

Lakes Wapogasset - Bear Trap Lake Planning Grant Interim Report

May 1992

Introduction:

In 1990 the Wisconsin state legislature passed a bill that made monies available for lake planning grants to lake districts and lake associations . During the winter of 1990-91 the Wapogasset and Bear Trap Lake Association Lake Improvement Committee put together a plan and applied for a lake planning grant. A grant for \$11,506.70 was approved on April 12, 1991. The state's share (75%) was \$8,630.03 and the our Lake Association's share (25%) was \$2,876.67.

The project general description consists of six categories:

1. **Lake use study (Lake Use Survey, Boat Access Interviews, Ice Fishing Interviews, use of traffic counters at public landings and survey of YMCA and Wapogasset Bible Camp)**
 2. **Determine nutrient loading and flow from Friday Creek and Balsam Branch**
 3. **Monitor in-lake water quality**
 4. **Interim summary, report in May 1992 and a final report in May 1993 to be provided to lake residents and news media**
5. **All aspects of the project (except for laboratory analyses) to be conducted by trained volunteers.**
 6. **Information to be disseminated through public hearings, newsletter, entire and summary reports and local media.**

Don Wegner was appointed as the project coordinator and Phyllis Grimm accepted the position of volunteer consultant. Several teams were established to perform the various tasks:

Lake Water Quality Sampling Team

Joe Hafner, Frank Fitzpatrick, Jim Earl, Ed O'Neill, Phyllis Grimm and Don Wegner
Balsam Branch and Friday Creek Sampling Team

Ed O'Neill, Jim Earl, Phyllis Grimm and Don Wegner
Boat Access Interviews

Bob Jones, Coordinator

Interviewers - Phyllis Grimm, Ray and Mary Lou Stanley, Richard Bazille, Martha Funk, Bill and Sandy Johnson, Paul K. Miller, Allen Okerman, Richard and Burt Peloquin, George Reinhardt, Gerry Sartor, Peter Seidl, Ben Sontag, Virgil Steinhoff, Bob Andrus, Bill Shay, Win Moravec, Irving Hughes, Jack Turek, Jacqueline Metcalf, Ruth Toher, Jim and Joan Earl, Rosalie Biros and Mary Hafner.

5/18/92

Ice Fishing Interviews

Ray Stanley, Jim Earl, Ed O'Neill and Don Wegner

Traffic Counter Team

Ed O'Neill and Don Wegner

Computer Data Entry Team

Ed O'Neill, Kathy Mortenson and family, and Don Wegner

I hope I have mentioned all the volunteers. If I have forgotten anyone please accept my apology. All of us on these lakes owe a debt of gratitude to these volunteers. Please give them a pat on the back and a big thank you when you see them.

An extra special thank you is due to Phyllis Grimm who spent countless hours in designing this project, doing Boat Access Interviews, examining Lake Use Survey suggestions and comments and keeping an eye on the water quality teams. We could not have done this project without her. Thank You Phyllis!

Another special thank you is due to Ed O'Neill who always came up with a better way to do something like; not one but two water sampling devices or building a case for our Dissolved Oxygen Meter or the gage he built for our flowmeter or the time he spent putting data into the computer. Thank You Ed!

The first project task began by placing the traffic counters at the public landings on May 3rd, followed by training the water quality team by Dan Ryan of the DNR in mid-May, taking water samples/tests on the lakes and creeks, conducting boat access interviews and finally conducting ice fishing interviews.

Data from the Lake Use Survey, Boat Access Interviews, Ice Fishing Interviews, water quality data and etc. were entered into the computer during the winter months followed by tabulating the data for this report. In no way are any of the above surveys or interviews identifiable by name of the respondent.

This report includes an update on the water quality test data, tabulation of the Lake Use Surveys, Boat Access Interviews, and Ice Fishing Interviews. Most of the data is pretty much in its raw form. Interpretation of the data will be done in the final report in May 1993.

Please give Don Wegner 268-9951 or Phyllis Grimm 268-9345 a call if you have any questions.

**Don Wegner Project
Coordinator**

Lake Use Survey (Tabulated)

1. Which lake is your residence on: Wapogasset or Bear Trap?

Wapogasset	256
Bear Trap	108
Unknown	4
Total	368

2. How many years have you been a resident of this lake?

		1-11-5	5-10			110-		>50	Blan
Wapogasset	21	66	43	49	30	21	15	10	0
Bear Trap	3	27	13	27	7	20	8	2	0
Unknown	0	0	1	2	0	1	0	0	2
Total	24	93	57	78	37	42	23	12	2

3. Are you: retired?

	Yes	No	Blank
Wapogasset	102	115	39
Bear Trap	39	44	25
Unknown	3	1	0
Total	144	160	64

employed?

	Yes	No	Blank
Wapogasset	158	35	63
Bear Trap	73	13	22
Unknown	1	2	1
Total	232	50	86

Area employed?

