



HISTORIC  
ENVIRONMENT  
SCOTLAND

ÀRAINNEACHD  
EACHDRAIDHEIL  
ALBA

Property in Care (PIC) ID:	PIC291
Designations:	Scheduled Monument (SM90154)
Taken into State care:	1908 (Guardianship)
Last Reviewed:	2021

## STATEMENT OF SIGNIFICANCE

# GRAIN EARTH HOUSE



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Cover: Still image from 3D photogrammetric model of Grain Earth House, showing interior of structure in relation to above-ground mound.

Full model accessible at: [Grain Earth House 3D models - sketchfab.com](https://sketchfab.com/Grain-Earth-House-3D-models)

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# HISTORIC ENVIRONMENT SCOTLAND STATEMENT OF SIGNIFICANCE

## GRAIN EARTH HOUSE

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Please note, the research for this document was undertaken during 2020-2021 with limited access to archives and resources, as a result of Covid-19. While every attempt was made for accuracy throughout the statement, errors or omissions may remain. Please direct comments or suggestions to [CRTenquiries@hes.scot](mailto:CRTenquiries@hes.scot)

## I. SUMMARY

### 1.1 Introduction

Grain Earth House is a stone-built underground structure or ‘souterrain’,<sup>1</sup> built and used in the 1st millennium BC in the period known as the Iron Age. The principal components of the structure comprise a narrow, curving passage and an oval chamber, walled and roofed with drystone masonry. The lintelled roof of the chamber is supported by four orthostats, freestanding atop a rock-cut floor.

The site is situated in the Mainland of Orkney, one kilometre north-west of the town of Kirkwall, in what is now the Hatston Industrial Estate. Since entering State care via Guardianship Agreement in 1908, certain changes were made to allow safe public access to the site. A modern entrance and access stair were added to what survived of the original steps, the passage floor was lowered, and the roof and freestanding orthostats were reinforced with metal bars. The rest of the structure is original, and due to the low height of the passage and chamber, access may be unsuitable for those with limited mobility, or claustrophobia.<sup>2</sup>

Excavation on the ground surface has revealed structural remains indicative of Iron Age settlement (both within and beyond the area in State care) together with a second earth house. These remains were not investigated in detail and survive for future analysis. They are not currently visible on the surface, however, a low, grassy mound of modern date covers the publicly accessible souterrain; its form corresponding with the ground plan of the subterranean structure.

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<sup>1</sup> The site belongs to a class of monument commonly referred to as ‘souterrains’; a term which is now generally preferred over that of ‘earth house’. Throughout this document the site is referred to by its legal name ‘Grain Earth House,’ as defined in the 2014 Scheme of Delegation for Properties in Care. [For further discussion on the use of the terms ‘earth house’ and ‘souterrain’ see Section 2.1.7 Nomenclature, below.] The ‘Grain’ element of the name relates to neighbouring Grainbank House, rather than any supposed function of the structure.

<sup>2</sup> A 3D model of the site is freely accessible via the HES Sketchfab page: [grain earth house 3d models - sketchfab.com](https://sketchfab.com/grain-earth-house-3d-models). This may be of particular interest for those unable to physically explore the monument. [A still image of which is provided on this document’s cover.]

Grain Earth House occupies a fenced-off enclosure on a wide grassy verge. There is nearby parking, and an interpretation board at the enclosure. The site is unstaffed and free to access. However, it is kept locked and the key made available through a local shop.<sup>3</sup> Once inside, the monument is unlit, and although a torch is provided on site, it is recommended that visitors bring their own as backup.

The monument and associated remains are collectively protected as Scheduled Monument SM90154<sup>4</sup> and listed on CANMORE as ID2527.<sup>5</sup>

## 1.2 Statement of Significance

Grain Earth House is of national importance as a well-preserved earth house or souterrain: a stone-built passage and chamber, associated with additional settlement remains, in Iron Age Orkney and dating to the first millennium BC. Although the associated remains are not visible today, archaeological excavation indicates the high potential of the site as a whole, including preserved sections of walling and rich organic remains.<sup>6</sup> While the precise function of earth houses remains unclear, it is likely that it includes both domestic (storage), and spiritual (ritual) elements. The potential of the site at Grain to elucidate further detail of life in the Iron Age, were further investigation possible, is extremely high.

The significance of Grain is enhanced by the wider potential of the site which includes its association with at least two similar (but unexplored) Iron Age settlements at Hatston and Saverock in the near vicinity, as well as the contrast it offers to high status settlements elsewhere in Orkney such as the **Broch of Gurness**.<sup>7</sup> It plays an important role in the interpretation of Iron Age life and society across Orkney.

Earth houses are found across Scotland but are still poorly understood. Grain holds a significant role for future research on this class of monuments because of its high degree of preservation.

Grain is a significant element of the display and interpretation of the archaeology of Orkney. Entering the structure, modern visitors are afforded an immersive experience in the world of Iron Age Orkney. Grain

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<sup>3</sup> The current (2021) key keeper shop is Judith Glue, 25 Broad Street, Kirkwall. Please check access information before planning a visit to Grain Earth House: [Grain Earth House: Getting There \(Historicenvironment.scot\)](#)

<sup>4</sup> Scheduling details are accessible at: [Grain Earth House: Designation \(Historicenvironment.scot\)](#)

<sup>5</sup> [Canmore ID 2527- Grainbank \(canmore.org.uk\)](#)

<sup>6</sup> Haigh 1984.

<sup>7</sup> Throughout the text, site names in **bold** are managed by Historic Environment Scotland and are publicly accessible. Access information can be found at: [visit a place \(Historicenvironment.scot\)](#)

provides the rare opportunity for a personal, unsupervised, encounter with the past.

