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MICHIGAN DEPARTMENT OF CONSERVATION
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THE MICHIGAN GENERAL CREEL CENSUS FOR 1961

By K. G. Fukano

The Michigan General Creel Census has been continuous since 1927. Conservation officers have obtained the catch records as a part of their regular duties. The objective 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 1961, the officers secured records on 74,048 angler-trips, divided into three major categories--trout, nontrout, and Great Lakes waters; each group 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, 8,765 (12% of all anglers interviewed), of whom 1,904 fished in designated trout lakes and special trout ponds and 6,861 fished in streams; (2) nontrout waters, 58,851 (79%), of whom 50,851 fished in lakes and 8,000 fished in streams; (3) Great Lakes waters, 6,432

(9%), of whom 3,075 fished in the Great Lakes and 3,357 fished in their connecting waters.

Of the 74,048 anglers interviewed, 9,386 (13%) were non-residents; 10,520 (14%) were women.

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 74,048 angling trips. Only legal-size fish caught by sport fishermen are considered.

Detailed Analysis

The 74,048 anglers (13% fewer than in 1960) interviewed by conservation officers during 1961 had fished 166,776 hours and had caught 163,666 fish. The average catch per hour for all fishing was 1.0, 0.3 fish below that recorded in 1960 (Table 1).

Records were obtained in 79 counties (Table 2). The lack of fishing records from four counties (Hillsdale, Ionia, Kalamazoo and Lenawee) and the fewness of records from several 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

The numbers and percentages of anglers interviewed while fishing in the various waters are given in Table 3. Regions I and II

furnished 89 percent of all records of trout fishing and Region III, 11 percent. In Regions I and II, 16 percent of all anglers fished for trout whereas in Region III only 4 percent did so.

Nontrout fishing records made up the largest percentage from Region II (86% of 35,093 anglers) and the smallest percentage from Region I (64% of 12,838 anglers).

Of the 26,117 anglers interviewed in Region III, 18 percent were fishing Great Lakes waters.

Number of Trout Caught in Trout Waters

Of the total trout catch recorded in 1961, brook trout constituted 62 percent; rainbow trout, 26 percent; and brown trout, 12 percent (Table 4). In 1960 these percentages were 56, 33, and 11, respectively.

The 7,203 brook trout taken in 1961 were divided as follows: Region I, 4,804 (67%); Region II, 1,997 (28%); and Region III, 402 (5%). Of 3,104 rainbow trout reported, Region II contributed 1,789 (58%); Region I, 856 (27%); Region III, 459 (15%). Of 1,401 brown trout recorded, 822 (59%) were caught in Region II; 390 (28%) in Region III; and 189 (13%) in Region I.

Of the 11,708 brook, brown, and rainbow trout reported from trout waters 89 percent came from Regions I and II.

Other Species Caught in Trout Waters

Brook, brown, and rainbow trout constituted 92 percent of all fish taken in trout waters. The numbers of each of 11 other kinds reported are as follows:

Suckers	623	Bluegill	6
Black crappie	110	Bullheads	4
Yellow perch	84	Lake trout	3
Walleye	74	Round whitefish	3
Rock bass	47	Smallmouth bass	3
Northern pike	19	Total	976

Catch per Hour--Trout Waters

As shown in Table 5 trout fishermen caught 0.6 fish per hour, identical to that reported in 1960. The fishing quality for trout only was 0.6 trout per hour for both the designated trout lakes or special trout ponds and trout streams. The highest catch per hour for trout lakes and ponds (0.6) was recorded in Regions I and II whereas the highest catch per hour for trout streams (0.7) was reported from Region I. Most of the trout fishermen interviewed (78%) fished the streams.

Composition of Catch--Nontrout Waters

Conservation officers recorded 31 kinds of fish from nontrout waters. Bluegills and yellow perch combined made up 62 percent of the catch (64% in Region I, 57% in Region II, and 66% in Region III-- see Table 6). The black crappie and walleye were the other species that made up as much as 10 percent of the total catch in any region. The black crappie comprised 10 percent in Region II and 14 percent in Region III. Walleye comprised 12 percent of the catch from Region I. Other species important in the catch were: northern pike, pumpkinseed, rock bass, rainbow trout, largemouth bass, and smallmouth bass. The

10 species mentioned have retained approximately the same rank in importance during the 10-year period 1952-1961 (Table 7). In 1961 these 10 species comprised 92 percent of the total recorded catch and at least 88 percent of the catch in every region. The remaining 21 kinds made up 8 percent and are listed below.

