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The Landscape Archaeology of St Kilda

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Abstract

The archipelago of St Kilda has received more attention from writers than any other in Scotland. Its allure to the Scottish romantic ideal, coupled with its central importance in widely held notions of Scotland's remote and noble past (and the unravelling impact of modernity) sets it apart as an archaeological landscape. Antiquarians and archaeologists have engaged with St Kilda since the 1850s but they have in general viewed the islands as the location of an isolated and unique culture, whose traditional way of life was reflected in a unique archaeology.

The critical review presented here summarises a 10-year study of the islands, developed at first through fieldwork and desk-based research, and in particular through a suite of detailed case-studies produced between 2008 and 2016. This led to a realisation that much of the story of the islands was told through highly personal histories, while archaeology was, in general, failing to challenge historical narratives. That said, a small group of writers have in recent years begun to dispute underlying assumptions about the islands, and rural settlement studies in general. The ideas of Chris Dalglish, Fraser Macdonald and Andrew Fleming in particular were of crucial importance to the development of a new critical approach supported and expanded here. Since joining the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS) in 2009 I was able to develop a deeper understanding of Scottish field archaeology, and of the Commission's surveys of St Kilda, providing a complimentary strand to research. I was able to bring to bear a new, more detailed and more critical view of St Kilda's field archaeology (more than 1,500 sites) set within its wider context.

My portfolio includes two papers that explore specific topics in some detail: in 2013 Dr Alice Watterson and I looked at the archaeological and historical evidence that describe St Kilda's numerous cleitean. In 2015, Dr Kevin Grant and I dissected the complexity of the post-medieval landscape of St Kilda using an early map, landscape and building archaeology, and family history. These papers compliment *St Kilda: the Last and Outmost Isle*, published by Historic Environment Scotland (HES) in 2015, of which I was the primary author. This book goes to some length to set St Kilda in a wider context, ensuring that the notion of its remoteness and isolation is undermined by the presentation of a wide range of evidence. From the outset the book was designed to provide an authoritative and reliable assessment of the evidence, but it goes further in offering a thorough reassessment of key elements of St Kilda's archaeology. This critical review of the work will seek to place my research within the context of studies of St Kilda, and comparative landscapes.

Lay Summary

The archipelago of St Kilda is the westernmost of the inhabited Scottish islands, and it has received more attention from writers and journalists than any other in Scotland. The story of the islanders has become well known among the public, and is now caught up in romantic ideas about Scotland's past. Archaeologists began studying St Kilda in the 1850s, and have tended to see the islanders as an isolated and unique culture, whose story was represented in unusual monuments and finds.

The critical review presented here provides a summary of a 10-year study undertaken through research in libraries and archives, and as archaeological fieldwork on St Kilda and many other islands in the Outer Hebrides. My own work, coupled with that of other archaeologists (such as Andrew Fleming and Chris Dalglish) and geographers (such as Fraser Macdonald) is beginning to suggest that too much of the story of St Kilda and the region has been told uncritically. I have been fortunate to work for RCAHMS, an organisation that was tasked with surveying archaeological remains all over Scotland. That work brings a broad perspective, and I have been able to look afresh at St Kilda's archaeological landscape (there are more than 1,500 sites) in its regional context – searching as much for the recognisable as the remarkable.

My portfolio (submitted alongside this review) includes two papers that explore specific topics in some detail: one looked at the most unique component of St Kilda's cultural landscape, a huge number of small storage buildings called cleitean (Geddes and Watterson 2013). The second studied a map of St Kilda from 1860, exploring the history of the map and its makers, as well as the landscape of that period (Geddes and Grant 2015). These papers compliment a book – *St Kilda: the Last and Outmost Isle* (Gannon and Geddes 2015) that was designed to provide an authoritative and reliable assessment of the archaeology and history of St Kilda. This critical review of the work will seek to place my research within the context of studies of St Kilda.

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Declaration

I declare that this thesis was composed by myself, that the work contained herein is my own except where explicitly stated otherwise in the text, and that this work has not been submitted for any other degree or professional qualification except as specified.

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Acknowledgements

Some 25 years ago I was given a book about St Kilda (Seton 1878) that I read avidly as we explored the nooks and crannies of the Hebrides in a 1930s yacht. A stalling city career (if such a thing is possible in archaeology) led me to escape to St Kilda in 2008. Before and since I have been lucky enough to work and travel among much of the region that is St Kilda's 'wider world'. Spending time amidst the landscape, the seabirds, and the ever-changing light, I have slowly developed a more nuanced sense of St Kilda's past, which recognises similarity as much as variance.

On this journey I have benefited from the good humour, guidance and companionship of a number of colleagues. I can clearly remember my trepidation on St Kilda at meeting the RCAHMS team – they turned out to be a warm community, who carried their skill and experience with ease. I am grateful to Angela Gannon, Dr Alex Hale, Stratford Halliday, John Sherriff and Ian Parker in particular, and to the remainder of the former RCAHMS staff.

I owe particular thanks to a number of individuals with respect to this critical review. Firstly, my co-authors Angela Gannon, Dr Kevin Grant and Dr Alice Watterson, who kindly facilitated this project. HES, through the good offices of Barbara Cummins, Robin Turner, and John Sherriff, have been particularly supportive of my research – without them it would not have been possible. At the University of Edinburgh, my supervisor Dr Catriona Pickard has offered salutatory advice and guided me through the requirements of the degree. Stimulating discussions with Jill Harden (an independent researcher), Adam Welfare and Dr Kevin Grant (both HES) have forced me to look again at developing ideas. My final thanks must of course be to my parents, Frederick and Valerie, who have facilitated my work whenever possible, and to my partner Rebecca Reid, who took on the task of a thorough review of the text with unstinting enthusiasm, care and not a little humour.

While I have benefited greatly from dialogue and debate with many of those acknowledged here, I take sole responsibility for the opinions in this work, many of which will undoubtedly prove with time to be wide of the mark.

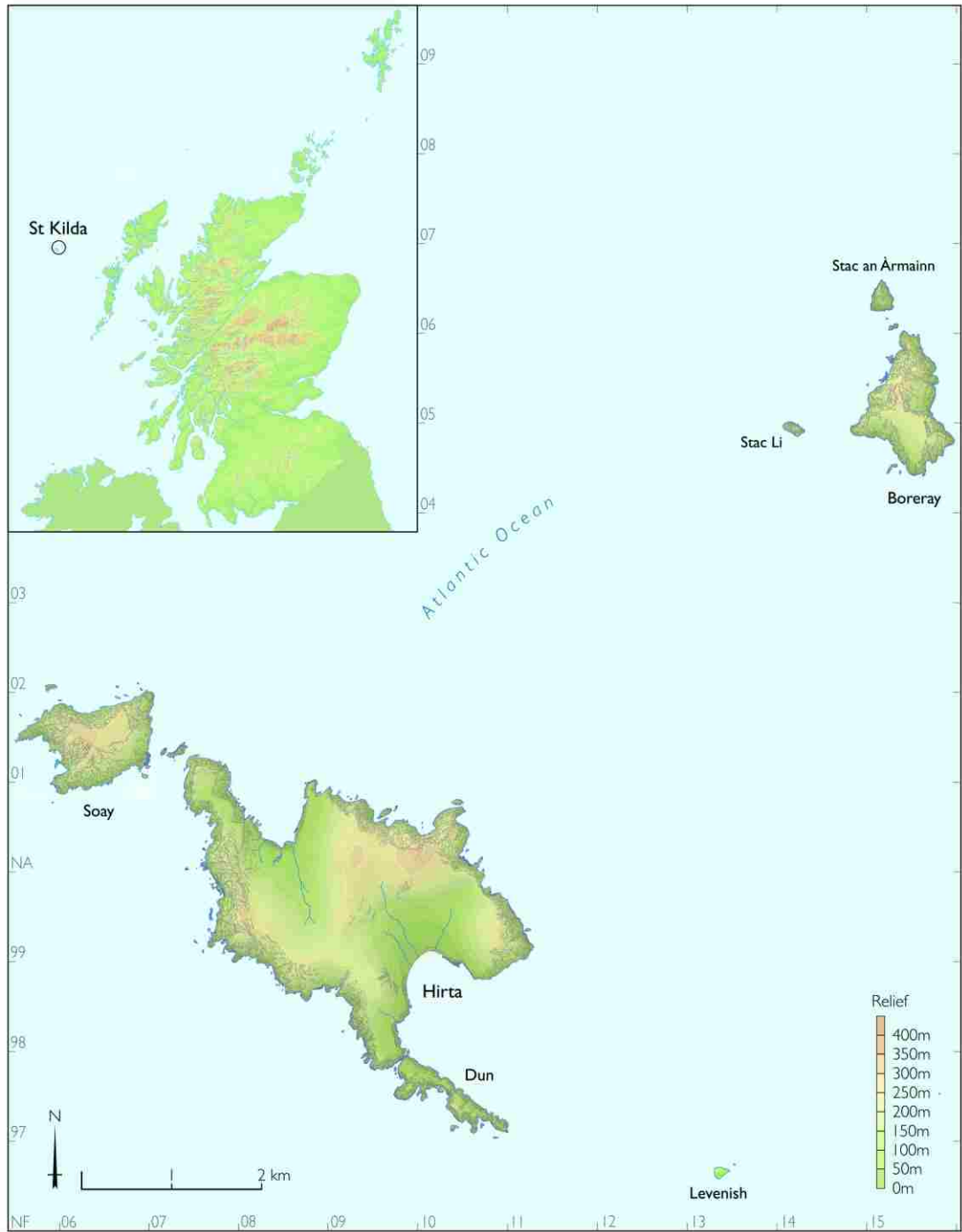


Figure 1 St Kilda: the archipelago and its location. SCI492796

Introduction

‘St Kilda isn’t the untouched island idyll I had believed it to be.’

Simon Birch 2010

This document acts as a critical review of the author’s submitted portfolio of published work (see attached CD), for the assessment of a PhD by Research Publications. The review is structured to satisfy the requirements outlined in Appendix 2 (3.3c): Part 1 includes a list of the submitted material and sections on the aims and objectives, approach, methodology and results; Part 2 indicates the coherence of the portfolio, outlines my contribution as a joint author, and includes a brief assessment of the contribution to current knowledge of the archaeology of St Kilda. These two parts are prefaced by a general introduction hereafter, followed by a lengthy review of previous research; the second of these provides a background to the reader that will demonstrate the need for the portfolio reviewed here, and the importance of an understanding of the history of ideas.

St Kilda is an archipelago of four main islands that form the remotest part of the parish of Harris in the Western Isles, lying some 90km from the common port of embarkation, Leverburgh (Figure 1). With a few other outliers (North Rona, the Flannans and the Monachs among them) they form the Atlantic fringe of Britain’s north-west coast. In 1930 the last 36 native inhabitants famously left St Kilda to escape poverty, leaving the islands ‘devoid of human interest’ (MacGregor 1931, 303). In fact, modernity arrived with a bang in 1957 when the construction of a small military base created an infrastructure that still provides employment, while supporting both research and tourism.

The name St Kilda is relatively recent, and its origin seems to lie in cartographic errors made in the 16th century, repeated and enhanced in a literature dominated by the English language (Harman 1997, 40). The occupants of St Kilda in recent centuries spoke Scottish Gaelic, and today’s inhabitants of the Western Isles know the archipelago as Hiort (pronounced hearsht) and the main island of Hirta as Hirte (Grant 2016, 25).¹ The remaining principal islands are

¹ Place names are given here in English where that is the common spelling, or in Gaelic where it is dominant (see Gannon and Geddes 2015, 293-4). Thus the archipelago is called St Kilda, while the stacs are called Stac Li and Stac an Àrmainn. Gaelic spellings were provided by Kirsty Macdonald (HES), in discussion with the author.

Boreray, Dun and Soay, while the largest of the attendant sea stacs are Levenish, Stac an Àrmainn and Stac Lì (Figure 2). The people of the archipelago are called in Gaelic Hiortaich, just as those of Harris (na Hearadh) are known as Hearaich.

St Kilda is formed from the remains of an ancient volcano, and a geology of breccia, dolerite, gabbro and granite has created dramatic and rugged scenery (Love 2009). It boasts the tallest sea cliffs in Britain (at 430 m) and the tallest sea stack (at 190 m). The precipitous coastline and high ground give little shelter, but two valleys on Hirta are relatively benign: Gleann Mòr to the north and Village Bay to the south; both also provide an exposed anchorage, but the latter is preferable in all but a strong south-easterly. The climate is primarily oceanic, and the islands themselves encourage the formation of clouds and incessant rainfall, while strong winds are endemic.



Figure 2 St Kilda, with Boreray in the foreground. DPI34187

This challenging environment is particularly rich in salt-tolerant plants and lichens, but of primary ecological importance is St Kilda's status as a breeding ground for seabirds. The numbers of nesting seabird pairs are counted in tens of thousands; with 60,000 Northern Gannets (*Morus bassanus*), 63,000

Northern Fulmars (*Fulmarus glacialis*) and a staggering 142,000 Atlantic Puffins (*Fratercula arctica*) (Love 2009, 110, citing Mitchell et al 2004). Such is the geographic remoteness of St Kilda that it hosts two unique sub-species, one a wren² and the other a mouse,³ but it is the Boreray and Soay sheep that attract most zoological attention. In both cases, these breeds are relict and feral populations brought to the islands by people, and their study is now of international scientific importance (Love 2009; University of Edinburgh and Imperial College London 2018).

² *Troglodytes troglodytes hirtensis*

³ *Apodemus sylvaticus hirtensis*

The human story of St Kilda is universally renowned, the familiar narrative of the islanders having been told through more than 20 books of a general nature, others devoted to particular aspects, novels, and innumerable articles in newspapers, academic and popular journals. Archaeological evidence suggests that the islands were settled during the Neolithic period (4000 to 2500 BC) and subsequently occupied periodically, if not permanently. Since the first detailed account was published (Martin 1698) most histories have been written by outsiders to the Gaelic world, many of whom did not set foot on the islands for anything other than a few brief hours or days (e.g. Steel 1965; Maclean 1972). Perhaps because of this hazy lens, St Kilda has played a role in the creation and curation of a romantic, simplistic and idealistic view of Scotland's past (Macdonald 2001). Tourism has been an important part of the St Kildan economy since the late 19th century, and the perspective of the tourist has grown to pre-eminence.

St Kilda is now owned by the National Trust for Scotland (NTS), who lease parts of Hirta to the Ministry of Defence. The archipelago is managed under a plan agreed by the NTS, HES, Scottish Natural Heritage, the Western Isles Council and the Ministry of Defence, and protected under numerous national schemes. In 1986 it was inscribed on the World Heritage List by the United Nations for outstanding natural heritage, and recognition was extended in 2004 to include the marine environment and in 2005 to encompass the islands' rich cultural heritage. At the time of writing, it is one of only 35 locations in the world to be recognised on the List for both natural and cultural criteria, and can attract as many as 5000 visitors a year.

Background: Archaeology and Survey

1697 to 1930

Professional archaeology on St Kilda could be said to begin in the 1950s but the islands benefit from a number of early accounts that touch on archaeological material. Martin Martin's *A Voyage to St Kilda* (1698) and *A Description of the Western Isles* (1703), the latter providing a wider context, offer both historian and archaeologist rich insight into the St Kildan lifestyle and a contemporary

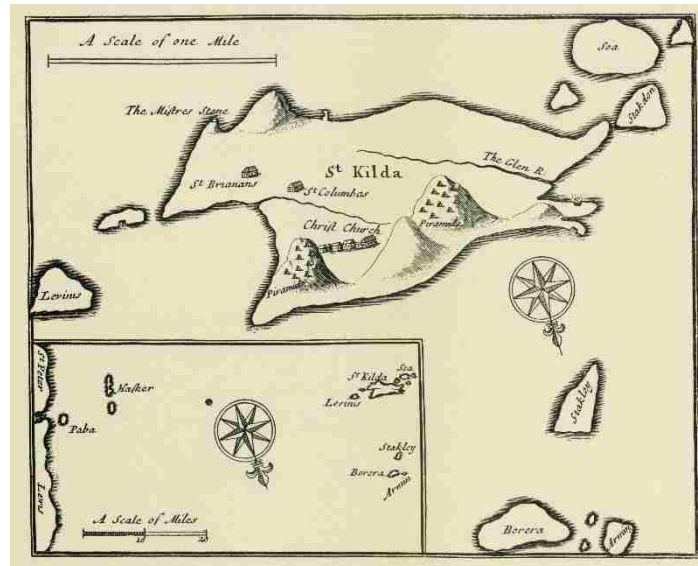


Figure 3 Martin Martin's map of St Kilda, 1697. DP214156

understanding of antiquities based on a lengthy visit to the islands in the summer of 1697 (Figure 3). Having published a perfunctory note (1697), Martin included more detail in his *Voyage* (1698) but his reading of St Kilda in fact demonstrates the similarities across the region as much as the differences (Martin 1703; Fleming 2005, 10).

Further detailed accounts followed in the 18th century, often in part derivative of Martin. Those by the Reverends Alexander Buchan (1727) and Kenneth Macaulay (1764) described the contemporary scene and touched on antiquities, which at that time were understood to be the work of Danes, Druids and the like. Just a few years later 'fisher-men...dug up...two antique urns, containing a quantity of Danish silver coin' in what appears to be the first chance archaeological find on the islands (*Glasgow Journal*, 7 – 14 May 1767), and further discoveries were made during extensive agricultural improvements on Hirta during the 1830s and early 1840s. The notes taken by Reverend Neil Mackenzie during his incumbency between 1830 and 1844 record the discovery of cists and an underground structure (1905, 398), while Hirta's Iron Age souterrain was discovered in 1844 'by a man who was digging the ground above it' (Sands 1878, 186; Figure 4).

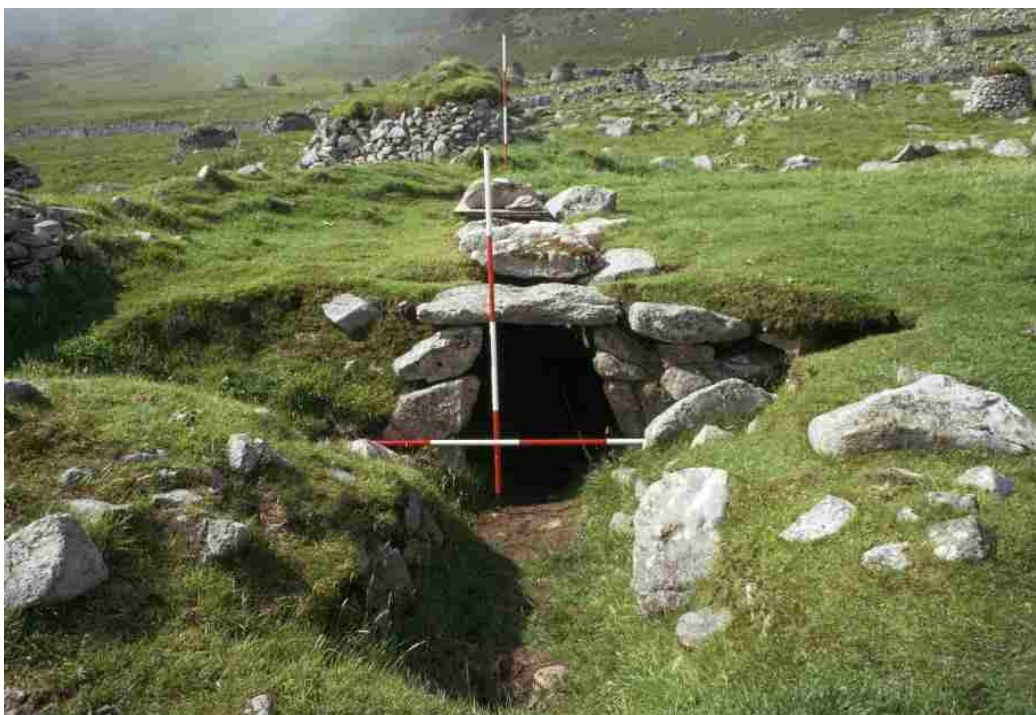


Figure 4 The Iron Age souterrain on St Kilda. SC1723539

While chance archaeological finds exactly like this were commonplace in Scotland (e.g. Thomas 1866; Anderson 1911), St Kilda was also visited by antiquarians who were active in research more generally. A handful of the buildings of the islands were thus drawn into academic discussion, particularly in the search for the origins of specific architectural techniques. The well-known ecclesiologist Thomas Muir travelled to St Kilda on 8 July 1858, touring the main island the following day in search of early churches and sculptured stones (Muir 1861, 219–23; 1885, 64–6; Geddes 2011b, 56). Though disappointed, his mood recovered with a visit to the northern glen, and he went on to publish a lengthy paper that drew on additional notes provided by Frederick Thomas (Muir and Thomas 1862).

Arguably it was Thomas who undertook the first ‘substantive archaeological work’ in the Western Isles (Armit 1996, 8) and he visited St Kilda in the summer of 1860, going on to include St Kildan buildings within his thesis on regional architectural development (Thomas 1862; 1869; Geddes and Grant 2015; see also Seton 1878, vii). His view of vernacular buildings as an analogy for those of prehistory was widely shared at the time (Mitchell 1880, 48–72), but it contributed to the sense that island culture was somehow ancient and backward (Dalglish 2002, 477).

Most importantly, the fieldwork of Muir and Thomas drew St Kilda into the national archaeological debate for a particular reason – it was seen as a place where ancient structures and building practices might survive. Thus, some 35 years later, St Kilda’s only mention in the

seminal text on Scottish prehistory is as a location for beehive houses, therein described as being built with a method of 'high antiquity', practised in Ireland 'before the introduction of Christianity' (Munro 1899, 336, 338).



Figure 5 In the 18th century this boulder was used to bless the cattle. By the early 20th century it was incorporated into archaeologies of the island and set alongside much earlier and later features. DP212708

To some extent continuing this perspective, three studies of St Kilda's antiquities were published in the 50 years between 1878 and 1928 (Sands 1878; Mackenzie 1905; Mathieson 1928). The authors were a writer, a minister and a cartographer respectively, and they described a range of structures that can now be attributed to dates between the Bronze Age and the post-medieval period, weaving their accounts with descriptions of what they considered ancient cultural practices. Unconsciously they each created a confusing conflation where prehistoric, medieval and recent features were interpreted alongside descriptions of folklore, and of building and farming methods, as if they all formed part of some coherent whole (Figure 5). Within a few short pages, Mathieson, for example, touches on medieval chapels and wells, a prehistoric souterrain, and a natural boulder associated with the blessing of milk cattle in the 18th century (1928, 124–6).

Just before the last of these archaeological appraisals was released in 1928, a major overview of the ancient monuments of the wider region was concluded by the Royal Commission on the Ancient and Historic Monuments of Scotland (RCAHMS), based on fieldwork undertaken in the Outer Hebrides, Skye and the Small Isles over some 12 years by a small professional team.⁴ Due to the difficulties in travel (and perhaps a doubt that the islands would hold much of interest), they never visited St Kilda, relying instead on published accounts and the careful notes of a correspondent (RCAHMS 1928, vi, 46; Figure 6). Detail was limited to a description of the souterrain, clearly within their pre-1707 remit, but notes touched on other structures and finds,

⁴ The majority of the archaeological fieldwork was undertaken by James Graham Callander in 1914 and 1915. His notebooks survive in the NRHE ([MS 36/62](#) to [MS 36/66](#)).

including the Amazon's House (described as a beehive shieling) and stone tools (RCAHMS 1928, 46–7).

More importantly perhaps, and applying to the whole regional analysis, was their 'praiseworthy reluctance to overestimate the antiquity of these [medieval and later buildings] simply on the grounds of their primitive appearance' (Wheeler 1929,



Figure 6 St Kilda's souterrain, photographed for RCAHMS in 1924. SCI467660

381). This marked a significant departure from the norms of the 19th century, where the apparent simplicity of a building had been seen either as an indicator of its age, or of the antiquity of the techniques used by its builders. The Commission brought to the fore an empirical approach, where they simply set out to provide information for a broad readership.⁵

1930 to 1983

The evacuation of St Kilda in 1930 created an unparalleled opportunity in Britain that attracted many naturalists and travellers to the islands for research and recreation (e.g. Atkinson 1949; Boyd 1952), but it strangely failed to draw anything other than a passing interest from archaeologists. The situation completely changed in 1955 when the government opted to construct a major rocket testing range on the Outer Hebrides, with an outpost on St Kilda. Archaeology was a major concern for the developers, and the Ministry of Works, through inspector Roy Ritchie, was tasked with a survey and excavation programme that would advance over the next three years (DES 1955, 34–5; DES 1956, 32–4, 38–9; DES 1957, 38; Macdonald 2011). The majority of the work was focussed in South Uist (Young and Richardson 1962; Fairhurst 1971; Maclaren 1974), Benbecula and North Uist (Campbell 1991), but St Kilda too came within the project scope.

⁵ The Commission's Secretary at that time, William Mackay Mackenzie, had published a paper that included 'beehive houses' some 25 years earlier which essentially expanded the corpus set out by Frederic Thomas (Mackenzie 1904, 173-189), perhaps continuing the 19th century trend (Dalglish 2002, 478).

Ritchie briefly visited St Kilda in the summer of 1956, assessing the nature of Hirta's ancient monuments and the risk posed by development (Figure 7). He found the medieval and later settlement of particular interest: 'Probably no other community in the north-west has been so well documented and no other will offer such an opportunity for studying the development of village planning'.⁶ He also

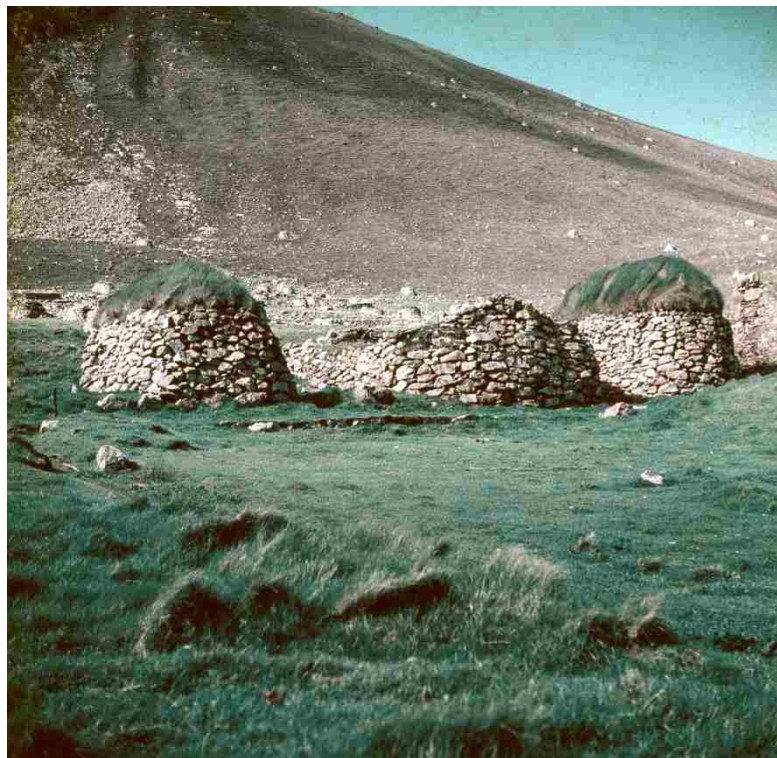


Figure 7 Ritchie's photographs of post-medieval buildings on St Kilda demonstrate his interest in the later landscape. SCI463041

recorded a small suite of what he thought may be prehistoric features, such as the supposed hut circle on Claignann an Taigh Faire, now thought to be natural (Canmore [9648](#); Gannon and Geddes 2015, 32).