**Key aspects of the site's significance include the following:**

- Well-preserved Iron Age masonry; Grain is currently the only earth house in Orkney that can be accessed along the original passage.
- Accomplished architectural design and skilful stonecraft, making use of a range of local stones including both quarried and worn slabs.
- Associated, well-preserved, undisturbed, settlement remains with both chronological and spatial depth mean that the site retains a high level of archaeological potential. These remains include another earth house, suggesting that, if they were in use concurrently, the settlement included at least two households.
- Potential links to similar sites in the vicinity at Hatston and Saverock.
- Part of a wider spectrum of Iron Age sites across Orkney, including high status sites such as the Brochs of **Gurness** and **Midhowe** and ceremonial sites such as Mine Howe.
- Grain is part of a suite of Iron Age monuments to be found across Scotland.
- The opportunity for an authentic, personal, unsupervised, immersive experience of the Iron Age.

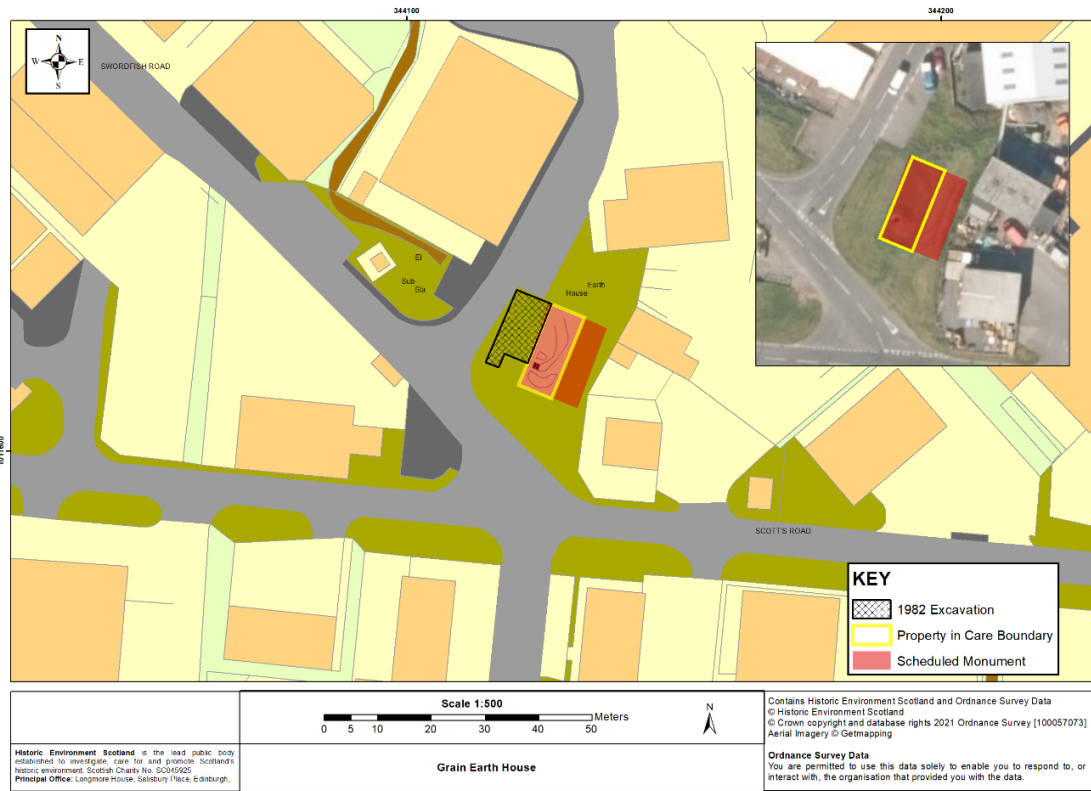


Figure 1: Scheduled area and Property in Care (PIC) boundary; for illustrative purposes only. Hatched lines represent location of 1982 excavation



