

# *Archaeological investigations in Þjórsárdalur 2001*



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With contributions by Bruno Berson, Hildur Gestsdóttir and Magnús Á. Sigurgeirsson



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## Table of contents

Steffen Stummann Hansen & Orri Vésteinsson:

*Introduction* 3

Hildur Gestsdóttir:

*Report of the 2001 excavation of the skáli at Skallakot* 7

Bruno Berson:

*Report on investigations of medieval byres in Þjórsárdalur 2001* 21

Magnús Á. Sigurgeirsson:

*Gjóskulög í Þjórsárdal* 31

## **Introduction**

One of the aims of the project *Vestnordisk byggeskik i vikingtid og middelalder* is to reevaluate the archaeology of Þjórsárdalur in South Iceland. This deserted valley on the edge of the highland plateau of central Iceland has held a central place in Icelandic archaeology for nearly one and a half century and the results of archaeological investigations carried out there have had reverberations far outside the shores of Iceland.

The earliest systematic description of the archaeology of an Icelandic region is Brynjúlfur Jónsson's survey of Þjórsárdalur published in 1883. This comprehensive survey created interest in the valley, leading to excavations of some of its sites by Þorsteinn Erlingsson and Daniel Bruun in the 1890s. These established the notion of Þjórsárdalur as "Iceland's Pompeii" – a valley of rich high-medieval settlement which had been hastily abandoned in some natural catastrophe. It was therefore the obvious region to choose when a team of Nordic archaeologists came to Iceland in 1939 to investigate Viking age and medieval house structures as the key to understanding the development of Nordic building custom. The resulting volume, *Forntida gårdar i Island*, published in 1943, has had an enormous impact on later generations of archaeologists and it is fair to say that it has fundamentally shaped current views of the subject.

Since the publication of *Forntida gårdar* there has been lively, and sometimes vicious, debate on the dating of the abandonment of the valley (Steffensen, Þórarinnsson, Vilhjálmsen) and a number of "follow-up" excavations have been carried out (Gjáskógar, Sandártunga, Sámstaðir and Stöng – Eldjárn, Rafnsson and Vilhjálmsen). These have only seemed to support the general picture of the development of Icelandic building custom, summarised so skillfully by Roussell in *Forntida gårdar*.

However there is mounting evidence that Roussell's model is not working. Not only does it not explain adequately how these buildings worked and why they changed but more recent excavations have failed to duplicate some of the features central to his model. Improvements in excavation methods in the late 20<sup>th</sup> century suggest that the phasing of the Þjórsárdalur site may have been inadequately

understood and that some of the archaeological features may have been misinterpreted.

As a result it was felt to be necessary to go back to Þjórsárdalur and its famous sites and attempt to reevaluate them. Our approach has involved two steps:

- a) survey of the archaeology of Þjórsárdalur. No adequate map of the archaeology of Þjórsárdalur exists and many of its sites are poorly known. In order to get a comprehensive picture of the archaeology of Þjórsárdalur, the location and preservation of the sites as well as their potential for further research, all the known sites were visited in 1999 and 2000. In 2000 a team of Icelandic and Danish archaeologists and archaeology students made detailed drawings of those sites which had never been mapped before, namely Steinastaðir, Leppar innri, í Fossárdal, undir Rauðukömbum, Bergálfstaðir and Fagriskógur. These have been published on the web site (-). This work was followed up in 2001 when James N and Rebecca N made contour surveys of these sites to complement the detailed drawings of the archaeological remains from the previous year. In addition to the mapping work new descriptions have been made of all the sites visited, they have been located with GPS measurements and assessments have been made of their preservation and potential for further research.
- b) Re-excavation of a key site. Of the sites excavated in Þjórsárdalur in 1939 those excavated by Roussell have had the most impact on later debate. While Stöng is without doubt the most widely recognised, Skallakot suited our purposes better as it apparently belongs to a transitional period, a Trelleborg type long house of a 10<sup>th</sup> century date with fairly haphazard additions at the back. Roussell also mentions in his report (Roussell 1943, 57-59) that there were indications of earlier phases which he did not excavate and in the original version of the report (Roussell n.d.) he notes a number of places where his interpretation of the features was uncertain. The indications of possible alternative interpretations as well as the possible existence of earlier phases clearly form grounds for a fresh look at this site.

The excavation at Skallakot took place from June 18<sup>th</sup> to July 6<sup>th</sup>, 2001. The excavation was directed by Orri Vésteinsson and Steffen Stummann Hansen but Hildur Gestsdóttir supervised in the field and took care of the post excavation. Other

members of the team were Bente Bech, Kirsten Caning, Karin Roug, Maeve Sikora, Sigríður N, Ragnar Edvardsson and Oddgeir Hansson. Geologist Magnús Á. Sigurgeirsson analysed the tepha layers. The project was joined by Bruno Berson, a doctoral student at the University of Tours, who is researching animal husbandry in medieval Iceland, with emphasis on animal stalling. Under the supervision of Orri Vésteinsson, Berson dug a number of evaluation trenches, two at Skallakot and also in four other sites in Þjórsárdalur: Í Fossárdal, undir Rauðukömbum, undir Lambhöfða and Ásláktunga innri. These locations were selected with the intention to assess the potential of these sites for further excavation. Doctoral students Timothy Horsley of the University of Bradford and Ruth Maher of the City University of New York also shared facilities with the team, conducting their independent research into the application of geo-physical methods in Icelandic archaeology and the topography of pagan burials in Iceland respectively.

The project was supported by NOS-H and the Icelandic Power Company, Landsvirkjun, which provided accommodation for the team at Búrfell power station. Permission to excavate at Skallakot was kindly granted by Sigurður Páll Ásólfsson at Ásólfssstaðir and Upprekstrarfélag Flóa og Skeiða gave permission to excavate on their land in Þjórsárdalur.

**Hildur Gestsdóttir**

## **Report of the 2001 excavation of the skáli at Skallakot**

### *Introduction*

This report describes an evaluation excavation carried out at Skallakot on the property of Ásólfssstaðir in Þjórsárdalur, between the 18<sup>th</sup> of June and 6<sup>th</sup> of July, 2001. The aim of the evaluation was to open parts of the trenches from the 1939 excavation to

- verify earlier conclusions as to the dating of the ruin
- verify if there really was only a single phase to the building excavated in 1939
- determine whether enough remains were present to warrant a re-excavation of the site.

Two areas were opened. Area A measured 11.4x10.3m and was on the eastern end of the longhouse. Area C was on the western end, measuring 8.2x8.6m.

The fill and spoil from the 1939 excavation were removed, and previously unexcavated areas taken down to the level of the H-1693 scoria layer. The site was covered in quite a dense tree growth, mainly due to planted trees within the ruin itself, and these had to be removed by hand. In some cases the roots were quite substantial, causing considerable damage to the underlying archaeology. Similarly all deturfing, removal of topsoil ([1] which contained H-1970 tephra) and excavation was carried out by hand. Due to the limited amount of time available to carry out the work, it was not possible to extend the original areas, so in some cases, in particular west and north of Area C the 1939 excavation areas extended beyond the 2001 excavation area.

A temporary bench mark (TBM) was set up to the east of the excavation area. It was not possible to determine the actual level of the TBM before work at the site finished, and therefore all the levels in this report will be given in figures below or above the TBM.

### *Post 1918*

The extent of the 1939 excavation of the longhouse at Skallakot can be divided into five separate units.

The largest of these was the excavation of the long house itself [4], 27.5x5.5m, varying in depth between 0.3-1.3m at an average depth of 0.1m below the TBM. The excavation of this trench had clearly been carried out by digging into the depression formed by the remains, and emptying out the inside of the structure by following the turf walls, in some cases truncating them considerably. The excavators had cut down to the uppermost floor of the longhouse, and probably gone through it in some places (see below). This cut was seen in both Areas A and C.

In addition to this several smaller trenches were made in 1939. One was the excavation of the back rooms [6], which were only partially exposed in 2001 (9.6x1.8m, average depth, 0.4m above the TBM) on the northern edge of Area A. This cut was considerably shallower than cut [4], and therefore much of the floor of the back rooms appears not to have been removed during the 1939 excavation.

The other cuts associated with the 1939 excavation are all trenches or pits outside the structure. Cut [8], 3.7x1.5m exposed, at a depth of 0.13m above the TBM, on the south-eastern corner of the longhouse; cut [17], 8.5x1.1m exposed, 0.02m above the TBM, along the south-western wall and cut [19], 1.7x1m, 0.3m above the TBM, a small pit in the south-western corner of the longhouse. These appear to have been made to explore the thickness of the longhouse walls, and were in all instances only partially exposed during the 2001 excavation.