Shortly thereafter, RCAHMS declined his offer to undertake a study of the islands: 'there is evidently an attractive field here for anyone wishing to make a detailed study of an old-standing village community, but this is not within the Commission's scope' – a pointed reference to their Royal Warrant that still required a focus for their work on the period preceding 1707.⁷

Undeterred, Ritchie developed a strategy for recording with the University of Edinburgh, resulting in some work by the School of Scottish Studies and a review by geographer Donald Macgregor (1960; see also Macgregor 1989).

While the work of the School has been lost or forgotten (Gannon and Geddes 2015, 21), most subsequent writing also pays little attention to Macgregor's article, buried as it is in a slightly obscure journal. It is in fact a thorough, wide-ranging and carefully balanced piece, that took into account a national context: 'following on the social and agrarian improvements being effected generally in Scotland after 1750, it is not surprising to find St Kilda the scene of similar

⁶ NRHE: [MS 7273/16](#)

⁷ NRHE: [551/1/10/8](#)

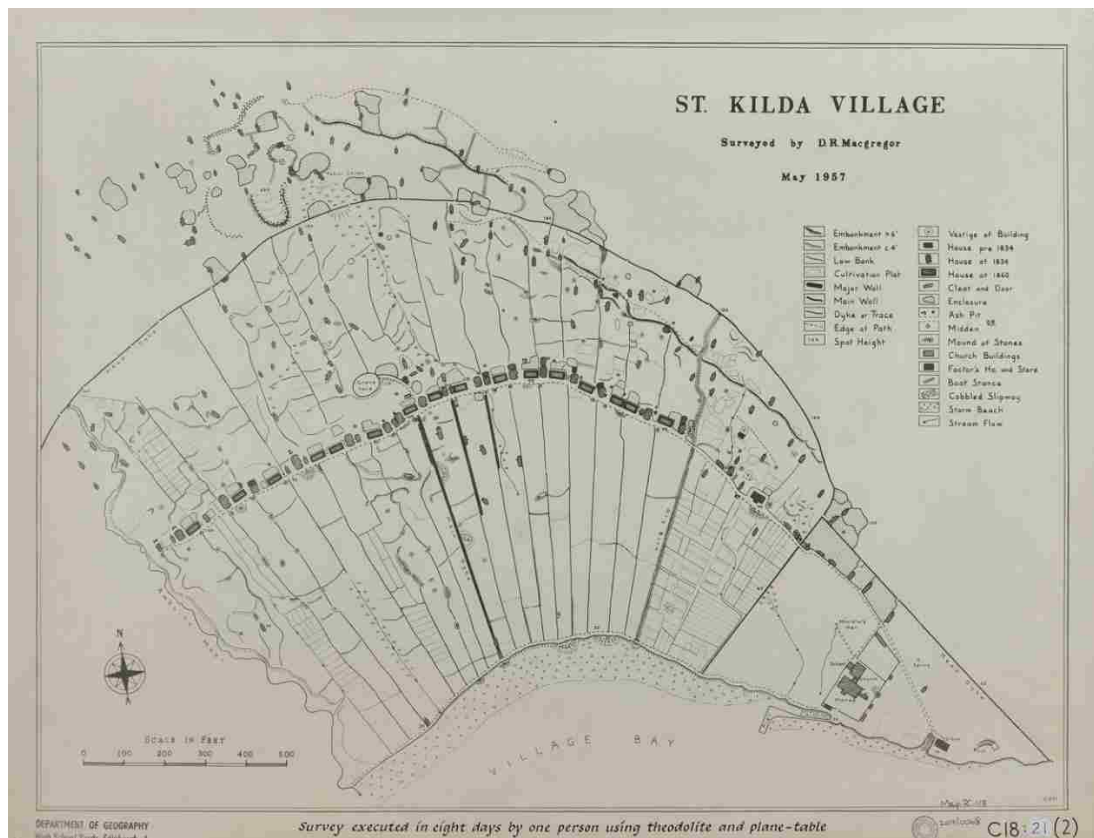


Figure 8 Donald Macgregor depicted the relict head-dykes (as embankments), as well as a suite of 'pre-1834' structures, and 'vestiges'. University of Edinburgh Special Collections Map.PC.118

improvements during the first half of the nineteenth century' (1960, 27). As well as providing a summary of climate, geography, geology, soils and vegetation, Macgregor undertook a plane-table and theodolite survey of the village over 8 days, undertaking a close analysis of the archaeological features (Figure 8).

At much the same time, two other academics turned their attention to the archaeology of St Kilda, becoming heavily involved in both the protection of archaeological features, and in their research. J Morton Boyd (a zoologist) and Kenneth Williamson (a zoologist and ornithologist) represented the Nature Conservancy, and made extended trips to the islands in the late 1950s. Kenneth Williamson in particular explored particular questions regarding the location of St Kilda's medieval village and the explanation for the buildings of Gleann Mòr (Williamson nd; 1957; 1958; 1960; Williamson and Boyd 1960; 1963). Working completely independently of Ritchie, their perception of archaeology was essentially naïve, since they understood the culture of St Kilda to be unique and largely independent of its wider context (Geddes forthcoming (b)). This notion was imported from their studies of the islands' unique mouse, wren and sheep that were demonstrably different from their mainland counterparts. Developed after lengthy stays on the islands, their ideas were far more influential than the specialist's assessments of the time, in part because they were able to map and describe many structures on the islands in more detail

than ever before, and in part because they published swiftly and widely, in authoritative and highly readable prose (Geddes forthcoming (b)). In contrast, the opinions of Ritchie, RCAHMS, the School of Scottish Studies and Macgregor were either not available to the public, or difficult to find.

The next major contribution came in August 1967 when J L Davidson of the Ordnance Survey (OS) began a revision of the maps and archaeological records (Davidson 1967), taking Williamson and Boyd (1960) and Macgregor (1960) as a starting point. This resulted in the discovery of a number of new archaeological sites in both the north and south glens of Hirta, and the provision of an interesting summary of the literature and field evidence. Some of the discoveries were depicted on the new 1970 OS maps,⁸ and all were added to the card index of the OS Archaeology Division (Figure 9).⁹ Many were interpreted as evidence for a prehistoric occupation of the islands, but the report was again unpublished.

Prompted by Davidson's discoveries, Jock Nimlin of the NTS encouraged archaeologist Barry Cottam of the University of Dundee to commence a further study of pre-medieval remains in 1973 and 1974. The results were recorded in two lengthy

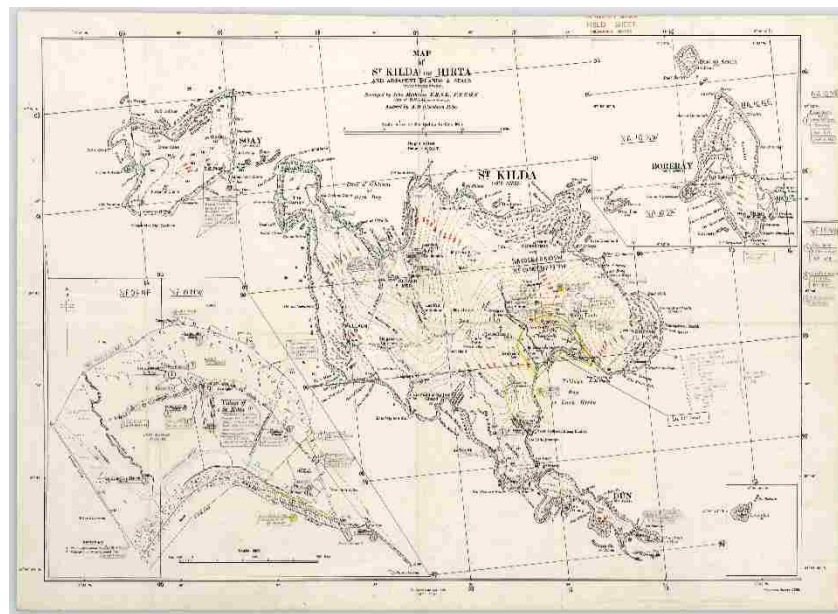


Figure 9 An OS record sheet for St Kilda, annotated with Davidson's notes. DP207930

manuscripts and published in a general guide to St Kilda (Cottam 1979). Cottam focussed his work on two particular areas of the main island, using a combination of archaeological survey and excavation. The first was the small hanging valley of An Lag Bho'n Tuath where Davidson had previously recorded a series of 17 'curious mounds', 3 of which were boat shaped (1967,

⁸ e.g. 'Sheet NF09NE & Part of NF19NW - Inset NF19NW', 1:10,000, 1970. The 'hut circles' at Geo Chrùbaidh (Canmore [3963](#)) appear on maps at this time.

⁹ NRHE: [551 166/1/1](#)

3).¹⁰ Cottam advanced this number to 20 identifying 4 as boat shaped settings; he undertook a small excavation of one example and recovered a radiocarbon date from the lowest level (Cottam 1979; SRR-316; Figure 10).



Figure 10 Barry Cottam focussed his work on the stone settings of An Lag Bho'n Tuath. SC1723501

In 1974 Cottam turned his attention to Gleann Mòr and the problem of the Amazon's House and associated structures, previously studied by Muir and Thomas (1862) and Williamson and Boyd (1960). His map of the glen identified another example of what he termed horned structures, bringing the total to 20. Individual structures were

recorded in more detail, and Cottam presented a detailed classification and analysis of the group, suggesting that they were Iron Age in date (1979, 53–61). As with so much on St Kilda, his research was prompted by a chance encounter and limited in the main to field survey. The summary of his results is at times speculative and, despite a degree of caution in places, some of his ideas nonetheless came to be seen as fact rather than simply hypotheses. It was still described as 'the most up-to-date account of St Kilda's prehistory' many years later (Fleming 1995, 25).

In 1976, just two years after Cottam finished his fieldwork, Mary Harman began a determined study of each individual structure of the whole archipelago began, one that had at its heart a wish to create a good quality data-set of locations, images and interpretation from which other projects might develop. She had resolved to begin a photographic record and survey of the islands' cleitean, aided to some extent by funding and advice from the Ministry of Works, NTS and RCAHMS. Harman's work was not limited to a thorough field survey but extended to a detailed analysis of primary and secondary sources, eventually culminating in a PhD (1993) and book *An Isle called Hirte* (1997). While this presents an encyclopaedia of St Kildan culture, it plays down her role in identifying and recording many of the structures on the archipelago for the first time. Yet to be repeated in full, her survey formed the basis of subsequent mapping

¹⁰ Contra Cottam (1979, 39) and Davidson (1967) these features were not in fact discovered by Davidson but had been noted by Ministry of Works architects a few years earlier, in 1964 (Gannon and Geddes 2015, 35).

projects by the Commission and the sites and monuments record used on the islands today. It did not, however, extend to a landscape archaeology of the islands in that very little was undertaken in the way of analysis.

1984 to Present

A geological survey of St Kilda in the late 1970s (Harding et al 1984) anticipated a modern phase of archaeological mapping that began in 1983 with the inception of a RCAHMS project on the main island Hirta. The survey, like the fieldwork by Mary Harman, was undertaken principally as a data-gathering exercise – the intention was simply to map the overall extent of occupation and record detailed examples of different building types (Stell 1995, 30). To this end two weeks of fieldwork were undertaken each year by a team of four between 1983 and 1986. The project was staffed by specialist surveyors and draughtsmen, and a specialist photographer in 1986, while its overall scope was managed by an architectural historian. This last point is important – the RCAHMS project on Hirta in 1983–86 was principally an architectural survey, and the large-scale mapping that was undertaken provided a backdrop to more detailed studies of individual standing buildings. The principal task was to produce an accurate plan of Village Bay, An Lag Bho'n Tuath and part of Gleann Mòr, and this was undertaken at a scale of 1:500 (Figure 11). The results were published in 1988 (Stell and Harman 1988; see also Stell 1995; Roberts 1989; RCAHMS 1998). The archaeological staff at the Commission had little to do with the 1980s



Figure 11 RCAHMS staff setting up a plane-table in 1983. DP220795

study of St Kilda, being largely focussed on Inventory work, and a programme of rapid inspection for Regional Lists (e.g. DES 1986, 54).¹¹

In 1986, St Kilda was inscribed on the UNESCO World Heritage List under natural criteria (iii) and (iv), essentially for its scenery, geology, sea-bird colonies, habitats and the unique

¹¹ RCAHMS archaeologists Jack Stevenson and Graham Ritchie made only a brief visit (Stevenson pers. comm.).

sheep (IUCN 1986; 2004, 155). The nomination by the UK Government had in fact included cultural criteria, and the technical evaluation supported nomination on those grounds (ICOMOS 1986). The Committee, however, chose to inscribe for natural criteria, while noting that ‘St Kilda...also had supportive cultural values as evidence of man’s harmonious interaction with nature over time’ (cited ICOMOS 2005, 13).

As this momentous decision was taking place a new programme of excavation was begun, this time focussing on recent structures in the first instance. Led by the University of Durham, the project involved the exploration of 19th century features: two unroofed houses and a cottar’s hut; the footings of a blackhouse; a kiln-barn and a midden pit (Emery 1996). From the perspective of archaeological survey the project was particularly interesting in two respects: firstly, the examination of the kiln-barn finally resolved the character of a structure that had been identified in 1957 as Norse (Williamson and Boyd 1960, 54), or medieval (Macgregor 1960, 25); secondly, the excavation demonstrated more generally that the 19th century story of Village Bay was complex and dynamic, and that buildings of apparently rude construction were not necessarily old. In that sense, it was a reminder of the difficulties faced by the Commission’s staff in the 1910s and 1920s when assessing the date of structures throughout the region, and of the mistakes that surveyors can make. The Durham project was described at the time as ‘a pioneering effort to apply modern archaeological procedures to evidence of medieval or later rural sites’ (Ralston 1997, 175), though the reviewer failed to recognise that a small excavation on St Kilda in 1983 had pre-figured the larger programme (Quine 1983).

In 1991 a new phase of research was begun, this time led by the University of Glasgow’s Alex Morrison. His work was focussed on three main areas of Hirta: the hanging valley of An Lag Bho’n Tuath, the scree slopes on the south-east flank of Mullach Sgar, and Village Bay itself (Harden and Lelong 2011; Figure 12). In 1996 the responsibility for the excavations on Hirta transferred from the University of Glasgow to their Archaeology Research Division (GUARD) which continued an annual programme of fieldwork until 2007. The results of some 16 years of excavation and survey, previously available as interim reports or shorter summaries only (e.g. Emery and Morrison 1995; Morrison 1999), were published in 2011 by Jill Harden and Olivia

Lelong. That lengthy gestation period allowed some of the original ideas put forward by the excavators at the time to mellow and fade away: Morrison's suggestion that Calum Mòr's House 'may well have been built at some time in the past 1500 years, but it embodies a building tradition that is very much older' (1999, 4) unwittingly regurgitates a 19th century idea with little evidential basis (Munro 1899,



Figure 12 The relatively modern enclosures at An Lag Bho'n Tuath overlie a complex suite of cultivation remains explored by Alex Morrison. SC1463898

336), while Pollard's suggestion (1999) that the stone settings in An Lag Bho'n Tuath were prehistoric burials was summarily rejected (Harden and Lelong 2011).

While the results of this programme were wide ranging and significant, its long duration, varied methods, changing staffing, and multiple foci, produced a confusing summary: it can be difficult to disentangle what was done where, by whom, and with what results. That said, the programme undertook large areas of detailed archaeological survey adding details to earlier maps and plans, while the results of excavation demonstrated a complexity and longevity that had not previously been recognised. It has been criticised in one respect: despite his close contact with them in the summer excavation season, Andrew Fleming (2011) felt that Harden and Lelong had singularly failed to engage with his ideas.

Perhaps the greatest archaeological contribution to St Kilda studies in recent years has come from Fleming, who is best known for his study of the Dartmoor Reaves in Devon (1988). He became interested in the islands after a first visit in 1994, eventually publishing a wide-ranging synthesis (2005), and continuing his research at the time of writing (pers. comm.). His enquiry can be categorised as a traditional mix of field observation, careful research, probing questions and critical thinking that has taken diverse and wide-ranging elements of the study of St Kilda forward by leaps and bounds. Fleming was the first writer to critically engage with the field archaeology of the islands (including that mapped by RCAHMS in the 1980s) since the early 1970s, and the first to set out a clear programme of research questions, methodological approach and conclusions. Fleming applied himself to the evidence for prehistoric quarrying and surviving stone tool assemblages (1994; 1995; 1997), before tackling a re-analysis of the evidence for pre-improvement settlement on the main island (2003). Intervening papers applied

theoretical questions to the St Kildan way of life, setting the past story of the islands within a framework of communitarianism, or faith-based thinking (1999; 2000; 2001). Among the small group of writers and practitioners deeply familiar with St Kilda, Fleming's work is roundly praised, but among the published reviews of his synthesis (Hummler 2006; Macdonald 2006; Symonds 2006), one that comes from an occupant of an equally remote island (Foula) does point to an infrequent failing:

‘Some of the text goes further than mere interpretation – on a number of occasions there is a process which starts with others’ work, then disputing and re-interpretation of that evidence. This leads to the author’s personal theorising and speculation, which slide imperceptibly into considerable assumptions which result in what appear to be unjustified definitive statements...’ (Holbourn 2006, 64)



Figure 13 Feannagan (lazy beds) on the island of Dun. DP 279400 © author

While Holbourn was concerned about the discussion of faith, his archaeological descriptions are also taken to their limit. In one simple case, Fleming (2005, 65) draws attention to the feannagan (lazy beds) on the island of Dun, often visible in the evening sun (Figure 13). Over a few short sentences he describes

how they overlie a ‘bank defining the upper edge of a field’ that is apparently truncated at the cliff edge, and may be a ‘Norse corn-field’ (Fleming 2005, 65). In fact the bank, which runs from left to right in Figure 13, is probably a geological feature, reflected in the irregular shape of the coastline, while the date of the lazy beds can be presumed to be post-medieval (Gannon and Geddes 2015, 81).

In 2003 the United Kingdom presented a new proposal to UNESCO for the inclusion on the World Heritage List to be widened to include additional natural and cultural criteria. Assessments by IUCN in 2003 and ICOMOS in 2004 and 2005 eventually resulted in this amendment, and St Kilda became one of only a small number of World Heritage Sites listed for both natural and cultural criteria. A specific request was made by ICOMOS that the State Party

undertake a 'systematic archaeological survey to underpin future management of the cultural landscape' (ICOMOS 2005, 15). By 2007 an agreement had been reached between NTS and RCAHMS for an archaeological analysis of the archipelago. It was completed in 2009 and published in 2015 forming part of the portfolio submitted here (Gannon and Geddes 2015; see also Gannon and Parker 2012; Halliday 2013; Figure 16).

One final element of the archaeological background of St Kilda is worth mentioning. In 1996 an agreement between Historic Scotland and the NTS was made to employ a St Kilda Archaeologist whose principal remit would be condition monitoring, conservation work and supervising the programme of works undertaken by volunteers; they in turn were supervised by members of the NTS archaeological staff, initially Robin Turner and latterly Jill Harden. The work was initially undertaken as part of GUARD's commercial archaeological programme but since 2000 each incumbent has been a NTS employee. Survey has been a relatively limited part of the programme of work, although the Cleit Preservation Project (Taylor 2001) went a long way towards tackling the relative cultural significance within the group of more than 1,000 cleitean. More relevant here, however, is the work of the author when St Kilda Archaeologist in 2008 and subsequently as consultant to the NTS, and of Kevin Grant who held the post between 2011 and 2014, both supervised by Jill Harden. With the support of the NTS, research projects have been undertaken on five individual structures (Geddes 2008; 2009b; 2011a; 2011b; 2016a) leading to a re-assessment of the evidence from survey and excavation. Grant's PhD (2016; see also Geddes and Grant 2015; Bezant and Grant 2016) represents the first attempt to place St Kilda's landscape into a contemporary theoretical framework.

Previous Doctoral Studies

Before exploring the approach taken by the author, a brief review of that taken within the two other PhDs that have focused in whole or part on the archaeology of St Kilda serves to introduce some of the relevant themes. Each reflects the academic tone of their time and the character of the department from which they came. Mary Harman's PhD thesis was written within the School of Scottish Studies at the University of Edinburgh and submitted in 1993, after almost 20 years of study and fieldwork (Figure 14). She includes no explicit mention of a theoretical approach or underlying theoretical narrative. Her aims were simply to 'to assemble as nearly as possible a comprehensive collection of information from diverse sources', 'to write about the history of the human occupation of the island using these sources', and to 'see St Kilda in its local and global context' (Harman 1993, v1, 1). The last of these might be taken as a formulaic nod to broader research approaches, but a collection of Harman's photographs held

in the NRHE demonstrates that she took a regional approach from the beginning.¹² The acknowledgements bring the breadth of her research in archives and museums into focus, while the numerous line drawings, family trees and tables show the exhaustive effort made to achieve that first aim.

Harman's book *An Isle Called Hirte* (1997) has become a classic in St Kilda studies during the last 20 years, drawing together a wide variety of data and presenting it impartially to the reader. It has unique value as a guidebook of encyclopaedic

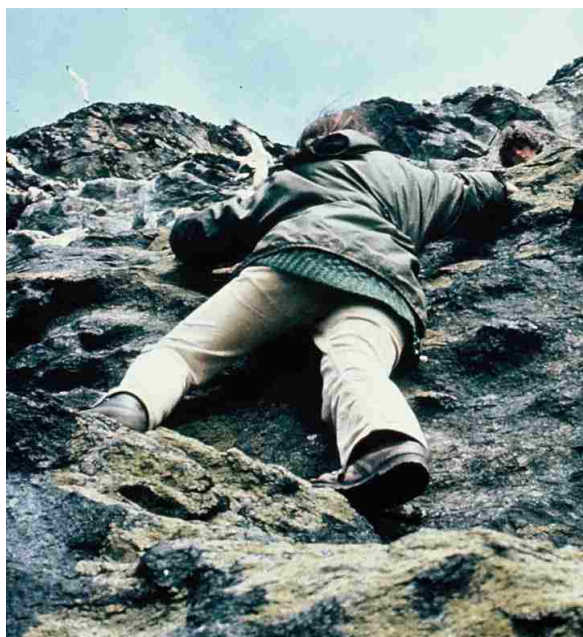


Figure 14 Mary Harman ascending Stac Li in 1976, under the watchful eye of Stuart Murray. DPI67272 © Stuart Murray

breadth, all the more remarkable given that it was completed without the aid of internet search engines. Having said that, the lack of an index aside, there is no doubt that a descriptive and empirical compendium has limitations and little is offered in the way of explanation. Even the cleitean, which Harman perhaps knows better than anyone else, receive only a bare description (Harman 1997, 159–161; cf. Geddes and Watterson 2013). There is little critical reflection on the availability of historical sources (something that profoundly affects our reading of the history of St Kilda). Indeed, the simple statement that 'No estate records for the period 1779 to 1871 have been located' (Harman 1997, 98) receives no further comment.

Kevin Grant's PhD thesis was written within Archaeology at the University of Glasgow (Figure 15). He includes a lengthy critique of previous approaches to the study of Hebridean landscapes by archaeologists, and a detailed exposé of his own approach of 'archaeological storytelling' (Grant 2016, 67). His aims were rather different: 'to formulate a new approach to the study of place and period which advances knowledge and understanding of the lived experience of the landscape' and 'to demonstrate and critically assess the approach by applying it to two case study areas' (Grant 2016, 21): St Kilda, and the landscape around Loch Aineort, South Uist. In each case Grant provides a fictionalised narrative that describes key activities (such as the harvesting

¹² e.g. NRHE: [SC1041755](#)

of kelp or seabirds), interweaving the account with source material drawn from walkover survey, historical sources, and Gaelic poetry and prose. Grant's compelling and nuanced writing does call for a fresh approach to meta-narratives within post-medieval archaeology as applied in the Gaelic-speaking region of Scotland, but it presents little in



Figure 15 Kevin Grant and Cathy Maclver during landscape survey on St Kilda with the author. Grant's work explores the archaeology of St Kilda using Gaelic prose and poetry and an evocation of the lived landscape. DPI197727

the way of new data, particularly new archaeological data. The fulcrum of his approach is the development of a better way of communicating multi-disciplinary understandings of the past, rather than a new technique of exploration, or a new analysis of data.

A predictable situation arises, where the innovative theory-led approach has to rely on the empirical approach for information; thus Grant's thesis references Harman 77 times, more than any other single source. In one example, he notes that evidence for 'the unusual' is 'best summarised in the work of Mary Harman' (Grant 2016, 156; cf. Dalglish 2001 and his use of RCAHMS 1971). The features that he then describes (cf. Harman 1997, 227–244; Fleming 2005, 107–122) include the milking stone, a boulder associated with the blessing of cattle in the 18th century; a wellhead that marks the site of a spring venerated for its healing abilities in the 18th century, and an Iron Age souterrain discovered in the 1840s that was subsequently associated with faeries. In each case, almost nothing is said about the archaeological features themselves, the focus being laid with intention upon a contemporary and conceptual journey (Grant 2016, 172). In the same section (2016, 173), Grant critiques approaches to the unusual made by other authors, in particular the way in which they simplify the changing meanings of different sites through time by lumping different features together. But his chapter on the unusual in fact ends up doing much the same, simply because of the small number of sources and the difficulty of ascribing any beliefs and customs to a particular time, far less offering up a date of their inception. With reference to one practice in particular, the offer of a milk libation on a large natural boulder known as Clach a' Bhainne (Figure 5), Grant notes that 'references about how

and when this ritual was carried out on St Kilda are vague (Harman 1997: 228)' (Grant 2016, 165), alighting upon the difficulty we all face.¹³

The first of these two PhDs clearly demonstrates the utility of a traditional empirical approach to data gathering and synthesis, while the second exemplifies how compelling and vital a multi-disciplinary narrative can be (and how difficult it is to execute).

