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Fish Division

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INSTITUTE FOR FISHERIES RESEARCH

DIVISION OF FISHERIES

MICHIGAN DEPARTMENT OF CONSERVATION B. V. Hughes

COOPERATING WITH THE UNIVERSITY OF MICHIGAN

D. S. Shetter

H. L. Peterson

ALBERT S. HAZZARD, PH.D. DIRECTOR

October 8, 1951

Report No. 1301

ADDRESS UNIVERSITY MUSEUMS ANNEX ANN ARBOR, MICHIGAN

THE RECREATIONAL USE OF THE RIFLE RIVER AREA, OGEMAN COUNTY, IN 1949

FISH DIVISION

David S. Shetter

Bу

Abstract

More entrants were registered at the Rifle River Area in 1949 then in any previous year. The 19,443 entrants were composed of 12,986 sightseers, 4,335 fishermen, 2,004 hunters and 118 trappers.

The five trout streams were subjected to 1,778 angling trips involving 4,194.5 hours of fishing. The trout catch by angling amounted to 874 fish (27 brook trout, 762 brown trout, 85 rainbow trout) whose total weight was 365.73 pounds, or 0.21 fish per hour. The streams also yielded Uli rough fish and warm-water fish and 2 snapping turtles whose combined weight was 147.97 pounds. Of the trout catch, 106 or 12.1 percent were of hatchery origin.

On eight lakes of the area, 2,557 angling days during which 7,850 hours were spent, yielded a combined catch of 4,563 fish, frogs, and snapping turtles whose total weight was 1,750.07 pounds. The catch per hour was 0.57 fish, and the pounds per hour index was 0.215.

Species captured by angling were brown and rainbow trout, largemouth and smallmouth black bass, northern pike, yellow perch, bluegills, cormon sunfish, black crappie, rock bass, bullheads, hybrid bluegills, common sunfish, common suckers, snapping turtles and bullfrogs.

The 1949 small-game hunters using the Rifle River Area killed 217 pieces of game weighing 349.24 pounds in 1,112.50 hours of hunting on 435 hunter-days. The kill was composed of 116 ruffed grouse, 18 wood-cock, 72 ducks, 10 snowshoe hares, and 1 gray squirrel.

During the 1949 rifle deer season 6,985 hours of hunting were prosecuted on 1,535 hunter-days. The kill was 36 bucks which dressed out for a total of 3,844 pounds of venison. During archery season one successful bow hunter killed a spike-horn buck that dressed out at 104 pounds. There were 54.5 hours of bow hunting expended in the archery season on 34 hunter-days.

The trappers had a fair season during 1949. Some 79 fur bearers were taken, consisting of 33 muskrats, 7 mink, 1 raccoon and 38 beaver.

The total weight of fur bearers removed was 1,269.38 pounds.

Numerous width measurements were taken on all of the trout streams of the Area and applied to length measurements made on large-scale aerial photographs of the drainage. It was found that there are 9.174 miles of trout streams within the Area boundaries with a total stream area of 33.18 acres.

A general summary of pertinent statistics concerning the years of operation of the Rifle River Area is given.

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THE RECREATIONAL USE OF THE RIFLE RIVER AREA, OGEMAN COUNTY, IN 1949

By

David S. Shetter

The Rifle River Area, lying 4 miles east of Rose City and 1/2 mile south of Lupton in Ogemaw County, saw continued heavy use by sportsmen and vacationers during 1949. The records of earlier observations on the use of this publicly-owned tract of wild land are given in other Institute reports (Numbers 1032, 1108, 1150, and 1235). This report will summarize the use of the Area and the fish, game and fur take for the calendar year 1949.

Method of collecting information

All cars using the Area must register at the entrance, the driver receives a written permit which indicates for what purpose the occupants wish to enter (fishing, hunting, trapping, sight seeing, picnicking). The permit is returned before the car leaves the Area. At this time the results of any fishing, hunting, etc., are recorded by the attendant on duty.

The Area is kept open for public use generally from 6 a.m. to 10 p.m., depending on the season of the year and the number of potential users in the vicinity. There has been very little complaint from the public concerning the hours of operation.

