

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

Fisheries Division

Water Hicks Lake

County Osceola

T. 19N R. 08W Sec. 21

I.D. _____

FISH COLLECTION

Date 07-01, 02-86

Sheet 1 of 4

Summary of: () All sites () Coll. site No. _____ () Index site No. _____ (X) All gear () Gear GILL, TRAP AND FYKE NETS

Sample site(s): Number of 8 Depth Range 2-20' Temperature range 76° F

Location(s) (describe or map below): _____

Cover (abundance, type): Heavy-aquatic weed

Fish foods: minnows

Water clarity, level, etc.: clear, high

Cond.: _____

Electro. eff.: _____

Weather: Present partly cloudy

Preceding _____

Temperature: Air 76° F Water surface 76° F

Time of day 2:45 PM

Stream: Length _____ Avg. width _____

Avg. depth _____

Velocity: Ave. _____

Surface _____

Discharge _____

Bottom type: _____

Gear Description: 2 variable mesh gill nets, 3 small mesh fyke nets, 3 large mesh trap nets

Effort: Net lifts 8

Net nights 2

Area covered _____

Hours shocked _____

Purpose of collection: Fisheries inventory

Data collected (✓): (X) CATCH SUMMARY (X) LENGTH-FREQUENCY () LENGTH-BIOMASS () LENGTH-WEIGHT REGRESSION
(X) GROWTH () MARK & RECAPTURE ESTIMATES () AGE-FREQUENCY & SURVIVAL

Analysis, map, remarks, fishing reports: Only 15% of the bluegills collected were of catchable size. Only one 8-inch bluegill was collected. A total of 3002 fish were collected of which 2488 (82.9%) were bluegills. The growth of all age classes of bluegills II thru VIII are 0.8 inches below the state average. The growth of all other game species are also below state average (see fish growth analysis form). The growth of bass does seem to improve with fish over 15 inches.

Perch to 12 inches were collected but the population is small. The lake is weedy, a soft black bottom in deeper waters with a poor oxygen-temperature profile and not typical of good perch waters. The lake has a very good population of northern pike in the 18-24 inch range which also probably prey heavily on the perch population.

The lake has characteristics which favor bluegill survival. Vast weedy areas and wide shallow shoals with a firm substrate. Hundreds of spawning beds (old and new) were observed during the survey.

Recommend the introduction of an additional predator species, channel catfish, and an increase in the size limit on largemouth bass to 14 or 15."

Fishing Reports: Good catches of northern pike in the 20-26 inch range. Lake noted for large largemouth bass. Fish over 7 lbs have been taken in past years. Fishing for panfish has been poor. Few large bluegills. Perch numbers have decreased in past years.

Analysis by R. E. Shepherd

Sec. Field _____

Collection by G. Jeffery, E. Smiddy Sec. Field _____

Identification by Jeffery

Sec. Field _____

COPIES TO: (✓) LANSING () REGION () DISTRICT () I.F.R.

CATCH SUMMARY BY GEAR

Gear = Trap or as indicated.

Per Hicks County, Surr

Species	BLUEGILL		PUMPKINSEED		BL. CRAPPIE		WARMOUTH		Y. PERCH		L. BASS		N. PIKE	
Gear														
Lengths	5.7		5.8		8.6		6.0		8.0		12.0		22.8	
Avg. Wt.	0.18				0.38		0.2		0.2		1.18		2.78	
	No.	Lb.	No.	Lb.	No.	Lb.	No.	Lb.	No.	Lb.	No.	Lb.	No.	Lb.
Total	178	32.1	30	5.4	9	3.4	1	0.2	1	0.2	29	34.2	5	13.9
%	66.4	31.5	11.2	5.3	3.4	3.3	0.4	0.2	0.4	0.2	10.8	33.6	1.9	13.6
CPE														
% L-A's	65.1		56.7		100		100		100		51.7		100	
Inches														
1														
2														
3														
4	7	0.3	3	0.2										
5	55	6.3	10	1.1										
6	100	20.0	9	2.0			1	0.2						
7	15	5.2	6	1.5	2	0.3								
8	1	0.3	2	0.6	4	1.3			1	0.2				
9					1	0.4					3	1.5		
10											10	5.8		
11					2	1.4					1	0.7		
12											3	3.0		
13											7	8.5		
14											2	3.0		
15														
16											1	2.0		
17														
18														
19											1	4.8		
20											1	4.9	2	3.6
21														
22														
23													1	2.8
24														
25													1	3.5
26													1	4.0
27														
28														
29														
30														
31														
32														
33														
34														
35														
36														
37														
38														
39														
40														
Sample total	178	32.1	30	5.4	9	3.4	1	0.2			3,002		386.1	