Suckers	4,147	Bowfin	21
American smelt	2,904	Whitefish	20
Cisco	1,595	Chubs	16
Bullheads	603	Muskellunge	9
Carp	443	Shiners	9
Brook trout	175	Burbot	4
Catfishes	87	Gar	2
Brown trout	80	Round whitefish	2
Lake trout	74	Freshwater drum	1
Redhorse	44	Sauger	<u>1</u>
Warmouth	24	Total	10,261

The nontrout 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. In nontrout waters the bluegill was the dominant species in the state as a whole (45,051 reported). Most bluegills (62% of the state total), black crappies, pumpkinseeds, and largemouth bass were recorded in Region III. Region II (from which almost half of the total nontrout catch reported for 1961 was taken) yielded the highest catches of yellow perch (59% of total for the state), rock bass, northern pike, rainbow trout, and smallmouth bass. The

largest number of walleyes was reported caught in Region I. Regions II and III together produced 94 percent of all bluegills recorded in the census.

Catch per Hour--Nontrout Waters

Anglers who fished the nontrout waters had poorer fishing success in 1961 (1.0 fish per hour) than in 1960 (1.3). The highest catch per hour (1.1) was recorded in Region III--see Table 9. According to the catch per hour, fishing in the nontrout lakes was best in Region III (1.2) but fishing in the nontrout streams was best in Region II (1.0).

Composition of Catch--Great Lakes Waters

The yellow perch made up 74 percent of 27,294 fish reported from Great Lakes waters in 1961. Yellow perch, walleye, rock bass, northern pike, and smallmouth bass constituted 93 percent of all fish caught from Great Lakes waters. The numbers of each of the 17 other kinds that made up the remaining 7 percent were as follows:

Crappies	461	Suckers	27
American smelt	394	Bluegill	15
White bass	211	Bullheads	4
Pumpkinseed	209	Rainbow trout	2
Catfishes	194	Brook trout	1
Freshwater drum	76	Bowfin	1
Carp	74	Cisco	1
Largemouth bass	57	Mooneye	<u>1</u>
Muskellunge	56	Total	1,784

Catch per hour--Great Lakes Waters

As in recent years the data for Great Lakes waters were tabulated separately for each Great Lake and the connecting waters. Table 11 shows the influence of the high catch per hour from Lake Huron (2.0 fish) on the fishing quality for the Great Lakes waters. The average catch per hour for all Great Lakes and connecting waters was 1.5 fish (1.6 for the Great Lakes and 1.5 for the connecting waters).

Residence of Anglers--All Waters

Of the 74,048 anglers recorded in the 1961 general creel census, 64,662 anglers (87%) were residents of Michigan and 9,386 anglers (13%) were nonresidents (Table 12). The greatest number of nonresident fishermen (3,328) was contacted in Region III, where they comprised 13 percent of the total.

Anglers from all Michigan counties were recorded in the census (Table 13). Residents of Wayne County made up 14 percent

of all residents; Kent, 6; and Genesee, 5 (total for these three counties, 25%).

Nonresident anglers came from 36 states, the District of Columbia, and the Province of Ontario (Table 13a). Ohio contributed 41 percent of all nonresidents; Indiana, 34; Illinois, 14; and Wisconsin, 7 (total for the four states, 96%).

Resident anglers caught 1.0 fish per hour whereas nonresidents caught 0.9 fish (all waters combined, see Table 14).

Sex of Anglers

Of 74,048 anglers interviewed 10,582 (14%) were women. They comprised 7 percent of the trout anglers, 15 percent of the non-trout anglers and 14 percent of fishermen on the Great Lakes (Table 15).

Comparison of 1961 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 1.0 fish in 1961 to 1.5 in 1954 and 1955 (Table 16). For 1961 the catch for all waters was 0.3 fish below the simple average for the 10-year period.

For trout waters the highest catches per hour were recorded in 1954 and 1955 (0.8 trout per hour) and the lowest in 1953 and 1958 to 1961 (Table 17).

