**INSTITUTE FOR FISHERIES RESEARCH** 

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THE MICHIGAN GENERAL CREEL CENSUS FOR 1956

by

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The Michigan General Creel Census has been conducted by conservation officers since 1927 as a part of their regular duties (1956 was the thirtieth consecutive year). 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 1956, the officers obtained records on 76,898 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 division of the data gives the best available indication of the fishing quality in the different types of waters administered by the state. The numbers of anglers interviewed from different types of waters were as follows: (1) trout waters, 9,746 (13% of all anglers contacted), of whom 1,429 fished in designated trout lakes and special trout ponds and 8,317 fished in streams; (2) nontrout waters, 57,202 (74%), of whom 50,077 fished in lakes and 7,125 fished in streams; (3) Great Lakes waters, 9,950 (13%), of whom 4,243 fished in the Great Lakes and 5,707 fished in the connecting waters.

Of the 76,898 anglers interviewed, 10,914 (14%) were nonresidents; 12,582 (16%) were women. For comparison with the number of interviews, the total sale of fishing licenses in 1956 was 1,138,288, of which 267,729 (24%) were nonresident  $\sqrt{2}$ 

From "1956 License Sales by Counties" issued by the Michigan Department of Conservation, 1957.

Of the nonresident licenses, 138,463 (12% of all fishing licenses sold) were temporary (15-day). Officers contacted proportionately fewer nonresidents than residents, probably because (1) the 15-day licensee fishes only a few days, and (2) nonresidents cannot fish in six southern Michigan counties from January 1 to the opening day of the trout season.

Officers contacted anglers either while an angler was fishing, or at the end of a fishing trip. Thus, the census is a partial rather than a complete record on 76,898 angling days. Only legal-size fish caught by sport fishermen are considered.

## Detailed analysis

The 76,898 anglers contacted by conservation officers during 1956 (23% more than in 1955) had fished 175,318.8 hours and had caught 222,613 fish (Table 1). The average catch per hour for all fishing was 1.3, which is 0.2 fish per hour below that recorded in 1955.

Angling records were obtained in 77 counties (Table 2). The lack of fishing records from six counties (Calhoun, Eaton, Genesee, Lenawee, Saginaw and Tuscola) and the paucity of records from a few others tend to bias the statewide sample of fishing.

In this report the various types of waters are separated by Conservation Districts (Fig. 1). Data from Alger County (which is in both Districts 3 and 4) have been separated according to the district to which the reporting officer was assigned.

#### Fishing in Trout, Nontrout, and Great Lakes Waters,

# by Conservation Districts

The numbers and percentages of anglers interviewed while fishing in various waters are given in Table 3. Regions I and II furnished 94 percent of all the

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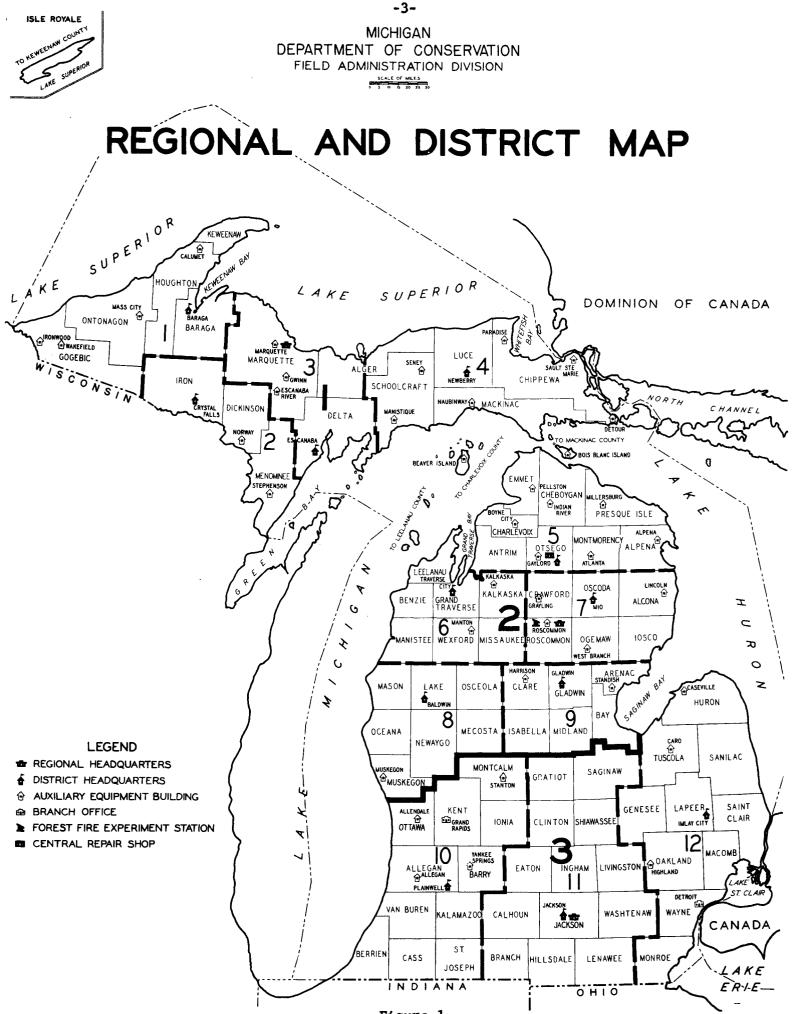


Figure 1

records on trout fishing; trout-fishing reports made up 19 percent of the total angler trips. Six percent of the records on trout fishing were from Region III, where trout fishing reports comprised only 2 percent of the total fishing censused.

Trout fishing made up the largest percentages of the total fishing records in District 1 (41% of 2,172 anglers), District 4 (36% of 4,011 anglers), and District 2 (27% of 2,155 anglers). In contrast, District 10 had 97 percent nontrout anglers (among 9,531 fisherman-days), District 11 had 96 percent (among 6,349 fisherman-days), and District 8 had 93 percent (of 5,805 fishermandays).

Officers secured records on Great Lakes sport fishing for 9 of the 11 districts which border on the Great Lakes and their connecting waters. Relatively few records of Great Lakes fishing are obtained because it is restricted somewhat to sheltered bays, island areas, and certain docking areas and because anglers are not required to purchase a fishing license to take fish from the Great Lakes. Over half of the anglers interviewed in District 12 (65% of 12,381 fisherman-days) were fishing Great Lakes waters; 23 percent of 1,703 fishermandays in District 3; and 16 percent of 4,011 fisherman-days in District 4.

### Number of Trout Caught in Trout

#### Waters, by Conservation Regions

Of the total trout catch recorded in 1956, brook trout constituted 56 percent; rainbow trout, 34 percent; and brown trout, 10 percent (Table 4). (In 1955 these percentages were 56, 29 and 15, respectively.)

