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THE EARLY PLANTINGS OF RAINBOW TROUT IN THE AU SABLE RIVER SYSTEM,
AND THEIR RELATION TO PRESENT-DAY RAINBOW TROUT CATCHES ON THE
NORTH BRANCH OF THE AU SABLE

According to Seymour Bower¹, the "Au Sable River" received the first stocking of rainbow trout in the early eighties. This plant is said to be the first attempt at introducing the rainbow anywhere east of the Mississippi. N. W. Clark of Clarkston, Michigan, and Dan Fitzhugh of Bay City, Michigan were responsible for the planting. A list of the subsequent early plantings in the Au Sable River system is given below:

1894 - Big Creek, Crawford County	5,000
1895 - " " " "	15,000
1896 - " " " "	15,000
1897 - Possibly in tributary to N. Branch	5,000
1899 - E. Branch near Grayling	3,000 fry
1905 - S. Branch	40,000 "
1914 - Main stream near Grayling	140,000 "

Since 1914, as stated by Hans Petersen, practically all rainbow plantings have been made in the South Branch and in the Main stream.

The history of the angling in the North Branch seems to be somewhat as follows: It has long been noted as an excellent dry fly stream for brook trout. If what meager records available are correct, the rainbow trout must have increased and multiplied from the original planting mentioned by Bower (the later plantings also probably aided the establishment of the rainbow). This is especially true of the

¹ Bower, Seymour, 1911. 19th Biennial Report of the State Board of Fish Commissioners for the Fiscal Years 1909 and 1910. p. 197.

North Branch below Lovells, as W. B. Mershon records the following in his personal diary:

1913 - Total catch for North Branch - 15,269 (total brooks and rainbow). There is a footnote--Au Sable Trout & Game Club--which was located near Dam 4 (about 8 miles below Lovells)--449 brook trout, 445 rainbow trout, indicating a ratio of 1 to 1 for the rainbows and brook trout.

The only other records available are from the personal diary of M. B. Trautman, Assistant Curator of Fishes, University of Michigan:

10 days - 1925 - 36 rainbow trout, 146 brook trout.

4 days - 1926 - 7 rainbow trout, 25 brook trout, 2 brown trout.

This would indicate a ratio of approximately 4 brook to 1 rainbow trout in the stream at that time.

At the present time, the rainbow trout are few in number in the North Branch in the region above Lovells. Seining for tagged fish show only 6 rainbow captured in the past 3 years, while approximately 3800 brook trout have been taken in the same period. Above Lovells, it is a rare occasion when a rainbow is taken by an angler.

Although the waters between Lovells and the Main Stream are not as well known to the Institute as those above, casual fishermen report a larger percentage of rainbow and brown trout in their catches from that section. From what is known of the water in the region below Dam 4 and in the region of Kellogg's Bridge, it seems probable that rainbow trout would survive and spawn in these sections of the stream.

In view of the fact that the North Branch of the Au Sable has never had a planting of rainbow, and also the fact that they once existed there in considerable abundance, an experimental planting of the rainbow in the region of Dam 4 might be of value. It is suggested that a portion of such a planting be tagged in order to learn how much such a planting will spread. If this latter operation is followed out, we should most certainly learn whether or not plantings of rainbow are available for North Branch anglers, or whether the rainbow leave this branch for the Main stream when they attain larger size, as seems to be the case in many western Michigan streams.

The following procedure is suggested:

1. Plant 5,000 legal rainbows, 1,000 to be tagged, the remainder to be fin-clipped. Plant 1/2 below Dam 4, 1/2 above Dam 4.
2. Establish a creel census on the North Branch between Dam 2 and the mouth of the streams. This would be advantageous inasmuch as it would give total catch and percentage of the three species of trout in the catch of the anglers, as well as throw considerable light on the movements of the rainbows after liberation.

Summary

1. Old records show rainbow to have been established in Au Sable River System from plants in the early 80's.
2. No plantings of record were ever made directly in the North Branch.
3. Mershon's records show that in 1913 rainbow and brook existed in North Branch in a 1:1 ratio.

Trautman's records show a ratio of 4 brook to 1 rainbow in 1925 and 1926. Seining and anglers' catches at present indicate more than 100 brook to 1 rainbow are taken.

4. Moderate stocking of marked legal rainbow together with a creel census over the length of the river fished are suggested.

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