During the 1952-1961 period the catch per hour in nontrout waters has ranged from 1.4 fish in 1952 and 1953 to 1.0 in 1961 (0.2 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 1952-1961 anglers fishing the Great Lakes waters averaged 2.3 fish per hour as compared to an average of 1.2 fish per hour in nontrout waters. The catch in Great Lakes waters has varied from 1.3 fish per hour in 1957 to 3.3 in 1954. The 1961 catch per hour was 0.8 fish below the average for the 10-year period.

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INSTITUTE FOR FISHERIES RESEARCH

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Report approved by G. P. Cooper

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Table 1. --Total number of anglers, hours fished, number of fish caught and catch per hour for each conservation region, all waters, 1961

Region	Number of male anglers	Number of female anglers	Total anglers	Total hours fished	Total fish caught	Catch per hour
I	11,239	1,599	12,838	30,342.8	26,021	0.9
II	30,112	4,981	35,093	76,818.6	65,746	0.9
III	22,115	4,002	26,117	59,614.4	71,899	1.2
State total	63,466	10,582	74,048	166,775.8	163,666	1.0

Table 2. --Number of anglers interviewed by conservation officers during
1961 and 1960, by counties

County	1961	1960	County	1961	1960
Alcona	784	1,003	Lake	437	694
Alger	1,076	646	Lapeer	916	753
Allegan	778	1,081	Leelanau	705	826
Alpena	1,945	1,723	Lenawee
Antrim	584	736	Livingston	2,863	3,688
Arenac	938	655	Luce	1,735	1,396
Baraga	160	374	Mackinac	1,052	1,016
Barry	1,905	3,668	Macomb	1,519	1,776
Bay	297	269	Manistee	1,436	1,647
Benzie	1,128	1,529	Marquette	1,355	2,057
Berrien	116	...	Mason	795	1,245
Branch	2,261	1,487	Mecosta	2,059	1,602
Calhoun	268	153	Menominee	895	1,050
Cass	1,068	591	Midland	319	521
Charlevoix	1,622	2,110	Missaukee	1,387	1,098
Cheboygan	3,442	2,691	Monroe	268	286
Chippewa	886	900	Montcalm	1,324	1,479
Clare	503	948	Montmorency	2,290	1,969
Clinton	166	206	Muskegon	3,140	2,455
Crawford	714	880	Newaygo	927	1,260
Delta	537	1,241	Oakland	1,679	2,057
Dickinson	911	743	Oceana	711	1,311
Eaton	123	...	Ogemaw	536	551
Emmet	648	1,254	Ontonagon	786	1,065
Genesee	673	1,011	Osceola	223	920
Gladwin	1,360	1,406	Oscoda	428	805
Gogebic	897	1,150	Otsego	420	882
Grand Traverse	520	907	Ottawa	532	797
Gratiot	57	114	Presque Isle	438	379
Hillsdale	Roscommon	1,560	2,625
Houghton	376	762	Saginaw	225	169
Huron	1,378	1,979	St. Clair	1,311	1,277
Ingham	68	81	St. Joseph	633	151
Ionia	...	433	Sanilac	577	474
Iosco	1,482	1,676	Schoolcraft	999	697
Iron	1,082	1,233	Shiawassee	290	367
Isabella	306	503	Tuscola	956	998
Jackson	247	257	Van Buren	364	189
Kalamazoo	...	223	Washtenaw	2,257	2,018
Kalkaska	574	869	Wayne	739	1,156
Kent	556	1,117	Wexford	435	753
Keweenaw	91	191			
			Total	74,048	85,259

Table 3. --Number and percentage of fishermen interviewed on trout, nontrout and Great Lakes waters, by conservation regions, 1961

Region	Trout waters		Nontrout waters		Great Lakes waters		Total number of anglers
	Number	Percentage	Number	Percentage	Number	Percentage	
I	3,591	28	8,206	64	1,041	8	12,838
II	4,241	12	30,260	86	592	2	35,093
III	933	4	20,385	78	4,799	18	26,117
State total	8,765	12	58,851	79	6,432	9	74,048

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,

1961

Region	Brook trout		Brown trout		Rainbow trout		Total number of trout
	Number	Percentage	Number	Percentage	Number	Percentage	
I	4,804	82	189	3	856	15	5,849
II	1,997	43	822	18	1,789	39	4,608
III	402	32	390	31	459	37	1,251
State total	7,203	62	1,401	12	3,104	26	11,708

