PRELIMINARY NOTE ON SOME EXCAVATIONS AT DUNAGOIL FORT AND CAVE.

By J. N. Marshall, M.D.

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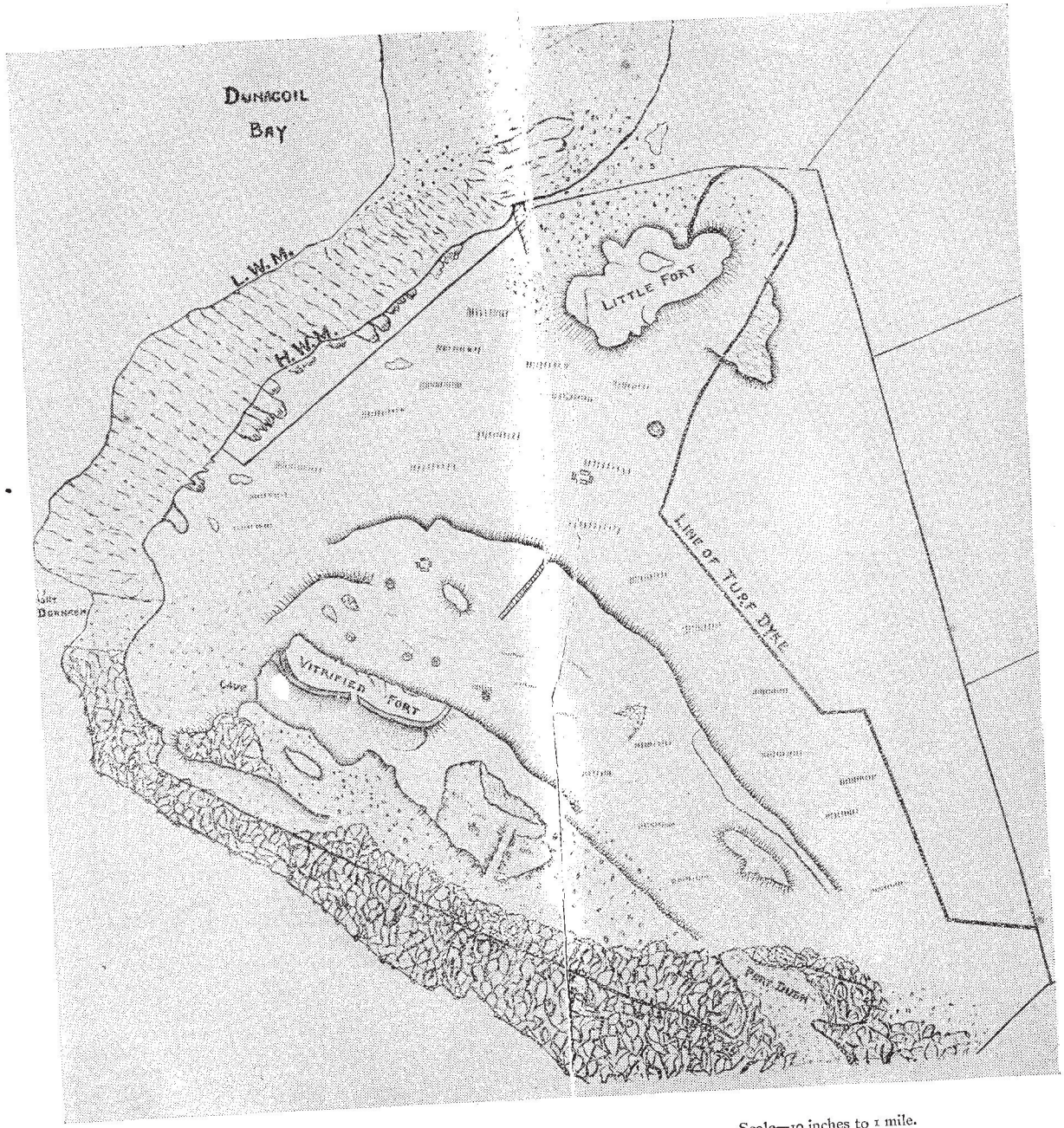
The little peninsula named Dunagoil at the South end of the island of Bute is, and has for a long time been known to have considerable archaeological interest. A cave, the existence of which was well known, had never been systematically explored. I was aware of a deposit of shells there, but not of their significance until I took Mr Ludovic Mann to see them. He at once recognised that the deposit was of the nature of a kitchen midden, and a little digging showed that there were bones among the shells The subject seemed to promise so much interest that I communicated with Lord Bute, who, after seeing the place for himself, arranged that Mr Beckett, a man skilled in excavating under the direction of Mr Mann, should begin digging operations as soon as convenient. This was done in the late Autumn of 1913, with the co-operation of Mr Gardner, curator of the Museum, and the results of that and of a later excavation of the fort in 1914, have considerably advanced our knowledge of the archaeology of this site. As a good deal of work remains to be done, this communication must be regarded merely as a preliminary report.

