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**INSTITUTE FOR FISHERIES RESEARCH**

DIVISION OF FISHERIES  
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UNIVERSITY MUSEUMS ANNEX  
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STATUS OF THE PARASITIC LAMPREY (ICHTHYOMYZON CASTANEUS)

IN THE MANISTEE RIVER NEAR GRAYLING, MICHIGAN IN 1943

by

Leonard N. Allison

In past years, trout in the Manistee River near Grayling were heavily burdened with the parasitic lampreys (Ichthyomyzon castaneus) and an investigation of this condition was made by Mr. W. R. Crowe of the Institute staff in 1939 (Report No. 548). Mr. Crowe divided a portion of the stream into five sections, each with a different bottom type. Each section was fished and the trout caught were examined for presence of lampreys and fresh lamprey scars. The percentage of infected trout<sup>\*</sup> caught in the sections ranged from 14.8 to 66.6. In one instance, seven of eight trout (87.5 per cent) caught in one day's fishing were infected. Mr. Crowe found infections in 78 of 219 trout (35.6 per cent) taken from all sections of the area under investigation.

During the summer of 1943, fishermen who are well acquainted with the Manistee River were contacted concerning the lamprey problem and all agreed that considerably fewer lampreys were seen this year. They all reported finding lampreys in the stomachs of a majority of the large trout that they caught. One method of control that was suggested was the stocking of large trout in the hopes that they would utilize the lamprey as food,

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\* Percentages corrected from Table 1 of Crowe's report.

thereby reducing the lamprey population. However, whether the appetite of large trout is entirely responsible for the decrease in lampreys is difficult to determine because of the operation of unknown natural factors.

On August 15, 1943 Dr. Hazzard, Dr. Shetter and five other fishermen fished the Manistee River by boat from M-72 to Portage Creek, a distance of about 12 miles by stream. The five sections studied by Mr. Crowe in 1939 were covered in this trip. The party caught 45 rainbow trout, approximately 12 per cent of which were infected with lampreys. As compared with the per cent of infection in 1939 (35.6 per cent), a substantial reduction of parasitic lampreys is apparent. However, it should be noted that Crowe's samples were all taken during May and June while the sample in 1943 was taken on August 15. There may be a seasonal decline in the percentage of parasitization although fishermen's reports substantiate the original conclusion.

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