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MICHIGAN DEPARTMENT OF CONSERVATION

COOPERATING WITH THE

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CREEL CENSUS FOR THREE SEASONS ON THE BEAVER

DAMS AND LAKES IN THE GLADWIN GAME REFUGE

This report is a compilation of the data for fishing in certain waters of the Gladwin Game Refuge which have been of especial interest in the beaver-trout problem. The reports, prepared on special blanks, cover fishing for 1934, '35 and '36.

Whether these reports cover all fishing for the areas under consideration, or only a part of the fishing, is not known. The data were not as complete as might be desired because of frequent omission of items such as "number of hours fished." The catch per hour for each station could not be given because it was generally not recorded for individual pools; number and size of fish from each station are recorded, however, for those records carrying this information.

An examination of the blanks suggests once more that the recording of the information by the angler or by someone not familiar with this type of work is unsatisfactory. The data presented below should be regarded only as an approximation.

The interpretations of the data in connection with the beaver-trout problem will need to be made by someone familiar with that problem. Since Messrs. Salyer and Bradt have presumably both examined the records, such

interpretations may already have been made.

The following notes by J. W. Leonard covering his observations in the Gladwin area may help in understanding the results of this census:

Owing to long beaver history, the series of dams from H to Q, including Little Trout Lake, would not be expected to produce trout fishing. Since November 27, 1934, when I first saw the area, most of the dams have been removed and rebuilt at least once. Cutting off of killed timber by Refuge caretaker removed all shade, leaving stream exposed to sun. Alternation of pond and stream conditions widened channel and increased amount of sand. Few if any shelters. Below Pond H in Section No. 4 there is some good water; but there were, in April of 1935 and after, at least 2 large dams in Section 4 just below Refuge line, not shown on map. C and D have been in more or less continuously since before April, 1935, for at that time the popple was gone and beaver gnawing on oak and cedar. At least 2 dams have since been built above Station "C", in stream section 2.

Stations U, V and W--these dams were never large--are frequently torn out by caretaker and haven't altered character of stream greatly. Beginning in late summer of 1935, 2 dams were thrown across stream section 5 north of road, and another just above road in section 1, this resulting in flooding of large area of section 1 to a point above entrance of small spring tributary, and all of section 5.

General information regarding the trout fishing is recorded in Table 1. Both the number of fishermen and the number of trout removed from the area apparently declined each year. The average size of the legal-sized fish remained constant. Under-sized trout became decidedly fewer each year. Only 13 tagged trout are recorded--12 taken in 1934 and one in 1935.

The catch per hour was determined by using the average number of hours fished (for records carrying this information) and the average number of trout per angler. Since many of the records indicated the number of fish caught but not the number of hours fished, it was necessary to use this method of determining the average catch per hour.

The fish other than brook trout are included in Table 2. Except for perch these were negligible. The perch included 253 from Hoister Lake, 217 from Trout Lake and 90 without locality given. The latter may have

all been taken in the two lakes. Almost all perch were taken in 1934.

The one brown trout recorded was taken by Mr. Westerman in 1934.

Data by stations (for brook trout only) are given in Table 3. Whether or not "Section" includes the beaver dams in that section is not known. Those records indicating "section" but not station letter are given near the bottom of the table. Stations A, C and D were outstanding in the number of trout removed by the anglers.

Trout Lake produced (to the fisherman) only one trout--and several hundred perch. In Hoister Lake, perch predominated in the catch, but a considerable number of trout (109) were also taken.

The catch per hour from trout waters for the state as a whole for the period 1934 to 1936 was 0.8 each year, for Gladwin County it was 0.7, 0.5, and 0.6 respectively for the three years (based on a limited number of records). Fishing on the refuge therefore compared very favorably with trout fishing in the state as a whole, and probably also with trout fishing in the rest of the county.

