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K. G. Fukano

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GERALD R. COOPER PH.D.
DIRECTOR

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ADDRESS
UNIVERSITY MUSEUMS ANNEX
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THE MICHIGAN GENERAL CREEL CENSUS FOR 1958

by

K. G. Fukano

The Michigan General Creel Census has been conducted since 1927. Conservation officers have obtained the catch records as a part of their regular duties. The object of the census is to obtain a sample of the sport fishing in all parts of the state. Creel records from special research projects of the Fish Division are not included.

During 1958, the officers secured records on 81,427 angler trips, divided into three major categories--trout, nontrout, and Great Lakes waters; each category was further subdivided into lakes and streams. It is believed that this tabulation of the data gives the best available indication of the fishing quality, and to some degree fishing intensity, in the six types of waters administered by the state. The numbers of anglers interviewed were as follows: (1) trout waters, 11,515 (14% of all anglers interviewed), of whom 1,820 fished in designated trout lakes and special trout ponds and 9,695 fished in streams; (2) nontrout waters, 59,852 (74%), of whom 52,789 fished in lakes and 7,063 fished in streams; (3) Great Lakes waters, 10,060 (12%), of whom 5,804 fished in the Great Lakes and 4,256 fished in the connecting waters.

Of the 81,427 anglers interviewed, 10,268 (13%) were nonresidents; 11,824 (15%) were women. For comparison, the total sale of fishing licenses in 1958 was 1,054,357 of which 215,907 (20%) were nonresidents.¹ Many nonresidents

¹ From "1958 License Sales by Counties" issued by Michigan Department of Conservation, 1959.

(98,008--45%) purchased temporary 15-day licenses. Officers contacted proportionately fewer nonresidents than residents, probably because the temporary nonresident licensee fishes only a few days and most nonresidents cannot fish in six southern Michigan counties from January 1 to the opening of the trout season.

Anglers were contacted either while fishing or at the end of a fishing trip. Thus, the census is a partial rather than a complete record on 81,427 angling trips. It does not represent 81,427 different individuals. Only legal-size fish caught by sport fishermen are considered.

Detailed analysis

The 81,427 anglers (11% fewer than in 1957) interviewed by conservation officers during 1958 had fished 194,527 hours and had caught 240,858 fish. The average catch per hour for all fishing was 1.2, the same as in 1957 (Table 1).

Records were obtained in 78 counties (Table 2). The lack of fishing records from five counties (Berrien, Eaton, Hillsdale, Keweenaw and Lenawee) and the paucity of records from a few others tend to bias the state-wide sample of fishing.

In this report the various types of waters are separated by Conservation Regions.

Fishing in Trout, Nontrout and Great Lakes Waters, by Conservation Regions

The numbers and percentages of anglers interviewed while fishing in the various waters are given in Table 3. Regions I and II furnished 96 percent of all records of trout fishing and Region III 4 percent. In Regions I and II 20 percent of all anglers fished for trout whereas in Region III only 1 percent did so.

Nontrout fishing records made up the largest percentage from Region II (80% of 40,807 anglers) and the smallest percentage from Region I (54% of 14,040 anglers).

Almost a quarter of the anglers interviewed in Region III (24% of 26,580 angler-days) were fishing Great Lakes waters.

Number of Trout Caught in Trout Waters, by Conservation Regions

Of the total trout catch recorded in 1958, brook trout constituted 48 percent; rainbow trout, 38 percent; and brown trout, 14 percent (Table 4). In 1957 these percentages were 54, 33 and 13, respectively.

The 8,406 brook trout taken in 1958 were divided as follows: Region I, 4,812 (57%); Region II, 3,416 (41%); and Region III, 178 (2%). Of 6,704 rainbow trout reported, Region II contributed 5,232 (78%); Region I, 1,236 (18%); Region III, 236 (4%). Of 2,374 brown trout recorded, 2,079 (87%) were caught in Region II; 181 (8%) in Region III; and 114 (5%) in Region I.

Of the 17,484 brook, brown, and rainbow trout reported from the trout waters 97 percent came from Regions I and II.

