HISTORIC ENVIRONMENT SCOTLAND | ÀRAINNEACHD EACHDRAIDHEIL ALBA

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Last reviewed:	2017

STATEMENT OF SIGNIFICANCE

ARNOL BLACKHOUSE NO. 39 AND ARNOL BLACKHOUSE NO.42

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No. 42, 1960s bungalow
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HISTORIC ENVIRONMENT SCOTLAND
STATEMENT OF SIGNIFICANCE

ARNOL BLACKHOUSE NO. 42 AND ARNOL BLACKHOUSE NO.39

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1 Summary

1.1 Introduction

This monument comprises the houses and immediate surrounds of two individual crofts in the crofting township of Arnol, on the west side of the Isle of Lewis in the Western Isles.

At no. 42 there is a conserved traditional thatched house ('blackhouse[1]') and the 1960s bungalow that replaced it (now serving as the visitor centre, shop, steward's office and toilets).The blackhouse was built about 1875 and taken into care in 1965. It has been as much as possible conserved as it was when it was vacated, along with its contents. The fire is lit daily, and it is re-thatched every few years, as well as being topped up with thatch annually. It consists of two parallel units which were a byre dwelling and barn, built with very thick walls (two faces of random rubble masonry infilled with clay and earth). The roof timbers were built with driftwood and thatched with straw, covered with rope made from heather or marram grass.

Across the road at no. 39 is an excavated and consolidated ruined blackhouse and the 1920s 'whitehouse' that replaced it. The interior of this whitehouse has been restored and furnished much as it would have been in the late 1950s/early 1960s. The blackhouse ruin consists of three parallel units (the entrance or 'fosglan', byre dwelling, and barn). The buildings at no. 39 were taken into care in 1996.

The site is staffed and is easily accessible with parking available. It currently attracts around 12,000 visitors per year. It is closed on Sundays.

1.2 Statement of significance

The HES managed site at Arnol is highly significant for a number of reasons but principally for its ability to authentically demonstrate a past way of life and culture, many aspects of which were shared across Scotland. Though it appears to be a simple and "primitive" structure, research by HES and others, has led to acknowledgement of the sophistication of this traditional building design. The following bullet points describe some key aspects of significance:

- The blackhouse at No. 42 Arnol is one of the best preserved blackhouses anywhere. It was one of the last to be built without windows or a chimney, linking it to medieval buildings that used an open hearth.

[1] It is unclear where the term 'blackhouse' (Gaelic *taigh-dubh)* originates. It has been thought it was coined in the 19th century, but references have been found from the 18th century to 'tolerable black farm houses' in Argyll (Mackie, C., 2006, Chapter 2.1.2). The Gaelic term is also very similar sounding to the word for 'thatched house' (*taigh-tughaidh*), which adds further uncertainty to the history of the term. Therefore, for the purposes of this document a blackhouse means a dwelling with stone walls, a thatched roof, with a central hearth and no chimney.

- The Blackhouse is rare in that it retains some of its original interior fittings and collections. This provides a rarely seen context for a traditional Highland crofting way of life which has largely disappeared since the time the property was taken into care. People in the Western Isles had lived in houses such as these during the 19th and 20th centuries, and their culture (life, work, relationships, stories and songs) reflected these settings. Within the Western Isles, this particular building type (with parallel units) seems to have been particular to Lewis. The fact that No 42 Arnol is largely authentic and has retained some aspects of its original interior fixtures, fittings and furnishings intact makes it very rare in the history of Scottish vernacular architecture.

- The assemblage at Arnol: roofed and furnished blackhouse and Whitehouse, excavated ruined blackhouse (and indeed the 1960s bungalow) preserve the settings for Lewis domestic/crofting life during the 19th and 20th centuries. The interpreted blackhouses help make understandable many ruined settlements and the assemblage has resonance for vernacular structures and rural life across Scotland. The value of this assemblage in telling a continuous story of over a century of housing in Lewis is likely to increase over time and it is one of very few comparable properties in State Care.

- The natural materials used to construct the blackhouse blend into the landscape and help visitors envisage how the landscape would have appeared before the introduction of modern 'white' houses.

- The completeness and authenticity of the site offers visitors a unique and very physical experience of past life and an opportunity to appreciate an everyday setting for Gaelic culture; this is particularly important for educational visits. Aspects such as the peat fire in the hearth add to this atmosphere and interpretation or performances in Gaelic are important for tourists and local visitors alike.

A fuller description of the site and its heritage and social values are given in the following Assessment of values.

2. Assessment of values

2.1 Background

The blackhouse and whitehouse buildings at Arnol give a good overview of the changes that took place in Lewis over the last two centuries. The history and physical development of the properties at Arnol in State Care is inextricably linked with the history and physical development of the crofting township of Arnol as a whole. In post-medieval times the focus of Arnol township was down by the shores of Arnol Bay to the west. The location of the settlement then moved in two stages to its present site on the ridge during the 19th century. The reasons for this, and the changes that it involved, provide not only an understanding of the evolution of this particular settlement

but also illustrate the wider social and political developments in the Highlands and Islands of Scotland. As the successive owners of the Lewis Estate attempted to carry out their own ideas of 'reform' or 'improvement' they created a new township of individual crofts or smallholdings in which the buildings were often altered or even completely rebuilt within a short space of time.[2]

Historical context

It is difficult to fully appreciate the development of blackhouses without also looking briefly at the history of crofting. The creation of lots, crofts or smallholdings was part of the improvement of farms that was popular with landowners from the end of the 18th century in the Highlands and Islands, giving the tenants exclusive access to their own small piece of land as well as common grazing. However, a croft was not big enough to support a tenant and his family. This was often the flip side of the creation of sheep farms on land vacated in the reorganisation of farms (eg. Linshader). In Lewis, the crofting system of tenure was introduced by Lord Seaforth around 1814. There was still no security of tenure, and the landlord could terminate the tenancy at any time. The kelp industry, an important source of employment, failed in the 1820s and the potato famine in the 1840s led to hunger and poverty, and crofters being unable to pay the rent, which could result in them being evicted and/or more or less forced to emigrate.

Each croft (a piece of land) extended to a few acres and included a steading built by the tenant. The incentive for repairs, upkeep and development of the house was intrinsically linked to the way the land was managed. The inhabitants of crofts such as those at nos. 39 and 42 Arnol led a lifestyle that was inextricably linked to the land, the seasons and the agricultural cycle. It included not just the croft, but access to the peat-banks, the water-mills and the sheilings and common grazings in the Barvas Hills some 3 miles south of the township.

This was a significant change to the previous runrig arrangements in which tenants shared strips in the common field that are still visible as sinuous lazy beds in the present landscape of Arnol. In the communal runrig system, the land was rotated round the tenants each year. This meant that each tenant would have a turn of the better land. Many crofting activities (peat-cutting, harvesting, thatching, summer grazing) were still carried out communally, a practice which continues to the present day in some areas.