It is clear that the site was left open after the 1939 excavation, so all of the infilling is by natural processes occurring after that date. The spoil [2] (10.5x2.6m exposed) had mainly been left on the south-eastern corner of the site, as can be clearly seen on contemporary photographs (see Roussell, 1943), and had therefore partially spilled into the excavated area. It was surprising how uniform the spoil was, with very few inclusions, apart from occasional turf fragments, charcoal, and the scoria from the H-1766 and H-1693 eruptions. The fact that the 1939 trenches were not backfilled meant that in many instances there was very little fill in the trenches, in particular





**Fig. 1. Area A, from NW.**

inside the longhouse itself, where there were only about 20cm between the grass surface and the base of the cut [4]. The five trenches were filled with, respectively [3], [5], [7], [16] and [18], which were all naturally deposited aeolian soils, with slight charcoal and turf fragment inclusions. In addition the fill of the main excavation of the longhouse, [3], contained *in situ* H-1947 scoria, in particular up against the edges of the trench in the western end of Area A.

The layer which the 1939 excavation cut and the spoil sealed, [9], was a 4cm thick, slightly organic soil, representing the 1939 surface, which in turn sealed the K-1918 tephra layer.

### *1918-1693*

The K-1918 tephra layer sealed a 20cm thick aeolian deposit [10], a uniform reddish brown soil with no inclusions. In Area A, this sealed a cut [13] in the south-eastern entrance of the longhouse. This is probably a trench orientated north-south, 2.7m wide and 0.26m deep. Its southern limit is obscured by the limit of excavation, and unfortunately its northern limit was truncated during the 2001 evaluation of the site.

Trench [13] contained two fills, the upper [11], a 0.16m thick medium greyish brown silt deposit with small turf fragments and Hekla scoria. The lower fill, [12] was a dark reddish brown turf deposit, 0.1m thick. The function of trench [13] is at present unclear but it clearly reflects some sort of activity at the site in the late 18<sup>th</sup> – early 19<sup>th</sup> century.

Trench [13] is cut into the level of the H-1766 scoria, and below that is a natural sequence of aeolian deposits [14], 14cm thick and [15], 3cm thick, separating the H-1766 scoria, K-1721 tephra and H-1693 scoria respectively. In Area A the H-1693 seals a shallow channel [20], orientated north-south 0.17m east of the south-eastern entrance of the longhouse. The channel is 0.1m deep, 0.4m wide and what remains of its length is 0.18cm. Its function is as yet unclear. For further detail on the excavated contexts see Appendix I.

### *Pre 1104*

As already stated, no material earlier than the 1693 scoria layer was removed during the 2001 evaluation at Skallakot. However, much of the longhouse was exposed in the 1939 trenches, and that will be discussed here (See figures 1 & 2).

The outline of the turf walls of the longhouse can be seen clearly. Their inner edge is seen in all of the sections of the 1939 excavations, and in most instances they have been truncated. In most cases, where the accumulation since the 1939 excavation was cleared completely, the remains of turf walls could be seen in plan. This is most clearly seen in the north-western corner of Area A, on the inner edge of the northern long wall on either side of the entrance into the back rooms, where a 4.16m section of wall has been exposed, of which at least 0.6m has been truncated by the 1939 excavation, leaving the top of the truncated wall at 0.77m above the TBM. A small, 0.8m long section of wall, which has been truncated by at least 0.16m is visible at 0.04m above the TBM in the north-eastern corner of the south-eastern quadrant of Area A. The 1939 excavation had extended further west than Area C, and so remains of the turf walls left during the earlier excavation could be seen along the western



limit of Area C with a return of the wall extending 2.94m to the east, before



**Fig. 2. Area A. Floor remains in back rooms**

disappearing into the northern limit of excavation. These turf walls extended between 0.14-0.66m into the area. The inner edge of the walls had clearly been truncated by the 1939 excavation, and it is likely that the upper part of the walls had been truncated, they were left at a level of 0.65-0.81m above the TBM. All the turf walls are *strengur* with landnám (AD 871±2) and Eldgjá (AD 934) tephra. Two sections of repair or filling in of entrances could be seen in the western end of the longhouse. The first of these was a 0.82m wide section in the northern longwall, 0.44m from the

north-western corner. The second is a 1.81m wide section [23] in the western wall, 0.87m south of the north-western corner. Lines of stones probably marking the inner edge of the wall can also be seen 50-80 cm inside the excavation cut [4]. This can be seen along all the exposed walls in Area A, and along the southern long wall west of the entrance in Area C. The outer edge of the northern long wall in Area A and the southern long wall in Area C are visible in 1939 excavation cuts [6] and [17] respectively. The break of slope of the level of the 1693 scoria indicates the outer edge of the western and southern walls in Area A, suggesting that the turf walls were between 1-2.8m thick. The outer edge of the eastern and northern walls of the longhouse in Area C are outside the limit of excavation. In no instance were any other outlying structures attached to the longhouse other than those exposed in 1939 visible in the excavated areas. The walls of the longhouse are sealed by the *in situ* H-1104, indicating that the longhouse had been abandoned some time before that eruption.

To minimise damage to any remaining floor layers, the fill from the 1939 excavation [3] was only partially removed, with both areas being split into quadrants, and the fill from two opposing quadrants removed in each area. As already stated the 1939 excavation of the back rooms was not as deep as the excavation of the main longhouse, so *in situ*, very ash rich floor layers were visible at a depth of 0.04m above the TBM. The base of the 1939 excavation inside the longhouse [4] in Area A revealed a very eroded slightly ashy layer at a depth of 0.06m below to 0.15m above the TBM. Due to the fact that the site was left open in 1939, it is unclear at this stage whether this is the remains of an eroded floor layer or not, but it is clearly the base of the 1939 excavation. On the northern edge of the southeast quadrant, this layer is sealed by a patch of turf debris containing landnám tephra, 1.23x1.31m, at the same level as the TBM, possibly representing structural collapse. A small trial pit (0.28x0.17cm) was dug into the ashy layer in the western end of Area A, which revealed a very pale peat ash layer at a depth of 0.09m below the TBM, indicating that either there are further floor layers underneath the current level, or that the longhouse at Skallakot overlies earlier remains.

Due to the limited amount of time, only half of the eastern quadrant in Area C could be excavated. At least two black ashy floor layers were exposed underneath [3], at a





**Fig. 3. Area C, from North**

depth of 0.17m above the TBM. Into the uppermost of these a circular pit had been dug, approximately 1.9m in diameter. This pit had clearly been partially excavated in 1939 (the 1939 fill was not removed). The western quadrant in area C revealed a different picture. Collapsed turf layers with landnám tephra, probably from the roof or walls were exposed underneath the fill of the 1939 excavation [3], at a depth of 0.15m above the TBM, and these were, in the southwest corner of the longhouse still partially sealed by the H-1104. This indicates that the excavation of at least the western end of the longhouse was not completed in 1939.

Internal structural features in the longhouse revealed during the 2001 evaluation of the site, in addition to the probable barrel pit in Area C already mentioned, include the paved area just inside the south-western entrance. It covers an area 2.16x2.73m, and is made up of flat natural slabs, up to 0.44x0.72m in size and lies at a depth of 0.35m above the TBM. Set within this paved area, in its south-western corner, is a stone box, 0.46x0.55m in size. It is constructed of upright stone slabs, and has a flat stone base. All the *in situ* fill of the box was removed during the 1939 excavation, and the box itself has been damaged due to the fact that the site was not sealed after the excavation. As a result ascertaining the function of this box will prove difficult.



**Fig. 4. Area C. Floor remains and barrel pit (still filled with 1939 backfill)**

Other internal structural elements are all linear stone features, probably representing foundations for internal wooden walls. A total of three such linear features were revealed. The easternmost of these runs north-south, 2.93m west of the eastern wall of the longhouse. A second possible partition wall lies 2.06m to the west of this, running 2.56m north from the western corner of the south-eastern entrance. The third wall lies 7.98m east of the eastern wall, running north-south from the eastern corner of the south-western entrance. A gap in the centre of this feature, 1.07m wide marks a possible entrance. A possible fourth feature runs south, 1.32m from the western corner of the entrance into the backrooms. However the soil around these had been greatly disturbed during the 1939 excavation, and so it is not certain that they retain their *in situ* position. None of the postholes recorded during the 1939 excavation were located.

No objects were recovered during the 2001 evaluation, and no samples were taken.



