World Archaeological Congress 4

University of Cape Town

10th - 14th January 1999

Symposium: A rock and a hard place: perspectives on the archaeology of St Kilda, Scotland

AN INTRODUCTION TO THE LATER SETTLEMENT HISTORY OF ST. KILDA

Alex Morrison

The archipelago of St. Kilda lies about 40 miles (64 kilometres) to the west of the Outer Hebrides and consists of the main island of Hirta, the smaller islands of Soay and Boreray, and the rock stacks of Stac an Armin, Stac Lee and Levenish, plus many smaller islets and stacks. Because of the significant natural and cultural heritage features the islands were placed on the United Nations World Heritage list in 1987. Archaeological evidence suggests an original occupation as early as the Neolithic/Bronze Age, but without implying continuity from this period. There are still great gaps in the settlement evidence. The sequence is known mainly from the field work and excavation of the past twenty years and the discoveries made by the minister of the small church on the island during re-organisation of arable holdings and dwelling locations in the 1830s. Because of the location of the islands, there has always been difficulty of access. There is also a scarcity of raw materials taken for granted elsewhere (e.g. clays, wood, ores, good quality lithic sources and wild animal resources).

Cottam (1986, 60-61) suggests that increasing population and pressure on resources in the Village Bay area caused the establishment of the settlements in Gleann Mor on the northern side of the island during the 6th-8th centuries AD. These Gleann Mor settlements were abandoned by about 1400, due to disease (Black Death), climatic deterioration or economic circumstances, since which time there has been no further permanent occupation of the area apart from

temporary occupation as shieling grounds and bothies. At the moment this is only a working theory, and it relies very much on non-tested evidence.

The how and when of the coming of Christianity to the islands is a great problem. There are legends and stories of St. Brendan and other monkish travellers, but the evidence is tenuous and the question remains of whether or not there was a resident population to Christianise. Two incised cross stones of possible Early Christian date have been discovered on St. Kilda, but out of context, one built into the front wall of House No. 16 at the west end of the village street and the other forming a roof slab of cleit 74 (Harman 1977).

There is some evidence that there may have been a Norse presence on the islands, if only temporary. Many of the place-names are of obvious Norse origin, and two possible 10th century Viking brooches were discovered in a grave in the early 19th century, but the location of the burial is not known. These were types worn by women, indicating, according to David Wilson "... wives and daughters who moved to Scotland with their Scandinavian menfolk as settlers". One was still in the Andersonian Museum in Glasgow and was drawn by the Danish antiquary J. J. A. Worsaae when he visited the city in 1846-47, but both brooches are now lost.

Rather more is known about the occupation of the last few centuries, down to the abandonment of the islands in 1930, but care is needed in interpreting the later historical accounts. It is necessary, from the outset, to be aware of the pitfalls involved in using published sources which are occasionally a rehash of past historical descriptions, or even of hearsay which, with enough repetition, becomes accepted as fact. This has happened on a number of occasions with pre-evacuation narratives about life and 'past history' on the island. Our awareness of these has been aided by the publication of lists of books and other publications on St. Kilda in which some guidance is given as to the the authenticity of the accounts or whether the writers had, in fact, ever actually visited the islands. The recent authoritative account of the islands by Mary Harman (1997) has a Bibliography which indicates if and when the writers had visited St. Kilda, but emphasising that with regard to the dates of visits: "In some cases these are significantly different from the date of publication".

By the 17th century St. Kilda was owned by the MacLeods of Skye. The MacLeod steward Martin Martin visited St. Kilda in 1697 and wrote the first detailed description of the island and its people. At this time the economy

depended mainly on bird-catching - gannets, puffins, etc., but, most importantly, the fulmar, as a source of food, oil and feathers. Cultivation of oats and barley was secondary to bird-catching. The annual rental was paid by the export of fulmar oil, feathers and tweed.