The houses generally had very low or no partitions between the living area and the byre, and no windows. The living area would be accessed through the byre. The manure was only cleared out of the byre once a year, through one of the hipped ends which had an area which could be opened up (*toll-each*) to allow the manure to be loaded onto a cart (or a horse and panniers). Catriona Mackie, in her paper which discusses the effect of so-called 'improvements' by landlords on the social values and traditions of Lewis, says,

[2] This practice was representative of what was happening on estates elsewhere in the highlands and islands at the time, for example in St Kilda Village Bay

> ‘The various features of the Lewis house indicate that the cultural notions of comfort, cleanliness, sanitation and desirable living conditions held by social reformers during the nineteenth century were very different from those held by rural tenants in Lewis. For the tenants, the functional attributes of the hearth...were clearly more important than having a smoke-free house. Similarly, windows were not considered necessary...since they would have weakened the house against the ravages of wind and rain.’[3]

Thus, when estate regulations (Articles of Set)[4] were published c. 1825 demanding a separate entrance to the dwelling area and a partition between the byre and the dwelling area, they were not well-received, and as with later similar stipulations, not necessarily adopted.[5]

In 1844 James Matheson bought the Lewis estate. His enormous wealth (from trading in opium)[6] meant that he was able to invest a significant sum in trying to improve conditions for tenants. But the arrears caused by the potato famine meant the majority of people were still in debt and

> ‘...Matheson and his chamberlain, John Munro MacKenzie, recognised by 1850 that the grand scheme of agricultural improvement had entirely failed to bring either an economic return to the estate or lasting material security to the people. They now argued that the root of the problem lay not in the continuing blight...but in the more fundamental pressure of overpopulation.’[7]

Matheson and his agents set about trying to solve this problem by trying to clear people off the land and then offering assisted emigration. In some instances they tried to clear entire townships which were in arrears. The crofters were told that if they could not settle their debt, they would need to move out of their homes, whereupon Matheson would write off their debt and also pay for passage to Canada. Arnol was among the townships which were considered over-populous, and at least some tenants must have been subject to eviction/ emigration notices.[8]

Similar conditions existed on other estates across the Highlands and islands, (as reported for example in the Statistical Accounts of Scotland) and were the subject of many poems and songs by Gaelic bards. The songs would have been shared in the ceilidh houses and news would travel quickly from house to house.

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[3]Mackie, C. (2014) ‘Social reform and segregation: tenant housing in the Isle of Lewis, 1795-1900’, *Vernacular Architecture* 45, page 59

[4]Articles of Set were rules and regulations which laid out how crofters should ‘improve’ their houses

[5]Mackie, C. (2014) ‘Social reform and segregation: tenant housing in the Isle of Lewis, 1795-1900’, *Vernacular Architecture* 45, page 59

[6] Mackie, C. (2014) ‘Social reform and segregation: tenant housing in the Isle of Lewis, 1795-1900’, *Vernacular Architecture* 45, page 58

[7] Devine, T. M.,1988, The Great Highland Famine, p212

[8] Devine, T. M., 1988, The Great Highland Famine, p214

It was following this time of instability that the blackhouses at No. 39 and No. 42 Arnol were built on the edge of the cultivated land that had been extended in this area since the 1840s. Both are depicted as roofed in the second edition Ordnance Survey map (1897). The landlords of the time tried to stipulate how crofters built their houses and issued Rules and Regulations. Those issued in 1879 (a year after Matheson's death) were written in Gaelic as well as English, though they were not widely distributed until 1881.[9] They stipulated for example that all houses must have chimneys and windows, and partitions up to the roof with a separate entrance to the byre, but in reality very few conformed to all the demands. The 1886 Crofter's Act finally gave crofters security of tenure, and in 1889 the Local Government Act meant control of housing was given to the County Council and then delegated to the Lewis District Committee. But these legislative changes took time to have much practical effect on the housing situation.

At the beginning of the 20th century the majority of houses still did not have these features – the Report on the Sanitary Condition of the Lews[10] says that with the exception of the three stone and lime built houses '*every house* in Arnol is grossly insanitary and could be certified as a nuisance under the Public Health Act'. It goes on to describe the blackhouses, none of which had a partition between the byre and the living room, and only some with a 6-7 foot partition between living room and bedroom. All were entered through the byre and none had windows in the walls, though some had a small pane of glass set into the thatch. The conditions outside the houses were also reported as insanitary: 'All the refuse is deposited in the byre and immediately in front of each house. The result is that the approach to every habitation is through a sea of mud, filth and liquid manure, which soaks into the foundations of the houses, while those standing at lower levels receive in addition the drainage from the upper ones.

In 1909 the Poor Law Commission reported regarding Barvas Parish that 'Human beings, cattle and other livestock are all housed under the same roof without any effective partition wall; all enter by the same door,...while the excretal matters of man and beast...are allowed to accumulate in the byre end of the house form spring to spring'.[11] Mackie says 'The failure to improve the housing of tenants in rural Lewis may be largely attributed to a failure to understand the lives, livelihoods, means, traditions, attitudes and wishes of the people, the landowners and authorities wished to reform'. [12] She points out that 'The example of Lewis is important because it represents the clearest and most sustained example of resistance to housing reform in Britain in the nineteenth century'.[13]

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[9] Ferguson, C,.Children of the Blackhouse p79
[10] Sanitary Condition of the Lews, Report to the Local Government Board for Scotland, Glasgow, 1905
[11]Quoted in Hance, William A., 1951, p84
[12]Mackie, C. (2014) 'Social reform and segregation: tenant housing in the Isle of Lewis, 1795-1900', *Vernacular Architecture* 45, page 64
[13] Mackie, C. (2014) 'Social reform and segregation: tenant housing in the Isle of Lewis, 1795-1900', *Vernacular Architecture* 45, page 65

It was not until the inter-war period that the move away from blackhouses really began in Lewis. The reasons for change were many and varied, but included the fact that there was more money readily available due to an improving economy (particularly herring fishing), the introduction of a crofting grant and loan scheme to assist with housing, emigrants returning home, and a general desire to build more modern houses (those who had been away wanted to emulate the types of houses they saw elsewhere).[14] The transition from blackhouse to whitehouse was still ongoing through much of the 20th century.

By the middle of the 20th century most people had moved into modern whitehouses for a variety of reasons. From early in the 20th century various levels of government loans, and later grants and loans were made available. To access the loans, plans for houses were subject to approval by the government, hence the uniformity of style. William Hance in 1951 stated that 'Many, if not most, of the "white houses" have been built with the aid of a government grant of £250 each, half of which was repayable by annual rent of £6 10s for twenty years. From 1920 to 1940 nearly twelve hundred loans were made in Lewis and Harris for the erection and improvement of houses.'[15] Writing in 1951 Hance predicted that due to the building activity ongoing the blackhouses would have disappeared in a decade or two, but stated that 'In Lewis,..."black houses" are in many areas still more numerous than white houses and the byre is still often joined end to end with the house, though with an independent roof'.[16] Mackie, in her PhD thesis argues that while undoubtedly the government grants and loans had an impact, there were many other factors contributing to the shift in building patterns.[17]

Crofting work/life

Although the area in care does not extend to the area of land originally associated with the croft houses, the landscape around is still in part worked and croft boundaries are discernable. The houses were part of an integrated system of land management and cultural and social life and should be understood in that context.

The fuel for both the fire and the kiln '*àth*' (for drying grain) was peat. Peat-cutting, like most crofting work, was a communal activity. It would be cut in springtime, with each croft having a particular peat-bank. Once partly dried, the peats would be lifted into '*rudhan*' (small piles) and left to dry fully before being taken home. The peats were often transported from the peat bank to the road with creels (*cliabh*), from where they would be taken by horse and

[14] For further reading and an extremely detailed analysis of the development of housing in Lewis, and the impetus for change, see C. Mackie, 'The Development of the Lewis House in the Nineteenth and Twentieth Centuries, with Particular Emphasis on the Bragar Township', unpublished PhD thesis, University of Edinburgh, 2006.

[15] Hance, William, A., 1951, p85

[16] Hance, William, A., 1951, p85

[17] C. Mackie, 'The Development of the Lewis House in the Nineteenth and Twentieth Centuries, with Particular Emphasis on the Bragar Township', unpublished PhD thesis, University of Edinburgh, 2006.

cart to the house. Once home, it would be built into one large stack (*cruach)*, to last the year. There is a peatstack at the back of blackhouse no.42.

Figure 1: Carrying home peats in creels. Note the men have shoes and the woman is in bare feet!