Other Species Caught in Trout Waters

Brook, brown and rainbow trout constituted 96 percent of all fish taken in trout waters. The numbers of each of 13 other kinds reported are as follows:

Suckers	193	Lake trout	15
Yellow perch	189	Northern pike	14
Bluegill	118	Walleye	3
Round whitefish	63	Largemouth bass	2
Rock bass	42	Splake	1
Smallmouth bass	33	Chub	<u>1</u>
American smelt	24	Total	698

Catch per hour--Trout Waters,
by Conservation Regions

As shown in Table 5 trout fishermen caught 0.6 fish per hour as compared to 0.8 fish per hour in 1957. The fishing quality index (trout only) was 0.6 trout per hour for the trout streams and 0.5 trout for the designated trout lakes and special trout ponds. The highest catch per hour for trout streams (0.9 trout) was reported from Region I whereas the highest catch per hour for trout lakes (0.6) was recorded in Region II. Most of the trout fishermen interviewed (84%) fished the streams.

Composition of Catch--Nontrout Waters,
by Conservation Regions

Conservation officers recorded 30 kinds of fish from nontrout waters. Bluegills and yellow perch together made up 69 percent of the catch (75% in Region I, 63% in Region II and 75% in Region III--see Table 6). The black crappie was the only other species that made up as much as 10 percent of the total catch in a region (10% in Region II and 11% in Region III). Other species important in the catch were: northern pike, pumpkinseed, rock bass, walleye, largemouth bass, rainbow trout and smallmouth bass. The 10 species mentioned have retained approximately the same rank in importance during the 10-year period 1949-1958 (Table 7). In 1958 these 10 species comprised 94 percent of the total recorded catch and at least 91 percent of the catch in every region. The remaining 20 kinds made up 6 percent and are listed below.

American smelt	5,563	Bowfin	27
Suckers	2,269	White bass	18
Bullheads	508	Gar	12
Lake trout	286	Freshwater drum	8
Carp	238	Muskellunge	5
Ciscoes	199	Burbot	4
Brook trout	111	Chubs	4
Lake whitefish	111	Redhorse	3
Warmouth	54	Round whitefish	<u>3</u>
Brown trout	42	Total	9,503
Catfishes	38		

Brook, brown and rainbow trout made up 1 percent of the total catch from nontrout waters.

The state-wide catch (as recorded in the census) of the 10 important species and the number and percentage contributed by each region is presented in Table 8. The bluegill, in nontrout waters, was the dominant species in the state as a whole (64,739 reported). Most bluegills (54% of the state total) and largemouth bass were recorded in Region III. Region II (from which more than half of the total nontrout catch reported for 1958 was taken) yielded the highest catches of yellow perch (51% of total for the state), black crappie, northern pike, pumpkinseed, rock bass, rainbow trout and smallmouth bass. The largest number of walleyes was reported caught in Region I. Regions II and III together produced 96 percent of all bluegills recorded in the census.

Catch per Hour--Nontrout Waters,
by Conservation Regions

Anglers who fished the nontrout waters had the same fishing success of 1.2 fish per hour as in 1957 (Table 9). The highest catch per hour (1.4) was recorded in Region III. All regions had catches of 1.0 fish per hour or better. According

to the catch per hour, fishing in the nontrout lakes was best in Region III (1.5) but fishing in the nontrout streams was best in Region II (1.4).

Composition of Catch--Great Lakes Waters

The yellow perch made up 93 percent of 60,985 fish reported from Great Lakes waters in 1958 (Table 10). Yellow perch, walleye, northern pike and rock bass, constituted 99 percent of all fish caught from Great Lakes waters. The numbers of each of the 18 other kinds that made up the remaining 1 percent were as follows:

Crappies	224	White bass	4
Pumpkinseed	188	Largemouth bass	3
Smallmouth bass	188	Catfishes	2
Ciscoes	131	Lake whitefish	2
Bluegill	115	Rainbow trout	2
Bullheads	54	Brook trout	1
Freshwater drum	19	Gar	1
American smelt	11	Lamprey	1
Muskellunge	8	Round whitefish	1
Bowfin	6	Sucker	<u>1</u>
Carp	5	Total	972
Lake trout	5		

Catch per Hour--Great Lakes Waters

In 1958 the data for Great Lakes waters were tabulated separately for each Great Lake and each connecting water. Table 11 shows the influence of the high catch per hour from Lake Huron (3.3 fish) on the fishing quality index for the Great Lakes waters. The average catch per hour for all Great Lakes and connecting waters was 1.9 fish (2.1 for the Great Lakes and 1.6 for the connecting waters).