ALL SPECIES TOTAL

Gear	No.	Lb.
TRAP	268	101.9
FYKE	2,715	261.3
GILL	19	22.9

↓ Record average length or range in length of fish.
 ↓ Total % = percent contribution of the species to the total catch in the gear.
 ↓ L-A = Legal- or acceptable- size game fish: bluegill, sunfish, rock bass-6'+ ; crappie, perch, bullhead-7'+ ; bass-12'+ ; walleye-15'+ ; pike-20'+ muskie-30'+ ; trout-7'+ in U.P. streams, 8'+ in L.P. streams, 10'+ in lakes.
 *OR:
 ↓ Inch groups: 1=1.0-1.9, 2=2.0-2.9, etc.

LENGTH-FREQUENCY & LENGTH-BIOMASS SAMPLE

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

Fisheries Division

FISH COLLECTION (CON'T.)

PIKE

Water Hicks Lake

T. 19N R. 08W Sec. 21

Date 07/01, 02/86

County Osceola

I.D. _____

Sheet 2 of 4

Summary of: () All sites () Coll. site No. _____ () Index site No. _____ () All gear () Gear Trap Net

Species	BULLHEAD		WH. SUCKER											
Gear														
Lengths	10.9		12.0											
Avg. Wt.	0.84		0.8											
	No.	Lb.	No.	Lb.	No.	Lb.	No.	Lb.	No.	Lb.	No.	Lb.	No.	Lb.
Total	14	11.7	1	0.8										
%	5.2	11.5	0.4	0.8										
CPE														
% L-A-S	100		100											
Inches														
1														
2														
3														
4														
5														
6														
7														
8														
9	1													
10	4													
11	6													
12	2		1	0.8										
13	1													
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														
25														
26														
27														
28														
29														
30														
31														
32														
33														
34														
35														
36														
37														
38														
Sample total	14	11.7	1	0.8										

LENGTH-FREQUENCY & LENGTH-BIOMASS SAMPLE

WICHIGAN DEPARTMENT OF NATURAL RESOURCES

Fisheries Division

FISH COLLECTION (CON'T.)

Location Hicks Lake

T. 19N R. 08W Sec. 21

Date 07/01, 02/86

County Osceola

I.D. _____

Sheet 3 of 4

Summary of: () All sites () Coll. site No. _____ () Index site No. _____ () All gear () Gear FYKE NETS

Species	BLUEGILL		PUMPKINSEEDS		BL. CRAPPIE		Y. PERCH		L. BASS		BULLHEAD		WH. SUCKER	
Gear														
Lengths	4.2		5.5		6.2		7.1		5.5		8.9		7.5	
Avg Wt.	0.08		0.11		0.19		0.25		0.2		0.62		0.25	
	No.	Lb.	No.	Lb.	No.	Lb.	No.	Lb.	No.	Lb.	No.	Lb.	No.	Lb.
Total	2310	197.7	349	39.4	10	1.9	11	2.8	2	0.4	30	18.5	2	0.5
%↓	85.1	75.7	12.9	15.1	0.4	0.7	0.4	1.1	0.1	0.2	1.1	7.1	0.1	0.2
CPE														
% L-A\$	11.0		16.6		60.0		54.6		0		93.3			
Inches↓														
1	22	0.1												
2	354	2.2	53	0.4							2			
3	172	5.5	86	3.0	2	.1			1					
4	492	29.9	139	8.9			2	.1						
5	1015	105.9	131	14.1			2	.1					1	.1
6	253	53.6	51	11.2	2	.2	1	.1						
7	2	0.5	7	1.8	4	.7	1	.1			1			
8					2	.9			1	.4	5			
9							4	1.8			7			
10											11		1	.4
11							1	.6			4			
12														
13														
14														
15														
16														
17														
18														
19														
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29														
30														
31														
32														
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34														
35														
36														
37														
38														
Sample total	2310	197.7	349	39.4	10	1.9	11	2.8	2	0.4	30	18.5	2	0.5