## *Conclusion*

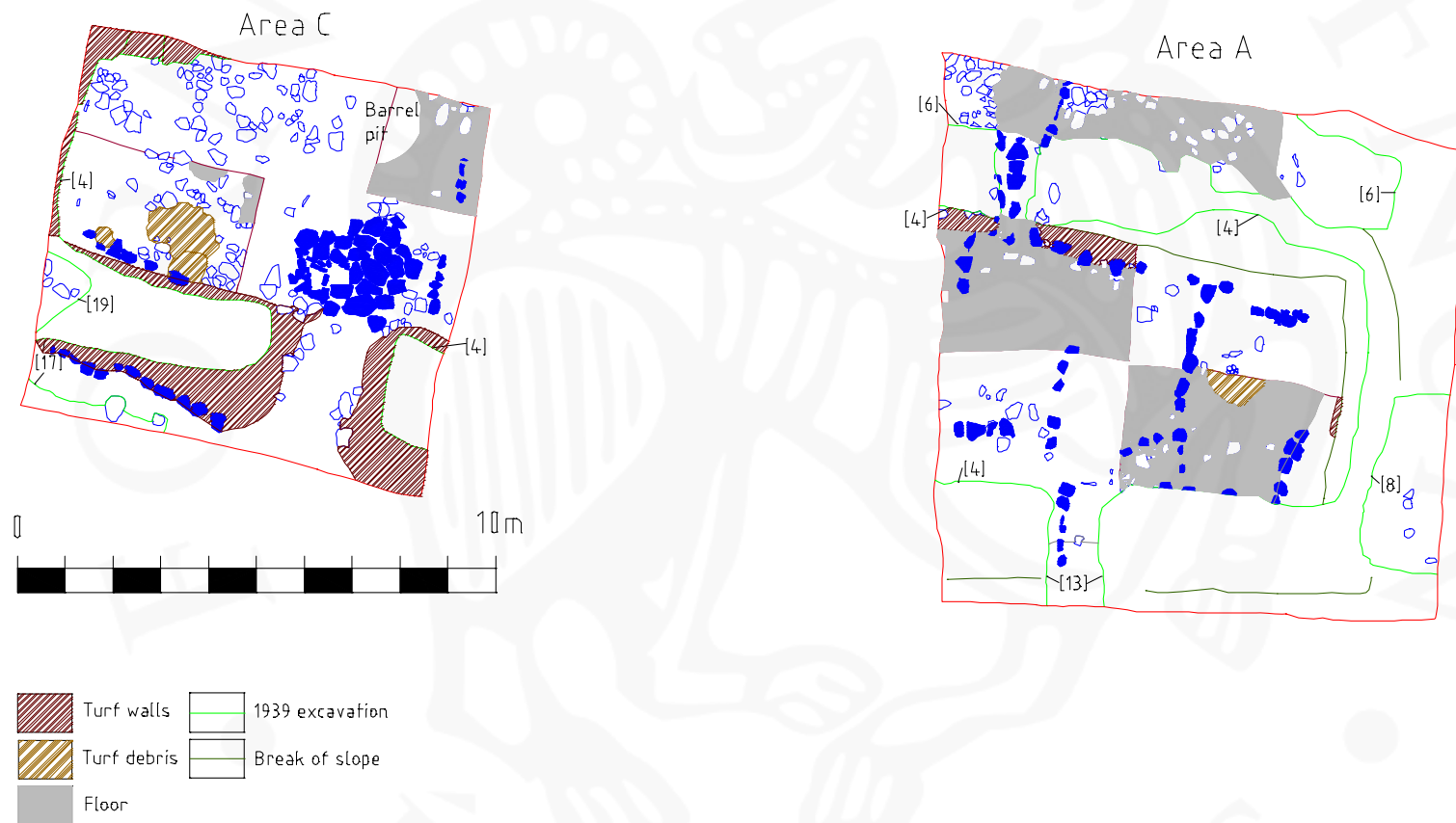
The evaluation carried out at Skallakot revealed the remains of a longhouse with the inner dimensions of about 26.9x4-5m, orientated east west (see figure 3), clearly sealed by the H-1104 tephra, indicating that the site had been abandoned by the time of its deposition. Two possible entrances into this structure were located, one in the eastern part, the other in the western part of the southern wall. Some internal divisions of the structure were seen, marked by lines of stones probably representing foundations for wooden structures. One of these was 3m west of the eastern wall, another 5.5m west of the eastern wall, and the third 8m east of the western wall. Other internal features were a large pit, probably a barrel-pit in the northeast corner of Area C and the paved area with the sunken stone box just inside the south-western entrance. Although the 1939 excavation had partially truncated the walls and probably the floor, remains of turf collapse were found in the western end of the structure, and at least two separate floor layers were seen in the north-western corner of Area C. The evidence of peat ash in the small trial pit in the western end of Area A suggests that the longhouse at Skallakot possibly seals older remains on the site, or that there are several phases to this structure. The evidence for external structures could be seen at the north-eastern corner of the long house, with an entrance leading into these in the northern wall. These were only partially exposed, but it is clear that these were not as extensively excavated as the longhouse itself in 1939, so they are likely to be better preserved than the longhouse itself.

The fact that the western end of the longhouse had not been completely excavated was not the only discrepancy seen with the 1939 plan of Skallakot. Other anomalies are the representation of the south-eastern entrance, which on the plan is shown to be paved, with lines of stone marking the edge of the walls. However, this entrance was partially sealed by the K-1918 tephra layer, and the wall on the eastern side of the entrance was still sealed by H-1693 scoria, so it could only have been partially excavated in 1939. No line of stones was seen on the eastern side of the entrance, and no paving stones. Similarly the outer line of stones along the eastern wall could not be seen, nor the circular feature shown in the western end of the longhouse.

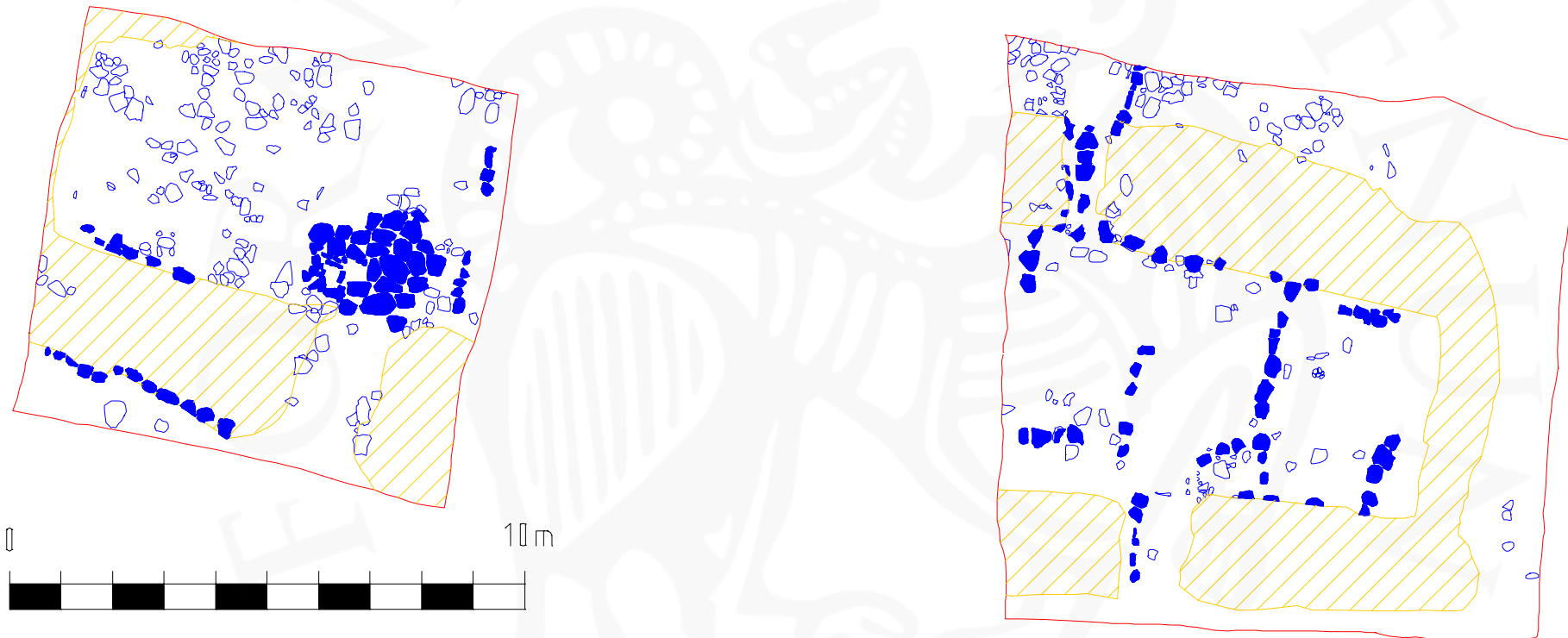
The results of the 2001 evaluation of Skallakot are very positive. It is clear that enough remains of the structural elements, especially the outer edge of the longhouse to be able to obtain a clear picture of its structure. Similarly a considerable portion of the floor layers appears to be preserved, especially in the western end of the longhouse and in the back rooms. This suggests that a full scale investigation of the longhouse remains could add valuable information to the understanding of Icelandic Viking age farmsteads.