Residence of Anglers--All Waters

Of the 81,427 anglers recorded in the 1958 general creel census, 71,159 anglers (87%) were residents of Michigan and 10,268 anglers (13%) were nonresidents (Table 12). The greatest number of nonresident fishermen (3,933) was contacted in Region III, where they comprised 15 percent of the total.

Anglers from all Michigan counties except Keweenaw were recorded in the census (Table 13). Residents of Wayne County made up 14 percent of all residents; Kent County, 5; Genesee, 5; and Saginaw, 4 (total for these four counties, 28 percent).

Nonresident anglers came from 33 states, the District of Columbia and the Province of Ontario (Table 13a). Ohio contributed 40 percent of all non-residents; Indiana, 37; Illinois, 11; and Wisconsin, 8 (total for the four states, 96 percent).

Both resident and nonresident anglers caught 1.2 fish per hour (all waters combined, see Table 14).

Sex of Anglers

Of 81,427 anglers interviewed in 1958, 11,824 (15%) were women. They comprised 10 percent of the trout anglers, 16 percent of the nontrout anglers and 12 percent of fishermen on the Great Lakes (Table 15).

Comparison of 1958 Data with that of Other Years

Tables 15 to 19 summarize the general creel census for the past 10 years. The catch per hour for all waters has ranged from 1.2 fish in 1957 and 1958 to 1.6 in 1950 (Table 16). For 1958 the catch for all waters was 0.2 fish below the simple average for the 10-year period.

For trout waters the highest catches per hour were recorded in 1954 and 1955 with 0.8 trout per hour and the lowest in 1950, 1953 and 1958 (Table 17).

During the 1949-1958 period the catch per hour in nontrout waters has ranged from 1.6 fish in 1950 to 1.2 in 1956, 1957 and 1958 (0.1 fish below the simple 10-year average, see Table 18).

The catch per hour has been consistently higher for the Great Lakes waters than for trout or (inland) nontrout waters (Table 19). In 1949-1958 anglers fishing the Great Lakes waters averaged 2.8 fish per hour as compared to an average of 1.3 fish per hour in nontrout waters. The catch in Great Lakes waters has varied from 1.3 fish per hour in 1957 to 4.8 in 1950. The 1958 catch per hour was 0.9 fish below the average for the 10-year period.

The appendix to this report, in the form of detailed tables, has been omitted as in the past. The tables are on file at the Institute for Fisheries Research.

Acknowledgments

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INSTITUTE FOR FISHERIES RESEARCH

K. G. Fukano

Report approved by G. P. Cooper

Typed by M. S. McClure

Table 1.--Total number of anglers, hours fished, number of fish taken and catch per hour for each conservation region, all waters, 1958

Region	Number of male anglers	Number of female anglers	Total anglers	Total hours fished	Total fish caught	Catch per hour
I	12,264	1,776	14,040	37,576.5	43,421	1.2
II	34,821	5,986	40,807	94,839.8	95,826	1.0
III	22,518	4,062	26,580	62,110.7	101,611	1.6
State total	69,603	11,824	81,427	194,527.0	240,858	1.2

Table 2.--Number of anglers interviewed by conservation officers during 1958 and 1957, by counties