The staff at the Area during 1949 consisted of Arthur DeClaire, Charles Kohn, and Howard Van Oosten. They operated under the supervision of Basil V. Hughes. During the deer hunting seasons, additional assistance was given by Ben C. Jenkins of the Game Division.

General use of the Area

A total of 19,443 entrants used the Area in 1949, the largest number of any of the five years of operation. Of this number, 12,986 (66.8 percent) were registered for sightseeing and/or picnicking, 4,335 were anglers (22.3 percent), 2,004 hunted (10.3 percent), and 118 set traps for fur bearers (0.6 percent). As in earlier years, the great bulk of the Area's use occurred between the last Saturday in April and November 30.

The most people passed through the Rifle River Area between June 25 and July 8 (2,384). Approximately 3/4 of these were sightseers. The largest number of anglers were registered during the opening two weeks of the trout season (714). The most hunters were noted in the period November 12 to 25 (1,655), and the greatest number of trappers came during March 19 to April 1 (102) which included the beaver season.

Angling results - streams (Table 1)

A total of 1,778 angling days were expended on the streams of the Rifle River Area in 1949; 1,749 during the trout season, 29 during the period January 1 to March 4, during which time it is legal to spear on the "Whirlpool" of the Rifle River below the Devoe Lake Outlet Dam.

The winter spearing on the "Whirlpool" yielded 6 northern pike (18.25 pounds), 26 common suckers (17.25 pounds), and 2 carp (13.25 pounds) in 59.0 hours of fishing on 29 angling days. Seventeen of the angling days or 58+ percent were successful. The winter catch per hour was 0.58 fish, the pounds per hour index was 0.826.

Table 1.--Summary of yield to anglers from Rifle River Area streams and total yield by all methods from streams, 1949. (Pounds of fish are given in parentheses under "Species taken.")

Stream	Number of angling days	Number of unsuccessful days (percent)	Total angling hours	Brook trout	Brown trout	Rainbow trout	Total trout (and total pounds)	Catch per hour	Pounds per hour	Other fish (pounds)	Snapping turtles (pounds)
Rifle River	1,546	1 , 263 (82)	3 ,7 82 . 0	2 (0.80)	√ 660 (275•49)	66 (31•78)	728 (308.07)	0.19	0.081	101 (56•41)	1 (25•00)
Gamble Creek	137	99 (72)	214.5	5 (1.33)	57 (23•74)	16 (13•02)	78 (38•09)	0.36	0.178	2 (0•75)	• * *
Fontinalis Creek	$\dot{\mathcal{U}}_1$	8 (57)	31.0	15 (3。山)	7 (2.31)	• • •	22 (5•45)	0.71	0.176	•••	• • •
Brown Trout Creek	: 17	13 (76)	27.5	4 (1,22)	1 (0.61)	● • •	5 (1.83)	0.18	0.067	• • •	* * *
Houghton Creek	35	1 7 (Ц9)	80.5	(0.16)	37 (10•64)	3 (1.49)	1 ₁ 1 (12•29)	0.51	0.153	7 (8.06)	(9.00)
Totals, 1949 trout season	1,749	1,400 (80)	4,135.5	27 (6.65)	¥762 (312•79)	85 (46•29)	874 (365•73)	0.21	0.088	110 (65 . 22)	2 (34.00)
Whirlpool winter fishing	29	1 2 (58)	59.00	• • •	• • •	• • •	• • •	0.58	0.826	34 (48•75)	• •
Removed by shocker	• • •	• • •	• • •	• • •	11 (6.47)	• • •	• • •	• 6 6	• • •	• • •	• • •

f V Eight legal brown trout were returned to the water; not included in pounds per hour index.

[&]quot;Other fish" removed from Rifle River were: 42 common suckers (50.94 pounds); 3 yellow perch (0.51 pounds); 7 rock bass (1.90 pounds); 24 common shiners (1.50 pounds); 25 creek chubs (1.56 pounds). From Gemble Creek: 2 yellow perch (0.75 pounds). From Houghton Creek: 7 common suckers (8.06 pounds).

The angling during the trout season was done mainly on the Rifle River, where over 88 percent of the angling trips were recorded. The remaining 12 percent of the angling pressure was spent on Gamble, Houghton, Brown Trout and Fontinalis creeks, in that order.