Crops of small oats, barley and potatoes were grown, and fertilised with the soot-filled thatch from the roofs of the blackhouses, the manure from the byre end of the buildings and seaweed. The grain was dried in the kilns in the village, then taken to the mill to be ground. The mills were generally of the older type; small with a horizontally turning waterwheel linked to the upper grinding stone. More research is required to determine which mills and kilns were used in Arnol.

The sheep were shorn and the wool was carded and spun. It was then either knitted or woven into lengths of tweed to either sell or make into clothes. The cows provided milk, manure and heat inside the blackhouse, and the hens gave eggs. The animals were slaughtered for meat when required, though rarely; the staple diet was salt fish (herring) and potatoes. During the summer months the cattle were taken to the common pastures and the womenfolk in particular moved to temporary dwellings called shielings to tend them.

Description of the structures in care

No. 42 - Blackhouse

The Blackhouse at No. 42 has been preserved as much as possible as it was when it was vacated in 1965. It consists of two parallel units; the byre dwelling, and the barn. On entering the house, there are wooden partitions to either side creating a porch area, with the byre to the right and the living area and bedroom to the left. Immediately opposite the front door is another low doorway which leads into a connected parallel building which incorporated the

barn and a porch area or fosglan. The latter has another door leading outside to the back of the building where the peat stack was kept. It is clearly visible where the barn was shortened at the north end in 1940 following a partial collapse when a World War II sea mine was detonated.

The living area round the hearth is paved with stones, and as well as a box bed there is a bench and sideboard, with items such as crockery, a spinning wheel, milk churns etc. Several small windows have been added later to the roof to let light in through the thatch. At the far left the bedroom contains two box-beds, and a window which is a later addition.

Figure 2: Interior view of Blackhouse No. 42 showing kitchen with furniture and the slabhraidh (chain) hanging down from the rafters over the central hearth. The door leads through to the bedroom. 1966.

The fire in the centre of the blackhouse living room was the centre of family life; it never went out and still burns daily to illustrate the importance of this focal point. It provided light and warmth and kept the building dry. Over the fire would hang the kettle, and any other pots/griddles for cooking, from the chain (slabhraidh) attached to the roof.

There was no chimney or smokehole, and the smoke from the fire would slowly rise up and filter through the thatch. The blanket of smoke in the roof space above the fire would extinguish any sparks that might otherwise set the thatch alight,[18] and also meant that the heat was evenly distributed as it rose which kept the whole house warm. The smoke prevented fungus from growing inside the blackhouse, as well as acting as an insect repellent. The soot also covered the roof timbers with a tar-like residue which protected them and stopped them from rotting (see figure 2). When the soot-filled thatch was eventually removed, it was recycled and used by some as fertiliser on potato crops; the nutrients from the soot enriched the soil.

[18] HS TAN 5, page 27

The floor of the byre slopes downwards slightly, and there is a drain to allow water and waste to flow out the small opening at the far end wall. There is a small hole in the floor at the top of the byre, where there is a spring from which the water would flow out down the drain.[19] There is also a system of under-floor drainage which was created at the time of building. The animal stalls in the byre are still complete.

The main alteration to the byre has been the work to the roof (see Appendix 3 for roof construction). The pitch of the roof in the byre of Lewis blackhouses often differed from that in the main living area. This gradual flattening of the roof meant that the heat rising from the cattle and dung would rise, creating a convection current that kept the smoke from entering the byre. The specific knowledge or 'know-how' of this vernacular practice had been developed by the inhabitants of Lewis blackhouses over centuries, and the challenge at Arnol was (and remains) to marry this to our modern theoretical and technical approaches to conservation.

HES District Architect Stephen Watt described the work to the roof as follows:

> 'When the Blackhouse was taken into care in the 1960s it was in a semi collapsed condition. The local residents at the time advised that, while a small continuous decrease in pitch occurred over the byre (primarily as the best and longest timbers were used over the accommodation for people), the trusses were in a collapsed state and were never meant to be at such a low pitch. This led to saturation of the thatch, rotting it, soaking the byre interior and the sagging of the trusses.
>
> When in the 1980s the collapsed form became so unstable as to require propping and the thatch failing so much a tarpaulin was covering the roof, an attempt was made to replicate the low pitch trusses with new timber but these collapsed. Trusses of a slightly increased pitch were then tried which lasted a few years but with continuing problems of stability and thatch rot they were again replaced in the 1990s with trusses of an increased pitch. There is still a slight decrease in ridge line, from building centre to byre end, as each successive truss has a decrease in angle and this last arrangement is structurally stable, allows fast water run to off over the thatch and is approved by the local residents.'[20]

[19]MacLeod, M., Monument Manager, Arnol Blackhouse: pers.comm.
[20]Pers. Comm., January 2017

Interior of the byre at No 42 at the time it was taken into care, illustrating the sagging trusses

No. 42 – Bungalow

The visitor centre and staff room are situated in the bungalow which was built in 1964 to replace the blackhouse. In many ways this continues the story of housing development in Lewis, and in years to come will be of architectural/archaeological interest in its own right. The house was taken into care and modified later to accommodate the needs of staff as well as to provide interpretation, and a small shop for visitors.

Blackhouse No.39

The unroofed remains of the blackhouse at no.39 have been analysed and excavated in 1995 leading to the conclusion that although it was only occupied for a relatively short time, it was modified many times. It consists of three parallel units built with random rubble walls packed with earth and clay. The first is the 'fosglan' or entrance porch, which in this case is almost as long as the central housing unit. This leads into the central house, which would have consisted of a living area to the right and byre to the left. The housing area has clearly been extended, adding a window in the gable end as well as extra space. It is built on a slight slope with the living area at the upper end, and the byre (with raised cattle stalls) at the lower end, which allowed water/ animal waste to exit from a small hole (feadan/ toll lodain) at the lower gable end. From the central unit there is a doorway to the third unit (the barn), at the far end of which there is a low opening which would have been a winnowing hole.

The consolidated ruined blackhouse at No.39, with the whitehouse and the 1960s bungalow (visitor centre) behind it.

There is no exact date for when this blackhouse was built. It does not appear on the 1st edition OS map in 1853, but it had been built by 1897 when the 2nd edition came out. We know it was built by the father of Alan MacLeod who built the white house around 1920.[21] It is possible it was built shortly before 1879, when the new estate regulations were introduced which stipulated features including a window in the gable end. Archaeological investigations have shown that the original house did not have a window which could suggest it was built before the regulations were published and subsequently altered.[22] However Catriona Mackie has shown that in general the estate regulations were not always adhered to in Lewis[23], and the sanitary report[24] from 1905 notes that none of the blackhouses in Arnol had windows, so it is not necessarily reliable to use this as a point of reference for when the house was built or altered.

No. 39 – Whitehouse

The whitehouse at No. 39 was built around 1920 by Donald MacLeod (son of Alan MacLeod who built the blackhouse) to replace the blackhouse. Unfortunately he died before it was completed so he never actually lived there. It is a style typical of other more modern houses which were built in the early 20th century; cemented stone walls, roofed with tarred felt, and a cement floor. The exterior of the whitehouse at no.39 is covered with impervious cement. The whitehouse roof finish is a build-up of bituminous felt

[21]Pers. Comm. M. MacLeod, Monument Manager, Arnol Blackhouse, 2017
[22]Holden, Timothy G and Baker, Louise M, 2004, The Blackhouses of Arnol, Edinburgh (Historic Scotland)
[23]Mackie, C. (2014) 'Social reform and segregation: tenant housing in the Isle of Lewis, 1795-1900', *Vernacular Architecture* 45, page 62.
[24] Sanitary Condition of the Lews, Report to the Local Government Board for Scotland, Glasgow, 1905

held down by nails and bitumen impregnated rope and further waterproofed by layers of coal tar.[25]

Immediately on entering the front door, there is a small hallway with stairs opposite leading up to an open space on the second floor. This loft-space is floored and although never the case in this house, these lofts sometimes had a weaving loom (beart) in them. To the right is the kitchen (which also has a box-bed), and to the left a living room. Most of the artefacts in the house are not original, but it is interpreted and displayed as from the 1950s.

