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KINNE CREEK ANGLING RESULTS, 1951 SEASON - Lake Co.

by

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According to a communication from C. F. Idema to Dr. A. S. Hazzard of October 15, 1951, the Wingleton Club stocked the following fish in Kinne Creek in 1951:

200 rainbow trout (10 inches +) - below the RR grade - 5/10/51
250 brook trout (8 inches) - below the RR grade - 5/16/51
200 brown trout (8 inches) - below the RR grade - 5/16/51
250 brook trout (8 inches) - above the RR grade - 5/16/51

900 trout - Total

The 1951 angling results are summarized briefly in Tables 1 and 2. The data in these tables are taken from the fishing records kept by the Wingleton Club members in the icehouse record book. Table 1 gives the results of fishing in the stream area above the Railroad Grade. In this stream area, 16 individuals made 39 trips and fished a total of 105.75 hours. They caught 185 brook trout ranging in size from 8.0 to 13.0 inches (average length of 1951 catch here was 8.7 inches). The catch per hour was 1.75 fish; the catch per angling day was 4.74 fish.

Table 1.--Angling results above Railroad Grade

Kinne Creek, 1951 trout season

Month 1951	Number of angling trips	Total hours of fishing	Brook trout caught		Catch per hour
			Number	Av. total length	
May	15	39.00	93	8.6	2.38
June	12	42.25	63	8.8	1.49
July	9	16.50	20	8.5	1.21
August	2	5.00	6	9.8	1.20
September	1	3.00	3	8.9	1.00
Totals	39	105.75	185	8.7	1.75

Table 2.—Angling results below Railroad Grade, Kinne Creek, 1951 trout season

Month 1951	Number of angling trips	Total hours of fishing	Number and size of trout caught						Total trout catch	Catch per hour
			Brook	Av. total length	Brown	Av. total length	Rainbow	Av. total length		
April	3	15.50	---	---	7	9.1	1	8.5	8	---
May	25	104.50	74	8.9	48	8.7	19	11.8	141	---
June	20	117.50	27	8.4	58	9.2	28	9.3	113	---
July	18	87.50	12	8.3	50	9.3	22	9.1	84	---
August	8	42.50	---	---	15	8.9	14	8.7	29	---
September	1	2.00	---	---	1	8.0	---	---	1	0.50
Totals	75	369.50	113	8.7	179	8.7	84	9.7	376	1.02

The 1951 total catch of this water compares favorably with that made in 1950 (206 brook trout).

The angling results recorded for the stream area below the Railroad Grade are given in Table 2. For the 1951 season a total of 26 individual anglers made 75 trips on this portion of Kinne Creek and spent a minimum of 369.50 hours in fishing (not all individuals recorded their hours of fishing). The recorded catch was 113 brook trout (average total length, 8.7 inches; range 8.0 to 13.5 inches), 179 brown trout (average total length 8.7 inches; range 7.0 to 15.5 inches), and 84 rainbow trout (average total length, 9.7 inches; range 8.0 to 16.0 inches), or a total catch of 376 trout in the lower stream. The catch per hour was 1.02 fish; the catch per trip was 5.01 fish. Thus for the entire club waters, a total of 114 angling trips involving 475.25 hours of fishing yielded a total of 298 brook trout, 179 brown trout and 84 rainbow trout, or a total yield of 561 trout to the club anglers. This amounted to a catch per hour of 1.18 fish or 4.91 fish per angling day.

Accurate analysis of the 1951 catch (i.e., as to what part were wild fish and what part were stocked fish) is almost impossible, inasmuch as the stocked fish were not marked so as to be distinguishable from the native trout. An informed guess can be made, utilizing creel census data furnished by the club members in earlier years when stocked fish were marked or no fish were planted. From such data on file, it is estimated that the section above the Railraod Grade would not yield over 50 wild or "carry-over" brook trout; the section below the Railroad Grade would yield 24 wild brook trout, 100 wild brown trout and 10 wild rainbow trout.

From this Table 3 can be assembled, showing the estimated catch of hatchery-reared fish and the percentage of recapture of the 1951 planted fish.

These data suggest that in the area above the Railroad Grade, a minimum of 135/250 or 54 percent of the stocked brook trout were removed by the 1951 anglers. In the stream area below the Railroad Grade, 89/250 or 35.6 percent of the stocked brook trout were recaptured; 79/200 or 39.5 percent of the stocked brown trout were retaken; and 74/200 or 37 percent of the stocked rainbow trout came into the anglers' catch. These estimates of recovery percentages are reasonably consistent with those observed during years when planted fish were marked.

Management Suggestions for 1952

1. Plant 250 disease-free adult brook trout in the pond above the Railroad Grade as soon as the water temperature reaches 50° F. Lower the daily bag limit here to 5 fish per day. This regulation will tend to spread the good fishing over a longer period of time and very likely among more of the club members.

2. Plant 200 disease-free rainbow trout and 200 disease-free brook trout in the stream below the Railroad Grade after the stream temperature reaches 50° F. Lower the daily limit on the stream to 10 fish to conform with the new state limit.

It should be apparent by this time to club members that when all three species of trout are stocked in the lower stream section, relatively low recovery of planted fish is made. Furthermore, experience has shown there is a good population of native brown trout present. In addition, reference to several fisheries publications suggests strongly that even

Table 3.--Estimated composition of 1951 trout catch Kinne Creek, with estimated percentages of recovery of hatchery fish

Item	Estimated catch of wild fish	Estimated catch of hatchery trout	Total catch 1951	Number stocked	Percent of recovery on hatchery fish
Brook trout above Railroad Grade	50	135	185	250	54.0
Brook trout below Railroad Grade	24	89	113	250	35.6
Brown trout below Railroad Grade	100	79	179	200	39.5
Rainbow trout below Railroad Grade	10	74	84	200	37.0
Totals	184	377	561	900	41.9

the hatchery-reared brown trout are recaptured at only about one half the recovery rate of stocked rainbow trout and brook trout. In this connection I quote from the report of Dr. E. L. Cooper (Institute for For Fisheries Research Report No. 1288). Dr. Cooper writes (pages 53 and 54):

"The inability of the average fisherman to catch brown trout makes this species a poor investment for any type of put-and-take fishing. Also, there is no apparent superiority to the rainbow in being able to survive the winter and contribute to the catch of future seasons. Evidence obtained for streams that have abundant brown trout populations indicates that they are not being fully exploited even under heavy fishing intensity. Stocking of this species because of depletion of native stocks therefore is seldom warranted."

The above conclusion was reached after two seasons of carefully controlled experiments involving the planting and recovery of hatchery-reared brook, brown and rainbow trout on the Pigeon River Trout Research Area in Otsego County.

For the combination of reasons just given, the stocking of brown trout in Kinne Creek is not recommended.

3. If the club desires to learn accurately the current percentage of recaptures on the fish it stocks annually, all planted fish should be marked by fin clipping before release. If length measurements of fin-clipped fish were then circled in the record book, a count of hatchery fish in the total catch would be directly available.

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