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Table 1

General Data on the Catch of Brook Trout  
In Waters of the Gladwin Game Refuge (1934-'36)

	No. of Fishermen	No. Taking No Fish		No. of Legal Fish	Ave. of Hours Fished	Average No. of Fish Per Angler	Ave. Size Fish Caught	No. & Ave. Size Under-sized		No. of Tagged Fish Caught	Catch Per Hour <sup>2</sup>
		No.	%					No.	%		
1934	160	39	24	669	3.9	4.2	8.1	273	5.8	12	1.1
1935	137	45	33	390	3.7	2.8	8.2	78	5.8	1	0.8
1936	49	6	12	212	4.5	4.3	8.2	14	6.1	0	1.0
Total or Average	346	90	26	1271 <sup>1</sup>	3.9	3.7	8.1	365	5.8	13	0.9

<sup>1</sup> All brook trout.

<sup>2</sup> Obtained by dividing average number of hours fished into number of fish per angler.

Table 2

Number and Size of Fish Other Than Brook Trout Taken From the Waters  
Of the Gladwin Game Refuge and Not Included in the General Information (1934-'36)

	Brown Trout		Perch*		Sunfish		Horned Dace		Shiners	
	No.	Ave. Size	No.	Ave. Size	No.	Ave. Size	No.	Ave. Size	No.	Ave. Size
1934	1	5.5	504	8.4	1	6.0	...	...	...	...
1935	...	...	43	...	...	...	3	...	2	...
1936	...	...	13	6.5	...	...	3	...	...	...
Total	1	5.5	560	...	1	6.0	6	...	2	...

\* Also 20 undersized perch.

Table 3

Brook Trout Catch by Stations,  
Gladwin Game Refuge, 1934-'36\*

Station	1934		1935		1936		Total	
	No.	Ave. Size	No.	Ave. Size	No.	Ave. Size	No.	Ave. Size
A	118	7.8	94	7.8	69	8.2	281	7.9
B	21	7.5	...	...	27	7.8	48	7.7
C	164	7.8	62	8.0	6	7.8	232	7.9
D	119	8.0	71	8.3	10	8.4	200	8.1
E	60	7.9	7	7.5	5	8.3	72	7.9
F	19	7.7	...	...	14	8.3	33	7.9
G	15	8.1	1	7.0	46	8.2	62	8.1
H	...	...	...	...	16	8.0	16	8.0
I	...	...	3	8.0	...	...	3	8.0
J	...	...	...	...	...	...	...	...
K	...	...	...	...	2	9.0	2	9.0
L	...	...	...	...	...	...	...	...
M	...	...	...	...	...	...	...	...
N (Trout Lake)	...	...	...	...	1	12.0	1	12.0
O	...	...	...	...	...	...	...	...
P	...	...	...	...	...	...	...	...
Q	...	...	...	...	...	...	...	...
R (Hoister Lake)	78	10.1	31	9.2	...	...	109	9.8
S	39	7.6	4	7.8	...	...	43	7.7
T	13	7.5	...	...	...	...	13	7.5
U	...	...	...	...	...	...	...	...
V	...	...	...	...	...	...	...	...
W	...	...	...	...	...	...	...	...
X	...	...	...	...	...	...	...	...
Section 1	5	7.5	8	8.5	5	7.9	18	8.0
Section 2	1	8.8	25	8.0	1	8.0	27	8.0
Section 3	1	8.8	19	8.0	...	...	20	8.0
Section 4	...	...	...	...	...	...	...	...
Section 5	8	7.0	2	7.1	...	...	10	7.0
Station Unknown	8	9.0	63	8.4	10	8.2	81	8.5
Total	669	8.1	390	8.2	212	8.2	1271*	8.1

\* Catch per hour for each station could not be obtained.

Figure 2

DEPARTMENT OF CONSERVATION  
**GLADWIN GAME REFUGE**  
 GLADWIN COUNTY

SCALE  
 ONE MILE



EXPLANATION

- SCHOOL HOUSE OCCUPIED
- SCHOOL HOUSE UNOCCUPIED
- DWELLING OCCUPIED
- DWELLING UNOCCUPIED
- HEADQUARTERS
- WELLS
- WATERHOLES
- BEAVER POND
- SPRING
- SQUARED POST
- GRAVEL ROAD
- FIRST CLASS DIRT ROAD
- SECOND CLASS DIRT ROAD
- TELEPHONE LINE
- POWER LINE
- FIRE LINE NOT DRIVABLE
- RAILROAD GRADE
- TRAIL

COPYED BY  
 FIELD ADM. DIVISION  
 Map No. 2000, 1917  
 Drawn by 247 3-6-1