

II.

NOTES ON THE CRANNOGS AND LAKE DWELLINGS OF WIGTOWNSHIRE. BY THE REV. GEORGE WILSON, MINISTER OF THE FREE CHURCH AT GLENLUCE.

Machermore is one of the many glacial lakes in Wigtownshire. It lies rather less than 3 miles south-east from Glenluce, to the east of the Portwilliam Road, about $1\frac{1}{4}$ mile from the sea-shore, at an elevation of nearly 200 feet above the sea.

On the Ordnance Survey map it is called Whitefield Loch. But this is a modern name. In the title-deeds of the lands of Machermore, it is called Machermore Loch.¹ In Timothy Pont's map of "The Sherrifdome of Wigtoun wth the Regalitie of Glen-Luze," published in Blaeu's Atlas in 1654, it is called "Macherymoir Loch." This name seems descriptive of its position near the edge of the "*great plain*" called *The Machars*, a brown table-land which stretches away east and south for many miles of peat, moss, and rough moor, gleaming with many lochs, and interrupted by ice-grooved rocks and rounded hills. One of these, called the Knock Fell (in Pont's map Knock Glas), a little more than a mile east of the loch, is the highest hill in Old Luce parish, being 573 feet above the sea.² It is surrounded near the summit by the traces of an ancient wall of fortification.

The loch is about 1000 yards long from east to west, and about 450 yards wide. Some low ground on the south and west is liable to floods,

¹ I was told this by the late John Adair, Esq. of Balkail, who sold Machermore to the Earl of Stair. The Adairs of Gennoch owned the lands of Auchenmalg and Machermore.

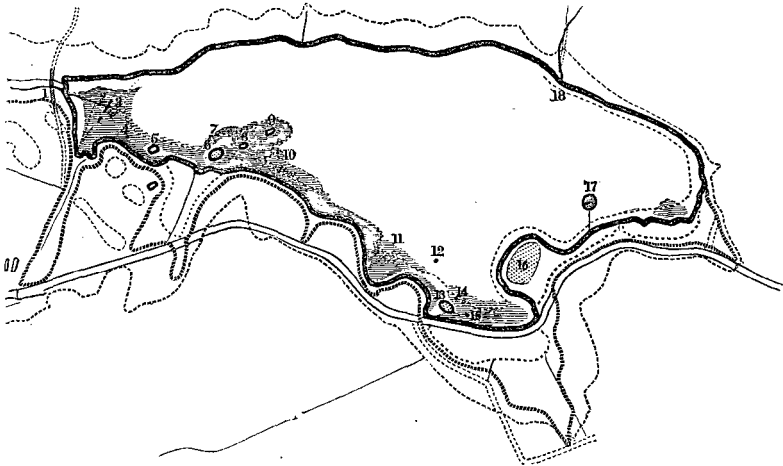
² In the *one*-inch Ordnance Survey map it is wrongly entered as 513 feet.

and an ancient shore line shows that the water once covered a much larger space than at present. On the south and west there is much loch peat extending under the water. The rest of the beach and the bottom of the shallower parts consist of rough angular stones of the glacial drift. In the deeper parts, the bottom is soft when probed with an oar. In a few places the depth is fully 20 feet. There are large pike and loch trout. In some parts of the loch there are indications of strong springs: but the chief feeder is Craigenveoch Burn, which drains Loch Robbin, and enters at the north-east angle. The water is so dark with peat that, when more than a yard deep, the bottom is not well seen. On the north, it is bounded by the rocky moors of Barnsallzie and Craigenveoch; on the east, by the wooded Fell of Machermore, which rises rapidly to about 300 feet; on the west, by Fordhouse Fields; and on the south, by the road to Machermore and Culroy. On the strip of Whitefield Farm, between this road and the loch, trees have been planted, and I have to call attention to its little promontories and bays. The level of the loch varies according to the season, and is now affected by a sluice. The difference between the lowest and the flood level is about 5 feet.

About twenty years ago, in examining the mollusca of the loch, I was much puzzled by the appearance of some of the trees lying in the bay at Whitefield road; but the water was not low enough to let me reach them. In February 1867, Dr Stuart sent me a copy of his paper on our Scottish Crannogs, with a note stating that some of them are in this district; but I could do nothing without a boat.

