



MINJASAFNIÐ Á AKUREYRI
AKUREYRI MUSEUM

Excavations at Gásir 2003 – A Preliminary Statement



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FORNLEIFASTOFNUN NORÐURLANDS

FS210 – 01074
September 2003

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by H.M.Roberts, Fornleifastofnun Íslands

Summary

Work at Gásir in 2003 has focused on a large open area excavation immediately to the west of the area examined in 2002. The total area now under investigation is approximately 600m², and is characterised by exceptionally complex archaeological structures and deposits up to 2m deep. A number of extremely well preserved buildings have now come to light, along with a sizeable and important assemblage of medieval artefacts. In addition, exploratory work has been carried out on a number of outlying structures.

The work completed so far at Gásir already represents an unparalleled source of information about the nature and extent of this unique and internationally important site.

Aims and Methods

Excavations proceeded for 8 weeks between July 1st and August 22nd, with an average of 12 full time staff. These included many experienced professionals and a small number of archaeology students from Iceland, the UK, Denmark, the Faeroes, Poland, France and the USA.

The excavation work is supported by an international and multi-disciplinary team of leading specialists. Minjasafnið á Akureyri and Ferðamálasteirið arranged guided tours of the site every day, and a number of special events were arranged, along with a new exhibition about Gásir at the museum itself. This exhibition displays a broad range of artefacts recovered from excavation in 2002.

Excavation in 2003 represents the third year of a six year project aimed at characterising a cross-section of the surviving archaeology at Gásir. This project also

aims to provide interpretation and description of the ruins for the purposes of public outreach and education.

The archaeological aims in 2003 were;

- to extend the main excavation area up to 20m westwards, encompassing a second large group of earthworks, thought to represent a number of rooms or booths.
- to complete the excavation of a booth partially excavated in 2002
- to examine a number of outlying structures of unknown date and function.



As before, the excavation methodology adopted was one of single context planning, within a large and contiguous open area. This was supplemented by conventional and digital photography, and a targeted programme of environmental sampling.

Acknowledgements

Excavation at Gásir in 2003 was made possible by generous grants from Ríkisjóður and the Kristnihátíðarsjóður. We are most grateful for this support and for the support and co-operation of a large number of individuals and institutions.