¹³ Place-name studies on St Kilda can also be fraught with difficulty (Gannon and Geddes 2015, 141; cf. Grant 2016, 174).

Summary

If we imagine St Kilda's archaeological landscape as a jigsaw puzzle, admittedly one that may have overlapping and ill-fitting pieces, we can see that the background of archaeological research and survey is exposing and illuminating a deeply complex and rich archaeological landscape. In this we should not be surprised, since there is abundant evidence from the region and Scotland more generally that habitats that have abundant or valuable resources have been inhabited by people for many thousands of years; numerous examples of complex Hebridean landscapes exist, from Mingulay in the south to Rona in the north. Recent excavation has also demonstrated that a maxim that emphasises survival and destruction is as important on St Kilda as anywhere else; excavations at Mullach Sgar, which appears as a scree slope dotted with relatively modern huts and enclosures, show that it is rich in the vestiges of earlier features, including indications of Iron Age, Norse and medieval activity. Since this is one of the least habitable parts of Village Bay, we can begin to see that well-preserved prehistoric archaeological features are unlikely to survive within a Bay where the early 19th century township has been so thoroughly grubbed out that it took until 1999 for Andrew Fleming (and Robin Turner) to discover it!

Survey itself has been technologically limited until recent years, the advent of DGPS making a huge difference to the accuracy and speed with which surveyors can work. Expertise plays a role here too; the archaeological maps of St Kilda in the 1950s were undertaken by geographers and zoologists, those of the 1970s by a young researcher, and even those of the 1990s relied on many volunteers and relatively junior staff. The Commission arguably did not perhaps bring its 'A' game to St Kilda in the 1980s, with respect to archaeology at least (hence the misreading of some relict head-dykes). The perspective they have offered subsequently has been far more nuanced (e.g. Halliday 2013, Gannon and Geddes 2015).

Excavation has made a greater contribution in recent years, though often through the investigation of minor components of the landscape, or new discoveries (Fleming 2005; Harden and Lelong 2011). We still have little grasp of the exact chronology of the souterrain, the character of the medieval churches, or even that of the pre-improvement township (only identified recently), while whole classes of monument on the islands (e.g. cleitean, cellular buildings and wellheads) rely on careful landscape archaeology for their interpretation, not to mention serious resilience against the embedded ideas of the past.

St Kilda continues to weave and mystify the visitor, writer and researcher. Such is the power of its landscape and story that the best modern writers can resort to hyperbole; Will Self has uncritically absorbed one of the thorough but problematic histories of the 20th century (Maclean

1972), and described the St Kildans as ‘a veritable singularity of humanity’ (Self 2000, 55; 2013; cf. Macdonald 2006). More than 150 years after the first archaeological studies of St Kilda, the same problems persist. On the one hand, the islands have not yet been drawn into Scottish history and archaeology more generally – they receive no mention in the standard texts on the subject (e.g. Edwards and Ralston 2003), although one undergraduate course bucks the trend.¹⁴ On the other, the literature that describes St Kilda continues in most cases to embrace it as special, failing to distinguish between developing research and our enthusiasm about its story and its place in modern Scotland: recent reprints of the well written but dated histories by Tom Steel (1965 [2011]) and Charles Maclean (1972 [2019]) emphasise the point.

¹⁴ University of Glasgow, Archaeology of Scotland 1A, Reading List [[Accessed 24 September 2018](#)].

Part 1

Material Submitted

The material submitted for examination comprises:¹⁵

- 1) Geddes, G and Watterson, A 2013 'A Prodigious Number of Little Cells' – Cleitean and the St Kilda World Heritage Site, *Architectural Heritage* 24, 103–118;
- 2) Geddes, G and Grant, K 2015 The Plan and the *Porcupine*: dynamism and complexity on St Kilda, *Landscapes* 16 (2), 1–19;
- 3) Gannon, A and Geddes, G 2015 *St Kilda: the Last and Outmost Isle*, Edinburgh: Historic Environment Scotland.

¹⁵ NB Author attribution in each case was alphabetical.

Aim and Objectives

The research summarised herein had one overarching aim: to create a thorough and complete account of the field archaeology of St Kilda with particular reference to the regional context of the Western Isles.

There were four more specific research questions:

- 1) What is the evidence for prehistoric settlement and agriculture within Gleann Mòr, St Kilda, and how does it compare with other regional examples?
- 2) What is the evidence for early buildings and field systems within Village Bay?
- 3) What archaeological features of 18th and 19th century date survive on St Kilda, and how do they reflect agricultural (and other) improvements seen more widely in the region?
- 4) How is fowling reflected in the landscape archaeology of St Kilda, and how does it compare to other landscapes in the Outer Hebrides?



Figure 16 James Hepher, Adam Welfare and Ian Parker return from a day in the field. The survey of St Kilda was undertaken by RCAHMS staff between 2007 and 2009, with associated fieldwork continuing until 2014. The results made the research and writing of my PhD submission possible. DP062834

Approach

‘In landscape archaeology there is always something new to notice.’

Andrew Fleming 1988, 58

Andrew Fleming’s (2006) incisive critique of post-processual theory in landscape archaeology demonstrates that a lengthy discussion of post-processual and contemporary archaeological theory is not always useful in landscape archaeology, and a thorough summary of archaeological approaches to the study of the region has already been provided by Dalglish (2002) and Grant (2016). While I recognise the value of a theory-led narrative, my own research has focussed more on the critical review of existing datasets, and the gathering of new material.

In practice, explicitly theoretical approaches often lay the focus on both the theory itself and the individual researcher – they tend not to be the preserve of finds or environmental specialists, or commercial excavators. The language can be opaque and indecipherable, even to professional archaeologists, and the provision of new and reliable data is often lacking. If we were dealing with a rich archaeological dataset, where a high proportion of the landscape of an island or region had been subject to professional mapping, excavation and environmental study, then an approach with theory at its centre might be completely justified. But in an instance (as is the case with Scottish archaeology in general) where data points are relatively few, and many basic questions remain unanswered, there is still a call for data-gathering and data-cleansing exercises, even if (or perhaps specifically because) these form a precursor to a variety of more theory-led approaches. It is common in the mapping projects undertaken by HES Survey and Recording (formerly RCAHMS) for the number of sites recorded in an area to increase by 100% or more: this suggests that heuristic empirical work, in mapping at least, has some way to go.

Having said all of this, it does seem relevant to give some indication of my general approach, best indicated by a series of guiding principles, each with an example from St Kilda or the region. The first strain within the research submitted for this critical review was that of **field or landscape archaeology** and it relied principally on evidence gathered by the author. Field archaeology is fundamentally important to archaeological practice: ‘it has been for four centuries one of the most important significant elements in the development not only of the discipline of archaeology...but also of an understanding of the British landscape and its people’ (Fowler 1980, 1). Field archaeology recognises the fact that the analysis and interpretation of a wide-

range of upstanding archaeological and landscape features can provide a unique and wide-ranging perspective on landscape (and therefore cultural) change. The origins of the methods applied here lie with the national archaeological surveys undertaken in the UK during the 20th century by the OS Archaeology Division, and the three Royal Commissions established in the early 20th century (Dunbar 1992; Frodsham et al 1999; Geddes 2013b; 2016b; Sobolewski 2017). In each case these organisations relied on a combination of the critical examination of primary and secondary published sources, and the application of field observation and measured survey (Figure 17). Crucially their intention was to provide useful and unbiased information for general use, and to highlight sites and buildings worthy of mapping or preservation.



Figure 17 RCAHMS staff Ian Scott and Alasdair Maclaren surveying a hillfort in 1961. This rare image lays emphasis on the importance in landscape archaeology of constant discussion and iterative reflection. SCI098663

It is worth saying that landscape archaeology as a term was first coined in the 1970s, more than 60 years after the Commission began its work; the change reflected a technological development that facilitated mapping at landscape scales. Field archaeology is the common term used by those well versed in the approaches of OS, RCAHMS and the like (OS 1973; Fowler 1980) though few in the wider archaeological world perhaps come across it.

Landscape archaeology as practised by the national organisations has been criticised in a variety of ways, particularly by writers seeking to develop dense narrative descriptions of the past who become frustrated by surveys that bring forward lists and dimensions (e.g. Dalglish 2002). Many of these criticisms are in part justified: there is no doubt that the work of the Commission and

OS tended to give prominence to empirical description, and that it had limitations related to budget, staffing, structure, and the balance between progress and detail. But there is much interpretation going on too, it is just that a state-sponsored survey cannot explicitly set out to explore archaeological landscapes from anything other than a balanced perspective (within a varying political context and budgetary constraint). The Secretary of RCAHMS J G Dunbar described the task of mapping Hirta in the 1980s in this telling way: ‘the survey and analysis of the island’s archaeological sites and historic buildings, with the resulting information being made available in an entirely disinterested way to all those who require it’ (Gannon and Geddes 2015, 15).¹⁶

The author’s approach has included lengthy and repeated walks through archaeological landscapes, multiple visits to individual sites, and the iterative development of interpretation and a holistic study of the islands. My fieldwork has extended to other areas and structures, to set the analysis of St Kilda on a more even keel. Landscape archaeology is clearly a subjective and interpretive process (cf. Halliday 2013), with a foot in the camp of other fieldworkers (such as naturalists) and a foot in the camp of more scientific and querying research. The nexus is both rewarding and productive.

A second critical strain was the requirement to bring a **holistic view to the landscape**. This did not prejudice certain elements (e.g. the crofts) or periods (e.g. the prehistoric), but simply considered each surviving element in the landscape in turn. To a degree this relies on having the time and resources to look many times at many sites, but it helps to free the fieldworker from the more implausible discoveries – it is easier to misread a site when looked at in isolation. There is no question that moving around a landscape, noting, analysing and recording each feature, on multiple occasions in different light and weather, brings improvements in understanding – which archaeologist would not excavate a larger trench or more sites if it were possible?

It is an approach that has been taken up ever more by many organisations including RCAHMS and now HES as highly accurate survey equipment and remote-sensing data become more available. It is now easier than ever to locate and identify new sites. Prior to the 1980s few archaeological surveys by the Commission covered large areas due to the technical and logistical constraints.¹⁷ Instead, they tended to focus on individual sites, with less recourse to a study of the wider landscape. In the late 1980s RCAHMS changed its approach to archaeological

¹⁶ NRHE: Letter from John Dunbar to Donald Erskine, 12 September 1983, RCAHMS administrative file 161/1, Western Isles Area, Prehistory

¹⁷ The Manor Valley in Peeblesshire is a notable exception (RCAHMS 1967, v1, 166-7)

mapping, beginning to tackle entire landscapes in a way that had not been possible before (e.g. RCAHMS 1990; 1997; Figure 18). One result of this holistic or landscape scale approach is a recognition of the importance of survival and destruction that comes from looking more generally at a region, in this example north-east Perthshire:

‘The distribution of the archaeological remains reflects the impact of successive phases of agricultural exploitation, each preserving, modifying or destroying the remains of its predecessors. The interplay between survival and destruction began at least as early as the neolithic and continues to the present day...’ (RCAHMS 1990, 1).



Figure 18 This landscape at Pitcarmick Burn, Perthshire, hosts a high density of later prehistoric and early medieval features that can be readily identified from survey alone. The survival of early features here is dramatically better than on St Kilda. SC370268

This reminder is no less true in north-west Scotland, or on St Kilda, where there is ample evidence for as much destruction as there is survival in archaeological and historical sources. But the early archaeological studies of the islands didn't recognise this fundamental tenet, identifying the remains of standing buildings from the prehistoric, Norse and medieval periods apparently cheek-by-jowl with those constructed in the 1830s: one of the most striking examples of the mistakes that can be made concerns the ruins of a structure known as Blackhouse W. Close to the street, in an area cultivated regularly for more than 100 years, this building of two phases was interpreted as Norse or medieval (Williamson and Boyd 1960, 64; Macgregor 1960). It is in fact a kiln barn overlain by a small hut, and both are probably of 19th century date (Emery 1996; Stell and Harman 1988; Canmore [9671](#); Figure 19). It would be unfair to judge previous surveyors too harshly, but they were clearly unaware of which features were common, and what one might expect to survive.¹⁸

A third element of my work was the particular emphasis given to the **history of ideas**.

This began with studies of the cellular buildings in Village Bay and Gleann Mòr (Geddes 2011a; 2011b), the interpretation of which is so embroiled with 19th century ideas. The majority of grand narratives that have been applied in St Kilda are not in



Figure 19 The kiln-barn and hut in 1973, before excavation. SCI723551

fact novel (or even empirical) but rely heavily on notions of the archipelago that are retrospectively applied to features that are either poorly understood, or provide evidence for a completely different explanation. Many perspectives are outdated: in Gleann Mòr the first studies of the area in 1858 (Muir and Thomas 1860) explicitly sought prehistoric and early medieval survivals (whether in structure or method of building), and much the same was true 100 years later when Williamson sought an archaeology of 'the Gleann Mòr folk' (Williamson and Boyd 1960).

¹⁸ Many kiln-barns survive on the island of Pabbay, where they are clearly features of agricultural improvement dating to the period after c. 1750.

Another good example is the enclosure in Gleann Mòr (Canmore [9642](#); Figure 20), which has been variously classified as a circle of stones (Davidson 1967, 4), and more recently as a prehistoric stone circle (Curtis and Curtis 2007; 2008). In 2008, the Commission's staff could see no evidence for a stone circle, calling it simply an enclosure. In truth, we may not know exactly what the site is yet but the tendency to ascribe a prehistoric date comes from two resilient ideas:



Figure 20 The Gleann Mòr enclosure being discussed by Mary Harman and RCAHMS staff. DP209270

that St Kilda's remoteness would encourage the survival of such features; that landscape archaeology can be used to classify features without recourse to their context, in this case an unusual location within a heavily grazed pastureland.

I have applied the principal of Occam's razor to many questions, particularly those regarding chronology. The idea that a simple explanation with few inferences should be preferred over a complex one is a stalwart of state-sponsored landscape archaeology. When faced with a cairn within a pre-Improvement landscape, the fieldworker requires compelling evidence for a prehistoric date such as form (a short cist, a kerb, a chamber, a recognisable plan), condition (heavily overgrown, robbed, supplemented by modern field clearance), or historical references. Without that they will often assign the feature to a later period and assume it has a more prosaic function, usually as a clearance cairn. Of course, this means that prehistoric cairns are occasionally missed, but it avoids the confusion of clearance cairns (a much more common feature of archaeological landscapes) with burial cairns.

One example may be the identification of prehistoric sites on the Hebridean island of Berneray, at the southern end of the Outer Hebrides (Figure 21). In 1992, the students mapping this small and rugged island identified no less than 'five cists, five suspected burial cairns, and four megalithic chamber tombs, as well as some of the seven circular hut foundations' (DES 1992, 88). This was revised in a survey by experienced fieldworkers in 2010 to one possible chambered

cairn (Canmore [84976](#)) and one possible hut circle (Canmore [309665](#)). Some of the features located in 1992 were reinterpreted as natural, while others were simply more prosaic or more likely to be relatively recent constructions. The importance of this distinction for distribution maps, local and regional analyses, and future research objectives (such as targeted excavation) is obvious.



Figure 21 The island of Berneray, where dramatically different survey results were obtained in 1992 and 2010. DP221926

Another example, this time on the island of Barra, is a little hut attached to a modern enclosure wall, discovered in 1989 (DES 1989, 69, T55). The excavators, who recovered no dating evidence, noted that: ‘we believe the most economical interpretation of the structure is that it was a small mortuary chamber of the late Neolithic/Early Bronze Age era, contemporary with the occupation at Allt Chrìsal 450m W’ (Branigan and Foster 1995, 165). A field visit by RCAHMS in 2010 suggested ‘there are no grounds on which to claim this small structure as the remains of a heel-shaped chambered cairn’ (Canmore [69642](#)), a statement that this author supports after a visit in 2016 (Figure 22).

Following on from this striking example, particular attention was paid to **empirical evidence**. This may be a self-evident positive in any archaeological study but there is no doubt that pressures of time, lack of concentration and a kind of romanticism leads to problematic assertions on St Kilda that appear to set the fundamental building blocks of the discipline to one side. Writing here about the stone settings of An Lag Bho’n Tuath (Canmore [83041](#)), the archaeologist Tony Pollard described how:

‘There seems little reason to doubt that these features are monuments of some sort, and their form would strongly suggest a Bronze Age date. However, the total absence of human remains or the artefacts, such as pottery, which usually accompany Bronze Age burials is rather puzzling. I have suggested elsewhere that these may not be funerary monuments at all but cenotaphs dedicated to those who’s [sic] remains were not available for burial, and given the location of St Kilda in an exposed part of the Atlantic it does not seem unreasonable to suggest that loss at sea was the reason for the absence.’ (Pollard 1999, 6).

These features had been of interest to archaeologists for the preceding 30 years, having been identified in the late 1950s and described in some detail by Davidson (1967; Figure 23). An example was excavated by Cottam in 1973, and returned a radiocarbon date that seemed to place it in the 2nd millennium BC (Cottam 1979; SRR-316). But all was not as it seemed. Much of the peat and turf in this area has been



Figure 22 A post-medieval hut, or a chambered cairn? DP241819 © author

stripped for fuel, and the excavated sample did not come from a secure context, presumably dating the underlying natural peat. By 1993 an alternative explanation was suggested: ‘...they are situated in an area where cleitean are sparse compared with adjacent areas...It is possible that these are footings of cleitean which have been robbed, perhaps to build the enclosures in An Lag...If the organic material dated to c. 1833 BC were dross from cut peat or turf stored in the former cleit, the date is readily explained.’ (Harman 1993, v1, 75). Excavating another pair in the late 1990s, Tony Pollard looked to exciting possibilities about a unique response to burial in a maritime and Bronze Age St Kilda (Pollard 1999), but most authors now accept the pointed logic of Harman’s account, particularly as more examples have been identified elsewhere (Gannon and Geddes 2015, 35; Harden and Lelong 2011).

Finally the author’s approach emphasises **critical thinking**. As with many of the general approaches summarised above, this may seem such a broad category that it does not require mention. But aspects of archaeological literature and the literature of St Kilda in particular suggest otherwise. To give one important example: the Improvement period from c.1750 to c.1850 on St Kilda witnessed the wholesale reconstruction of the field system, housing, and burial ground, and the building of a new storehouse, manse and church. One particular reference describes this period in great detail, an account by Neil Mackenzie, minister of St Kilda from 1830 to 1843 (Mackenzie 1911). In most descriptions of St Kilda’s history and landscape, Mackenzie’s account is given precedence over any others, and he himself is given the role of revolutionary and primary Improver (Nimlin 1979, 70; Harman 1997, 105; Fleming 2005, 123; Halliday 2013, 68). Little time is given to critiquing Mackenzie’s narrative, or exploring

alternative approaches. Recourse is not made to a discussion of the wider context of agricultural improvement in northwest Scotland (e.g. Macleod 1794). The islands' owner, factor, ground officer and sub-tenants become passengers on Mackenzie's mission perhaps because of a notable lack of estate records for the Improvement period: we have almost no written evidence for their roles during this time of landscape change after 1779 and before 1871. Mackenzie, whose notes were privately published by an admiring son (1911), becomes prime mover simply due to the existence of his account, and all wider regional narratives (particularly economic and social changes) are subsumed.

Such is the emblematic and emotive prominence of St Kilda's evacuation in 1930 that two other important considerations have been entirely forgotten. Firstly, many of the offshore islands of Harris were depopulated during the middle of the 19th century, e.g. Ensay, Killegray, Pabbay, and Taransay, and each has a story as poignant and intriguing (Lawson 1994; 1997; 2002) – St Kilda's archaeology and history are rarely set in this context. Secondly, the question surrounding the evacuation of St Kilda is perhaps not 'why did the community fail in 1930?' but rather 'how did the community survive until 1930?'



Figure 23 One of the stone settings in An Lag Bho'n Tuath. DP279330 © author

Methodology

The material submitted by the author draws in particular on four main strands of research and fieldwork, beginning in 2008 and continuing to the present day (e.g. Geddes forthcoming a, b):

1. Conservation Statements;
2. Archaeological Survey on St Kilda;
3. Archaeological Survey of Comparative Landscapes;
4. Desk-based Research.

They are presented in this structure and in this order since it reflects the way in which my research has progressed over time, in advance of the publications submitted in the portfolio.

Conservation Statements

The first method was the research and fieldwork undertaken to inform a series of five Conservation Statements prepared for the National Trust for Scotland (Geddes 2008; 2009; 2011a; 2011b; 2016a). These lengthy and comprehensive reports gave the author the opportunity to look at five structures in detail, to review the history of their study, and to study comparative material. The research of primary and secondary sources, and the fieldwork undertaken in 2010 and 2014, fed directly into the published portfolio submitted here.

In each case the reports drew on the methodologies established for conservation planning, in particular on the ideas of Informed Conservation developed in Australia and Britain (Kerr and the National Trust for Australia 1996; Clark and English Heritage 2001; HLF 2004; HS 2000; HES 2016). That approach sets out a clear process of information gathering, and a methodology for assessing and relating elements of cultural significance. There follows a phase dedicated to the assessment of risk (e.g. structural failure or coastal erosion) and opportunity (e.g. public engagement or research potential), after which comes an analysis of policy and intention in relation to the subject. This apparently straightforward method has in fact revolutionised the way that conservation practitioners work, bringing assumptions out into the open, laying emphasis on the underlying information, and stressing the relative importance of a heritage asset. Guidance on cultural significance assessment recommends the consideration of intrinsic, contextual and associative values (HS 2009; HES 2016, 49): it is possible for the condition of a monument to be important (e.g. Mousa broch); or its location within a group (e.g. the smaller stone circles at Calanais); or its association with a historic figure (e.g. Leven Castle and Mary Queen of Scots). The methods can also highlight an instance where a site or landscape is not

significant – perhaps a poorly preserved shieling hut, an isolated and badly damaged hut circle, or a post-medieval clearance cairn.

The lens of significance assessment has in fact proved hugely beneficial to my approach to St Kilda (cf. Harden 2008a; 2008b). It encourages and sustains a step-by-step method for interrogating not only intrinsic values such as condition (of course a relative value), but also some of those most relevant to St Kilda, such as associative significance. St Kilda is arguably one of Scotland's most significant cultural landscapes precisely because of its importance in the modern period to the country's national consciousness. But these links break down, diffuse and complicate when one considers individual monuments.

The first report (Geddes 2008) tackled the gun emplacement and magazine on St Kilda, constructed as a response to an attack on Hirta by a German submarine on 15 May 1917 (Gannon and Geddes 2015, 108; Figure 24). A thorough review of the primary and secondary documentation led to my discovery of why the



Figure 24 The 1918 gun emplacement. SC1475383 © Courtesy of HES (Graham and Anna Ritchie Collection)

Germans had targeted St Kilda, and why they had battered the storehouse of the island with such ferocity – it remained in a ruinous state until the 1980s. It was clear from the original war diary of the U-boat commander that he had been under the mistaken impression that the storehouse was the power station for Hirta's military base. This kind of information, coupled with a comparative analysis which in fact strengthened the case for the cultural significance of the gun itself (it being one of only two in situ examples in Scotland), put the management of the feature on a much firmer footing, and provided one of the more detailed studies of the wartime period on the island.

A second report was produced in 2009 (Geddes 2009), this time with its focus on the pier of St Kilda, once described as 'the greatest benefit that has been conferred upon us'.¹⁹ The modern pier, constructed by the Congested Districts Board c.1900 turned out to have a complex history, and the research and fieldwork led to my discovery of an 18th century capstan base and boat

¹⁹ NRS: AF42/933

naust on St Kilda, previously unrecorded elements of the historic landscape (Gannon and Geddes 2015, 106, 109). More importantly perhaps, the research for this report involved the interrogation of the files relating to the construction of the military base on Hirta between 1957 and 1958, and to a major phase of re-development between 1969 and 1970. This research later allowed me to develop a more detailed analysis of the military base on St Kilda than had previously been undertaken (Gannon and Geddes 2015, 124–9).

Two further reports were produced three years later (Geddes 2011a; 2011b; DES 2011, 201), after a field trip in November 2010. Both tackled vernacular buildings on Hirta that had been the subject of interest, research and glorification since the 17th century: Calum Mòr's House (Figure 25) and the Amazon's House (Figure 26). Unusually,



Figure 25 Calum Mòr's House, possibly a much-altered medieval building. SC1463832

both are named for their associated with stories told by the St Kildans in the 19th century and in the 17th century respectively. This undoubted social or cultural significance cannot easily be translated into anything strictly archaeological.

The survey and research considering Calum Mòr's House necessarily required the disentangling of numerous previous descriptions. First described by a journalist (Sands 1876, 35), it has on one occasion been ascribed to 'around AD600' (Quine 1982, 55) although most accounts tend to date the building to the medieval period. The author's analysis of the features immediately surrounding the building (Geddes 2011a, 14) demonstrated the stratigraphic complexity of the landscape here, much of which may be relatively modern. The search for comparative structures led the author, as it had led Muir and Thomas in the 1860s, to the study of similar buildings throughout the Outer Hebrides, and in particular to the tradition of corbelling seen in the modern shielings of Lewis and Harris.

This work was complimented by the analysis of the Amazon's House that same year (Geddes 2011b). The Amazon's House has been written about more than any other single building on St Kilda. Since it was first described in 1697, it has been assigned dates ranging from the Neolithic to the 17th century AD, many of which owed as much to speculation as to careful landscape

analysis (Steel 1965 [1994 edn.], 271; Harman 1997, 77; Fleming 2005, 23; Geddes 2011b). The process of developing a conservation statement allowed the author the time and space to look critically at the written evidence, the building itself, and its surrounding landscape, and the results later fed directly into the analysis of this part of St Kilda's landscape (Gannon and Geddes 2015: 59–63, 83–5).



