run	Gamefish catch per effort, length at age.
May 27-29, 1998	Fyke Nets	6 - 4ft. nets, 15 lifts	Panfish catch per effort	Panfish length at age; nongame catch per effort
August 18-19, 1998	Fyke Nets	6 - 3ft.(mini) nets, 12 lifts	Game- and nongame- fish catch per effort	Game- and nongame- fish length at age
September 24, 1998	Boomshocker 3	Partial shoreline 2.6 miles	Gamefish recruitment	Gamefish catch per effort

V. SURVEY RESULTS

Results are summarized in the following figures. Corresponding data tables are in the Appendix.

CATCH SUMMARY

Figure 1.



GAMEFISH CPE

Figure 2.

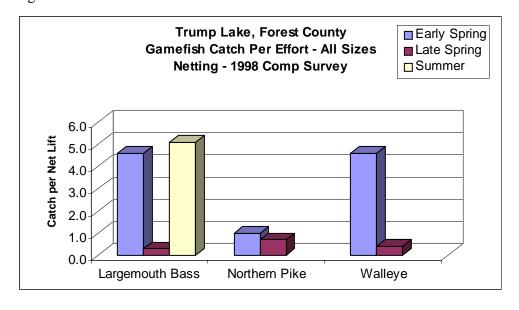
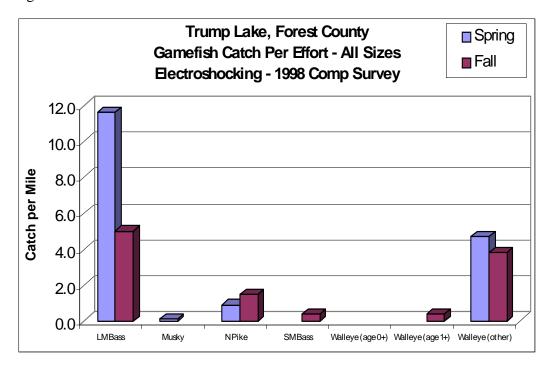


Figure 3.



LARGEMOUTH BASS

Figure 4.

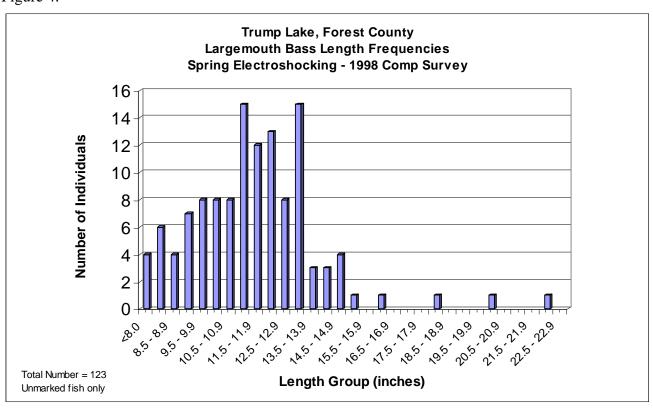
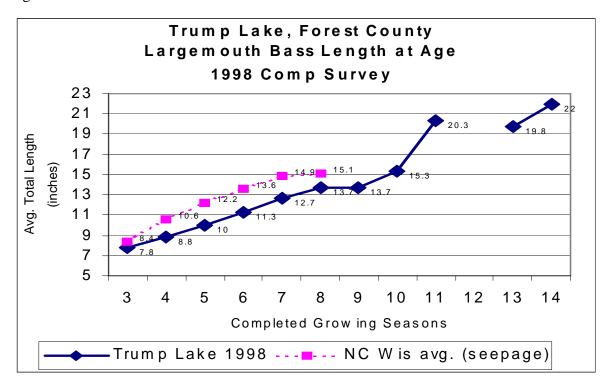
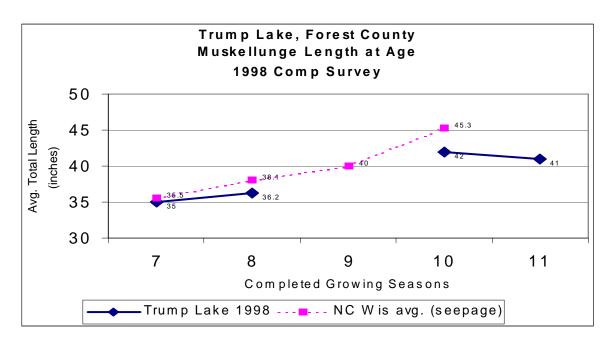


Figure 5.



MUSKELLUNGE

Figure 6.



NORTHERN PIKE

Figure 7.

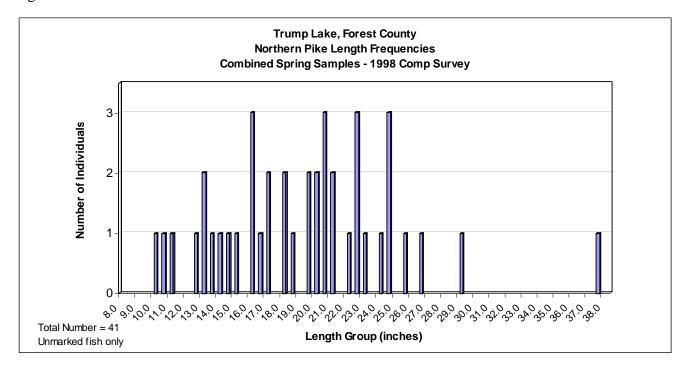
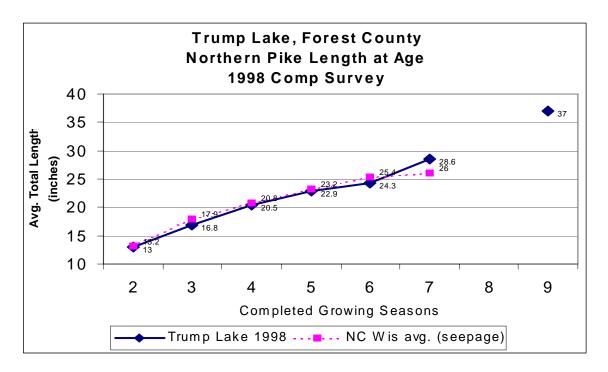