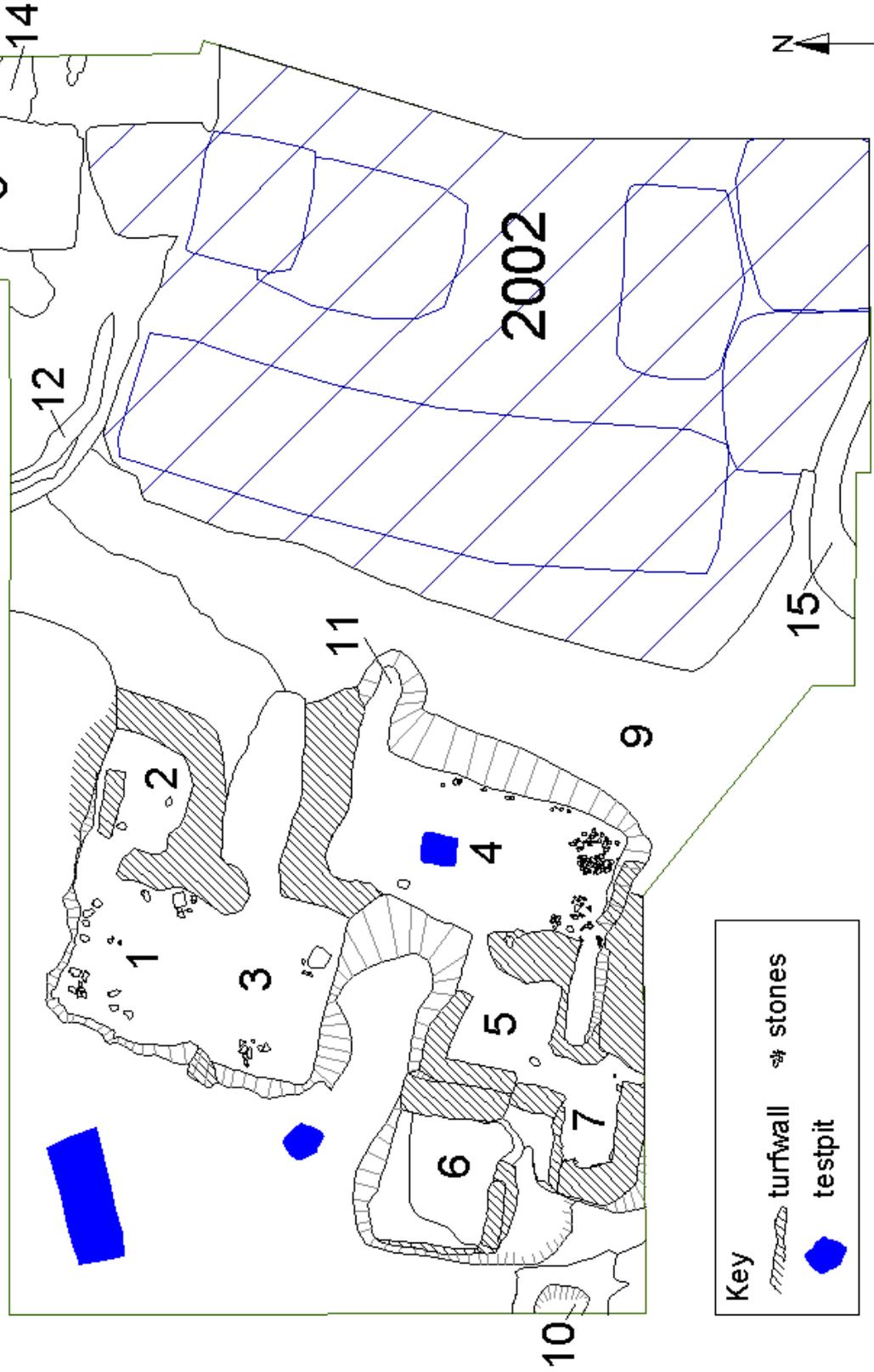
The site was excavated by Mary Alexander, Hákun Andreassen, Águsta Edvaldsdóttir, Bruno Bersson, Birna Lárusdóttir, Douglas Bolender, Marta Dulinicz, Elín Hreiðarsdóttir, Jón Óskar Jónsson, Lilja Björk Pálsdóttir, Oddgeir Hansson, Caroline Paulsen, Theresa Rowell, Freyja Sadarangani, and James Taylor. The excavation was directed by the author on behalf of Fornleifastofnun Íslands and Minjasafnið á Akureyri. Public relations were managed by Kristín Sóley Björnsdóttir of Ferðamálastetur Íslands. The project was administered for Fornleifastofnun Íslands by Ólöf Þorsteinsdóttir, and local liason was managed by Sædís Gunnarsdóttir of Fornleifastofnun Norðurlands .

The artefacts were processed and registered by the author and by Dr. Colleen Batey, who has described the finds. Magnús Á. Sigurgeirsson continued his study of the tephra profile for the site and its environs.

Our thanks are due to Guðrún Kristinsdóttir, the staff of Minjasafnið á Akureyri, and to the people of Akureyri and Eyjafjörður for their support and encouragement.

We would especially like to thank Friðrik Gylfi Traustason and Guðrún Björk Pétursdóttir, the farmers at Gásir, for their kindness and co-operation.

Gásir 2003 - Area A - Plan



Results (See plan)

Area A

The remains seen in 2002 represent a discrete cluster of connected structures, and the rooms or booths excavated this year are shown to be an additional and separate building cluster. The area between these two groups (9) is marked by a raised strip of heavily compacted and highly laminated deposits. This is interpreted as the remains of a track or pathway. Seven new rooms have been excavated (1-7), and these all appear to be interconnected. Booths 1, 2 and 3 are seen to be built together into a large sunken area that has been dug down through older archaeological layers and structures. The largest booth (4) seems to be a separate space, although connected, and booths 5, 6, and 7 seem to represent another connected sub-group.

Rooms 5,6 and 7

These structures are hybrid in construction technique, being primarily dug down, but with turf walls forming their internal features, and dividing one room from another. This seems to represent a very



pragmatic response to the challenges of building new functional spaces in a landscape already wholly characterised by the earthworks of earlier ruins. Most of these rooms included (at least) temporary fireplaces, and have exceptionally thin floors of trampled, charcoal-rich soil. These rooms show evidence of multiple phases of use, re-occupation, reconstruction and repair, before finally being buried and protected beneath many layers of turf collapse and wind-blown sand. Rooms 1-7 are thought to represent a linked group of shops, storerooms, or living areas.

