

On July 14, 1903, the surface-level was 52·9 feet above the sea, almost identical with the elevation determined by the Ordnance Survey officers on August 24, 1900, viz. 53·0 feet. The basin is simple, the bottom sloping on all sides to the deepest water, a little north of the middle line. The variation of temperature from surface to bottom was only $\frac{1}{2}^{\circ}$:—

Surface . .	...	...	...	...	...	54°·8 Fahr.
25 feet ...	.	..	...	.	...	54°·6 „
70 „ ...	...	..	...	...	...	54°·8 „

Grass Water (see Plate CI.) is a narrow loch, to the west of Houllma Water in Aithsting. It lies amid low moorland, and measures two-thirds of a mile in length from north to south. The centre line of the loch is strongly curved. The greatest breadth, one-sixth of a mile, is at the north end, which is very shallow and obstructed by numerous boulders. At this end there are several small islands. The narrow southern portion is slightly deeper, with the maximum depth of 6 feet. The whole loch is filled with vegetable growth. The superficial area is 34 acres, and the contents 4 millions of cubic feet. The Yoxna burn, a considerable stream, conveying the overflow of Houllma Water and of several smaller lochs, enters at the southern extremity, and four or five smaller burns on the west shore. The outflowing stream passes northward through the little Loch Culeryn into the Vadills, at the head of Uni firth. The drainage area, including several fairly large lochs not surveyed, measures 3 square miles. The height of the loch above sea-level was not ascertained, but it may be estimated from a spot-level of 11 feet on the shore to be about 10 feet.

The surface temperature on July 15, 1903, was 58°·0 Fahr.

Upper Loch of Brouster (see Plate CI.) is a small loch about 5 miles south-east from Sandness. It is of oblong form, with the axis running north and south. It is the lowest of an extensive chain of lochs, stretching right across the peninsula, from near Sandness to the Browland Voe near Walls. The chain includes several fairly large lochs, of which only Burga Water was surveyed, there being no boat on the much larger Voxterby Loch. The loch is fully one-third of a mile long, one-eighth of a mile broad, with an uneven bottom, varying from 5 feet to 8 feet in the centre, and a very small part 11 feet deep near the south end. The mean depth is $5\frac{1}{2}$ feet, the area about 22 acres, and the volume 5 millions of cubic feet.

The area draining into the loch is $5\frac{1}{2}$ square miles. The Brace burn, from Voxterby Loch, comes in at the north end. A short stream flows south into the Loch of Brouster, a sea loch, and a branch of the Browland Voe. The level of the loch was not found, but it was stated that the water might fall a little lower, and might rise 5 to 6 feet higher than on the date of the survey (July 20, 1903). The surface temperature was 54°·2 Fahr.