Figure 8.



SMALLMOUTH BASS

Only 1 smallmouth bass was captured during the entire survey - a 2.6 inch individual collected in the September 24 electroshocking run.

WALLEYE

Figure 9.

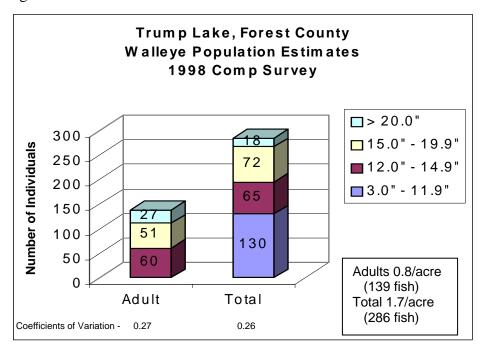


Figure 10.

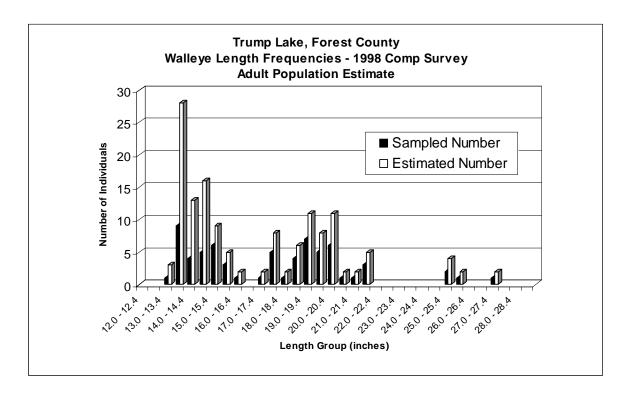


Figure 11.

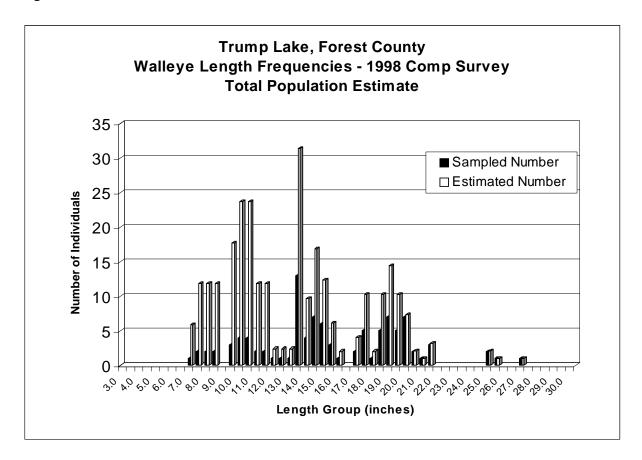


Figure 12.

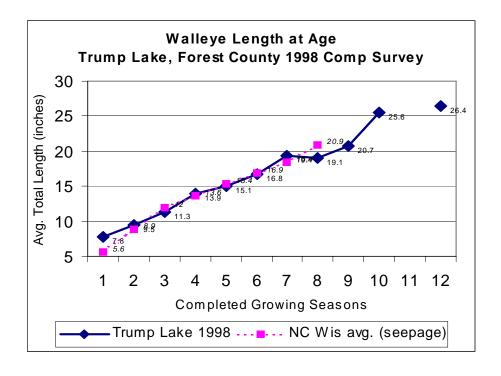
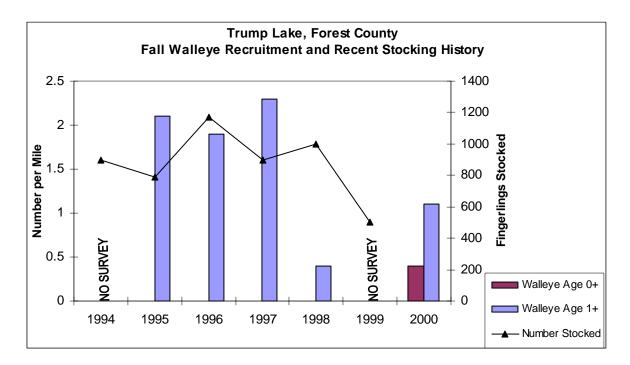


Figure 13.



PANFISH

Figure 14.

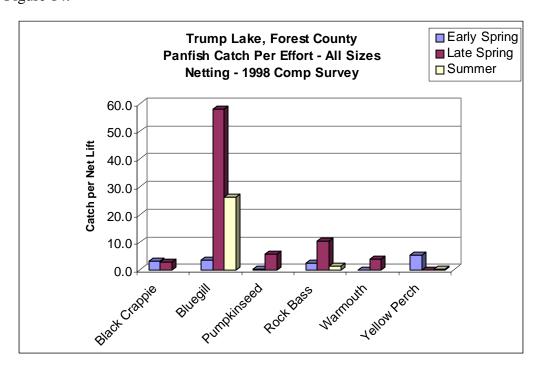


Figure 15.