Of 9,868 brook trout reported in 1956, Region I contributed 6,003 (61%); Region II, 3,647 (37%); Region III, 218 (2%). Of 6,071 rainbow trout recorded, 4,962 (82%) were caught in Region II, 783 (13%) in Region I, and 326 (5%) in Region III. The 1,830 brown trout taken in 1956 were divided as follows: Region II, 1,503 (82%); Region I, 181 (10%); and Region III, 146 (8%).

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Of the 17,769 brook, brown and rainbow trout reported from trout waters, 96 percent were caught in Regions I and II combined.

#### Other Species Caught in Trout Waters

Brook, brown and rainbow trout constituted 95 percent of all fish taken in trout waters. The numbers of each of 14 other species reported are as follows:

Bluegill	269	Black crappie	3
Suckers	254	Creek chubs	3
Yellow perch	245	Bullhead	1
Rock bass	45	Pumpkinseed	1
Northern pike	26	Redhorse	1
Largemouth bass	23	Round whitefish	_1
Walleye	23	Total	905
Smallmouth bass	10		

# Catch per Hour--Trout Waters,

#### by Conservation Districts

Trout anglers had the same fishing success (0.8 fish per hour) as they did in 1955 (Table 5). The fishing quality index was 0.8 trout per hour for the designated trout lakes and special trout ponds as compared to 0.7 for the trout streams. Most of the trout fishermen (85%) fished the streams. The highest catches per hour for trout lakes (1.1 trout) and trout streams (1.0) were recorded in District 4.

# Composition of Catch--Nontrout Waters,

## by Conservation Districts and Regions

Conservation officers recorded 27 kinds of fish from nontrout waters. Bluegills and yellow perch together made up 67 percent of the total (71% in Region I, 64% in Region II, and 71% in Region III--see Table 6). The black crappie was the only other species that made up at least 10 percent of the total catch in any one region (10% in Region III). Other important species recorded were: northern pike, pumpkinseed, rock bass, largemouth bass, rainbow trout, walleye and smallmouth bass. The 10 species mentioned have retained approximately the same rank in importance during the 10-year period 1947-1956 (Table 7). In 1956 these 10 species comprised 95 percent of the total recorded catch and at least 69 percent of the catch in every district. The remaining 17 species made up 5 percent. These 17 species and the numbers recorded were:

Suckers	2,027	Bowfin	44
Bullheads	1,474	Redhorse	44
American smelt	1,151	Lake whitefish	36
Carp	1,113	Warmouth	23
Brook trout	278	Gars	18
Brown trout	227	Sauger	15
Lake trout	220	Muskellunge	11
Catfishes	217	White bass	3
Shallowwater cis	co 75	Total	6,976

Brook, brown and rainbow trout made up 2 percent of the total catch from nontrout waters.

Species composition of the catch is summarized in Table 8 by conservation regions in terms of the percentage of the total state catch of each species recorded in each region.

In nontrout waters the bluegill outranked all other species in the state as a whole (55,631 reported). Most bluegills (62% of the state total) and black crappie were recorded in Region III. Region II (from which more than half of the total General Creel Census records for 1956 were obtained) showed

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the highest catches of yellow perch (65% of total for the state), northern pike, pumpkinseed, rock bass, largemouth bass, rainbow trout, walleye and smallmouth bass. Regions II and III combined produced 97 percent of all bluegills recorded in the census.

## Catch per Hour -- Nontrout Waters,

## by Conservation Districts

In 1956 the catch from nontrout waters for the entire state was 1.2 fish per hour (Table 9). The highest catch per hour (1.8) was recorded in District 4. Seven districts had catches of better than 1.0 fish per hour. The fishing quality index in the nontrout lakes was highest in District 8 (1.8 fish per hour), followed by Districts 4, 10 and 11 with 1.7, 1.6 and 1.4 fish per hour, respectively. For nontrout streams District 9 yielded the highest catch per hour (2.7 fish), followed by Districts 4, 10 and 11 with 2.3, 1.5 and 1.4 fish per hour, respectively.

# Composition of Catch--Great Lakes Waters

Of the 51,658 fish recorded from Great Lakes waters in 1956, yellow perch made up 86 percent and walleyes, rock bass, white bass and smallmouth bass (combined) added 10 percent (Table 10). The remaining 4 percent were made up of 17 other kinds of fish as follows:

Freshwater drum	818	Round whitefish	28
American smelt	274	Suckers	22
Northern pike	251	Muskellunge	5
Pumpkinseed	248	Alewife	3
Bullheads	217	Carp	3
Black crappie	198	Lake trout	3
Largemouth bass	90	Mooneye	3
Catfishes	76	Bowfin	2
Bluegill	34	Total	2,275

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# Catch per Hour--Great Lakes Waters,

## by Conservation Districts

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The average catch per hour for all Great Lakes and connecting waters was 1.9 (2.7 for the Great Lakes and 1.1 for the connecting waters), the lowest recorded during the 15 years (1942-1956) in which the Great Lakes waters have been tabulated separately from nontrout waters. District 6 had the best catch per hour (average of 9.8 for 218 hours of fishing). In four of the districts the catch was better than 2.0 fish per hour (Table 11).

#### Residence of Anglers--All Waters

In the 1956 general creel census, 65,984 anglers (86%) were residents of Michigan and 10,914 anglers (14%) were nonresidents (Table 12). The greatest number of nonresident anglers (2,678) was interviewed in District 5, where they made up 19 percent of the total; in District 1 they made up 29 percent; in District 3, 25 percent; and in other districts, less than 25 percent.

Anglers residing in all 83 counties of Michigan were recorded (Table 13). Residents of Wayne County made up 18 percent of all residents; Kent County, 5; Ingham, 5; Macomb, 4; Genesee, 4; and Saginaw, 3 (total for these six counties, 39 percent).

Nonresident anglers came from 34 states, District of Columbia, Province of Ontario, and West Indies (Table 13a). Ohio contributed 46 percent of all nonresidents; Indiana, 31 percent; Illinois, 13; and Wisconsin, 5 (total for the four states bordering Michigan, 95 percent).

Resident anglers caught 1.3 fish per hour (all waters combined); nonresident, 1.1 (Table 14).

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## Sex of Anglers

Of 76,898 anglers interviewed in 1956, 12,582 (16%) were women. They constituted 10 percent of the trout anglers, 18 percent of the nontrout anglers, and 15 percent of fishermen on the Great Lakes (Table 15).

# Comparison of 1956 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 1.1 fish in 1948 to 1.6 in 1950 (Table 17). For 1956 the catch for all waters was 1.3 fish per hour which is 0.1 fish below the simple average for the 10-year period.

During 1947-1956 the catch per hour of trout in trout waters has ranged from 0.6 to 0.8 trout per hour (Table 17). The high catches during this period were in 1948, 1954 and 1955, and the low catches were in 1950 and 1953. In 1956 the trout catch in trout waters was 0.7 per hour, which is the simple average for the 10-year period.