Figure 26 The Amazon's House and surrounding structures present St Kilda's archaeology in microcosm. The site may be medieval and later, though most writers prefer an earlier origin. DP045011

The most recent Conservation Statement (Geddes 2016a) tackled a rather different subject; the late 18th century building on St Kilda known as the Feather Store. The 18th century in much of Scotland is a time of major landscape change when the organisation of the

nation's farms was changed dramatically in order to exploit new market and technological possibilities. This agrarian revolution affected the Scottish landscape deeply, resulting in the wholesale removal of earlier townships and curvilinear field systems, the establishment of a regular network of rectangular fields, and a new crop of farmsteadings with specialised buildings (Glendinning and Martins 2008). The effect of this on another island known well by the author, Bute in the Firth of Clyde, was dramatic and it is well-documented by a series of estate plans and ledgers (Geddes and Hale 2010; Geddes 2010a). On St Kilda and the estate of Harris, the archives of the owners and tacksmen have not been identified for the period from 1779 to 1871 (Harman 1997, 98), leading to a major problem with the study of the 18th and 19th century landscape and buildings. Fortunately there are a handful of secondary sources that describe the investments made by the new owner of the Harris estate and St Kilda from 1779, Captain Alexander Macleod (Anderson 1792: 280; Mackinnon and Morrison 1968: 55–58; Daniell 2006 edn. v1: 190–1; Knox 1787: 158–160). A careful reading of these led to my re-analysis of the historic landscape at Rodel, Harris, and a new assessment of St Kilda's storehouse, now for the first time identified clearly as a construction of the 1780s, strongly linked to economic development, government and private strategies to develop fishing in the region, and (through

its owner) to national and international narratives of change (Geddes 2016a, 38–42). This research and fieldwork contributed directly to two of the elements of this portfolio (Geddes and Grant 2015; Gannon and Geddes 2015, 93–115).

Archaeological Survey on St Kilda

The majority of the RCAHMS survey of St Kilda was undertaken between 2007 and 2009 (DES 2007, 209; 2008, 190–1; 2009, 195), with the focus of effort being on the complete mapping of the main island of Hirta at a basic scale of 1:5000 (see Gannon and Geddes 2015, 299). The project was undertaken as a partnership with the NTS,



Figure 27 Ian Parker (RCAHMS), Jill Harden (NTS) and Angela Gannon (RCAHMS) noting and surveying in 2008. DP045691

and their staff (including the author in 2008) were heavily involved in the fieldwork (Figure 27). The most accessible subsidiary island of Dun was mapped by the Commission in 2009 and again by a team that included the author in 2013. The outer islands presented more of a difficulty, but Boreray was thoroughly mapped by RCAHMS and Jill Harden in 2010, and Soay was briefly visited by Jill Harden in 2011 in order to gather a baseline record (DES 2011, 201). The sea stacks proved to be an insurmountable challenge as the protection of the bird colonies there now prevents summer landings. A team that included the author attempted a landing on Stac an Àrmainn in 2013, but the conditions proved impossible. For the principal stacks we still rely on the information gathered by Mary Harman and others, with the assistance of Stuart Murray at Stac Li (in 1976) and Stac an Àrmainn (in 1977 and 1984).

While the principal mapping of the islands was undertaken at 1:5000 and thus individual structures were captured as a single line with DGPS (Figure 16), particular areas of the islands were given much more detailed treatment. Village Bay, mapped by RCAHMS in the 1980s at 1:500, was thoroughly revised, with the original data digitised, enhanced and amended, and checked in the field. This process led to a re-assessment of the Village Bay field system (Halliday 2013, 67–72), subsequently expanded by the author (Gannon and Geddes 2015: 74–76, 9–81). The author was also involved in the 1:500 survey of the west side of Gleann Mòr in 2008, which built on the plan of the east side of the glen undertaken in 1985. For reasons related to format

and clarity, the published illustrations were produced at smaller scales: Village Bay is printed at 1:1250 and Gleann Mòr at 1:2500, both greatly reduced in size from the original 1:500 data.²⁰

In addition to my involvement with the Commission's fieldwork in 2008, my appointment with NTS involved a stay of 6 months on St Kilda between May and September that year, the great majority of which was spent in the field (Geddes 2009a; 2009c). This provided a unique opportunity to study more than 300 individual structures in some detail during the Cleit Conservation Project, and to get to grips with the multi-scalar landscape approach that archaeology on St Kilda's requires. The author undertook another field trip to St Kilda in 2014 (DES 2014, 206) in order to study the evidence for the pre-Improvement township that had been put forward by Fleming (2003), and to complete a corpus of plans of the blackhouses constructed in the 1830s (Figure 28), thus ensuring the relevant sections in Gannon and Geddes (2015) would be on a firm foundation.

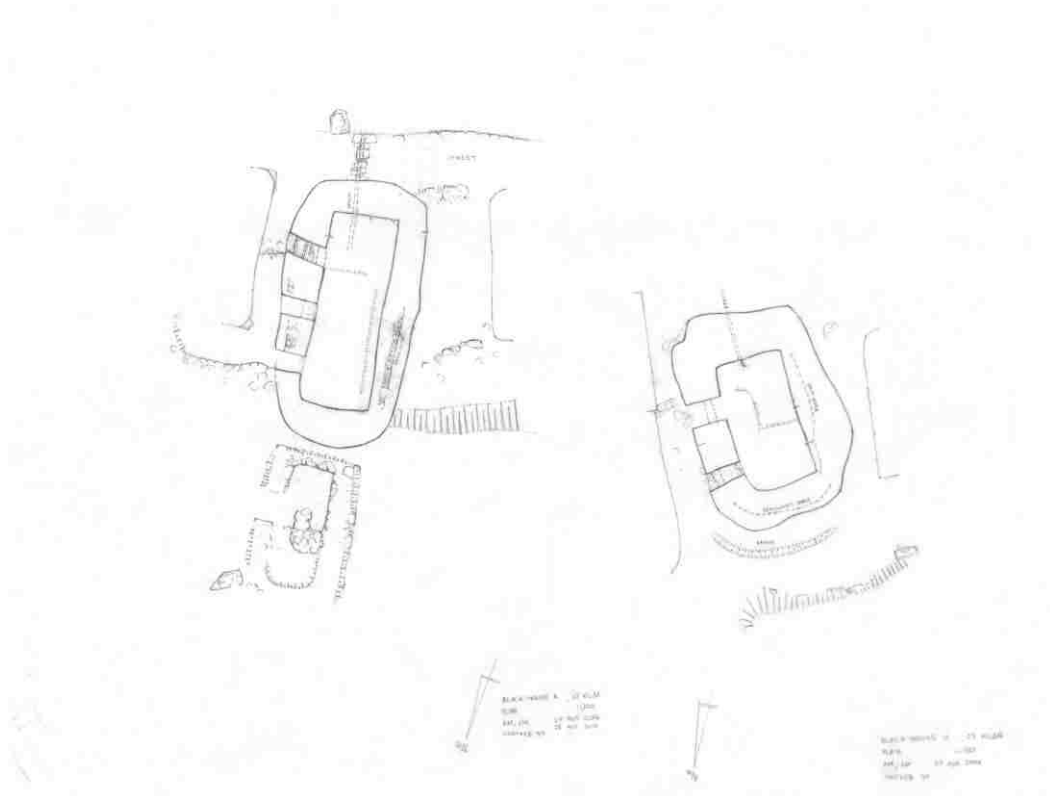


Figure 28 Detailed plans of St Kildan blackhouses, undertaken by the author and Alison McCaig in 2014. SC1450793

²⁰ The original survey drawings and data are available to view at the NRHE.

Archaeological Survey of Comparative Landscapes

It is nigh on impossible to analyse St Kilda's landscape without specific recourse to comparative examples in the region. It is equally clear that as much of this as possible should be done in person, given the difficulties in the interpretation of many features on the ground, and the likelihood of



Figure 29 Smaller and equally remote, North Rona forms a natural counterpart in St Kilda studies. DP256924

earlier misinterpretation. With these thoughts very much at the forefront of my mind, I began to seek out opportunities to visit and record landscapes and structures that might provide a broader perspective. This built on fieldwork undertaken for my undergraduate and postgraduate degrees, finished in 2001 and 2004 respectively, the second of which involved an analysis of building styles in the Western Isles over the long-term (Geddes 2006; 2010b). Commercial archaeology also provided the opportunity to undertake fieldwork in Lewis and Harris in previous years (e.g. DES 2003, 130; DES 2007, 198).

Fieldwork that was directly related to my study of St Kilda began in 2011 with a field trip to the island of Pabbay in the Sound of Harris, for many years part of a single farm with St Kilda (Geddes forthcoming (a); e.g. Canmore [10474](#)). One of the corbelled shielings recorded by F W L Thomas, at Sròn Smearasmal, Harris, was rediscovered and recorded during the same project (Canmore [313882](#)). In June 2012 fieldwork with was undertaken on the islands of Ensay and Killegray in the Sound of Harris (both trips including full revision of the archaeological record), and of a number of remote beehive shieling sites in Lewis, including Àirigh a' Sguir and Ascleit (DES 2012, 196). Mingulay, another important island in the comparative study of St Kilda (Buxton 1995; Harman 1997) was visited in 2013 and 2016, in part to provide another report for the NTS (DES 2013, 190; Geddes 2012; 2013a), and in part to compare the field system, township and peat stack stands with those of St Kilda. A fieldtrip to Lewis in 2014 included recording at one of the famous examples of a corbelled shieling at Both a' Chlair Bheag where a

gathering fold also survives (Canmore [75023](#)). A trip to the Flannan Isles, 20 miles off the west coast of Lewis, included the recording of both a pre-Reformation chapel and seabird fowlers' bothies with colleagues (DES 2014, 206; Figure 58). One of the most important comparative sites for St Kilda is of course the equally remote island of North Rona that lies some 45 miles off the Butt of Lewis (Harman 1993, v2, 382–388; Robson 1991; Figure 29). An archaeological survey was undertaken by RCAHMS and Jill Harden in 2009 (DES 2009, 194–5), while the author made separate fieldtrips to the island in 2010, 2012 (DES 2012, 184–5), 2013 and 2016, on two occasions with Jill Harden and Mark Thacker to carry out test pitting and building recording. These visits were undertaken to provide a comparison with St Kilda in particular relation to the various elements of Rona's landscape that inform an understanding of St Kilda, in particular the chapel, field system, peat stack stands, and the pre-Improvement township. One visit was made to Sula Sgeir in 2010, the island that is famous for the annual gannet hunt undertaken by the men of Ness, Lewis. The bothies and chapel that survive here are important for comparison with St Kilda (Canmore [1470](#); [1471](#)).

The author also took part in the Commission's projects on Rum (DES 2011, 201) and the Uists (DES 2012, 196; 2013, 189, 205; Geddes 2014), each of which has profoundly affected my view of the archaeology of St Kilda, and in particular my understanding of processes of survival and

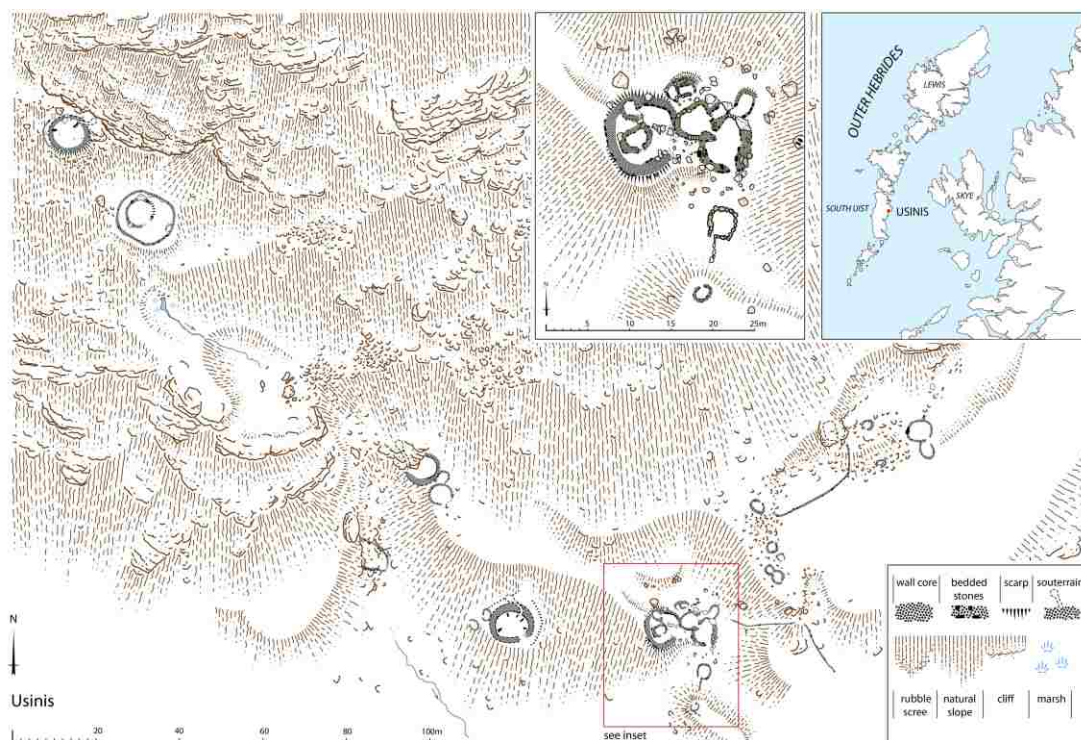


Figure 30 Recorded by RCAHMS in 2013, the archaeological landscape at Usinis, North Uist, includes five upstanding prehistoric buildings, and vestiges of later shieling activity. SCI346230

destruction, and comparison across classes. Fieldwork in South Uist in 2013 included the recording of a series of Iron Age souterrains that, in contrast to the example on St Kilda, retain obvious indications of the houses with which they were associated (e.g. Canmore [10151](#); Figure 30) – these structures too were included within the work of F W L Thomas in the 1860s reiterating how important and influential his ideas have been (Thomas 1869, 165–7). One final fieldtrip that should be mentioned was undertaken in 2014 on the island of Swona in the Pentland Firth. It is here that skeos survive, structures almost identical to St Kilda’s cleitean. They provide perhaps the best Scottish analogy we currently have for the use of drystone storage huts in the modern period (Canmore [9423](#); [9454](#)).

Desk-based Research

The volume of written source material for St Kilda can be overwhelming; the final reference list for *St Kilda: the Last and Outmost Isle* extended to over 350 individual items (Gannon and Geddes 2015, 7). Although landscape survey has been at the heart of the author’s approach to St Kilda’s past, an exhaustive trawl through primary and secondary sources has provided a fourth and equally important strain of research. The publication of the paper on cleitean involved a review of historical evidence (Geddes and Watterson 2013, 110–113), the first real attempt to use the site database created by RCAHMS and NTS (Geddes and Watterson 2013, 105), and the first comprehensive distribution plan of cleitean. Importantly, the analysis of this data using ArcGIS allowed this author to create a density map of cleitean on the main island (Geddes and Watterson 2013, 106), as a means of addressing the fundamental question of why cleitean were constructed in particular locations.

Contrary to popular belief (Scottish Executive 2004, 5; Fleming 2005, 12), the primary documentary material for St Kilda is in one important sense relatively limited. For the crucial period between 1779 and 1871, when the islands went through the hands of four different owners from two families, there are no estate records (Harman 1997, 98). There are however rich sources for the later 19th and 20th centuries, particularly in the National Records of Scotland and the National Archives (Kew). At the time of writing, there was no access to the Macleod archive at Dunvegan Castle and mentions of rentals thus rely on Harman (1997) in particular, while notes related to ecclesiastical history rely heavily on Robson (2005). The National Record of the Historic Environment (NRHE) was used extensively, particularly in relation to the historic involvement of the Commission and OS Archaeology Division on St Kilda and the Western Isles. The notebooks, photographs and drawings collected by RCAHMS between 1914 and 1924 during the Outer Hebrides Inventory programme were thoroughly searched,

catalogued and many were digitised.²¹ The original RCAHMS survey material captured on St Kilda from 1983 to 1986 was researched, digitised and catalogued fully for the first time, opening it up to scrutiny.²² This resulted in the discovery of additional plans, and more information on the scope and context of the project (which provided a foundation for later studies of landscape archaeology e.g. Fleming 2003; 2005).

The NRHE, accessed through the Canmore website, formed one of the primary sources of material since it brings together the results of various archaeological projects in one place, provides a link to material in the NRHE and presents material in online maps. Wherever possible the original source material was consulted, with Canmore simply acting as a conduit. That said, a fundamental tenet of the author's approach was that the landscape archaeology of St Kilda must be explored through a regional prism. In this context, the fact that there are almost 600 recorded medieval or post-medieval townships in the region (and one on St Kilda), or about 70 Neolithic chambered cairns (and none on St Kilda) become fundamentally important to the author's perspective. How can one comment with authority on St Kilda's township (e.g. Fleming 2003) without at least considering the archaeology and history of some of the townships in the local parish of Harris, the Macleod estate or the county? It is important to recognise that no other 19th century crofting township in the Outer Hebrides has been subject to the same level of study as St Kilda's, even those at Garenin and Arnol in Lewis (Holden et al 2001; Holden 2004; Figure 31).²³

The NRHE of course has limitations: only a handful of national archaeological programmes have been undertaken with a consistent methodology, and the data is open to criticism, reinterpretation and revision. In some instances lacunae within the NRHE were precisely what drove the fieldwork undertaken on comparative landscapes: the last archaeological mapping of Pabbay had been undertaken by Ordnance Survey Archaeology Division in 1965 (e.g. Canmore [10474](#)), and of Ensay (e.g. Canmore [10470](#)) and the Flannan Isles in 1971 (e.g. Canmore [3971](#)).

During the preparation of a 2nd draft of *St Kilda: the Last and Outmost Isle* the authors and editors agreed that each chapter must begin with a short summary of the remains from each period in the Western Isles region. This approach was founded on the idea that the reader must first understand the wider context before getting into the nitty gritty of St Kilda (cf. Fleming 2005, 37–8). They would in this way recognise that the Mesolithic period on St Kilda is essentially unexplored, while the Iron Age remains are a shadow of what is known from elsewhere in the

²¹ NRHE: 551 1/4/1/08 (<https://canmore.org.uk/collection/1291737>)

²² NRHE: 551 1/128/34/12/1 (<https://canmore.org.uk/collection/1255182>)

²³ NRHE: [MS 899/123](#) and [MS 899/124](#)

Outer Hebrides (e.g. Armit 2006; Parker Pearson and Sharples 1999; Harding and Gilmour 2000).



Figure 31 Oblique aerial view of Arnol, Lewis. This landscape has yet to be studied in as close detail as that of St Kilda. SC685276 © HES (John Dewar Collection)

This part of the project was undertaken by building a review from regional and island syntheses (e.g. Armit 1996; Branigan and Foster 2002; Parker Pearson et al 2004; Branigan 2005), complimented by more detailed excavation reports and notes on recent fieldwork provided in *Discovery and Excavation in Scotland*. To these were appended links to specific archaeological sites in Canmore, to encourage the reader to engage with field archaeology. Thus, the introductory four paragraphs on the Mesolithic and Neolithic periods draw on over 30 sources, each of which was carefully checked and cross-referenced to 20 individual sites (Gannon and Geddes 2015, 25–26, 266). For each period, the summary included a short description of typical funerary and settlement monuments, as well as indications of the character of stray finds and

assemblages. For the period from 1600 to 1780 AD the focus of comparison was shifted from the Western Isles region to the estate of the Macleods of Dunvegan, and in particular to areas that had been surveyed in some detail, on Pabbay and on Waternish, Skye (RCAHMS 1993). The dataset for the whole region would have proved too cumbersome to assess in this context.

When it comes to St Kilda itself, the serious modern archaeological publications based on original fieldwork undertaken with modern methodologies are fortunately relatively few in number, comprising the work of the University of Durham (Emery 1996), RCAHMS (Stell and Harman 1988), Mary Harman (1997), Andrew Fleming (2005), and the University of Glasgow and GUARD (Harden and Lelong 2011). In each case, the published results were scrutinised carefully for material that could be assigned to particular periods and incorporated in an overall analysis of the landscape.

St Kilda: the Last and Outmost Isle was essentially structured by period, then by the category of remains (e.g. settlement, burial, agriculture, fowling), and finally by individual structure. In each case the descriptive material was presented with an interpretation of the history of research. Thus, the discussion about the archaeology of the outlying island of Boreray (cf. Fleming 2005, 57-8) included a lengthy critical review of the candidates for a stone circle, chapel and wheelhouse on the island (Gannon and Geddes 2015, 32, 39), as well as a descriptive piece assigning the visible remains to the most probable period.

Results

The detailed results of the author's research into the landscape archaeology of St Kilda are published within the portfolio (Geddes and Watterson 2013; Gannon and Geddes 2015; Geddes and Grant 2015) and in forthcoming papers (Geddes forthcoming (a) and (b)). The purpose here is simply to provide an intelligible summary of some of the results, arranged in relation to the research aim and objectives laid out above.

The topics have been chosen to provide examples from what has been a broad study. In each case, the summary below includes recourse to the history of previous investigations – this analysis is not simply a literature review, but forms parts of the results proper, since the history of ideas and the broader context of St Kilda studies has profoundly affected the interpretation of archaeological data.

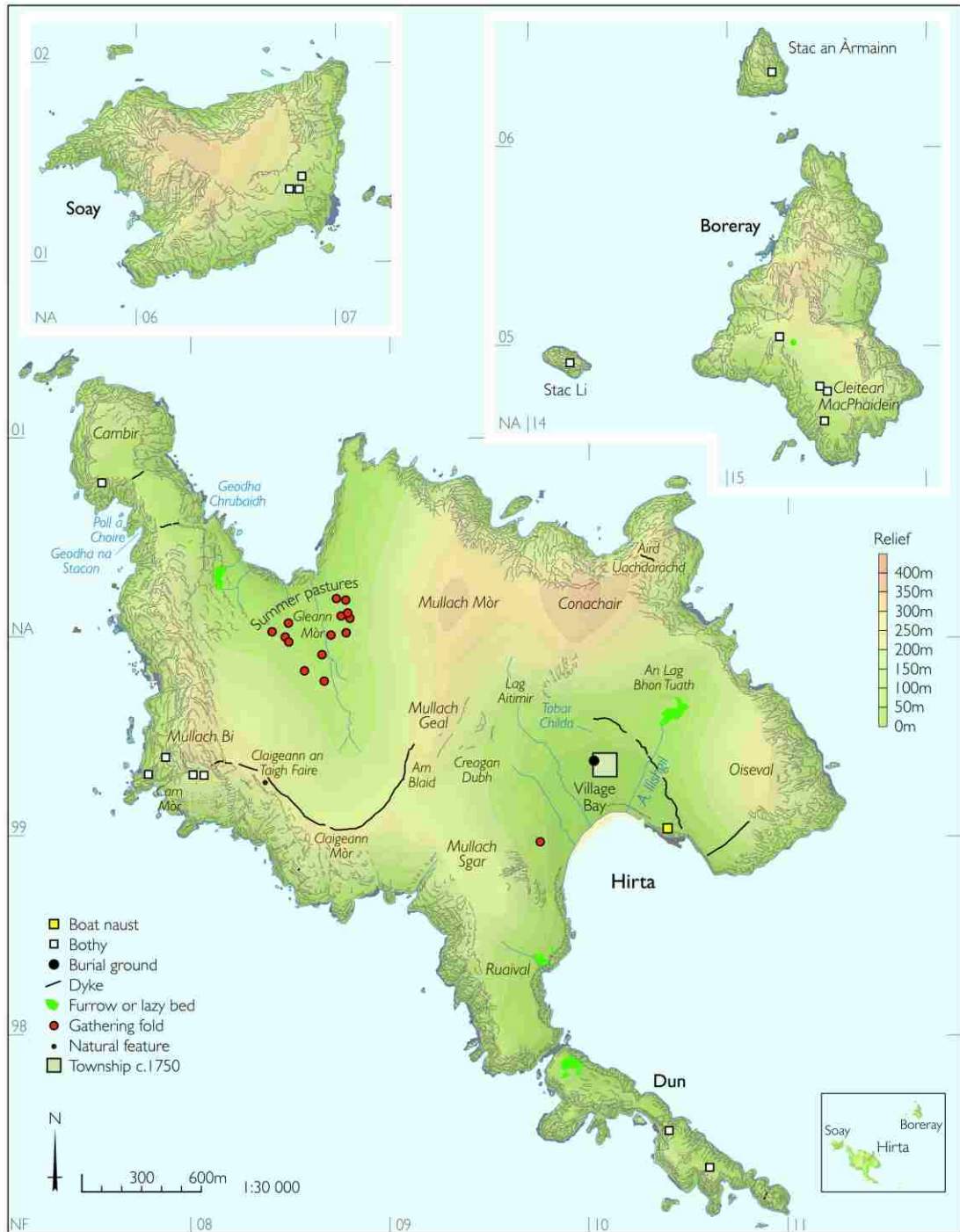


Figure 32 Map of St Kilda showing post-medieval features related to pasture and agriculture. SCI492829

The Landscape of Pasture

‘Could it be (we often wondered) that this, the remotest glen in all Scotland, on the very brink of Europe, once cradled a forgotten culture?’

Williamson and Boyd 1960, 67

What is the evidence for prehistoric settlement and agriculture within Gleann Mòr, and how does it compare with other regional examples?

The northern glen on St Kilda is simply known as Gleann Mòr (the big glen) and is separated from the southern and settled bay of Hirta by a 240m high pass known as Am Blaid (the mouth, perhaps the entrance, to the glen) (Figure 32). From Village Bay it takes about an hour to walk over to the foot of the glen, where the grassy and open ground gives way to low cliffs. The steep sides naturally frame the lower ground which descends in a series of natural terraces that provide relatively rich grazing for the current flock of Soay sheep (Figure 33). In the modern period the glen was used by the St Kildans for summer pasture of their cattle and sheep: a small number of documentary sources describe milking and folding in detail (summarised in Harman 1997, 152–3), though few photographs exist.

Alongside more than 50 cleitean, the archaeological features include as many as 14 cellular buildings (Figure 34), perhaps 14 gathering folds (Figure 35), and the fragments of enclosures and walls (Gannon and Geddes 2015, 84).²⁴ In addition, there is a natural spring protected by a fine well-head known as Tobar nam Buaidh (the well of virtues), a boundary dyke that prevented cattle from crossing back over to Village Bay, a plot of feannagan (lazy beds), and a small group of buildings of unknown date and function (e.g. Canmore [298391](https://canmore.org.uk/thesaurus/298391)).