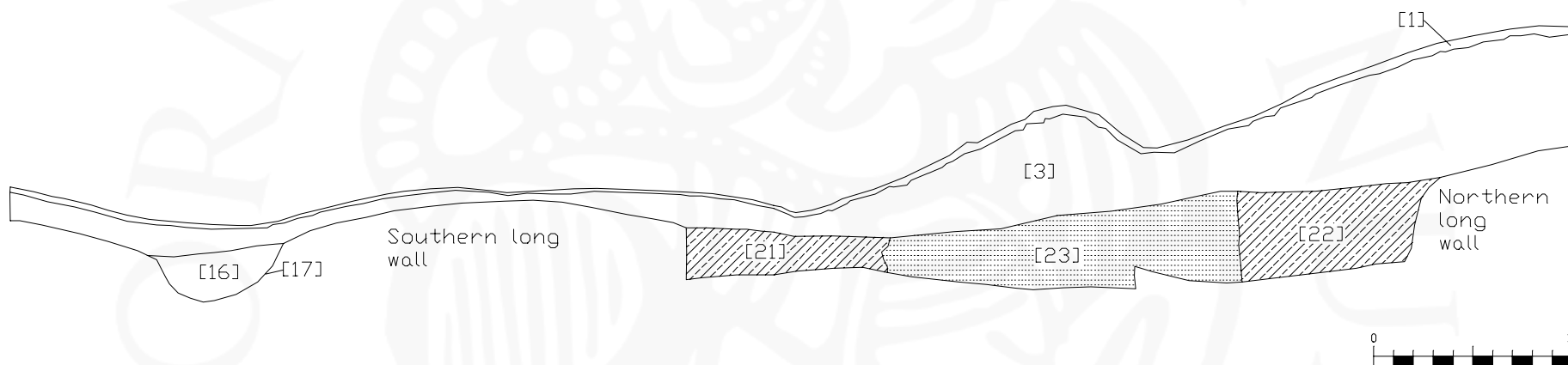
Figure 1. Site as left



*Figure 2. Location of turf walls.*



*Figure 3. East facing section*



## Appendix I. Context Descriptions

Area	Context	Type	Description	Thickness/ depth
A/C	1	Layer	Topsoil. Friable medium reddish brown silt/turf. Contains <i>in situ</i> H-1970 tephra.	6cm
A	2	Layer	1939 excavation spoil. Loose medium reddish brown silt. Contains fragments of charcoal, disturbed H-1766 & H-1693 scoria.	180cm
A/C	3	Fill	Fill of 1939 excavation [4]. Loose medium reddish brown silt. Contains small fragments of charcoal, <i>in situ</i> H-1947 scoria and disturbed H-1766 & H-1693 scoria.	20cm
A/C	4	Cut	1939 main excavation of the skáli. Vertical/stepped sides, flat base. Seems to have involved removing the soil from the inside of the structure, stepping the excavation in when walls were encountered.	80cm
A	5	Fill	Fill of 1939 excavation [6]. Loose medium reddish brown silt. Contains small fragments of charcoal and disturbed H-1766 & H-1693 scoria.	50cm
A	6	Cut	1939 excavation trench. Vertical sides, flat base. Excavation of the back rooms, <u>only partially exposed</u> .	50cm
A	7	Fill	Fill of 1939 excavation [8]. Loose medium reddish brown silt. Contains small fragments of charcoal and disturbed H-1766 & H-1693 scoria.	50cm
A	8	Cut	1939 excavation trench. Vertical/gently sloping sides, concave base, “L”-shaped trench outside southeaster corner of longhouse, <u>only paritally exposed</u> (300x350cm).	50cm
A/C	9	Layer	Buried soil horizon, 1939 topsoil. Friable greyish brown silt.	4cm
A/C	10	Layer	Windblown loess. Loose medium reddish brown silt, sealed by K-1918, seals H-1766.	20cm
A	11	Fill	Upper fill of [13]. Friable medium greyish brown silt. Contains small turf fragments and disturbed H-1766 and H-1693 scoria.	16cm
A	12	Fill	Lower fill of [13]. Friable dark reddish broen silt. Contains turf debris.	10cm
A	13	Cut	Trench in southeast entrance of longhouse. Linear feature, gently sloping sides and flat base. Length uncertain as truncated during 2001 excavations, 270cm wide.	26cm
A/C	14	Layer	Windblown loess. Loose medium reddish brown silt, sealed by H-1766, seals K-1721.	14cm
A/C	15	Layer	Windblown loess. Loose medium reddish brown silt, sealed by K-1721, seals H-1693.	3cm
C	16	Fill	Fill of [17]. Loose medium reddish brown silt. Contains disturbed H-1766 and H-1693 scoria.	40cm
C	17	Cut	1939 excavation trench. Linear feature, gentle sloping sides and flat base. Follows outer edge of the western end of the southern wall of the longhouse ( 90x420cm).	40cm
C	18	Fill	Fill of [19]. Loose medium reddish brown silt. Contains disturbed H-1766 and H-1693 scoria.	60cm
C	19	Cut	1939 excavation trench. Irregular/oval pit (only partially exposed), vertical/undercut sides, irregular base. In southwestern corner of longhouse (100x150cm).	60cm
A	20	Cut	Linear feature, gentle sloping sides, concave base, filled by H-1693 scoria (40x180cm)	10cm

Bruno Berson

## Report on investigations of medieval byres in Þjórsárdalur 2001

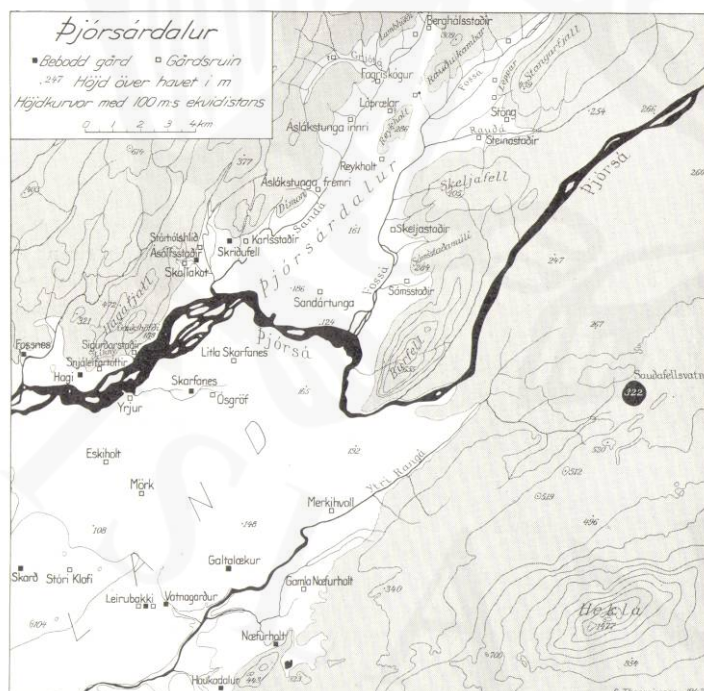
### Introduction

In June 2001 a study of several byre and outhouse sites in Þjórsárdalur was carried out. The study forms a part of the author's doctoral research and is carried out in collaboration with the project *Vestnordisk byggeskik i vikingtid og middelalder*.

The aim of this study was to identify byres and other animal shelters at the well known medieval sites in Þjórsárdalur, in order to assess their suitability for further investigation. All the sites have been described as late back as in the 19<sup>th</sup> century and some were partially excavated in 1895 and 1939, but in many cases it is not known to what extent undisturbed archaeological deposits have been preserved. The aim was to locate undisturbed deposits and structural remains where questions relating to the

development of animal husbandry can be fruitfully tackled with large scale excavation.

Out of 20 sites in Þjórsárdalur with suggested byres and/or animal shelters 5 sites were selected for investigation 2001. These are Skallakot, undir Rauðukömbum, í Fossárdal, undir Lambhöfða and Áslákstunga innri. In undir Rauðukömbum, í Fossárdal



and undir Lambhöfða the state of preservation of the archaeological deposits was

unknown and it was hoped that trenching of the byres could serve the double function of revealing the state of preservation on the sites as a whole. The byre at Áslákstunga innri was investigated in 1895, although it remains unclear to what extent this involved an actual excavation, and it was thought that the small mound northeast of the long-house at Skallakot represented a likely location for a byre which had neither been eroded nor touched by previous investigators.

