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**INSTITUTE FOR FISHERIES RESEARCH**  
DIVISION OF FISHERIES  
**MICHIGAN DEPARTMENT OF CONSERVATION**  
COOPERATING WITH THE  
**UNIVERSITY OF MICHIGAN**

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REPORT NO. 470

**ANALYSIS OF FISHING IN BAKER  
LAKE, BARRY COUNTY, SUMMERS OF 1936, 1937**

The Yankee Springs Project has taken a creel census of Baker Lake for one complete summer (1936) and for a portion of another summer. The data are summarized below.

An Institute survey party, assisted by the Project, made a survey of Baker Lake in 1936. According to the survey, the lake has an area of 58.8 acres. It is apparently of the rich southern Michigan type of lake with little or no oxygen in deeper water in summer. It is a bluegill-large-mouthed bass lake, containing the kinds of fish common to such waters. The census records small-mouthed bass in the catch each season, and it is entirely possible that these fish are present. None were taken by the survey party, however, and the habitat is apparently much better suited to the large-mouth. The census-takers were possibly in error. Not all census-takers can distinguish between bluegills and sunfish, so the figures given for each of these may be somewhat inaccurate, although both were undoubtedly present in the catch.

Records for 1936 indicate that 3,476 legal-sized fish were taken in 734 fisherman days. The fish had an average length of almost 8 inches and were taken at the rate of about one fish per hour. The average fishing day was rather long (4.5 hours). Only 16 per cent of the anglers were entirely unsuccessful in taking fish.

Bluegills decidedly predominated in the catch. They represented about 70 per cent of all fish taken. Perch, black crappies, bullheads, sunfish and large-mouthed bass were each represented in the catch by over a hundred individuals. Warmouth bass and northern pike were relatively insignificant.

Seventy-five per cent of the anglers were from Barry and Kent counties; relatively few were non-residents.

The catch in 1936 represented 59 fish per acre.

The information is summarized in Tables 1, 2 and 3.

During June and the first half of July, 1937, fishing was decidedly better than for the same months in 1936. In June the catch was 2 fish per hour, compared with 1.4 fish per hour for this month the previous year. The catch in July decreased, but was slightly higher than for the full month of July in 1936. Bluegills again decidedly predominated. Residence of the anglers was similar for the two seasons.

Data for fishing from June 25th to July 15th are summarized in Tables 4 and 5.

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Table 1

General Data on Fishing on  
Baker Lake, Barry County, Summer of 1936

Date	Number of Fisherman-days	Anglers Taking No Fish		Number of Legal-sized Fish	Number of Hours Fished	Catch Per Hour	Average Size of Fish	Number of Fish Per Fisherman-day	Hours Per Fisherman-day
		No.	%						
June 25-30	113	24	21	728	539.0	1.4	8.1	6.4	4.8
July	253	31	12	1050	1166.5	0.9	7.9	4.2	4.6
August	215	30	14	999	884.2	1.1	7.8	4.6	4.1
September	153	30	20	699	720.5	1.0	7.7	4.6	4.7
Totals or Averages	734	115	16	3476	3310.2	1.05	7.9	4.7	4.5

Table 2

Species, Number and Average Size of Fish Taken in  
Baker Lake, Barry County, Summer of 1936

Date	Large-mouthed Bass		Small-mouthed Bass*		Bluegills		Sunfish		Perch		Black Crappie		Bullheads		Warmouth Bass		Northern Pike	
	No.	Ave. Size	No.	Ave. Size	No.	Ave. Size	No.	Ave. Size	No.	Ave. Size	No.	Ave. Size	No.	Ave. Size	No.	Ave. Size	No.	Ave. Size
June 25-30	38	13.2	14	14.9	401	7.3	66	6.6	76	7.8	22	8.0	104	10.1	7	7.0	...	...
July	44	13.6	4	12.8	757	7.3	68	6.5	66	7.6	54	8.8	49	9.5	4	7.0	4	17.0
August	16	12.4	7	12.3	726	7.4	31	6.9	110	8.1	99	9.5	10	10.5	...	...	...	...
September	9	13.7	1	12.0	562	7.5	14	7.2	93	8.3	4	8.5	14	9.7	2	6.0	...	...
Totals or Averages	107	13.2	26	13.0	2446	7.4	179	6.8	345	8.0	179	8.7	177	10.0	13	6.7	4	4.1

\* Possibly large-mouthed bass.

Table 3

Residence of Fishermen,  
Baker Lake, Barry County, Summer of 1936

## RESIDENTS

County	June	July	August	September	Total No.
Barry	27	92	102	78	299
Allegan	4	16	15	6	41
Calhoun	2	3	15	2	22
Kent	55	94	44	55	248
Emmet	1	...	...	...	1
Eaton	...	2	...	...	2
Ingham	6	15	2	3	26
Jackson	2	4	...	...	6
Kalamazoo	4	5	1	3	13
Lissaukee	...	2	...	...	2
Luskegon	...	1	...	...	1
Ottawa	3	1	...	...	4
Saginaw	...	...	1	...	1
Wayne	3	1	3	...	7
Unknown	4	8	3	1	16
Total	111	244	136	148	689

## NON-RESIDENTS

States	June	July	August	September	Total No.
Ohio	2	4	2	...	8
Indiana	...	4	22	...	26
Illinois	...	1	5	5	11
Total	2	9	29	5	45

Out of state = 45 or 6% of total number of fishermen.

Table 4

General Data of Fishing in  
Baker Lake, Barry County, Summer of 1937 (To July 15th)

Date	Number of Fisherman-days	Number of Fishermen Taking No Fish	Number of Hours Fished	Number of Legal Fish Caught	Number of Fish Per Fisherman	Number of Fish Per Hour	Average Size Of All Fish Caught (Inches)	Number of Hours Per Fisherman-day
June 25-30	111	0	451.00	918	8.3	2.0	7.3	4.1
July 1-15	180	38	694.50	809	4.5	1.2	7.6	3.9
Total or Average	291	38	1145.50	1727	5.9	1.5	7.5	3.9

Table 5

Species, Number and Average Size of Fish Taken From  
Baker Lake, Barry County, Summer of 1937 (To July 15th)

Species	June		July		Total	
	No.	Average Size	No.	Average Size	No.	Average Size
Large-mouthed Bass	27	12.00	20	12.9	47	12.4
Small-mouthed Bass	4	11.5	5	12.3	9	11.9
Bluegills	731	7.1	685	7.4	1416	7.2
Sunfish	63	6.5	31	6.2	94	6.4
Yellow Perch	83	7.9	39	8.3	122	8.0
Calico Bass	...	...	15	7.9	15	7.9
Rock Bass	...	...	2	11.0	2	11.0
Bullheads	10	12.0	12	9.5	22	10.6
Total and Average Size	918	7.3	809	7.6	1727	7.5