The glen has long been seen as a place where ancient structures might survive, and as early as 1858 individual buildings attracted antiquarian interest (Muir 1861; Muir and Thomas 1862). This was to some extent anticipated by Martin Martin who described the Amazon’s House in some detail (1698 [1749 edn.], 12; Geddes 2011b). Few early writers had the time to study this

²⁴ The classification of archaeological sites follows the Canmore thesaurus. <https://canmore.org.uk/thesaurus>.

building for more than a few hours, and it took until the mid-20th century for surveyors to incorporate other similar structures into a detailed study (Williamson and Boyd 1960).



Figure 33 Aerial view of Gleann Mòr. DPI134161

Complex narratives about the landscape archaeology of Gleann Mòr were developed by Williamson (nd; 1958; Williamson and Boyd 1960; 1963), Davidson (1967) and Cottam (1979), each of whom attributed various structures to the prehistoric period, some even suggesting the possibility that the glen was once permanently settled (cf. Macgregor 1960). More recently the survey work of Mary Harman and RCAHMS (Stell and Harman 1988; Harman 1997) provided a restrained analysis, with the structures and field system being assigned to the medieval and post-medieval periods. In 2008 the east side of Gleann Mòr was resurveyed by RCAHMS, while the west side was mapped for the first time – an illustration of the entire area was published in 2015 (Gannon and Geddes 2015, 84), with my reanalysis.

Dating many of the structures in Gleann Mòr has proved particularly problematic, with most writers relying on the analysis of the plan form and a search for comparisons. In this they have struggled, one remarking that a simulacrum could be found in Cornwall (Cottam 1979, 55; cf. Quine 1982); while in the 1950s the naturalists simply could not believe that the modern St Kildans were capable of such architectural achievements (Williamson and Boyd 1960, 73). Most

recently Andrew Fleming has tentatively suggested that the field system in Gleann Mòr may be of Bronze Age date (2005, 51–2, 61), but that the cellular structures such as the Amazon’s House are of a different date being ‘fairly normal houses dating from the Pictish period’ (2005, 23, 61; cf. Harden and Lelong 2011, 176; Figure 34). Pushing this thesis even further, Margaret and Ron Curtis have identified a prehistoric stone circle in the glen (2007; 2008; cf. 2010).²⁵ These recent writers have followed in the footsteps of those before them, sometimes taking the glen out of the islands’ context, and the islands out of the regional context.



Figure 34 The Amazon’s House – a shieling hut of c.1600AD, or a Pictish dwelling? DP045018

Given a lack of modern excavation, interpretations have also been influenced by the remoteness of the glen, and a longstanding problem in the interpretation of buildings of drystone and turf without architectural embellishment. Writing more generally about RCAHMS and the Outer Hebrides, Mortimer Wheeler noted long ago that ‘the [RCAHMS] Commissioners show a

praiseworthy reluctance to overestimate the antiquity of these [medieval and later buildings] merely on the grounds of their primitive appearance’ (Wheeler 1929, 381). This author has strived to follow that train of thought with regard to the cellular buildings in Gleann Mòr, and now prefers an interpretation as shieling huts of medieval and later date.

The evidence can be summarised thus:

- The **condition** of these structures is relatively good: some cells are still roofed. Those structures that have been robbed out appear to have suffered this fate after c.1750 AD. The nearby structures that consumed the stone are post-medieval in date;
- The **place name** Airigh Mhòr (big shieling) is attached to the main group of four cellular buildings and cannot possibly refer to any other structures in the glen;
- The **plan** form and building **style** does not compare favourably with anything other than post-medieval shieling huts, and certainly doesn’t bear ready comparison with any known prehistoric structure (Geddes 2011b);

²⁵ Jill Smith has fancifully suggested that the whole landscape is configured in the shape of a woman (2017).

- The **historical evidence** is plain: one building is certainly in use as a shieling hut in 1697, and shieling activity (in the sense of summer occupation) seems to have stopped by the early 18th century;
- There are at least 14 cellular buildings in this relatively small glen, a number that is broadly comparable with the number of families on St Kilda in the post-medieval period (Harman 1997, 77, 153). This is surely **too high a density** for a prehistoric community (cf. Macgregor 1960, 23–4);
- It is **improbable** that a burgeoning prehistoric settlement would have been constructed in what is a relatively small glen, clearly less attractive for settlement than Village Bay;
- It is **improbable** that a Pictish building would survive in good condition in a glen that was intensively used for pasture from at least the 17th century – that interpretation relies on the notion that patterns of survival and destruction are unique on St Kilda;
- There is at present **no evidence to suggest an earlier date**.

Turning now to the gathering folds, these too have been occasionally interpreted as prehistoric structures, one writer seeing them as courtyard houses of Pictish date (Cottam 1979; Figure 35). The prehistoric date was based on a misreading of the fabric by Williamson and Boyd (1960), who understood the folds and cellular buildings to be part of one structure, and then by Cottam (1979), who understood the folds to underlie the cellular buildings: the relationship is in fact the reverse.

The use of these folds is well-attested in the 19th century (Thomas 1869, 176; Mackenzie 1911, 7) and the suggestion from documentary evidence is that they were used at a time when the St Kildans shuttled from Village Bay to Gleann Mòr each day during the summer (summarised in Harman 1997, 152–4, 190). One important result of my own fieldwork has been the recognition of similar structures in South Uist, Lewis, Rum and Arran, each appearing to be of post-medieval date (cf. Geddes 2011b, 19).²⁶

The most recent elements of the landscape in Gleann Mòr include a large number of cleitean. Many of the cleitean are free-standing, constructed using stone and turf won from the surrounding slopes, but a few directly overlie earlier structures that include gathering folds, cellular buildings and dykes. Some were certainly being constructed here in the 1870s (Sands 1878, 188), and there is little doubt that they are in general post-medieval in date. In addition to the cleitean and gathering folds, there is every reason to think that the boundary dyke enclosing

²⁶ Canmore [10154](#); [75023](#); [314273](#); [358031](#) respectively.

the upper reaches of Gleann Mòr is also post-medieval in date. Its condition and character are perfectly reconcilable with that interpretation, and its use most likely reflects the holding of cattle in Gleann Mòr during the summer months, when the practice of permanent summer shieling in the glen had ended.



Figure 35 Gathering fold A, with two more recent cleitean to the left. DP045505

Where then is the Bronze Age field system referred to by Andrew Fleming? Few writers have paid much attention to the group of as many as 20 enclosures, and isolated stretches of wall (Figure 36; Figure 38). Passing mention of them was made in the 1950s, though the writers conflated these features with a plot of feannagan (lazy beds) that is of 18th century date (Williamson and Boyd 1960, 74; Gannon and Geddes 2015, 81). It is likely though that the existence of a field system supported the thesis of early and permanent settlement put forward by Williamson and Boyd (1960), Cottam (1979) and Davidson (1967) who created a circular argument around the cellular buildings and the field system, perhaps driven by a fascination with the uniqueness.



Figure 36 The field system in west Gleann Mòr. Derived from GV005704

The area near the shore is the most straightforward to interpret (Figure 36). Here four stretches of dyke presumably linked to form a large enclosure, bounded to the north by the coast, within which there are two or three smaller enclosures. In places the walls have been robbed out to build post-medieval cleitean and a number of other buildings of unknown date and function (Gannon and Geddes 2015, 85, 87). The second suite of ‘fields’ occurs around Structure K where at least three enclosures contain the grassy and sheltered ground around a natural hollow

(Figure 36). Here too sections have been robbed out for the construction of modern cleitean, but the walls seem to be associated with the gathering folds and cellular buildings found in close proximity. There are no clear and direct relationships to be observed, but it may not be coincidental that K has two gathering folds and is also at the centre of the group of enclosures – it has clearly been a central node for penning and milking animals. As with the enclosures near the shore, there is no direct evidence for cultivation here, as the soils do not seem to have been deepened or made into beds. Finally, the most complex series of walls occurs on the eastern side of the glen, where the majority of gathering folds and cellular buildings are located (Figure 37; Figure 38). A few walls are directly overlain by modern cleitean, while in other instances they cross each other in a way that suggests there are multiple phases.

The evidence can be summarised thus:

- Some of the enclosures and lengths of wall are directly associated with the gathering folds, which are demonstrably of post-medieval date;
- There is no evidence for soil-deepening, cultivation ridges, or lynchets;
- There are no clearance cairns, often found in association with prehistoric field systems;
- Some of the walls and enclosures run up to and abut the cellular buildings, which are probably of medieval and later date;
- Some of the dykes take in ground that cannot possibly have been cultivated;
- Some of the longer stretches of dyke appear to separate large areas that appear to be parcels of pasture, rather than arable;²⁷
- The use of the glen for pasture is well-attested;
- There is no convincing environmental evidence (Walker 1984);
- There is no convincing artefact evidence to indicate cultivation, such as hoe blades (Fleming 2005, 52).

²⁷ Fleming (2005, 52) suggests that these are ‘divisions of land’ and may be ‘relatively late’.



Figure 37 General view of Gleann Mòr from the west. The concentration of structures and walls is on the far (east) side. SC1467609

The chronology of Gleann Mòr will continue to prove problematic until there is further archaeological research, whether it takes the form of an environmental study or limited excavation. That said, there are things that we can confidently say about the history and archaeology of this part of the landscape. Firstly, it is clear that the focus of activity in the glen during the historic period has been on the use of the glen as pasture for the islanders' cattle and sheep. This is reflected in the gathering folds (no longer seen as unique to St Kilda), the shieling huts, the hill dyke and in at least some of the enclosures and field boundaries. To this we can add the well Tobar nam Buaidh, known as a source of healing water from at least the 17th century (Geddes and Gannon 2015, 55). Other recognisable components include plots of lazy beds in the north-west part of the glen that are almost certainly of 18th century date. Finally, the cleitean in the glen reflect the availability of stone, the use of the glen for the gathering of grass, turf or fuel, and probably the temporary storage of bird carcasses after harvesting undertaken in the Cambir area.

This landscape is in one sense recognisable. Nearly every reasonably sheltered glen within reach of a township was used for much the same purposes in the north-west highlands. Indeed, the pasture here is probably much better than the rocky northern and western coasts of the other Harris islands.

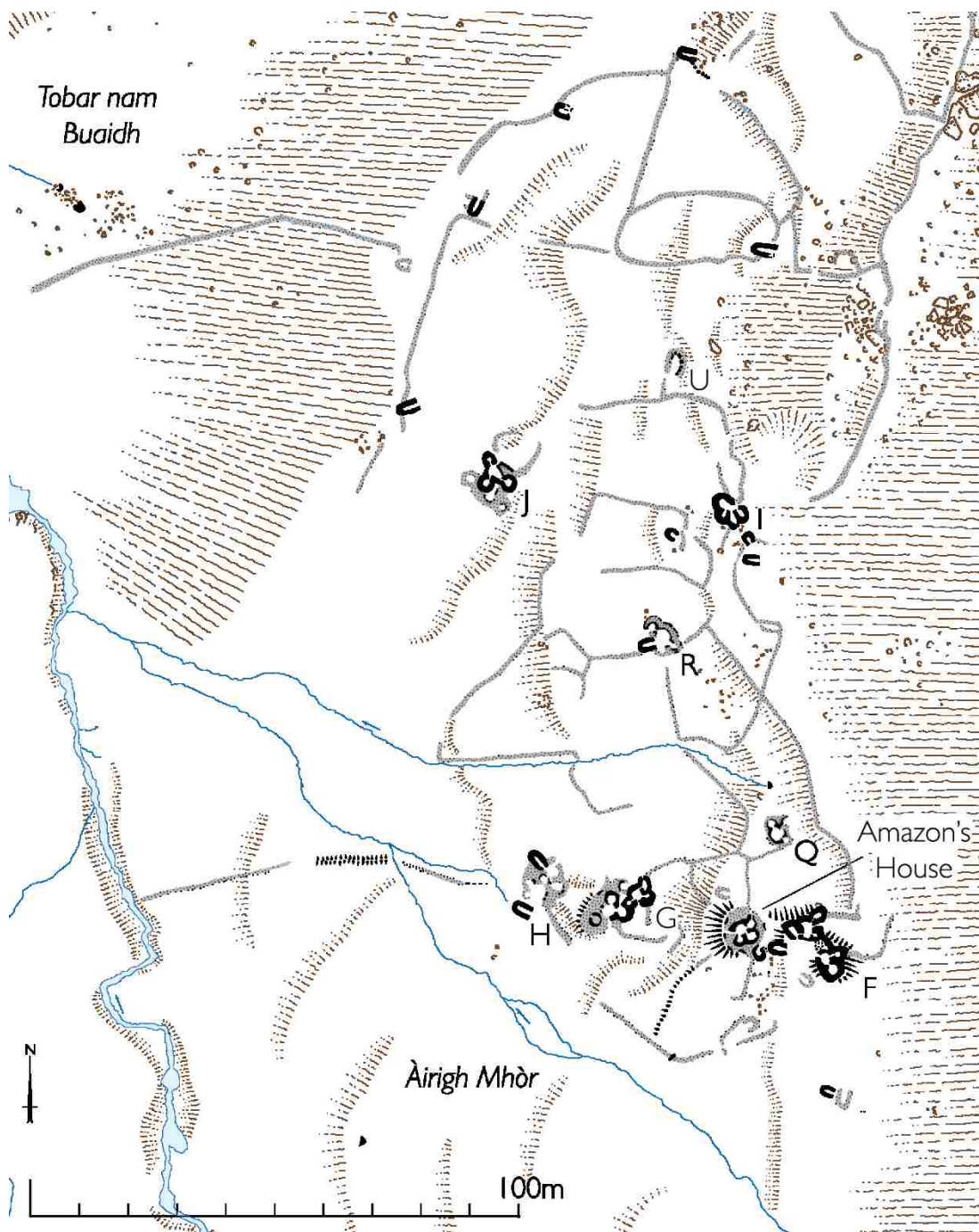


Figure 38 The field system in east Gleann Mòr. Derived from GV005704

Having said that, the particular story of survival and destruction in Gleann Mòr is unusual: the majority of small peripheral glens of Harris and Lewis were occupied in the 19th century, when crofters were cleared from better land, and many consequently contain post-medieval settlement and lazy bed cultivation remains that necessitated the removal of earlier features; the survival of shieling huts that can be ascribed to the 17th century is very rare indeed –to the best of my knowledge there are no other examples in the region.

Prehistoric field systems, when encountered through the methods of archaeological survey, are often dated by their direct association with prehistoric buildings. A typical Scottish example might include hut circles, small cairns, and field banks forming a field system. Unfortunately, it is not generally possible to ascribe a date to a field system without the occurrence of diagnostic structures – banks of turf and stone occur in many different periods. On Mingulay, RCAHMS recorded four prehistoric roundhouses, recognisable by their thick walls, entrances, situation, preservation and context: none were associated with contemporary fields, and the enclosures and cultivation visible in the area is probably post-medieval (RCAHMS 2010). In contrast, field mapping on Canna produced a series of about 12 prehistoric hut circles, some with associated field systems (e.g. Canmore [141568](#)) and even cultivation remains tentatively interpreted as cord rig (Canmore [10768](#); RCAHMS 1999; Gannon and Halliday 2002; Hunter 2016). In North Uist, RCAHMS recorded as many as five prehistoric buildings in a relatively small area, but there was no associated field system and each was identifiable on the basis of prehistoric traits (Geddes 2014).

In contrast, the prehistory of Gleann Mòr remains elusive. None of the cellular buildings in Gleann Mòr contain characteristics that point to a prehistoric date, and earlier authorities were simply confusing a broadly cellular plan and drystone building, with evidence for a prehistoric date. That said, if there was any prehistoric settlement or burial in Gleann Mòr it is likely to underlie one of the later shieling huts. The degree of mounding, and the amount of stone that is visible, suggests that this is a possibility at structures M, K and the Amazon's House (Figure 39).

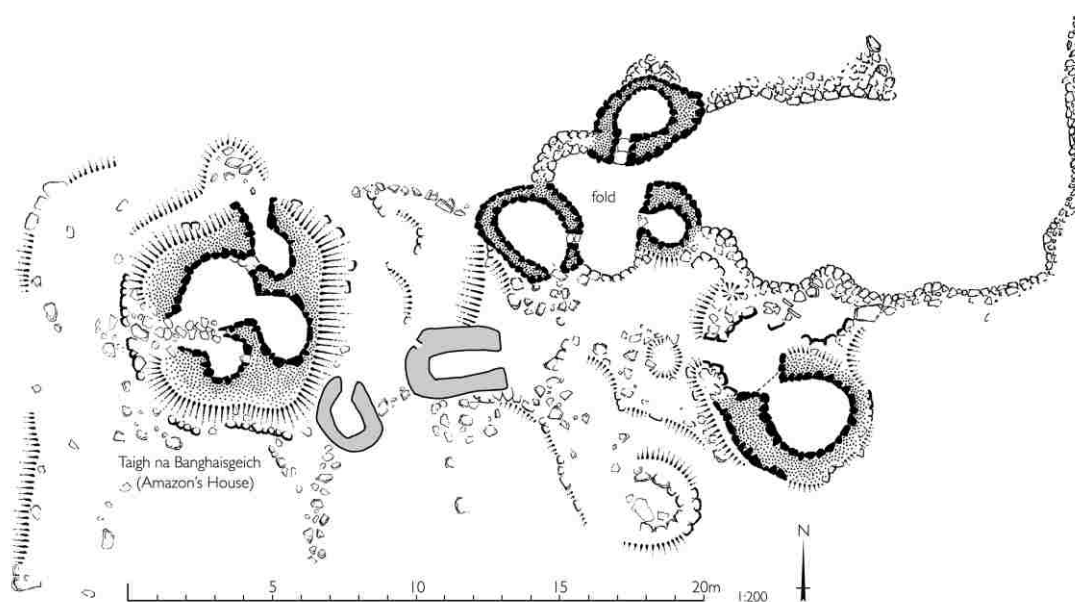


Figure 39 This complex includes two cellular huts, a gathering fold with attendant cells, and a series of cleitean. At present, the dating evidence suggests this is a late medieval and post-medieval site. SCI492740

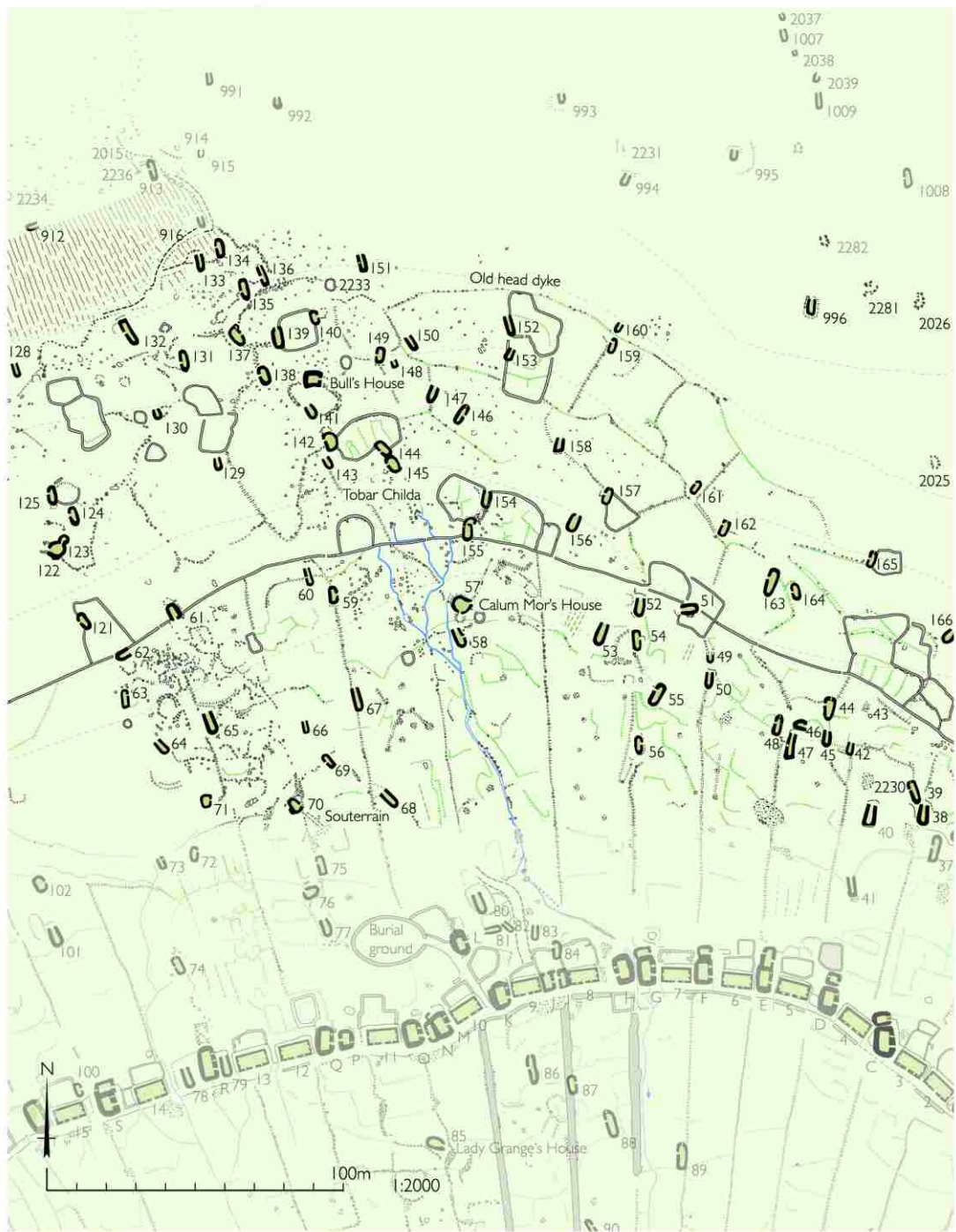


Figure 40 General plan of the relict field system in Village Bay. SC1492810

The Landscape of Agriculture

‘There is much here to be subjected to archaeological inspection.’

Donald Macgregor 1960, 24

What is the evidence for early buildings and field systems within Village Bay?



Figure 41 A general view of Village Bay. The current head-dyke, built in the 1830s, can be traced curving around the better ground. The focus of earlier features is near the centre of the image, above and below the head-dyke. SC1463925

The Village Bay field system includes the mid-19th century arrangement of individual crofts and their enclosing head-dyke, as well as the relict features that have preceded it (Figure 40; Figure 41). The summary of results presented here is limited to a discussion of the evidence for pre-crofting (i.e. pre-1830s) buildings and fields within the Village Bay field system, with a specific focus on the existence of a prehistoric field system, and

of the intractable date of some of the structures that survive here.

Despite a lengthy campaign of excavation in recent years (Harden and Lelong 2011), there are few scientific dates, and many of the key structures (even entire classes of structure) are poorly dated. That said, trial trenching, geophysics and pollen analyses have shown that the ground here has been intensively cultivated and enriched since prehistory (Meharg et al 2006; Harden and Lelong 2011), while the preponderance of stone tools, some of which are certainly prehistoric, clearly supports an argument for a lengthy occupation (Fleming 2005). Fieldwork and excavation by Andrew Fleming (1995), some of it undertaken with Mark Edmonds (1999), led to the suggestion that particular elements of the Village Bay field system were Norse or Bronze Age in date (summarised in Fleming 2005, 51–4).

Before delving into the detail, it is worth first stripping away the most recent and known elements of the field system that were created after 1830. These includes the following features:

- A drystone head-dyke;
- A series of crofts, each with attendant boundaries and the scarps and platforms of internal garden plots;
- A series of drystone garden enclosures, some by the houses, some above the head-dyke;
- A series of planticrues (tiny garden enclosures);
- Cleitean and other buildings;
- Blackhouses, and later cottages;
- Quarries, in the form of pits and irregular scarps.



Figure 42 Patterns of post-medieval quarrying, such as these denuded scree slopes, have yet to be mapped. SC1463895

The reconstruction of the landscape after 1830 involved the movement of significant quantities of soil and stone, and few of the negative features that were created at that time have made it on to archaeological maps: only one quarry was indicated on the original RCAHMS plan (Stell and Harman 1988). It is actually possible to see numerous small pits and scarps, where stone has been

won to build cleits, the head-dyke or specific buildings; the scree slopes directly above the storehouse have probably been used as the quarry for its construction (Figure 42). This rebuilding continued into the later 19th century – in one small area, at least four large cleitean have been constructed on and around earlier features, each one requiring the quarrying or robbing of stone and the construction of a level foundation (see Cleitean 34–8; Figure 49; Stell and Harman 1988, 7).

A series of features in the field system must date to an earlier period. In some cases, they have been robbed, and in others they are overlain by later structures. The most obvious of these are two stretches of dyke that cross across the higher ground behind the current head-dyke (Figure 43; Figure 44). First noticed by J L Davidson (1967, 4), at least one of these has probably acted as a head-dyke during the post-medieval period, perhaps as recently as the early 19th century. The lower of the two may be the earliest for two reasons: firstly, the pair of subdividing banks

that run between the dykes appear to abut the upper dyke, but run over the soil behind the lower dyke; secondly, the upper dyke seems to spring from an earlier wall at the west, while the lower dyke gets lost in this area, as if it has been subsumed in later building. To the east, both



Figure 43 The two scarps running across the hillside where the grass gives way to heather are the remains of pre-crofting head-dykes. SCI467635

walls can be traced intermittently for some distance, as depicted on the pull-out map accompanying *St Kilda: the Last and Outmost Isle*. It must be recognised that we have no absolute dating for these features – they simply appear to be pre-crofting head-dykes, perhaps built in the same (probably post-medieval) period.

Other features, smaller and irregular enclosures, some with high drystone dykes protecting them, can also be seen to pre-date the head-dyke of c.1840 since, as Macgregor noted (1960, 26), ‘the existing walls are clearly in the nineteenth century style of building, but the enclosures are probably of earlier date since in several cases they are transected by the regularly aligned head-dyke’ (see the enclosure beside cleit 167, Figure 49).