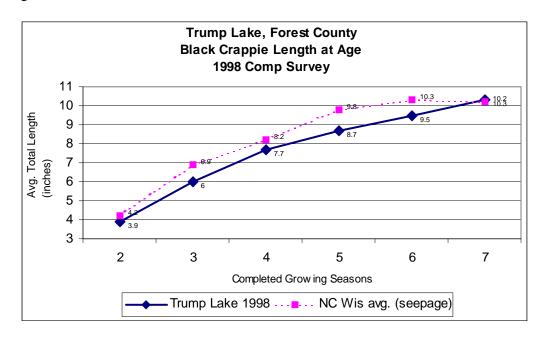


Figure 16.

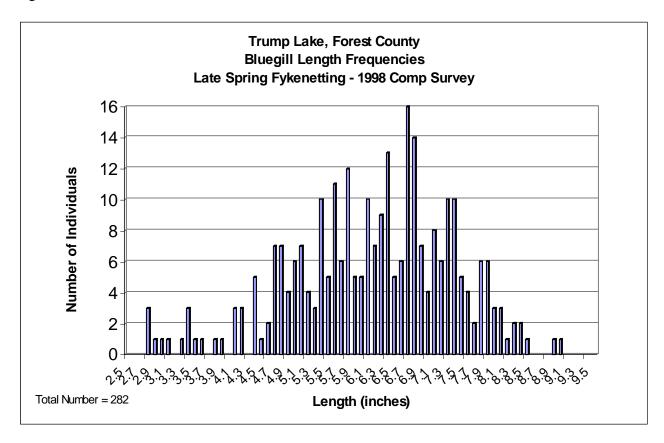
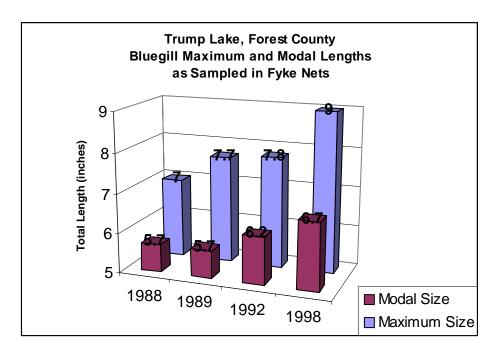


Figure 17.



Bluegill angling quality was determined with the indices Proportional Stock Density (PSD) and Relative Stock Density (RSD) (Figure 18). PSD is the proportion of "quality" size fish (6 inches or greater TL) while RSD is the proportion of "preferred" size fish (8 inches or greater).

Figure 18.

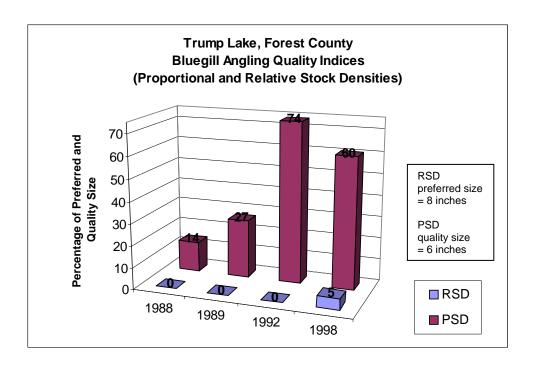


Figure 19.

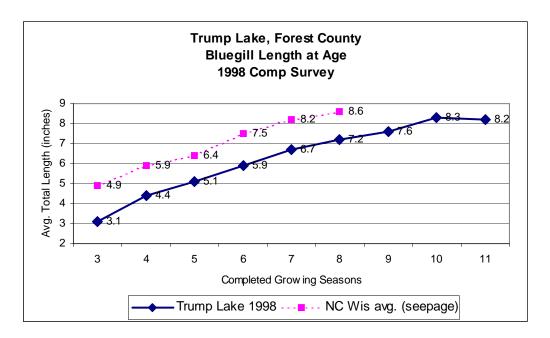


Figure 20.

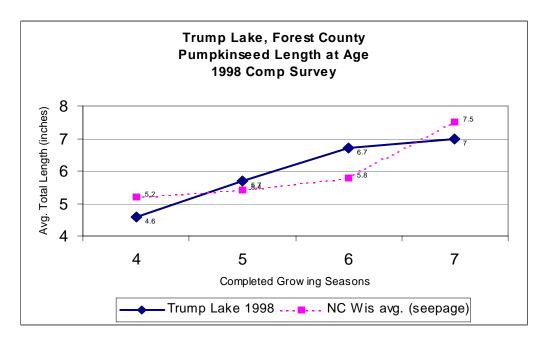


Figure 21.