The name Dunagoil is Celtic in origin and means "the stranger's fort," or according to the Rev. Mr Dewar, "the stranger's port." The Rev. Mr Thorburn, minister of the Parish of Kingarth, at the end of the eighteenth century, writing in the old Statistical Account of Scotland mentions the fact that, locally, the place was called the Danish Fort, but he opines that the people who occupied it were not Danes but natives. It is difficult however to get away from the fact of the name, which corresponds to similar names in other parts of the country, such as Donegal, in Ireland. Both Blain and Henderson refer at some length in their histories of Bute to



Plan of Forts at Dunagoil, by Mr Duncan Dewar.

Scale—19 inches to 1 mile.

Dunagoil, but without throwing any light on the sort of people who inhabited the place.

Blain says: "Considering the extensive stronghold here, and other circumstances of this division of Kingarth, it can admit of little doubt that a town of the aborigines and their successors stood during several ages at Dun-na-Ghaoil. Perhaps that was the inductive cause why St. Blane erected his church in the immediate neighbourhood—a situation ill-adapted for the conveniency of by far the most extensive part of the parish in point of territory. The inhabitants here had the accommodation of a smooth bay on one side and at a small distance on the other, a small sheltered creek —Duport, at both of which places their currachs could be drawn up and secured."

Proceeding from the high road towards the peninsula of Dunagoil we come first upon an old turf-dyke. Within the dyke the land has remained uncultivated for many years. Near the foot of the first hillock are three or four large earth fast stones set on edge, which seem to be a remnant of a larger number which may have offered a first line of defence of the little fort. On one of the stones is a round depression which Mr Mann thinks may be a cup-mark similar to those found on rocks about Argyllshire. The first hillock or little fort runs north-east and south-west or at nearly a right angle to the ridge on which the large fort is placed, its highest point being towards the south-west. For the plan I am indebted to Mr Duncan Dewar who took a good deal of trouble and prepared a careful survey of the whole place. This hillock offers an irregular surface with numerous small plateaux having precipitous or steeply sloping sides. These latter are all protected by ruined walls composed mostly of rounded stones, showing no signs of vitrifaction.

The soil at the top of this fort is of a character similar to that found in ancient habitations. It is rich and loamy. Only slight digging was undertaken here, but what was done showed evidence of occupation of probably similar date to the other places. The various hillocks at Dunagoil are composed of igneous rock, and this extends as far as the seashore on the west, where there

are fine basaltic columns. To the north, however, in Dunagoil Bay, forming the shore, the rock is conglomerate. There is a little out crop of conglomerate also to the south of the little fort, showing marks of having been worn by water, and in the soil by its side there is what looks like the remains of a shell deposit, *i.e.*— shells of molluses which have been used for food. On the slope of the hill looking towards Dunagoil Bay there is a large mass of white sandstone from which pieces have been split off by some tool but at what date it would be difficult to say.