All the structures and layers now being excavated can be dated to after 1300AD by tephrochronology. The dating evidence from pottery and other artefacts suggests that this activity dates to the 14th or perhaps the 15th century.

Room 1 – Part of a sub-group, this sub-square room measures 3.7m x 3.2m and is up to 1.6m deep. The northwestern part of this room is cut down through a complex sequence of occupational deposits, whereas its eastern side is formed by a low built up turf construction. Room 1 was filled by a complex sequence of turf collapse and aeolian deposits, some of which showed evidence of temporary hearths within the semi-abandoned structure. The primary floors of this structure await further excavation. Of note is an apparent large post hole in the northwestern corner, indicative of a potential timber superstructure.

Room 2 – Apparently constructed earlier than Room 1, this room measures 3.3m x 2.2m and is of unknown depth. This room was only defined towards the end of excavation in 2003 and awaits further study. This structure appears to be largely turf-built.

Room 3 – This room appears to have been re-used after the abandonment of Room 1. It measures some 4.5m x 2.6m, with a depth of up to 1.6m at the southwest. Similar to Room 1, this building was primarily cut down at the west and south. The internal area of this room had subsequently been subdivided by a shallow turf wall, and a small fire pit was excavated to the east of that sub-division. To the east of this room is a narrow stepped passage or trench, presumably used as an entrance way for the latter phase of use.

Room 4 – This room is the largest of those excavated this year, measuring 6.5m x 3.4m, with a depth of up to 1m. A number of thin occupation layers have been excavated in this room, along with a cluster of temporary hearths at its northern edge, and a more substantial sequence of stone built hearths along the southern edge. Only the northern limit of this building appears to be turf built, the other sides being cut down through earlier deposits. This room is perhaps the centre of the cluster of rooms excavated this year, with the other rooms connecting to it. Also of note is the apparent front entrance to this room (Feature 11 – see below). A test pit (presumably)

excavated by Daniel Bruun and Finnur Jónsson was located at the centre of this room – this shows a sequence of at least a further 50cms of of very fine, laminated occupation deposits, over an apparent rough stone surface.



Room 4

At least 5 further floor layers are visible (each measuring less than 3mm), although their association with a room of this plan is as yet speculative. At the south western corner of this room, a shallow passage or trench leads away to the west – this latter feature measures 2.5m x 0.6m and is up to 0.4m deep. The function of this outshot is as yet unclear, and it does not appear to connect to Room 7.

Room 5 – This room forms part of a sub-group also including rooms 6 and 7. It measures 2.8m x 2.9m and it is up to 0.8m deep. The northern limit of this room and Room 6 are formed by the same cut feature, truncating earlier deposits. The



boundary between these two rooms is formed by an irregular roughly built turf wall – one that exhibits a lack of carefully shaped and layered turf. A complex sequence of post abandonment deposits have been removed from this room, exposing a clear and

distinct floor surface. That surface is seen to be contiguous with the floor surface of Room 7. The northern and western sides of Room 5 have well built, brightly coloured turf benches up to 30cms high. The centre of this room shows evidence of burning, perhaps a temporary fireplace.

Room 6 – This room lies beneath the remains of a later building (Room 16 – not illustrated). It measures 3.1m x 2.5m and is up to 0.8m deep. Deposits currently exposed within this room represent a phase of re-use, where this room was utilised for the dumping of peat ash and other debris. The southern limit of this room is formed by a substantial turf wall, and remains of a western turf wall are coming to light. Earlier phases of this structure will be examined in 2004. It is noted that as yet no entrance to this room has been excavated – it is thought that an earlier phase of this room is likely to connect to an earlier phase of Rooms 6 and 7.



Room 7 – Room 7 is clearly connected to Room 5 by means of a narrow entrance passage. This room measures 3.5m x 1.9m and is up to 1.2m in depth. This structure is chiefly dug down, but includes a turf wall at its northern limit. The interior of the room includes a turf

construction some 20cms high at its western and southern edges. This may also represent a turf bench.