No.	City	No.	City	No.	City
1	Scottsdale, Az	1	Newport, Mn	28	Amery, Wi
1	(Varies), Ca	1	North Branch, Mn	4	Baldwin, Wi
1	Moline, Ill	1	Owatonna, Mn	1	Clear Lake, Wi
1	Indianapolis, Ind	1	PI mouth, Mn	4	Dresser, Wi
1	Arden Hills, Mn	1	Ramsey County, Mn	1	Durand, Wi
8	Ba port, Mn	4	Red Wing, Mn	1	Ellsworth, Wi
1	Blaine, Mn	1	Rochester, Mn	1	Emerald, Wi
4	Bloomington, Mn	1	Roseville, Mn	2	Hudson, Wi
3	Burnsville, Mn	1	Shoreview, Mn	1	Menomonie, Wi
3	Cottage Grove, Mn	1	St. Louis Park, Mn	9	New Richmond, Wi
3	Eagan, Mn	66	St. Paul, Mn	1	Northwest, Wi
2	Edina, Mn	3	Stillwater, Mn	1	Osceola/Amery, Wi
2	Golden Valley, Mn	2	Twin Cities, Mn	1	Riverfalls, Wi
1	Goodhue, Mn	1	Vadnais Heights, Mn	1	St. Croix Falls, Wi
1	Maplewood, Mn	1	Woodbury, Mn	1	West Bend, Wi
44	Minneapolis, Mn	1	Kansas City, Mo	7	Unknown
1	New Brighton, Mn			7	Unknown, Wi

4. Do you:

	Own Rent	Blank
Wapo asset	249 6	1
Bear Trap	108 0	0
Unknown	4 0	0
Total	361 6	1

5. Is your lake residence a:

	House	Cottage	Mobile Home	Motor Home	Other "
Wa ogasset	124	88	41	0	2
Bear Trap	53	51	1	0	0
Unknown	2	1	1	0	0
<u>Total</u>	<u>179</u>	<u>140</u>	<u>43</u>	<u>0</u>	<u>2</u>

6. If mobile home, is it permanently or temporarily in place?

Wapo asset	32	9	
Bear Trap	1	0	
Unknown	1	0	
<u>Total</u>	<u>34</u>	<u>9</u>	

7. What type of residence do you have? 1 Season, 2 Season, 3 Season, 4 Season

Wa ogasset	12	25	58	157	4
Bear Trap	5	11	32	59	1
Unknown	0	0	2	2	0
<u>Total</u>	<u>17</u>	<u>36</u>	<u>92</u>	<u>218</u>	<u>5</u>

8. How many in each age group use our residence?

	<18	19-30	31-40	41-50	51-60	61-70	>71
Wa ogasset	5178	504	579	548	48	498	429
Bear Trap	185	80	118	62	76	67	27
Unknown	0	0	0	0	2	2	4
<u>Total</u>	<u>5363</u>	<u>584</u>	<u>697</u>	<u>610</u>	<u>56</u>	<u>567</u>	<u>460</u>

9. Is your lake residence used as our permanent or seasonal home?

Wapo asset	79	37
Bear Trap	175	70
Unknown	2	1
<u>Total</u>	<u>256</u>	<u>108</u>

10. If seasonal, when do you occupy

Summer	Yes	No	Blan
Wa ogasset	132	0	7
Bear Trap	57	0	1
Unknown	2	0	0
<u>Total</u>	<u>19</u>		<u>a---</u>

of weekends	2	3	4	5	6	8	9	10	12
Wapo asset	1	1	1	1	3	2	1	17	14
Bear Trap	0	0	0	0	0	1	1	2	4
Unknown	0	0	0	0	0	0	0	0	0
<u>Total</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>3</u>	<u>3</u>	<u>2</u>		<u>12L-1-</u>

of weekends - continued

of weekends	13	14	15	16	18	20	21	22	23
Wapo asset	0	4	9	7	2	24	1	1	2
Bear Trap	3	5	6	4	1	7	0	0	0
Unknown	0	0	0	0	0	0	0	0	0
<u>Total</u>	<u>3</u>	<u>9</u>	<u>15</u>	<u>11</u>	<u>3</u>	<u>31</u>	<u>1</u>	<u>1</u>	<u>2</u>

of weekends - continued

# of weekends	24	25	26	28	30	40	45	Blank
Wapogasset	1	21	1	3	2	1	1	11
Bear Trap	1	14	0	1	0	0	0	7
Unknown	0	1	0	0	0	0	0	1
Total	2	36	1	4	2	1	1	19

Summer vacations	Yes	No	Blank
Wapogasset	90	12	36
Bear Trap	40	2	16
Unknown	1	0	1
Total	13	14	53

Vacation weeks	1	2	3	4	5	6	9	Blank
Wapo asset	19	34	13	8	3	3	1	45
Bear Trap	7	14	9	5	0	1	0	20
Unknown	0	0	1	0	0	0	0	1
Total	26	48	23	13	3	4	1	66

Occupy the entire summer season

Wapogasset	36
Bear Trap	12
Unknown	1
Total	49

Months Used	Apr to Sep	Apr to Oct	Apr to Nov	May to Sep	May to Oct	May to Nov	June to Sep	Blank
Wapogasset	1	5	4	5	12	7	4	8
Bear Tra	1	4	2	0	2	1	2	1
Unknown	0	0	1	0	0	0	0	0
Total	2	9	7	5	14	8	6	9

