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REPORT ON DRAINING OF STEPHENSON'S POND, NEAR LOCH LOMOND

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REPORT ON DRAINING OF STEPHENSON'S POND, NEAR LOCH LOMOND, MAY 10, 1938.

After having been filled with water all winter the water was lowered about May 5th. On my arrival on the 10th. it was drained out so that the stream was falling into the "kettle" in which a foot or so of water remained.

At 2 to 2:15 p.m., 150 lbs. of hydrated lime was introduced into the stream by three persons simultaneously, two just below the upper screen and one above it. Each threw the lime in by handfuls and the rapid water carried it away and facilitated solution.

Two small tributaries were treated to prevent fish seeking refuge in them.

The progress of the solution downstream was followed using a suitable indicator (phenolphthalein) and when it had arrived in some strength at a point about half way down the stream another 50 lbs. was added to reinforce the solution.

Three hours after the completion of the introduction of the lime near the upper screen the solution reached the kettle. Half an hour later the water was strongly alkaline there but by 8:30 p.m., only slightly alkaline water was coming down, indicating that the lime was largely removed.

Comparatively few fish came down into the kettle although a large school of sticklebacks came down some distance in the stream. They were found dead in large numbers along the lower half of the stream.

Five dead trout were found. One in the "kettle", one near the upper end of the stream and three in the lower half of it. Their

lengths were 5, 7, 9, 10 and 10½ inches. They were in good condition. The stomachs of the larger ones were packed with dragonfly larvae.

The whole length of the stream was examined between 7 and 8 p.m. Dead sticklebacks were seen all along it and it seems that several thousand were killed. In one place where there was a slight seepage into the stream a small school of sticklebacks had survived. No live trout were seen but this is not significant as none were seen in the lower section before they were killed. Evidently they were well hidden until the unfavourable conditions overtook them. However, it is felt that the likelihood of many trout surviving is very small.

In addition to trout and sticklebacks, we found one large sucker (9 inches), and a half dozen small yellow perch, several dozen Conesius (chub) and a fair quantity of tadpoles.

Some debris which had collected near the sluiceway contained large numbers of dragonfly larvae and quite a quantity of giant water bugs.

The water temperature at 8 p.m. was 44.7 °F. There was ice arched over the stream in places in the woods. The water flow was not great for the time of year.

The hardhack vegetation where completely submerged is dead and becoming brittle.

A. H. Leim.