Interior of the Whitehouse

Collections relating to No. 42[26]

The interiors of the houses, and associated collections on display contribute to our understanding of day-to-day life in a blackhouse and whitehouse.

In particular many of the objects in the blackhouse at no. 42 are original or have been there at least since the blackhouse was taken into care. The objects remaining within the house fall into certain categories: furniture; tools and objects connected to tasks and activities; basic household objects and blankets.

The furniture within the Arnol Blackhouse is predominately typical of the furniture that would have been found in all contemporary blackhouses. These standard items were functional and the most characteristic were the long wooden settle, *being or sèise*, the box beds, *leabaidh dhuinte*, dressers and chests. A settle was a long wooden bench found along the edge of the living

[25] It is interesting to note the use of rope and that they were not simply depending on nails. The coal tar was a by-product of gas production prior to the introduction of natural gas and widespread supply of electricity in the second half of the 20th century (the gas being used for street lighting and heating in the larger towns).

[26]From Walker, Rona, Draft Statement of Significance for Collections at Arnol, unpublished (see Appendix 2)

space in the blackhouse, built low so that people could sit below the level of the peat smoke.

Outside the immediate environment of the blackhouse life and work tended to be communal, linked to working the land. Functional objects remaining at the Arnol blackhouse are working tools such a flail, *suist*, peat cutters, *tairsgeir* and spade, creels, *cliabh*, and a winnower, *criathar*. A fishing rod, *slat*, made of bamboo currently sits up in the rafters. This would have been used for fly fishing and six or seven hooks would have been put on it at once to try and get a catch. It would have been a treasured possession and this one shows evidence of mending. Other objects relate more to domestic activities such as an upright butter churn, *biota*, and blankets. Household objects, remain as evidence of nearly eighty years of generations of the same family residing in the blackhouse. These include a girdle, *grideal*, the large kettle, *coire*, which hung over the fire, crockery and interesting clocks, one of which is believed to have been an import from the USA brought back by a returning traveller (Museum Nan Eilean and Historic Scotland leaflet 1994). There is also a group of blankets, some of which are contemporary to when the site was inhabited. These blankets would have been the precursor to duvets. For detailed information on these items please see Appendix 2.

2.2 Evidential values

The principal evidential values concern the physical fabric of the site, its collections and the archaeological resource. Excavation of Blackhouse no. 39 shows that it was altered many times though it was occupied for a relatively short period.[27]

No other part of the complex has been researched and explored in this way, and undoubtedly there remains considerable potential to better understand the evolution of the remaining buildings and the activities that took place here.

The other major strand of evidential value comes from the opportunity to study Blackhouse no. 42 in great detail and as an operational model. HS Technical Advice Note 5 1996 (TAN 5) includes a detailed record and interpretation of the physical fabric of the Blackhouse. For example the original roof timbers were made from driftwood, and the teak window frame was salvaged from a trawler that ran aground at Arnol.[28]

[27]Holden, T.G., Dalland, M., Burgess, C., Walker, B., and Carter, S., 2001, No. 39 Arnol: The Excavation of a Lewis Blackhouse
[28]HS TAN 5, page 22

Roof timbers above the barn section of No 42

There are several photographs of the blackhouse at the time it was taken into care (see Appendix 4). Together with the invaluable memories and oral histories of local residents, and accounts of No. 42 and similar houses from visiting travellers over the years we have a relatively complete record of the conserved building.

2.3 Historical values

The chief historical value of the property lies in its ability to demonstrate, in a very authentic way, the domestic life of Lewis crofters in the 19th and early 20th centuries. Read against the historical context described in 2.1 the various elements of the property deliver a very complete picture of the crofters' response to their changing political, social and economic circumstances.

Thus the alterations to Blackhouse no. 39 illustrate the fluidity of the houses, that they were often frequently adapted for use in a short period of time; the excellent survival of Blackhouse no. 42 with its byre stalls intact makes it easy to tell the story of cattle housed overwinter and how the subtleties of variations in roofline, airflow and drainage made this possible. The organic and cyclical nature of crofting life in which elements of thatch, turf and dung were re-cycled and renewed are made more real by the extent of survival.

This history is revealed through an appreciation/understanding of Gaelic language and culture and a very significant part of the blackhouse's historical value lies in retaining an authentic context for these cultural practices. Much of the practical 'know-how' and the associated Gaelic terminology of old-style crofting life has since either disappeared or is on the verge of dying out, apart

from the Gaelic singing tradition which is still vibrant outwith the context of the blackhouse.

For instance, it was round the fire that the family and neighbours would gather each night to 'cèilidh' – exchanging news, singing songs and telling folktales in Gaelic which had been passed down through many generations. This was done to pass the time as evening chores were done, usually involving crafts such as rope-making, net-mending, spinning, and knitting among others. It was also regarded as an informal place of learning, where knowledge going back hundreds of years was passed on.

Another cultural practice for which the blackhouse provided a context was courtship. Sleeping accommodation was a combination of boxbeds, beds built into the external walls, and makeshift beds on the floor by the fire. It was common practice until sometime in the early-mid 20th century for men courting young ladies to practice 'bundling'or sleeping fully clothed beside their sweetheart. The extended family would generally be aware of this, but the men in question would go to great lengths to make no noise and disguise their presence, and the family usually turned a blind eye.[29] This custom is the subject of a well-known short Gaelic song or 'mouth music':
'Innis dhòmhsa cà'il thu cadal, cà'il thu cadal, cà'il thu cadal
Innis dhòmhsa cà'il thu cadal 's cò tha cadal comhl' riut
Leabaidh àrd ri taobh an teine (x3) còmhla ri mo sheanmhar'
'Tell me where you sleep (x3) and who sleeps with you
The high bed beside the fire (x3) along with my grandmother'

The building of the Whitehouse demonstrates a break with traditional building patterns and techniques. According to Catriona MacDonald[30] (Catriona Aonghais Mhaois) the first whitehouse was built in Arnol in 1905. She recalled that none of the houses (blackhouses or whitehouses) had chimneys built until after the end of World War I. Arnol suffered many losses, but those who did return immediately set about improving the houses. There were two stonemasons in the village who built all the whitehouses and dressed the stones themselves as they went along. She also pointed out that 'some of the black houses were just as nice and clean as the white houses, and they were always much warmer'. The 1905 report[31] states that there were three new houses in Arnol and one being built. The rest were found to be 'grossly insanitary'.

Crofting work
The blackhouse was linked with activities such as peat-cutting, growing crops, animal work such as milking cows and shearing sheep, as well as traditional crafts mentioned above. Evidence of all these can be found at No. 42 Arnol,

[29]Mackie, C. (2014) 'Social reform and segregation: tenant housing in the Isle of Lewis, 1795-1900', *Vernacular Architecture* 45, page 60.
[30] Unpublished memories of Arnol, donated to HES
[31] Sanitary Condition of the Lews, Report to the Local Government Board for Scotland, Glasgow, 1905

where peat is still burned on the fire daily. There are two small haystacks in the enclosed stackyard (iodhlann) outside the house, and milk pails and hand shears (deamhais) can be seen by visitors.

2.4 Architectural and artistic values

In telling us about past building types, Blackhouse 42 is important both for its particularities as an example of a specific Lewis-type blackhouse and also for its relationship to a wider context of vernacular building traditions in Scotland.