11. Do you use your seasonal residence in the winter?

Winter weekends	No	Yes	Blank
Wapo asset	92	77	5
Bear Trap	44	26	0
Unknown	2	1	0
Total	138	104	5

Winter weekends	1	2	3	4	5	6	7	8	9
Wapogasset	5	19	11	13	1	5	1	1	1
Bear Trap	2	3	5	4	4	1	0	3	0
Unknown	0	0	0	1	0	0	0	0	0
Total	7	22	16	18	5	6	1	4	1

of winter weekends -

Winter	12	15	16	20	25	28	Blank	Total
Wapogasset	9	3	0	1	2	1	4	77
Bear Trap	2	0	1	0	0	0	1	26
Unknown	0	0	0	0	0	0	0	1
Total	11	3	1	1	2	1	5	104

Winter vacations	No	Yes	Blank
Wapo asset	121	15	38
Bear Trap	48	5	17
Unknown - -	0	0	4
[Total	<u>16</u>	<u>20</u>	<u>59</u>

# Winter Vacation Weeks	1	2	3	4	Blank
Wapogasset	8	3	0	1	42
Bear Trap	2	2	1	0	17
Unknown	0	0	0	0	4
Total	10	<u>5</u>	1	1	<u>63</u>

12. Do you rent out your lake residence?

	No	Yes	Blan
Wapogasset	169	3	2
Bear Trap	68	2	0
Unknown	2	0	2
Total	239	5	4

What season	Summer	Summer/Winter	Winter	Total
Wapogasset	2	0	0	2
Bear Trap	1	1	1	2
Unknown	0	0	0	0
Total	3	1	1	<u>4</u>

13. How many of the following water craft do you have at the lake?

127	Canoes
160	Row Boats
70	Sailboats
2	Jet Skis
8	Inboards
62	I/O's
255	Outboards
131	Pontoon Boats
45	Paddle Boats
1	1 Man Basstracker No Motor
1	Deck Boat
20	Fun Bugs
4	Inflatable Raft
3	Ka ak
1	Model Boat
1	Sailboard
1	Swimming Dock
1	Wind Surfer
893	Total watercraft reported

Watercraft hours used per week

131 residents reported using their Canoes an average of 0.2 hours per week. 149 residents reported using their Row Boats an average of 2.4 hours per week. 20 residents reported using their Sailboats an average of 3.3 hours per week. 0 residents reported using their Jet Skis.

1 residents reported using their Inboards an average of 4.0 hours per week. 22 residents reported using their I/O's an average of 4.3 hours per week. 85 residents reported using their Outboards an average of 1.9 hours per week.

Watercraft_lengths

80 residents reported having Canoes with lengths from 12 to 20 feet 138 residents reported having Row Boats with lengths from 10 to 16 feet 61 residents reported having Sailboats with lengths from 8 to 20 feet 7 residents reported having Inboards with lengths from 14 to 19 feet 51 residents reported having I/O's with lengths from 14 to 22 feet
215 residents reported having Outboards with lengths from 10 to 20 feet

Watercraft_horsepower

3 residents reported having motors from 2 to 3 HP on their Canoes
99 residents reported having motors from 3 to 40 HP on their Row Boats
2 residents reported having motors from 3 to 14 HP on their Sailboats
1 resident reported having a motor of 45 HP on their Jet Ski
8 residents reported having motors from 25 to 200 HP on their Inboards 51 residents reported having motors from 55 to 305 HP on their I/O's 212 residents reported having motors from 3 to 200 HP on their Outboards 117 residents reported having motors from

14. In the first column, rate these summer activities in order of importance to your household: (1 - most important, 10 - least important)

No.

Check how often you participate in these activities?

80	2	Boating	52	204	33	12
70	3					
55	1					
92	1	Fishing	50	178	56	28
57	2					
33	3					
92	1	Gardening	50	178	56	28
57	2					
33	3					
74	10	Jet Skiing	1	2	3	232
42	9					
20	8					
81	1	Peacefully doing nothing	134	119	17	12
44	5					
42	4					
36	7	Sailing	5	20	33	182
36	8					
35	9					
65	10	Scuba diving	0	1	7	225
14	9					
33	8					
49	3	Swimming	50	148	48	38
48	5					
45	4					
39	6	Water skiing	20	81	75	84
34	5					
32	4					

Summer activities - continued

Other,					
2	2	Entertaining		5	2
1	1				
1	1				
6	1	Home/Yard Maint.	8	7	1
3	5				
2	4				
1	3	Rec Sports Activities	2	3	
1	4	-			
1	7				
1	1	Socializing	1	2	
1	3				
1	6				
3	2	Walking	2	3	
1	3				
1	10				
1	1	Working	2	3	1
1	2				
1	3				
1	1	Sunning	1	1	
1	10				
1	1	Yard Sports		2	
	2				
1	3	Being Outdoors		1	
1	5	Bird Watching	1		
1	1	Bridge		1	1
1	6	Canoeing , Paddle Boating			
1	7	Dinner, Walking			
1	1	Enjo Lake Scene	1		
1	10	Fireworks			1
1	11	Relaxing			
1	1	Remove Weeds	1		
1	4	Snowmobile			
1	10	Sta in Home			
1	2	Tubing		1	
1	7	Turtleing			
1	2	Weed Mowing		1	
1	3	Wood Working			

15. If you fish, do you Keep, Catch & Release, or Both, the fish you catch?

Catch & Keep Release Both
Blank

16. During the winter, at these lakes,

a. Do you use area snowmobile trails?