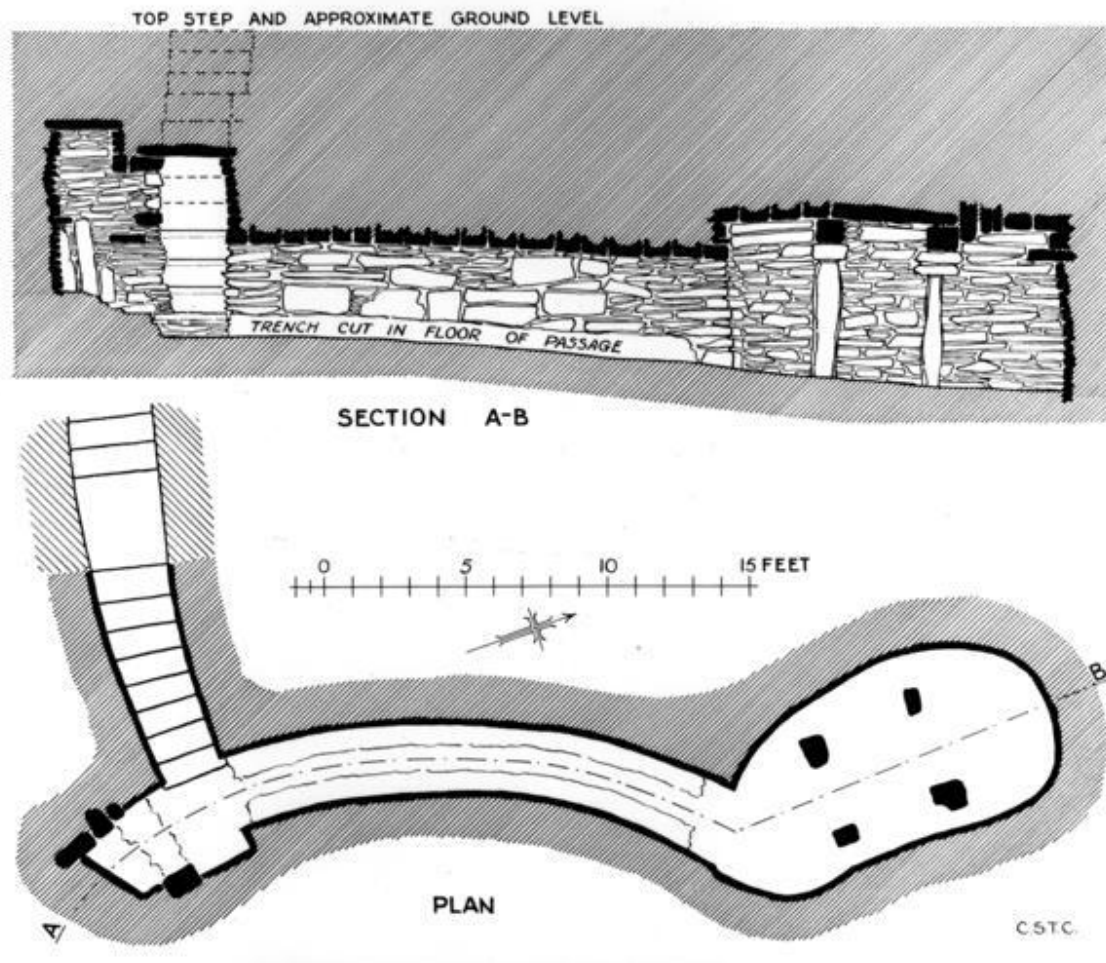


Figure 2: c.1920 RCAHMS publication drawing: plan and section of Grain Earth House. Note line of modern interventions inc. additional stairs and lowering of entrance passage floor. © Crown copyright: HES.

## 2. ASSESSMENT OF VALUES

### 2.1 Background

#### 2.1.1 Iron Age Orkney

Grain Earth House is one of the abundant Iron Age monuments which survive in Orkney.<sup>8</sup> In use in the first millennium BC, all bear witness to a thriving and sophisticated society with established connections to the world outside the islands. Life revolved around farming, and focussed on the management of cattle, though there is evidence that fishing, and hunting practices continued. A range of different types of site indicates the development of social hierarchy. Elsewhere in Scotland the evidence

<sup>8</sup> Further information about Iron Age Scotland is to be found at [iron age panel report \(scarf.scot\)](https://www.scarf.scot/iron-age-panel-report)



suggests that communities were organised into chiefdoms, and that, as the Iron Age progressed, individual status may have relied increasingly on inherited rank as much as acquired position and this is likely to have been the case in Orkney.

While many people lived in roundhouses which were often arranged in groups to form small villages, in Orkney there are also several so-called 'broch settlements', clusters of stone-built houses set into courtyards around a central tower known today as a broch<sup>9</sup>. Broch settlements were usually enclosed, and accessed through a single entranceway. The entrance at **Gurness** is particularly impressive. At the heart of the settlement stood the broch tower, a substantial circular structure with thick stone walls and up to 13m high. Brochs contained several floors and sometimes included a central well or cistern. The broch is thought to have been the habitation of the leading family. For many years they were assumed to be primarily defensive in nature, but research now presents a more nuanced picture in which display and ostentation both played a role, as well as the facility they offered to control the land and waterways in the vicinity. In this way the inhabitants of the broch were well informed on the arrival of strangers and able to access both taxes and trade goods. Trade was an important element of Iron Age life. It allowed the import of high-status goods which could be used to bolster the social hierarchy, in addition to locally produced craft items.

Other Iron Age sites were more focussed towards the ceremonial side of life, most notably Mine Howe in the east Mainland of Orkney. While spiritual and ceremonial elements are to be found within domestic sites, for example the complex cistern at **Gurness**<sup>10</sup> or some of the post-broch structures at The Cairns in South Ronaldsay,<sup>11</sup> the site at Mine Howe seems to focus exclusively on ceremony and metalworking.<sup>12</sup> Other sites include Knowe of Skea in Westray,<sup>13</sup> where structures were apparently reserved for ceremony and surrounded by an extensive burial ground.

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<sup>9</sup> Wickham-Jones, 2012.

<sup>10</sup> Wickham-Jones, 2012.

<sup>11</sup> [The Cairns \(archaeologyorkney.com\)](http://archaeologyorkney.com)

<sup>12</sup> [Canmore ID-Tankerness, Mine Howe \(canmore.org.uk\)](http://canmore.org.uk)

<sup>13</sup> [Canmore ID - Westray, Knowe of Skea \(Canmore.org.uk\)](http://canmore.org.uk)



Figure 3: Looking north within the subterranean chamber of Grain Earth House. Its lintelled ceiling is supported by freestanding orthostats; a feature typical of Orcadian examples. At Grain these have been reinforced with modern, metal bars (visible next to rear, left pillar). The floor is exposed bedrock, which gently slopes in places, causing water to pool. © Crown Copyright reproduced courtesy of Historic Scotland.

### 2.1.2 Earth houses or 'souterrains'

Earth houses, or souterrains, were a common element of Iron Age life in Orkney<sup>14</sup> and elsewhere. They comprise underground passages, cut into bedrock or local till, and lined with stonework. A stone stair and long horizontal passage lead into a chamber with a stone roof, often supported on freestanding pillars (elsewhere in Scotland, pillars, where used, extend from the chamber walls). Many of these structures have been discovered and, though few are still visible, new sites are occasionally revealed. Once thought to be isolated sites, modern archaeology shows that most earth houses were accessed from the interior of roundhouses. Where the archaeology survives, traces of settlement usually occur on the ground surface above the earth house. Such traces may include crop marks indicating the location of roundhouses, together with deposits of ash and midden material (refuse), and occasionally stone walling. Some roundhouses were isolated, others occurred in groups suggesting that they

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<sup>14</sup> Canmore records 51 souterrains in Orkney.

were part of village life. Another earth house has been recorded at Grain, discovered in 1982, together with traces of other Iron Age buildings, and interpreted as part of the same complex as Grain. These suggest that this comprised the location of a small settlement. The traces of these other structures are no longer visible, though none has been completely excavated and it is likely that further evidence remains buried beneath the present ground surface.