From the trout streams of the Area, the 1949 anglers removed 27 brook trout (6.65 pounds), 762 brown trout (312.79 pounds, weight of 754 creeled), and 85 rainbow trout (46.29 pounds). These fish were captured in 4,135.5 hours of fishing during 1,749 angling trips. Of the total angling trips only 20 percent were successful. The 1949 catch per hour for the trout fishing as a whole was 0.21 fish, and the pounds per hour index was 0.088 pounds. In addition, 110 "rough" fish weighing 65,22 pounds and two snapping turtles weighing 34 pounds were removed by the anglers. Following the close of the season, 11 brown trout weighing 6.47 pounds were removed from the Rifle River for egg counts. The 1949 total yield of the trout streams may be set as follows: brook trout, 27 (6.65 pounds); brown trout, 765 (319.26 pounds); rainbow trout, 85 (46.29 pounds); other fish, 144 (113.97 pounds); snapping turtles, 2 (34 pounds). The total round weight of flesh removed amounts to 520.17 pounds, of which 372.20 pounds consisted of trout, 113.97 pounds were made up of warm-water fish and rough fish, plus 34 pounds of snapping turtles.

The source of the trout in the anglers' catch was as follows: all 27 brook trout were native fish. Except for two individuals from the Rifle River, the catch came from the smaller, cooler tributaries.

origin. One dorsal-clipped survivor of the 1947 state-wide marking was among the catch from the Rifle River. The remaining 58 originated from the 1948 releases of 1,200 tagged fish in the Rifle River (55) and from the 1948 release of 1,000 tagged fish in North Lake (3).

Among the rainbow trout, 47 of the 85 fish taken were of hatchery origin. Two dorsal-clipped specimens from the previously referred to 1947 state-wide marking were in the catch. Most hatchery rainbows in anglers' creeks came from the April, 1948, release of 2,000 tagged fish in Devoe Lake; 44 of these fish had migrated from the lake into Gamble Creek or the Rifle River where they were captured. A lone-tagged specimen, caught in the Rifle River, originated from the release of 1,000 tagged fish in North Lake in April, 1948.

Of the 874 stream-caught trout taken in 1949, a total of 106 or 12.1 percent were of hatchery origin, and 87.9 percent were of natural origin.

The reduction in the 1949 catch (874 trout from 1,084 trout) when compared with 1948 data appears to be directly related to the decrease in angling pressure (5,081 hours to 4,135.5 hours). Angling quality for trout was the same in both years (0.21 fish per hour).

Lake fishing (Table 2)

A total of 2,557 angling days involving 7,850 hours of effort was expended on eight different lakes of the Rifle River Area in 1949. Of the total angling days 39.7 percent were successful. The total catch removed by angling consisted of 83 brown trout, 330 rainbow trout, 147 largemouth black bass, 104 smallmouth black bass, 6 northern pike, 1,512 yellow perch, 1,135 bluegills, 255 common sunfish, 128 black crappies, 109 rock bass, 561 bullheads, 10 hybrid bluegill x common sunfish, 62 common suckers, 2 snapping turtles, and 109 frogs. In addition, 2 yellow perch, 5 northern pike and 3 brown trout were removed in test netting from North Lake in September and October, 1949. Based on 7,790.5 hours of fishing and excluding frogs and gill-netted fish, the catch per hour for all lakes in 1949 was 0.57 fish; the pounds per hour index was 0.215. Angling quality was at the same approximate level in 1948.

Includes 21 permits for frog hunting, involving 59.50 hours.

Table 2 .- Summary of lake fishing results, 1949, Rifle River Area (Total pounds of each species caught are given in parentheses)