Yes No Blank

37 311 20

b. Do you use area cross country ski trails?

45 299 24

17. Rate these outdoor winter activities, at the lake, in order of importance to your household:

(1 - most important, 7 - least important)

No. How often do you participate in these activities?
 Cast Rating Daily Weekly Monthly Never

35	1	Cross country skiing	7	27	68	125
34	2			-		
28	7					
36	7	Downhill skiing	2	27	68	125
27	3					
21	5					
57	7	Ice boating		2	1	200
40	5					
9	6					
102	1	Ice fishing	21	79	61	84
24	2					
18	3					
32	3	Ice skating	4	26	54	129
30	7					
29	2					
38	7	Snowmobiling	7	33	30	151
23	2					
22	1					

Other, specify 2

3	3	Sledding	1	3	2	
2	1					
1	6					
2	1	Walking	4	1		
2	2					
1	7					
8	1	Peacefully Doing Nothing	3	2	3	
1	4					
1	2	3 Wheeler				
1	3	Enjoy Lake Scenery				
	3	Entertainment		1		
1	7	Freezin				1
1	2	Gathering			1	
1	2	Go South			1	
1	1	Home improvement				
		Out Of Town				
1	4	Snow Blowing				
2	1	Snow Shoveling		2		
2	1	Snowshoeing		1	2	
1	3	Watching Nature	1			

20. Do you have any suggestions for solving these concerns?

See attached report by Phyllis Grimm

21. Do you feel the lake is better, worse or stayed the same as previous years?

Better Worse Same Blank 138 132 63 1
35

If so, in what way? **See attached report by Phyllis Grimm**

22. Your comments will be very useful, carefully considered and greatly appreciated.

See attached report by Phyllis Grimm

20 - Do you have any suggestions for solving these concerns?

133 (36%) had suggestions for solving the concerns you felt were important. Briefly summarized below, you advocated methods for more:

boating restrictions	41
Eurasian milfoil prevention	20
water quality protection	20
fishing quality improvement	17
erosion control	15
boating/fishing violation control	15
over-development control	13
aquatic plant control	7
noise, algae, crime control	1

You also added fix roads, dredge Quarella channel, more/less DNR involvement, more education/communication/involvement through the Lake Scene and the Lake Association.

29 - Do you feel the lake is better, worse or stayed the same as previous years? If so, in what way?

193 (52%) expressed opinions, summarized below:

A. algae	17	11	6
B. plants	19	51	6
C. boating/fishing violations *	11	0	0
D. boat traffic/congestion	2	43	0
E. crime **	1	0	0
F. Eurasian milfoil threat ***	1	0	0
G. fishing quality	2	20	0
H. noise	0	7	0
I. overdevelopment	0	6	0
J. erosion	0	2	0
K. water depth ****	11	3	0
L. water quality	97	7	0
M. zebra mussel threat	0	0	0
N. other *****	15	1	0

- * because of boat patrol
- **neighborhood watch
- ***information
- ****water level (8), dredging (3)

*****better because of information from Lake Association and the Lake Scene, worse because of "more and more people taking less & less care.

22 - Your comments will be very useful, carefully considered and greatly appreciated.

83 (23%) used the comment section to reiterate and expand on the concerns you checked off as important and ways to deal with them. You also added some new ones: swimmer's itch, litter, dogs, the Sanitary District, car speed and road conditions. You also provided information about yourselves and thanked TJ's for improvements, Mortenson's for the Lake Scene, the Lake Association and the Lake Project.

The conflicts arising from living on a multiple use recreational lake are apparent. You are both pro and con the boat patrol, herbicide spraying, DNR, Townships and TJ's. The conflicts between fishermen and water skiers seem of particular concern. Ice fishing and jet skiing are both criticized for interfering with others enjoyment of the lakes.

A discussion of these issues was presented at the 1991 Lake Association annual meeting and as an insert in the 1991 Labor Day issue of the Lake Scene. Some suggest becoming a Lake District, other hope conflicts can be resolved by cooperation and consideration of the rights of others. Many of you want more communication and education. Some of you want more long range planning. The latter with respect to water quality must begin with the watershed clean.

Immediate concerns are Eurasian milfoil, zebra mussels and purple loosestrife; learn to recognize them and report your finding. Attend monthly trustee meetings and the annual meeting. Read the Lake Scene and inserts. Report zoning, boating and fishing violations. Obey laws and ordinances. Join a team. Volunteer to help. Get involved. Respect and care for the lake and the rights of others.