Last summer, James Faed, Esq., who had purchased Craigenveoch, discovered that Dorman's Island is artificial, and had a short notice of the fact inserted in the "Galloway Gazette." On August 21, I had the pleasure of examining it along with him. On September 19, I took Dr Stuart to see it, and on that occasion, on landing him at the stone mound near Tree Island, we had the pleasure of observing many beams of wood lying near the margin. After he left us I suggested to Mr Faed that, as these beams were laid in a space sheltered from the westerly winds by the low water promontory at Tree Island, we should examine the similarly sheltered bay at Whitefield road. On doing so, we found similar beams there. On the 25th September, with the kind assistance of Mr Faed and Mr Miller, road surveyor, I laid down a base line along

this part of the shore ; and on the 13th October, assisted by D. R. Irvine, Esq., of the Geological Survey, I completed the base line and other measurements, and marked in the beams of wood on a chart. Unhappily, a strong ripple on the water made it impossible to lay down the position of any in the water except those near the margin, and ere I could return, the water was too high. On the 23d November, I found it up to the flood line. The accompanying map is constructed from these plans and measurements, and the 6-inch Ordnance Survey map. The outer



Plan of Machermore Loch. Scale, 6 inches to one mile.

dotted line is the 200 feet contour line ; the darker dotted line the ancient boundary of the loch ; the black line the boundary of the loch in the 6-inch Survey map, and the dotted line within it indicates the low-water mark of 1871. The figures are referred to in their order in the following notes, beginning at the west end.

No. 1 is an ancient causeway, on which an old line of road has crossed the hollow through which the present outlet is cut. It is formed of large rough stones, and is 220 feet long, with an average breadth of 6

The section shows it to be a natural mound of glacial drift. Where the mound thrown out of the ditch was peat a winter flood washed it away, and masses of it still lie on the southern beach.

Nos. 6, 8, and 9 mark three small islands, of which 8 and 9 are barely above water, and form, in dry seasons, a peninsula of coarse, angular gravel. At two places the peat comes in, and digging is necessary to show whether it extends under the shingle.

No. 6 has been planted, and I shall designate it "*Tree Island*." It seems to be a true *crannog*.¹ It measures 70 feet by 50 feet, the greater axis lying north-east, and slopes rapidly, especially at the sides, and rises about 10 feet above the summer level of the loch. It is crowned by an old cairn, covered with green moss 6 or 8 inches deep. At the south-west part three beams of wood are laid in regular order, radiating from the cairn down the sloping beach. Farther out are two beams, apparently counterchecked flush; but the cross piece, being fir, is sorely decayed. To the north, at figure 7, there are many pieces of wood lying on the peat. Several are birch, with the bark on. In some places the wood has decayed, and its place is marked by the white clay under the peat, which is here quite thin. Many angular stones, some of them pretty large, lie scattered on the peat, and it is difficult to understand how they came there. I call this "*Tree Island wood-work*."

No. 10 is a circular mound of stones on the peat, 16 feet by 15 feet across, and above 3 feet high, with at least three short horizontal beams of wood laid on it, as marked on the map. The large stones atop seem to have been disturbed. I suppose this to be like the stone mounds found *under water* in the Swiss lakes, and called *Steinberg* or *Mont* by the Swiss archæologists.

The space beside No. 10, extending about 320 feet along the shore, and reaching into the water at least to a distance of from 100 to 140 feet from the margin, contains many pieces of wood, some of them large. The nearest to the margin is about 15 feet into the water. In two instances, above the low-water line, a pair of cross beams are counter-

¹ I use this Irish term for convenience, without implying that it was ever used in Galloway. But I may mention that Pont's map calls the Black Loch of Challoglas, 4 miles off in Mochrum, Loch *Chrannochy*. It contains several rocky islets, of which Pont marks three.

checked flush. In the water one was seen notched into the side of another at an acute angle. Near the stone mound lies a mass about 5 feet by 3 feet, formed of several pieces joined together.

Over this whole space the bottom is peat, resting on a white, adhesive, marly-looking clay, which appears through many irregular holes in the peat. I observed no shells in it. The peat is full of branches, or of holes out of which they have rotted away. Where the branches have been of birch, the shining bark often stands out like tubes, while the wood has wasted away.

The same remarks apply to the space marked 11, which I shall designate Whitefield Bay. This bottom of peat and clay is so soft that wading is impossible, and the oar can be thrust down 3 or 4 feet till it strikes a hard bottom.

At Whitefield Bay, for a space 240 feet long by from 70 to about 100 feet broad, the same kind of thing is found as at Nos. 7 and 10. Here also some of the beams are counterchecked flush. About 80 feet from the west end I noted three trees laid in a triangle, the longest being a fir 30 feet long. Has any example of such wood work been observed on the *shore* of any other lake in Great Britain or Ireland? It is something quite different from the crannogs, which are common in Galloway as elsewhere, and appears more like some of the works in the Swiss lakes. No *roots* have been observed among these trees and branches.

No. 12 is another *stone mound*, 18 or 20 feet in diameter. Mr Faed found it midway between the shore lines at 11 and 16, with a depth of 1 foot of water over the flat top, and of 8 feet all round it. I have not seen it yet.