It could be said that the first mention of the archaeology of St. Kilda was by Martin in 1697, with his references to the three 'chappels' of Christ Chappel ('Christ Church' on his map), St. Columba and St. Brianan. These were described by Martin as "similarly built", "covered and thatched after the same manner with their houses" and "having churchyards belonging to them". There are no traces of St. Columba or St. Brianan on the ground at the moment in the areas suggested by Martin's description, and we cannot be sure if all three were in use at the same time, or if 'St. Columba' and 'St. Brianan' were disused in 1697. It is possible that the Christ Church was the source of the two incised cross stones of possible Early Christian date already mentioned.

THE VILLAGE AREA

The area just above and below the Village head dyke is very steep, rough, stony ground with a tangle of remains that begin to separate out only after several visits. The closer one looks the more one notices remains that are not obvious to the passing glance. Apart from traces of terraces, enclosures and turf-covered building foundations, there are cleits (the dry-stone built, turf-roofed structures numbering about 1200 on the main island alone, which were used as cool, dry storage places for dead birds, climbing ropes, peats, etc.), some of which appear to be built on low mounds, remains of structures that resemble the 'boat-shapes' of An Lag and traces of what might have been circular hut foundations and related platforms.

A number of commentators mention the older village up here. The Rev. Kenneth McAulay, who visited the islands in 1758 noted that the well, Tobar Childa, was near the heart of the village and described the houses as being "...built in two rows, abundantly regular and facing one another, with a tolerable causeway in the middle, which they call the street" (Macaulay 1764, 42). There are other traces on the hillside of what might be termed tracks rather than the somewhat grandiose term 'causeway', and these have been more recently suggested as "... the remains of pre-1830 head dykes, narrow terraces quarried for stone and levelled off, the head dykes being built along their front edges and subsequently abandoned and/or robbed out" (Fleming 1995, 33). The terrace remains have

also been noted by Harman as possibly "...the upslope side of former dykes" (Harman 1997, 79 and Fig. 38).

But there is no longer any trace of an ordered pattern among the remains in this area and, with underlying rock lying so close to the surface, it is obvious that this part of the Village will never yield any great depth of stratified deposits. Despite this, there is evidence scattered around on the surface of occupation that surely pre-dates even the medieval settlement. Boyd (Williamson & Boyd 1960) noted differences among the cleit structures in the vicinity - e.g. soot-staining on some internal walls indicating a function other than storage. "There can be no doubt that the fascinating group of cleitan in the neighbourhood of Tobar Childa represents all that is left of the medieval village, for there are features which show that many of the structures were built in the first place as dwellings." Was the rough 'street pattern' seen by Macaulay in 1758, in fact secondary to an earlier, possibly medieval, and much more irregular clustering of settlement? Could that 'street pattern' have disappeared with the re-use of stones for building the black houses in Mackenzie's 1830s relocation of settlement?

Other elements which were assumed to be the 'medieval village' are there, including Tobar Childa and the 'Bull's House', but they are at present inextricably mixed with remains of even earlier and possibly also later periods. The 'Bull's House' is an old structure and Calum Mor's House has been described as one of the buildings of the medieval settlement, with even a suggestion that it was built about AD 600! The structure is archaic; its corbelled roofing and general shape would not be out of place covered with a stone cairn as the burial chamber of a chambered cairn. It may well have been built at some time in the past 1500 years, but it embodies a building tradition that is very much older.

Martin Martin had put the population of St. Kilda at about 180 in 1697. In 1727 a smallpox epidemic reduced this number to 30, a figure which included only 12 adult males. The island was repopulated over the next few decades and by 1764 it had risen to 92. The introduction of this new population had probable genetic consequences, but there must also have been cultural changes, including the import of different ideas of house building and perhaps farming.

The Rev. Neil Mackenzie came to St. Kilda in 1829 and over the next 14 years he initiated drastic changes in the settlement and field pattern. He persuaded the islanders to move their habitations from the higher location of the older medieval

and probably pre-medieval village, and to build better black houses in a row which became the Village 'Street'. At the same time he helped to re-organise the landholdings of the people - changing the old, possibly medieval system of fragmented 'runrig' holdings, scattered over the whole arable area, to individual strips running up behind and down in front of the new black houses on the Street. As far as the welfare of the islanders was concerned, Mackenzie's work was, on the whole, positive, and he was responsible for the construction of the head dyke - perhaps better termed a 'ring-dyke' (Mackenzie's own term was "ring fence") - around the village and its arable holdings, and also the massive wall around the burial ground.