Iake Total anglin		Total								Specie	s of fish	caught			Total	Catch
	days (number taking 0 fish)	hours of angling	Brown	Trout Rainbow	Ba LM	SM	Northern pike	Yellow perch	Bluegill	Common	Black crappie	Rock bass	Bullhead	Hybrid, common sunfish x bluegi	fish	per hour (lbs./hour)
Devoe	1,439 (1,040)	4,732.0	82 (159.83)	330 (278•26)	8 (18.09)	74 (74•02)	4 (18•38)	16 5 (21.75)	13 (2•53)	1 (0,25)	2 (2.91)	54 (15•26)	1 (1•]44)	. •••	¥ ₇₉₈ (728•03)	0.17 (0.154)
Spring	257 (100)	742.0	•••		•••	•••	• • •	866 (191 . 63)	• • •	• • •	•••	•••	45 (3.69)	•••	911 (195•32)	1 .23 (0.263)
North 3/	280 (221)	786.5	1 (0.42)		7 (21.91)	(元十, 98) (元十, 98)	1 (5•50)	109 (22•48)	راباب) (۱۰)	• • •	•••	•••	1 (1,25)	•••	150 (96•98)	0.19 (0.123)
Devil's, W.B.	11 (11)	17.5	8* >	••• •••	•••	• • •	•••	• • •		♥ № 5	•••	•••	•••	•••	3 3 9	0.00
Tea l	63 (27)	191.5	•••	· •••	30 (29.81)		1 (1.44)	136 (29•75)	(0.37)	•••	• • •	•	* * *	•••	168 (61•37)	0.88 0
Loon	200 (70)	520.0	• * *	0 9 B	72 (127.48)	• • •	•••	12년 (16년년)	99 (26•93)	34 (5•12)	85 (38•16)	•••	423 (49 .5 8)	•••	837 (263•71)	1.61
Dollar	237 (46)	690.5	***	• • •	22 (20.39)	4 9 ♦	•••	94 (16.86)	960 (162.00)	220 (45•53)	41 (10.67)	148 (15•59)	91 (35•08)	10 (2.62)	1,486 (308,74)	2 .1 5 (0.山7)
South Pond	149 (28)	110.5	• • •	•••	8 (7•23)	•••	• • •	18 (2.19)	61 (9•31)	•••	• * •	7 (2•12)	* • • •	•••	94 (20•85)	0.85 (0.189)
Totals, 1949	2,536 (1,543)	7,790.5	83 (160 . 25)	330 (278 . 26)	147 (225.91)	104 (119.00)	6) (25•32)	1,512 (301.10)	1,135 (201,58)	255 (50•90)	128 (51•74)	109 (32•97)	561 (91.04)	10 (2,62)	У ц.ии.* (1,675.0	0.57 0)(0.215)

^{1/}Includes 62 common suckers (88.81 pounds) and 2 snapping turtles (46.50 pounds).

In addition to the indicated totals, 21 permits to hunt frogs, all successful, were issued. A total bag of 109 frogs weighing 43.91 pounds was taken in 59.50 hours.

In addition to the anglers' catch in North Lake, the following fish were removed by experimental gill nets in 1949: 2 yellow perch, 1.04 pounds; 5 northern pike, 15.31 pounds; 3 brown trout, 14.81 pounds, or a total of 10 fish and 31.16 pounds.

The total weight of fish, frogs and turtles taken in 1949 was 1,750.07 pounds, divided as follows: fish by angling, 1,628.50 pounds; snapping turtles, 46.50 pounds; frogs, 43.91 pounds; and fish from gill netting operations, 31.16 pounds.

Devoe and North lakes, which attracted anglers for the greatest number of hours, possibly because they are the most scenic lakes en the Area, continued to be poor in angling quality. The catch per hour on both was less than 0.2 fish. Judged from the standpoint of catch per hour, the best fishing was found on Dollar Lake (2.15), followed by Loon Lake (1.61) and Spring Lake (1.23). However, if angling quality was judged on a pounds per hour basis, Loon Lake (0.507) was best, followed by Dollar Lake (0.447) and Teal Lake (0.320).

Anglers caught 12 different species of fish from Devoe Lake, 8 species from Dellar Lake, and only two species from Spring Lake.

The rainbow trout in the catch from Devoe Lake all were survivors from the 1948 spring planting of 2,000 tagged hatchery-reared fish. The single brown trout from North Lake was a survivor of a planting of 1,000 tagged brown trout also made in the spring of 1948. All other fish were of natural origin.