For nontrout waters the highest catch per hour was recorded in 1950 with 1.6 fish, and the lowest in 1948 with 1.1 fish per hour (Table 18). The 1956 catch for nontrout waters was 1.2 fish per hour which is 0.2 fish below the simple 10-year average.

The catch per hour has been consistently higher for the Great Lakes waters than for trout or nontrout (inland) waters (Table 19). During the 1947-1956 period, anglers fishing the Great Lakes waters have averaged 3.0 fish per hour as compared to an average of 1.4 fish per hour in nontrout waters. In Great Lakes waters the catch per hour has varied from 1.9 in 1956 to 4.8 in 1950. The 1956 catch per hour was 1.1 fish below the average for the 10-year period.

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

## Acknowledgments

Mr. James E. Hughes and his staff, in Administrative Services, tabulated the data with IBM equipment. Mrs. Grace G. Hubbell assisted in the coding and analysis of records.

INSTITUTE FOR FISHERIES RESEARCH

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Approved by G. P. Cooper Typed by M. S. McClure

Table 1.--Total number of fishermen, hours fished, number of fish taken and catch per hour for each conservation district and region, all waters, 1956

District or region	Number of male anglers	Number of female anglers	Total anglers	Total hours fished	Total fish caught	Catch per hour	$\frac{\sum x^{1}}{N}$
District 1	1,870	302	2,172	4,779.1	3,597	0.8	0.9
District 2	1,937	218	2,155	4,772.4	5,668	1.2	1.3
District 3	1,527	176	1,703	5,010.5	3,153	0.6	0.7
District 4	3,422	589	4,011	10,412.1	15,502	1.5	1.6
Region I	8,756	1,285	10,041	24,974.1	27,920	1.1	1.2
District 5	11,373	2,744	14,117	34,564.5	29,362	0.8	0.9
District 6	4,973	885	5,858	13,431.1	16,556	1.2	1.4
District 7	6,532	1,380	7,912	17,364.5	1 <b>3,</b> 806	0.8	0.8
District 8	4,857	948	5,805	11,900.3	19,741	1.7	1.7
District 9	4,073	831	4,904	8,953.4	18,657	2.1	2.0
Region II	31,808	6,788	38,596	86,213.8	98,122	1.1	1.2
District 10	7,918	1,613	9,531	19,448.0	29,755	1.5	1.5
District 11	5,274	1,075	6,349	12,760.2	17,704	1.4	1.4
District 12	10,560	1,821	12,381	31,922.7	49,112	1.5	1.4
Region III	23,752	4,509	28,261	64,1 <b>3</b> 0.9	96,571	1.5	1.4
State total	64 <b>,3</b> 16	1 <b>2,</b> 582	76,898	175,318.8	222,613	1.3	1.3

This symbol in this and subsequent tables (5, 9, 11 and 14) denotes the mean catch per hour per angler.

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# Table 2.--Number of anglers interviewed by conservation

officers during 1956 and 1955, by counties

County	1956	1955	County	1956	1955
Alcona	1,188	1,124	Lake	1,092	1,622
Alger	514	640	Lapeer	153	202
Allegan	1,304	387	Leelanau	614	625
Alpena	2,314	1,252	Lenawee	•••	
Antrim	2,032	571	Livingston	1,057	1,174
Arenac	98 <b>3</b>	1,685	Luce	1,316	1,179
Baraga	272	251	Mackinac	1,012	461
Barry	2,173	393	Macomb	4,962	3,173
Bay	622	1,668	Manistee	1,135	1,034
Benzie	1,167	583	Marquette	1,052	812
Berrien	3	280	Mason	472	138
Branch	1,540	1,841	Mecosta	1,090	606
Calhoun	•••	•••	Menominee	381	77
Cass	459	449	Midland	727	710
Charlevoix	1,717	957	Missaukee	754	956
Cheboygan	2,431	1,411	Monroe	1,910	1,647
Chippewa	676	471	Montcalm	1,077	721
Clare	1,295	1,514	Montmorency	2,560	986
Clinton	250	271	Muskegon	747	1,172
Crawford	514	795	Newaygo	1,195	1,326
Delta	407	96	Oakland	1,423	2,320
Dickinson	680	600	Oceana	650	800
Eaton	•••	• • •	Ogemaw	1,052	855
Emmet	1,632	555	Ontonagon	452	790
Genesee	•••	181	Osceola	559	582
Gladwin	584	584	Oscoda	1,124	1,154
Gogebic	963	676	Otsego	448	370
Grand Traverse	778	753	Ottawa	363	905
Gratiot	125	<b>3</b> 56	Presque Isle	983	656
Hillsdale	243	169	Roscommon	2,733	2,165
Houghton	411	669	Saginaw	•••	121
Huron	880	778	St. Clair	542	208
Ingham	651	683	St. Joseph	1,306	363
Ionia	546	212	Sanilac	1,734	1,994
Iosco	1,301	889	Schoolcraft	737	836
Iron	1,094	344	Shiawassee	35	149
Isabella	693	501	Tuscola	•••	107
Jackson	211	• • •	Van Buren	273	171
Kalamazoo	821	210	Washtenaw	2,237	1,176
Kalkaska	731	679	Wayne	777	1,206
Kent	1,206	530	Wexford	679	646
Keweenaw	74	179			
			Total	76,898	62 <b>,</b> 382

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Table 3.--Number and percentage of fishermen interviewed on trout, nontrout

and	Great	Lakes	waters,	by	conservatio	on d	listri	cts	and	regions,	1956
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District or region		<u>it waters</u> Percentage		ut waters Percentage		kes waters Percentage	Total number of anglers
District 1	894	41	1,270	59	8	Ъ <sup>0</sup>	2,172
District 2	582	27	1,552	72	21	1	2,155
District 3	436	26	<sup>°</sup> 869	51	398	23	1,703
District 4	1,445	36	1,928	48	<b>63</b> 8	16	4,011
Region I	3,357	33	5,619	56	1,065	11	10,041
District 5	2,140	15	11,817	84	160	1	14,117
District 6	1,290	22	4,451	76	117	2	5,858
District 7	1,683	21	6,222	79	7	¥0	7,912
District 8	409	7	5 <b>,3</b> 96	9 <b>3</b>	•••	•••	5,805
District 9	276	6	4,024	82	604	12	4,904
Region II	5,798	15	31,910	83	888	2	38,596
District 10	326	3	9,205	97	•••	•••	9,531
District 11	228	4	6,121	96	•••	•••	6,349
District 12	37	₽o	4,347	35	7,997	65	12,381
Region III	591	2	19,673	70	7,997	28	28,261
State total	9,746	13	57,202	74	9,950	13	76,898