Table 5.--General creel census data for trout lakes, trout streams and all trout waters by conservation regions, 1961

	Number of anglers	Hours fished	Fish caught	Catch per hour	Trout caught	Trout per hour
<u>Trout lakes</u>						
Region I	1,372	3,172.0	1,856	0.6	1,833	0.6
Region II	378	854.7	517	0.6	517	0.6
Region III	154	279.0	110	0.4	110	0.4
State total	1,904	4,305.7	2,483	0.6	2,460	0.6
<u>Trout streams</u>						
Region I	2,219	5,513.2	4,220	0.8	4,016	0.7
Region II	3,863	8,725.1	4,840	0.6	4,091	0.5
Region III	779	1,842.1	1,141	0.6	1,141	0.6
State total	6,861	16,080.4	10,201	0.6	9,248	0.6
<u>All trout waters</u>						
Region I	3,591	8,685.2	6,076	0.7	5,849	0.7
Region II	4,241	9,579.8	5,357	0.6	4,608	0.5
Region III	933	2,121.1	1,251	0.6	1,251	0.6
State total	8,765	20,386.1	12,684	0.6	11,708	0.6

Table 6. --Percentage of the total catch contributed by the 10 most important species taken in nontrout waters, by conservation regions, 1961

Species	Region I		Region II		Region III	
	Num-ber	Per-cent- age	Num-ber	Per-cent- age	Num-ber	Per-cent- age
Bluegill	2,722	17	14,232	25	28,097	56
Yellow perch	7,848	47	18,405	32	5,105	10
Black crappie	373	2	5,567	10	6,835	14
Pumpkinseed	306	2	2,808	5	4,157	8
Rock bass	662	4	2,619	5	1,129	2
Northern pike	892	5	1,947	3	555	1
Walleye	1,919	12	1,040	2	83	¹ / ₁₀
Rainbow trout	367	2	1,512	3	707	1
Largemouth bass	208	1	853	2	1,169	2
Smallmouth bass	343	2	647	1	320	1
Miscellaneous	961	6	7,083	12	2,217	5
Total	16,601	100	56,713	100	50,374	100

¹/₁₀ Less than 0.5

Table 7.--Percentage of the total catch contributed by the 10 most important species taken in nontrout waters, 1952-1961

Species	Year										Mean, 1952- 1961
	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	
Bluegill	40	43	37	35	36	38	40	36	39	37	38
Yellow perch	33	27	31	32	31	27	29	28	32	25	30
Black crappie	8	9	8	11	7	8	9	11	9	10	9
Pumpkinseed	5	5	5	4	5	5	4	6	5	6	5
Rock bass	4	4	3	3	3	4	3	4	3	4	3
Northern pike	3	4	5	4	6	4	4	4	2	3	4
Walleye	2	1	1	2	2	1	2	1	1	2	2
Rainbow trout	↓0	↓0	2	2	2	2	1	1	1	2	1
Largemouth bass	2	2	2	2	2	2	1	2	1	2	2
Smallmouth bass	1	1	1	1	1	1	1	1	1	1	1
Total	98	96	95	96	95	92	94	94	94	92	95

↓ Less than 0.5

Table 8. --Numbers caught and percentage of the total catch contributed by the 10 most important species taken in nontrout waters, by conservation regions, 1961

Species	Region I		Region II		Region III		Total
	Num-ber	Per-cent- age	Num-ber	Per-cent- age	Num-ber	Per-cent- age	
Bluegill	2,722	6	14,232	32	28,097	62	45,051
Yellow perch	7,848	25	18,405	59	5,105	16	31,358
Black crappie	373	3	5,567	44	6,835	53	12,775
Pumpkinseed	306	4	2,808	39	4,157	57	7,271
Rock bass	662	15	2,619	59	1,129	26	4,410
Northern pike	892	26	1,947	58	555	16	3,394
Walleye	1,919	63	1,040	34	83	3	3,042
Rainbow trout	367	14	1,512	59	707	27	2,586
Largemouth bass	208	9	853	38	1,169	53	2,230
Smallmouth bass	343	26	647	49	320	25	1,310
Miscellaneous	961	9	7,083	69	2,217	22	10,261
Total	16,601	13	56,713	46	50,374	41	123,688