LENGTH-FREQUENCY & LENGTH-BIOMASS SAMPLE

CATCH SUMMARY BY GEAR

Gear = Fyke

or as indicated

File
July OSCEQ
Summary

Species	GOLDEN SHINER													
	No.	Lb.	No.	Lb.	No.	Lb.	No.	Lb.	No.	Lb.	No.	Lb.	No.	Lb.
Gear														
Lengths	5.0													
Avg. Wt.	0.1													
%	0.04	0.04												
CPE														
% L-A														
Inches														
1														
2														
3														
4														
5	1	.1												
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
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35														
36														
37														
38														
39														
40														
Sample total	1	.1												

LENGTH-FREQUENCY & LENGTH-BIOMASS SAMPLE

↙ Record average length or range in length of fish.
 ↘ Total % = percent contribution of the species to the total catch in the gear.
 ↗ L-A = Legal- or acceptable- size game fish: bluegill, sunfish, rock bass-6"+ ; crappie, perch, bullhead-7"+ ; bass-12"+ ; walleye-15"+ ; pike-20"+ ; muskie-30"+ ; trout-7"+ in U.P. streams, 8"+ in L.P. streams, 10"+ in lakes.
 *OR:
 ↕ Inch groups: 1=1.0-1.9, 2=2.0-2.9, etc.

Hicks Lake

T. 19N R. 08W Sec. 21

Date 07-01 & 02-86

County Osceola

I.D. _____

Sheet 4 of 4

Summary of: () All sites () Coll. site No. _____ () Index site No. _____ () All gear () Gear GILL

Species	BL. CRAPPIE		YELLOW PERCH		NORTHERN PIKE									
Gear														
Lengths	7.5		6.0		20.4									
Avg. Wt.	0.25		0.1		1.98									
Total	No.	Lb.	No.	Lb.	No.	Lb.	No.	Lb.	No.	Lb.	No.	Lb.	No.	Lb.
% ♀	10.5	2.2	31.6	2.6	57.9	95.2								
CPE														
% L-A♂	100		0		54.5									
Inches ♂														
1														
2														
3														
4														
5														
6			6	0.6										
7	1	0.2												
8	1	0.3												
9														
10														
11														
12														
13														
14														
15														
16					2	1.8								
17														
18					2	2.2								
19					1	1.3								
20														
21					2	4.2								
22					2	5.0								
23					1	2.8								
24														
25														
26														
27														
28					1	4.5								
29														
30														
31														
32														
33														
34														
35														
36														
37														
38														
Sample total	2	0.5	6	0.6	11	21.8								

LENGTH-FREQUENCY & LENGTH-BIOMASS SAMPLE

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

R-9070 4/81

Water Hicks Lake T. 19N R. 08W Sec. 21

FISH GROWTH ANALYSIS

County Osceola Id. _____

Collection Date 07/01-02/86

Gear and Methods Trap, Fyke & Gill Nets

Collected By C. Jeffery, E. Smiddy Section _____ Field _____ Aged By E. Smiddy Section _____ Field _____