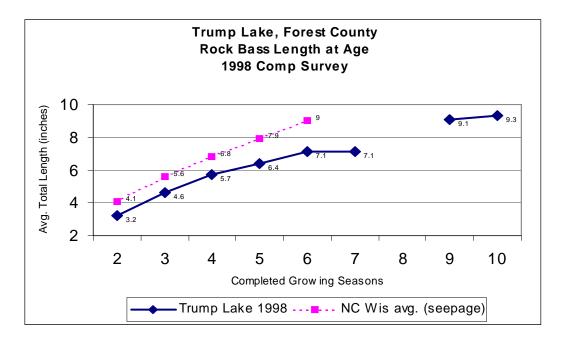
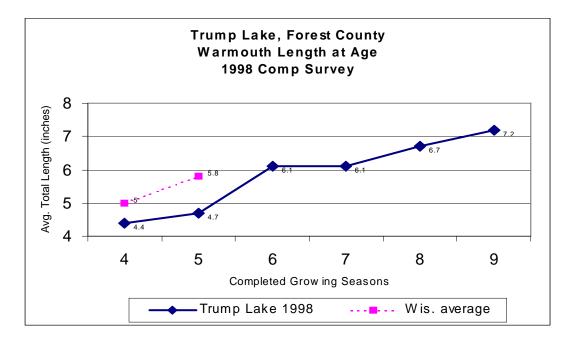
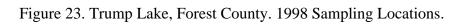
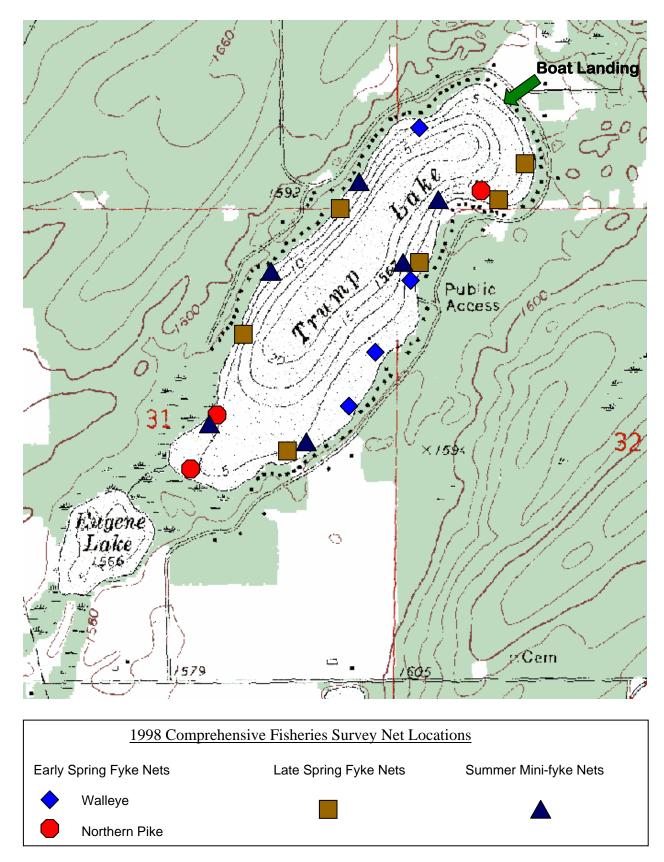


Figure 22.







VI. Discussion and Recommendations

GAMEFISH

Largemouth Bass (LMB) – Natural reproduction of LMB appears adequate in Trump Lake, with good size representation of smaller fish (Figure 4). LMB were also the most numerous and commonly encountered gamefish species of the survey.

LMB size structure is also indicative of heavy angling pressure, with few fish larger than 14 inches found. However, those few fish that do make it beyond the 14 inch size range can reach large size (up to 22 inches). At the time of the 1998 survey the Trump Lake bass minimum size limit was 18 inches with a daily bag of one. However, that regulation had been in effect for only 2 fishing seasons by 1998. It appears that the more restrictive regulation had not yet produced the desired result of a better quality adult LMB size structure.

Growth as measured from scale aging appears slower than the average for comparable north central Wisconsin lakes.

Recommendation: Assess LMB relative abundance and size structure by 2004 to determine the impact of the 18"minimum size/1 bag regulation

Muskellunge – The last known stocking of muskellunge was in 1988, and a remnant population apparently remains. Four muskies were captured during the survey, ranging from 35 to 43 inches.

Growth as measured from scale aging appears slower than the average for comparable north central Wisconsin lakes.

Recommendation: Current musky stocking guidelines do not allow for stocking Trump Lake. No active management of muskellunge in Trump Lake is recommended.

Northern Pike – Relatively low numbers of pike were captured during the survey, but they can reach good size for a small lake (37" TL).

Size structure is fairly evenly distributed through most of the size ranges, although only one larger than 29 inches was captured.

Growth as measured from scale aging appears similar to the average for comparable north central Wisconsin lakes.

Recommendation: No active management of northern pike in Trump Lake is recommended at this time.

Smallmouth Bass – Only one smallmouth was captured during the entire survey period.

Recommendation: No active management of smallmouth bass in Trump Lake is recommended at this time.

Walleye – Although Trump Lake is best characterized as a bass-bluegill lake, there is a small but fishable population of walleye, maintained solely by stocking. There little to no evidence of natural

reproduction and recruitment, based on fall electroshocking surveys, since surveys were begun in 1981.

Walleye size structure showed adequate representation of most sizes from 7" to over 20" TL, indicating good survival of stocked fish. Notably, fish from 17" to 22" TL were well represented, and several walleyes were captured measuring from 25" to 27" TL.

Growth of walleyes as measured from scale aging appears similar to the average for comparable north central Wisconsin lakes.

Recommendation: Continue to provide a walleye fishing opportunity by authorizing the annual private stocking of walleye fingerlings from the FCWA coop pond. Small fingerlings to be stocked at no more than 50 per acre. Large fingerlings to be stocked at no more than 20 per acre.