Small game hunting (Table 3)

No hunting was done in that portion of the 1948-1949 small game season falling between January 1 and February 28. From October 15 to December 23, a total of 435 hunter-days were registered. On these days, 1,112.50 hours of hunting yielded a combined game kill of 116 ruffed grouse (146.66 pounds), 18 woodcock (7.82 pounds), 72 ducks (164.63 pounds), 10 snowshoe hares (29.13 pounds), and 1 gray squirrel (1.0 pound). The total poundage of game brought to bag by the scatter-gumners was 349.24 pounds (217 pieces).

Table 3.--Small game hunting statistics, Rifle River Area, 1949.

(Total weights in pounds are given under each species in parentheses.)

Period	Total	Total		Game killed						
	hunter days	hours of hunting		Woodcock	Du cks	Snowshee Gray hare squirre		in numbers (and pounds)		
October 1 - 1/4	61	158.0	•••	•••	26 (51•31)	•4.5	•••	26 (51•31)		
October 15 = 28	254	670•5	86 (105•10)	16 (6•94)	29 (70•19)	9 (25•63)	1 (1.0)	1/1 (208.86)		
October 29 - November 11	101	228.0	30 (41•56)	2 (0 _• 88)	(50°/1/1') 8	1 (3•50)	• • •	4 1 (66.38)		
November 12 - 25	13	141.5	•••	•••	(22 . 69)	•••	• * •	(22.69)!		
November 26 - December 9	3	5•5	. •••		• • •	* * *	• • •	•••		
December 10 - 23	3	6.0	• • •	•••	•••	•••	` ⊕ ÷ •	•••		
Totals, 1949	435	1,112.50	116 (146,66)	18 (7.82)	72 (164.63)	10 (29•13)	1 (1.0)	217 (349•24)		

In comparison with previous years, grouse hunting and duck hunting were considerably above average.

Bow and arrow deer hunting

In 1919, the season on deer with bow and arrow was open on antiered deer from October 1 to November 5. One spike horn buck was killed by Arthur DeClaire on October 1. This buck weighed 104 pounds. Thirty-four hunter-days were spent on the Area by archers, but DeClaire's kill was the only one registered in 54.5 hours of hunting.

Rifle deer hunting (Table 4)

Hunting pressure dropped off slightly in 1949, possibly as a result of the relatively low buck kill (32) in 1948. Only 1,535 hunter-days involving 6,985 hours were listed. The total kill by rifle hunters was 36 bucks, whose total weight (hog-dressed) was 3,844 pounds. One 9-pound red fox was also killed by deer hunters. Hunting pressure over the Area may be set at 1.78 hours per acre for the season. The greatest concentration of hunters occurred on the opening day, when 224 riflemen were registered, or 1 hunter for each 17.5 acres. The average weight of bucks killed was 107 pounds.

Trapping results (Table 5)

Trappers were able to set for beaver in 1949 from March 20 to March 31. During the beaver season 102 permits were issued to 13 different trappers. In 1,298 trap-nights they captured 38 beaver whose total weight was 1,174 pounds. Spring Lake and Teal Lake and Skunk Creek were closed to beaver trapping. The 1949 catch was made on Rifle River, Gamble Creek and Brown Trout Creek.

Wased on 3,918 acres of land within the Area's boundaries, i.e., total area minus water area.

Table 4.--Deer hunting statistics, Rifle River Area, 1949.

Date	Total hunter-days	Total hours of hunting	Bucks killed	Total pounds of venison taken
November 15	221:	1,376.0	17	¥1,871
16	2໗₊	1,042.0	14	439
17	157	746.0	3	292
18	137	629.0	3	268
19	1 90	793.0	1	77
20	153	548.5	3	304
21	37	120.5	1	135
2 2	21.	61.0	•••	4 9
23	21	79•5	***	•••
5/1	72	323.0	1	1 21
25	89	403.0	1	111
26	85	355•0	1	110
27	70	26 6.5	• •	•••
28	19	714.0	8.0	***
29	2 2	108.0	1	116
30	21	60.0	0	9 4 5
Totals, rifle deer season	1,535	6,985.0	36	3,844
Totals, archery deer season	34	54•5	1	104
Grand totals, 1949	1,569	7,039.5	37	3 , 9Li8

 $[\]Psi$ In addition on this date one red fox (9 pounds) was killed.