Room 8 - in the north eastern corner of the excavation appears to be somewhat different in nature. Although somewhat truncated by the work of Daniel Bruun and Finnur Jónsson, further excavation in this area has clarified the extent of another sunken building. The most notable feature within this room was a large stone built oven or furnace. The deposits excavated in this area are typically very rich in peat

ash, wood ash, and slag, suggesting that this area may be for some industrial function. Further specialist study of these industrial and fuel residues will shed light on the nature of this industry.



Feature 9 – this raised area is characterised by the absence of rooms, and by a highly compacted and complex sequence of surfaces. This area is interpreted as a track or pathway, both connecting and dividing the 2 clusters of rooms excavated in 2002 and 2003. These layers appear to have been formed by the deliberate dumping of material, and by subsequent trampling. As many as 40 temporary surfaces were noted during excavation. Only the lowest few of these appear contemporary with the rooms excavated in 2003 – the others must belong to the phases of activity excavated to the east in 2002.

Feature 10 – Part of a sunken feature located at the southwestern corner of the excavation area. This feature will not be further investigated until such time as the area is extended to encompass its complete extent.

Feature 11 – A shallow, curved feature joining Room 4 and the track 9. This is interpreted as an entrance way.

Feature 12 – A pair of curved, steep sided narrow trenches or gullies. These features are interpreted as drainage channels, but also function to demarcate the occupation area from the putative industrial area around Room 8 (see below).

Feature 13 – A very large pit, truncated by Room 8. The full extent of this feature is currently unknown, but it was filled almost entirely with peat ash, wood ash and other industrial residues. It has produced a large quantity of slag of various types, some with copper inclusions, some others appearing glassy in nature. The further study of these residues will shed considerable light on medieval industry at Gásir, and also the fuel economy of the region at this time.

Feature 14 – A passage leading into Room 8 (see above). This may have function as an entrance, or possibly as a flue or air inlet for the furnace/fireplace discovered in Room 8.

Feature 15 – A turf wall, partially excavated in 2002. The extent of this wall is now known with greater certainty, and further excavation has shown it to be earlier than some of the layer forming the pathway (Feature 9). This has greatly enhanced our understanding of the phasing of this area – a process that requires constant revision in the light of new discoveries.

Room 16 (not illustrated) – Located directly above Room 6, this structure represents a late phase of activity that utilises a previously abandoned structure. The southern wall of Room 6 had been re-used, and a shallow turf wall had been constructed parallel to this. Several episodes of burning were noted within this structure, indicating a number of temporary fireplaces.

Areas C1, C2 and C3

The investigation of a number of peripheral structures some distance from the main ruin area suggests that these ruins belong to the agricultural activity of the farm of Gásir. This work begins the task of placing the trade site within its landscape context, and starts the process of integrating the site into its wider environment.