County	1958	1957	County	1958	1957
Alcona	907	955	Lake	763	866
Alger	1,035	400	Lapeer	409	731
Allegan	1,007	2,551	Leelanau	863	949
Alpena	1,467	2,252	Lenawee	...	...
Antrim	1,340	1,312	Livingston	1,443	1,240
Arenac	544	366	Luce	1,619	2,098
Baraga	140	202	Mackinac	2,114	1,638
Barry	1,882	1,895	Macomb	2,929	4,893
Bay	309	277	Manistee	1,654	1,917
Benzie	1,718	1,184	Marquette	1,205	789
Berrien	...	...	Mason	786	1,029
Branch	2,478	1,583	Mecosta	1,107	1,133
Calhoun	145	...	Menominee	151	716
Cass	1,622	1,063	Midland	657	823
Charlevoix	1,927	1,617	Missaukee	966	777
Cheboygan	2,287	2,057	Monroe	618	372
Chippewa	1,070	1,786	Montcalm	1,207	892
Clare	1,360	1,245	Montmorency	1,789	1,936
Clinton	224	312	Muskegon	1,839	2,625
Crawford	786	803	Newaygo	1,242	1,265
Delta	1,966	1,526	Oakland	631	1,573
Dickinson	653	689	Oceana	1,857	1,519
Eaton	...	564	Ogemaw	832	1,134
Emmet	1,277	1,397	Ontonagon	468	791
Genesee	863	377	Osceola	748	487
Gladwin	2,522	2,068	Oscoda	1,177	1,378
Gogebic	513	1,718	Otsego	316	408
Grand Traverse	1,616	1,487	Ottawa	750	433
Gratiot	196	171	Presque Isle	497	751
Hillsdale	...	631	Roscommon	3,156	3,782
Houghton	195	585	Saginaw	25	...
Huron	1,654	761	St. Clair	1,820	1,879
Ingham	251	841	St. Joseph	596	626
Ionia	317	270	Sanilac	811	2,091
Iosco	1,204	1,273	Schoolcraft	1,130	1,282
Iron	1,781	1,803	Shiawassee	332	141
Isabella	400	516	Tuscola	129	240
Jackson	425	344	Van Buren	153	324
Kalamazoo	521	8	Washtenaw	3,043	2,631
Kalkaska	210	996	Wayne	40	809
Kent	59	997	Wexford	684	569
Keweenaw	...	20			
			Total	81,427	90,439

Table 3.--Number and percentage of fishermen interviewed on trout, nontrout and Great Lakes waters, by conservation regions, 1958

Region	<u>Trout waters</u>		<u>Nontrout waters</u>		<u>Great Lakes waters</u>		Total number of anglers
	Number	Percentage	Number	Percentage	Number	Percentage	
I	3,402	24	7,500	54	3,138	22	14,040
II	7,679	19	32,508	80	620	1	40,807
III	434	1	19,844	75	6,302	24	26,580
State total	11,515	14	59,852	74	10,060	12	81,427

Table 4.--Number and percentage of total trout catch made up by each of the three species of trout--all trout waters, by conservation regions, 1958

Region	Brook trout		Brown trout		Rainbow trout		Total number of trout
	Number	Percentage	Number	Percentage	Number	Percentage	
I	4,812	78	114	2	1,236	20	6,162
II	3,416	32	2,079	19	5,232	49	10,727
III	178	30	181	30	236	40	595
State total	8,406	48	2,374	14	6,704	38	17,484

Table 5.--General creel census data for trout lakes, trout streams and all trout waters by conservation regions, 1958

	Number of anglers	Hours fished	Fish caught	Catch per hour	Trout caught	Trout per hour
<u>Trout lakes</u>						
Region I	590	1,435.5	562	0.4	546	0.4
Region II	1,193	2,730.7	1,972	0.7	1,657	0.6
Region III	37	66.0	25	0.4	25	0.4
State total	1,820	4,232.2	2,559	0.6	2,228	0.5
<u>Trout streams</u>						
Region I	2,812	6,509.0	5,796	0.9	5,616	0.9
Region II	6,486	17,358.5	9,241	0.5	9,070	0.5
Region III	397	973.5	586	0.6	570	0.6
State total	9,695	24,841.0	15,623	0.6	15,256	0.6
<u>All trout waters</u>						
Region I	3,402	7,944.5	6,358	0.8	6,162	0.8
Region II	7,679	20,089.2	11,213	0.6	10,727	0.5
Region III	434	1,039.5	611	0.6	595	0.6
State total	11,515	29,073.2	18,182	0.6	17,484	0.6

Table 6.--Percentage of the total catch contributed by the 10 most important species taken in nontrout waters, by conservation regions, 1958