Table 5.--Trapping statistics, Rifle River Area, 1949

(The total weight in pounds of each species taken is given in parentheses.)

Period	Number of	Tote.1		Fur	bearers taken		Total fur
1949	permits issued	trap- nights	Muskrat	Mink	Raccoon	Beaver	bearers (and total pounds)
March 20 - 31	102	1,298	• •	• • •	● 6 6	38 (1 , 174)	38 (1,174.00)
November 15 - 25	1,	97	11: (31:00)	***	• • •		1/ ₄ (31.00)
November 26 - December 9	9	815	16 (36.00)	6 (10.88)	1 (9•50)	. ● \$ \$	23 (56•38)
December 10 - 23	3	160	(6 _• 50)	(1.50)	• • •	•••	(8.00)
Totals, 1949	118	2,630	33 (73•50)	7 (12.38)	1 (9•50)	38 (1,174,00)	79 (1,269,38)

During the fall trapping season, between November 15 and December 23, 16 permits to trap were issued. In 1,332 trap-nights a take of 33 muskrats (73.50 pounds), 7 mink (12.38 pounds), and 1 raccoon (9.50 pounds) was recorded.

For the year 1949 the total catch of fur-bearers amounted to 79 animals with a total weight of 1,269.38 pounds.

Stream mileage and acreage determinations

During the summer of 1949, the Rifle River Area staff took a series of width measurements on each of the trout streams within the boundaries. Later the author measured the stream mileage of the stream portions under our control, utilizing the large-scale aerial photographs in the files of the Rifle River Watershed Development office. Measurements were made with a map-measurer. From the two sets of data it has been possible to compute the water acreage of the portions of the trout streams under intensive creel census. The length and average width of the streams are given in Table 6.

There are 9.174 miles of trout stream under state ownership within the Rifle River Area boundaries with an area of 33.18 acres. Approximately half of the stream mileage and about 2/3 of the acreage is made up by the Rifle River proper.

A general summary of the use and the take of fish, game and fur bearers is given in Table 7. There were more sight-seers and fishermen than in any previous year.

Trout stream fishing has been of reasonable quality despite the 8-inch minimum size limit and the 10 fish daily creel limit, and these restrictions have not materially reduced the numbers of anglers.

Table 6 .-- Mileage and acreage data on trout waters of the Rifle River Area.

Stream		Leng Feet	ths Miles	Average width (feet)	Area in acres	Number of width measurements
Rifle River -	Upper Lower Total	4,139 20,191 24,330	0.784 3.824 4.608	42.08 40.65	4.00 18.84 22.84	23 97 120
Gamble Creek -	Upper Lower Total	2,703 5,238 7,941	0.512 0.992 1.504	17.36 40.38	1.08 4.85 5.93	11 18 29
Houghton Creek		1,267	0•2110	30•57	0•89	7
Fontinalis Cree	$\mathbf{V}_{\mathbf{x}}$	4,679	0.886	8•75	0.94	17
Brown Trout Cre	eek₩	10,222	1.936	11.00	2.58	36
Grand totals		48,439	9•174	•••	33•18	358

 $[\]forall$ Includes side channels, but not beaver dams.

Table 7.--Summary of the fish, game and fur take, and the general use of the Rifle River Area, 1945-1949 inclusive.

Item				Year		
		1945	1946	1947	1 948	1949
Permits issued -	Sight seers and others Fish Hunt Trap	9,993 4,080 2,257 40	8,861 3,294 2,487 75	10,54 3 3,881 2,342 52	10,627 4,176 2,134 141	12,986 4,335 2,004 118
	Total registrants	16,370	14,717	16,818	17,078	19,443
Trout stream results-	Total angling days Total fish taken Catch per hour	1,472 446 0.13	1,727 1,164 0,34	1,959 1,695 0.36	2,162 1,533 0.30	V1,031 0,24
Lake fishing results-	Total angling days Total fish taken Catch per hour	2,608 6,192 0.67	1,867 5,159 0,89	1,922 1,538 0.74	2,014 h,042 0.58	¥ ² ,557 ↓,563 0.57
Small game hunting -	Total hunter-days Total pieces killed	334 92	328 126	421 115	350 13 2	435 217
Deer hunting results-	Total hunter-days Total busies kille d	1,923 54	2 , 159 5 1	1 ,921 Ц8	1 , 784 32	1 , 569 37
Trapping results -	Total trapper-days Total fur bearers takes	140 114	75 172	52 126	141 304	118 79
Yield in pounds -	Fish from streams - Angling For research	221.92	1447.98	703.00	529•38	513.70 (11) 6.47
	Fish from lakes - Angling	2,247.13	1,523.89	1,246.75	1,242.75	1,718.91
	For research Small game and archery Rifle-killed deer Fur bearers	301.87 6,912.00 42.00	6,150.00	145.72 5,498.00 294.40	3,583.00	3.844.00
	All fish, game, fur- bearers	9,724.92	8,953.96	7,887.87	6,838.38	7,845.86

