

*Loch of Flugarth* (see Plate XCIX.) is a small, narrow oblong loch, running due north and south, and close to the Sand Voe, on the north coast of the Mainland. It lies amid low country, cultivated to north and south, at only a few feet above sea-level (determined by the Ordnance Survey to be 6·4 feet on October 23, 1876). The axis is slightly curved. It is half a mile long, by fully one-eighth of a mile in maximum breadth. The basin is flat-bottomed, with a maximum depth of 8 feet, and a mean depth of 5 feet. The superficial area is 40 acres, and the volume of water 8 millions of cubic feet. A considerable stream from the Bergs of Skelberry (648 feet) enters the south end of the loch, and the outflow, through Vats meadow, is barely 100 yards long. It drains fully a square mile of country.

The surface temperature was 58°·0 Fahr. on August 8, 1903.

*Muckle Lunga Water* (see Plate XCVIII.) is a fairly large loch, of very irregular form, about a mile to the north of Roer Water, and draining through a chain of lochs which were not surveyed, into South Wick, on the west coast of the Mainland. It is longer than Roer Water, measuring three-quarters of a mile from south to north, but is narrower (a quarter of a mile in greatest breadth), and of smaller superficial area (about 58 acres) and volume (17 millions of cubic feet). It is very shallow, having a mean depth of about 7 feet, and only a very small area over 10 feet deep, and the maximum of 27 feet, to the east of the centre, in the broadest part of the loch.

*Muckle Lunga* is the uppermost of the chain of lochs, and drains a very small area of only a third of a square mile. The burn flowing out northward to Moosa Water, then westward, changes its name, as is so common in Shetland, being the Moosawater burn after passing the loch of that name, and finally the Brettoo burn when tumbling over the cliffs into the South Wick. The height of the surface above sea-level could not be measured, but is estimated at somewhere between 450 and 500 feet, being the most elevated of the lochs surveyed in Shetland.

The surface temperature on August 7, 1903, was 55°·8 Fahr.

*Birka Water* (see Plate XCVIII.) is a small triangular loch, a short distance to the north of Ronas hill. It is fully a third of a mile long from south to north, and a quarter of a mile broad at the extreme south end. It is a simple basin, the 10-foot contour being close to the shore except at the angles, the slope of the bottom being gradual to the 20-foot contour, then steeper to the centre, where the maximum depth of 45 feet occurs. The mean depth is 12 feet, the superficial area about 30 acres, and the volume of water 15 millions of cubic feet. It drains an area of 3 square miles, receiving most of the water collected on the north slope of Ronas hill, and the overflow of a large number of lochs. The burn flows out in the middle of the west side, and, after a course of about