In a sense this was the beginning of archaeological investigation, albeit unintentionally, since Mackenzie noted discoveries during re-organisation. He wrote about structures: "... formed of four flat stones set on edge and covered by a fifth" "... In a few of them bones were found, and in nearly all of them pieces of earthen vessels" - which seem to be typical of Bronze Age cist burials with beakers, food vessels, or cinerary urns. Prehistoric settlement is also indicated by the presence of at least one souterrain which was discovered in 1844 and investigated by Sands in 1876 ; it was also dug out by Kearton and Mackenzie in the 1890s ; again investigated by Mathieson in 1927 and it was most recently excavated by P.R. Ritchie in 1974.

There is little doubt, therefore, that the Village area has a great quantity of evidence for human occupation over a very long time period. The suggestion of prehistoric settlement is strong, particularly on evidence from recent work, but continuity of occupation over this time range will be much more difficult to prove. For these reasons, and the nature of the layout of the settlement and field remains, this seemed a good area in which to take a sample strip or transect, near the centre of the Village Street but far enough west to take in the area of probable medieval occupation in the vicinity of the head dyke.

A strip was laid out to run from above the head dyke down to the wall above the beach. Its central line ran from a point c. 12m to the west of cleit no. 151. The land holding bisected by this line is that shown on Sharbau's plan of 1858-1861 as belonging to John Gillies to the north of the street and to John Gillies and Donald McQueen to the south of the street. This strip was chosen for the transect because it takes in Tobar Childa, the 'Bull's House' and part of the area of early settlement above the head dyke already mentioned, as well as passing

close to what has been accepted as the traditional location of Martin Martin's 'Christ Church', the burial ground, and samples of enclosures, cleits and later settlement.

Soil samples were taken at 5m intervals along the strip (for phosphate analysis, magnetic susceptibility measurement and pH measurement), a geophysical survey was attempted and the strip was levelled at 1m intervals. It is interesting to note the increase in phosphate levels in the region between the head dyke and the street lower down the slope - an area on which pre- and post-1830s agriculture would have been concentrated.

On processing results from the various analyses performed with soils from the transect, it became apparent that there was a significant change in the quality of the data as a function of distance. There is a major step up in phosphate concentration and magnetic susceptibility after 95m south along the transect. This distance is significant since it corresponds with the location of the head dyke. The area enclosed by the head dyke not only represents the cultivation strips and habitation sites of the population of Hirta since 1830, it probably also represents the focus of the pre-1830s population's agricultural activity since it represents the best arable land in the archipelago. This land has therefore been intensively used through time and significant characteristics might be expected in soils taken from this area.

Phosphate analysis showed that concentrations of phosphates above the head dyke are fairly low. Below the head dyke levels of both organic and inorganic phosphates increase dramatically after the 150m mark, but between the head dyke and this mark the levels are again fairly low. The only rational explanation for this effect is that the quality of the land between the head dyke and the 150m mark farther downhill is detrimentally affected by a jumble of rocks, boulders and the upper reaches of the watercourse arising from Tobar Childa. This would never have been a suitable location for agrarian or horticultural practices and may therefore have escaped manuring. It may also have been part of the pre-1830s settlement area.

Below the 150m mark, the topography of the plot improves and this is perhaps reflected by the dramatic increase in phosphate levels. It is interesting to note that, on the whole, the peaks are largely composed of inorganic phosphates often with no parallel in the organic phosphate curves. Several groups of peaks and

troughs can be identified. The most obvious trough, at around the 250m mark, is a direct result of the transect crossing the Village Street.

Once over the street, the phosphate levels detected can be best attributed to agricultural practices on the lower parts of the individual strip holdings, with a general lessening of concentrations towards the sea. The organic component of the total phosphate levels is generally higher in this section of the transect, each transect displaying significant peaks that do not correspond with any extant sites or known archaeological feature. It may be significant to note that there was a substantial temporary military camp in this region in the 1950s and phosphate levels may have been artificially increased during this period.