[√] Includes 11 brown trout taken by shocker for egg counts (6.47 pounds) and 2 snapping turtles
(34.00 pounds).

VIncludes 109 frogs (43.91 pounds) and 10 gill-netted fish from North Lake (31.16 pounds).

Mincludes 1 red fox (9 pounds) shot during rifle deer season.

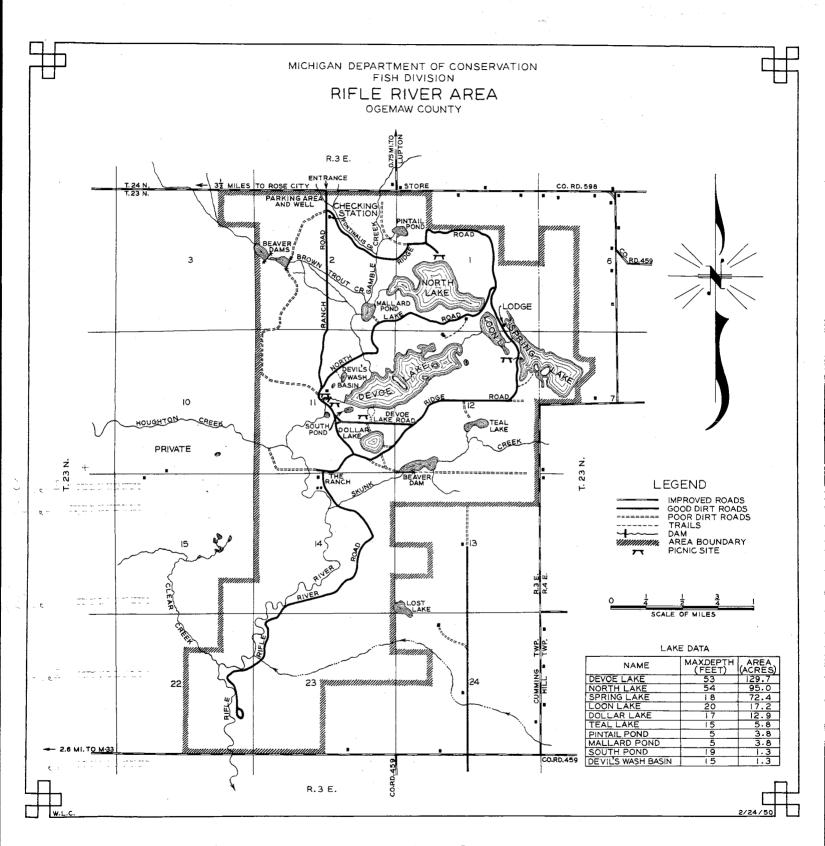


Figure 1

RIFLE RIVER AREA

HISTORY -- This 4,318 acre tract was formerly known as "Grousehaven" when under ownership of H. J. Jewett, pioneer auto maker, who operated it as a private hunting and fishing preserve. In 1945 the Department of Conservation purchased the area with monies derived from hunting and fishing license sales.

REASONS FOR PURCHASE -- (1) To provide additional public fishing and hunting grounds; (2) to provide a solidly-blocked area of State-owned land where experimental fish and game management might be conducted and accurate records of the results secured.

ADMINISTRATION -- is under the jurisdiction of the Department of Conservation, Fish Division, because of the predominance of fishing values. The Rifle River Area is open daily for public use during all regular fishing, hunting and trapping seasons from daylight to dusk, except from December 1 to the last Saturday in April. In the winter months a sign at the entrance lists the days and hours of access.