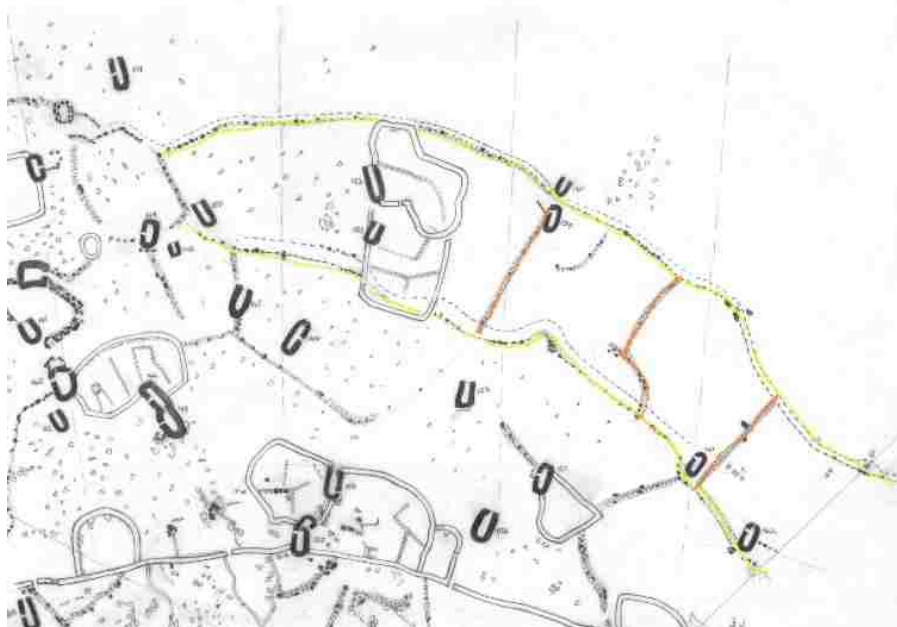


Figure 44 The original RCAHMS survey annotated to show the old head-dykes in yellow. The subdivisions in orange seem to abut the upper dyke, but partially overlie the lower dyke. Derived from SCI451150

The next feature that must be discussed is another stretch of relict head-dyke, this time found below the current head-dyke (Fleming 2005, 64; Gannon and Geddes 2015, 81; Figure 45). First recorded in the 1950s this feature has often been put forward as a track or street rather than a head-dyke; it formed an important part of the evidence for the site of the pre-crofting settlement (Williamson and Boyd 1960, 55; Macgregor 1960, 25; Stell and Harman 1988, 17). It is much larger than the two mentioned above and now survives as a grass-grown terrace (hence the identification as a track), with the odd line of facing stones visible among sections that have probably been robbed. Soil has accumulated behind this wall, while quarrying and cultivation below it may have accentuated the height. Dating evidence is limited to the relationship that it has with other features: a

number of cleitean have been constructed on and even into it, while some of the croft-boundaries run up to it. One unusual building (Cleit 32) may have been constructed later than this dyke, though the evidence is unfortunately ambiguous. I have assigned it to the medieval period, principally on the basis that it appears to be earlier than the stretches higher up the slope, and has been severely truncated at its western end by post-medieval activity.

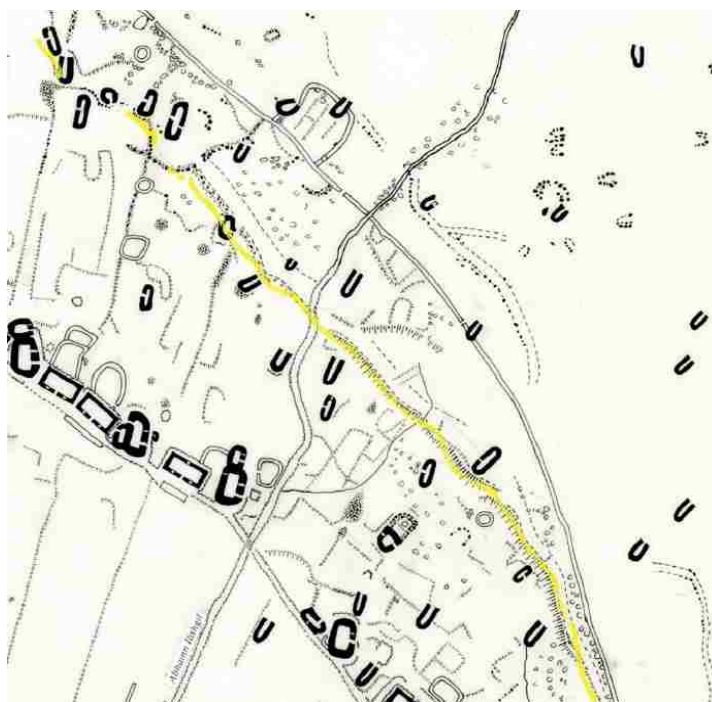


Figure 45 The lower relict head-dyke (in yellow). Derived from DP209309

There is little doubt that other features within the system date to the medieval and post-medieval periods. Stratford Halliday has argued that vestiges of this system in the form of terraces and mounds that underlie more modern features might extend down to the sea, and he has suggested that they are all ‘components of the field-system that was replaced by the crofts’, that ‘may have accreted over many centuries’ (2013, 70–71). In this he chose to differ from Andrew Fleming, who had suggested that the aforementioned head-dykes may be Norse in date

whilst, in the same breadth, noting that ‘there is...as yet no evidence that these old head-dykes date from the Norse period’ (1995; 2005, 66).

Fleming has gone further in his analysis of the Village Bay field system, arguing that the central area of ‘primitive looking’ features may be later prehistoric (2005, 51). In doing this he resurrected an idea initially put forward by J L Davidson in 1967 who had identified what he thought were a series of hut circles and boulder walls of Late Bronze Age or Early Iron Age date (1967, 2, 7). The hut circles identified by Davidson can all be dismissed as small huts, pens and enclosures, none of which support a prehistoric date.²⁸ The boulder walls, however, require further discussion.

Fleming’s hypothesis grew from the discovery of prehistoric stone quarrying to the west of Village Bay, in the steep slopes known as Clais na Bearnach (1995; Fleming and Edmonds 1999). With Mark Edmonds, Fleming (1999) discovered a large number of stone tools in Village Bay including hoe-blades, pounder/grinders and Skaill knives, some of which bear close comparison with examples found in secure prehistoric contexts in the Northern Isles (Gannon and Geddes 2015, 31).²⁹ Fleming went on to argue that the distribution of these stone tools, that have been incorporated into later buildings and walls, was coincidental with ‘primitive looking’ walls in Village Bay (Fleming 2005, 51); a small trench across one boulder wall was opened to test this hypothesis (Fleming and Edmonds 1999, 140–146; Figure 46). The wall was found to be of multiple phases, and finds from the trench included stone tools and pottery, as well as 18th and 19th century artefacts. The excavators felt that the evidence suggested that the wall was contemporary with the stone tools, and that they could be therefore be coterminous. There are problems with this hypothesis. Firstly,



Figure 46 The field system of Village Bay in the area where Fleming and Edmonds (1999) opened their trial trench (indicated). Derived from SC1451149

²⁸ Some of the hut circles identified by Davidson at NF 0995 9955 (1967, 1-2) had been surveyed by Macgregor (1960). A few cannot now be located, while others are so small that an identification as a prehistoric hut circle in this context is not supportable.

²⁹ They also provided compelling evidence that stone tools were in use on St Kilda in the post-medieval period (Fleming and Edmonds 1999, 153-154), although they argued that this was ‘the re-invention of a way of working’ or ‘the legacy of a tradition that was never entirely forgotten’.

neither the pottery nor the tools were of a type that can be closely dated; secondly they occurred in contexts that suggest they have been incorporated into the wall; thirdly, the wall that they chose cannot in itself be seen as anything other than pre-crofting (c.1840) in date, as it is in an isolated position, truncated at both ends (Figure 46); finally, there is no scientific dating evidence. Even if the stone tools found in this excavation were prehistoric in date, it is perfectly plausible that they were incorporated into a much later wall.

In summary, the field system of Village Bay is clearly a complicated archaeological landscape that has developed over many centuries, if not millennia. At present, no elements of the field system can be assigned to a date earlier than medieval or post-medieval and, while fragments of earlier features may survive, it seems abundantly clear that Village Bay provides an exemplar of the processes of survival and destruction that make it generally difficult to find well-preserved prehistoric landscapes across Scotland.

One further element of Village Bay's archaeology is also worth looking at in summary. Turning back to the late 1950s and the 1960s, one of the principal research questions at that time was the location of the pre-crofting 'medieval' settlement and emphasis was laid on the descriptions offered by previous writers, including Macaulay (1764) in particular (Williamson and Boyd 1960; Macgregor 1960). The surveyors identified two groups of buildings. One was a set of small stout drystone huts that they felt may be 18th century in date: these can be discounted as more modern buildings; some were cottars' houses; another was built to house the communal bull (Figure 47). The second set of buildings is more challenging. These were defined by evidence for a plan that had originally been cellular in form the surveyors became interested in their relationship with the buildings in Gleann Mór, which they felt sure were early in date. By the late 1960s the idea that the pre-crofting settlement (often described as medieval) had been securely located in these cellular buildings was firmly embedded in the literature.

RCAHMS in the 1980s expended a good deal of effort identifying all of these structures and providing detailed plans and photographic records. They agreed that each represented an earlier building that broadly corresponded to historical



Figure 47 This late 19th century building housed the communal bull. It was once interpreted as a pre-1834 house (Macgregor 1960). SC1463853

descriptions of pre-crofting buildings on St Kilda (Stell and Harman 1988).

These buildings remain problematic in a landscape archaeology of Village Bay (Figure 48). None has been professionally excavated, and their importance has been played down in recent summaries of St Kilda's archaeology (Fleming 2003, 377; 2005, 134; Harden and Lelong 2011, 176): the last of these implied that they may be later prehistoric. My own current interpretation of these structures is that they may indeed be the remains of early dwellings in Village Bay best assigned to the medieval period (Gannon and Geddes 2015, 59). That rests on the assessment that they have been so altered from their original form that they are almost unrecognisable. It is only the foundations, and in particular the inclusion of what were probably sleeping cells akin to those found in other parts of the Hebrides, that may survive from their first phase. The process of altering them for use as cleitean has perhaps resulted in the reconstruction of their roofs, the contraction and reconstruction of their walls, the insertion of new openings, and an alteration in floor plan.

In contrast, the most recent fieldwork on settlement has focussed on another hypothesis for the location of the pre-crofting village. Building on a suggestion by Robin Turner, Andrew Fleming identified the location as much nearer the burial ground using a combination of field survey and re-interpretation of early 19th century artworks (2003; 2005, 133–7). His thesis is compelling, and some of the features on the ground are almost certainly robbed-out buildings. Given the scope and detail of Fleming's research, it is surprising that he did not look to the wider context, since a brief study of pre-crofting settlements in Harris demonstrates that they are often clustered in relatively close proximity to the medieval church and burial ground. Furthermore, the route of



Figure 48 Cleit I22-3. Much altered, this 'cellular' building may incorporate the foundations of a medieval house. SC1463876

the street itself provides compelling evidence – why else would it kink around buildings near the burial ground were it not for the fact that they were there before it was constructed?

In recent years, the dust has settled somewhat around this debate with most St Kilda experts agreeing with Fleming's (2003) hypothesis that the pre-crofting settlement was centred around the burial ground, but

that there may have been another, earlier, focus of settlement to the north, to explain the presence of the cellular buildings such as cleit 122–3. The smallpox epidemic of 1727–8 has been put forward as a cause for this move, as the settlement associated with disease may have been abandoned (Harden and Lelong 2011, 188; contra Gannon and Geddes 2015, 77).

The summary above has highlighted some of the difficulties with the analysis of the field system in Village Bay, and in particular with an interpretation of some of the remains as prehistoric. A summary of the evidence for settlement has also been provided, since an understanding of pre-crofting settlement patterns must be closely related to that of agriculture and enclosure.

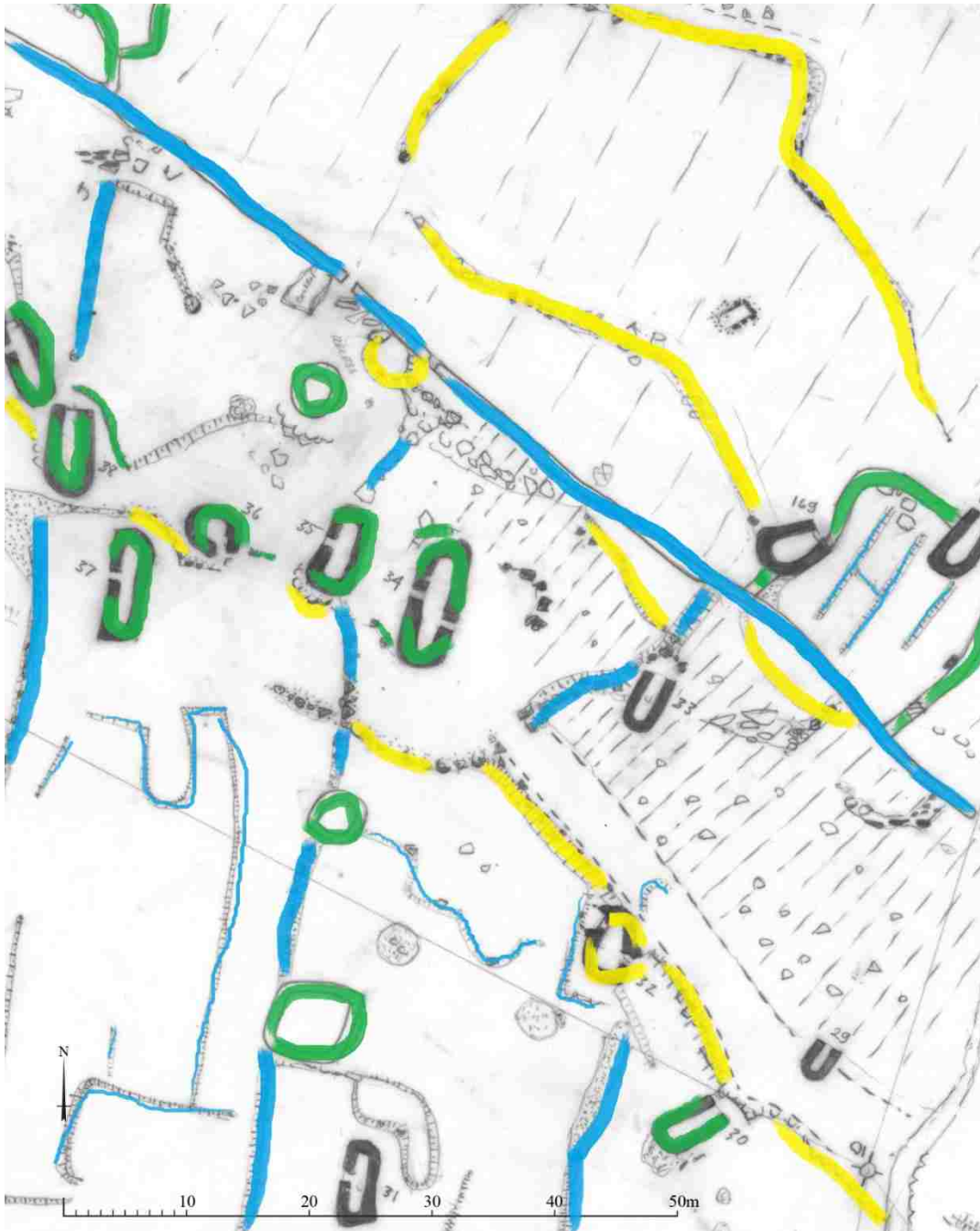


Figure 49 This extract from an original survey drawing demonstrates the complexity of the landscape, as phased by the author. The crofts and associated features (c.1840) are blue, earlier features are yellow, and later features are green. In some areas the relationships are very clear (a series of small enclosures in green overlie the croft boundaries in blue). The construction of cleitean 34–8 in the late 19th century has had a dramatic effect on the old head-dyke (in yellow) that now runs from south-east to north-west in fits and starts.

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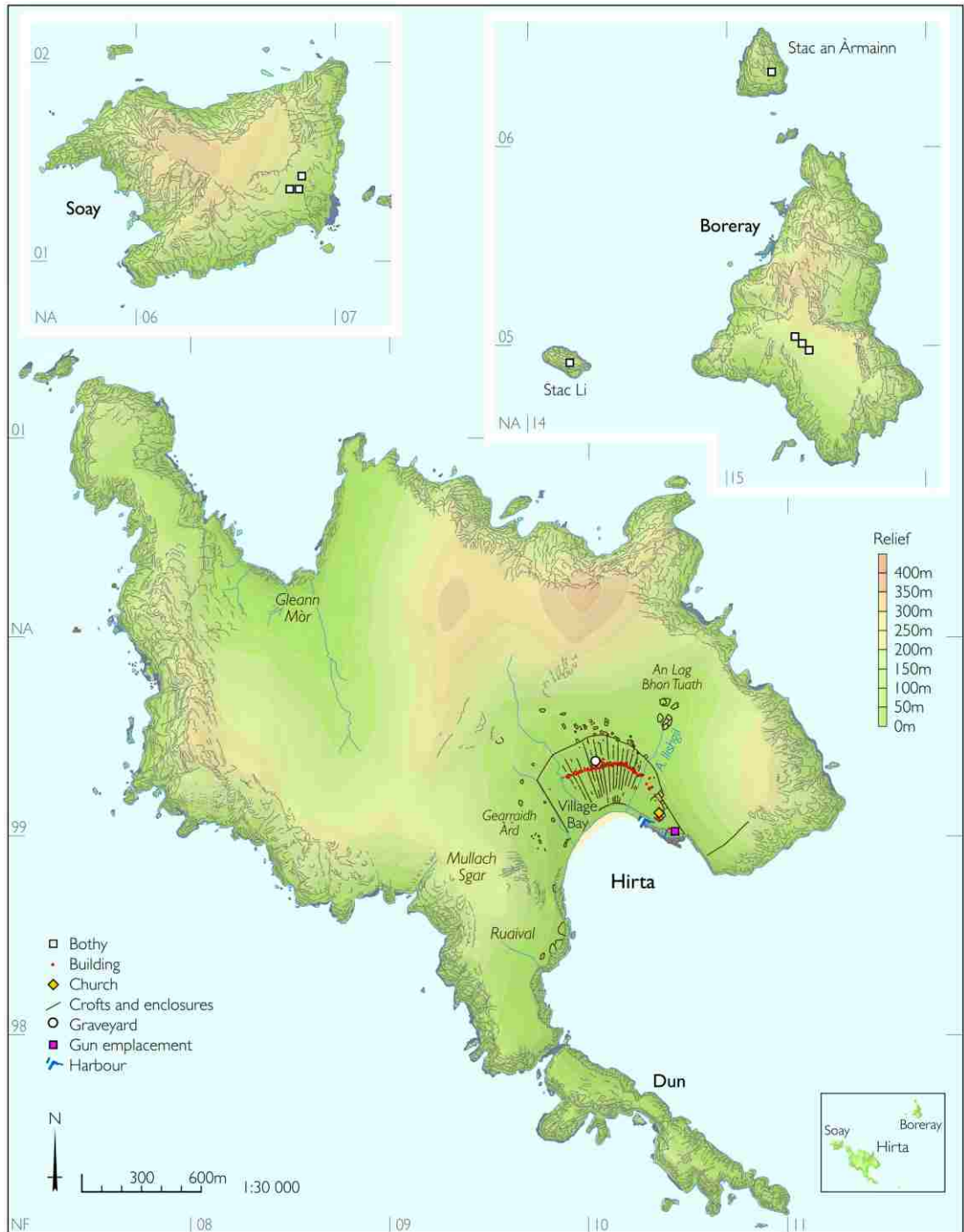


Figure 50 Map of the St Kilda archipelago showing the main features of c.1780-1930. SCI492830

The Landscape of Improvement

‘It is certain that a small number of acres well prepared in St Kilda...will yield more profit to the husbandmen than a much greater number when roughly handled in hurry...’

Kenneth Macaulay 1764, 35

What archaeological features of 18th and 19th century date survive on St Kilda, and how do they reflect agricultural (and other) improvements seen more widely in the region?

The landscape of Scotland was deeply affected by changes in agricultural practice during the late 18th and early 19th centuries. In many parts of the country, farms were enclosed, field systems made regular, and farmsteadings reconstructed (Glendinning and Martin 2008). Social



Figure 51 The landscape on the west coast of Harris underwent huge change in the 19th century and 20th century. The resulting landscape owes much to phases of agricultural improvement in that period. DP221673

impacts included the wholesale movement of small tenants, whether to new crofts, to the New World, or to take their part in the Industrial Revolution (Figure 51).

The impact on archaeological survival was twofold. From the grubbing out of old farms and earlier archaeological sites, even using explosives, there was a huge loss of upstanding archaeological sites (cf. Welfare 2011, 31–67). Our rich cropmark record, and the discovery of

numerous small finds, owe much to this period of destruction and discovery. By way of contrast the regularisation of agricultural holdings created distinctive areas of relict land set over to grazing, and it is here that whole landscapes of pre-Improvement date can be located. These include medieval and later rural settlements and, in some parts of the country, significant areas where prehistoric sites remain within their landscape context. In the Outer Hebrides more generally, agricultural improvement came in the form of crofting, which developed as a response to the need for smaller holdings that tied the small tenants to the nascent kelp industry in particular (Hunter 1976; Lawson 2002; Grant 2016). A later phase of sheep farming, and eventually the development of sporting estates, had a concomitant effect on archaeological survival and destruction. Because of the development of sheep farms, and the clearance of large numbers of people to more peripheral locations in the Western Isles (or the New World), some tracts of the landscape are dotted with pre-Improvement settlement remains and associated field systems: the islands of Pabbay, Mingulay and North Rona are good examples (Geddes forthcoming a; RCAHMS 2010; Robson 1991). In other areas, for example the islands of Ensay and Killegray, the former townships were almost totally removed.

Little has been said about the way in which St Kilda fits into this wider pattern. While the primary historical evidence is severely limited by the absence of estate records, the archaeological landscape of St Kilda in the 18th and 19th centuries is rich, and it has benefited from detailed



Figure 52 The storehouse on St Kilda was constructed in the 1780s as part of wider efforts to promote a fishing industry. SC1463846

analysis and survey (Stell and Harman 1988;

Fleming 2005; Gannon and Geddes 2015) as well as excavation (Quine 1983; Emery 1996), environmental research (Meharg et al 2006; Donaldson et al 2009) and geophysics (Harden and Lelong 2011).

The first obvious sign of agricultural improvement on St Kilda is probably the plot of feannagan (lazy beds) in Gleann Mòr that were set out as an agricultural experiment at the suggestion of the islands' tacksman (Macaulay 1764; Gannon and Geddes 2015, 81). A more explicit sign of

Improvement on St Kilda takes the form of the Storehouse (Figure 52). Constructed in the late 1780s, this two-storey building almost certainly owes its inspiration to attempts by the islands' owner at that time to encourage a fishing industry in Harris and St Kilda (Geddes 2016a).



Figure 53 The establishment of the crofting township (reflected here in the linear plots, the street and regularly spaced houses) resulted in the removal of most of the earlier settlement. DP044780

Constructed at the same time as a harbour and related buildings at Rodel on Harris, the storehouse is in fact an important symbol of economic change, of significant investment, and of links to the encouragement of fishing elsewhere (Geddes 2016a). Some 40 years later the construction of a church and manse in 1827–8, to a design by Thomas Telford, instigated the formal enclosure of a glebe, and the enrichment of a series of walled enclosures (Harden 2008a; 2008b; Robson 2005). This too was part of a wider pattern of church construction in the region, including examples on the island of Berneray near Pabbay (c.1829) and a new parish church at Scarista, Harris (c.1840) (Gannon and Geddes 2015, 99).

During the 1830s and early 1840s the St Kildan township was completely reconstructed, and the agricultural land reorganised (Mackenzie 1911; Gannon and Geddes 2015, Chapter 6; Geddes and Grant 2016; Fleming 2005, Chapter 8). The principal features of this project included the creation of a series of approximately rectangular plots or crofts, one for each family (Figure 53). On each an improved form of blackhouse was constructed, often furnished with a window and an external midden pit, all laid out along a paved trackway that led to the storehouse and the landing place where a boat naust (now almost completely destroyed by the construction of a

septic tank) with an attendant capstan base survive (Gannon and Geddes 2015, 106, 109). A kiln-barn was possibly constructed around this time, though only the footings now remain (Emery 1996).

Descriptions of the 19th century on St Kilda tend to view the establishment of these crofts, new housing and a church as changes that were unique, and it can at times be easy to forget the wider picture in the region. This is in part led by the nature of the documentary material which, rather than being comprehensive and administrative, tends to take the form of emotive descriptions of relatively short visits to the island, and much regurgitation of earlier material. The testament of Rev. Neil Mackenzie, the minister on St Kilda from 1830 to 1844, has thus had a huge impact on St Kildan studies, since it provides more detail than any other contemporary source. Because of this he is often described as the genesis of these changes, as opposed to a contributor and commentator: ‘the 1830s brought the minister, Neil Mackenzie, and with him radical changes to the layout and fabric of the village’ (Harden and Lelong 2011, 190; see above).

It seems abundantly clear that this view requires moderation. Firstly, the pattern of settlement and agricultural development on St Kilda in the 19th century needs to be viewed as one example of a regional shift that resulted in widespread demographic, economic and agricultural change. I have tried in my research to bring that wider regional context to bear, and to point to the obvious lacunae in our understanding of the process on St Kilda (Geddes and Grant 2015; Geddes forthcoming (a)). Just as important is the recognition of the elements of St Kilda’s archaeological landscape that are unusual: this research is just beginning but significant elements include the evidence for fowling but also peat and turf cutting. Of more importance are the underlying reasons why the community survived the period of agricultural improvement without the decimation of its population – in much of the remainder of the region, the 19th century is characterised by economic changes that resulted in major shifts in the distribution of populations.