Two further earth houses are known to have lain roughly one kilometre to the west of the site, at Hatston and Saverock, though neither is still extant. Both are likely to have been associated with small settlements and together they provide an idea of the wider, farmed, landscape into which Grain was integrated.

Many earth houses were examined prior to modern archaeological techniques, and few contained significant deposits, making their interpretation difficult. At **Rennibister**, 4.5km to the west of Grain, the remains of about 18 people were discovered in the interior, when it was investigated in 1926,<sup>15</sup> but this is very unusual. In common with other examples, Grain was empty, though the 19th century excavators did uncover traces of domestic settlement around the entrance. Current interpretations suggest that while earth houses provided efficient storage facilities for the inhabitants of the roundhouse above, they were also likely to have been used for elements of domestic ritual in a society where ritual and non-ritual behaviours were less separated than they are today.

The interpretation of the function of earth houses is also complicated by the long period over which they were in use. While the sites in the north (such as Grain) seem to have been active in the first millennium BC, some have earlier dates<sup>16</sup> and further to the south they are much later: in Perthshire and Angus, the archaeological evidence indicates that earth houses were common into the earlier centuries AD.

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<sup>15</sup> Marwick, 1927.

<sup>16</sup> Carruthers, pers comm.





Figure 4: View along curving passageway of Grain Earth House, looking north on approach towards the chamber. The central channel within the rock-cut floor was cut in modern times to facilitate visitor access to the site; the original floor level is visible at the base of the lowest course of stonework (see too Figure 2, section A-B). Visitors with claustrophobia may not be comfortable within this narrow, restrictive space. © Diego Meozzi.

### 2.1.3 Descriptive overview

The earth house at Grain is located on the western side of the Bay of Kirkwall, at a height of 15m above sea-level and about 250m from the present shore. It was in use in the Iron Age, in the first millennium BC. Today it is sited among the buildings of an industrial estate, but the archaeological evidence indicates that, when in use, it was part of a settlement of several Iron Age roundhouses. The records suggest that the earth house at Grain was part of a small settlement, probably comprising at least two roundhouses, each of which had earth houses accessed from inside. It is likely that this settlement was part of an open farming landscape and the presence of other earth houses in the vicinity indicates that other settlements lay not far away.

The monument lies 2m below the current ground surface. It comprises an oval chamber, c.3m x 1.7m and 1.6m high, accessed along a curving passageway, c.5m long and about 0.9m high, down to which drops a flight of stone stairs. The upper stairs and entrance date to the early 20th

century. The passage and chamber have been cut into bedrock and are lined with coursed stone. The chamber is aligned roughly north-south, with the passage running from the southern end. Where the stairs meet the passageway there are two recesses, one continues the line of the passage for a short distance to the south, and the other, a very shallow niche, opens opposite the stairs, to the east. The passage and chamber are roofed with slabs of stone, supported in the chamber by four free-standing stone pillars. The floor of the chamber is formed of exposed rock, while the floor in the passage was lowered at the time of display to facilitate public access. A series of reinforcing metal bars was inserted into the chamber at this time in order to stabilize the roof.

On the surface of the ground, the site is visible as a low grassy mound, located within a small, fenced enclosure in the industrial estate. The estate originally served as an airfield in the Second World War, and relics of this survive in some of the buildings and street names. The mound and enclosure were created when the site came into State care in 1908, at which time the upper levels of the staircase were inserted to allow public access. There is no lighting within the earth house, though a torch is supplied on site.<sup>17</sup> The enclosure and entrance to the earth house are kept locked, the key may be obtained from a local shop (see Section 1.1).



Figure 5: From the exterior, the site is visible as a grassy mound, within a fenced enclosure. The mound is of modern construction and indicates the ground plan of the subterranean structure beneath. The highest point of

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<sup>17</sup> Visitors are encouraged to bring their own back-up torch.



the mound (at the rear of this image) encloses a modern entranceway. Both the fenced enclosure and entrance require a key for access. © Crown Copyright: HES.

#### 2.1.4 Early antiquarian interest and activity

Grain was discovered in 1827 during the course of farming activity. It was well-preserved and seems to have been made safe and resealed with little exploration, but it was not forgotten. Thirty years later, in 1857, two antiquarian friends: a local man, George Petrie; and James Farrer who had recently (and temporarily) lost his seat as MP in Durham, reopened the chamber in order to carry out more detailed investigations. While the earth house itself was found to be empty, they did find the remains of past settlement on the nearby ground surface and these included the remains of walling, as well as pits containing ash, burnt materials, animal bones and shells.

By 1901, the precise details of the site had been lost and trenches were opened in order to relocate it. This investigation found further evidence for the settlement remains and debris that Farrer and Petrie had reported in 1857. Seven years later, in 1908, the site was taken into State care, and work was undertaken to safely present it to the public. This included the repair of the staircase, creation of the entrance and mound, and the fencing of the enclosure.



Figure 6 (left): The modern entranceway © Crown Copyright: HES.