Everyone Must Register on Entering and Before Leaving

This requirement simplifies supervision and provides opportunity for creel and game-bag checks. Picnicking is permitted. (See map on reverse side for suggested sites.) Camping is not allowed because suitable sites are relatively scarce; also daily registration and census operations would be made more complex and expensive. Good camping grounds are available on other public areas nearby. The attendant will be glad to suggest such sites. Permission to build cooking fires at designated sites must be obtained from the attendant on duty. Except as announced by posters or signs, the same general laws applying elsewhere to the use of State-owned land are in effect on the Rifle River Area. The creel and game-bag censuses are taken by technicians of the Fish and Game Divisions, and these data provide a measure of the success of experimental management policies. The other divisions of the Department are consulted on special problems and cooperate in management of the area.

SUMMARY OF THE USE OF AND THE FISH, GAME, AND FUR TAKE, RIFLE RIVER AREA

	1945-19	949, INCLU	JSIVE				
US	SE AND HARVEST	1945	1946	1947	1948	1949\+	
PERMITS ISSUED	SIGHTSEERS AND OTHERFISHHUNTTRAP	9,993 4,080 2,257 40	8,861 3,294 2,487 75	10,543 3,881 2,342 52	19,627 4,176 2,134 141	4,335 ***********************************	2 2 2
TOOLT CIDEAU	Totals	16,370	14,717	16,818	17,078	19,443	i
TROUT STREAM RESULTS	TOTAL ANGLING DAYS TOTAL FISH TOTAL POUNDS	1,472 446 222	1.427 1.164 448	1,959 1,695 703	2,162 1,533 529	1.778 1.031 520	
LAKE FISHING RESULTS	TOTAL ANGLING DAYS TOTAL FISH TOTAL POUNDS	2,608 6,192 2,247	1,867 5,159 1,524	1,922 4,538 1,247	2.014 4.042 1,243	2,557 ***********************************	4,563
SMALL GAME HUNTING	TOTAL HUNTER-DAYS TOTAL NUMBER GAME ANIMALS KILLED TOTAL POUNDS	325 91 142	284 125 308	374 115 146	306 132 235	435 217 348	
DEER HUNTING RESULTS	TOTAL HUNTER-DAYS TOTAL BUCKS KILLED TOTAL POUNDS VENISON	1,932 55 7,072	2,203 52 6,280	1,968 48 5,498	1,828 32 3,583	37 3,948	1,569
TRAPPING RESULTS	TOTAL TRAPPER-DAYS TOTAL NUMBER ANIMALS TAKEN TOTAL POUNDS	40 14 42	75 172 394	52 126 294	141 304 1,249	118 79 1,269	
	Total Pounds of Fish, Game and Fur	9,725	8,954	7,888	6,839	XXXXXXXXXXX	7,846

RESEARCH AND DEMONSTRATION PROJECTS UNDER WAY

- Effects of lower daily trout limits and increase in trout size limits.
- Results from plantings of trout of various sizes in streams and lakes.
- Evaluation of stream and lake improvements.

 Detailed population studies with the electric shocker in Gamble Creek to learn more about the characteristics of a brown trout population and results from planting. Recording the annual condition and take of fish, game and fur.
- Experimental food and cover plantings for small game and birds and a demonstration of the effects of deer browsing on cedar reproduction.

 Establishment of a flock of Canada geese to encourage local breeding of this species.

Lake fishing is again increasing in popularity after a slump during the previous three years. The total catch appears to be at least average.

The Area appears to be increasing in popularity among small game hunters. The 1949 kill was the best noted in any year. The 1949 deer-hunting pressure was down about 25 percent in comparison with the earlier years, and the buck kill also was down about the same proportion. A relatively small number of trappers removed far fewer animals in 1949, but since almost half of them were beaver the total weight of fur bearers removed was the highest on record.

The total poundage of fish, game and fur bearers removed in 1949 was the fourth highest noted. It exceeded the 1948 total by slightly over 1,000 pounds (7,847 pounds as against 6,838 pounds).

INSTITUTE FOR FISHERIES RESEARCH

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