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Table 4.--Number and percentage of total trout catch made up by each of the three species of trout--all trout waters, by conservation districts and regions, 1956

District or region		ok trout Percentage		wn trout Percentage		w trout Percentage	Total number of trout
District 1	941	65	54	4	454	31	1,449
District 2	990	90	18	2	90	8	1,098
District 3	504	82	28	5	80	13	612
District 4	3,568	94	81	2	159	4	3,808
Region I	6,003	86	181	3	783	11	6,967
District 5	1,596	35	470	10	2,502	55	4,568
District 6	8 <b>36</b>	32	365	14	1,411	54	2,612
District 7	847	40	451	21	817	39	2,115
District 8	262	45	121	21	201	34	584
District 9	106	46	96	41	31	13	2 <b>33</b>
Region II	3,647	36	1,503	15	4,962	49	10,112
District 10	182	40	94	21	177	39	453
District 11	24	11	52	23	149	66	225
District 12	12	100	•••	••	•••	••	12
Region III	218	32	146	21	326	47	690
State total	9,868	56	1,830	10	6,071	34	17,769

and all trout waters, by conservation districts and regions, 1956

			Trout	the second s						Trout streams					All trout waters						
District or region	Number of anglers	Hours fished	Total fish caught	Catch per hour	Total trout caught	Trout catch per hour	$\frac{\sum x}{N}$	Number of anglers	Hours fished	fish caught	Catch per hour	Total trout catch	Trout catch per hour	$\frac{\sum \mathbf{x}}{\mathbf{N}}$	Number of anglers	Hours fished	fish	Catch per hour	. Total trout caught	Trout catch per hour	
District 1	65	. 89.0	116	1.3	116	1.3	1.5	829	1,838.0	1 <b>,3</b> 46	0.7	1,333	0.7	0.8	894	1,927.0	1,462	0.8	1,449	0.8	0.8
District 2	58	99.0	52	0.5	52	0.5	0.6	524	1,221.9	1,132	0.9	1,046	0.9	0.9	582	1,320.9	1,184	0.9	1,098	0.8	0.8
District 3	158	258.0	252	1.0	252	1.0	1.2	278	652.0	404	0.6	360	0.6	0.6	436	910.0	656	0.7	612	0.7	0.8
District 4	458	1,000.0	1,117	1.1	1,078	1.1	1.8	987	2,871.2	2,791	1.0	2,730	1.0	1.0	1,445	3,871.2	3,908	1.0	3,808	1.0	1.3
Region I	739	1,446.0	1,537	1.1	1,498	1.0	1.6	2,618	6,583.1	5,673	0.9	5,469	0.8	0.9	3,357	8,029.1	7,210	0.9	6,967	0.9	1.0
District 5	314	686.5	577	0.8	522	0.8	1.3	1,826	5,162.9	4,269	0.8	4,046	0.8	0.9	2,140	5,849.4	4,846	0.8	4,568	0.8	0.9
District 6	49	101.0	42	0.4	42	0.4	0.4	1,241	2,995.5	2,668	0.9	2,570	0.9	0.9	1,290	3,096.5	2,710	0.9	2,612	0.8	0.9
District 7	44	109.0	74	0.7	62	0.6	0.6	1,639	4,008.2	2,111	0.5	2,053	0.5	0.5	1,683	4,117.2	2,185	0.5	2,115	0.5	0.5
District 8	139	315.0	259	0.8	82	0.3	0.7	270	627.0	502	0.8	502	0.8	0.7	409	942.0	761	0.8	584	0.6	0.7
District 9	•••	• • • • •	•••	• • •	•••	• • •	•••	276	585.5	245	0.4	233	0.4	0.4	276	585.5	245	0.4	233	0.4	0.4
Region II	546	1,211.5	952	0.8	708	0.6	1.0	5,252	13,379.1	9,795	0.7	9,404	0.7	0.7	5,798	14,590.6	10,747	0.7	10,112	0.7	0.8
District 10	6	8.5	5	0.6	5	0.6	0.5	320	885.0	475	0.5	448	0.5	0.6	326	893.5	480	0,5	453	0.5	0.6
District 11	121	241.0	93	0.4	93	0.4	0.4	107	328.0	132	0.4	132	0.4	0.4	228	569.0	225	0.4	225	0.4	0.4
District 12	17	20.5	•••	•••	¢ ♦ ●	• • •	•••	20	37.0	12	0.3	12	0.3	0.3	37	57.5	12	0.2	12	0.2	0.2
Region III	144	270.0	98	0.4	98	0.4	0.3	447	1,250.0	619	0.5	592	0.5	0.5	591	1,520.0	717	0.5	717	0.5	0.5
State total	1,429	2,927.5	2,587	0.9	2,304	0.8	1.2	8,317	21,212.2	16,087	0.8	15,465	0.7	0.8	9,746	24,139.7	18,674	0.8	17,769	0.7	0.8

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Table 6.--Percentage of the total catch contributed by the 10 species most frequently

	Blue- gill	Yellow perch	Black crappie	Northern pike	Pumpkin- seed	Rock bass	Largemouth bass	Rainbow trout	Wall- eye	Smallmouth bass	Total
District 1	13	33	24	6	1	2	4	1	10	2	96
District 2	10	52	5	10	1	2	$\mathbf{y}_0$	¥о	8	8	96
District 3	11	47	¥0	11	4	1	9	12	2	1	98
District 4	8	75	••	5	2	4	¥0	\$0	3	1	98
Region I	9	62	4	7	2	3	2	1	5	3	98
District 5	14	34	2	23	9	6	3	4	1	3	99
District 6	25	<b>3</b> 8	1	4	2	6	2	1	7	2	88
District 7	26	44	2	6	5	7	2	1	2	2	97
District 8	43	34	11	2	4	1	1	1	<b>4</b> 0	1	98
District 9	19	55	15	1	2	1	1	1	••	1	96
Region II	25	39	6	9	5	4	2	2	2	2	96
District 10	70	9	9		4	1	3	2	Jo	₽o	98
District 11	67	9	8	1	10	2	2	$\mathbf{J}_{0}$	$\gamma^0$	$\mathbf{y}_{0}$	99
District 12	25	19	15	\$∕0	4	4	1	<b>J</b> 0	$\mathbf{y}_{0}$	1	69
Region III	61	10	10	1	6	2	2	1	<del>↓</del> 0	<b>4</b> 0	93
State total	36	31	7	6	5	3	2	2	2	1	95

caught in nontrout waters, by conservation districts and regions, 1956

Less than 0.5.