Proceeding towards the west we come to a bare hill rising to a height of over a hundred feet, on which there is no sign of habitation. Beyond this hill, still further to the west, is a little valley, bounded on the north, or Dunagoil Bay side by a steep slope. In the valley are at least two cists and several mounds, two of which were opened by Mr Blain and in which he records having found bones. Beyond this valley, still going west, we come to the precipitous ridge on which the vitrified fort is placed. It is situated at the highest point of a ridge of porphrytic trap running in a direction north-west, the highest point being 100 feet above sea level, and having quite precipitous sides towards the east or landward side and a steep rocky slope to the west or seaward side. It is on the latter, the sea side, that the vitrified wall is constructed on the edge of the rocky slope; it extends for a distance of 300 feet. The vitrifaction is best seen at the extreme north-west corner where a small part of the wall is still standing. The rest of the wall has for the most part tumbled down, and masses of vitrified rock are to be found lying on the slope as far as the sea beach.

The wall is interrupted on the south side about mid-way in its length by a gap 8 feet wide now filled up with loose stones; this gap, lined on either side by a wall, suggests an entrance to the fort, its outlet being to a steep slope at the foot of which is a rather precipitous wall of cliff overhanging the sea-beach. At one part of the cliff there is a chimney or cleft in the rock, up or down which an expert climber might make his way; this leads directly down to the mouth of the cave. Later on I shall endeavour to show that the fort and the cave

were occupied by the same people, at least at one time, and here we have at any rate a sort of road which could, if necessary, be made easier by a ladder.

At its south-eastern extremity the ridge on which the fort is built falls away and at present there is a path which leads down to the plain below. So far there is nothing new in the above description except perhaps the definition of the double wall at the entrance on the south side. Since the time of Blain many competent observers have seen and described the fort, among whom may be included our esteemed member, Dr. Hewison. Much discussion has taken place concerning the vitrifaction of the walls, but into that subject I do not mean to enter now. It seems evident, however, that there is a concensus of opinion that the vitrifaction of the rocks was carried out intentionally and methodically, with the object of strengthening the walls, though it is possible that the art was accidentally discovered when beacon fires were lit and the rocks underlying the beacon became fused.

The excavations of last July revealed several things which are new. A trench fourteen feet long, six feet wide, and four feet deep, dug in the middle of the fort and near the end, showed the soil to be of a rich dark-brown loam. Numerous interesting relics were found, the description of which Mr Ludovic Mann has kindly undertaken. Besides these there were scattered through-out the soil a quantity of bones and shells quite similar in character to those found in greater quantity in the cave below, and evidently the remains of the food of the inhabitants, otherwise a kitchen-midden. Some small seeds collected in the depth of the soil were sent to Dr. Ritchie and were identified by him as those of the burdock and the thistle. Both of these plants are conspicuous occupants of the ground of the fort at the present time. At the east side of the fort a deep excavation was made, and here another transverse wall of squared stones, was discovered similar to the one on the west side. It seemed to form an entrance which led to a cleft in the face of the cliff not unlike the one above the cave. It was noticed in defining the wall that some isolated lumps of vitrified rock were built into it, which fact would suggest that this