Species	Region I		Region II		Region III	
	Number	Percentage	Number	Percentage	Number	Percentage
Bluegill	2,321	10	27,116	33	35,302	61
Yellow perch	14,822	65	24,129	30	8,288	14
Black crappie	272	1	8,391	10	6,000	11
Northern pike	1,549	7	4,093	5	564	1
Pumpkinseed	453	2	3,180	4	2,473	4
Rock bass	620	3	3,363	4	1,211	2
Walleye	1,606	7	771	1	361	1
Largemouth bass	81	↓0	924	1	1,190	2
Rainbow trout	323	2	1,396	2	266	1
Smallmouth bass	166	1	698	1	259	↓0
Miscellaneous	497	2	7,147	9	1,859	3
Total	22,710	100	81,208	100	57,773	100

↓ Less than 0.5

Table 7.--Percentage of the total catch contributed by the 10 most important species taken in nontrout waters, 1949-1958

Species	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	Mean, 1949- 1958
Bluegill	48	44	42	40	43	37	35	36	38	40	40
Yellow perch	24	29	34	33	27	31	32	31	27	29	30
Black crappie	9	8	6	8	9	8	11	7	8	9	8
Northern pike	5	3	3	3	4	5	4	6	4	4	4
Pumpkinseed	4	4	4	5	5	5	4	5	5	4	4
Rock bass	3	3	3	4	4	3	3	3	4	3	3
Walleye	1	1	2	2	1	1	2	2	1	2	2
Largemouth bass	2	1	2	2	2	2	2	2	2	1	2
Rainbow trout	↓0	↓0	↓0	↓0	↓0	2	2	2	2	1	1
Smallmouth bass	1	1	1	1	1	1	1	1	1	1	1
Total	97	94	97	98	96	95	96	95	92	94	95

↓ Less than 0.5

Table 8.--Numbers caught and percentage of the total state catch contributed by the 10 most important species taken in nontrout waters, by conservation regions, 1958

Species	Region I		Region II		Region III		Total fish
	Number	Percentage	Number	Percentage	Number	Percentage	
Bluegill	2,321	4	27,116	42	35,302	54	64,739
Yellow perch	14,822	31	24,129	51	8,288	18	47,239
Black crappie	272	2	8,391	57	6,000	41	14,663
Northern pike	1,549	25	4,093	66	564	9	6,206
Pumpkinseed	453	7	3,180	52	2,473	41	6,106
Rock bass	620	12	3,363	65	1,211	23	5,194
Walleye	1,606	59	771	28	361	13	2,738
Largemouth bass	81	4	924	42	1,190	54	2,195
Rainbow trout	323	16	1,396	70	266	14	1,985
Smallmouth bass	166	15	698	62	259	23	1,123
Miscellaneous	497	5	7,147	75	1,859	20	9,503
Total or percentages	22,710	14	81,208	50	57,773	36	161,691

Table 9.--General creel census data for nontrout lakes, nontrout streams and all nontrout waters combined, by conservation regions, 1958

	Number of anglers	Hours fished	Fish caught	Catch per hour
<u>Nontrout lakes</u>				
Region I	6,804	16,804.5	21,763	1.3
Region II	29,993	68,771.5	74,936	1.1
Region III	<u>15,992</u>	<u>33,622.6</u>	<u>49,595</u>	<u>1.5</u>
State total	52,789	119,198.6	146,294	1.2
<u>Nontrout streams</u>				
Region I	696	1,703.5	947	0.6
Region II	2,515	4,531.1	6,272	1.4
Region III	<u>3,852</u>	<u>8,203.7</u>	<u>8,178</u>	<u>1.0</u>
State total	7,063	14,438.3	15,397	1.1
<u>All nontrout waters</u>				
Region I	7,500	18,508.0	22,710	1.2
Region II	32,508	73,302.6	81,208	1.1
Region III	<u>19,844</u>	<u>41,826.3</u>	<u>57,773</u>	<u>1.4</u>
State total	59,852	133,636.9	161,691	1.2

Table 10.--Percentage of the total catch contributed by the four species taken most frequently in Great Lakes waters

Species	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	Mean, 1949- 1958
Yellow perch	91	96	94	84	85	90	91	86	81	93	89
Walleye	4	1	1	4	1	1	2	3	7	4	3
Northern pike	1	↓0	1	↓0	2	1	↓0	↓0	2	1	1
Rock bass	↓0	↓0	1	6	4	2	2	3	4	1	2
Total	96	97	97	94	92	94	94	92	94	99	95