PANFISH

Bluegill – Bluegill are by far the dominant panfish in Trump Lake based on relative abundance. Historical concerns about overabundance and small size led to several panfish removal projects, the last which occurred in 1989.

Bluegill size structure in 1998 appears to have remained fairly good, with sizes up to almost 8" TL well represented, and a maximum size sampled of 9" TL. Modal size was 6.7" TL. In comparison, maximum and modal sizes in 1988, 1989 and 1992 were all less than in 1998.

Growth as measured from scale aging appears slower than the average for comparable north central Wisconsin lakes. In light of the relatively good size structure, the slow growth may also be related to factors other than bluegill density, most likely the lake's inherent nutrient-poor chemistry and resultant low productivity.

Recommendation: No active management of bluegill in Trump Lake is recommended at this time. Periodic monitoring of bluegill relative abundance and size structure may warrant future panfish removals if abundance again greatly increases and sizes decline.

Other Panfish - Black crappie, pumpkinseed, rock bass, warmouth and yellow perch were all relatively very low in abundance compared to bluegill. Like bluegill, growth rates for all except pumpkinseeds were slower than the average for comparable north central Wisconsin lakes. In light of their low relative abundance, the slow growth rates are likely related to the lake's inherent nutrient-poor chemistry and resultant low productivity. Pumpkinseed growth was similar to the average for comparable north central Wisconsin lakes.

Recommendation: No active management of other panfish in Trump Lake is recommended at this time.

APPENDIX

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

Table 1. Trump Lake, Forest County

1998 Comprehensive Fisheries Survey

Catch Summary

				Catch	(and Size Ra	ange in	Inches) by	Sampli	ng Period				
Fish S Common Name	Species Scientific Name	,	Spring etting Size		Spring ectrofishing Size		Spring etting Size		ummer letting Size		Fall ctrofishing n Size	Total Catch	Catch Size
Black Crappie	Pomoxis nigromaculatus	49	ND			40	(3.8 - 10.4)					89	(3.8 - 10.4)
Bluegill	Lepomis macrochirus	53	ND			870	(2.8 - 9.0)	316	(1.1 - 3.6)			1239	(1.1 - 9.0)
Bluntnose Minnow	Pimephales notatus							447	(1.1 - 3.1)			447	(1.1 - 3.1)
Creek Chub	Semotilus atromaculatus							1	(4.5)			1	(4.5)
Golden Shiner	Notemigonus crysoleucas					4	(5.1 - 5.9)					4	(5.1 - 5.9)
Iowa Darter	Etheostoma exile							3	(1.4 - 1.8)			3	(1.4 - 1.8)
Johnny Darter	Etheostoma nigrum							3	(1.6 - 2.2)			3	(1.6 - 2.2)
Largemouth Bass	Micropterus salmoides	4	ND	129	(7.0 - 22.0)	4	(7.6 - 19.8)	61	(1.3 - 5.8)	13	(5.1 - 14.4)	211	(1.3 - 22.0)
Muskellunge	Esox masquinongy	3	(36.2-43)	1	(35.0)							4	(35.0)
Northern Pike	Esox lucius	24	(9.9 - 37.0)	10	(12.5 - 24.2)	11	(10.7 - 26.3)			4	(17.0 - 20.9)	49	(9.9 - 37.0
Pumpkinseed	Lopomis gibbosus	5	ND			84	(3.8 - 7.7)					89	(3.8 - 7.7)
Rock Bass	Ambloplites rupestris	37	ND			158	(3.1 - 9.3)	15	(1.4 - 4.2)			210	(1.4 - 9.3)
Smallmouth Bass	Micropterus dolomieui									1	(2.6)	1	(2.6)
Walleye	Stizostedeon vitreum vitreum	110	(7.9 - 27.3)	52	(7.5 - 25.4)	6	(9.6 - 21.4)			11	(9.8 - 22.4)	179	(7.5 - 27.3)
Warmouth	Lepomis gulosus	1	ND			59	(3.6 - 7.9)					60	(3.6 - 7.9)
White Sucker	Catostomus commersoni	70	ND									70	ND
Yellow Bullhead	Ictalurus natalis					43	(7.1 - 12.4)	1	(2.5)			44	(2.5 - 12.4
Yellow Perch	Perca flavescens	26	ND			1	(6.7)	2	(1.9 - 2.3)			29	(1.9 - 6.7)

ND = No Data

Table 2. Gamefish							
	Late						
	Spring Spring						
Largemouth Bass	4.6	0.3	5.1				
Northern Pike	1.0	0.7	0				
Walleye	4.6	0.4	0				

Table 3. Gamefish CPE's - Shocking							
	Spring	Fall					
LM Bass	11.6	5.0					
Musky	0.1						
N Pike	0.9	1.5					
SM Bass		0.4					
Walleye (age 0+)							
Walleye (age 1+)		0.4					
Walleye (other)	4.7	3.8					