Lake Planning Grant - Water Quality Update

Phyllis Grimm

The first year of the two year lake and tributary water quality study showed that the lakes remained stratified throughout the summer. This resulted in a delightful season of minimal algal blooms until after mixing in mid-September.

Sixteen samples and sets of measurements were taken from both the top and bottom of the deepest holes in Bear Trap and Wapogasset and fourteen each from both Balsam Branch and Friday Creek. Flow rates of the tributaries were also measured at the time of sampling, 5/20/91 to 10/28/91. Congratulations to Don Wegner and Ed O'Neill, ably assisted by Jim Earl, for their precision and excellent attention to the details of taking measurements and proper samples which has resulted in totally reliable data. Note that the intrepid researchers collected the last samples just before the Halloween storm of 1991.

Oxygen depletion at the bottom of the lakes occurred in June and resulted in anaerobic bacterial breakdown of bound phosphorous into a more available form. This phosphorous, however, did not enter the water column until mixing in September and was not available for algal growth until then. The date of mixing is determined by temperature, wind and the shape of the lake. Shallow lakes usually either do not stratify or do so unstably. The latter situation results in the sediments contributing the phosphorous needed for algal blooms throughout the summer.

Both Balsam Branch and Friday Creek contribute significant amounts of nutrients, both phosphorous and nitrogen, to the lakes from May to October. Balsam Branch has a lower concentration of nutrients than Friday Creek but contributes more to the lakes because of it's greater flow.

Historical data is limited with respect to the tributary inputs. A 1972-3 E.P.A. study, said to have used some dubious methodology, shows a higher concentration of nitrogen in Balsam Branch but a lower flow rate. As a result, the nitrogen contribution found in both studies is of the same order of magnitude. Phosphorous concentrations are similar. Nitrogen concentration of Friday Creek is somewhat higher in the E. P.A. study. A D.N.R. study of 6 samples each in 1973-4 and 1975-6 on each stream had similar results but no flow data.

The enormous Balsam Branch watershed, variously described as between 50 and 100 square miles, makes clean up a difficult and expensive task. Friday Creek, with it's higher level of nutrients and watershed of about 10 square miles will be easier to clean up. Hopefully these data have come to the attention of the D.N.R. and the non-point source watershed clean up program.

Nothing can be done to lower the nutrient levels in the lakes until the watersheds are cleaned up. However, care must be taken by lake residents not to increase the present nutrient levels. Minimize runoff with buffer zones of plants and care during construction projects; don't rake lawn or garden debris into the lake or burn near shore - compost; use lake water to fertilize gardens and lawns; don't use commercial fertilizers, especially those containing phosphorous.

Boat Access Interview (Tabulated)

Non Residents Only

1. Location of this boat access?

Bear Trap	Garfield Park	Sunrise Beach	Mort's Marina	TJ's	Blank	Total
20	32	78	17	36		2185

3. Where do you live?

No.	City and State	No.	City and State	No.	City and State
1	Almena, WI	1	LaCrosse, WI	1	Eagan/St. Paul, MN
16	Amery, WI	1	Luck, WI	1	Hopedale, MN
1	Arcadia, WI	1	Lundwood City, WI	2	Inver Grove H, MN
12	Baldwin, WI	1	Menominee, WI	1	Lake Elmo, MN
1	Balsam Lake, WI	1	Minog, WI	1	Lindstrom, MN
2	Bay City, WI	22	New Richmond, WI	1	Maple Grove, MN
1	Boyceville, WI	2	Oakdale, WI	1	Maplewood, MN
3	Clayton, WI	5	Osceola, WI	1	Minneapolis, MN
4	Clear Lake, WI	1	Plum City, WI	1	Newport, MN
1	Cushing, WI	2	Prescott, WI	5	Red Wing, MN
2	Deer Park, WI	6	River Falls, WI	1	Richfield, MN
3	Deronda, WI	4	Roberts, WI	2	Scandia, MN
1	Dresser, WI	1	Sheboygan, WI	1	Shoreview, MN
1	Eau Claire, WI	5	Somerset, WI	1	St. Paul, MN
4	Ellsworth, WI	6	Star Prairie, WI	1	St. Paul Park, MN
1	Elmwood, WI	1	Turtle Lake, WI	1	Stillwater, MN
1	Emerald, WI	3	Wanderoos, WI	1	Twin Cities, MN
1	Farmington, WI	3	Woodville, WI	1	White Bear, MN
2	Forest, WI	1	Bloomington, MN	1	Winona, MN
1	Glenwood City, WI	1	Chaska, MN	1	Woodbury, MN
6	Hammond, WI	2	Cottage Grove, MN	1	Unknown, MO
11	Hudson, WI	2	Eagan, MN		

4. How many are there in your party?

The smallest party size was 1. The largest party size was 12. The average party size was 2.8. There were a total of 508 persons counted in the 185 interviews.