Species	1947	1948	1949	1950	1951	1952	1953	1954	1955́	1956	Mean, 1947- 1956
Bluegill	<b>3</b> 0	45	48	44	42	40	43	37	35	36	40
Yellow perch	40	23	24	29	34	33	27	31	32	31	30
Black crappie	7	10	9	8	6	8	9	8	11	7	8
Pumpkinseed	3	4	4	4	4	5	5	5	4	5	4
Northern pike	3	4	5	3	3	3	4	5	4	6	4
Rock bass	2	4	3	3	3	4	4	3	3	3	3
Largemouth bass	1	2	2	1	2	2	2	2	2	2	2
Walleye	1	2	1	1	2	2	1	1	2	2	2
Smallmouth bass	1	2	1	1	1	1	1	1	1	1	1
Rainbow trout	<b>∱</b> 0	<del>1</del> 0	<b>1∕</b> 0	70	₽0	<b>∛</b> 0	<del>4</del> 0	2	2	2	1
Total	88	96	97	94	97	98	96	95	96	95	95

Table 7.--Percentage of the total catch composed by the 10 species taken most frequently in nontrout waters, 1947-1956

Less than 0.5.

Table 8.--Numbers caught and percentage of the total state catch contributed by the 10 species taken most frequently in nontrout

Species	the second se	ion I Percent-	and the second	on II Percent-	Region Number 1		Total fish
	·	age		age		age	
Bluegil1	1,627	3	19,671	35	34,333	62	55,631
Yellow perch	10,896	23	31,080	65	5,711	12	47,687
Black crappie	747	7	4,745	44	5,380	49	10,872
Northern pike	1,230	14	7,235	8 <b>3</b>	292	3	8,757
Pumpkinseed	360	5	<b>3,</b> 848	51	<b>3,</b> 279	44	7,487
Rock bass	497	10	3,460	68	1,098	22	5,055
Largemouth bass	285	10	1,515	50	1,217	40	3,017
Rainbow trout	266	11	1,335	56	789	33	2,390
Walleye	829	36	1,436	63	30	1	2,295
Smallmouth bass	487	23	1,367	65	260	12	2,114
Total or percentages	17,224	12	75,692	52	52 <b>,3</b> 89	36	145,305

waters, by conservation regions, 1956

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		Nontrout	lakes				Nontrou	t stream	IS			All nont	rout wate	rs	
District or region	Number of anglers	Hou <b>r</b> s fished	Fish caught	Catch per hour	$\frac{\sum_{N} x}{N}$	Number of anglers	Hours fished	Fish caught	Catch per hour	$\underline{\sum}_{\mathbf{X}}$	Number of anglers	Hou <b>r</b> s fi <b>she</b> d	Fish caught	Catch per hour	$\underline{\Sigma}_{\mathbf{X}}$
District 1	1,188	2,638.1	2,092	0.8	0.9	82	176.0	40	0.2	0.2	1,270	2,814.1	2 <b>,</b> 1 <b>3</b> 2	0.8	0.9
District 2	1,082	2,511.0	3,383	1.3	1.6	470	908.5	1,027	1.1	1.1	1,552	3,419.5	4,410	1.3	1.4
District 3	859	2,278.0	1,789	0.8	0.9	10	31.0	20	0.6	0.9	869	2,309.0	1,809	0.8	0.9
District 4	1,755	4,753.7	8,095	1.7	1.7	173	533.5	1,217	2.3	2.3	1,928	5,287.2	9,312	1.8	1.8
Region I	4,884	12,180.8	15,359	1.3	1.4	735	1,649.0	2,304	1.4	1.3	5,619	13,829.8	17,663	1.3	1.3
District 5	11,344	27,434.9	23,298	0.8	0.9	473	794.7	804	1.0	1.0	11,817	28,229.6	24,102	0.9	0.9
Dist <b>t</b> ict 6	4,359	9,877.6	11,591	1.2	1.3	92	239.0	116	0.5	0.5	4,451	10,116.6	11,707	1.2	1.3
District 7	5,998	12,730.3	11,389	0.9	0.9	224	503.0	126	0.3	0.3	6,222	13,233.3	11,515	0.9	0.9
District 8	5,279	10,644.3	18,896	1.8	1.8	117	314.0	84	0.3	0.3	5,396	10,958.3	18,980	1.7	1.8
District 9	2,197	4,003.6	3,699	0.9	1.0	1,827	3,154.3	8,448	2.7	2.4	4,024	7,157.9	12,147	1.7	1.6
Region II	29,177	64,690.7	68,873	1.1	1.2	2,733	5,005.0	9,578	1.9	1.8	31,910	69,695.7	78,451	1.1	1.2
District 10	8,582	17,400.0	27,518	1.6	1.6	623	1,154.5	1,757	1.5	1.5	9,205	18,554.5	29,275	1.6	1.6
District 11	5,632	11,216.2	16,145	1.4	1.5	489	975.0	1,334	1.4	1.3	6,121	12,191.2	17,479	1.4	1.5
District 12	1,802	4,869.7	4,124	0.8	0.9	2,545	5,145.5	5,289	1.0	1.0	4,347	10,015.2	9,413	0.9	0.9
Region III	16,016	33,485.9	47,787	1.4	1.5	3,657	7,275.0	8,380	1.2	1.1	19,673	40,760.9	56,167	1.4	1.4
State total	50,077	110,357.4	1 <b>3</b> 2,019	1.2	1.3	7,125	13,929.0	20,262	1.5	1.4	57,202	124,286.4	152,281	1.2	1.3

Table 9.--General creel census data for nontrout lakes, nontrout streams and all

nontrout waters combined, by conservation districts and regions, 1956

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Table	10Per	centag	e of	the	total	cato	ch cont	tribute	ed by	the
five	species	taken	nost	freq	quent13	/ in	Great	Lakes	water	s

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Species	1947	1948	1949	1950	1951	1952	195 <b>3</b>	1954	1955	1956	Mean, 1947- 1956
Yellow perch	8 <b>3</b>	86	91	96	94	84	85	90	91	86	88
Walleye	8	5	4	1	1	4	1	1	2	3	3
Rock bass	1	2	\$∕0	\$∕0	1	6	4	2	2	3	2
White bass	••	₩	••	••	••	2	1	1	∛0	2	1
Smallmouth bass	1	1	₩	1	1	2	1	1	1	2	1
Total	93	94	95	98	97	98	92	95	96	96	95

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 $\mathcal{Y}_{\text{Less than 0.5.}}$ 