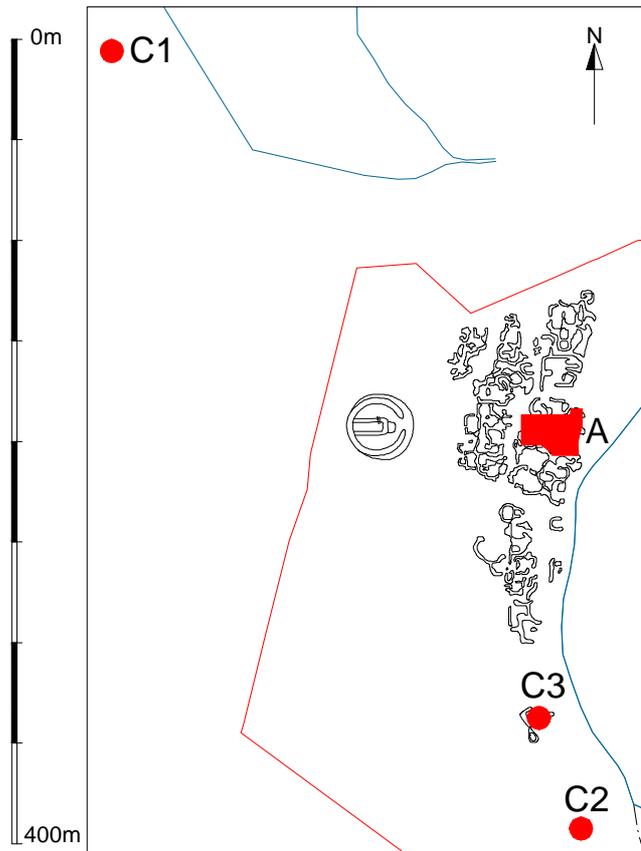


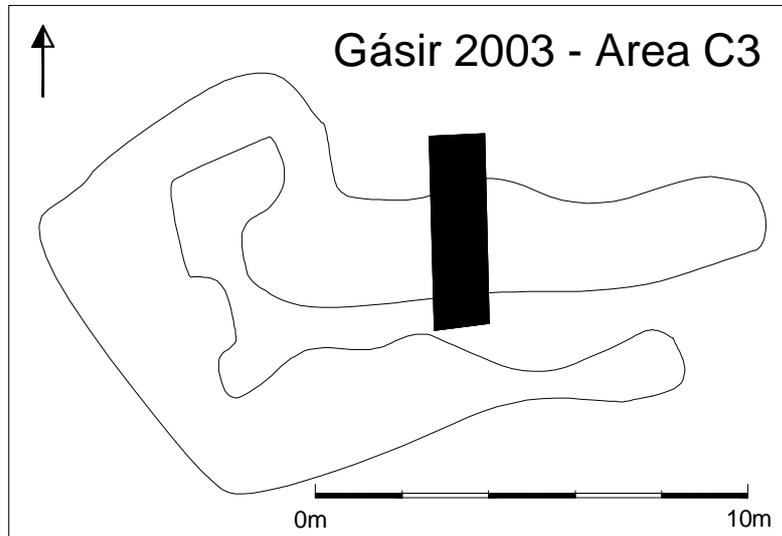
Figure 2 - Location of peripheral structures

C1 – Examination of this area revealed a ring shaped structure some 6-7m in diameter and up to 0.5m in height. One quarter of the structure was exposed, and a small trench was excavated to examine the nature of the earthwork. This appears to be formed from multiple layers of turf and upcast, accentuating a naturally raised platform overlooking the estuary to the northeast, and areas of boggy

land to the south and west. Prior to further analysis, this structure is thought to be an agricultural construction, possibly for the storage of hay (*heystæði*).

C2 – Structure C2 is the partially preserved remains of a sub-square building. It is clearly in the process of eroding down a cliff face that overlooks an area of marsh/tidal lagoon to the east of the main excavation area. This erosion face was cleaned, and the exposed section was recorded.

C3 – A small exploratory trench was excavated through the northern wall of this structure. This revealed the remains of a stone and turf built wall, overlying earlier structural layers. However, no floor



layer was encountered in the internal area of the building. Whereas the remains visible on the surface are held to be consistent with agricultural activity in the post medieval period – possibly a weening fold for sheep and lambs (*stekkur*) - the nature of the earlier layers is as yet unclear. A larger scale excavation will be necessary to fully understand the nature and extent of these complex remains.

Gásir 2003 Preliminary Finds Assessment

by Dr. Colleen Batey

288 finds units were recovered during the 2003 fieldseason at Gásir, the range of material and object quantities can be seen in the tables below.

The Inorganic Assemblage

Material	Quantity*	Major types/comments
Copper Alloy	54	
Iron	49	including nails, knives, mounts
Lead	1	
Industrial debris	73	Ironworking slag
Ceramic	18	including stoneware and glazed
Sulphur	18	
Stone	44	including baking plate, whetstones
Glass	7	including vessel sherds

* in finds units

In numerical terms the inorganic material makes up the bulk of the overall finds assemblage (91.7%) and within that the industrial debris (weighing 4.779 kg overall for 73 finds units) is numerically dominant. In the case of the site at Gásir, the smaller quantity of sulphur (18 finds units) may however, have a more readily identifiable significance although it may be related at least in part to the activities indicated by the industrial debris, at least in terms of the general industrial nature of some of the deposits. In the case of the sulphur, this is a commodity which was brought to the site for onward export. It has been suggested previously that the sulphur may have been extracted elsewhere (eg Mývatnssveit) and that the centre at Gásir served a considerable hinterland (Roberts 2003, 21). Ongoing research on the sulphur trade in relation to part of a cargo of a Baltic wreck may be of considerable interest in relation to establishing wider trading contacts from Iceland¹

¹ Roberts 2003

The metal elements of the assemblage, numerically dominant, include copper alloy (which is universally in a poor condition, probably due to the salt rich environment) and iron, in the form of nails and knives, and a single lead find. It is most likely that the iron material is at least in part being



produced on site, and relates to the industrial debris perhaps; such a port would have required boat repairs and the local production of nails would have been most sensible for that. The poor condition of the copper alloy assemblage militates against further comment at this stage, but it appears to include items of personal dress such as buttons and strap ends (see photo above, SF 24) etc.