Figure 7 (right): Looking up the stairs towards the modern entrance. Only the lower steps are original (see Figure 2 section). Image is a screenshot from the photogrammetric model of the site, accessible via the HES sketchfab page. © Crown Copyright: HES

### 2.1.5 Other earth houses in the vicinity

Just over a kilometre to the north-west of Grain Earth House, at Saverock, a second site was excavated close to the shore in 1848. The investigation was undertaken by a naval officer, Captain FWL Thomas, assisted by the Orcadian antiquaries George Petrie and Robert Heddle. Thomas records that he employed the crew of his ship, HM cutter Woodlark, for the work. Thomas published a detailed account of the monument,<sup>18</sup> describing the five freestanding stone pillars which supported the conical roof of the chamber. The Saverock earth house had two passages, the smaller of which was blocked by a large flagstone, and there was clearly some complexity to the remains. Thomas's account hints at further passages and a second chamber. He discusses the great amount of refuse encountered within the remains, including many animal bones. Sheep, cattle and horses were all represented as well as antler, whalebone and shellfish. The matrix for this deposit appeared to be ash, and there were also implements of bone. It is difficult to know to what extent Thomas's investigation was confined to the remains below ground, or whether some of the walling might represent the lower footings of above-ground structures.

In 1939, during construction of the Hatston wartime airfield, a second earth house was discovered to the south of the Saverock site, about 900m to the northwest of Grain.<sup>19</sup> Marwick reports the discovery of a dilapidated structure representing the remains of a small earth house containing

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<sup>18</sup> Thomas, 1852.

<sup>19</sup> Marwick, 1949.



numerous finds including potsherds. The plan in his publication illustrates an oval chamber running roughly north-south, and measuring some 4m by 2m, with a curved passage running away from the south west. The roof of the chamber was supported on five freestanding slabs, and the passage climbed steeply towards the ground surface. The upright stones and slab roofing from this structure were originally stored with a view to laying it out for public display after the war. As this never happened, they were reburied on site and their location marked by concrete markers.

### 2.1.6 Archaeological survey and excavation around the earth house at Grain

A second earth house at Grain itself was uncovered in 1982, during the construction of a car park for the growing industrial estate.<sup>20</sup> Though discovered by accident, an archaeological team was brought in to excavate the site. This earth house lies some 6m to the west of the Guardianship site and it is almost identical, though there was evidence that some alteration to the structure had been undertaken during the course of its life.<sup>21</sup> The excavators suggested that this structure might predate the other (publicly accessible) earth house.<sup>22</sup> When investigated the site was found to be filled with deposits of peat ash and domestic rubbish which appeared to have been used to fill it once it was abandoned. The archaeology included extensive structural remains on the surface of the ground, incorporating paved flooring and the footings of walls. Finds included pottery sherds, a weaving comb made of antler, a hammerstone and the pivot stone from a door. In general, the remains indicated the location of a domestic settlement, and the excavators in 1982 suggested that the two earth houses may have been interlinked, though the evidence for this was inconclusive. The site had been much altered during its life and was clearly one of some size and complexity. This earth house was not laid open for the public and now lies under grass.

### 2.1.7 Nomenclature

Grain is classified as an 'Earth House', a name that was certainly in use by the early twentieth century to describe this very specific type of monument; comprising an underground passage and chamber, usually built of stone. The term was used throughout Scotland. In 1852, Thomas describes his findings at Saverock as those of a 'subterranean chamber', though by 1867 he refers to 'a great earth-house' in a publication about the Outer Hebrides. Early references sometimes use the various spellings: 'jord',

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<sup>20</sup> Haigh, 1983.

<sup>21</sup> Including the blocking of a passage, and the addition, and later reconfiguration, of a chamber. (Ibid, 368)

<sup>22</sup> The newly-discovered earth house had partially collapsed, and been sealed by a roughly-paved surface in antiquity; as the Guardianship earth-house was largely intact when it was first exposed, it seemed likely it was the latest of the sequence of earth houses. (Ibid, 368-370)

‘eirde’, or ‘yird’ instead of ‘earth’. All are dialect words from different parts of Scotland.

Earth houses were generally assumed to be dwellings, and Thomas classifies the Orkney sites as ‘Picts houses’; a term commonly used across Orkney in the 19th and early 20th centuries. It was generally applied to ancient sites with some sort of internal stone chamber, and incorporated what we now understand to be a wide variety of monuments, from Neolithic houses and chambered tombs, to brochs and earth houses. At this point there was little chronological distinction; ‘The Picts’ were assumed to have been the main inhabitants of the past, and the term referred to a generalised antiquity. Local stories abound of childhood explorations of the ancient ‘Picts Houses’.

Today, you will see this type of site classed as a ‘souterrain’ across most of Scotland. It is a term which draws upon the French to describe an underground structure. The NRHE’s thesaurus notes that the term souterrain is now preferred;<sup>23</sup> though some sites, mainly in Orkney, are still known as earth houses.<sup>24</sup>

### 2.1.8 Maintenance and conservation

Grain Earth House has been subject to investigation on several occasions, from the antiquarian diggings of Farrer and Petrie, to excavation in 1901, and further work in the surrounding area in 1982 and 2009. The main structure seems to have been in good condition when found, apart from the entrance, and, when taken into State care in 1908, the modern entrance and upper slabs of the stairway were added in order to allow public access to the structure. This work included the insertion of metal bars to secure the safety of the chamber roof. The fenced enclosure dates from this time, as does the low mound that marks the position of the site. At some stage prior to this the floor of the passage was dug away in order to provide increased head-height for those exploring the monument. In 1992, the scheduled area was expanded to include the second souterrain, but this did not lead to any physical change to the site. The second souterrain and associated remains had been consolidated and reburied below grass at the time of excavation in 1982. In 2009 the enclosure railings were repaired, under archaeological supervision to make sure that no deposits were disturbed.<sup>25</sup>

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<sup>23</sup> (NRHE – National Record of the Historic Environment) [Canmore Thesaurus-Souterrain \(canmore.org.uk\)](https://canmore.org.uk)

<sup>24</sup> As the site names for both Grain and **Rennibister** were defined as such under the 2014 Scheme of Delegation for Properties in Care, the name ‘earth house’ is employed in the 2021 Statement of Significance for both sites.

<sup>25</sup> Kirkdale Archaeology 2010.