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

		Great	Lakes				Connecti	ng water	S		A	ll Great L	akes wat	ers	
District or region	Number of anglers	Hours fished		Catch per hour	<u>Σx</u>	Number of anglers	Hours fished		Catch	<u>Σx</u>	Number of anglers	Hours fished	Fish caught	Catch per hour	<u>Σx</u>
District 1	8	38.0	3	0.1	0.1	• • •	•••	• • •	•••	•••	8	38.0	3	0.1	0.1
District 2	21	32.0	74	2.3	1.9	• • •	• • •	•••		•••	21	32.0	74	2.3	1.9
District 3	<b>3</b> 98	1,791.5	688	0.4	0.4	•••	•••	• • •	•••	•••	<b>3</b> 98	1,791.5	688	0.4	0.4
District 4	296	510.3	1,600	3.1	2.5	342	743.4	682	0.9	1.2	<b>63</b> 8	1,253.7	2,282	1.8	1.8
Region I	723	2,371.8	2,365	1.0	1.3	342	743.4	682	0.9	1.2	1,065	3,115.2	3,047	1.0	1.3
District 5	160	485.5	414	0.9	0.8	•••	ð • •	•••	• • •	• • •	160	485.5	414	0.9	0.8
District 6	117	218.0	2,139	9.8	10.0	•••	• • •	•••	•••	•••	117	218.0	2,139	9.8	10.0
District 7	7	14.0	106	7.6	7.6	•••	•••	•••	•••	• • •	7	14.0	106	7.6	7.6
District 9	604	1,210.0	6,265	5.2	5.5	•••	•••	•••	•••	•••	604	1,210.0	6,265	5.2	5.5
Region II	888	1,927.5	8,924	4.6	5.3	•••	•••	•••	•••	•••	888	1,927.5	8,924	4.6	5.3
District 12	2,632	9,210.0	25,136	2.7	2.8	5,365	12,640.0	14,551	1.2	1.0	7,997	21,850.0	39,687	1.8	1.6
Region III	2,632	9,210.0	25,136	2.7	2.8	5,365	12,640.0	14,551	1.2	1.0	7,997	21,850.0	. <b>39,</b> 687	1.8	1.6
State total	4,243	13,509.3	36,425	2.7	3.1	5,707	13,383.4	15,233	1.1	1.0	9,950	26,892.7	51,658	1.9	1,9

conservation districts and regions, 1956

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District or region	Total anglers	Resident anglers	Nonresident anglers	Percentage nonresident
District 1	2,172	1,550	622	29
District 2	2,155	1,754	401	19
District 3	1,703	1,281	422	25
District 4	4,011	3,222	789	20
Region I	10,041	7,807	2,234	22
District 5	14,117	11,4 <b>3</b> 9	2,678	19
District 6	5,858	4,629	1,229	21
District 7	7,912	7,168	744	9
District 8	5,805	5,160	645	11
District 9	4,904	4,793	111	2
Region II	38,596	33,189	5,407	14
District 10	9,531	7,890	1,641	17
District 11	6,349	4,979	1,370	22
District 12	12,381	12,119	262	2
Region III	28,261	24,988	3,273	12
State total	76,898	65,9 <b>8</b> 4	10,914	14

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district, all waters, 1956

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in the general creel census,  $1956\sqrt[1]{}$ 

County of residence	Male anglers	Female anglers	Total anglers	County of residence	Male anglers	Female anglers	Total anglers
				_ 1			
Alcona	214	37	251	Lake	119	37	156
Alger	336	13	349	Lapeer	160	29	189
Allegan	561	94	655	Leelanau	152	12	164
Alpena	761	159	920	Lenawee	138	43	181
Antrim	607	197	804	Livingston	177	34	211
Arenac	155	36	191	Luce	751	62	813
Baraga	139	8	147	Mackinac	157	16	173
Barry	361	97	458	Macomb	2,460	468	2,928
Bay	1,269	209	1,478	Manistee	482	41	523
Benzie	371	34	405	Marquette	717	55	772
Berrien	273	60	333	Mason	337	<b>3</b> 8	<b>37</b> 5
Branch	214	51	265	Mecosta	322	57	379
Calhoun	543	168	711	Menominee	276	26	302
Cass	198	34	2 <b>3</b> 2	Midland	8 <b>73</b>	175	1,048
Charlevoix	<b>49</b> 8	69	567	Missaukee	273	33	306
Cheboygan	541	53	594	Monroe	528	110	<b>63</b> 8
Chippewa	253	27	280	Montcalm	606	110	716
Clare	452	63	515	Montmorency	590	128	718
Clinton	384	80	464	Muskegon	739	126	865
Crawford	156	9	165	Newaygo	318	37	355
Delta	172	16	188	Oakland	1,277	274	1,551
Dickinson	706	51	757	Oceana	303	43	346
Eaton	290	78	<b>3</b> 68	Ogemaw	216	21	237
Emmet	566	69	635	Ontonagon	296	33	329
Genesee	2,027	495	2,522	Osceola	225	30	255
Gladwin	212	22	2 <b>3</b> 4	Oscoda	218	40	258
Gogebic	425	74	499	Otsego	433	63	496
Grand Traverse	668	83	751	Ottawa	537	73	610
Gratiot	404	70	474	Presque Isle	482	64	546
Hillsdale	278	26	304	Roscommon	232	59	291
Houghton	245	26	271	Saginaw	1,746	393	2,139
Huron	270	37	307	St. Clair	507	138	645
Ingham	2,461	602	<b>3,</b> 063	St. Joseph	459	91	550
Ionia	335	69	404	Sanilac	476	94	570
Iosco	213	27	240	Schoolcraft	347	22	369
Iron	719	91	810	Shiawassee	2 <b>3</b> 8	29	267
Isabella	496	90	586	Tuscola	148	30	178
Jackson	467	113	580	Van Buren	174	24	198
Kalamazoo	1,589	347	1,936	Washtenaw	1,076	240	1,316
Kalkaska	281	71	352	Wayne	9,663	1,998	11,661
Kent	3,022	595	3,617	Wexford	461	45	506
Keweenaw	26	2	28				
				Total	53,847	9,993	6 <b>3,</b> 840

The residence of 1,982 males and 162 females was not recorded; therefore they are not included in Table 13 and 13a. In Tables 12 and 14 these anglers are included with resident anglers.

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Table 13a.--Residence of out-of-state fishermen

interviewed in the general creel census, 1956

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	Number	Number	نىيىلى <u>مەرىپى بىلەر ب</u>
	of	of	
Residence	males	females	Total
Alabama	5	•••	5
Arizona	4	5	9
Arkansas	6	2	8
California	34	6	40
Connecticut	7	• • •	7
Florida	52	10	62
Georgia	3	3	6
Idaho	1	• • •	1
Illinois	1,113	283	1,396
Indiana	2,643	803	3,446
Iowa	21	4	25
Kansas	4	4	8
Kentucky	62	26	88
Maine	1		1
Ma <b>r</b> yland	9	3	12
Massachusetts	5		5
Minnesota	12	1	13
M <b>iss</b> issippi	1	• • •	1
Missouri	41	12	53
Nebraska	1	• • •	1
New Jersey	8	2	10
New Mexico	3	• • •	3
New York	13	8	21
Ohio	3,870	1,180	5,050
Oklahoma	6	1	7
Pennsylvania	53	12	65
Rhode Island	1	• • •	1
South Carolina	2	•••	2
Tennessee	5	1	6
Texas	12	2	14
Virginia	4	• • •	4
Washington	3	2	5
West Virginia	15	2	17
Wisconsin	460	54	514
Washington, D. C.	1	• • •	1
Ontario	4	• • •	4
West Indies	2	1	3
Total	8,487	2,427	10,914