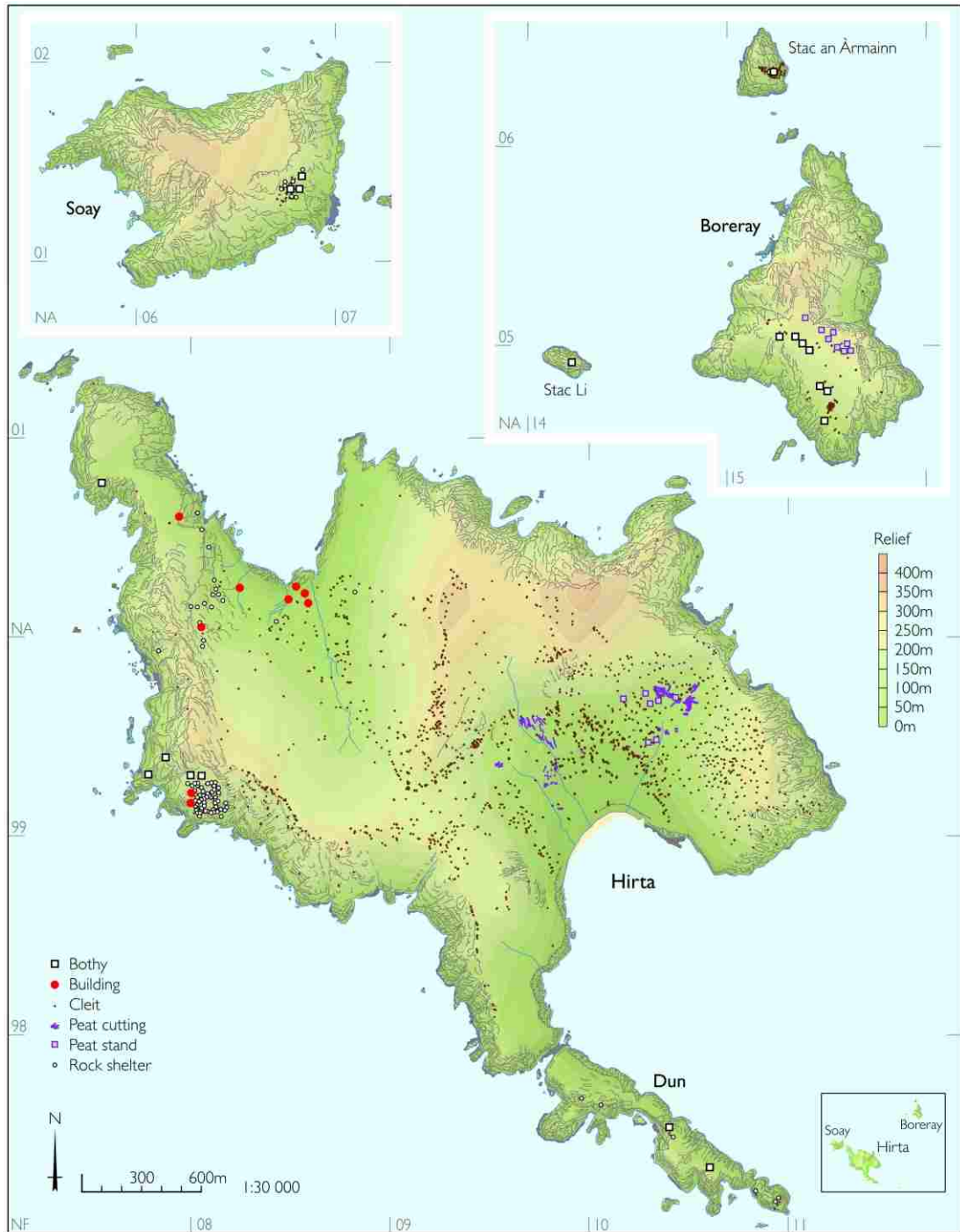


Figure 54 Map of St Kilda showing features related to fowling and peat cutting. SC142837

The Landscape of Fowling

‘Their present rent [c.1840] is principally paid in feathers’

Neil Mackenzie 1911, 16

How is fowling reflected in the landscape archaeology of St Kilda, and how does it compare to other landscapes in the Outer Hebrides?

Visitors to St Kilda in the 18th and 19th centuries were equally amazed by the huge numbers of seabirds and the efforts of the St Kildans to catch them. While fowling was by no means unique to the islands, the St Kildans made a particular art of it, whether to provide food for their own tables, or to provide oil, feathers and flesh for export to their tacksman or factor (Baldwin 1974; Harman 1997, 205–225; Shrubb 2013).



Figure 55 Groups of cleitean like this one, near Claigeann Mòr, were probably depots for seabirds taken from the steep ground below. DP279924

The archaeological features related to fowling are in one sense obvious though they are seldom explicitly referred to. Firstly, the islands are dotted with cleitean and these appear to have developed as a form of storage for bird carcasses and eggs (Figure 54; Figure 55). There are a huge number of cleitean: more than 1,200 on Hirta; more than 50 on Boreray; as many as 80 on Stac an Àrmainn and others on Soay and Dun. While some are recent constructions, which gave shelter to hay, fish or fuel, many can be directly related to fowling. These include the group on Stac an Àrmainn in particular, where some 80 or so cling to the rock face, with their attendant bothy. On Hirta some of the dense clusters were almost certainly depots (Figure 55), while some cleitean can be directly associated with areas that still host significant bird populations, or may have in the past (Geddes and Watterson 2013; Gannon and Geddes 2015, 89).



Figure 56 One of the fowlers' bothies on the outer island of Boreray, photographed in the early 20th century. It has now completely collapsed. SCI323126 © Courtesy of HES

The second component are the fowlers' bothies, small seasonal shelters used by a group of St Kildans for shelter. The examples on the two sea stacks have been known since the 17th century (Martin 1698), but others have now been located on Hirta and on Dun (Gannon and Geddes 2015, 88–89). In a few cases, it is difficult to be sure

whether they are associated with fowling, sheep (on Soay), or even cultivation (on Boreray). Some were maintained and occupied into the 20th century and particularly striking images show a bothy on Boreray that is now completely ruinous (Gannon and Geddes 2015, 114; Figure 56).

A third component of the fowlers' landscape has been found only within the boulder field of Carn Mòr (Figure 57), a steep rocky slope on the west side of Mullach Bì, on Hirta. Here, more than 80 small nooks and crannies have been supplemented with a number of stones to form temporary stores (Harman 1997, 160; Gannon and Geddes 2015, 88). This extraordinary landscape must relate to fowling among the boulders.

Broadly comparable landscapes do exist. The Flannan Isles, which lie some 50 miles north-east of St Kilda and 20 miles from the shore of Lewis, were also exploited for seabirds and grazing (Figure 58). The two corbelled buildings on the largest Flannan Isle, Eilean Mòr, were in use in the 17th century (Martin 1703, 16), and still roofed in 1859 (Muir 1861, 181–2; 1885, 60, plan; cf. Thomas 1869). One may have functioned as a bothy, the other as a store. Both are built of drystone and turf, and each has a cellular plan; the largest cells are only 3m in diameter. Fowling still takes place on Sula Sgeir (gannet rock), a small and rocky outcrop about 40 miles north of the Butt of Lewis, and 11 miles west of North Rona. The gannet hunters from Ness still



Figure 57 The author recording one of the small stores in Carn Mòr. DP 279918

seasonally occupy some of group of four corbelled bothies on Sula Sgeir. These buildings are also modern in date, though they may replace similar structures, the footings of which can be seen nearby. Mingulay, in the southern part of the Outer Hebrides, was also known for its fowling, although no structures directly

related to fowling have been recorded (Buxton 1995; RCAHMS 2010).

In addition to the cleitean, bothies and stores, fowling has had a more important impact on St Kildan archaeology as a whole. There is little doubt from the historical evidence that seabirds were a fundamentally important part of the St Kildan economy from at least the 17th century if not much earlier (Serjeantson 2014, 284, 287). This extended beyond their importance to the sustenance of the community to their value as a commodity for export. During the early and mid-19th century, the St Kildans appear to have paid almost the entirety of their rent in the products of fowling, particularly feathers (Dixon 1902, 510; Mackenzie 1911, 16; Harman 1997, 100).

I have suggested that it may be in part because of this that the St Kildan community escaped the prevalent ‘Improvements’ in the remainder of Harris, where communities were first re-focused on kelping and crofting, before many were removed from the best land in favour of large sheep farms (Lawson 2002; Colls and Hunter 2015, 110; Gannon and Geddes 2015, 113; Geddes forthcoming a). It could be argued that the survival of the St Kildan community in the early 19th century owes much to the value of the seabirds themselves. Indeed, there is little doubt that the decrease in value of feathers and oil during the late 19th century contributed to the decline of the community. The general density of cleitean, and the specific concentrations of structures in areas such as Carn Mòr, Stac an Àrainn and Boreray also raise the intriguing possibility that we should really be thinking of St Kilda, in the post-medieval period at least, as a landscape that is partly industrialised.



Figure 58 The seabirds of the Flannan Isles, some 50 miles north-east of St Kilda, were also exploited in the 17th century. The fowlers' bothy survives as a ruin on the largest island. DPI 66570

Conclusions

This critical review has set out to explain and contextualise some elements of my research on St Kilda during the last ten years. By its nature, it presents a unified summary of what has been at times piecemeal and frustrating work, providing the reader with a sense of what has been done, and where my views have differed (sometimes radically) from those of other researchers. I have continually emphasised the importance of the history of research and the recurring appearance of particular ideas about St Kilda's archaeology. Few interpretations in archaeology emerge for the first time, and the roots of many of the persistent values and interpretations set on St Kilda can be traced back to the 1850s in some cases, and the 1950s in others.

While Andrew Fleming's corpus has certainly revolutionised St Kilda studies, there is little doubt that he too has occasionally fallen into the trap of eulogy: on the one hand he incisively critiqued the 20th century historians of St Kilda as biased in their outlook, but on the other he identified a specialness on St Kilda (in its prehistory in particular) that cannot yet be justified when the archaeological evidence is looked at in the cold and harsh light of a regional context. It is remarkable that almost 120 years after Robert Munro's great synthesis of Scottish archaeology described St Kilda as a place where building methods of 'high antiquity' survived (1899, 336), what is probably the greatest book on the subject identifies field systems as prehistoric partly on the basis that they are 'primitive looking' (Fleming 2005, 51).

I have tried to demonstrate that the archaeological landscape of Gleann Mòr is interesting and complex, but that there is no reason as yet to identify anything there as dating to before the time of Macleods' control of St Kilda in the 16th and 17th centuries. As it stands, the buildings, folds and fields in the glen seem to reflect intensive use as pasture for the islanders' sheep and cattle over many generations. Village Bay too hosts a complex field system and a suite of buildings that belie simple classification: much is yet to be securely dated. Most of what is visible may turn out to be medieval and post-medieval, a thesis that accepts the importance of survival and destruction to the reading of any archaeological landscape.

The post-medieval archaeology of St Kilda has also suffered from the lack of a wider context. I have repeatedly emphasised that the 18th and 19th centuries are not well documented on St Kilda, since the estate archives have yet to be discovered; if the letters and receipts of the owners and tacksmen do come to light, much of what we know may be turned on its head.

St Kilda's pre-Improvement township and crofting township have too often been studied as if no parallels exist; yet almost 600 townships have been recorded in the Western Isles alone.

Those on Pabbay, an island linked with St Kilda for so many centuries, may prove fundamental to our understanding of St Kilda in the late medieval and post-medieval periods.

The story of the death of St Kilda's community in 1930 has perhaps blinded us to the inescapable fact that it survived when almost every other community in the parish of Harris was torn asunder during the economic and social upheaval of the early and mid-19th century. Whether or not this was due to the economic importance of fowling to the islands' owners and factors remains to be demonstrated. It is to be hoped that further enquiry will provide more detail on the social and economic context of this vital tenet in St Kilda's story, and draw comparison with other parts of Scotland where it was equally important (such as the Bass Rock and Ailsa Craig; Figure 59).

The answers to these and the many other questions will only come from a sustained and multi-disciplinary approach to the study of the past in the Western Isles as a whole, with St Kilda forming an important and in some ways unique piece in the puzzle. That research will benefit from a wide view at the outset since we cannot hope to get an informed perspective on our past if we do not do not undertake comparative studies, with similar methodologies, across larger datasets. Much as the novice excavator is taught to work with their trowel from the known to the unknown, and to avoid opening sondages here, there and everywhere, St Kilda studies can only develop if undertaken with the same careful, step-by-step approach to an understanding of the past, with empiricism as its foundation.



Figure 59 The island of Bass Rock, East Lothian, seen here bedecked with gannets, played host to equally intensive fowling exploitation before 1900. This is just one example where a wider approach to St Kilda studies might offer more fruitful results. DPI91794



Figure 60 The upper slopes of Oiseval are dotted with cleitean. DPI34132

Part 2

‘It is likely that it will take many years for a re-appraisal of the evidence and a re-building of our theoretical approach to St Kilda to begin to erode the well-entrenched historical narratives that exist both in print and in the public imagination.’

Gannon and Geddes 2015, 160

Coherence

The three components of the portfolio presented here address elements of St Kilda’s archaeology at different scales. The book is by its nature an encyclopaedic overview, and we have seen above that it is structured and balanced in a way that promotes a rounded view of St Kilda’s landscape, set in its regional context. It was set out from the beginning to appeal to both an academic audience, and to the non-specialist general reader. The two remaining elements of the portfolio explore particular aspects in corresponding detail, but have much the same overarching approach. Each of the elements of the portfolio drew on the same four strains of method, and were informed by the approach outlined in detail above, which has been applied consistently by the author in my engagement with St Kilda studies.

The earlier paper of course had some impact on the writing of the book, so that the section on cleitean in 2015 drew on the more detailed study published in 2013 (Geddes and Watterson 2013). Similarly the research undertaken for the paper on the mid-19th century on St Kilda (Geddes and Grant 2015) was complementary to that undertaken for the book. This last paper, written with Kevin Grant, although it draws to a greater degree on contemporary theory, is still essentially focussed on a close empirical study of an estate plan, and the contemporary archaeological landscape.

Candidate Contribution

In each case my co-authors have provided confirmation that I undertook at least 50% of the writing and research with respect to the submitted works (see Appendix 1). My own contribution is defined in the methodology section above, and only a brief summary is provided here.

The paper on cleitean was a joint effort between Alice Watterson and myself (2013), drawing on the outcomes of the RCAHMS survey and the resultant data and structures database. I was responsible for the structure and tone of the paper, and for the historical research, the analysis of locations and the summary of comparable buildings. The paper on Sharbau's plan (1860), written with Kevin Grant (2015), grew from a project undertaken on Hirta during his tenure as St Kilda Archaeologist. My contribution to the paper included the passages on St Kilda in 1860, Captains Otter and Thomas, Henry Sharbau, and the analysis of the 1860 plan itself, while Kevin's knowledge of archaeological theory and Gaelic were amply suited to the discussion of toponymy and a critique of descriptions of the crofting landscape as static.

St Kilda: the Last and Outmost Isle brought the results of the RCAHMS/NTS survey of St Kilda to publication. Once the shape and content of the book had been agreed, I undertook the bulk of the research and writing, contributing five of the seven principal chapters, and undertaking major revision to the remaining sections. In addition, I wrote all seven of the essays on different themes in the imagery of St Kilda, and undertook the image research. None of this would have been possible without the support of RCAHMS, and subsequently HES, and of my colleagues, whose contributions are detailed in the acknowledgements (Gannon and Geddes 2015, 292–5).



Figure 61 The cliffs of Conachair, the highest summit of St Kilda at 430m. DPI 34200

Contribution to Expansion of Knowledge

We all stand on the shoulders of the writers, fieldworkers and researchers before us, and we all set out to prepare the ground for those that will come after us. The research presented here was undertaken within the auspices of RCAHMS, which at that time was in its death throes after some 107 years. Archaeological work within RCAHMS had rather a different focus from that in either academia, or the commercial sector. For many years, the purpose was simply to provide as detailed an account as was possible, given constraints of method, technology or time. Certainly, it continued to be axiomatic that any information that was provided was intended to be authoritative and unbiased, so that it could be used by anyone that might need it, whether for management or research. The staff had often worked in archaeological survey for many years (a service of over 20 years was not unusual). This longevity of service brought benefits in terms of a broad experience but it can lead to a myopia in terms of technique or theoretical perspective – it was not unusual for archaeological staff to have little experience of Britain’s burgeoning commercial archaeology sector. In broad terms, however, their archaeological publications are rightly perceived as a good starting point for understanding the landscape archaeology of any particular area.

With this context in mind, the paper on cleitean (Geddes and Watterson 2013) was intended to provide a detailed introduction to that type of building, with an introduction to the historical material and the archaeological evidence, and an attempt to provide some explanation for the unusual density and distribution of these buildings on St Kilda. It was a far more detailed attempt than had previously made, and thus provides an important contribution to research, undoubtedly one that can be built upon in the future, particularly if we can light upon a better method of dating. In summary, it was:

- The first research paper on the subject;
- The first to draw together the historical and archaeological evidence;
- The first to utilise GIS software in the analysis of site location;
- The first to offer a more complex assessment of the function of the cleitean.

The paper on Sharbau’s plan (Geddes and Grant 2015) reflected the research interests of the two authors. On the one hand, it acted as a pointed effort by Grant to lance the conception of the post-medieval landscape as static and unchanging. On the other, it provided the author with

an opportunity to pin down the exact origins of the plan itself, to uncover the biographical details of Henry Sharbau, and to illustrate the complexity of the landscape within Village Bay in the mid-19th century. This helped to emphasise my broader point about the importance of survival and destruction on St Kilda. It remains to be seen whether this example will be picked up and developed by other students of the post-medieval Hebrides, and whether it will help counteract the current situation where St Kilda is seen as something anomalous within the region, as opposed to a well-documented and intensively studied Hebridean landscape. In summary, it was:

- The first paper to use detailed genealogical data in conjunction with archaeological data;
- The first paper to accurately point out the history and context of the 1860 plan;
- The first to identify Sharbau and to set his work in context;
- The first to describe the efforts of the Royal Navy officers on St Kilda in detail and in context;
- The first paper to tackle the mid-late 19th century landscape of St Kilda in any detail (Emery 1996).

The larger part of the portfolio submitted here is the book *St Kilda: the Last and Outmost Isle*. It was structured to provide three interrelated sections, falling under two broad categories. The first of these, *Archaeology of St Kilda*, began with a thorough and detailed introduction to the work of RCAHMS in the Western Isles, and on St Kilda specifically. This sought to provide context for the survey of 2007 to 2009 and to explain the approach of the organisation in the 1980s, and in the original Inventory of the region published in 1928. Very little research on the work of RCAHMS has been published, and misunderstanding and criticism, some verging on caricature, can be found easily in the literature of the Outer Hebrides (e.g. Buxton 1995, 153; Parker Pearson et al 2004, 15). The chapter built on the author's other work (Geddes 2013; 2016b) which sought to describe the history of RCAHMS in particular respects, and from which in time a critical history can develop.

The sections on the archaeology of St Kilda are important in both their perspective and their results. It is the first book to tackle the landscape archaeology of the archipelago fully, and to set each element in a regional context. The particularly important contributions are as follows:

- The first book to recognise and emphasise the importance of the medieval landscape of St Kilda, whether the series of chapels (perhaps a route of pilgrimage), or the fragmentary remains of the medieval agricultural landscape;

- The first book to emphasise the comparative importance of the 18th and 19th century landscape in other parts of Harris, particularly on the island of Pabbay (see also Geddes forthcoming (a));
- The first book to argue that most of the features of St Kilda are recognisable rather than remarkable;
- The first book to reframe St Kilda's modern story as one of survival rather than demise, and to place this within the context of agricultural Improvement, economic and social change on the Hebrides;
- The first book to suggest that the unique element of St Kilda's built heritage is the component dedicated to fowling, and to suggest that the economic importance of fowling may have been fundamental to St Kilda's story in the post-medieval period;
- The first book to draw the archaeology of the Cold War base into a wider narrative of landscape development, to identify the earliest components of the base, and to provide a guide to the key documentary sources;
- The first book to present an analytical survey of the entire archipelago.

Publication on such a widely known topic also presents opportunities that are almost unique for a writer of landscape archaeology. I have argued elsewhere (forthcoming b) that modern perspectives of St Kilda as seen in the popular media owe something to the academic research of a generation or more ago. Echoes of the work of 19th century writers such as Arthur Mitchell (1880) and Frederick Thomas (1869) can readily be found in the newspaper and blog entries on the island, where a broad sense of romanticism is caught up in pseudo-academic theories that were popular long ago (e.g. Self 2000; 2003). The importance of the book may then extend beyond its relevance to academic debates. It has sold upwards of 5,000 copies in the three years since publication, selling out in hardback and being immediately reprinted in paperback. Reviews of the book within a non-academic context are enlightening (if profoundly unscientific). There are 33 on Amazon at the time of writing, 32 of which offer five stars. The most recent, from 23 July 2018, gives a judgement that speaks for itself:

This is a well-designed book containing well researched work and stunning photographs of both a historical and up to date nature. It's regretful that many otherwise good quality books of this nature do not contain maps to aid the readers understanding of place, but there is no problem here, as a good quality map of St Kilda is included as a loose addition in the back of the book and I found it of great assistance, even clarifying some aspects of my recent visit to the islands. I did find the first section of the book which focuses upon the archaeology on the island a little academic and dry in places,

although I think I may benefit from a second reading of this. I didn't really get a feel of the 'people' of St Kilda until I began to read the second section where the wonderful photographs helped immensely to give a feel for the place and the people. The landscape photographs are especially stunning and are worth the price of the book alone. There's a very good bibliography which will be of assistance to anyone wishing to get involved in wider reading about St Kilda. I felt it a privilege to visit the islands and it is a privilege to own such a wonderful book which clearly has had so much work put into it.³⁰

While this is of course simply one reviewer's voice, it hits the nail on the head with regard to the balance of the book, and its intended results. If this is the sense that many readers come away with then I will be pleased.

³⁰ https://www.amazon.co.uk/St-Kilda-Last-Outmost-Isle/dp/1849172250/ref=cm_cr_ar_p_d_product_top?ie=UTF8 Accessed 8 September 2018



Figure 62 An archaeological palimpsest on Mullach Sgar with features that range from Iron Age to the 20th century. DPI34156

Reference List and Abbreviations

Anderson, J 1911

Notice of a hoard of Bronze implements recently found in Lewis, *Proc Soc Antiq Scot* 45 (1910–11), 27–46

Armit, I 1996

The Archaeology of Skye and the Western Isles, Edinburgh: Edinburgh University Press

Armit, I 2006

Anatomy of an Iron Age roundhouse, the Cnip wheelhouse excavations, Lewis, Edinburgh: Society of Antiquaries of Scotland

Atkinson, R 1949

Island Going, London: Collins

Baldwin, J 1974

Sea Bird Fowling in Scotland and Faroe, *Folk Life* 12, 60–103

Bezant, J & Grant, K 2016

The post-medieval rural landscape: towards a landscape archaeology? *Post-medieval Archaeology* 50 (1), 92–107

Birch, S 2010

Travel: UK Remote: Away with the birds: Simon Birch is the only camper at one of the most spectacular sites in Britain – on remote Hirta, in the St Kilda archipelago 100 miles west of Scotland, *The Guardian*, 15 May 2010

Boyd, J M 1952

St Kilda in 1952, *Scottish Field*, October, 28–30

Branigan, K (ed) 2005

From Clan to Clearance: History and Archaeology on the Isle of Barra c. 850–1850 AD, Oxford: Oxbow

Branigan, K & Foster, P 2002

Barra and the Bishop's Isles: Living on the Margin, Stroud: Tempus

Buchan, A 1727

A Description of Saint Kilda by the Rev. Mr. Alex. Buchan, late minister there, 1811 edn, Glasgow: Robert Chapman

Buchanan, M (ed) 1995

St Kilda—the continuing story of the islands, Edinburgh: HMSO

Buxton, B 1995

Mingulay, an island and its people, Edinburgh: Birlinn

Campbell, E 1991

Excavation of a wheelhouse and other Iron Age structures at Sollas, North Uist, by R J C Atkinson in 1957, *Proc Soc Antiq Scot* 121, 117–173

Canmore

The online index to the National Record of the Historic Environment. www.canmore.org.uk. Unique site identification numbers are given in the text; a simple search through the website will locate information related to the site.

Clark, C & English Heritage 2001

Informed conservation: Understanding historic buildings and their landscapes for conservation. London: English Heritage.

Colls, K and Hunter, J 2015

Archaeological Signatures of Landscape and Settlement Change on the Island of Harris, *Journal of the North Atlantic* 9, 108–124

Cottam, M B 1979

Archaeology, in Small (ed) 1979, 36–61

Curtis, M R 2010

Boreray, St Kilda, Western Isles, stone circle (possible), *DES 2010*, 176

Curtis, M R & Curtis, G R 2007

Gleann Mor, Hirta, St Kilda, survey of prehistoric circular stone setting, *DES 2007*, 198–199

Curtis, M R & Curtis, GR 2008

Gleann Mor, Hirta, St Kilda, Western Isles (Harris parish), plans and photographs of prehistoric stone circle, *DES 2008*, 178

Dalglish, C 2001

Rural settlement in the age of reason, *Archaeological Dialogues* 8 (1), 2–48

Dalglish, C 2002

Highland Rural Settlement Studies: a critical history, *Proc Soc Antiq Scot* 132, 475–479

Davidson, J 1967

Some further discoveries on St Kilda. Unpublished report, NRHE: [MS7272/1](#)

DES

Discovery and Excavation in Scotland

Dixon, C 1902

St. Kilda: its birds and its people: a sketch, *The Leisure Hour*, Jan.1877–Oct.1903, 507–510

Donaldson, M, Edwards, K, Meharg, A, Deacon, C & Davidson, D 2009

Land use history of Village Bay, Hirta, St Kilda World Heritage Site: a palynological investigation of plaggan soils, *Review of Paleobotany and Palynology* 153, 46–61

Dunbar, J G 1992

The Royal Commission on the Ancient and Historical Monuments of Scotland: the first eighty years, *Transactions of the Ancient Monuments Society* 36, 13–77

Edwards, K and Ralston, I 2003

Scotland after the Ice Age; Environment, Archaeology and History 8000 BC – 1000 AD, Edinburgh: Edinburgh University Press

Emery, N 1996

The Archaeology and Ethnology of St Kilda No 1: The Archaeological Excavations on Hirta 1983–1990, Edinburgh: HMSO

Emery, N & Morrison, A 1995

The Archaeology of St Kilda, in Buchanan (ed) 1995, 39–59

Fairhurst, H 1971

The wheelhouse site at A' Cheardach Bheag on Drimore Machair, South Uist, *Glasgow Archaeology Journal* 2, 72–106

Fleming, A 1988

The Dartmoor Reaves, Investigating Prehistoric Land Division. London: Batsford.