Table 9. --General creel census data for nontrout lakes, nontrout streams and all nontrout waters combined, by conservation regions, 1961

	Number of anglers	Hours fished	Fish caught	Catch per hour
<u>Nontrout lakes</u>				
Region I	6, 679	15, 340.1	14, 591	1.0
Region II	27, 242	60, 075.2	51, 018	0.8
Region III	16, 930	37, 366.3	44, 176	1.2
State total	50, 851	112, 781.6	109, 785	1.0
<u>Nontrout streams</u>				
Region I	1, 527	3, 369.0	2, 010	0.6
Region II	3, 018	5, 648.1	5, 695	1.0
Region III	3, 455	6, 801.0	6, 198	0.9
State total	8, 000	15, 818.1	13, 903	0.9
<u>All nontrout waters</u>				
Region I	8, 206	18, 709.1	16, 601	0.9
Region II	30, 260	65, 723.3	56, 713	0.9
Region III	20, 385	44, 167.3	50, 374	1.1
State total	58, 851	128, 599.7	123, 688	1.0

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

Species	Year										Mean, 1952- 1961
	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	
Yellow perch	84	85	90	91	86	81	93	93	86	74	86
Walleye	4	1	1	2	3	7	4	3	3	11	4
Rock bass	6	4	2	2	3	4	1	1	4	4	3
Northern pike	↓0	2	1	↓0	↓0	2	1	1	1	2	1
Smallmouth bass	2	1	1	1	2	1	↓0	1	3	2	2
Total	96	93	95	96	94	95	99	99	97	93	96

↓ Less than 0.5

Table 11. --General creel census data for Great Lakes and connecting waters, 1961

Lake or waters	Number of anglers	Hours fished	Fish caught	Catch per hour
Lake Superior	31	60.0	41	0.7
Lake Michigan	589	2,114.0	1,322	0.6
Lake Huron	2,408	5,578.5	11,228	2.0
Lake Erie	47	300.0	571	1.9
Total, Great Lakes	3,075	8,052.5	13,162	1.6
Waters between Lake Superior and Lake Huron	474	1,237.0	1,833	1.5
Waters between Lake Huron and Lake Erie	2,883	8,500.5	12,299	1.4
Total, connecting waters	3,357	9,737.5	14,132	1.5
All Great Lakes waters	6,432	17,790.0	27,294	1.5

Table 12.--Number of resident and nonresident anglers and percentage of nonresident anglers in each conservation region, all waters, 1961

Region	Total anglers	Resident anglers	Nonresident anglers	Percentage nonresident anglers
I	12,838	10,095	2,743	21
II	35,093	31,778	3,315	9
III	26,117	22,789	3,328	13
State total	74,048	64,662	9,386	13

Table 13.--Residence of Michigan fishermen interviewed in the general creel census, 1961¹

County of residence	Male anglers	Female anglers	Total anglers	County of residence	Male anglers	Female anglers	Total anglers
Alcona	206	24	230	Lake	75	15	90
Alger	519	23	542	Lapeer	457	76	533
Allegan	485	60	545	Leelanau	164	13	177
Alpena	817	125	942	Lenawee	129	33	162
Antrim	194	39	233	Livingston	397	58	455
Arenac	318	45	363	Luce	741	58	799
Baraga	119	10	129	Mackinac	311	47	358
Barry	591	66	657	Macomb	1,144	271	1,415
Bay	1,114	203	1,317	Manistee	904	51	955
Benzie	458	46	504	Marquette	1,319	140	1,459
Berrien	415	78	493	Mason	346	29	375
Branch	333	84	417	Mecosta	545	97	642
Calhoun	686	128	814	Menominee	676	41	717
Cass	210	19	229	Midland	749	127	876
Charlevoix	693	91	784	Missaukee	279	18	297
Cheboygan	1,076	67	1,143	Monroe	235	49	284
Chippewa	412	64	476	Montcalm	575	111	686
Clare	368	48	416	Montmorency	501	51	552
Clinton	263	40	303	Muskegon	2,419	384	2,803
Crawford	188	12	200	Newaygo	335	55	390
Delta	240	21	261	Oakland	1,815	306	2,121
Dickinson	807	70	877	Oceana	228	33	261
Eaton	302	63	365	Ogemaw	178	20	198
Emmet	569	98	667	Ontonagon	455	48	503
Genesee	2,658	519	3,177	Osceola	217	20	237
Gladwin	391	29	420	Oscoda	185	22	207
Gogebic	647	46	693	Otsego	511	49	560
Grand Traverse	433	80	513	Ottawa	553	61	614
Gratiot	362	79	441	Presque Isle	364	37	401
Hillsdale	78	18	96	Roscommon	411	43	454
Houghton	328	22	350	Saginaw	1,795	370	2,165
Huron	605	52	657	St. Clair	749	101	850
Ingham	1,835	391	2,226	St. Joseph	317	52	369
Ionia	247	39	286	Sanilac	259	44	303
Iosco	231	22	253	Schoolcraft	398	50	448
Iron	425	39	464	Shiawassee	377	66	443
Isabella	414	77	491	Tuscola	584	77	661
Jackson	582	119	701	Van Buren	153	33	186
Kalamazoo	847	142	989	Washtenaw	1,284	236	1,520
Kalkaska	123	20	143	Wayne	7,378	1,396	8,774
Kent	3,308	629	3,937	Wexford	436	48	484
Keweenaw	18	2	20				
				Total	55,863	8,685	64,548