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		Residen	t anglers	6			Nonresid	ent angle	rs	
District or region	Number of anglers	Hours fished	Fish caught	Catch per hour	$\frac{\sum_{\mathbf{X}}}{\mathbf{N}}$	Number of anglers	Hou <b>r</b> s fished	Fish caught	Catch per hour	$\frac{\sum \mathbf{x}}{N}$
District 1	1,550	3,286.8	2,470	0.8	0.8	622	1,492.3	1,127	0.8	0.9
District 2	1,754	3,904.9	4,642	1.2	1.3	401	867.5	1,026	1.2	1.3
District 3	1,281	3,408.0	2,164	0.6	0.7	422	1,602.5	989	0.6	0.7
District 4	3,222	8,594.4	13,156	1.5	1.7	789	1,817.7	2,346	1.3	1.4
Region I	7,807	19,194.1	22,432	1.2	1.3	2,234	5,780.0	5,488	0.9	1.1
District 5	11,439	29,068.1	25,037	0.9	1.0	2,678	5,496.4	4,325	0.8	0.8
District 6	4,629	10,734.0	13,793	1.3	1.4	1,229	2,697.1	2,763	1.0	1.1
District 7	7,168	15,613.2	12,2 <b>3</b> 0	0.8	0.8	744	1,751.3	1,576	0.9	0.9
District 8	5,160	10,667.2	17,917	1.7	1.7	645	1,233.1	1,824	1.5	1.6
District 9	4,793	8,749.9	18,506	2.1	2.1	111	203.5	151	0.7	0.8
Region II	<b>33,</b> 189	74,832.4	87,483	1.2	1.3	5,407	11,381.4	10,639	0.9	1.0
District 10	7,890	16,250.1	25,258	1.6	1.6	1,641	3,197.9	4,497	1.4	1.5
District 11	4,979	10,635.7	14,092	1.3	1.4	1,370	2,124.5	3,612	1.7	1.6
District 12	12,119	31,395.7	48,537	1.5	1.4	262	527.0	575	1.1	0.9
Region III	24,988	58,281.5	87,887	1.5	1.4	3,273	5,849.4	8,684	1.5	1`.5
State total	65,984	152,308.0	197,802	1.3	1.3	10,914	23,010.8	24,811	1.1	1.1

Table 14.--Number of resident and nonresident anglers, number of hours fished, number of fish caught and the catch per hour for each group--all waters by conservation districts, 1956

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

# 1947**-**1956

	1947	1948	1949	1950	1951	1952	195 <b>3</b>	1954	1955	1956	Mean, 1947- 1956
CATCH PER HOUR:		- f. 1									
All waters	1.4	1.1	1.3	1.6	1.4	1.4	1.3	1.5	1.5	1.3	1.4
Resident	1.5	1.2	1.3	1.7	1.4	1.4	1.3	1.5	1.5	1.3	1.4
Nonresident	1.1	1.1	1.1	1.1	1.0	1.1	1.0	1.0	1.3	1.1	1.1
Trout waters	0.8	0.8	0.7	0.6	0.8	0.7	0.6	0.8	0.8	0.8	0.7
Resi <b>dent</b>	0.8	0.8	0.7	0.6	0.8	0.7	0.7	0.8	0.8	0.8	0.8
Nonresident	0.6	0.7	0.8	0.6	0.7	0.7	0.6	0.8	0.8	0.7	0.7
Nontrout waters	1.4	1.1	1.3	1.6	1.5	1.4	1.4	1.3	1.3	1.2	1.4
Resident	1.5	1.2	1.3	1.7	1.6	1.5	1.4	1.3	1.3	1.2	1.4
Nonresident	1.1	1.1	1.2	1.2	1.0	1.1	1.1	1.1	1.1	1.1	1.1
Great Lakes waters	2.7	2.9	3.1	4.8	3.2	2.6	3.0	3.3	2.8	1.9	3.0
Resident	2.7	3.1	3.2	4.9	3.4	2.6	3.1	3.3	2.8	2.0	3.1
Nonresident	1.9	1.6	1.2	2.7	1.3	2.8	1.3	2.3	2.1	0.8	1.8
PERCENTAGE OF ALL ANG REPRESENTED BY:	LERS										
Nonresidents	10	16	10	10	11	10	15	14	13	14	12
Females	14	19	17	16	17	16	16	16	16	16	16
PERCENTAGE OF TROUT A REPRESENTED BY:	NGLER	S									
Nonresidents	7	6	6	7	6	5	8	6	8	9	7
Females	9	10	12	10	10	10	9	8	10	10	10
PERCENTAGE OF NONTROU ANGLERS REPRESENTED B											
Nonresidents	11	19	11	12	13	12	17	16	16	17	14
Females	16	21	18	18	19	18	18	17	17	18	18
PERCENTAGE OF GREAT L ANGLERS REPRESENTED B											
Nonresidents	3	13	6	4	8	5	5	4	4	5	6
Females	10	17	16	13	18	14	16	15	17	15	15

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Table 16.--Catch per hour for all waters by conservation districts

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and regions, 1947-1956

	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	Mean, 1947-1956
District 1	0.6	0.8	0.8	0.9	0.8	0.8	0.8	1.0	0.8	0.8	0.8
District 2	0.5	0.9	0.7	1.1	0.7	0.9	1.0	0.9	1.4	1.2	0.9
District 3	0.9	1.1	0.9	0.7	0.9	0.9	0.8	0.5	0.6	0.6	0.8
District 4	1.0	1.3	1.5	1.6	1.4	1.4	1.1	1.3	1.6	1.5	1.4
Region I	0.8	1.0	0.9	1.1	1.0	1.1	1.0	1.0	1.2	1.1	1.0
District 5	1.1	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.8	0.8
District 6	1.5	1.1	1.2	1.9	1.3	1.2	1.5	1.4	1.2	1.2	1.4
District 7	0.7	0.8	0.8	0.9	0.9	0.9	0.8	0.8	0.9	0.8	0.8
District 8	1.6	1.3	1.4	1.9	1.8	2.1	1.8	1.5	1.8	1.7	1.7
District 9	3.0	1.2	1.9	2.6	3.3	2.8	2.8	2.9	2.7	2.1	2.5
Region II	1.5	1.0	1.1	1.5	1.4	1.3	1.3	1.3	1.4	1.1	1.3
District 10	1.6	1.6	1.8	2.0	1.8	2.0	1.4	1.3	1.7	1.5	1.7
District 11	1.0	1.1	1.4	1.7	1.8	1.3	1.4	1.6	1.2	1.4	1.4
District 12	2.5	2.2	1.9	2.4	1.4	1.7	1.9	2.8	1.8	1.5	2.0
Region III	1.7	1.6	1.7	2.1	1.6	1.7	1.4	1.9	1.6	1.5	1.7
Entire state	1.4	1.1	1.3	1.6	1.4	1.4	1.3	1.5	1.5	1.3	1.4

