

Surface ...	...	..	..	...	...	42°·8 Fahr.
50 feet ...	...	..	...	...	...	42°·0 „
100 „ ...	...	..	...	...	...	41°·7 „
140 „ ...	...	...	...	...	...	41°·0 „

Dr. L. W. Collet, who took part in the survey, supplies the following notes on the formation of St. Mary's Loch and the Loch of the Lowes :—

“During the great Ice Age the Yarrow valley was occupied by a glacier, as is shown by the U-shaped section and the moraine matter on the slopes of the hills. In this valley we find the two picturesque lochs, St. Mary's Loch and the Loch of the Lowes, which are both due to burn deltas damming the valley. Three dams are manifest: (1) one situated at the very head of the Loch of the Lowes, formed by the junction of the deltas of two lateral streams, the Chapelhope burn and the Riskinhope burn; a small loch was very likely formed at one time behind this dam, as shown now by an alluvial tract, which is the result of the filling up of the loch by detrital matter brought down by the principal burn; (2) one at the lower end of St. Mary's Loch, due also to the junction of the deltas of two burns, the Kirkstead burn and the Thorny cleuch; this dam held back at one time only one big loch; (3) one formed by the deltas of the Ox cleuch and the Thirlestane burn, which divided the big loch into two separate ones, now represented by the Loch of the Lowes and St. Mary's Loch; this dam has led to the gradual filling up of the Loch of the Lowes by the detrital matter brought down by the streams, as shown by the soundings, the deepest recorded being 58 feet, while on the other hand the deepest sounding recorded in the upper basin of St. Mary's Loch is 112 feet.

“St. Mary's Loch is fed by many streams: the first one on the western shore is the Summerhope burn, the detrital matter brought down by which causes a sinuosity in the 50-foot contour-line in that region; the Mare cleuch has given rise to a small delta, which has little effect on the contour-lines; the most important tributary is the Megget water, which has laid down a huge delta protruding across the lake, forming a sub-lacustrine barrier, on which the maximum depth recorded is 88 feet; the Copper cleuch has also formed a small delta, and has raised the floor of the bay into which it flows.

“From a bathymetrical point of view, St. Mary's Loch is divided into two basins separated by the sub-lacustrine ridge due to the deposition of material brought into the lake by the Megget water. The deeper basin is situated in the north-eastern part of the loch, and might be ascribed to the combined effect of the two glaciers, the Yarrow glacier and the Megget glacier, uniting at that place. It is difficult to decide whether St. Mary's Loch is simply a barrier basin, or whether it partakes of the character both of a barrier basin and a rock basin.”

Mr. James Murray supplies the following notes on the biology of St. Mary's Loch.—

“During the discussion as to the suitability of St. Mary's Loch as a