Fleming, A 1994

Clash na Bearnaich: stone quarries and stone working areas, *DES 1994*, 95

Fleming, A 1995

The stone quarries of Clash na Bearnaich, *St Kilda Mail* 19, 16–17

Fleming, A 1997

The stone hoe-blades of Hirta, *St Kilda Mail* 21, 18–20

Fleming, A 1999

Human ecology and the early history of St Kilda, Scotland, *Journal of Historical Geography* 25, 183–200

Fleming, A 2000

St Kilda: family, community and the wider world, *Journal of Anthropological Archaeology* 19, 348–368

Fleming, A 2001

Dangerous islands: fate, faith and cosmology, *Landscapes* 2.1, 4–21

Fleming, A 2003

St Kilda: the pre-Improvement clachan, *Proc Soc Antiq Scot* 133, 375–389

Fleming, A 2005

St Kilda and the Wider World: Tales of an Iconic Island, Macclesfield: Windgather Press

Fleming, A 2006

Post-processual Landscape Archaeology: Critique, *Cambridge Archaeological Journal* 16:3, 267–280

Fleming, A 2011

Book review : ‘Winds of change : the living landscapes of Hirta, St Kilda,’ by Jill Harden and Olivia Lelong, *Antiquity* 85, 1501–1503

Fleming, A & Edmonds, M 1999

St Kilda: Quarries, Fields and prehistoric agriculture, *Proc Soc Antiq Scot* 129, 119–159

Fowler, P 1980

Tradition and Objectives in British Field Archaeology, *Archaeological Journal* 137, 1–21

Frodsham, P, Topping, P & Cowley, D (eds) 1999

‘We were always chasing time’. Papers presented to Keith Blood. *Northern Archaeology* Special Edition, 17–18, Newcastle-upon-Tyne: Northumberland Archaeological Group

Gannon, A & Geddes, G F, 2015

St Kilda, the Last and Outmost Isle. Edinburgh: HES

Gannon, A & Halliday, S P 2002

The Archaeology of Canna and Sanday, in J L Campbell, *Canna, the Story of an Island* (H Cheape ed.), xxii—xxix

Gannon, A & Parker, I 2012

Surveying St Kilda, *Current Archaeology* 263, 36–41

Geddes, G F 2006

Vernacular Buildings of the Outer Hebrides 300 BC–AD 1930: Temporal comparison using archaeological analysis, *Internet Archaeology* 19, <https://doi.org/10.11141/ia.19.4>

Geddes, G F 2008

The Magazine and Gun Emplacement, St Kilda, a Conservation Statement. Unpublished report, NRHE: [WP003151](#)

Geddes, G F 2009a

Remote archaeological recording on Hirta, *St Kilda Mail* 33, 28–30

Geddes, G F 2009b

The Pier, St Kilda, a Conservation Statement. Unpublished report, NRHE: [WP003548](#)

Geddes, G F 2009c

The St Kilda Archaeologist's Annual Report [2008]. Unpublished report, NRHE: [WP004755](#)

Geddes, G F 2010a

'An enormous expense enclosing and dividing': Agricultural improvement in 18th century Bute, in Ritchie, A (ed), *Historic Bute: Landscape and People*, Edinburgh: Scottish Society for Northern Studies

Geddes, G F 2010b

Vernacular Parallels: Brochs and Blackhouses, *Vernacular Architecture* 41(1), 15–27

Geddes, G F 2011a

Calum Mòr's House, Hirta, St Kilda, Conservation Statement. Unpublished report, NRHE: [WP000657](#)

Geddes, G F 2011b

The Amazon's House, Hirta, St Kilda, Conservation Statement. Unpublished report, NRHE: [WP000658](#)

Geddes, G F 2012

St Columba's Roman Catholic Chapel and Presbytery, Miùghlaigh (1). Unpublished report, NRHE: [WP003814](#)

Geddes, G F 2013a

St Columba's Roman Catholic Chapel and Presbytery, Miùghlaigh (2). Unpublished report, NRHE: [WP003813](#)

Geddes, G F 2013b

'Archaeology at the margins – RCAHMS emergency survey in the 1950s', *Proc Soc Antiq Scot* 143, 363–391

Geddes, G F 2014

RCAHMS Archaeological Survey, North and South Uist, 2012–3, Edinburgh: RCAHMS

Geddes, G F 2016a

The Storehouse, St Kilda, a Conservation Statement. Unpublished report, NRHE: [WP004316](#)

Geddes, G F 2016b

The Royal Commission on the Ancient and Historical Monuments of Scotland, Angus Graham and Gordon Childe, *Proc Soc Antiq Scot* 146, 275–309

Geddes, G F forthcoming (a) (expected 2019)

Ultima Thule? Reconnecting St Kilda and Pabbay, *Proceedings of the CHAT Conference 2016 on 'Rurality'*, Oxford: Archaeopress

Geddes, G F forthcoming (b) 'St Kilda's Archaeology and the Galapagos effect. Unpublished paper presented at the conference Uist: Island Archaeology in Focus, 2017

Geddes, G F & Grant, K 2015

The Plan and the Porcupine, Dynamism and Complexity on St Kilda, *Landscapes* 16 (2), 1–19

Geddes, G F & Hale, A G, 2010.

The Archaeological Landscape of Bute, Edinburgh: RCAHMS.

Geddes, G F & Watterson, A 2013

‘A Prodigious Number of Little Cells’– Cleitean and the St Kilda World Heritage Site, *Architectural Heritage* 24, 103–18

Glendinning, M & Martins, S W 2008

Buildings of the Land: Scotland's farms 1750–2000, Edinburgh: RCAHMS

Grant, K G 2016

‘*Mo Run am Fearann*’ – ‘My Love is the Land’: Gaelic landscapes of the 18th and 19th Centuries. Unpublished PhD Thesis, University of Glasgow

GUARD

Glasgow University Archaeological Research Division

Halliday, S 2013

I Walked, I Saw, I Surveyed, but what did I see? ...and what did I survey?, in Opitz and Cowley (eds), 63–75

Harden, J 2008a

The St Kilda Manse, a review of its development circa 1820—today, for the National Trust for Scotland and Historic Scotland. Unpublished report, NRHE: [WP003550](#)

Harden, J 2008b

The St Kilda Manse – Conservation Management Plan. An Understanding, Assessment of Significance, Vision & Heritage Impact Assessment, for the National Trust for Scotland. Unpublished report, NRHE: [MS6960](#)

Harden, J & Lelong, O 2011

Winds of Change: The Living Landscapes of Hirta, St Kilda, Edinburgh: Society of Antiquaries of Scotland

Harding, D W & Gilmour, S M D 2000

The Iron Age Settlement at Beirgh, Riof, Isle of Lewis, Excavations 1985–1995. Volume 1 – The Structures and Stratigraphy. Edinburgh: University of Edinburgh Department of Archaeology

Harding, R R, Merriman, R J & Nancarrow, P H A 1984

St Kilda, an illustrated account of the geology, British Geological Survey: HMSO

Harman, M 1993

PhD Thesis: History and Culture of the St Kildans to 1930. Unpublished PhD thesis, 2v, University of Edinburgh

Harman, M 1997

An Isle called Hirta: History and Culture of the St Kildans to 1930, Waternish, Isle of Skye: Maclean Press

HES

Historic Environment Scotland

HES 2016

Policy Statement, Edinburgh: HES

HLF

Heritage Lottery Fund

HLF 2004

Conservation management plans; helping your application, London: HLF

HMSO

Her Majesty's Stationery Office

Holbourn, I 2006

Review: St Kilda and the Wider World, *Scottish Archaeological Journal*, 28 (1), 63–4

Holden, T 2004

Research Report: The Blackhouses of Arnol, Edinburgh: HS

Holden, T, Dalland, M, Burgess, C & Walker, B 2001

No. 39 Arnol: the excavation of a Lewis blackhouse, *Scottish Archaeological Journal* 23 (1), 15–32

HS

Historic Scotland

HS 2000

Conservation plans: A guide to the preparation of conservation plans. Edinburgh: HS

HS 2009

Scottish Historic Environment Policy, Edinburgh: HS

Hummeler, M 2006

New book chronicle, *Antiquity* 80, 244–9

Hunter, J 1976

The Making of the Crofting Community, 2000 edn, Edinburgh: John Donald

Hunter, J 2016

The Small Isles. Edinburgh: HES

ICOMOS

International Council on Monuments and Sites

ICOMOS 1986

World Heritage List No. 387, <https://whc.unesco.org/en/list/387/documents/> [Accessed 23 September 2018]

ICOMOS 2005

Advisory Body Evaluation, St Kilda, <https://whc.unesco.org/en/list/387/documents/> [Accessed 23 September 2018]

IUCN

International Union for Conservation of Nature

IUCN 1986

Technical evaluation, No. 387, St Kilda, <https://whc.unesco.org/en/list/387/documents/> [Accessed 23 September 2018]

IUCN 2004

Technical evaluation Saint Kilda, <https://whc.unesco.org/en/list/387/documents/> [Accessed 23 September 2018]

Kerr, J, & National Trust of Australia 1996

The conservation plan: a guide to the preparation of conservation plans for places of European cultural significance (Fourth ed.), Sydney: National Trust of Australia (NSW)

Knox, J 1787

The Highlands and Hebrides in 1786, 1975 edn, Edinburgh: James Thin

Lawson, B 1994

The Teampull on the Isle of Pabbay: a Harris church in its historical setting, Harris: Bill Lawson Publications

Lawson, B 1997

The Isle of Taransay: a Harris island in its historical setting, Harris: Bill Lawson Publications

Lawson, B 2002

Harris in history and legend, 2011 edn, Edinburgh: Birlinn

Love, J A 2009

A Natural History of St Kilda, Edinburgh: Birlinn

Macaulay, K 1764

The History of St Kilda, 1974 edn, Edinburgh: James Thin

MacDonald, F 2001

St Kilda and the Sublime, *Ecumene* 8 (2), 151–174

MacDonald, F 2006

Review: St Kilda and the Wider World, Andrew Fleming, *Journal of Historical Geography* 32 (3), 660–2

MacDonald, F 2011

Doomsday fieldwork, or, how to rescue Gaelic culture? The salvage paradigm in geography, archaeology, and folklore, 1955–62, *Environment and Planning D: Society and Space* 29, 309–335

MacGregor, A A 1931

A Last Voyage to St Kilda, London: Cassell and Company

Macgregor, D R 1960

The island of St Kilda – a survey of its character and occupance, *Scottish Studies* 4, 1–48

Macgregor, D R 1989

An expedition in 1957, *St Kilda Mail* 13, 18–25

Mackenzie, J B 1905

Antiquities and old customs in St Kilda, compiled from notes by Rev Neil Mackenzie, Minister of St Kilda, 1829–48, *Proc Soc Antiq Scot* 39 (1904–5), 397–402

Mackenzie, J B (ed.) 1911

Episode in the life of the Rev. Neil Mackenzie at St Kilda from 1829 to 1843, Aberfeldy: Privately printed

Mackinnon, D & Morrison, A 1968

The Macleods – The Genealogy of a Clan, Section 2, The Macleods of Talisker, Berneray, Orbst, Luskintyre, Hamer, Greshornish, Ulinish and Dalvey, Edinburgh: The Clan Macleod Society

MacLaren, A 1974

A Norse house on Drimore Machair, South Uist, *Glasgow Archaeological Journal* 3, 9–18

Maclean, C 1972

Island on the edge of the world: Utopian St Kilda and its passing, London: Tom Stacey

Macleod, J 1794

Parish of Harris, *The Statistical Account of Scotland* 10, 342–392

Martin, M 1697

Several Observations on the North Islands of Scotland, *Philosophical Transactions on the North Islands of Scotland* 19, 727–9

Martin, M 1698

A Late Voyage to St Kilda, 1986 edn, Edinburgh: The Mercat Press

Martin, M, 1703

A Description of the Western Isles of Scotland. London: Andrew Bell

Martin, M 1749

A Voyage to St Kilda, London: R Griffith

Mathieson, J 1928

The antiquities of the St Kilda Group of Islands, *Proc Soc Antiq Scot* 62 (1927–28), 123–132

Meharg, A A, Deacon, C, Edwards, K J, Donaldson, M, Davidson, D A, Spring, C, Scrimgeour, C M, Feldman, J, & Rabb, A 2006

Ancient manuring practices pollute arable soils at the St Kilda World Heritage Site, Scottish North Atlantic, *Chemosphere* 64, 1818–1828

Mitchell, A 1880

The Past in the Present: What is Civilisation? Edinburgh: David Douglas

Mitchell, I, Newton, S F, Ratcliffe, N and Dunn, T E 2004

Seabird populations of Britain and Ireland, London: Poyser

Morrison, A 1999

An introduction to the later settlement history of St Kilda, *World Archaeology Congress* 4, <http://worldarch.org/wac4/wp-content/uploads/sites/7/2016/03/s025mrr2.pdf> [Accessed 23 September 2018]

Muir, T S 1861

Characteristics of Old Church Architecture & C. in the Mainland & Western Islands of Scotland, Edinburgh: David Douglas

Muir, T S 1885

Ecclesiological notes on some of the islands of Scotland, Edinburgh: David Douglas

Muir, T S & Thomas, F W L 1862

Notice of a Beehive House in the Island of St Kilda, *Proc Soc Antiq Scot* 3 (1857–9), 225–32

Munro, R 1899

Prehistoric Scotland and its place in European Civilisation, Edinburgh: William Blackwood & Sons

NRS

National Records of Scotland, <https://www.nrscotland.gov.uk/> [Accessed 23 September 2018]

NRHE

National Record of the Historic Environment, www.canmore.org.uk [Accessed 23 September 2018]

NTS

The National Trust for Scotland

Nimlin, J 1979

Historical St Kilda, in Small, A (ed) 1979, 69–75

Opitz, R S & Cowley, D C (eds) 2013

Interpreting archaeological topography, 3D data, visualisation and observation, Oxford: Oxbow

OS

Ordnance Survey

OS 1970

Six inch map Sheets 'Parts of Sheets NF09NE & NF19NW', 'Parts of Sheets NA10NW, NE, SW & SE', Sheet NA00SE

OS 1973

Field archaeology in Great Britain, 5th edition, Southampton: OS

Parker Pearson, M & Sharples, N 1999

Between Land and Sea, Excavations at Dun Vulan, South Uist, Sheffield: Sheffield Academic Press

Parker Pearson, M, Sharples, N & Symonds, J 2004

South Uist: Archaeology and History of a Hebridean Island, Stroud: Tempus

Pollard, T 1999

New Horizons, St Kilda and the colonisation of Scottish Islands, *World Archaeology Congress 4: Symposium; a Rock and a Hard place: Perspectives on the Archaeology of St Kilda, Scotland*, <http://worldarch.org/wac4/wp-content/uploads/sites/7/2016/03/S025p11.pdf> [Accessed 23 September 2018]

Quine, D A 1982

St Kilda Revisited, 1989 edn, Frome: Dowland Press

Quine, T A 1983

Excavations in Village Street, Hirta, St Kilda, 1983, Glasgow: University of Strathclyde

Ralston, I 1997

Review: Excavations on Hirta 1986–90, *Northern Archaeology* 17 (1), 175–6

RCAHMS 1928

Ninth report with inventory of monuments and constructions in the Outer Hebrides, Skye and the Small Isles, Edinburgh: HMSO

RCAHMS 1967

Peeblesshire: An Inventory of the Ancient Monuments, 2v, Edinburgh: HMSO

RCAHMS 1971

Argyll, an Inventory of the Monuments volume 3: Mull, Tiree, Coll and Northern Argyll, Edinburgh: HMSO

RCAHMS 1990

North-east Perth: an archaeological landscape, Edinburgh: HMSO

RCAHMS 1993

Waterness, Skye and Lochalsh District, Highland Region: an archaeological survey, Edinburgh: RCAHMS

RCAHMS 1997

Eastern Dumfriesshire: An Archaeological Landscape, Edinburgh, RCAHMS

RCAHMS 1998

RCAHMS Broadsheet 4, St Kilda, Settlement and Structures on Hirta, Edinburgh: RCAHMS

RCAHMS 1999

RCAHMS Broadsheet 5, Canna, the archaeology of a Hebridean landscape, Edinburgh: RCAHMS and NTS

RCAHMS 2010

Mingulay, Archaeology and Architecture, Edinburgh: RCAHMS and NTS

Roberts, D L 1989

Review: The Buildings of St Kilda, *Vernacular Architecture* 20 (1), 58–9

Robson, M 1991

Rona, the Distant Island, Stornoway: Acair

Robson, M 2005

St Kilda: Church, Visitors and Natives, Isle of Lewis: Islands Book Trust

Sands, J 1876

Out of the World; or, Life in St Kilda, Edinburgh: Maclachan and Stewart

Sands, J 1878

Notes on the antiquities of the island of St Kilda, *Proc Soc Antiq Scot* 12 (1876–8), 186–192

Self, W 2000

Will Self on Charles Maclean's St Kilda: Island on the Edge of the World, *New Statesman*, 27 November 2000 <https://www.newstatesman.com/node/152462> [Accessed 6 October 2018]

Self, W 2013

On The Rocks: Will Self Sets Sail for the Inaccessible Wilderness, *Esquire*, 6 July 2013, <https://www.esquire.com/uk/culture/news/a4298/will-self-in-the-wilderness-murdos-kilda/> [Accessed 6 October 2018]

Seton, G 1878

St Kilda, Past and Present, Edinburgh

Scottish Executive 2004

St Kilda World Heritage Site, a Comparative Analysis of the Cultural Landscape. Edinburgh: Scottish Executive.

Sharbau, H 1860

Plan of Village Bay, St Kilda, National Museums of Scotland, Society of Antiquaries of Scotland Collection, MS 158

Shrubb, M 2013

Feasting, Fowling and Feathers: A History of the Exploitation of Wild Birds, London: Poyser

Small, A (ed) 1979

St Kilda Handbook, Edinburgh: National Trust for Scotland

Smith, J 2017

The Amazon woman of St Kilda, *Northern Earth* 151, 19–22

Sobolewski, R 2017

Royal Commission on the Ancient and Historical Monuments of Scotland: fieldwork, rescue and archive. Unpublished PhD thesis, University of Edinburgh

Steel, T 1965

The Life and Death of St Kilda, 1994 edn, London: Harper Press

Stell, G P 1995

The Study of Buildings, in Buchanan, M (ed), 24–38

Stell, G P and Harman, M 1988

Buildings of St Kilda, Edinburgh: RCAHMS

Symonds, J 2006

Review: St Kilda and the Wider World: Tales of an Iconic Island by Andrew Fleming, *Antiquaries Journal* 86, 456

Taylor, M 2001

Cleit Preservation Project, St Kilda. Unpublished report, NRHE: [MS2635](#)

Thomas, F W L 1862

Notice of beehive houses in Harris and Lewis; with traditions of the "Each-uisge," or water-horse, connected therewith, *Proc Soc Antiq Scot* 3 (1857–59), 127–44

Thomas, F W L 1866

Note of two Bronze swords, recently found under moss at South Uist, *Proc Soc Antiq Scot* 6 (1) (1864–5), 252–3

Thomas, F W L 1869

On the primitive dwellings and hypogea of the Outer Hebrides, *Proc Soc Antiq Scot* 7 (1) (1866–7), 153–95

Turner, R 1999

Locating the old village in Village Bay, *St Kilda Mail* 23, 30

UNESCO

United Nations Educational, Scientific and Cultural Organisation

University of Edinburgh and Imperial College London, 2018

Soay Sheep Project. <http://soaysheep.biology.ed.ac.uk/> [Accessed 23 June 2018]

Walker, M J C 1984

A pollen diagram from St Kilda, Outer Hebrides, Scotland, *New Phytologist* 97, 99–113

Welfare, A T 2011

Great Crowns of Stone, Edinburgh: RCAHMS

Wheeler, R E M 1929

Review, Royal Commission on the Ancient and Historical Monuments and Constructions of Scotland, Ninth report with inventory of monuments and constructions in the Outer Hebrides, Skye and the Small Isles, *Antiquity* 3, 379–81

Williamson, K nd

The Gleann Mor settlement, St Kilda. Unpublished report, NRHE: [MS7641/2](#)

Williamson, K 1957

The Medieval Village at St Kilda, Unpublished report, NRHE: [MS7641/2](#)

Williamson, K 1958

Ancient St Kilda, *Scottish Field* March 1958, 46–9

Williamson, K 1960

From cleit to cottage, *The Countryman* 57 (3), 505–10

Williamson, K and Boyd, J M 1960

St Kilda Summer, London: Hutchison

Williamson, K and Boyd, J M 1963

A Mosaic of Islands Edinburgh: Oliver and Boyd

Young, A & Richardson, K M 1962

À Cheardach Mhor, Drimore, South Uist, *Proc Soc Antiq Scot* 93 (1959–60), 135–73

Appendix 1: Co-author Statements

Dear Sirs/Madam,

I can confirm that George Geddes undertook at least 50% of the writing and research in connection with the publication of our join-authored paper 'A Prodigious Number of Little Cells' – Cleitean and the St Kilda World Heritage Site' published in 2014.

Best,



Dr Alice Watterson

Dr Kevin Grant
E7, Historic Environment Scotland
Longmore House
Salisbury Place
Edinburgh
k.j.grant@hotmail.co.uk
07952 313 444

Archaeology
School of History, Classics and Archaeology
University of Edinburgh

Re: Reference confirming co-authorship of paper with George Geddes

Dear Sir/Madam,

I am writing to confirm that George Geddes undertook at least 50% of the writing and research in connection with our joint-authored paper 'The Plan and the Porcupine: Dynamism and Complexity in the Landscape of St Kilda', published in *Landscapes* in 2015.

Please feel free to contact me at the address above if you would like further information or confirmation.

Yours,



Dr Kevin Grant, MA (Hons), Mlitt, AIFA, FSAScot

10 Queensferry Road
Kirkliston
West Lothian
EH29 9AQ

4 September 2018

Dear Sir/Madam

I am happy to confirm that George Geddes undertook at least 50% of the writing and research in relation to our 2015 publication *St Kilda: The Last and Outmost Isle*.

Yours faithfully

A handwritten signature in black ink that reads "Angela R Gannon". The script is cursive and fluid.

Angela R Gannon

Appendix 2: Procedure

University of Edinburgh

College of Humanities and Social Science

PROCEDURES FOR THE APPLICATION AND AWARD OF THE DEGREE OF PHD (BY RESEARCH PUBLICATIONS)

References:

- A: [The Universities Degree Regulations and Programmes of Study](#) (DRPS)
- B. [The University's Postgraduate Research Assessment Regulations](#)

1. Candidate's Eligibility³¹

1.1 Candidates meeting the following criteria may, at the discretion of the College, be allowed to apply for the award of the degree of PhD (by Research Publications).

- a. Graduates of the University of Edinburgh of at least 5 years standing **OR** Current members of staff of the University of Edinburgh (or of one of the University's Associated Institutions) of not less than three years standing;

AND

- b. Been active researchers in their field of expertise for a minimum of five years before seeking permission to register for this degree

AND

³¹ From the DRPS

- c. Must not submit material published more than ten years prior to the date when they are given permission to register for the degree.

1.2 Permission to register will not be granted to applicants who are in a position to submit for the PhD by Research or other professional doctorate or who already possess a PhD.

2. Application Process

2.1 Applicants must apply for candidature to the CPGSC³² on the appropriate form (Appendix 1).

2.2 The applicant should initially submit the following to the College Postgraduate Office:

- a. Application Form
- b. CV
- c. Published Articles/Books to be assessed (see Paragraph 3.3)
- d. A 500-word abstract.
- e. A general critical review of all their submitted work.

2.3 Initial Assessment. The College will then ask the relevant School to appoint an internal assessor to give the Committee an opinion on the appropriateness of the submission. The assessor may be the Head of School or the most appropriate subject specialist.

- a. The internal assessor is not expected to read or examine the submission in full, but is asked to assess whether or not the submission appears to meet the criteria for the award of the degree as specified in the DRPS and Postgraduate Research Assessment Regulations and is therefore, *prima facie* worthy of examination. The assessor should review it along the following lines:

- i. Does the submission form a coherent whole?

³² Or equivalent, if these guidelines are used by other colleges

- ii. Does the submission show a sound command of established knowledge in the field and make a significant contribution to the field?
- iii. Does it appear to have taken the same amount of time and research effort as a PhD by Research?
- iv. Does it meet the criteria in the DRPS?
- v. Does the submission appear appropriate, based on the above? Can a prima facie case of examination be made?

b. The CPGSC will consider the merits of the application on the basis of the list of works submitted for examination and the internal assessor's report. The CPGSC Examinations Sub-Committee Secretary will advise the applicant of the outcome of this initial consideration.

c. If the applicant's candidature is approved, the CPGSC will ask the School to appoint an adviser to assist the candidate with the format of his/her submission and the nature of the accompanying statement. This person may or may not be the original internal assessor.

3. Matriculation and Submission

3.1 Applicants will be required to pay their fees at this stage and submit a matriculation form.

3.2 The applicant should submit a Notice of Intention to Submit form to the College Postgraduate Office up to two months prior to submitting his/her critical review (in lieu of thesis). On receiving the "notice of intention to submit" forms, the CPGSC will appoint examiners.

3.3 The Candidate must submit to the College Postgraduate Office his/her abstract, a critical review, and portfolio of work within 3 to 12 months of registration. These documents should meet the following requirements:

a. The submitted portfolio of published research must add up to a substantial and coherent body of work which would have taken the equivalent of three years of full-time study to accomplish. It must consist of either one or two books or at least six refereed journal articles or research papers, which are already in the public domain.

b. The candidate should not submit material published more than ten years prior to the date when s/he is given permission to register for the degree.

- c. The critical review should:
 - i. Summarise the aims, objectives, methodology, results and conclusions covered by all the submitted work in the portfolio;
 - ii. Indicate how the publications form a coherent body of work, what contribution the candidate has made to this work and how the work contributes significantly to the expansion of knowledge;
 - iii. Be at least 10,000 words in length, but not more than 25,000 words in length.
 - c. The abstract may be the same, or based upon, the synopsis provided at the initial assessment phase, and should fit onto one page of A4.
 - d. **The candidate must either be the sole author of the portfolio of published work or must be able to demonstrate in the critical review of the submitted work that s/he has made a major contribution to all of the work that has been produced by more than one author**
 - e.
- 3.4 The total submission, including the critical review, should not normally exceed 100,000 words.

4. Assessment and Examination

4.1 On receiving the “notice of intention to submit” forms, the CPGSC will appoint examiners in the normal way, and the normal PhD by Research examination processes will be followed (Part One report followed by Viva and Part Two report). Both internal and external examiners should be experienced PhD examiners. Members of staff will require two external examiners.

4.2 A member of CPGSC, who is NOT a member of the School involved (to ensure no question of a conflict of interest), should attend the oral examination and subsequent discussion, as an observer. The expertise of the member appointed should be as close as possible to the candidate’s discipline.

4.3 The CPGSC will consider the examiners' reports in the normal way, and make a formal decision. The CPGSC will then communicate the final outcome to the candidate after due consideration of the Examination Sub-Committee.