Historically, the form and layout of even late-dated blackhouses such as 39 and 42 – narrow bodied parallel interconnecting ranges with individual roofs resting on mutual walls – is specific to the Isle of Lewis. Thus No 42 represents the last stages in the development of a building type constructed to entirely different principles from those with which we are familiar today.[32]

In terms of their particulars, the blackhouses in Arnol are typical of those built throughout Lewis, but they differ from those built in other parts of the Western Isles. Catriona Mackie points out that;

> 'Throughout the Western Isles, there were certain similarities in housing form and construction, but there were also notable differences. While the external walls were typically either of turf or of a double-skinned dry-stone construction, with an earth and clay infill, those in Lewis were generally much thicker than their counterparts in the south, with the result that the roof timbers rested on the inner wall, leaving a broad outer wall-head called the *tobhta*.'[33]

In Uist and Barra, not all blackhouses had the cow byre under the same roof.[34] The style of parallel units in Lewis seems to share more in common with Shetland than other parts of the Western Isles and Highlands.[35] Further research is required to help illuminate the age and origins of blackhouses, as highlighted by Piers Dixon in his article Pre-improvement Rural Buildings.[36]

Blackhouse no. 42 offers a uniquely authentic demonstration of the use of vernacular materials associated with Lewis blackhouses and retains a large measure of authenticity. Rubble faced walls with earth core; broad turf topped walls; roof timbers of driftwood and shipwreck salvage; roof part laid to turf, covered in straw and held in place by ropes (formerly of marram, now coir) weighted with stones. All that was commonly used; however, because of the state of preservation and ongoing conservation of No. 42 it is possible to explain much more about the fine-tuning of the building than would be possible simply from excavated examples or from documentary sources.

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[32]HS TAN 5 p7

[33] Mackie, C. (2014) 'Crossing the threshold: negotiating space in the vernacular houses of the Isle of Lewis', *Archaeological Journal* 171, page 318

[34]Parker-Pearson, Mike; South Uist, 2004, page 177

[35]Mackie, C. (2014) 'Crossing the threshold: negotiating space in the vernacular houses of the Isle of Lewis', *Archaeological Journal* 171, page 318

[36] Dixon, Piers, (2011) 'Pre-Improvement Rural Buildings' in Fenton & Veitch (eds) *Farming and the Land*

The mechanics of providing ventilation to keep both people and cattle healthy is a case in point. The pitch of the roof above the living end of the house is forty-five degrees, and this gradually flattened out toward the end of the byre. This, along with wattle doors which allowed ventilation, created a convection current which kept the smoke from the fire out of the byre area. It is thought that this air current also contained a small amount of ammonia from the cattle urine, which contributed to some Lewis blackhouse residents being resistant to Tuberculosis when it was at its most prevalent.

The ongoing management by HES of No. 42 has led to greater understanding by academics and historians of the technology of blackhouse construction and its unique properties as a “machine for living”. The traditional knowledge and skills through which communities understood and supported blackhouses in the past has in part been recorded and transferred by this relationship. However negotiating communication between professionals and local community knowledge is an ongoing process and requires respect and commitment from HES.

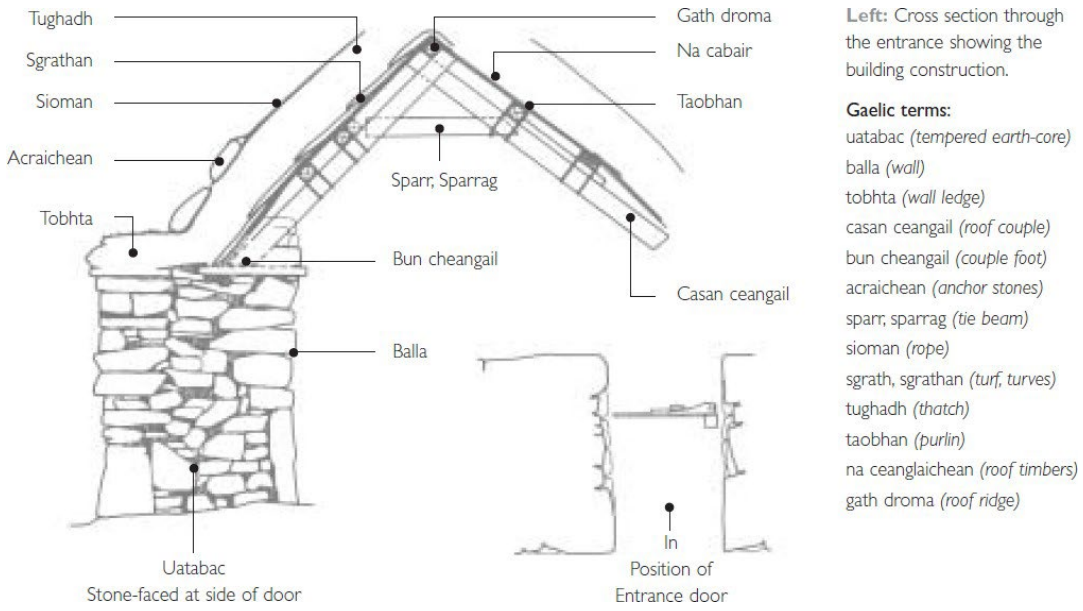

Diagram showing Gaelic terminology of parts of the blackhouse

Detailed and technical notes on the construction of the blackhouse at No. 42 Arnol can be found in The Hebridean Blackhouse (HS TAN 5). A summary of the information in the book is given at Appendix 3.

Having followed this tradition of building for some time, the introduction of the white house was not welcomed by all. These houses were often prone to damp, and not as ergonomically suited to the climate in the Western Isles. At first, there were documented cases of people with new white houses moving back to their blackhouses because of the lack of warmth. Despite this, the whitehouses proved popular, and by the 1960s only very few blackhouses remained in use, for reasons outlined in 2.3 above.

2.5 Landscape and aesthetic values

The blackhouses at No. 39 and particularly No. 42 Arnol have an extremely high aesthetic value. Built entirely with natural materials, stone walls and straw thatch, they blend with the landscape and illustrate in many ways the close relationship the people of the area had with the land. The low height and rounded corners provided protection from the strong Atlantic gales to which it was exposed. The enclosures around the buildings are made of drystone, and outside No. 42 there is a peat stack and some haystacks which further enhance the experience.

Exterior view of Blackhouse No. 42 from the croft behind the house, illustrating how well it blends into the surrounding landscape

On entering the blackhouse many visitors are struck by the fact some of these houses were still inhabited until the middle of the 20th century. The atmosphere inside, with the smoke from the peat fire, and the stillness and shelter from the wind provided by the thick walls tends to be of note.
The impressive view to the west of the blackhouse looks down towards the shore and out across the Atlantic, to the east across the moors and to the south the hills of Lewis and Harris. It is surrounded in the village by several other ruined blackhouses still scattered between the more modern inhabited houses.

Although the whitehouse cannot be said to have the same aesthetic values as the blackhouses, in general whitehouses have become fairly symbolic of this period in the Western Isles. As housing styles continued to develop, the whitehouse at Arnol represents a major shift in building traditions, with many ‘modern’ timber frame houses being built to look like a traditional whitehouse.

Overall, the visual interplay and contrast of the many blackhouses, white houses and bungalows in Arnol township, in their various states of preservation and decay, and juxtaposed with the stone dykes and wire fences of the extensive field divisions, provide a pleasing sense of a busy but organic landscape.

A particularly distinctive and attractive aspect of Arnol as a whole is the distinctive radial layout of its settlement. This is a well-preserved example, though best appreciated from the air. Arnol 39 and 42 are an addition to the township and this expansion remains unexplained.

2.6 Natural heritage values

The blackhouse is situated next to the RSPB nature reserve at Loch na Muilne, where among other species, Dunlin, Lapwing, Redshank and Whooper Swans can be seen. It is noted as a place to see the rare red-necked phalarope during its breeding season in late May.