## 2.2 Evidential values

In addition to its inherent architectural value (Section 2.4 below), Grain has high evidential value because of the associated traces of settlement and other buildings that have been discovered here. Although the size of this settlement remains unknown, excavation on the surface above the earth house remains revealed a complex of stone wall footings, indicative that the buildings here represented a number of structures that had been altered over time. There were also deposits of midden, containing organic matter and other artefacts with considerable potential to reveal domestic detail of ordinary life in the Iron Age. The existence of at least one other earth house in the immediate vicinity suggests that this may have been a settlement of some size, and the structural alterations evidenced in the stonework of the buildings suggests that it may have been used over a prolonged period. The evidential value of the site is thus enhanced by both chronological and spatial complexity. It is more than a mere snapshot of life in the Iron Age.

Although earth houses are no longer considered to represent high status structures, as once thought, it is the very ‘everydayness’ of sites like Grain that makes it special. Everyday life, though ubiquitous, can be more difficult to capture archaeologically. In addition, the light to be shed on the ordinary lives of the Iron Age communities of Orkney provides an important contrast to that recovered from excavations at sites like **Gurness** and The Cairns, where settlement is dominated by the broch dwellings of the elite. Grain and **Rennibister** offer a glimpse into the world of the ordinary Iron Age farmer.

The enhanced opportunities provided by modern archaeological techniques and their ability to tease intimate detail from archaeological remains, make the potential of well-preserved sites like Grain particularly exciting. Specific categories of information that might be addressed include: material related to the chronology of the site, the relationships between the earth houses and above ground structures, the differing uses of earth houses, the manifestation of changing social needs, dietary information, domestic technologies and craft specialisation, resource collection and use.

At a wider scale, the discovery of two other earth houses along this short stretch of coastline presents the possibility of examining the Iron Age community of Orkney within the Iron Age landscape. No site existed in isolation, and detail of the interrelations between communities is as important as investigation of the site itself. In addition, the excavation of other Iron Age sites in Orkney such as **Gurness**, **Midhowe**, The Cairns, Mine Howe, Swandro, and Knowe of Skea means that any information from Grain can be set into the wider picture of Iron Age life in the archipelago. There is exciting potential to reveal detail of the broader networks of trade and

exchange, as well as the significant elements of display and social hierarchy that provided the foundations for Iron Age society in Orkney.

### 2.3 Historical values

The islands of Orkney are known for their remarkable archaeology which stretches back several thousand years to build a story of the people of Orkney over the millennia. The earth house at Grain plays an important role in this narrative by providing detail of the everyday lives of those who inhabited the western shores of the Bay of Kirkwall over two thousand years ago. Communities such as that at Grain were largely self-sufficient, occupying farming settlements keyed into a local network, as evidenced here by the adjacent sites at Hatston and Saverock. The complete nature of the lower stairs, passage, and chamber at Grain provide visitors with the opportunity to experience a part of the world of the Iron Age farmer as it existed at the time. Although people had undoubtedly differing mindsets to those of today, this is an evocative experience which helps to bring the past to life.

The story of Grain is part of the wider narrative of Iron Age Orkney to be told through an extraordinarily complete suite of sites such as those at **Gurness, Midhowe**, Mine Howe and Knowe of Skea. Key skills, including stone masonry, animal husbandry, tool manufacture, hide preparation, pottery making, and food preparation were essential aspects of survival, though they played out in different scale depending on one's place in society. The well-preserved structure at Grain, situated within a complex of remains of high archaeological value, helps to shed light on local people: their lives, needs, and choices.

Additional value is added to this narrative through the work of those who have sought to elucidate the sites, from their earliest discoveries to the present day. Archaeology as a discipline has become a significant part of the story of Orkney, and Grain provides substantial relevant detail with its links to local farmers, accomplished antiquarians, excavating naval officers, wartime developments, 20th century heritage professionals, and modern archaeologists. Thomas' contribution, for example, is particularly exciting for the light it sheds on Orkney monuments before the depredations of 20th century development and climate change. Farrer and Petrie were well respected antiquarians whose contribution to knowledge of the past is well-recognised today. In contrast, the war time activities of the first half of the 20th century in Orkney have only recently received recognition as worthy of study in their own right - the archaeological discoveries that were a by-product of this period have yet to be researched. The contribution of Marwick in recording them is prescient. Grain lies at the heart of all of this.

## 2.4 Architectural and artistic values

In general, the Iron Age earth houses of Orkney are well-built, though many had started to collapse by the time they were discovered. Grain is reported to have been largely complete: testament to the care and skill with which it was constructed. The building of the earth house involved a considerable effort of labour as well as a high level of expertise. Once the site for the passage and chamber had been selected and cut into bedrock,<sup>26</sup> it was necessary to find a source of suitable stone and to bring sufficient quantity on to site. It has been suggested that the prehistoric excavation of the passage may have provided a source of building stone, but this remains to be tested; not all Orkney flagstone is suitable for building. It is, nevertheless, an interesting suggestion. While much of the building stone visible in the interior of Grain is quarried, the rounded nature of some of the larger slabs suggests that they may have been brought up from the shore, or perhaps re-used from earlier buildings nearby. The location of the earth house, accessed from within an upstanding roundhouse, required careful planning and execution, and must have been an intrinsic part of the overall house construction. The near-total degradation of the surface structures in any earth house or souterrain complex has tended to separate the roundhouse itself from the underground element for the modern observer, but it is likely that they were integrated elements of home building for the Iron Age farmers of Orkney.

Within the overall construction, individual elements of the structure emphasise the quality of construction, and skill and knowledge of the builders. Within the chamber, the four orthostats that support the roof stand well away from the side walls. This is an unusual feature for earth houses that is only to be found in Orkney. Each upright supports a massive horizontal slab that is pinned into the wall behind, and these slabs collectively provide support for the great slabs that provide the main structure of the roof. Thin pinning stones have been skilfully used throughout in order to level up the slabs and provide stability to the whole structure.