Table 4. LN	MB Trump La	ike 1998 Len	gth Frequen	cies			
unmarked	fish only						
	l í						
INCH							
GROUP	04/10/1998	04/11/1998	04/13/1998	04/28/1998	05/19/1998	05/26/1998	Totals
<8.0					1	3	4
8.0 - 8.4					4	2	6
8.5 - 8.9				1	2	1	4
9.0 - 9.4				1	3	3	7
9.5 - 9.9				1	2	5	8 8
10.0 - 10.4				2	2	4	8
10.5 - 10.9				1	4	3	8
11.0 - 11.4			2	2	7	4	15
11.5 - 11.9				4	5	3	12
12.0 - 12.4	1	1		3	6	4	13
12.5 - 12.9	1			2	3	3	8
13.0 - 13.4			2	4	9		15
13.5 - 13.9				1	1	1	3
14.0 - 14.4			1			2	3
14.5 - 14.9			1	1	1	1	4
15.0 - 15.4				1			1
15.5 - 15.9							
16.0 - 16.4					1		1
16.5 - 16.9							
17.0 - 17.4							
17.5 - 17.9							
18.0 - 18.4					1		1
18.5 - 18.9							
19.0 - 19.4							
19.5 - 19.9							
20.0 - 20.4						1	1
20.5 - 20.9						-	-
21.0 - 21.4							
21.5 - 21.9							
22.0 - 22.4					1		1
22.5 - 22.9					-		
23.0 - 23.4							
23.5 - 23.9							
24.0 - 24.4							
24.5 - 24.9							
25.0 - 25.4							
25.5 - 25.9							
26.0 - 26.4							
26.5 - 26.9							
27.0 - 27.4							
27.5 - 27.9							
28.0 - 28.4							
28.5 - 28.9							
29.0 - 29.4							
29.5 - 29.5							
30.0+							
TOTALS	3	1	6	24	53	40	123
		ı,	U	⊤	30	FO	120

Table	Table 5. Largemouth Bass length at age							
		NC Wis averge						
age	Trump Lake 1998	(seepage lakes)						
3	7.8	8.4						
4	8.8	10.6						
5	10	12.2						
6	11.3	13.6						
7	12.7	14.9						
8	13.7	15.1						
9	13.7							
10	15.3							
11	20.3							
12								
13	19.8							
14	22							

Table 6. Muskellunge length at age								
		NC Wis averge						
age	Trump Lake 1998	(seepage lakes)						
7	35	35.5						
8	36.2	38.1						
9		40						
10	42	45.3						
11	41							

NCH														•		
Authoritists Auth	Table 7. NF	Trump Lak	te 1998 Leng	th Frequenci	es		oorly opring	anzina.					loto onrina			
	upmarked f	ich only														
MCMUP MCM0998 MCM09998 MCM09998 MCM09989 MC	unmarkeu i	ISH OHLY					neung	SHOCKING				enring	netting			late spring
Care	INCH						early netting									netting
880 80 84 85 80 86 86 86 86 86 86 86		04/08/1998	04/09/1998	04/10/1998	04/11/1998	04/12/1998	totals	04/13/1998	04/28/1998	05/19/1998	05/26/1998	Totals	05/27/1998	05/28/1998	05/29/1998	
80 - 84																
88-89																
90-94																
93 - 99	9.0 - 9.4															
10.5-10.8						1	1									
110-114		1					1									
115-118											1	1				
120 - 124																
12.5 - 12.8			-				1									
130 - 134			-						1		1	2	 	-		
13.5 - 13.9					1		1									
14.0 14.6 1				1			1						-			
14.5 14.8							1									
15.0 - 15.6							1									
16.0 - 16.6	15.0 - 15.4															
16.5 16.8 1				2						1		1				
17.0 + 174		-	1													
17.5 17.9		1				1	2									
18.0 18.4				1	ļ								<u> </u>		1	
18.5 18.9														1		<u> </u>
19.0 19.4																<u>'</u>
19.5 + 19.9 1						1	1						1			1
200 - 20.4						·	·			1		1			1	1
21.0 - 21.4				3			3									
21.5-21.9	20.5 - 20.9		1		1		2									
1																
22.5 - 22.9 1																
23.0 - 23.4											1	1	1	1		2
23.5 - 23.9		1					1									
24.0 - 24.4										1		1				
24.5 - 24.9				1	1		2	1		- '						
25.0 - 25.4					'							'				
25.5 - 25.9		1					1									
26.5 - 26.9																
27.0 - 27.4	26.0 - 26.4													1		1
27.5 - 27.9																
28.0 - 28.4																
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31.0 - 31.4																
31.5 - 31.9																
32.5 - 32.9 33.0 - 33.4 33.5 - 33.9 34.0 - 34.4 34.5 - 34.9 35.0 - 35.4 35.5 - 35.9 36.0 - 36.4 36.5 - 36.9 37.0 - 37.4 37.5 - 37.9	31.5 - 31.9															
33.0 - 33.4 33.5 - 33.9 34.0 - 34.4 34.5 - 34.9 35.0 - 35.4 35.5 - 35.9 36.0 - 36.4 36.5 - 36.9 37.0 - 37.4 37.5 - 37.9																
33.5 - 33.9 34.0 - 34.4 34.5 - 34.9 35.0 - 35.4 35.5 - 35.9 36.5 - 36.9 37.0 - 37.4 37.0 - 37.4 37.0 - 37.9																
34.0 - 34.4													L			
34.5 - 34.9													1			
35.0 - 35.4 35.5 - 35.9 36.0 - 36.4 36.5 - 36.9 37.0 - 37.4 37.5 - 37.9																
35.5 - 35.9 36.0 36.4 3 5.5 - 36.9 3 5.7 - 37.9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1													-			
36.0 - 36.4																
36.5 - 36.9 37.0 - 37.4 37.5 - 37.9																
37.0 - 37.4 1 1 1 1 37.5 - 37.9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1																
37.5 - 37.9						1	1									
	37.5 - 37.9															
TOTALS 4 4 9 3 4 24 1 1 3 4 9 4 3 1	TOTALS	4	4	9	3	4	24	1	1	3	4	9	4	3	1	8