5. Why did you choose these lakes?

No.	Reason given:	No.	Reason given:
39	Close to home	1	Came with friends
24	Knows friend or relative on lake.	1	Dad fished lake in the 50's
22	Fish	1	Have cabin of Apple River
17	Like the lake	1	Heard it was a good lake
11	Know the lake	1	Looking at place here
10	Nice Lake	1	Mainly for bass and crappies
9	Bass tournament	1	Muskie
7	Fished here before	1	Never fished, wanted to try
7	Good fishing	1	No Eurasian Milfoil, <u>fishing is good</u>
5	Like the area	1	No <u>special</u> reason
4	Always had <u>good luck</u>	1	Pan fish lake
4	Big lake	1	<u>Pickup boat</u> for repair
4	Used to fish here	1	Prior experience
3	<u>Fishing is better</u>	1	Scout <u>troop</u> on canoe <u>trip</u>

5. Why did you choose these lakes? (continued)

2	Crappies	1	Try different
1	better lake than lakes around home	1	Usually fish Apple River
1	Bringing boat out for service	1	Usually fish here
1	Came last year and enjoyed it	1	Walleyes, polk county

6. How many years have you used these lakes?

Number Persons	Years Used	Number Persons	Years Used
2	5	2	11
5	4	15	10
1	3	3	8
1	3	4	7
1	3	4	6
7	3	12	5
3	2	10	4
7	2	13	3
1	1	26	2
16	1	12	1
7	1		

7. How many times a season do you come to this lake?

Summer				Winter			
Number Persons	Times Used	Number Persons	Times Used	Number Persons	Times Used	Number Persons	Times Used
1	60	1	14	1	60	1	14
1	55	13	12	2	50	6	12
1	50	15	10	1	40	3	10
2	48	3	9	2	32	1	8
1	40	6	8	2	30	3	6
2	32	4	7	2	25	5	5
4	30	17	6	1	24	3	4
5	25	11	5	6	20	10	3
2	24	9	4	1	16	9	2
1	23	15	3	1	15	2	1
6	20	12	2				
2	16	7	1				
5	15						

8. Did you have a good time? Yes 165
No 11

9. Purpose of launching your boat?

Fishin Water skiing Pleasure boating Other, specify

156 18 29 6*

* Bird watching, Boat Repair, Knee boarding, Swimming, Torpedo riding, Tow children on raft and Tubing

10. Kind of boat launched?

No. of Wate	Type of Watercraft	Hours/ week Used
1	Canoe	Blank
3	Row Boat	11
0	Sailboat	0
0	Jet Ski	0
4	Inboard	33
4	I/O	Blank
164	Outboard -	601
6	Pontoon Boat	25.5

Type of Watercraft	No. of Water Craft	Water Craft Length	No. of Water Craft	Water Craft HP
Canoe	1	1	1	0
Row Boat	1	1	1	1
	2	1	1	20"
			1	Blank
Inboard	1	1	1	175
	1	1	1	180
	1	2	1	350
	1	21	1	Blank
I/O	2	17	1	120
	2	18	2	130
			1	175
Outboard	6	12	1	4.5
	46	14	3	6
	2	14.5	1	7.5
	8	15	4	9
	4	15.5	2	9.5
	44	16	3	10
	3	16.5	1	12
	10	17	14	15
	28	18	2	18
	1	18.5	9	20
	3	19	19	25
		20	2	30
	2	21	4	35
Outboard			15	40
			1	45
			1	48
			18	50
			2	55
			7	60
			5	65
			4	70
			7	75
			4	80
			1	85
			7	90
			1	95
		4	100	

Continued

Type of Watercraft	No. of Water Craft	Water Craft Length	No. of Water Craft	Water Craft HP
Outboard			1	105
			2	115
			3	120
			1	135
			1	140
			6	150
			2	175
			4	200
Pontoon Boat	1	18	1	18
	1	20	1	25
	3	24	1	75
			1	90
			1	120

11. When you fish, do you usually, Keep, Catch & Release, or Both the fish you catch?

24 fisherman indicate that they <u>kept</u> the fish they <u>caught</u> .
39 fisherman indicated that they <u>released</u> the fish they <u>caught</u> .
105 <u>fisherman indicated</u> that they <u>practiced</u> both <u>keep</u> and <u>catch & release</u> .
17 of those interviewed were either not fishermen or did not care to respond.

12. Is fishing Better, Worse or The Same as previous years?

17 fisherman indicated that <u>fishing</u> was better than previous years.
36 fisherman indicated that <u>fishing</u> was the same as <u>previous years</u> .
73 fisherman indicated that <u>fishing</u> was worse than <u>previous years</u> .
59 of those interviewed were either not <u>fish</u>

13. What was your catch?

6	fisherman <u>caught</u> 13 Walleye, kept 5, released 8.
16	fisherman <u>caught</u> 21 Northern, <u>kept</u> 11, released 10.
0	fisherman <u>caught</u> 0 Muskie, <u>kept</u> 0, released 0.
63	fisherman caught 1199 Crappie, kept 836, released 363.
62	fisherman <u>caught</u> 1202 Sunfish, <u>kept</u> 758, released 444.
61	fisherman <u>caught</u> 335 Bass, kept 27, released 308.
7	fisherman <u>caught</u> 31 Perch and Rock bass, <u>kept</u> 13, released 18.