↓ Less than 0.5

Table 11.--General creel census data for Great Lakes and
connecting waters, 1958

Lake or waters	Number of anglers	Hours fished	Fish caught	Catch per hour
Lake Superior	85	236.0	87	0.4
Lake Michigan	1,994	8,052.4	5,750	0.7
Lake Huron	3,725	10,328.9	34,070	3.3
Total, Great Lakes	5,804	18,617.3	39,907	2.1
Waters between Lake Superior and Lake Huron	450	1,338.8	3,948	2.9
Waters between Lake Huron and Lake Erie	3,806	11,860.8	17,130	1.4
All connecting waters	4,256	13,199.6	21,078	1.6
All Great Lakes waters	10,060	31,816.9	60,985	1.9

Table 12.--Number of resident and nonresident anglers and percentage of nonresident anglers in each conservation region, all waters, 1958

Region	Total anglers	Resident anglers	Nonresident anglers	Percentage nonresident anglers
I	14,040	11,265	2,775	20
II	40,807	37,247	3,560	9
III	26,580	22,647	3,933	15
State total	81,427	71,159	10,268	13

Table 13.--Residence of Michigan fishermen interviewed
in the general creel census, 1958¹

County of residence	Male anglers	Female anglers	Total anglers	County of residence	Male anglers	Female anglers	Total anglers
Alcona	178	20	198	Lake	135	20	155
Alger	531	43	574	Lapeer	275	60	335
Allegan	585	57	642	Leelanau	356	16	372
Alpena	535	86	621	Lenawee	163	31	194
Antrim	514	107	621	Livingston	306	30	336
Arenac	230	33	263	Luce	977	87	1,064
Baraga	55	3	58	Mackinac	674	99	773
Barry	704	80	784	Macomb	1,720	243	1,963
Bay	1,471	288	1,759	Manistee	1,055	85	1,140
Benzie	647	59	706	Marquette	808	78	886
Berrien	417	64	481	Mason	472	77	549
Branch	454	99	553	Mecosta	299	50	349
Calhoun	587	138	725	Menominee	177	14	191
Cass	224	47	271	Midland	1,260	193	1,453
Charlevoix	860	182	1,042	Missaukee	256	25	281
Cheboygan	693	64	757	Monroe	264	41	305
Chippewa	633	97	730	Montcalm	622	102	724
Clare	619	89	708	Montmorency	494	93	587
Clinton	333	59	392	Muskegon	1,735	277	2,012
Crawford	284	24	308	Newaygo	363	25	388
Delta	692	78	770	Oakland	1,240	256	1,496
Dickinson	951	49	1,000	Oceana	692	81	773
Eaton	233	45	278	Ogemaw	247	26	273
Emmet	597	98	695	Ontonagon	268	32	300
Genesee	3,077	620	3,697	Osceola	388	33	421
Gladwin	883	91	974	Oscoda	348	69	417
Gogebic	242	18	260	Otsego	404	86	490
Grand Traverse	1,036	139	1,175	Ottawa	402	57	459
Gratiot	466	91	557	Presque Isle	228	51	279
Hillsdale	61	15	76	Roscommon	465	61	526
Houghton	148	13	161	Saginaw	2,185	326	2,511
Huron	355	28	383	St. Clair	291	51	342
Ingham	1,917	407	2,324	St. Joseph	212	49	261
Ionia	253	49	302	Sanilac	211	48	259
Iosco	213	27	240	Schoolcraft	425	57	482
Iron	1,140	99	1,239	Shiawassee	331	72	403
Isabella	455	65	520	Tuscola	372	53	425
Jackson	692	159	851	Van Buren	188	25	213
Kalamazoo	1,140	224	1,364	Washtenaw	1,260	267	1,527
Kalkaska	258	47	305	Wayne	8,468	1,600	10,068
Kent	3,283	616	3,899	Wexford	525	56	581
Keweenaw	...	...	...	
				Total	60,207	9,619	69,826

¹The residence of 1,158 males and 175 females was not recorded; therefore, they are not included in Tables 13 and 13a.

