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THE PROPORTION OF LICENSED AND UNLICENSED TROUT FISHERMEN USING  
HUNT CREEK AND PIGEON RIVER TROUT RESEARCH AREAS, 1949-1953

By

David S. Shetter and Edward H. Bacon

The question is often asked "How many of our trout fishermen are fishing 'for free' under present Michigan angling regulations?"

Under the present law, males and females over 17 years old must buy a fishing license and a trout stamp to fish trout legally. The law provides, however, that the wife of a resident license-holder may fish on the husband's license and trout stamp. Minors under age 17 can fish trout free of charge also.

Since 1949 at the Hunt Creek Fisheries Experiment Station, and since 1950 at the Pigeon River Trout Research Station, it has been possible to determine the proportion of licensed and unlicensed individuals using these trout waters. These proportions were determined by sorting the angling permits required at both areas, on which was recorded information as to whether the applicant was a licensed male, wife, or minor under 17 years. At Pigeon River, only permits for trout stream anglers were available in usable numbers, while at Hunt Creek permits for both trout lake and trout stream fishing were utilized.

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The results of the sorting and tabulations are shown in the accompanying table. At Hunt Creek the numbers of individuals applying for permits has varied from 467 to 563 during the five seasons. The percentage of licensed anglers has ranged from a low of 73.2 (1951) to a high of 77.1 (1952). The average for the five-year period was 75.0 percent licensed fishermen.

Over the entire period 11.7 percent of the unlicensed individuals were wives fishing on their husband's licenses, and 13.3 percent were minors less than 17 years old.

At Pigeon River individual trout stream anglers varied in numbers from 1,091 to 1,388 in the four years studied. The percentage of licensed individuals ran from a low of 75.9 percent (1951) to a high of 84.1 (1952). For the four years combined, 79.9 percent of the total individuals using the experimental sections of the Pigeon River were license-holders. About equal numbers of wives (10.1 percent) and minors (10.0 percent) were fishing free.

The proportion of licensed individuals recorded at Hunt Creek (1,937 of 2,585) was compared with the proportion of licensed individuals noted at Pigeon River (4,004 of 5,009), by means of the adjusted chi-square test. The difference between the two ratios is significant (chi-square = 24.78, P = 99.9 percent).

Were data on the anglers using the Pigeon River lakes available, it seems likely, in view of the percentages noted at Hunt Creek, that more individuals would have been found in the "wife" and "minor" classes. It appears logical that women and children would fish those waters exacting less physical demands, such as the lakes and smaller streams.

Table 1.--Numbers of licensed and unlicensed trout fishermen, Hunt Creek experimental area (1949-1953) and Pigeon River Trout Research Area (1950-1953)<sup>1/2</sup>, with corresponding percentages (in parentheses)

Year	Hunt Creek				Pigeon River <sup>1/2</sup>			
	Indiv- uals	Licensees	Wives	Minors	Indiv- uals	Licensees	Wives	Minors
1949	533	391 (73.4)	69 (12.9)	73 (13.7)	...	...	...	...
1950	522	399 (76.4)	60 (11.5)	63 (12.1)	1,196	967 (80.9)	136 (11.3)	93 (7.8)
1951	514	376 (73.2)	58 (11.2)	80 (15.6)	1,334	1,013 (75.9)	155 (11.7)	166 (12.4)
1952	467	360 (77.1)	50 (10.7)	57 (12.2)	1,091	917 (84.1)	95 (8.7)	79 (7.2)
1953	549	411 (74.9)	66 (12.0)	72 (13.1)	1,388	1,107 (79.8)	120 (8.6)	161 (11.6)
Totals	2,585	1,937 (75.0)	303 (11.7)	345 (13.3)	5,009	4,004 (79.9)	506 (10.1)	499 (10.0)

<sup>1/2</sup>Trout stream anglers only.

When the data from the two stations are combined, of 7,594 individuals on which complete information is available, it was found that 5,491, or 78.2 percent were license-holders; 809, or 10.7 percent were wives; 11.1 percent (844) were anglers under the age of 17 years.

In view of the small but significant differences noted in the percentages of licensed and unlicensed fishermen using the areas in question, it is concluded that a minimum average of 22 percent of the trout fishermen in the past five years were fishing free of license charges.

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