Table	17Catch	of	trout	per	hour	in	trout	waters,	by	conservation

districts and regions, 1947-1956

	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	Mean, 1947-1956
District 1	0.7	0.7	0.6	0.9	0.7	0.7	0.7	1.1	0.8	0.8	0.8
District 2	0.5	0.7	0.8	0.8	0.7	1.0	1.1	1.1	0.9	0.8	0.8
District 3	0.8	1.1	1.0	0.6	1.1	0.5	0.5	0.4	0,6	0.7	0.7
District 4	1.0	1.2	1.0	1.1	1.3	1.0	0.7	1.0	1.1	1.0	1.0
Region I	0.7	0.9	0.8	0.8	1.0	0.8	0.7	1.0	0.9	0.9	0.8
District 5	0.7	0.7	0.6	0.6	0.7	0.6	0.6	0.7	0.8	0.8	0.7
District 6	1.0	0.9	0.9	0.7	0.7	0.9	0.6	0.7	0.9	0.8	0.8
District 7	0.7	0.7	0.5	0.4	0.5	0.5	0.4	0.5	0.6	0.5	0,5
District 8	0.8	0.6	0.7	0.6	0.7	0.7	0.7	0.7	0.8	0.6	0.7
District 9	0.6	0.5	0.4	0.1	0.3	0.3	0.5	0.5	0.5	0.4	0.4
Region II	0.8	0.7	0.6	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.6
District 10	0.5	0.5	0.4	0.6	0.5	0.5	0.7	0.7	0.7	0.5	0.6
District 11	•••	0.5	0.4	0.6	0.4	0.5	0.5	0.8	0.6	0.4	0.5
District 12	0.6	•••	0.6	0.6	0.3	0.5	0.8	1.3	0.8	0.2	0.6
Region III	0.5	0.5	0.5	0.6	0.4	0.5	0.6	0.8	0.7	0.5	0.6
Entire state	0.7	0.8	0.7	0.6	0.7	0.7	0.6	0.8	0.8	0.7	0.7

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

districts and regions, 1947-1956

	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	Mean, 1947-1956
District 1	0.4	0.8	0.9	1.0	0.9	0.8	0.9	0.9	0.7	0.8	0.8
District 2	0.5	0.9	0.7	1.1	0.7	0.8	0.9	0.9	1.6	1.3	0.9
District 3	0.6	1.2	0.8	0.9	0.8	1.0	0.8	0.5	0.6	0.8	0.8
District 4	0.8	1.4	1.7	1.8	1.5	1.6	2.1	1.8	1.9	1.8	1.6
Region I	0.6	1.0	0.9	1.2	0.9	1.2	1.2	1.0	1.3	1.3	1.1
District 5	1.2	0.7	0.7	0.9	0.6	0.7	0.7	0.7	0.8	0.9	0.8
District 6	1.4	1.2	1.5	2.4	1.5	1.3	1.7	1.4	1.4	1.2	1.5
District 7	0.6	0.8	0.9	1.2	1.1	1.1	1.0	0.9	1.0	0.9	1.0
District 8	1.8	1.5	1.5	2.1	2.0	2.3	1.9	1.6	1.9	1.7	1.8
District 9	3.5	1.0	1.8	2.3	3.3	2.4	2.4	2.1	1.7	1.7	2.2
Region II	1.7	1.0	1.1	1.7	1.5	1.4	1.4	1.2	1.3	1.1	.1.3
District 10	1.6	1.7	1.8	2.1	1.9	2.0	1.4	1.3	1.7	1.6	1.7
District 11	1.0	1.1	1.4	1.7	1.8	1.3	1.4	1.6	1.2	1.4	1.4
District 12	1.3	1.4	1.2	1.1	1.3	1.3	1.2	1.6	0.8	0.9	1.2
Region III	1.4	1.4	1.5	1.7	1.7	1.5	1.4	1.5	1.2	1.4	1.5
Entire state	1.4	1.1	1.3	1.6	1.5	1.4	1.4	1.3	1.3	1.2	1.4

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

districts and regions, 1947-1956

	1947	1948	1949	1950	1951	1952	195 <b>3</b>	1954	1955	1956	Mean, 1947-1956
District 1	0.5	0.9	0.3	• • •	•••	0.9	•••	•••	•••	0.1	0.3
District 2	1.8	2.9	4.8	•••	•••	•••	•••	•••	•••	2.3	1.2
District 3	1.0	1.0	0.9	2.5	0.4	2.0	1.6	2.3	0.6	0.4	1.3
District 4	1.1	1.1	2.9	4.9	1.6	2.8	1.2	0.6	1.1	1.8	1.9
Region I	1.0	1.1	1,1	4.2	0.9	2.3	1.3	0.7	0.9	1.0	1.4
District 5	4.2	1.7	0.4	0.5	0.7	0,5	2.1	0.5	1.8	0.9	1.3
District 6	8.2	12.2	3.6	2.9	5.0	4.3	7.0	11.1	2.4	9.8	6.6
District 7	0.9	0.3	5.9	•••	5.0	•••	0.5	• • •	4.3	7.6	2.4
District 8	•••	•••	• • •	2.8	•••	•••	•••	•••	•••	•••	0.3
District 9	5.7	5.8	5.4	5.7	4.9	4.4	5.4	6.8	5.0	5.2	5.4
Region II	7.1	5.5	4.9	5.1	4.7	3.7	4.9	6.9	4.7	4.6	5.2
District 10	•••	•••	6.4	6.6	•••	10.2	4.0	•••	•••	•••	2.7
District 12	4.0	3.9	3.3	4.7	2.3	2.2	2.9	3.2	2.5	1.8	3.1
Region III	4.0	3.9	3.4	4.8	2.3	2.4	2.9	3.2	2.5	1.8	3.1
Entire state	2.7	2.9	3.1	4.8	3.2	2.6	3.0	3.3	2.8	1.9	3.0

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Year	Thousands	Catch per hour							
	of hours reported	A11 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	• • •				
19 <b>3</b> 8	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				
1 <b>9</b> 50	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				
			• •	1 0	0.0				

Table 20.--Total fishing time reported (thousands of hours)

and catch per hour for various waters, 1928-1956

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

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1.3

1.3

0.8

0.8

0.8

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1.3

1.2

1.3

2.8

1.9

2.6

1955

1956

mean

Unweighted

147

175

107