Table 13a.--Residence of out-of-state fishermen interviewed in the general creel census, 1958

State or province of residence	Male anglers	Female anglers	Total anglers
Alaska	1	...	1
Arizona	5	...	5
Arkansas	1	...	1
California	13	2	15
Colorado	1	...	1
Connecticut	7	3	10
Florida	35	11	46
Georgia	5	...	5
Idaho	2	...	2
Illinois	903	226	1,129
Indiana	3,026	805	3,831
Iowa	11	3	14
Kansas	4	3	7
Kentucky	50	18	68
Louisiana	7	3	10
Maine	1	...	1
Maryland	7	3	10
Massachusetts	10	3	13
Minnesota	8	1	9
Missouri	28	7	35
Nevada	4	1	5
New Jersey	1	...	1
New York	22	8	30
Ohio	3,261	848	4,109
Oklahoma	1	...	1
Oregon	1	...	1
Pennsylvania	36	8	44
Tennessee	4	1	5
Texas	18	7	25
Virginia	4	1	5
Washington	1	1	2
West Virginia	19	4	23
Wisconsin	731	63	794
Washington, D. C.	4	...	4
Ontario	6	...	6
Total	8,238	2,030	10,268

Table 14.--Number of resident and nonresident anglers, number of hours fished, number of fish caught and catch per hour for each group--all waters, by conservation regions, 1958

Angler and region	Number of anglers	Hours fished	Fish caught	Catch per hour
<u>Resident anglers</u>				
Region I	11,265	29,648.5	34,563	1.2
Region II	37,247	87,570.4	88,730	1.0
Region III	22,647	54,723.3	91,461	1.7
State total	71,159	171,942.2	214,754	1.2
<u>Nonresident anglers</u>				
Region I	2,775	7,928.0	8,858	1.1
Region II	3,560	7,269.4	7,096	1.0
Region III	3,933	7,387.4	10,150	1.4
State total	10,268	22,584.8	26,104	1.2

Table 15.--Comparison of data from the general creel census, 1958

Item	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	Mean, 1949- 1958
Catch per hour											
All waters	1.3	1.6	1.4	1.4	1.3	1.5	1.5	1.3	1.2	1.2	1.4
Residents	1.3	1.7	1.4	1.4	1.3	1.5	1.5	1.3	1.2	1.2	1.4
Nonresidents	1.1	1.1	1.0	1.1	1.0	1.0	1.3	1.1	1.0	1.2	1.1
Trout waters	0.7	0.6	0.8	0.7	0.6	0.8	0.8	0.8	0.8	0.6	0.7
Residents	0.7	0.6	0.8	0.7	0.7	0.8	0.8	0.8	0.7	0.6	0.7
Nonresidents	0.8	0.6	0.7	0.7	0.6	0.8	0.8	0.7	0.8	0.7	0.7
Nontrout waters	1.3	1.6	1.5	1.4	1.4	1.3	1.3	1.2	1.2	1.2	1.3
Residents	1.3	1.7	1.6	1.5	1.4	1.3	1.3	1.2	1.3	1.2	1.4
Nonresidents	1.2	1.2	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.1
Great Lakes waters	3.1	4.8	3.2	2.6	3.0	3.3	2.8	1.9	1.3	1.9	2.8
Residents	3.2	4.9	3.4	2.6	3.1	3.3	2.8	2.0	1.4	2.0	2.9
Nonresidents	1.2	2.7	1.3	2.8	1.3	2.3	2.1	0.8	0.8	1.3	1.7
Percentage of all anglers represented by:											
Nonresidents	10	10	11	10	15	14	13	14	14	13	12
Females	17	16	17	16	16	16	16	16	15	15	16
Percentage of trout anglers represented by:											
Nonresidents	6	7	6	5	8	6	8	9	9	7	7
Females	12	10	10	10	9	8	10	10	10	10	10
Percentage of nontrout anglers represented by:											
Nonresidents	11	12	13	12	17	16	16	17	15	14	14
Females	18	18	19	18	18	17	17	18	17	16	18
Percentage of Great Lakes anglers represented by:											
Nonresidents	6	4	8	5	5	4	4	5	9	9	6
Females	16	13	18	14	16	15	17	15	13	12	15

