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REPORT NO. 842a

CONCLUSION OF WALLEYED PIKE EXPERIMENT CONDUCTED AT THE WOLF LAKE HATCHERY DURING 1942-1943

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The walleyed pike that were raised in Ponds 9 and 11 at the Wolf Lake Hatchery in 1942, were held over winter for survival and growth studies at the suggestion of Mr. Jay G. Marks. Because of the pressure of other duties, Institute members were unable to obtain adequate weights and measurements on the cannibals and consequently had to use estimates of the length furnished by Mr. Marks. The 10,045 fingerling walleyes were placed in Pond No. 9 and the 176 "hogs" were placed in Fond No. 22 for the winter. Both of these ponds were supplied with large numbers of lake emerald shiners (see Report No.842).

Ponds 9 and 22 were drained on May 1, 1943. The writer weighed, measured and counted all of the walleyes and the results are as follows:

Number of fish stocked-Oct. 24,194,2 Average total length Average weight	Pond No.9 10,045 3.37 inches 0.14 ounces	Pond No.22 176 10.76 inches 6.6 ounces
Number of fish recovered-May 1, 1943 Average total length Average weight	1,045 3.7 inches 0.21 ounces	$8.l_{\downarrow}$ inches 2.7 ounces
Percentage survival	10.2 per cent	92.0 per cent

These measurements and weights were obtained from 27 fish on October 24, 1942 by L.A. Krumholz. These 27 fish apparently did not constitute a random sample because the pond was not completely drained at this time. Mr. Marks gave the average length of these cannibals as between 10 and 11 inches and did not give any data on their weight.

Both ponds contained many thousands of lake emerald shiners when drained.

Despite the presence of such large numbers of shiners, the walleyes exhibited

very little growth over winter. The fingerlings in Pond No. 9 made an average growth of 0.35 inches and 0.07 ounces in weight between October 24, 1942 and May 1, 1943. It is apparent that these fish did not feed to any extent and grew very little during the winter months. Northern pike have been found to grow continually and considerably in length and weight during winter.

The growth of the walleye "hogs" held in Pond No. 22 cannot be determined because adequate lengths and weights were not obtained when these fish were placed in Pond No. 22.

Walleye pike yearlings were planted in the following lakes:

Name	County	Township	T. R.	s.	No. planted	Weight
Eagle Lake C@dar " Gravel " Eagle " Cedar " Gravel "	Van Buren n n n n n n n n	Paw Paw Porter Paw Paw Porter	38 14W 48 13W 48 13W 38 14W 48 13W	32 33 32 32 33 32	54 54 514 335 335 330	第一条 分析 上海 上海

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