Table 8. Northern pike length at age										
		NC Wis averge								
age	Trump Lake 1998	(seepage lakes)								
2	13	13.2								
3	16.8	17.9								
4	20.5	20.8								
5	22.9	23.2								
6	24.3	25.4								
7	28.6	26								
8										
9	37									

Table 10.	ADULT PO	PULATION DI	STRIBUTION -T	rump Lake 19
			ESTIMATED	
INCH		SAMPLED	NUMBER PER	
GROUP		NUMBER	INCH GROUP	
3.0 - 3.4				
3.5 - 3.9				+
4.0 - 4.4				
4.5 - 4.9				+
				-
5.0 - 5.4 5.5 - 5.9				
6.0 - 6.4				-
6.5 - 6.9				
7.0 - 7.4				
7.5 - 7.9				
8.0 - 8.4				
8.5 - 8.9				
9.0 - 9.4				
9.5 - 9.9				
10.0 - 10.4				
10.5 - 10.9				
11.0 - 11.4				
11.5 - 11.9				
12.0 - 12.4				
12.5 - 12.9				
13.0 - 13.4		1		3
13.5 - 13.9		9		28
14.0 - 14.4		4		13
14.5 - 14.9		5		16
15.0 - 15.4		6		9
15.5 - 15.9		3		5
16.0 - 16.4		1		2
16.5 - 16.9				
17.0 - 17.4		1		2
17.5 - 17.9		5		8
18.0 - 18.4		1		2
18.5 - 18.9		4		6
19.0 - 19.4		7		11
		5		
19.5 - 19.9				8
20.0 - 20.4		6		11
20.5 - 20.9		1		2
21.0 - 21.4		1		2
21.5 - 21.9		3		5
22.0 - 22.4				
22.5 - 22.9				
23.0 - 23.4				
23.5 - 23.9				
24.0 - 24.4				
24.5 - 24.9				
25.0 - 25.4		2		4
25.5 - 25.9		1		2
26.0 - 26.4				
26.5 - 26.9				
27.0 - 27.4		1		2
27.5 - 27.9				
28.0 - 28.4				†
28.5 - 28.9				
29.0 - 29.4				
29.5 - 29.5				
30.0+				
TOTALS		67		141
TOTALS	l	07		141

Table 9. Trump Lake WE Population Estimates									
1998	1998 Comp Survey								
Size Group	Adult	Total							
3.0" - 11.9"		130							
12.0" - 14.9"	60	65							
15.0" - 19.9"									
> 20.0"	27	18							

Table 11	TOTAL PC	PULATION D	ISTRIBUTION -T	rump Lake
			ESTIMATED	
INCH		SAMPLED	NUMBER PER	
GROUP		NUMBER	INCH GROUP	
3.0 - 3.4	3			
3.5 - 3.9	3.5			
4.0 - 4.4	4			
4.5 - 4.9	4.5			
5.0 - 5.4	5			
5.5 - 5.9	5.5			
6.0 - 6.4	6			
6.5 - 6.9	6.5			
7.0 - 7.4	7	1	6	
7.5 - 7.9	7.5	2	12	
8.0 - 8.4	8	2	12	
8.5 - 8.9	8.5	2	12	
9.0 - 9.4	9			
9.5 - 9.9	9.5	3	18	
10.0 - 10.4	10	4	24	
10.5 - 10.9	10.5	4	24	
11.0 - 11.4	11	2	12	
11.5 - 11.9	11.5	2	12	
12.0 - 12.4	12	1	2	
12.5 - 12.9	12.5	1	2	
13.0 - 13.4	13	1	2	
13.5 - 13.9	13.5	13	31	
14.0 - 14.4	14	4	10	
14.5 - 14.9	14.5	7	17	
15.0 - 15.4	15	6	12	
15.5 - 15.9	15.5	3	6	
16.0 - 16.4	16	1	2	
16.5 - 16.9	16.5			
17.0 - 17.4	17	2	4	
17.5 - 17.9	17.5	5	10	
18.0 - 18.4	18	1	2	
18.5 - 18.9	18.5	5	10	
19.0 - 19.4	19	7	14	
19.5 - 19.9	19.5	5	10	
20.0 - 20.4	20	7	7	
20.5 - 20.9	20.5	2	2	
21.0 - 21.4	21	1	1	
21.5 - 21.9	21.5	3	3	
22.0 - 22.4	22			
22.5 - 22.9	22.5			
23.0 - 23.4	23			
23.5 - 23.9	23.5			
24.0 - 24.4	24			
24.5 - 24.9				
25.0 - 25.4	25	2	2	
25.5 - 25.9	25.5	1	1	
26.0 - 26.4	26			
26.5 - 26.9	26.5			
27.0 - 27.4	27	1	1	
27.5 - 27.9	27.5			
28.0 - 28.4	28			
28.5 - 28.9	28.5			
29.0 - 29.4	29			
29.5 - 29.5	29.5			
30.0+	30			
TOTALS	30	101	286	
		101	200	

