

about half a mile from the southern end, based on soundings in 82 and 83 feet. Within the largest 75-foot basin, and about $1\frac{1}{2}$ miles from the northern end, is the 100-foot basin, about half a mile in length, enclosing the maximum depth of the loch. The areas between the contour-lines at intervals of 50 feet, and the percentages to the total area, are as follows:—

Feet.				Acres.		Per cent.
0 to 50	...	...	...	571	...	52·3
50 ,, 100	...	...	...	485	...	44·6
Over 100	...	...	...	34	...	3·1
				1090		100·0

Loch Eck was surveyed on June 20–22, 1903, when the elevation was found to be 66·6 feet above the sea, which agrees closely with the elevation determined by the Ordnance Survey officers on June 9, 1863, viz. 66·8 feet.

Temperature Observations.—Two serial temperatures were taken on June 22, 1903, one at 2.30 p.m., in the deepest part of the loch, in 135 feet of water, and the other at noon, about a quarter of a mile to the south, in 74 feet of water, with the following results:—

	Deepest basin, 135 feet.	South of deepest basin, 74 feet.
Surface	60°·0	58°·4
20 feet	58°·9	57°·5
27½ ,,	54°·9	—
35 ,,	52°·0	56°·3
42½ ,,	—	51°·5
50 ,,	50°·0	50°·2
70 ,,	—	48°·3
100 ,,	47°·8	—
130 ,,	46°·5	—

The series in the deepest basin shows a range from surface to bottom of 13°·5, the greatest fall being one of 4° between 20 and 27½ feet. The shallower series shows a range of 10°·1 in the 70 feet of water, the greatest fall being one of 4°·8 between 35 and 42½ feet. The “sprungschicht” was thus observed nearer the surface in the deepest basin, the temperature at a depth of 35 feet being 4°·3 lower than at the same depth in the shallower water to the south, while at 50 feet the temperature was practically the same in both series. A strong south-east wind was blowing at the time these observations were taken, which might explain the higher readings at the surface and at 20 feet in the more northerly position.

From the following table it will be seen that in the three lochs under consideration 372 soundings were taken, and that the aggregate area of the water-surface is just over 2 square miles, so that the average number of soundings per square mile of surface is 180. The aggregate volume of water contained in the lochs is estimated at 2525 millions of cubic feet. The area drained by these lochs is nearly 43 square miles, or 21 times the area of the lochs.