

east end, as well as here and there about the shore, small areas of marsh occur. Excepting for the marshy areas and a rocky part on the south-west, the shores consist of muddy gravel, and merge imperceptibly into the grassy banks. The water is clear, not peaty, and apparently of a steely grey colour, probably due to the copious deposit of black mud on the bottom, which arises from the rapid decomposition of a very luxuriant aquatic flora. Many of the submersed plants are heavily coated with a deposit of calcium carbonate, and others, particularly *Littorella lacustris*, are overgrown to an extraordinary degree with Diatomaceæ. On the north side there is a large association of *Polygonum amphibium*, which is frequently mixed with *Potamogeton natans*, and a belt of the latter extends along the outside of the *Polygonum* in deeper water. A similar phenomenon also occurs upon the south side. *Potamogeton Zizii* and *P. lucens* are both very abundant, and cover large areas of the bottom to a depth of 10 feet. *Heleocharis acicularis* not only occurs in the water to a depth of 3 feet, but also forms a sward upon the dry shore. A large number of other plants occur here, but Bryophytes, with the exception of a few ordinary marsh mosses, are scarce.

**Kilconquhar Loch** is about two miles north of Elie. It is a very shallow circular loch about half a mile across, and is so completely surrounded with marsh and reed swamp that the water can only be approached at a few places; consequently there is no definite shore. The village of Kilconquhar is situated on the north side of the loch, and the gardens from the adjacent cottages run down to its margin. The ornamental grounds of Elie House, which are wooded or park-like, adjoin and beautify the south side. Upon the east and west sides the loch is surrounded by agricultural land. The bottom of the loch at the north and west sides consists of deep black mud; but at the south and east sides the bottom is less muddy, and in many places is formed of firm sand. Near the shore the depth of water is from 3 to 5 feet, but towards the middle it is somewhat deeper, seldom, however, exceeding 7 feet. The water is clear, but has a stagnant appearance, which may be described as dead, in comparison with the sparkling water of a pellucid highland loch. In consequence of such favourable physical conditions, the whole of the bottom of this loch is more or less overgrown with plants. The marginal swamp vegetation is chiefly composed of associations of the following plants:—*Scirpus lacustris*, *Equisetum limosum*, *Phragmites communis*, *Heleocharis palustris*, *Carex rostrata*, *Hippuris vulgaris*, *Typha latifolia*, *Epilobium hirsutum*, *Menyanthes trifoliata*, *Sparganium ramosum*, and *Phalaris arundinacea*. The plant associations in the water are chiefly of the following species:—*Polygonum amphibium*,