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<sup>26</sup> The bedrock geology of the site belongs to the Upper Stromness Flagstone Formation. For further information, see the British Geological Survey onshore GeolIndex at: [Geoindex Onshore \(Britishgeologicalsurvey.ac.uk\)](http://www.bgs.ac.uk/geoindex/onsshore/)



Figure 8: First view of the internal chamber of Grain Earth House, after progressing along the passage. The building stone used in its construction is a mixture of quarried and rounded stone. © Crown Copyright HES.

The planning of the underground chamber and passage incorporated additional spaces at the foot of the stairs. The original purpose of these is unknown. As you descend the stairs, a shallow recess ahead of you almost gives the impression of a shelved aumbry, while to the right lies a larger recess that has been suggested as a possible alternative entrance or even the start of a passage leading to a second chamber. These structures were not built for simplicity, they were carefully designed to serve the specific needs of their builders, and many were altered in the course of their usage.





Figure 9: At the foot of the stairs are recesses ahead (east) and to the right (south). The passage opens off to the left (north). Image is a screenshot from the photogrammetric model of the site, accessible via the HES sketchfab page. © Historic Environment Scotland.

The floor of the structure was originally cut into bedrock, but in the passage, it has been deepened to facilitate access in modern times (see Figure 4). The sloping nature of the floor elsewhere causes water to pool in some places.

The upper levels of the entrance stair and the entranceway itself with its associated grassy mound were added between 1901 and 1908 when the monument came into State care. As such, they provide good examples of a level of (re)construction work that, while adding considerably to the visitor experience and wellbeing of the monument, might not be undertaken today.

## 2.5 Landscape and aesthetic values

Today, Grain is an important part of the Orkney archaeological experience, not least because of the opportunity it affords to enter and immerse oneself in an Iron Age structure. It is, nevertheless, totally cut off from any sort of contemporary landscape setting, sitting as it does at the heart of a 20th century industrial estate. The monument as seen above ground today is entirely a modern construction, located within a modern enclosure and surrounded by cut grass, backed by commercial buildings. The juxtaposition this provides, of ancient monument and modern life, is an increasingly important element of heritage management and appreciation everywhere. It acts as an important reminder of the presence and value of the past, even in a seemingly anachronistic location.

Visiting the monument, while immersive and evocative, is also subject to restrictions of access. The space below ground is constrained so only a few people can enter at a time, and for those waiting to enter, there is little of interest above ground. Grain is, therefore, not suitable for the many tour groups who visit Orkney. It is very much a site to be found and explored individually. This makes it very different to the majority of Orkney monuments, many of which accommodate larger groups, and this adds to the value of the site.





Figure 10: The site is situated in what is now a modern industrial estate. © Crown Copyright: HES.

## 2.6 Natural heritage values

The site and its immediate surroundings are not currently (2021) protected by any special natural heritage designations. The entrance to the monument is surrounded by a small, enclosed area of amenity grassland, which is of very little wildlife value.

## 2.7 Contemporary/use values

The earth house at Grain was known to many Orcadians as ‘Just About Anything’, after the name of a neighbouring local shop, now long gone.

Sites such as Grain are popular because of the opportunity they provide for an immersive experience afforded by entering a largely intact Iron Age structure. In addition, the personal and unsupervised scale of the site is preferred by many to the more communal experience of visiting other sites. The past is important to the people of Orkney, and many visitors come to the islands for the opportunity to explore the monuments which are better preserved than in many other parts of the United Kingdom. While in some locations the visitor experience is carefully supervised and mediated, those who enter Grain are free to think and explore independently.

There has not been a formal assessment of the value of Grain Earth House to contemporary communities.