No. 13 is apparently a small crannog; but I have not yet examined it, or seen any of the stakes or beams of wood which that distinctive name implies. It is 37 feet by 27 feet, the greater axis lying slightly south of east. It is about a yard high, and is covered with rank green grass. Except on the west, it is surrounded by peat. Between it and the road are the stumps of some oak trees, which are apparently *in situ*. If they grew there, the level of the water must have been lower than it is now. It may be called *little crannog*.

No. 14 marks two circular mounds of small gravel and sand, about 40 feet north of this crannog, raised about a foot above the surrounding peat

bottom, and conspicuous, when the water is low, by their thick covering of *Lobelia Dortmanna*. This pretty flower grows plentifully over the spaces above described. One of these mounds is 9 feet, the other 12 feet in diameter. I can think of no natural cause which could lay them down in so regular a form. Near them were three or four stakes of oak, neatly pointed.

At No. 15 are two patches, one of which is 10 feet in diameter, of coarse, irregular stones, laid on the soft peat, like a sort of floor, the other a large, quite irregular patch of similar stones, lying on soft peat. There are also scattered stones.

No. 16 is now planted with trees, and is only an island during floods. Its regular outline and position make it worthy of careful examination. It appears to be a natural promontory. Should wood work be found in it, the name might be "*Whitefield* crannog."

No. 17 is called Dorman's Island, from a man said to have been drowned near it. The large plan (on a scale of 1 inch to 60 inches) explains the details of its structure so far as yet made out. When the loch is full, it is about 60 feet by 50 feet, the greater axis lying east and west. When the water was lowest, in October, the greater axis was north and south, the part laid dry measuring 104 feet by 74 feet. It thus appears that it slopes much more gradually to the north. The water deepens as you recede from the southern shore, and the stones, of which the island seems to be formed, spread out under the water to a limit, marked pretty nearly by the darker line.

Beyond this, in the deeper water, a soft bottom is felt by sounding with an oar. The base probably measures 125 feet by 90 feet. The stones are rough and angular, many of them large. A paved ford, 56 feet long and about 3 feet wide, formed by a double row of large uneven stones laid close together, connects the crannog with the southern low water line. For about other 40 feet up the sloping shingle beach runs a road about 8 feet wide, roughly paved or beaten, and becoming gradually indistinct. At the east side of the ford, at low water line, is the top of an oak stake, which is exactly in line with two large oak stakes, standing erect on the crannog, 2 feet west of the north and south axis;—one, about 8 feet high, is 34 feet from the south end; and the other, about 6 feet high, is 39 feet from the north end. Boys in the neighbourhood have waded to the island

by this ford in dry weather. On the higher part the rough stones of the crannog are quite hidden by low willow bushes, rank grass, and *Lythrum Salicaria*. There is a sort of annular mound of stones surrounding the margin corresponding to the darker line on the plan, similarly hidden, but is laid down from memory. At the north end, there is a piece of rough pavement about 12 feet by 8 feet. An irregular piece of similar pavement is shown to the south-west. It is in this part of the crannog that most of the oak beams and stakes have been observed. But Mr Faed found three or four stakes at the south end, by turning over stones: one of these is marked on the plan. I have seen more than I have inserted in it. Those entered in it are drawn to scale, and pretty nearly in correct place.

Several of the beams show mortise holes neatly cut, some of them about 7 inches square. In some of the smaller ones pieces of the broken mortises still stand upright. Two or three short stakes were pulled up. They show at first a glairy covering of a golden yellow. When this is washed off the small axe marks are found quite fresh, and the grain of the wood is beautifully distinct. On exposure to the air, the buried part tends to split up into fibres. Only oak wood has been found here. At the other places we have noticed besides oak, the fir, ash, birch, alder, hazel, and willow. Among the angular stones there are a number of water-rolled stones and white quartz pebbles, which have been brought from the sea shore. Some of the granite stones are spherical, and cracked as by heat. Are they *boiling stones*?

Two or three sea-rolled stones were seen on the south shore also, and two or three flakes of flint.

No digging has yet been attempted at any of the places described. It seemed best, in the limited time at my disposal, to secure measurements and note appearances when the water was so low.

Mr Faed has made a road to his cottage along the north-east shore, about the ancient water line. Under about two feet of soil and subsoil he found burnt-looking branches. About the north-east shore he also has found a hard mass of iron-looking stone, with a broken pebble sticking in a hole through it. Some stakes have been seen among the stones on the north beach.

The flint javelin head, now presented by me to the Society's Museum,

was found, some years ago, by a boy, somewhere on the southern shore, among the stones.¹

I do not think all the antiquities of this interesting loch have been observed yet. The keen eyes of Mr Faed's boys detected several of those above noticed; but some parts of the loch have not yet been closely examined.