Table 16.--Catch per hour all waters by conservation regions, 1949-1958

Region	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	Mean, 1949- 1958
I	0.9	1.1	1.0	1.1	1.0	1.0	1.2	1.1	1.1	1.2	1.1
II	1.1	1.5	1.4	1.3	1.3	1.3	1.4	1.1	1.1	1.0	1.2
III	1.7	2.1	1.6	1.7	1.4	1.9	1.6	1.5	1.4	1.6	1.6
Entire state	1.3	1.6	1.4	1.4	1.3	1.5	1.5	1.3	1.2	1.2	1.4

Table 17.--Catch of trout per hour in trout waters
by conservation regions, 1949-1958

Region	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	Mean, 1949- 1958
I	0.8	0.8	1.0	0.8	0.7	1.0	0.9	0.9	0.8	0.8	0.8
II	0.6	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.5	0.6
III	0.5	0.6	0.4	0.5	0.6	0.8	0.7	0.5	0.7	0.6	0.6
Entire state	0.7	0.6	0.7	0.7	0.6	0.8	0.8	0.7	0.7	0.6	0.7

Table 18.--Catch per hour for nontrout waters,
by conservation regions, 1949-1958

Region	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	Mean, 1949- 1958
I	0.9	1.2	0.9	1.2	1.2	1.0	1.3	1.3	1.1	1.2	1.1
II	1.1	1.7	1.5	1.4	1.4	1.2	1.3	1.1	1.2	1.1	1.3
III	1.5	1.7	1.7	1.5	1.4	1.5	1.2	1.4	1.4	1.4	1.5
Entire state	1.3	1.6	1.5	1.4	1.4	1.3	1.3	1.2	1.2	1.2	1.3

Table 19.--Catch per hour for Great Lakes waters,
by conservation regions, 1948-1958

Region	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	Mean, 1949- 1958
I	1.1	4.2	0.9	2.3	1.3	0.7	0.9	1.0	1.2	1.3	1.5
II	4.9	5.1	4.7	3.7	4.9	6.9	4.7	4.6	3.3	2.4	4.5
III	3.4	4.8	2.3	2.4	2.9	3.2	2.5	1.8	1.3	2.2	2.7
Entire state	3.1	4.8	3.2	2.6	3.0	3.3	2.8	1.9	1.3	1.9	2.8

Table 20.--Total fishing time reported (thousands of hours)
and catch per hour for various waters, 1928-1958

Year	Thousands of hours reported	Catch per hour			
		All waters	Trout waters	Non-trout waters	Great Lakes waters ^{1/}
1928	48	1.1	1.2	1.1	...
1929	52	1.0	1.2	0.9	...
1930	74	0.9	0.9	0.9	...
1931	63	0.9	1.0	0.9	...
1932	38	1.3	1.1	1.3	...
1933	47	1.0	0.7	1.3	...
1934	53	1.7	0.8	1.8	...
1935	59	1.6	0.8	1.9	...
1936	67	1.4	0.8	1.7	...
1937	62	1.5	0.8	1.7	...
1938	82	1.3	0.9	1.4	...
1939	109	1.1	0.8	1.1	...
1940	98	1.0	0.8	1.0	...
1941	118	1.0	0.8	1.1	...
1942	151	1.1	0.9	1.1	1.7
1943	103	1.2	0.9	1.2	1.6
1944	152	1.2	0.8	1.1	1.8
1945	144	1.1	0.8	1.1	2.2
1946	145	1.3	0.8	1.4	1.6
1947	96	1.4	0.8	1.4	2.7
1948	161	1.1	0.8	1.1	2.9
1949	168	1.3	0.7	1.3	3.1
1950	130	1.6	0.6	1.6	4.8
1951	123	1.4	0.8	1.5	3.2
1952	123	1.4	0.7	1.4	2.6
1953	148	1.3	0.6	1.4	3.0
1954	169	1.5	0.8	1.3	3.3
1955	147	1.5	0.8	1.3	2.8
1956	175	1.3	0.8	1.2	1.9
1957	209	1.2	0.8	1.2	1.3
1958	194	1.2	0.6	1.2	1.9
Unweighted mean	113	1.3	0.8	1.3	2.5

^{1/}Data for the Great Lakes were included with "non-trout waters" prior to 1942.