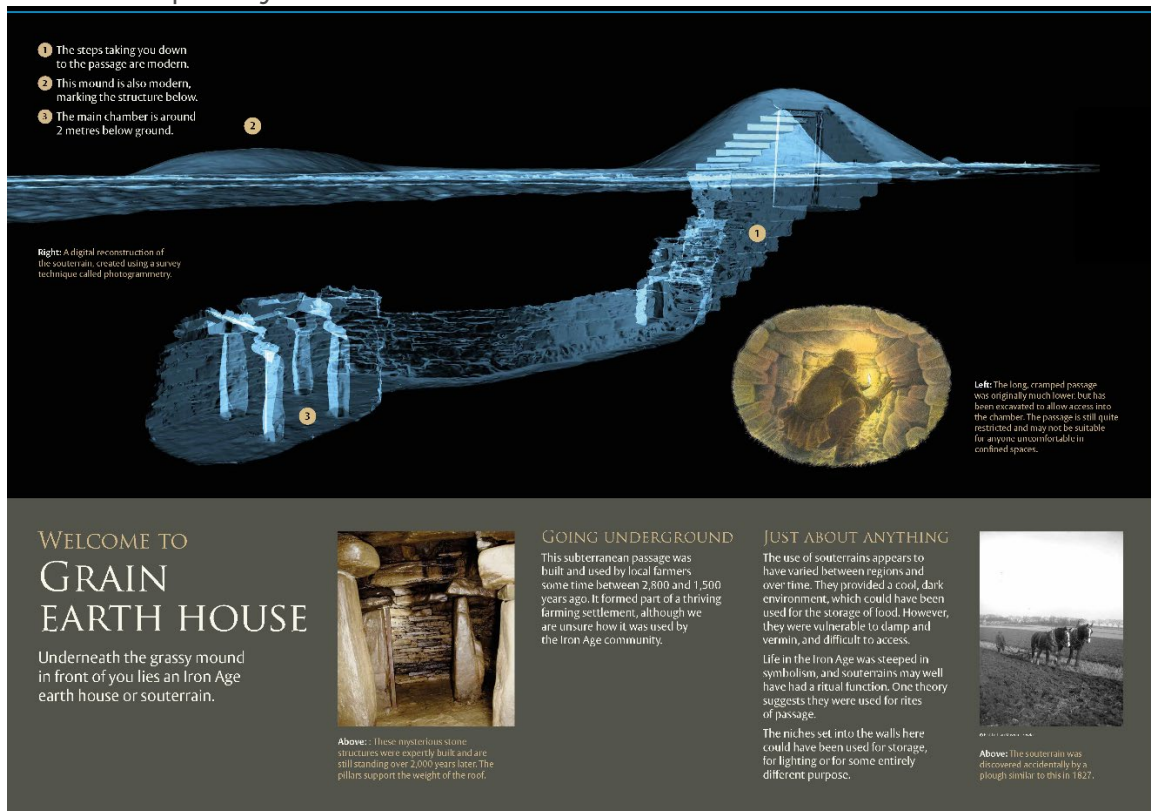


Figure 11: Information is provided on site via an interpretation panel fixed to the fenced enclosure (reproduced above). Once inside the structure, visitors may enjoy an immersive and unmediated experience of the Iron Age architecture. © Historic Environment Scotland.

### 3. MAJOR GAPS IN UNDERSTANDING

- The most significant gap in understanding of Grain Earth house relates to the precise function of the structure. Information relating to this might well be obtained from detailed investigation and analysis on this site and other sites, and is, in part covered by current work at Windwick and The Cairns.
- Full details of the meaning and alteration of the site is not known, for example the function of the recess at the foot of the stairs and the possible alteration or second passage there.
- The original size of the Iron Age site at Grain is not known. The current remains likely relate only to a small part of the whole site.
- The relationship of the second earth house to the guardianship monument remains obscure, as does the nature and relationship of the associated structural remains.

- The exact date of the earth house is unknown, as is its lifespan and chronological history.
- *People* are, by and large, missing from the narrative of Grain except through secondary interpretation. Further excavation could enhance this through the discovery and analysis of artefacts, and might reveal skeletal remains.
- The relationship of the site to other Iron Age settlements in the vicinity as denoted by other earth houses such as Hatston and Saverock, is unknown.
- The precise details of the Iron Age landscape around the Bay of Kirkwall remain obscure.

Added to the specific questions above, there are major knowledge gaps relating to the period to which the monument belongs. Key research questions relating to the Iron Age as a whole are contained within the ScARF National Framework Iron Age report.<sup>27</sup>

Please note, the research for this document was undertaken during 2020-2021 with limited access to archives and resources, as a result of Covid-19. While every attempt was made for accuracy throughout the statement, errors or omissions may remain. Please direct comments or suggestions to [CRTenquiries@hes.scot](mailto:CRTenquiries@hes.scot)

## 4. ASSOCIATED PROPERTIES

Associated properties managed by HES

- Rennibister Earth House, Mainland Orkney
- Broch of Gurness, Mainland Orkney
- Midhowe Broch, Rousay

Sites not managed by HES

- Broch of Borwick, Mainland Orkney
- Mine Howe, Mainland Orkney
- Burroughston Broch, Shapinsay

## 5. KEYWORDS

Iron Age, Orkney, Earth House, Souterrain, Roundhouse, Settlement, Storage.

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<sup>27</sup> Accessible at: [iron age panel report \(scarf.scot\)](#)

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### Further Resources

Canmore ID: 2527

Site Number: HY41SW 19

NGR: HY 4413 1161

Historic Environment Scotland – Scottish Charity No. SC045925

Principal Office: Longmore House, Salisbury Place, Edinburgh EH9 1SH



Canmore entry: <https://canmore.org.uk/site/2527/grainbank>

Canmore entries for the associated earth houses:

<https://canmore.org.uk/site/2535/hatston>

<https://canmore.org.uk/site/2563/saverock>

<https://canmore.org.uk/site/2541/hatston>

A number of early images of the site are available to view at the Orkney Library and Archive, Kirkwall.

Images of the site may be viewed on SCRAN:

[https://www.scran.ac.uk/database/results.php?QUICKSEARCH=1&search\\_term=Earth+House+Grain+Orkney](https://www.scran.ac.uk/database/results.php?QUICKSEARCH=1&search_term=Earth+House+Grain+Orkney)

A 3D digital model of the site can be viewed at: <https://sketchfab.com/3d-models/grain-earth-house-iron-age-southern-orkney-9248b3b39c5c4fb8b41857f675f37db6>

The Orkneyjar website includes information about Grain and associated sites: <http://www.orkneyjar.com/history/earth-houses/grain.htm>

Further information on Iron Age Scotland is to be found at <https://scarf.scot/national/iron-age-panel-report/>

## APPENDICES

### APPENDIX I:TIMELINE

Date	Event
Iron Age (1st millennium BC)	Earth house built and used, forming part of a larger settlement.
1827	Site discovered during farming activity, and resealed.
1857	Investigations by George Petrie and James Farrer, revealing Grain Earth House plus the remains of associated settlement on the nearby ground surface, inc. pits containing ash, burnt matter, animal bones and shells.
1901	The details of the site having been lost, trenches were opened in order to locate it. Further evidence of settlement remains revealed.
1908	Site taken into State care. In the following years, work was undertaken to facilitate safe public access including the lowering of the passage floor, the creation of the entrance and mound, the reinstatement of the upper levels of the stair, and the fencing of the enclosure.
1982	Second, neighbouring earth house discovered 6m west of the Guardianship site, during the construction of a car park. Excavators suggested it may predate the Guardianship site. Associated settlement remains revealed on the ground surface, including wall footings and paved flooring, pottery sherds and a weaving comb. The newly discovered earth house was reburied, and is not publicly accessible.