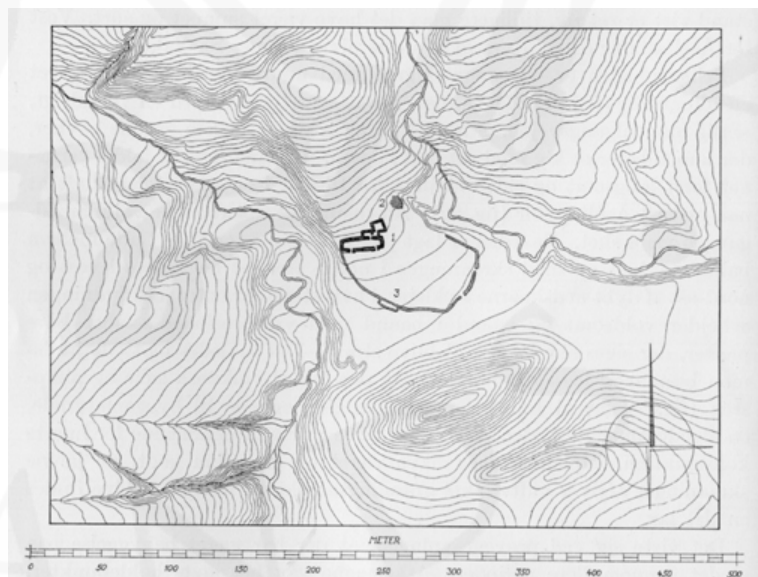
### *Skallakot*

Skallakot was originally excavated in 1939 and saw renewed excavations in 2001. In 1939 three structures were identified at the site. 1 is the longhouse dated to the Viking period, 2 is a small mound to the north east of the longhouse and 3 is a structure adjoining an enclosure wall surrounding a small field associated with the site.

Structure 2 conforms to a typical location for a byre in Þjórsárdalur. It is to one side of the dwelling and not far from a small stream. It is also set slightly higher than the dwelling, on a slight slope at the foot of the hill above the site.

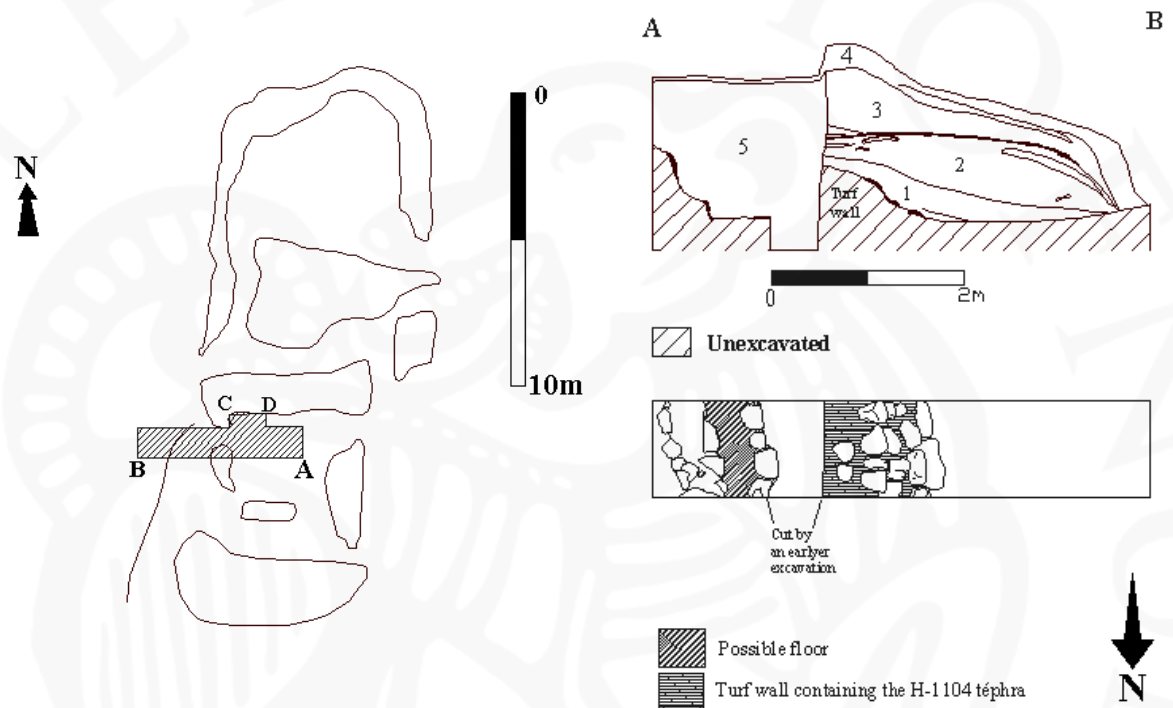
The excavation revealed that the mound had been trenched at some earlier date, probably in 1939 although this is not mentioned in Aage Roussell's report. A rectangular "phone-booth" had been sunk into the top of the mound, revealing at the bottom a turf wall containing the H-1104 tephra. This wall is made of turf and stones on the outside and forms a part of a structure following the slope in a north-south orientation.

Some flat stones and a possible floor were also visible at the bottom of the earlier trench but these remains had been disturbed by this earlier intrusion.



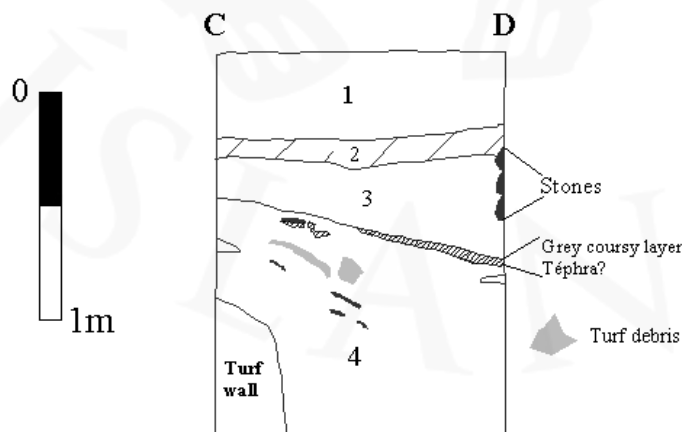
A thin of layer of soil immediately covering the medieval turf wall seems to represent natural accumulation with traces of human activity, but above this there is a more than a metre thick natural accumulation with no traces of human presence.

The trench was not extended into undisturbed deposits and it is therefore possible that the high-medieval structure seals earlier structures, possibly contemporary with the longhouse.



#### Plan of Skallakot structure 2, trial trench and section A-B:

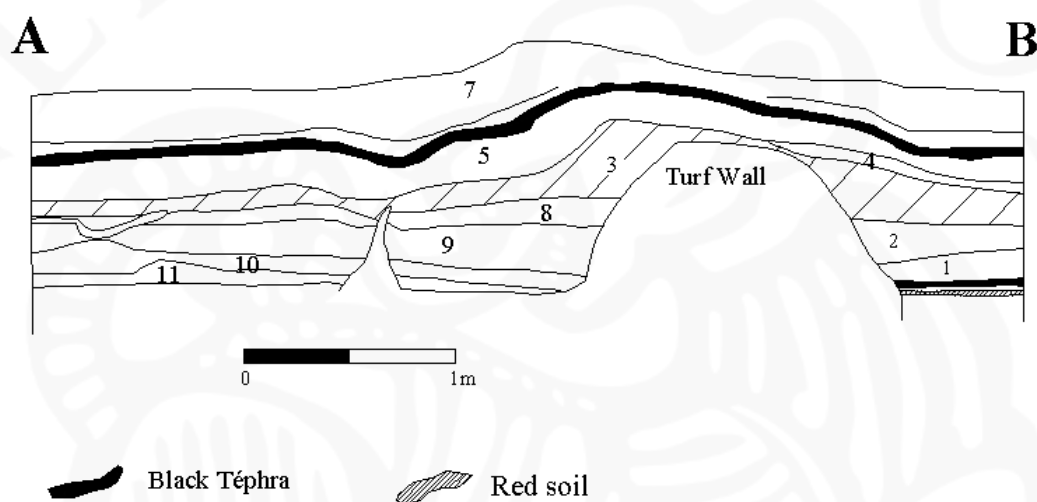
**1** : Homogeneous light brown soil with traces of human activity. **2** : Homogeneous light brown soil with less traces of human activity. **3** : Heterogenous dark brown soil containing much gravel. **4** : Grass roots containing a black tephra. **5** : back fill from an earlier excavation.