2.7 Contemporary/use values

The social values of the houses at Arnol have changed considerably over time. At one time, the blackhouses were of extremely high value to families, providing not only warmth and shelter but a way of life intricately connected to the land. The fact they valued this way of life is evidenced in their resistence to conform to landlords' stipulations or ideas of 'improvement'. Alexander Fenton notes "Perhaps changes in buildings demonstrate change in the Outer Isles better than any other apsects whether minor modifications such as the insertion of dividing walls between people and animals, or more substantial change, such as the desertion of the blackhouse in favour of a 'white house'"[37]

At the time Arnol blackhouse was taken into care in 1966, newspaper reports of the time suggest that members of the local community were not in favour of it being opened to the public. This could suggest they did not value the blackhouse; it could alternatively be argued that after centuries of messaging from landlords and other authority figures that such houses symbolised backwardness and a lack of hygiene they were simply reflecting these views. It was also reported that they had concerns regarding their strong spiritual values; many were worried that it would be open on the Sabbath, which was against their beliefs and would disrupt their way of life. The blackhouse remains closed on a Sunday to respect this valued aspect of community life.

Today the community in Arnol and Lewis as a whole place much value on the houses at Arnol in that they contribute hugely to their sense of identity and belonging. In the Western Isles in general there is now a pride in the Gaelic culture and the houses at Arnol symbolise the richness of this historic way of life. A public consultation conducted in 2003 raised certain issues for further clarification and discussion, such as:

[37]Fenton, A,. 2012, A Swedish Field trip to the Outer Hebrides, 1934, page 95

- The base layer of turf under the thatch was restricted to the wallhead soldier course and the apex, or above the first purlin only.
- There was a debate as to the type of underlying turf: heather or grass.
- The extent of re-thatching and associated cycle.
- The roof pitch over the byre
- The thatch material changed in nature with the introduction of mechanical farming techniques, reducing the length of the stalk, making directional thatching impossible.

The Arnol Blackhouse site works with the local school, Sgoil an Taobh Siar, to run a very successful Junior Guides scheme. The children visit the site and learn about life in a blackhouse and white house, then present guided tours to the public. A video called An Tac an Teine (Beside the Fire) has been produced featuring the Junior Guides of 2016. This is available online nationally and internationally to help viewers understand what life in a blackhouse was like.[38]

Junior guides filming in Blackhouse No. 42

The blackhouse is a popular stop with tour buses from cruise ships which visit Stornoway. They visit the blackhouse, whitehouse and gift shop at Arnol, and benefit from the chance to experience a glimpse of what life was traditionally like in Lewis until the middle of the last century.

Arnol Blackhouse No. 42 is the only roofed blackhouse in State Care and the only blackhouse anywhere which has been conserved as much as possible as it was when it was inhabited. The corporate value therefore lies in the challenge to the organisation of understanding and caring for a structure built

[38]An Tac an Teine on Youtube: https://www.youtube.com/watch?v=y61YFE1sD7E

to an entirely different set of precepts and traditions than more conventional monuments. It offers the opportunity to support and foster traditional thatching and vernacular masonry techniques. In addition there is a collection of original artefacts in situ. The management of the site also includes the whitehouse which in itself is another interesting example of preservation and conservation.

Interior view of the covered scaffolding which was used during the last full rethatching process to protect the collection of artefacts inside among other reasons

3 Major gaps in understanding

- When exactly were the blackhouses at No.42 and No. 39 built and why, as they appear to have been a late addition to the township (the layout of the crofts differs to that of the majority of the village)?

- When were features such as the windows, partitions introduced at no.42?

- How many families in Arnol were affected by emigration? How much of an impact did this have on the community?

- Was the white house at Arnol built under the grant and loan scheme, and how much of an impact did this scheme have on Arnol township in particular?

- What is the antiquity of the vernacular building technique used at Arnol Blackhouse?

- Is there any evidence for keeping animals in a byre-house before the post-medieval period?

- What further information can be gathered of life and work at corn-drying kilns and watermills associated with Arnol township? Whilst the

Research Study[39] has cast considerable light on the township and its blackhouses, there is still much we don't know about these important aspects of crofting life. Watermills are seen on the 1st Edition O.S. Map, and the official guidebook for Arnol describes these and mentions four kilns. But there is more to be learned of exactly when and how these were in use, and how they related to Nos 39 and 42 Arnol.

- An important area of study yet to be investigated is that of the township's shielings, clustered between Gleann Bhràgair and Gleann Bhruthadail [centred on NB 302 420].[40] The secretary of the Grazings Committee has the map indicating where each croft in the township had its shieling hut, and consideration should be given to exploring further those pertaining to Nos. 39 & 42, at the very least undertaking detailed archaeological investigation of them.

- Archaeological studies are urgently needed before surviving remains disappear, as is oral history collection to understand fully how they were connected with the township.

- An examination of Ordinance Survey name-books and the Scottish Place-name Survey may help to shed light on some of the above gaps.

4 Associated Properties

Properties in Care: Sunnybrae Cottage, Pitlochry
Other blackhouses in Lewis: An Gearannan, Lewis, Callanish Blackhouse (NTS)
Other examples of accessible associated properties: – Auchindrain Folk Museum (Argyll); Beaton's Croft, Bornaskitaig (Skye; NTS); Colbost Folk Museum (Skye); Highland Folk Museum (Invernessshire); Laidhay Museum (Caithness); Voe Folk Museum, Easthouse Croft, Burra (Shetland), Morlannich (NTS), Auchtavan (Braemar Community Ltd)

5 Keywords

Blackhouse, Whitehouse, vernacular, housing, thatch, drystone, peat, Gaelic, crofting, township,

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Appendix 1: Timeline

- **1795:** Lewis Estate owned by the Mackenzies. Articles of Set issued putting an end to the Runrig system of land management and creating set crofts on which each crofter was to build his dwelling. This broke up the original coastal settlement and saw the village of Arnol begin to move inland.

- **c.1825:** Articles of Set issued in an attempt to 'improve' housing standards

- **1844**: Lewis Estate (including Arnol) is purchased by Sir James Matheson whose wealth derived from the successful far eastern Jardine Matheson and Co.

- **1845**: Potato harvest fails followed by four years of famine. Matheson advances meal to the crofters leaving them heavily in debt to him.

- **1849:** Matheson issues his first Articles of Set and begins 'improvements' by re-lotting the land of the crofts.

- **1851- 1854**: Compulsory emigration ordered by Matheson across the Lewis estate in areas considered over-populous, or for those in arrears. In some cases entire townships cleared.

- **1875**: Blackhouse no. 42 built around 1875 and occupied until 1965 when it and its contents passed into guardianship.

- **1852-95:** Blackhouse at No. 39 built, possibly just before 1879 - abandoned in 1920 and then used as a weaving shed.

- **1879:** Matheson's new Articles of Set issued (a year after his death), attempting to improve again, though not widely distributed until 1881. These 'rules and regulations' result in many of the houses being rebuilt 20-30 metres from their original location.

- **1886:** The Crofters (Scotland) Act passed following the gathering of evidence by Royal Comission (the Napier Commission). Crofters now have security of tenure.

- **1917** – Duncan Matheson, Lady Matheson's great-nephew, sells Lewis to Lord Leverhulme, the founder of Lever Brothers (of *Sunlight Soap* fame). Although he has new ideas for his island retreat (eg, improving the fishing industry), these seem not to impact on Arnol directly.

- **1920:** Whitehouse No. 39 built to replace blackhouse. Occupied until 1976.