On 24th November the loch was up to flood line. Tree island was about 5 feet above water. Dorman's island showed only the tops of the bushes. I examined carefully the part of Barnsallzie Moor near the north shore, and found ten or twelve cairns, so old that the stones are almost hidden by heather and peaty turf, and at least one foundation of an ancient circular dwelling. They are opposite Tree island, and are from 8 to 15 feet across and 2 to 3 feet high. In a marshy hollow is an annular mound of turf and stone, 3 feet high, 4 feet broad, outside diameter 36 feet, the entrance 25° south of east, with an oblong heap opposite the entrance, and three small cairns on the west and north-west. These may be works of the lake dwellers. There was an old cairn of no great size behind Mr Faed's cottage. Some have been dilapidated to build dykes. About quarter of a mile south-west of the Loch Robbin, in a field on Machermore, lying between the Loch of Machermore and the Knoch Fell, is a large mound, covered with smooth green turf, measuring from north to south 80 feet, and from east to west 46 feet. South slope, 18 feet; north slope, 25 feet; east slope, 12 feet; west slope, 10 feet. The height is about 12 feet. Some stones about the top were put there by the present tenant of Machermore. There are many cairns on Craigenveoch Fell, and some large ones to the south-east of the loch, but none of them so close to it as those just described.

Pont's map marks some of the Wigtownshire crannogs as *homesteads*. I think some of them have probably been used up to a comparatively modern period.

The following are a few hasty notes of other lochs with artificial works in them:—

¹ As this sheet passes through the press, I may note that in May 1872 I found on the shore of Whitefield Bay a quartz pebble, which had been used as a hammer-stone. It is now in the Museum.

IN OLD LUCE PARISH.

1. *Barnsallzie Loch*, about 750 yards west from Machermore Loch. Above forty years ago this small loch was drained almost dry. On the west side a double row of parallel stakes was found mortised into horizontal beams at bottom and top. Two hammers of granite were found, but have been lost.

2. *Barlochhart Loch*, $\frac{3}{4}$ of a mile south-east from Glenluce.—It is little more than a furlong across; but I found, among other traces of wood work on the shore an oak plank, 10 feet long, 9 inches broad, and 3 or 4 inches thick, the under side in its natural state, the upper dressed flat, with the axe marks quite distinct. A small island in it is artificial. There are large stones; but I saw no beams on it. Local tradition says there was a castle in the middle of this loch.

3. *Loch Robbin* (in Pont's map Loch Ribbon), which is less than $\frac{3}{4}$ of a mile north-east of Machermore Loch, and drains into it. Mr Faed thinks it contains a crannog. I am doubtful. As it is near the Knock fort, it must be examined again.

4. *Barhapple Loch*, 4 miles east of Glenluce, close to the coach road.—James M'Culloch, one of my deacons, told me that, about the year 1842, in cutting peat, about 40 yards from the west side of this loch, he came on a circle of stakes (about a dozen), from the thickness of the arm to that of the leg, and about 5 feet long, the heads at least 2 feet below the surface. The stakes were of hazel, pointed by four axe cuts, $3\frac{1}{2}$ to 4 inches broad, and some of them 5 inches long. The circle was cut away at two times, and was at least 5 feet in diameter; coarse branches were twisted among the stakes like wicker-work. No trace of clay.

IN MOCHRUM PARISH.

5. *Loch Weyoch*, 7 miles south-east from Glenluce.—At the north-east part I noticed much wood, apparently in artificial order, but in a mixture of peat and water on which only a snipe could walk.

6. *Fell Loch*, above $\frac{1}{2}$ a mile south of Weyoch.—Pont calls it *Dyrhynwen*. On the east shore, opposite *Fern* island, I found an oak in the peat, with an axe mark. My companion waded to the island and reported

the remains of a paved ford for 20 or 25 feet next the island. He saw rock *in situ*.

7: *Mochrum Loch*.—On *Long Island* the Survey map marks three rectangular ruins. The stone foundations are much hidden by rank vegetation. Two of them lie from north-west to south-east, the third has the end to the south-west. Possibly one or other may have been a chapel. We observed a very old circular heap of stones, not marked in the 6-inch Survey map.

IN KIRKOWAN PARISH.

8. *Loch Heron*.—Mr Faed examined its two islands, and found them artificial. A large stone, thrown on one of them, shook it at the opposite end. A crow bar, thrust down among the stones, got into a soft mass, and would have sunk, if not firmly held.

IN INCH PARISH.

9. *Loch Krindil*, commonly called the *Black Loch*.—I suppose Mr Dalrymple has reported on its crannog. The island in the *White Loch* has, I suppose, given its name to the parish. Pont's map marks it as a homestead.