14. Do you have any suggestions to improve these lakes?

No.	Suggestion
2	Ban <u>fertilizing lawns</u>
1	Bass limits smaller
9	Bear Trap landing-extend, put in dock, more parking, toilets
1	Catch/release <u>everything</u> but panfish
1	Continue water <u>study</u> .
1	Control boat speed
7	Control weeds
1	Don't allow tournaments
1	Don't <u>improve public landings</u> if there is a fee
1	Donation boxes at landings for their upkeep or fish cribs

14. Do you have any suggestions to improve these lakes? continued

1	Donation boxes at Marinas
11	Garfield Park landing-improve landing, dredge, put in docks, better parking, cut up trees
1	Get rid of <u>algae</u>
7	Improve the <u>public landings-docks, toilets, trash cans</u>
1	Jet skiers-keep off the lake
1	Jet skiers-slow them down
2	Let fish grow <u>larger</u>
1	More lots for sale
1	More places to stop, eat
1	More <u>voluntary catch and release</u>
1	Need <u>public landing S.E. side, dock at landing, no fee</u>
2	No <u>spearing</u>
1	Pay attention when <u>skiing, don't zig-zag.</u>
1	Public beach
1	Publicize that catch and release is practiced at bass tournaments.
1	Put in artificial reefs
1	Put in more fish cribs
1	Reduce Minnesota boats
14	Stock more walleyes, bass
1	Stock muskies
2	Stock walleye, not muskies
12	Sunrise Beach landing-barrels for refuse, <u>change box for landing maint., toilets, dock</u>
1	Watch for <u>Eurasian Milfoil</u>

15. Your comments will be very` useful, carefully considered and greatly appreciated.

1 st time on lake, usually go to MN lakes, now too many weeds
 Bear Trap landing awful, Garfield needs to be improved
 Bear Trap landing is very good
 Boaters seem to come too close to fishermen. Boat went through narrows very fast. We usually launch at Mort's. Parking & facilities better
 Busy but courteous
 Came out because it was such a nice day.
 Don't believe in cutting weeds
 Enjoy the lake - homes and scenery always enjoyable whether we catch fish or not.
 Everything nice
 Fish here only weekdays. Unpleasant people - fast boats. Waterpatrol good idea.
 Fun time
 Glad they increased depth for launching
 Good lake
 Good lake- one of better lakes in Wisconsin
 Good lake-not as congested as MN lakes
 Good quality lake
 Good water level at present height Happy
 Have always liked this lake
 Have tried Wapo twice now and no luck. Looking for walleye. Has had better luck in Apple River
 I just enjoy getting out on this lake
 Is someone dumping the fish, what an odor! It has been great
 Just likes getting out by himself, doesn't have to catch any to enjoy it
 Keep it like it is
 Keep up good work on lake
 Lake is o.k. very nice area. Does not like spearing
 Lake shore looks good -clean not trashy-carp down
 Lake well managed, people nice, no trouble with skiers or jet skis.

Ice Fishing Interview (Tabulated)

1/11/92[16	All interviews were conducted	Wapo asset	
1/21/9 7	between 1:35pm and 5:00pm.		5
2/11/9 1		4	
2/16/92 16			
2/23/92 6			
3/1/92 14			
Blank			
Total 611			

Location on lake:

Ragna's Addition	1	Long wood	12
Weber's Birch Haven	2	North Sunrise	1
Manitou Point	3	Sunrise Beach	14
Haney Addition	1	West Shore	5
Buzzetti Park	1	Wapo Valley Resort	18
YMCA	2	Blank	1

1. Are you a lake resident? Yes No ` 4
57

2. If you are a non-resident, where do you live?

Cit	No.	Cit , State	No.
Amery , WI	3	Lino Lakes, MN	1
Balsam Lake, WI	1	Maplewood, MN	2
Big Lake, WI	1	New Richmond, WI	6
Boyceville, WI	1	Pepin, WI	1
Columbia Heights, MN	1	Plainview, WI	1
Cottage Grove, MN	3	River Falls, WI	5
Deer Park, WI	1	Roseville, MN	1
Deronda, WI	1	Shoreview, MN	1
Eau Claire, WI	1	So. St. Paul, MN	3
Elmwood, WI	2	St. Paul, MN	6
Glenwood City, WI	1	Star Prairie, WI	2
Hammond, WI	2	Turtle Lake, Deronda, WI	1
Hastings, MN	2	Unknown	5
Houlton, WI	1	Wilson, WI	1
Hudson, WI	1	Woodbury , MN	1
Inver Grove Heights, MN	1	Woodville, WI	1

3. How many are there in your party? Of 61 interviews

18 were party size of 1
17 were a party size of 2
12 were a party size of 3
9 were a party size of 4
3 were a party size of 5
1 were a party size of 6
1 were a party of 7

The average party size was 2.5 persons.