- **1923** – Having encountered significant opposition to his reforming plans, Lord Leverhulme proceeds to sell his Lewis estate through the Stornoway Trust and Lewis District Committee. In 1924 the parish of Barvas, which includes Arnol township, is sold to the Barvas Estates. The old blackhouse at no. 39 is now used by the crofting family as a weaving shed producing Harris tweed (the Harris Tweed Association, founded in 1909, required that all its cloth be made in the Outer Hebrides from virgin Scottish wool, woven on hand looms in the weavers' own homes).

- **1954:** Mains electricity available in Arnol.

- **1960** – a survey finds that nine Arnol blackhouses are still being inhabited by humans and animals. These include no. 42, which has one cow and calf, eight breeding ewes and 26 chickens.

- **1962** – the Scottish Land Court grants Barvas Estates permission to resume from crofting no. 42 Arnol. The area is then feud to the Ministry of Works, with the intention that its blackhouse be preserved intact. In 1966 the occupying family move to an adjacent new bungalow, designed and built by the Department of Agriculture& Fisheries for Scotland (DAFS).

- **1976** – following the death of its last resident, an elderly lady, the white house at no. 39 is left unoccupied.

- **1996** – With the relocation of the occupants of the DAFS bungalow to a new, modern house close by, Historic Scotland acquire the bungalow, and also the blackhouse and white house at no. 39. The bungalow becomes the new visitor centre, enabling the blackhouse at no. 42 to be redisplayed to visitors. The blackhouse at no. 39 is excavated, and the adjacent white house is repaired and refurnished much as it would have looked in the late 1950s/early 1960s.

Appendix 2: Overview of collections

(By Rona Walker, Collections, Historic Environment Scotland)

The settle at Arnol Blackhouse no. 42 has been made from driftwood and been adapted for storage at one end. The use of driftwood to construct furniture highlights the resourceful nature of a local community where wood was a rare commodity and emphasises the unique nature of these objects. A reused boat tiller in the roof of the blackhouse reiterates this point. Other items made of driftwood include a bench, a stool and one of the dressers. This dresser has been made with an angled top to fit in with the camber of the roof. This unique, eccentric touch can only be appreciated because the dresser has remained within the context in which it was made for.

There are three box beds in the Blackhouse, laden with blankets. Box beds are typical of any blackhouse.


The boxbeds in Blackhouse No 42

All of the wooden objects were made for the blackhouse by the son of the man who built it. The son later emigrated to Canada. This is thought to be an Uncle or Brother of Chrisetta Smith's (nee Macleod) grandmother. Chrisetta lived in the blackhouse as a child and then continued to work on site as a steward when it was taken into Ministry of Works care. The intriguing thing about some of these objects is the story behind the driftwood itself. On some of the slats of the boxbeds and on the back door, original to the blackhouse, there are large gouges. These have been analysed and are the gouges made from large seaworms. From their size, the wood is thought to have come from the Caribbean.

Another recurring piece of furniture is the chest, *ciste*, constructed from planks of wood, often with lino on top. These were used as storage for blankets and clothes. The ones in the Arnol Blackhouse were made by a local man, John McIver, who lived at 16, Arnol. The Arnol Blackhouse has a rather intriguing dresser, unusual within the space and atypical for a blackhouse. The dresser has two built-in mirrors and was purchased in Leith in 1930 for 7s 6d and transported back to Arnol.

Some of most interesting objects within the house are those that relate to peat, *moine*, cutting. Peat is still cut and used for fuel today. Interestingly, locals are beginning to return to more traditional ways of cutting and collecting the peat. Peat cutting was seen as a communal task, hard yet sociable work and something which is remembered fondly by those involved:
"A common excuse for absence from school in my time was 'anns a mhonadh' (in the moors)" (Macdonald 2003: 104)

"In my own childhood the day for taking home the peats was one of the highlights of the year. The tractor had not yet taken over and peats had first to be carried from the banks to the road by creel or barrow…The lorries themselves were five-tonners and it took a crew of about ten people a full

hour to fill them, throwing peat after peat from the heap by the roadside" (Macleod 2006 : 162)

Traditionally it was the woman that carried the peat with the creels on their backs and it was unthinkable that men should have to do this task. Woman wore clothing that was suitable for this task and their skirt could be gathered to form a *dronnag*, a cushion on which the creel could rest (Ferguson 2003: 221).

The peat spades in the blackhouse are interesting and with a bit of inspection are quite informative. You can see the wear of the foot and the effect it has on the wood from generations of use; straight on one side, angled on the other. In some cases a leather strip has been added to the foot as it has worn to ensure it remains at the required length to cut into the peat. On some of the peat iron blades three dot impressions have been made into the metal. These three dots show that the peat iron was made in Stornoway, and it is the makers mark of the father of the current blacksmith in Stornoway, Calum Steallag. His father was also known as Steallag. The address, croft or personal initials were often marked on the wooden leg of the peat spade. This was branded by a sheep brander or cut in with a knife. Initials can be seen on some of the peat spades in the blackhouse. "24 Brue" for example, was from Catriona Chandler's (nee Macleod) grandfather's croft in the neighbouring township to the east. "AMR" is likely to be the mark of Alan MacRitchie and "JM" of John Morrison.

Other tools in the house relate to seasonal tasks such as harvesting the land. The scythe, *speal*, would have been used to cut crops and the flail, *suist*, for threshing. The use of the flail was predominately by men although another method adopted by women was to use their bare feet to rub the grain from the sheaves (Ferguson 2003: 239). The flail, like many other tools, diminished greatly in use with the coming of the hand threshing mill. What previously had been done in a year could now be done in a day (Macdonald 2003: 26). The winnower, *fasgnag, criathar or beanntag*, is an interesting object, a circular riddle with a sheepskin base with holes. It would have been shaken, the motion separating the seed from the chaff. The significance of the winnower and the understanding of its use is heightened at the Arnol Blackhouse because there is a winnowing hole, *toll-fasgnaidh*, in the back wall of the barn. The winnowing hole, currently blocked up, would have been open during threshing and, with help of the breeze entering the opened front door, would clear the dust and chaff from the winnowing and take it outside (Fenton 1934 : 21). The potential here for activities in the future is incredibly valuable. Within the collection of objects and tools at the Arnol Blackhouse there is also a fishing line, creel and a flensing iron used for cutting whale blubber. Possibly not original to the house during its occupancy, these objects are still evidence of largely bygone activities within the local community of Arnol to which many visitors will have little knowledge of. What are original are the two wall hangers which would have been used to dry fish or other meats.

These types of tools will be familiar to the older generation on Lewis but it is unlikely that the younger generation will know of their use and significance. This is part of their cultural heritage, something which is in the relatively recent past but yet could possibly feel alien to them. At Arnol Blackhouse the junior guide scheme is up and running and young people from a local primary school have learnt a script about the Blackhouse to tell other visiting youngsters. This script incorporates references to tools and objects visible within the Blackhouse. As well as day to day visitors, the ability to enable direct access for local youngsters to these tools and memories is extremely valuable. Being able to engage directly with this cultural past, and in some cases, touch these objects well known by their grandparents and great grandparents is a great way for youngsters to build recognition, interest and a pride in the past.

The blankets are highly culturally significant as they are early evidence of a long standing domestic and industrial activity on the Isle of Lewis. The Harris Tweed industry was well established by 1880 and by 1902 there were interest free loans for those wanting to purchase their own loom (Macleod 2013: 2). The blankets were in high demand by the 1950s and there was a fear that power woven looms on the mainland would take over the local industry. However, a mill was opened in Sandwick, Stornoway (Macleod 2013: 2). Recent research on the blankets was able to identify five different makers of the blankets from the Blackhouse. Five of the blankets are the hand of Roddy Gillies of the Stornoway Mill, based at Olivers Brae. Roddy's son Dan still lives in Stornoway. He may be able to provide information regarding his father's work on these types of blankets.