#### Section C-D in structure 2 at Skallakot

**1** : Dark brown soil containing a lots of gravel.  
**2** : Homogeneous organic brown soil. This layer contains a black tephra.  
**3** : Very similar to 1.  
**4** : Light brown soil containing many traces of human activity and some turf debris.  
 The turf wall contains the H-1104 tephra.

The trench into structure 3 revealed a turf wall containing the H-1104 tephra. No floor or surface layers were visible on the inside of the structure. Although its function is unclear it seems most likely that it represents an small enclosure to pen animals. It is consistent in size and location vis-à-vis the dwelling, with “kvíar” a pen to milk the ewes in. The H-1104 tephra was visible outside and under the wall but not inside, suggesting that on the inside it had been trampled away by the animals.



**Section through north wall of structure 3 at Skallakot.**

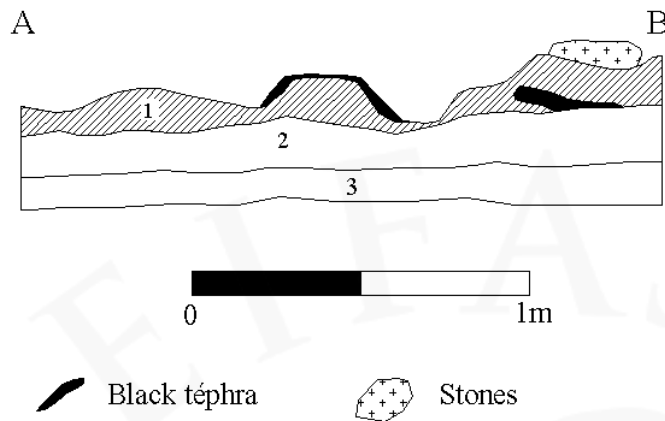
**1** : Light brown soil, homogeneous. **2** : Red, dark brown soil. **3** : Light brown soil, aeolian. **4** : Darker brown soil. **5** : Dark brown organic soil. **6** : Black tephra very coarse. **7** : Brown organic soil similar to 5. **8** : Aeolian light brown soil. **9** : Aeolian light soil containing some charcoal and other traces of human activity. **10** : same as 2. **11** : same as 1.

The H-1104 tephra is between layers 8 and 9. It goes under the turf wall but is not present inside the structure.

*undir Rauðukömbum*

The site undir Rauðukömbum is situated close to the modern swimming pool in the centre of Þjórsárdalur. The site was visited by Brynjúlfur Jónsson at the end of the 19<sup>th</sup> century. He described several structures on the site including a dwelling, a byre and certainly a smithy. In 1954 two structures were still visible but today only stones scattered on the ground show a possible ruin. The site has been completely eroded away and the trench dug in the supposed byre confirms this observation.





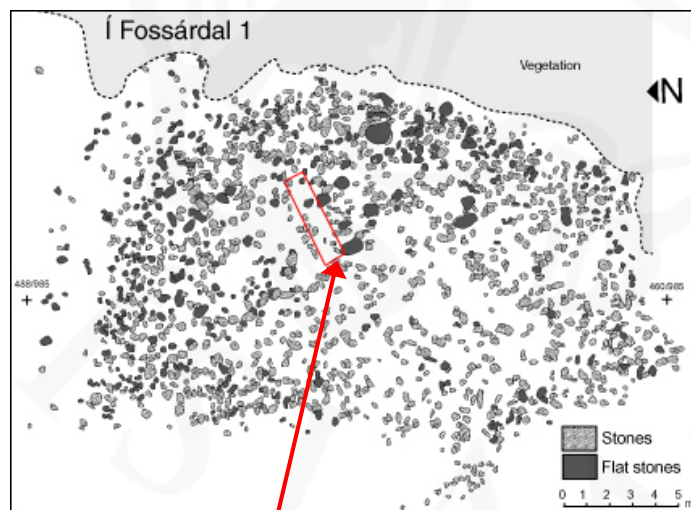
**Section of trench in the supposed byre undir Rauðukömbum :**

1 : Black organic soil just under the gravel. 2 : Heterogenous brown grey soil. 3 : Homogeneous red soil.

*í Fossárdal*

The site í Fossárdal is in a narrow valley branching off the main part of Þjorsárdalur.

Several structures can be seen at this site and the long house – one of the largest in Þjorsárdalur - is still covered with vegetation which suggests that the archaeological remains might still be in a good state of conservation.



**Location of trench in ruin 1, í Fossárdal.**

The floor is marked by the red arrow on the photograph. The scale is 1m.

Plan by VNB-group, June 2000.

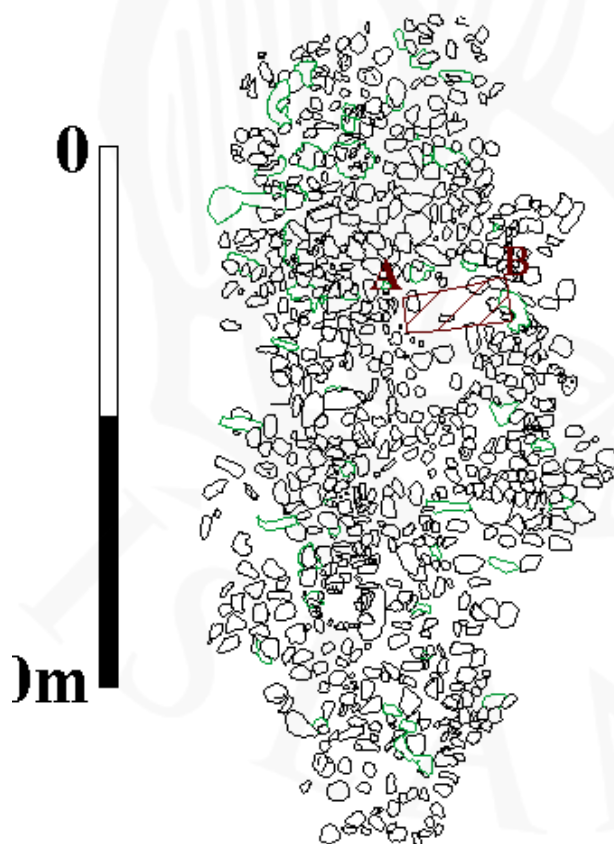


A scatter of stones further down the slope is believed to be the ruin of a byre. Some flat stones are visible on the surface but it is almost impossible to define the shape of this building.

Beneath the stones on the surface the deposits are made up of highly stratified lenses of ash and sand. The first anthropogenic horizon is at 65cm under the current surface. This is a layer of trampled earth and a layer of charcoal. Further down at about 1m dpth a thick black tephra band is visible in the section.

While some archaeological deposits are clearly intact at the byre site at í Fossárdal it is uncertain if or how the relate to the surface scatter of stones. This structure would require more substantial investigation to ascertain its nature, extent and level of preservation.

#### *undir Lambhöfða*

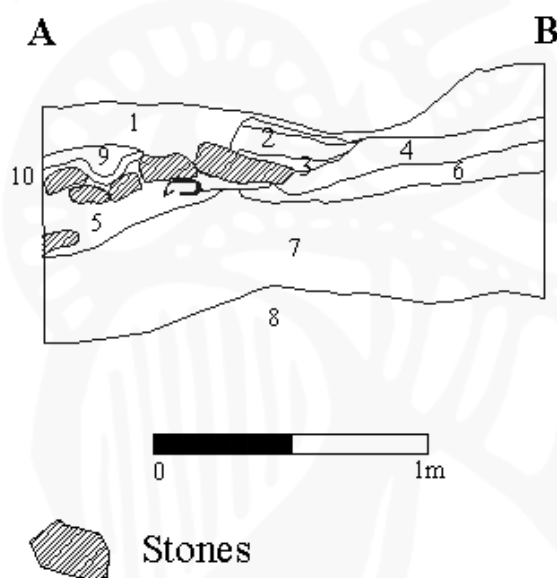


**Plan of the byre at undir Lambhöfða**, Bruno Berson, June 2001

The site at undir Lambhöfða lies on the western side of Þjórsárdalur on an eroded area similar to undir Rauðukömbum and many others. At the end of the 19<sup>th</sup> century 4 structures were visible at this site, and the remains of the dwelling were excavated. In 1954 when Gísli Gestsson visited the site, only two structures were left, the dwelling and the byre. Today the ruin of the dwelling can be made out as a scatter of stones. The byre ruin is located further up in the slope about 100m east of the dwelling and is in a better state of preservation. The

byre ruin measures 13 by 4 m and several stone slabs can be seen lying on its surface, presumably the upright partitions between stalls

No distinct floor was revealed in the trench dug into this ruin. It seems that the building represented by the scatter of stones is more or less eroded away but that underneath it earlier remains are preserved. The layers of stone and turf associated with the surface ruin seal a substantial anthropogenic deposit, containing charcoal, ash and turf debris and from which a knife was retrieved. It is not apparent that this deposits has the same distribution as the surface ruin and may therefore represent a substantially different building or activity area.



