

INSTITUTE FOR FISHERIES RESEARCH  
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MILFORD POND, OAKLAND COUNTY

During the first week of September, 1938, the Institute for Fisheries Research made a survey\* of the Milford Pond in Oakland County. Shortly after this study was made, the water was released from the pond to allow for extensive repairs on the dam by the owners (Ford Motor Co.). At the present time the dam has been replaced and the reservoir is again filled with water. On July 27, 1939, another examination was made to ascertain what effect the draining of the pond had on the fish population. The following report summarizes the conditions at the time of each examination and includes suggestions for future management.

Milford Pond is the result of a dam placed across the Huron River immediately south of the town of Milford. The impoundment covers an area of about 65 acres and has a maximum depth of 18 feet. The basin is rather abrupt on all sides, but the average depth is less than 10 feet. Fibrous peat and muck, resulting from decaying vegetation and sediment, cover the entire bottom except in areas less than three feet in depth, which are largely composed of sand and gravel.

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\* The survey was made by Robert Ball, leader; Walter Crowe, Paul Eschmeyer, and Arthur Whiteley, assistants.

The maximum surface temperature recorded during August was 84°F. Temperatures varied only slightly (2-3°F.) between top and bottom.

At the time of the 1938 survey, oxygen was abundant from top to bottom. The water is distinctly alkaline, with a pH of 8.0 and a methyl orange alkalinity ranging between 160-182 ppm. Because of the current through this pond, it is very doubtful if stagnation ever occurs. There is no serious pollution of any sort, although the bottom deposits indicate pollution here at an earlier time.

Fish-food organisms were exceedingly abundant. The major items were shrimp (Amphipoda) and midges (Chironomidae). Caddisflies and mayflies were also numerous. Fish taken at the earlier survey were as follows:

<u>Game</u>	<u>Forage</u>	<u>Coarse</u>	<u>Obnoxious</u>
Largemouth bass	Common shiner	Common sucker	Dogfish (reported)
Bluegill	Black-banded		Gar Pike (reported)
Pumpkinseed	topminnow		
Long-eared sunfish			
Rock bass			
Green sunfish			
Perch			
Pike (reported)			

Most of the fish taken were relatively free from parasites and in fairly good condition.

Reports from local fishermen indicate good fishing for pike, bass and bluegills. The catch of legal bluegills per hour by angling for members of the survey party was 6.5 fish.

The recent study made during July, 1939, showed a large number of small bluegills and pumpkinseeds to be present. The bass seemed to be reduced to a few large ones and the forage fish (shiners) were greatly reduced. The other conditions seemed quite similar to those noted in the original survey.

Since the spawning areas in this pond are very favorable to all the species present and since the present bluegill population is sufficient to restock this water as it now stands, no plantings of this species <sup>are</sup> is recommended. Earlier collections indicate that the bluegill population was too large for good growth. The stocking of bass is recommended. Conditions seem favorable for either species. We believe that, even though the forage fish were reduced by lowering the water, they will come back in adequate numbers during the coming year. The spawning grounds were out of water during the breeding season this year, which probably accounts for the lack of small bass and forage fish.

In view of the fact that the population of bass and bluegills maintained itself during the past few years without stocking, we believe that little or no stocking of any species will be necessary after the first year.

INSTITUTE FOR FISHERIES RESEARCH

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