Species ↓	Age Group ↕	Number of fish	Length range in inches	Mean length in inches	State avg. length	Growth index (by age group)	Mean growth index for species
Bluegill	II	5	3.2 - 3.9	3.7	4.2	-0.5	
	III	12	3.2 - 4.9	4.1	5.3	-1.1	
	IV	2	4.8 - 5.7	5.2	6.2		
	V	12	4.9 - 6.2	5.7	6.9	-1.2	
	VI	11	6.2 - 7.7	6.8	7.4	-0.6	
	VII	9	6.7 - 7.7	7.2	8.0	-0.8	-0.8
	VIII	1	8.0	8.0	8.4		
Pumpkinseeds	V	4	5.6 - 6.6	6.1	6.3		
	VI	6	6.4 - 7.0	6.7	6.8	-0.1	-0.1
	VIII	2	6.6, 7.0	6.8	7.5		
	IX	1	8.8	8.8			
Yellow Perch	0	1	3.5	3.5	3.3		
	I	1	4.7	4.7	4.0		
	II	1	5.4	5.4	5.7		
	III	7	6.0 - 6.5	6.3	6.8	-0.5	-0.5
	IV	1	7.3	7.3	7.8		
	V	1	8.0	8.0	8.7		

↓ Several species may be listed on one sheet.
 ↕ Age in years. Fish become one year older on January 1.

(over)

Species ↓	Age Group ↓	Number of fish	Length range in inches	Mean length in inches	State avg. length	Growth index (by age group)	Mean growth index for species
Yellow Perch (cont)	VI	1	9.2	9.2	9.7		
	VII	1	9.9	9.9	10.5		
	VIII	1	11.8	11.8	11.3		
Black Crappie	II	1	6.5	6.5	6.5		
	III	1	7.5	7.5	7.9		
	IV	1	7.1	7.1	8.9		
	VII	1	11.0	11.0	11.1		
Largemouth Bass	II	2	8.0, 9.4	8.7	8.7		
	III	14	9.9 -12.4	10.4	10.6	-0.2	
	IV	11	10.8 -14.8	12.8	12.0	-0.8	-0.6
	V	1	14.8	14.8	13.7		
	VII	1	16.4	16.4	16.7		
X	2	19.8, 20.3	20.0	19.3			
N. Pike	II	3	16.1 -18.4	17.0	19.0		
	III	6	18.5 -25.4	21.0	21.8	-0.8	
	IV	6	21.3 -23.3	22.7	24.2	-1.5	-1.2
	VI	1	26.8	26.8	27.8		
	VII	1	28.9	28.9	30.0		

Analysis:

Prepared by R. E. Shepherd
 Copies to: Lansing, Region, District, I.F.R.

Section _____ Field _____

Date 03/23/87

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

FD-350 (4-81)

Water Hicks Lake T 19N R 08W Sec. 21

County Osceola 14

Gear and Methods Electro-fishing

FISH GROWTH ANALYSIS
9/28/87
10/13/87

Collected By Shepherd, Hamilton Section Fish, Field Aged By D. Manz Section Fish, Field

Species ↓	Age Group ↓	Number of fish	Length range in inches	Mean length in inches	State avg length	Growth index (by age group)	Mean growth index for species
Bluegill	IV	2	6.0, 6.1	6.0	6.7	-0.7	
	V	1	6.3	6.3	7.3	-1.0	
Pumpkinseed	VI	1	6.7	6.7	7.0	-0.3	
	VII	1	7.6	7.6	7.4	+0.2	
	VIII	2	6.8, 7.1	6.9	7.5	-0.6	
Black Crappie	III	1	7.2	7.2	8.6	-1.4	
	IV	2	8.8, 9.6	9.2	9.4	-0.2	
	V	2	8.6, 9.2	8.9	10.2	-1.3	
Yellow Perch	IV	1	8.1	8.1	8.2	-0.1	
	V	2	9.3, 9.5	9.4	9.4	0.0	
Largemouth Bass	I	2	8.0, 8.3	8.2	7.1	+1.1	
	II	2	10.6, 10.6	10.6	9.4	+1.2	
	III	2	9.8, 12.9	11.4	11.2	+0.2	
	IV	3	10.7, 14.2	12.4	13.2	-0.8	
	V	1	13.8	13.8	14.4	-0.6	

↓ Several species may be listed on one sheet.
↓ Age in years. Fish become one year older on January 1.

(over)