#### Section of trench at undir Lambhöfða :

1 : White coursy tephra covering the inside of the byre. 2 : Organic material grey and red. 3 : Yellow tephra layer. 4 : Layer of red, grey and black turf. 5 : Heterogeneous light brown soil containing a black tephra. 6 : Homogeneous dark brown soil containing some turf debris and a black tephra. 7 : Very mixed heterogeneous grey brown soil. The layer is very compact and contains some turf collapse and a black tephra not *in situ*. A knife was found in this layer. 8 : Very compact orange soil. 9 : Very clean homogeneous brown soil. 10 : Yellow tephra possibly equal to 3.

#### Áslákstunga innri

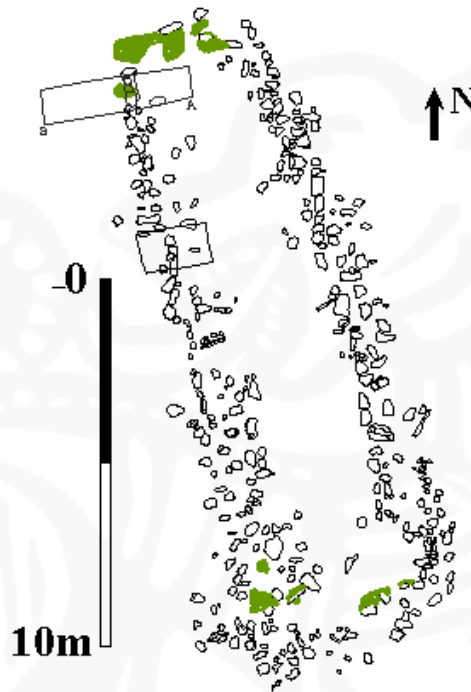
The site Áslákstunga innri is located on the western side of Þjórsárdalur, in the middle where the valley is at its widest. The river Sandá runs close by the site.

The long house was excavated in 1895 by Þorsteinn Erlingsson. This structure was very large (in excess of 30 m) and was interpreted as the remains of a rich and prosperous farm. The long house ruin is now partially covered by slope wash but is probably more or less extant.

The byre is situated about 100m west of the long house on a small mound at the foot of the slope which overlooks the site. Judging from surface remains this looks

like the best preserved byre ruin in Þjórsárdalur. It measures about 16m by 4m and follows the slope.

The trench dug into this ruin revealed walls with an inner lining of stones, preserved to a height of 0,85m. It also suggests that the northern part of the structure

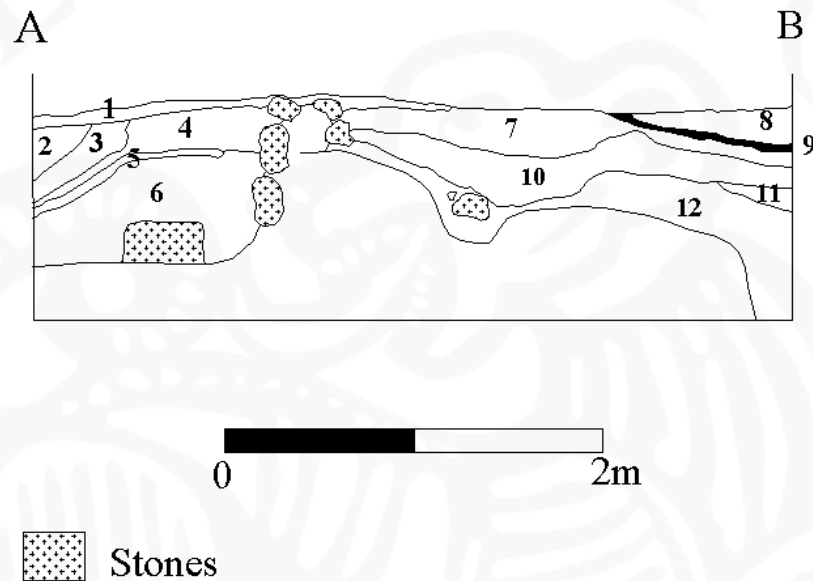


**Plan of byre at Áslákstunga innri.** Bruno Berson, June 2001.

served as a barn. The main reason for this conclusion is a large stone found on the floor, in a place consistent with a post pad for a roof bearing support, reminiscent of the arrangement of the byre at Gröf in Öræfi in southern Iceland. To investigate the extent of the barn two very small test pits were dug 4 m further to the south inside and outside the wall. Again a post pad was revealed inside the stone lined wall, suggesting that the barn constitutes up to a half of the length of the building. The byre might have been only 7-8m long and the barn some 6-7 m.

The whole structure is covered by a very thick layer of white tephra. This deposit is mixed with soil and possibly other tephtras but the bulk of the material clearly originates in the 1104 eruption of Hekla. It is however not possible to say whether the byre was abandoned on that occasion or whether the tephra was redeposited at some later date.

Few meters north of the byre ruins a small stream runs and this has eroded the mound on which it is situated, exposing a section through the underlying deposits. A study of this section revealed that the mound is not entirely natural but is made up of anthropogenic deposits, including a turf wall containing a black tephra. This indicates that the byre was built on top of extensive and deep anthropogenic deposits similar to the byre undir Lambhöfða.



**Section through byre(barn) wall at Áslákstunga innri.**

**1 :** Black tephra and dark soil. **2 :** White tephra. **3 :** Homogeneous brown soil (natural deposition). **4 :** Yellowish scoria. **5 :** Brown soil similar to 3. **6 :** White scoria, with pieces upto 2 cm in diam. **7 :** Dark brown aeolian soil including some gravel and yellowish tephra. **8 :** Dark brown aeolian soil containing grass roots. **9 :** Black tephra. **10 :** Dark sand containing very small gravel. **11 :** Dark sand containing more yellowish gravels. **12 :** Very similar to 10 and 11 with more yellow gravels.

The stratigraphical sequence outside the structure is mainly composed by aeolian deposits accumulating against the ruin.

## Conclusions

The trial trenches opened in five byre ruins in Þjórsárdalur in 2001 have yielded significant results:

- The byre at undir Rauðukömbum is completely eroded away. This may have implications for other sites in a similar state of preservation, e.g. Steinastaðir and Berghálsstaðir, where the surface scatter of stones may be the only thin left of the archaeology.

- While the surface ruins at undir Lambhöfða and í Fossárdal are probably eroded beyond recovery they seal earlier deposits, which – as is the case at Áslákstunga innri – may represent earlier phases of byres or other features.

- Only at Áslákstunga innri and Skallakot are there substantial structural features left intact and both sites clearly merit further attention. The byre-barn at Áslákstunga innri is likely to share design characteristics with well known late medieval byres such as those at Gröf in Öräfi and Lundur in Lundarreykjadalur, and may as such have implications for the dating of the demise of the settlements in Þjórsárdalur.

- Unfortunately a tephrochronologist was not present at the excavation of the trial trenches at undir Rauðukömbum, í Fossárdal, undir Lambhöfða and Áslákstunga innri, but the results of the identification of tephra layers at Skallakot are quite astounding. At Skallakot, the enclosure wall and adjoining building (str. 3) as well as structure 2 close to the long house were built after 1104. It has been shown beyond doubt that the long house at Skallakot was abandoned before the deposition of the 1104 tephra so this represents something of a surprise. Clearly the site continued to be used after the abandonment of the long house, but it is not known whether this took the form of a re-occupation of the site after a period of abandonment, continuous use in a new dwelling at the site or continuous use with the dwelling removed elsewhere and the site used only for sheltering animals.

The wall post-dating 1104 discovered in structure 2 at Skallakot is certainly part of a large structure. Is this the remains of a new dwelling built after the eruption on a new plot ? Is it a byre under which there maybe an older structure associated with the pre-1104 long house ? The nature of the building remains in structure 2 needs to be demonstrated to solve this riddle.