Table	Table 12. Walleye length at age			
	Trump Lake 1998	NC Wis average		
age	survey avg length	(seepage lakes)		
1	7.8	5.6		
2	9.5	8.9		
3	11.3	12		
4	13.9	13.6		
5	15.1	15.4		
6	16.8	16.9		
7	19.4	18.4		
8	19.1	20.9		
9	20.7			
10	25.6			
11				
12	26.4			

Table 13	Trump Lake, I	orest County	Fall Walleye Red	ruitment Survey I	Results an	d Stocking Histo	ry I	
		Electrofis	l shing Results			Walleye Stockin	l ng History	
		(Numbe	r per Mile)					
Year	Survey Date	Walleye Age 0+	Walleye Age 1+	Walleye Other	Year	Stocking Date	Number Stocked	Size
					1970-76	_	18700	Fingerling
1981	04-Nov	0	0	0				
					1982-93		31050	Fingerling
					1994	25-Nov	900	Fingerling
1995	26-Sep	0	2.1	1.4 (12.0"-16.9")	1995	01-Nov	788	Fingerling
1996	08-Oct	0	1.9	3.5 (11.8"-18.8")	1996	Sept & Oct	1169	Fingerling
1997	15-Sep	0	2.3	5 (9.5" - 25.0")	1997	19-Sep	900	Fingerling
1998	24-Sep	0	0.4	3.8 (12.0" - 22.4")	1998	21-Oct	1000	5.5"
1999					1999		500	5" - 8"
2000	15-Oct	0.4	1.1	0.4 (13"-13.4")	2000		1590	3" - 9"

Table 14. Trump Lake Panfish Netting CPE's			
	Early	Late	
	Spring	Spring	Summer
Black Crappie	3.3	2.7	
Bluegill	3.5	58.0	26.3
Pumpkinseed	0.3	5.6	
Rock Bass	2.5	10.5	1.3
Warmouth	0.1	3.9	
Yellow Perch	5.3	0.1	0.2

Tabl	Table 15.Black Crappie length at age		
	Trump Lake 1998	NC Wis average	
age	survey avg length	(seepage lakes)	
2	3.9	4.2	
3	6	6.9	
4	7.7	8.2	
5	8.7	9.8	
6	9.5	10.3	
7	10.3	10.2	

Table 16. Panfish LF's Trump lake 19					
Table 16. F	Panfish LF's 1	rump lake 19			
fyke nets M	1ay 27-29				
Length					
	number BG				
2.5					
2.6					
2.7					
2.8	3				
2.9	1				
3	1				
3.1	1				
3.2					
3.3	1				
3.4	3				
3.5	1				
	1				
3.6 3.7	-				
3.8	1				
3.9	1				
4	_				
4.1	3				
4.2	3				
4.3					
4.4	5				
4.5	1				
4.6	2				
4.7	7				
4.8	7				
4.9	4				
5	6				
5.1	7				
5.2	4				
5.3	3				
5.4	10				
5.5	5				
5.6	11				
5.7	6				
5.8	12				
5.9	5				
6	5				
6.1	10				
6.2	7				
6.3	9				
6.4	13				
6.5	5				
6.6	6				
6.7	16				
6.8	14				
6.9	7				
7	4				
7.1	8				
7.2	6				
7.2	10				
7.4	10				
7.4	5				
7.5	4				
	2				
7.7					
7.8	6				
7.9	6				
8	3				
8.1	3				
8.2	1				
8.3	2				
8.4	2				
8.5	1				
8.6					
8.7					
8.8					
8.9	1				
9	1				
9.1	'				
9.1					
9.3					

9.4

Table 17. BG max/modal sizes				
	Trump Lake			
	max (in)	modal (in)		
1988	7	5.7		
1989	7.7	5.7		
1992	7.8	6.2		
1998	9	6.7		

Table 18. Trump Lake Bluegill Proportional and Relative Stock Densities							
		number >=	number >=	number >=			
		min pref	min quality	min stock			
year	sample	length (8")	length (6")	length (3")	PSD	RSD	
1988	(PSD & RSD	from 10/26/	92 Ave to A	Andrews memo)	14	(0
1989	(PSD & RSD	from 10/26/	/92 Ave to <i>P</i>	Andrews memo)	27	(0
1992	(PSD & RSD	from 10/26/	/92 Ave to <i>A</i>	Andrews memo)	74	(0
1998	late spr fykes	14	167	277	60	ļ	5

Tabl	Table 19. Bluegill length at age		
	Trump Lake 1998	NC Wis average	
age	survey avg length	(seepage lakes)	
3	3.1	4.9	
4	4.4	5.9	
5	5.1	6.4	
6	5.9	7.5	
7	6.7	8.2	
8	7.2	8.6	
9	7.6		
10	8.3		
11	8.2		

Tabl	Table 20. Pumpkinseed length at age		
	Trump Lake 1998	NC Wis average	
age	survey avg length	(seepage lakes)	
4	4.6	5.2	
5	5.7	5.4	
6	6.7	5.8	
7	7	7.5	

Tabl	Table 21. Rockbass length at age			
	Trump Lake 1998	NC Wis average		
age	survey avg length	(seepage lakes)		
2	3.2	4.1		
3	4.6	5.6		
4	5.7	6.8		
5	6.4	7.9		
6	7.1	9		
7	7.1			
8				
9	9.1			
10	9.3			

Table	Table 22. Warmouth length at age			
	Trump Lake 1998	NC Wis average		
age	survey avg length	(seepage lakes)		
4	4.4	5		
5	4.7	5.8		
6	6.1			
7	6.1			
8	6.7			
9	7.2			