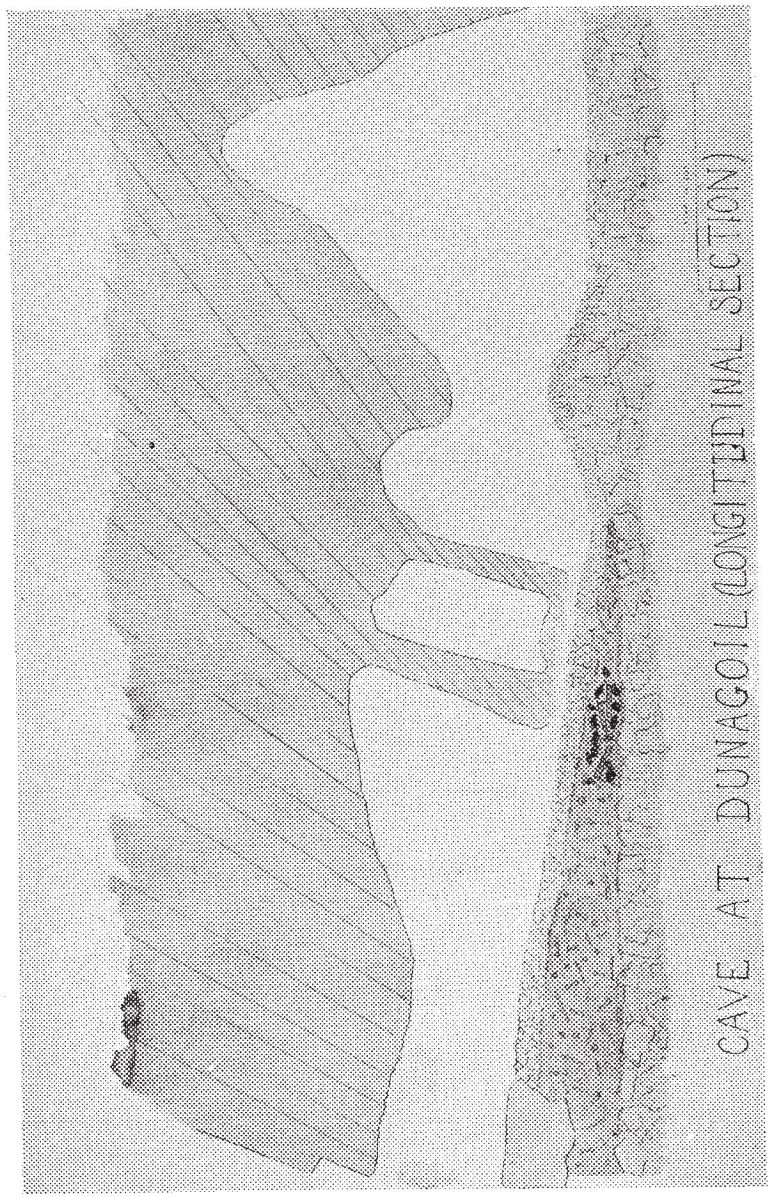
wall was built at a later date than the vitrified one. In this excavation were found relics and also the same deposit of bones and shells as in the trench.

The cave at Dunagoil is mentioned in most books on Bute and is marked on the Ordnance Survey map, but beyond an account of its measurements, little has hitherto been written about it. It is situated immediately under and to the west of the highest point of the vitrified wall.

There seems little doubt that it has been hollowed out by the action of the sea. Its mouth is about 20 feet above the present sea level, and is near the level of the 25 foot raised beach, well marked in many places in the neighbourhood. At the same level round this part of the coast are smaller caverns indicating the action of the sea. Furthermore within the cave there is a stack or pillar which could hardly have been formed in any other way than by the action of water.

The mouth of the cave was, until lately, partly filled up by a large rock which had evidently fallen from the cliff above. This was rolled down a few feet in the process of excavation. The mouth is now about five feet in width and seven feet in height. From the entrance, the roof after slightly declining rises gradually to a height of ten feet at a distance of 21 feet from the entrance, and here there is a sloping pillar detached for the greater part of its length from the walls of the cave. Further in, the roof falls but rises again at the extremity of the cave so as to form a dome nearly 20 feet high. The total length of the cave is 66½ feet, there being a slight bifurcation at the extremity of the passage. In the vestibule some moisture is apparent on the roof, being leakage through the rock, but further in both roof and floor are quite dry.

The floor is composed mostly of talus, fragments of rock fallen from the roof, but among those there are a considerable number of water-worn stones, similar to what are present on the beach. These water-worn stones ase found as far as the extremity of the cave. The stones are all of rather large size as are also those on the beach.



Diagrammatic Sketch by Miss S. Marshall.

This superficial layer is eight to twelve inches in depth. Beneath it, at the entrance and outer part of the cave was found the deposit which has led to this investigation taking place.

It is a deposit consisting of multitudes of shells, all adult, belonging to about half a dozen species, all edible and many fragments of bones of various species of animals, many of the bones being split as if to extract the marrow. These shells and bones were lying in a matrix of greasy pultaceous earth, with here and there some dark carbonaceous material. At the entrance to the cave the deposit was four to six feet in thickness but it rapidly got thinner and ceased altogether at a distance of about 25 feet from the mouth of the cave. It cannot be said that any definite layers were made out in the deposit, though at some place the carbonaceous material was so abundant as almost to form a layer. This was especially marked at a distance of 20 feet from the entrance where also some large slabs of sandstone were found which were presumed to be hearth-stones. A great part of the deposit was carefully picked over by Mr Gardner and Mr Beckett and some very interesting relics were found, the description of which will be given to you by our friend, Mr Ludovic Mann, who is an eminent authority in these things. The bones also have been carefully examined and identified by Dr. Ritchie of the Royal Scottish Museum, and he has been kind enough to come here to-night to describe them.