There is a significant rise in magnetic susceptibilty at about the 48m south mark which is generally sustained until the 70m mark. The transect passes through a substantial enclosure at this point but significantly the area of enhancement exceeds the dimensions of the enclosure. It may be that the processes involved in the magnetic susceptibility enhancement of this area predate the enclosure itself.

There is a massive increase in overall levels of magnetic susceptibilty in the areas within the head dyke typified by a gradual and progressive increase in enhancement corresponding with distance south from the head dyke. There are troughs in the graphs between the 200 and 250m marks followed by dramatic increases thereafter. As with the phosphate curves, this reflects the position of the street. The trend towards the sea is one of a gradual lessening of enhancement levels but even at their lowest these levels are significantly higher than any found in the upper section.

The pH levels in soils taken from outside/above the head dyke do not appear to be significantly different from those from within the head dyke. The transect depicts a slight and fairly consistant acididty in the soils collected. There is a swing towards neutral (pH 7) and perhaps even slight alkalinity at around the 250m south mark, which once again corresponds with the position of the Street.

RUAIVAL

At Ruaival, to the south-west of the village, there are four dry-stone built enclosures, three of which are open to the edge of the sea-cliff. Enclosure 4, the farthest south-west, is shown by OS maps to be the location of the 'chappel' of St. Brianan, as mentioned by Martin Martin in 1697, but there is no evidence on the

ground to suggest such a structure. More important are the older turf-covered remains of terraces, platforms and sub-rectangular foundations of an earlier occupation and use of the site which underlie the dry-stone enclosures and are exceptionally clear in enclosure 1. Geophysical (electrical resistivity) survey of these turf-covered foundations of terraces or platforms most clearly visible in enclosure 1 showed that they were not of stone construction and could have been made of turf. Soil analysis of these terraces suggests their use as artificial cultivation areas.

AN LAG

On An Lag, the corrie to the NE of the Village, the evidence for human activity is fairly clear to the eye. At first sight, the corrie is dominated by the four large dry-stone built enclosures. These are higher and more massive than the enclosures at Ruaival, with very large orthostatic stones as foundations; the walls have been kept in a good state of repair. A closer look reveals remains of earthen terraces or platforms scattered across the corrie area, in some cases running up to, and inside, the walls of the more recent enclosures.

Excavation and soil sampling of these features suggests artificial beds of earth rather than structures, some with visible tip lines, perhaps used for some type of cultivation, a possible St. Kilda form of the 'lazy bed'. Dr. Huntley's pollen sampling shows traces of cereals. The recovery of a large rim sherd of black ware pottery from a location well below the surface, during the excavation of one of these features, confirms the human association. A preliminary examination of the sherd suggests similarities with pottery from the excavation of a black house along the Village Street, either used in situ or dumped here with earth from elsewhere.

This evidence from Ruaival and An Lag has added considerably to our knowledge of these regions beyond the Village. The work on the platforms and terraces of sub-rectangular or tongue shape has moved nearer to confirming their use as growing areas for crops, including cereals. Their structure shows a very great depth of usable soil in the central saucer-like area of the corrie and implies a great amount of careful work on the part of the St. Kildans at some time in the past. Morton Boyd wrote in 1960 (Williamson & Boyd 1960, 58): "It is possible that the wide and irregular cultivation ridges on the floor of the corrie ... belonged to [the] mediaeval settlement. At a later date, probably about 1830,

a number of curiously shaped enclosures were erected there to protect the root crops either from wind or grazing stock, or both." This is also noted by Stell & Harman in *Buildings of St. Kilda* (1988, 23) in their description of the dry-stone enclosures: "Although generally interpreted as sheep stells, their walls, vertically-faced externally and battered internally, appear to have been constructed to exclude rather than contain livestock". ... "An Lag is a naturally sheltered area, and these enclosures may have arisen in an attempt, perhaps in the 1830s, to enclose suitable land for growing vegetables." This does not rule out the possibility that the earthen platforms were used by even earlier groups from the medieval village. The platforms and terraces within and underlying the ruinous stone enclosures at Ruaival resemble very closely those on An Lag and may have fulfilled the same agricultural/horticultural function at a similar time.