## Gjóskulög í Þjórsárdal

Gjóskulög í Þjórsárdal og nágrenni voru rannsökuð af Sigurði Þórarinssyni jarðfræðingi á 4. og 5. áratug síðustu aldar í tengslum við fornleifarannsóknir í dalnum (Sigurður Þórarinsson 1943, 1944, 1968). Í doktorsriti sínu frá 1944 fjallar Sigurður ýtarlega um eyðibýggðir í Þjórsárdal og eyðingu þeirra. Meginástæðuna telur hann vera gjóskufall samfara Heklugosum. Í fyrstu taldi Sigurðar að Heklugosið árið 1300 hefði haft mest áhrif á byggð í Þjórsárdal en í kjölfar ýtarlegri gjóskulagarannsóknar kom í ljós að það er fyrsta Heklugos eftir landnám, árið 1104, sem mest ýtti undir eyðingu byggðarinnar (sjá umfjöllun í Sigurður Þórarinsson 1968). Þegar Sigurður vann við rannsóknir sínar í Þjórsárdal var gjóskulagatímatafskráin enn á bernskustigi og má segja að grundvöllurinn hafi verið lagður að henni með þessum rannsóknum.

Helstu gjóskulög sem fundust við Skallakot eru eftirfarandi:

- ♦ H-1970. Dökkgrátt-svart fínkorna gjalllag, um 0,5 cm þykkt. Sést víðast hvar á uppgraftarsvæðinu næst undir gróðurþekjunni. Samkvæmt útbreiðslukorti er þykkt þess í utanverðum Þjórsárdal um 1-2 cm nýfallið (Sigurður Þórarinsson 1970).
- ♦ K-1918. Svart fínsöndugt gjóskulag, 0,5-1 cm þykkt. Samkvæmt þykktarkorti er það um 1cm að þykkt í Þjórsárdal (Guðrún Larsen 1978).
- ♦ H-1766. Gjalllag, með korn á bilinu 0,2-2 cm í þvermál, 1-1,5 cm þykkt. Samkvæmt þykktarkorti er það um 2 cm að þykkt við Skallakot (Sigurður Þórarinsson 1968).
- ♦ K-1721. Svart fínsöndugt gjóskulag, 1-1,2 cm þykkt. Samkvæmt útbreiðslukorti er það um 2 cm að þykkt í Þjórsárdal (Guðrún Larsen 1978).
- ♦ H-1693. Dökkgrátt gjalllag, með korn á bilinu 0,2-2 cm í þvermál, 4-6 cm að þykkt. Samkvæmt þykktarkorti er það 5-6 cm við Skallakot (Sigurður Þórarinsson 1968).
- ♦ Svart fínkorna gjóskulag, mjög misþykkt 0,5-1 cm þykkt. Svartir gjallmolar, allt að 2 cm í þvermál, eru í laginu. Ekki er að sjá að Sigurður Þórarinsson hafi merkt þetta lag inn á snið sín við Skallakot en hins vegar kemur það fram í sniðum Í nágrenninu, s.s. í Lambhaga sem er um 3 km sunnan Skallakots (Sigurður Þórarinsson 1968). Út frá lit, kornagerð og afstöðu til annara laga verður að telja afar sennilegt að um sé að ræða það gjóskulag sem almennt er nefnt Katla~1500 (engar frásagnir eru af þessu Kötlugosi í rituðum heimildum og gosár því ekki þekkt með vissu). Víða á Suðurlandsundirlendinu má sjá gjallrönd næst ofan við K~1500 sem talin er vera frá Heklugosinu árið 1510. Ekki



er ólíklegt að gjallmolarnir í laginu í Skallakoti séu frá þessu Heklugosi. Samkvæmt útbreiðslukorti er þykkt lagsins um 0,5 cm í Þjórsárdal (Guðrún Larsen 1978).

- ♦ Tvö dökkgrá gjóskulög, um 0,5 cm þykk eða minna. Efra lagið er fínsöndugt en það neðra er úr fínkorna gjalli. Telja verður sennilegt að um Heklugjósku sé að ræða í báðum tilvikum. Af samanburði við snið Sigurðar Þórarinssonar (1968) frá Lambhaga er líklegast að um lögin H-1341 og H-1300 sé að ræða. Ekki er þó hægt að útiloka að efra lagið geti verið H-1389. Samkvæmt útbreiðslukorti er þykkt H-1300 < 0,5 cm við Skallakot en þykkir hinna laganna eru ekki þekktar.
- ♦ H-1104 (H<sub>1</sub>). Ljósgrátt (gráhvítt) fínkorna, um 0,5 cm þykkt. Samkvæmt útbreiðslukorti er þykkt þess við Skallakot um 1 cm (Sigurður Þórarinsson 1968).
- ♦ Landnámslagið (VIIa+b). Grágrænt misþykkt gjóskulag, einnig ljós gjóska. Sums staðar er Landnámslagið blandað svartri gjósku. Greinilegt er að lögin eru röskuð sennilega troðin. Samkvæmt útbreiðslukorti er þykkt dökka hluta Landnámslagsins um 4 cm en ljósa hlutans um 2 cm í Þjórsáral (Guðrún Larsen 1984). Lagið er talið hafa myndast um 870-875 e.Kr. (Grönvold o.fl.1995, Zielinski o.fl. 1997). Í sniði Sigurðar Þórarinssonar (1944) frá Skallakoti eru sýnd tvö svört gjóskulög rétt neðan Landnámslagsins sem hann nefnir VIIc og VIId. Líklegt er að þessi lög séu einnig í troðna jarðvegslaginu, ásamt Landnámslaginu, sem áberandi er í túngarðssniðinu (sjá snið 2).

## **Afstaða gjóskulaga til rústa og mannvistarlaga**

### **Skáli**

Í sniði I sem mælt var við NA-horn skálabyggingar, í utanverðum vegg, sást að gjóskulagið H-1104 er um 2 cm ofan við torf skálaveggsins. Við vesturvegg skála, um 2 m vestan inngangs, er áberandi að H-1104 liggur þar í fleti ofan á torfveggnum. Ekki var að sjá að jarðvegur væri á milli torfs og gjóskulags. Í framhaldi af þessu má benda á að jarðvegsþykknun er ávallt mjög hæg ofan á torfveggjum og gördum, a.m.k. meðan þeir standa vel yfir umhverfi sitt. Staða gjóskulagsins ofan á veggnum staðfestir að veggurinn er eldri en gjóskulagið H-1104. Út frá afstöðu gjóskulaga til torfs í sniði 1 má draga þá ályktun að skálaveggurinn sé umtalsvert eldri en H-1104, hversu mikið er ekki hægt að segja til um. Ljóst er að skálinn hefur verið aflagður fyrir Heklugosið mikla árið 1104.

### **Túngarður**

Torfið í túngarðinum liggur um 2 cm ofan við gjóskulagið H-1104, sem staðfestir að hann er byggður síðar (sjá snið 2). Slitrur af gjóskulaginu H-1104 eru í torfinu. Efri mörk torfsins eru



um 5 cm neðan gjóskulags sem að flestum líkindum er H-1300. Út frá þessu má draga þá ályktun að túngarðurinn sé hlaðinn á 12.-13. öld.

### **Tóft skammt NA skála**

Í skurðinum blösti við tvær vegghleðslur úr grjóti og torfi í N-S stefnu með um 1 m millibili. Við nánari skoðum sést að efri hluti eystri hleðslunnar er raskaður og seinna til kominn en neðri hlutinn. Greinilegt er að grafið hefur verið í tóftina á síðari tímum og henni spillt að nokkru leyti samfara því. Í vestari hleðslunni, sem er mun heillegri, er torf sem inniheldur gjóskulagið H-1104. Í bakkanum yfir veggnum er elsta óraskaða gjóskulagið K-1721. En þar fyrir neðan, 5-10 cm yfir veggnum, mátti sjá slitrur að gjallkenndu lagi sem vafalítið samsvarar gjóskulaginu H-1693. Af þessum lauslegu athugunum má draga þá ályktun að þetta hús hafi verið byggt eftir 1104 og að hlutverki þess hafi verið lokið fyrir árið 1693.

### **Niðurstöður og ályktanir**

Greinileg ummerki eru um að búseta í Skallakoti hafi hafist all löngu áður en gjóskulagið H-1104 fellur, sennilega á 9. eða 10. öld (sjá snið 2). Einnig bendir flest til að búseta hafi haldist þar eftir 1104, a.m.k. fram á 12.-13. öld. Mannvirki voru reist í Skallakoti bæði fyrir og eftir að gjóskulagið H-1104 fellur. Vísbendingar eru um að búseta hafi lagst af um tíma á 11.-12. öld en síðan hafist að nýju. Byggir þessi skoðun einkum á því hversu gjóskulagið H-1104 er heillegt, nánast óraskað, yfir veggjum skálans og undir túngarðinum. Greinilegt er að það er ekki traðkað eða raskað á nokkurn hátt. Frekari athugana er þó þörf til að sannreyna þessa ályktun.

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