¹ The residence of 94 males and 20 females was not recorded; therefore, they are not included in Tables 13 and 13 a.

Table 13a. --Residence of out-of-state fishermen interviewed
in the general creel census, 1961

State or province of residence	Male anglers	Female anglers	Total anglers
Alabama	4	1	5
Alaska	4	1	5
Arizona	6	...	6
Arkansas	2	1	3
California	9	1	10
Colorado	1	1	2
Connecticut	3	...	3
Florida	40	9	49
Georgia	2	1	3
Illinois	1,032	242	1,274
Indiana	2,493	642	3,135
Iowa	20	1	21
Kansas	9	2	11
Kentucky	47	5	52
Louisiana	2	...	2
Maryland	1	...	1
Massachusetts	5	...	5
Minnesota	1	1	2
Missouri	33	2	35
Nebraska	1	...	1
New Jersey	10	2	12
New Mexico	4	...	4
New York	23	9	32
North Carolina	1	1	2
North Dakota	3	...	3
Ohio	3,016	854	3,870
Oklahoma	6	1	7
Oregon	6	...	6
Pennsylvania	40	10	50
South Carolina	2	...	2
Tennessee	4	1	5
Texas	14	4	18
Virginia	7	1	8
Washington	3	...	3
West Virginia	18	5	23
Wisconsin	617	77	694
Washington D. C.	10	2	12
Ontario	10	...	10
Total	7,509	1,877	9,386

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, 1961

	Number of anglers	Hours fished	Fish caught	Catch per hour
<u>Resident anglers</u>				
Region I	10,095	23,744.3	20,401	0.9
Region II	31,778	70,321.7	61,413	0.9
Region III	22,789	53,010.2	63,815	1.2
State total	64,662	147,076.2	145,629	1.0
<u>Nonresident anglers</u>				
Region I	2,743	6,598.5	5,620	0.9
Region II	3,315	6,496.9	4,333	0.7
Region III	3,328	6,604.2	8,084	1.2
State total	9,386	19,699.6	18,037	0.9