Part of the return trade to Gásir may be seen in the stone assemblage - including 10 finds units of Norwegian stone baking plates, flat schist stones distinctively scored to facilitate even distribution of heat to the overall heating surface for the baking of flatcakes. Other imported stone items include schist whetstones amongst the 6 such items in the assemblage. Other fragments of micaceous stone, also possibly imports, have been noted, and although they are apparently unworked they were presumably part of the same cargo source. Additional pieces in the stone assemblage, such as SF 67 may be a part of a steatite vessel, again with a Norwegian origin. Flakes of flint such as SFs 69 and 70 may have been imported for strike-a-lights, although at this stage it is not certain of the original source for such material. The presence of stoneware and glazed ceramics at the site, 18 finds units in total also indicates external contacts here, and it is reasonable to assume comparable sources as those previously identified from the site and discussed by Mehler (in Roberts, 2002, 44-45) and by Roberts (2003, 20) with a Germanic source as the prime import zone. It is possible that some of the glass vessel finds may have a similar origin.

The Organic Assemblage

Material	Quantity*	Major types/comments
Bark	2	Fragments
Bone	3	including a possible spindle
Whalebone	1	
Horn	1	decorative object
Wood	1	modern
Leather	10	
Fibre/hair	5	
Textile	1	



This is numerically less than the inorganic group, comprising just some 24 finds units. However the recovery of any organic material on such a dry site is itself remarkable. At this stage little further can be said, but it should be possible to identify the bark and wood to species, and the leather to its original source. The single piece of textile may indicate local manufacture or a more exotic source. Detailed specialist study is required. The single horn item, SF1 (left) is an interesting piece. Simply carved in the form of a sea creature with intertwining tail or tendrils, the piece is complete. The sea creature may represent a sea horse, given the shape of the head and neck but it would seem to be a unique item, crafted by a sailor perhaps

from the memory of something seen in warmer waters! It is difficult to be sure of a date for the piece, but it need be no older than the 17th -18th centuries.

Potential of the Assemblage

There are several parts of the assemblage which will repay further specialist analysis, the ceramics and slag of the inorganic assemblage and in the organic assemblage the leather and hair/fibres in particular. The metals all need urgent conservation investigation. Excavations at Gásir are already making a very important addition to the study of medieval pottery in Iceland. The ongoing research into the Icelandic sulphur industry will ensure a crucial role for the site at Gásir, and its external trading links provide a key to the early success of this important trade site, they may also provide an understanding of the failure of this site to continue.

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Appendix 6. The Finds, in Roberts 2002a, 44-46

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Conclusions and Further Work

A highly productive excavation season at Gásir in 2003 has begun to meet the aims and objectives set out for this year's work. Much more work remains to be done. The full analysis of both the stratigraphic record and the artefactual assemblage will continue throughout the winter, and a complete excavation report will be finalised in the spring of 2004.

Already we are able to define a new group of rooms, and to describe their size, nature and construction techniques. We are also now able for the first time to examine a sizeable assemblage of artefacts from several years of excavation, and this work alone will greatly enhance our knowledge of the types and sources of goods brought to Gásir. The assemblage of pottery is now large enough to contribute substantially to the Icelandic corpus and will assist greatly in the refining of dating horizons. Further excavation has already clarified the phasing of the site, and further analysis of this evidence will lead to a new and better understanding of site chronology.

Study of the industrial residues will tell us much about the nature of activity at Gásir. An ongoing study of the sulphur found in 2002 and 2003 is progressing well, and has been greatly enhanced by the kind donation of a comparative sample from the Darsser Cog (see Roberts 2003, page 30).

It is proposed that excavation in 2004 will continue within the area begun this year, and additionally that work will commence within the churchyard at Gásir. The results gathered so far will be presented at conference (NABO/SILA, Copenhagen May 2004), and it is hoped that this opportunity will enhance the process of international discussion and collaboration. It is hoped that a wide ranging study of comparable sites and material will place Gásir more clearly in its international context, and will highlight the extraordinary preservation and international significance of continued work at Gásir.