The settlement landscape was further altered from 1861, when 16 mason-built cottages were erected along the line of the Village Street. These were positioned with their fronts or long sides towards the sea, and the remaining examples of the earlier black houses still project their gable ends from the gaps between the newer houses. One of these cottages (No. 8) and a black house (W) were excavated in 1986-90 (Emery 1996) . These were the last major domestic changes before the island was evacuated in 1930. St. Kilda was sold by the McLeod family to Lord Dumfries (later Marquis of Bute) in 1934. In the Marquis's will of 1956 it was offered to the National Trust for Scotland, who accepted in 1957. After 1957 a radar station was built to monitor rocket launchings from South Uist. Most of the alterations in the cultural landscape in the last two or three hundred years have involved the destruction or cannibalisation of previous structures, so that much of the earlier archaeological evidence has been totally lost.

If, as Carl Sauer (1962) stated, "natural resources are cultural appraisals", then we must admire the nature of the islanders' adaptations to the somewhat meagre allowances of nature. The investigations of the past few years have yielded some good examples of the St. Kildans' ability to make the most of their difficult environment, not only in the creation of cultivation areas in localities with little or no natural topsoil, but in the use in tool-making over a very long period of time of what would elsewhere be considered one of the more intractable rock types (Fleming 1995). These and the structures built in the scree appear to be part of an overall strategy of making the best of many negative environmental features, a strategy which broke down with greater and more frequent contact

with the outside world and when the population structure became unstable and unviable.

BIBLIOGRAPHY

Cottam, M.B., 1979. Archaeology. In Small, A. (ed.) *St. Kilda Handbook*. National Trust for Scotland, 36-61.

Emery, N., 1996. *Excavations on Hirta, 1986-1990*. National Trust for Scotland/HMSO, Edinburgh.

Emery, N. & Morrison, A., 1995. The Archaeology of St. Kilda. In Buchanan, M. (ed.) *St. Kilda: The Continuing Story of the Islands.* Glasgow Museums/HMSO, Edinburgh, 39-59.

Fleming, A., 1995. St. Kilda: stone tools, dolerite quarries and long-term survival. *Antiquity*, 69, 25-35.

Harman, M., 1977. An incised cross on Hirt, Harris. *Proc. Soc. Antiq. Scot.*, 108 (1976-77), 254-258.

Harman, M., 1997. *An Isle Called Hirte: A History and Culture of St. Kilda to 1930.* Isle of Skye.

Kearton, R., 1897. *With Nature and a Camera.*

Macaulay, K., 1764. *The History of St. Kilda*. London (Repr. James Thin, Edinburgh, 1974).

Mackenzie, J.B., 1904. Antiquities and old customs in St. Kilda, compiled from notes made by the Rev. Neil Mackenzie, Minister of St. Kilda, 1829-43. *Proc. Soc. Antiq. Scot.*, 39, 397-402

Mackenzie, J.B. (ed)., 1911. *Episode in the Life of the Rev. Neil Mackenzie at St. Kilda from 1829 to 1843.*

Martin, M., 1698. *A Late Voyage to St. Kilda.* London

Mathieson, J., 1928. Antiquities of St. Kilda. *Proc. Soc. Antiq Scot.*, 62, (1927-28), 123-132.

Morrison, A., 1992. Archaeology on St. Kilda. *Heritage Scotland* (National Trust for Scotland), 9, no. 4, 20-21.

Sands, J., 1878. Notes on the antiquities of the island of St. Kilda. *Proc. Soc. Antiq. Scot.*, 12 (1876-78), 186-192.

Carl Sauer, C., 1962. *Agricultural Origins and Dispersals.*

Stell, G.P. & Harman, M., 1988. *Buildings of St. Kilda*. R.C.A.H.M.S., Edinburgh.

Williamson, K. & Boyd, J.M., 1960. *St. Kilda Summer*. Country Book Club, London