Table 15. --Comparison of data from the general creel census, 1961

Item	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	Mean, 1952- 1961
CATCH PER HOUR											
All waters	1.4	1.3	1.5	1.5	1.3	1.2	1.2	1.3	1.3	1.0	1.3
Residents	1.4	1.3	1.5	1.5	1.3	1.2	1.2	1.3	1.3	1.0	1.3
Nonresidents	1.1	1.0	1.0	1.3	1.1	1.0	1.2	1.4	1.0	0.9	1.1
Trout waters	0.7	0.6	0.8	0.8	0.8	0.8	0.6	0.6	0.6	0.6	0.7
Residents	0.7	0.7	0.8	0.8	0.8	0.7	0.6	0.6	0.6	0.6	0.7
Nonresidents	0.7	0.6	0.8	0.8	0.7	0.8	0.7	0.7	0.5	0.5	0.7
Nontrout waters	1.4	1.4	1.3	1.3	1.2	1.2	1.2	1.2	1.3	1.0	1.2
Residents	1.5	1.4	1.3	1.3	1.2	1.3	1.2	1.2	1.3	1.0	1.3
Nonresidents	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.3	1.0	0.9	1.1
Great Lakes waters	2.6	3.0	3.3	2.8	1.9	1.3	1.9	2.9	2.2	1.5	2.3
Residents	2.6	3.1	3.3	2.8	2.0	1.4	2.0	3.0	2.4	1.6	2.4
Nonresidents	2.8	1.3	2.3	2.1	0.8	0.8	1.3	2.6	1.3	1.1	1.6
PERCENTAGE OF ALL ANGLERS REPRESENTED BY:											
Nonresidents	10	15	14	13	14	14	13	13	12	13	13
Females	16	16	16	16	16	15	15	16	14	14	15
PERCENTAGE OF TROUT ANGLERS REPRESENTED BY:											
Nonresidents	5	8	6	8	9	9	7	7	7	5	7
Females	10	9	8	10	10	10	10	9	8	7	9
PERCENTAGE OF NONTROUT ANGLERS REPRESENTED BY:											
Nonresidents	12	17	16	16	17	15	14	14	13	15	15
Females	18	18	17	17	18	17	16	17	15	15	17
PERCENTAGE OF GREAT LAKES ANGLERS REPRESENTED BY:											
Nonresidents	5	5	4	4	5	9	9	11	11	6	7
Females	14	16	15	17	15	13	12	13	12	14	14

Table 16. --Catch per hour for all waters, by conservation regions,
1952-1961

Region	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	Mean, 1952- 1961
I	1.1	1.0	1.0	1.2	1.1	1.1	1.2	1.3	0.9	0.9	1.1
II	1.3	1.3	1.3	1.4	1.1	1.1	1.0	1.3	1.2	0.9	1.2
III	1.7	1.4	1.9	1.6	1.5	1.4	1.6	1.4	1.6	1.2	1.5
Entire state	1.4	1.3	1.5	1.5	1.3	1.2	1.2	1.3	1.3	1.0	1.3

Table 17. --Catch of trout per hour in trout waters, by conservation regions,
1952-1961

Region	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	Mean, 1952- 1961
I	0.8	0.7	1.0	0.9	0.9	0.8	0.8	0.8	0.6	0.7	0.8
II	0.6	0.6	0.7	0.7	0.7	0.7	0.5	0.5	0.5	0.5	0.6
III	0.5	0.6	0.8	0.7	0.5	0.7	0.6	0.7	0.6	0.6	0.6
Entire state	0.7	0.6	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.6	0.7

Table 18. --Catch per hour for nontrout waters, by conservation regions,
1952-1961

Region	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	Mean, 1952- 1961
I	1.2	1.2	1.0	1.3	1.3	1.1	1.2	1.2	0.9	0.9	1.1
II	1.4	1.4	1.2	1.3	1.1	1.2	1.1	1.2	1.3	0.9	1.2
III	1.5	1.4	1.5	1.2	1.4	1.4	1.4	1.3	1.4	1.1	1.4
Entire state	1.4	1.4	1.3	1.3	1.2	1.2	1.2	1.2	1.3	1.0	1.2

Table 19. --Catch per hour for Great Lakes waters, by conservation regions,
1952-1961

Region	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	Mean, 1952- 1961
I	2.3	1.3	0.7	0.9	1.0	1.2	1.3	2.1	1.4	1.1	1.3
II	3.7	4.9	6.9	4.7	4.6	3.3	2.4	9.2	2.2	2.4	4.4
III	2.4	2.9	3.2	2.5	1.8	1.3	2.2	2.2	2.6	1.5	2.3
Entire state	2.6	3.0	3.3	2.8	1.9	1.3	1.9	2.9	2.2	1.5	2.3

Table 20. --Total fishing time reported (thousands of hours)
and catch per hour for various waters, 1928-1961

Year	Thousands of hours reported	Catch per hour			
		All waters	Trout waters	Nontrout waters	Great Lakes waters [↓]
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
1959	167	1.3	0.6	1.2	2.9
1960	187	1.3	0.6	1.3	2.2
1961	167	1.0	0.6	1.0	1.5
Unweighted mean	118	1.2	0.8	1.3	2.4

[↓] Data for the Great Lakes were included with "nontrout waters" prior to 1942.