Examination was made for a lower layer of possibly older date but so far nothing of that sort has been found. There is merely rock in large masses with ordinary soil between.

The juxtaposition of the fort and cave is interesting and is certainly more than a mere coincidence. In the trenches dug in the fort the same kind of shells and bones are found and to some extent similar relics. There is no doubt that at one time at any rate the same people used both fort and cave. On the question of who these people were and against whom they built their defences it would be perhaps premature at this stage of

the investigation to say, and in any case our friends who follow me are better qualified to offer an opinion than I am.

From comparison with other caves and forts which have been investigated by such competent authorities as Boyd Dawkins, Lord Avebury, and Dr. Munro, it would seem that the people probably belonged to what is called the Romano-British period. They lived partly by hunting and partly by keeping domestic animals. They tilled the ground, they fished, they possessed the art of weaving, they made many useful tools from stone and from the bones of animals, they made ornaments from bronze and from jet and probably used iron, and they made pottery of a sort.

Hill forts are widely distributed over Europe, and they are especially common on the west coast of Scotland. Comparatively few have been excavated, which makes the investigation here all the more interesting. One interesting investigation was made by Dr. Christison and others at the fort of Dunadd in the Poltalloch estate in 1904. According to Dr. Christison: "This was a place of unusual importance because of its reputation as the capital of Dalriada, the primitive kingdom of the Scots, and because it is one of the very few hill forts mentioned in the earliest annals of our country."

An account of the excavation will be found in the Proceedings of the Society of Antiquaries for 1904, and a comparison of our own fort will be found extremely interesting. Many of the relics are quite similar, but on the whole the people of Dunadd seem to have enjoyed a higher degree of civilisation.

When we come to compare our cave at Dunagoil with others which have been examined we find that the literature of the subject is very extensive.

With such famous caves as Aurignac, Cro Magnon, and Moustier in France, ours has nothing in common. These were inhabited by Paleolithic man in the Pleistocene age, flint weapons being found associated with the bones of the cave-lion, the woolly rhinoceros, the mammoth, and other extinct animals, and what

From Drawing by Miss S. Marshall—Looking S.W.

lends an additional interest to those caves is the beautiful drawings to be found in some of them. We have no remains like those.

In England there are a few caves which contain Paleolithic remains similar to those of France but which also have a deposit similar to that which we have. One such is the Victoria Cave in Yorkshire which is hollowed out of the limestone at a height of 1450 feet above sea level. The most superficial layer on the floor of this cave consists of two feet of angular blocks of limestone, and beneath this is a deposit containing bones and implements quite similar to our own, but in addition, some Roman coins are to be found. The period is called by Boyd Dawkins Romano-Celtic and the date is fixed at about the fifth century.

A somewhat similar cave at Wookey Hole, near Wells, I had the opportunity quite lately of examining. It also like the Victoria Cave has ancient deposits containing bones of pleistocene animals, but recently Mr Balch has examined and published in book form an account of a more superficial layer where the bones and implements are also very similar to those at Dunagoil.

In Scotland I shall just refer to two caves which offer interesting comparison with our own. The Macarthur Cave at Oban was examined in 1896 by Dr. Joseph Anderson and others. Bones and implements were found which however indicate a much earlier occupation than those in our cave. An interesting point about this case is that it is on the level of the 25 foot raised beach and the deposit of bones and shells is interrupted by a layer of fine clean gravel, the supposition being that at the time of an unusual storm the cave was flooded by the sea which deposited this layer of gravel.

Borness Cave in Kirkcudbrightshire was examined and reported on in 1876 by Corrie, Clarke, and Hunt. It is on the sea coast, 19 feet above sea level, and, what is especially interesting to us, it is surmounted by a hill fort. The deposit is also quite similar to what we have at Dunagoil.