Four blankets were woven by Angus Macleod, better known locally on Lewis as Tarzan. He used a herring bone and diamond weave and virgin wool. He still remembers the day his loom arrived, ordered from Huddersfield, when local men had to help him lift the roof of his shed to fit the loom in! (Macleod 2013: 7).
These sorts of anecdotes are invaluable in interpreting objects both now and in the future. Anecdotes bring objects alive and people are more likely to engage with them.

These woven blankets are culturally significant because they are evidence of a booming industry on the Isle of Lewis, both now and in the past. Techniques within this industry will continue to modernise and therefore there is a need to preserve knowledge of those used in the past, and the products. Being able to identify makers and in some cases, collecting oral histories from them is so valuable. It is likely that the older Lewis generation have many examples of simpler blankets dating from this period, however, that does not lessen their cultural significance and what they can potentially tell us about the past. Instead, we are in a position where we can conserve and preserve an example of different weaves for the future. The market for modern, machine made blankets is very popular.

There are three hand crochet blankets made by Chrisetta Smith (nee Macleod) in the 1950s and 1970s. These are particularly significant blankets to the site because Chrisetta lived in the blackhouse as a child.

There is yet another type of blanket that was donated to the Blackhouse when the Whitehouse was opened to the public in 1999. It is a covered blanket – a technique used on Lewis particularly in the 1950s to add fabric to a worn blanket to give it some weight. Patch work squares would be made from old clothing or curtains to enhance the appearance of the blanket. It is evidence of a specific practice from the past, fuelled by a no waste lifestyle, a desire to reuse and adapt, unlike the materialistic society of the 21st Century. Bellan Macleod recalls Mary Murray of 37 South Galson covering blankets in the 1950s and it is very likely to be one of hers.

The blankets are a diverse group of different designs and techniques and showcase the varied approach to blankets in the 20th century. Any knowledge that can be gathered on them by those who made them will be invaluable for the future.

The living room in the Blackhouse would have been the scene of constant activity from morning to night, with the women carrying out all their domestic duties, evidenced by pots and pans, crockery, the large kettle and the butter churn, *Cuinneag*. Evenings were a time for the family and gatherings of friends, tales being told whilst tasks such as spinning, knitting and fixing peat creels were carried out (Historic Scotland Arnol Guidebook: 4). Although ceilidh is a word used now for an evening of Scottish music and dancing, ceilidh was originally meant these lively evening gatherings in houses.

Appendix 3: Constructional details of blackhouse no. 42 – mainly summarised from HS.TAN 5, The Hebridean Blackhouse

The site is prepared by removing the topsoil and exposing a layer of blue clay, onto which is hammered a friction course of small round pebbles before the walls are built. Shallow trenches are also cut into the clay and lined with stone, acting as part of the underfloor drainage system.

The random rubble walls are then built and packed with a tempered earth core made up of the excavated top soil mixed with clay and ash. Bits of iron such as old horse shoes were traditionally placed between the walls as it was considered good luck. The overall thickness of the walls varied between 1.5m and 2m. On the outside face of the lower end of the byre wall there is a series of cantilevered stones which form a rough narrow staircase (staran). This provided access to the wall-head for essential roof/thatch repairs (as well as allowing hens access to a hole for roosting in the byre). The steps were out of bounds unless access was essential for repairs, and then only in wet weather which ensured the clay could withstand the weight of the thatchers.

The roof timbers are almost all made from driftwood or taken from shipwrecks due to the shortage of wood on the island. They are constructed with a series of A-frame trusses which rest on the inner skins of the walls and divide the roof into bays. The feet of the trusses are set on stones raised slightly above the level of the clay to keep them dry. The trusses support purlins (horizontal beams) over which is placed a slatted surface of timber to create a complete covering. Since the blackhouse was taken into care in 1965 an extra purlin has been placed on the roof to help avoid any weakness (previously only limited due to wood shortage).

The pitch of the roof above the living end of the house is forty-five degrees, and this gradually flattens out toward the end of the byre. As detailed above, this, along with wattle doors which allowed ventilation, created a convection current which kept the smoke from the fire out of the byre area. It is thought that this air current also contained a small amount of ammonia from the cattle urine, which contributed to Lewis blackhouse residents being resistant to Tuberculosis when it was at its most prevalent (it has been shown that inhaling small amounts of ammonia can prevent TB).

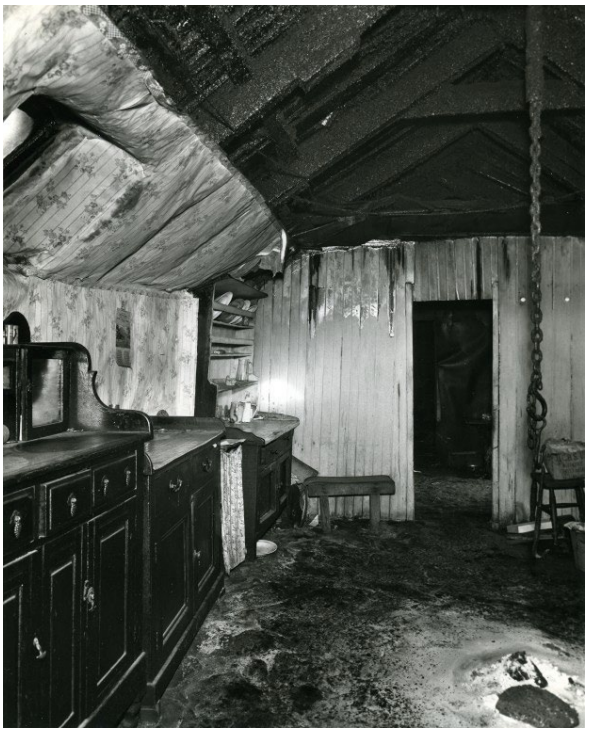
Once the slats have been laid on the roof, these are covered with a layer of turf, though often a certain amount was left unturfed. ‘Traditionally, the area of roof turfed was...finely tuned to suit the needs of the croft. The unturfed thatch filtered soot from the smoke that passed through it. The soot laden thatch made an excellent top dressing for the potato crop. The area of unturfed roof related directly to the area over the potatoes but only insofar as there was enough straw for re-thatching each year. The amount of straw available depended on the amount of dung available from the crofter’s cattle: the number of cattle depended on the availablility of fodder, supplemented in the winter by potatoes and the potato crop depended upon the soot top dressing from the stripped thatch.’ This illustrates how instrinsically the very fabric of the house was connected to the crofting way of life.

The thatching of the roof was traditionally a communal activity. Oat or barley straw was used to thatch the roof at No. 42 Arnol though other materials commonly used in the surrounding areas would have been marram (bent) grass and heather. These materials would also have been used in the past to create the ropes used to secure the thatch on the roof, though now single strand coir rope (made from coconut fibre) is used. The complex roping system uses hanging stones as weights to secure the thatch. As well as the full rethatching which takes place every few years, HES tops up the thatch annually which is a process in itself involving the setting aside of the rope weighting and wallhead stones and the lifting off of the net which covers the thatch.

Inside the living space the floor is finished with rough paving pointed with clay. The hearth is raised in the centre of the living space. One method of finishing the floor was to fill the space with sheep for 12 hours to compact it. There is no paving in the byre end of the house, rather compacted clay. As referenced

above there were drains built in under the floors to allow for any water (in particular from springs) to flow freely and avoid damp problems.

Appendix 4: Images of Blackhouse No.42 at the time it was taken into care (1966/7)



Interior view from living room looking through to porch and byre

Interior view from living room looking through to porch and byre

Interior of barn

Interior of bedroom and boxbeds (note walls and beds all covered in fabric/paper) looking through to living room

Bedroom

The seise (bench/settle) in living room

The porch area showing exterior door