

Meeting of the Sutherland Field Club
at the West Links to inspect sub-
merged Peat moss &c.

The meeting arranged ^{at our} last ~~month~~ ^{meeting} having
had to be postponed, took place in the forenoon
of Saturday the 25th of February last - The tide
was at its lowest when the members reached
the ground, but unfortunately not being a low one
the Peat was not exposed to view -

When I wrote some time ago the notes
regarding this Peat Moss, I formerly read to the
Club, the Moss had been entirely ~~discovered~~ ^{recovered} with
sand and no part of it was to be seen - Lately
however it was found to be again exposed
and was being extensively broken up by the
action of the waves - Large pieces being strewn
along the shore - Among the pieces of Peat
so thrown up there were found two or three
pieces of tree trunks of considerable size which
had evidently been embedded in the moss - These
have been secured and are now in the Museum -
They show the trees to have had trunks of nearly
a foot in diameter - They are very much flattened
as if by superimposed weight -

By the removal of Peat it was seen
that

that the ^{bed} was resting on a bed of gritty sand of a bluish colour mixed with rounded pebbles of a bluish looking granitic rock - On two different occasions, after careful inspection, I satisfied myself that the clay with marine shells referred to in my previous notes occurs above the Peat - On one of these occasions I took away the small section showing the Peat with the clay and shells above, which I showed to the Club last month.

At our meeting on the 24th of February, the Peat not being visible, the attention of the members present was directed to the possibility of finding by the perforation of the beach that the Peat extended backwards towards the shore. With the assistance of a few workmen - two of whom were kindly supplied by Mr. Melville, two perforations were accordingly made at different points up the shore, the highest one being nearly mid way between high and low water mark - The thick bed of Peat was not come upon, in either of these perforations, - but in the lower one, after passing through a bed of clay upwards of a foot in thickness full of the marine shells previously observed in connection with the Peat, a very thin layer of peaty earth was ^{noticed} ~~seen there~~, and ^{then} came gritty blue sand apparently the same as that which I had noticed underlying the

thick peat. In the upper of the two perforations, the thin layer of peaty earth was not noticed, but the bed of clay was passed through, the same as in the lower one, and underlying this was the gritty sand - the result apparently indicates that the peat does not extend in a uniform sheet in any direction, and my observations of last autumn when peat was exposed at various points along the shore for a distance of 3 or four hundred yards confirmed this -

In the two perforations of the Beach I have referred to, the section of the clay bed was well seen - It is, as I have said, ~~about two~~ upwards of a foot in thickness - The upper portion is of a yellowish colour, the lower bluish - I did not observe any marking by way of stratification between the yellow and blue clay, and it occurs to me that the yellow ~~very~~ colour may have been given to the clay by the percolation of water ~~and~~ containing a little oxide of iron. In both the yellow and blue clay, abundance of shells were found, but apparently of two species only - the Cockle, but with the curious appendage to one side which is characteristic I believe of such shells belonging to an earlier age, and a shell which appears to me to be the same as that figured in Lyell's Elements of Geology as Tellina calcarea a shell still of a living species but

now only an inhabitant of the Arctic Regions - These shells ~~were~~ found among the yellow clay were in a highly decomposed state, the material of the shells being as soft as the clay in which they were embedded - On the other hand the shells found among the blue clay were in the highest state of preservation -

An attempt was also made to reach the beds of Peat and clay by a perforation at a low point on the bank fifty or sixty yards from the shore. But after going through soft sand for about four feet, water was reached, preventing further digging and a probe pierced another three or four feet of the same sand without touching anything more solid. If the beds of Peat and clay had continued sloping upwards from the sea at the same angle as they have been observed ^{to slope} where exposed, some indications of their presence should have been found in this perforation -

On breaking up portions of the Peat found strewn along the shore some fine specimens of Nuts were found - These were very like the ordinary Hazel Nut, and being quite smooth differed from the nuts previously observed, which have a beaked appearance - a number of small round seeds were also noticed, and specimens of the Butters

already obtained - I may also notice specimens of moss which had not been turned into peat. Some of this moss is very like the ordinary sphagnum but a species was noticed with a thickish hard stem and round leaves, very like in appearance a small specimen of the Maiden hair spleenwort Fern.

As my attention has been here called to moss, I would note, that about the eastmost point where the clay and peat beds have hitherto been noticed, there is a bed of earthy clay, and ~~at~~ some points of this bed, there is to be found unchanged moss in a series of layers, between layers of a very sandy clay - This would seem to indicate that while the moss was growing, it had either been subjected to periodical inundations, having coverings of sandy silt, or had occasional coverings of a clayey sand blown over it.