4. How many years have you used these lakes?

7 parties use these lakes for 1 year.	6 parties used these lakes for 15 years.
7 parties used these lakes for 2 years.	2 parties used these lakes for 16 years.
5 parties used these lakes for 3 years.	2 parties used these lakes for 20 years.
3 parties used these lakes for 4 years.	1 party used these lakes for 29 ears.
2 parties used these lakes for 5 years.	2 parties used these lakes for 30 years.
2 parties used these lakes for 6 years.	2 parties used these lakes for 35 years.
1 party used these lakes for 8 years.	7 parties used these lakes for 40 years.
7 parties used these lakes for 10 years.	1 party used these lakes for 50 years.
1 party used these lakes for 12 years.	1 party used these lakes for 57 years.
1 party used these lakes for 13 years.	1 party used these lakes for 60 years.

5. How many times a season do you fish this lake?

Summer	
No. parties	Times
5	0
3	1
9	2
7	3
2	4
2	5
3	6 ,
2	8
10	10
2	15
1	20
1	40
1	50
13	Blank

Winter	
No. parties	Times
0	3
1	5
2	4
3	6
4	1
5	2
6	4
7	1
8	2
10	6
12	2
14	1
15	2
16	2
20	5
25	2
30	4
40	4
80	1
Blank	4

6. Are you using a fish house?

Yes	No	26	34
Blank			

catch?

Species	How many?	How many kept?	How many released?
Walleye	15	11	4
Northern	20	9	11
Muskie	0	0	0
Crappie	577	488	89
Sunfish	651	482	217
Bass	1	0	1
Perch	3	3	0
Not specified	23	10	13

8. When you fish, do you usually, Keep, Catch & Release, or Both the fish you catch?

<u>Keep</u>	8
<u>Catch & Release</u>	1
<u>Both</u>	52
<u>Blank</u>	2

9. Do you feel that fishing is better, worse or stayed the same as previous years?

<u>Better</u>	1
<u>Worse</u>	
<u>Stayed the same</u>	2
<u>Blank</u>	1

10. What do you like about these lakes?

<u>Abundance of lakes in the area</u>	Large variety
<u>Accessibility</u>	Less congested
<u>Area</u>	Location
<u>Big crappies</u>	Lots of fish (Panfish, Walleyes)
<u>Bigness</u>	Nice crappies
<u>Can usually catch fish</u>	Nicer panfish
<u>Clean</u>	No spearing
<u>Clear water</u>	Not congested
<u>Close</u>	Not much traffic
<u>Convenient</u>	Panfish better
<u>Crappies</u>	Peaceful
<u>Different depths</u>	Place to fish
<u>Distance</u>	Pretty
<u>Easy to get to</u>	Quiet
<u>Familiar species available</u>	Several accesses
<u>Fish bigger</u>	Walleye Several different species
<u>Fish bite better</u>	Size of fish
<u>Good access</u>	Thought there were fish in lake
<u>Good clean fish</u>	Usually catch panfish
<u>Good Fishing</u>	Usually good fishing
<u>Good structure</u>	Walleye worse

11. Do you have any suggestions to improve these lakes?

<u>25 limit under 16</u>	Parasites in fish here
<u>Bigger fish</u>	Put dock at public landings
<u>Cut boat traffic in summer</u>	Put more fish in them hard to catch small
<u>Cut down crowd in summer</u>	Slow down boats
<u>Inch limit on crappies</u>	Sorry
<u>Lake bars on ice</u>	Stock more fish
<u>Lower the limits</u>	Stop cutting all the weeds
<u>Make people police their trash</u>	Toilets at landings
<u>Milfoil</u>	Too many weeds
<u>More enforcement of trash pickup</u>	Too much snowmobile speeding
<u>No</u>	Walleye size limit 15"
<u>None</u>	

12. Do you have any suggestions for solving the problem of trash left on the ice?

<u>Arrest the offenders</u>	Lake police
<u>Better patrol at night</u>	Make accountable
<u>Bigger fine</u>	<u>Maybe</u> some big signs by the entrance to lake
Boy scouts	More surveillance by DNR
Chart fish houses and hold them responsible.	Not a problem
<u>Definitely is a problem</u>	Patrol
Enforce laws	<u>Personal responsibility</u>
<u>Everyone</u> clean up after yourself	Put dumpster/trash cans at accesses
<u>Everyone</u> pitch in and do their part	Put trash barrel by ice houses
Fine violators	Report to warden
Get <u>tough</u>	Revoke <u>fishing priveledge</u>
Have a clean up	Signs, monitors
I <u>pick up</u> others trash.	Up to the individual
<u>Kill-shoot or maim</u>	<u>Volunteers to patrol</u>

13. Your comments will be very useful, carefully considered and greatly appreciated.

Carp are <u>becoming a problem</u> , <u>algae bloom</u> worse
Pollution control
Have a <u>good lake</u> , <u>keep up</u> the good work
<u>Having not</u> fished this lake but of <u>listening to problems</u> this lake used to be
Heard lake magnor <u>freezing out</u> (no O2)
Lake assn, <u>good job</u> - summer patrol <u>good</u> , sees increase in use
Likes the lake
Nice <u>day</u>
Nice lake to come to
No
People don't seem to care
Sewer <u>system</u> has <u>improved</u> lakes
Thank you for the survey.
<u>Weeds</u> are bad - speed boats in summer