cc: Mr. Lydell 9-3-42 Mr. J. G. Marks 9-3-42 Education-Game INSTITUTE FOR FISHERIES RESEARCH Division of fisheries MICHIGAN DEPARTMENT OF CONSERVATION COOPERATING WITH THE UNIVERSITY OF MICHIGAN

Original: Fish Division

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August 25, 1942

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REPORT NO. 809

WALLEYED PIKE EXPERIMENTS AT WOLF LAKE AND LYDELL HATCHERIES

by

W. F. Carbine

On June 30, 1942, while the writer and Mr. Krunholz were at the Wolf Lake and Comstock Park (Lydell) Hatcheries on other investigations, we had an opportunity to look into the walleyed pike experiments being conducted. Following is a summary of the findings made at these hatcheries.

Wolf Lake Hatchery

Mr. Jay Marks has complete information in his files on the size of the ponds, date of stocking, etc. Mr. Marks did not fertilize either of the two ponds used or stock the ponds with minnows. Pond 9 was stocked with 170,000 walleye fry and Pond 11 with 130,000 fry.

Young walleyes were observed around the banks of both ponds. Upon seining we were able to take 31 fish (average 46.4 mm. total length) from Pond 9 and 27 fish (average 51.0 mm. total length) from Pond 11. (See attached table for complete measurements.)

All walleyes appeared thin and had large heads. It was easier to collect young walleyes near shore, especially over sand bottom, than on or over weed beds. The majority of the fish were taken in one seine haul in each pond.

Mr. Marks placed the fat-headed minnows that were collected at Grass Lake Village in Pond 17. Young fat-heads of several different sizes were present in the pond. Eggs were found under several boards. Mr. Marks should have an excellent supply of fat-head breeders next year.

Lydell Hatchery

Complete notes have been kept (by Matthews, Lydell, and now Cy Moody) since Pond 19 was filled. Notes give all information pertaining to the experiment.

The pond water was brown. Good growth of weeds present; algae was extremely abundant. Lydell has taken 3 samples of walleyes to date, at two-week intervals. The hatchery men have not taken any suckers since the first seining was made. Blunt-nosed minnows were also absent. A few have been observed by the hatchery men but all of these were fungused or injured fish. It is possible that they have spawned and are still spawning but young are eaten as soon as, or very soon after, hatching.

About a week ago a planting of 21,000 lake emerald shiners was made. Although many were (and are) too large for the walleyes, the hatchery men claim that the walleyes still tackle the large minnows and usually manage to eat them either whole or by breaking them in two when two walleyes play tug-of-war with one shiner. Numerous lake shiners were observed around the pond.

Mr. Lydell now has one hatchery pond stocked with golden shiners, another with chub-suckers and still another with top-minnows (Fundulus). Providing that Mr. Lydell does not feed all of the minnows to the bass, or plant them in some of the lakes in his district, he should have an excellent supply of brood stock next year. (We suggested that he keep these minnows for brood stock.)

INSTITUTE FOR FISHERIES RESEARCH

By W. F. Carbine

Report approved by: A. S. Hazzard

Report typed by: R. Bauch

Pond #11						
44 50 46 46 47	141 147 148 147 146	48 48 48 44 44 47	144 148 145 148 144	43 144 149 146 145	44 45 48 51 47	<u> 4</u> 8
Av. length 46.4 mm.						
Pond #9						
49 50 48 54 54	52 50 52 56 56	48 50 54 48 5 3	49 56 55 52 51	49 50 54 54	50 42	
		Av. 10	ength 5	1.0 mm.		

Total lengths of walleye fry, collected by W. F. Carbine and L. A. Krumholz, from Wolf Lake Hatchery, 6/30/42

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