

ARCHAEOLOGICAL EXCAVATIONS AT VATNSFJÖRÐUR 2003-04

Vestfirðir has, for the most part, been left out in archaeological research in Iceland. However, in the past decade archaeological research has slowly been increasing and today Vestfirðir has become the focal point of many research projects. The archaeological excavation of Vatnsfjörður in Vestfirðir began in 2003 and continued in 2004. The excavation unearthed the remains of a longhouse dating to the Viking Age. The site is of great importance for understanding the settlement of Vestfirðir as Vatnsfjörður was one of the main seats of power in the area. During the late Middle Ages it became one of the richest farms in Iceland.

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Introduction

The summer of 2003 saw the beginning of archaeological research on the farm of Vatnsfjörður in Ísafjarðardjúp. The research was part of a cooperative research program aimed at studying Vestfirðir (the Northwest) during the Medieval period. The primary goal of this cooperative effort is to conduct research in the fields of history, cultural history, literature and archaeology with the focal point on the Vestfirðir peninsula. The foremost endeavor being the archaeological excavations at the farm of Vatnsfjörður in 2003 and 2004.

The Vatnsfjörður farm was selected for assessment based on the fact that it is known to be one of the more important farms in Vestfirðir during the Medieval period. Furthermore, in the

period between AD 1300 and 1500 it was one of the richest farms in Iceland. It is hoped that archaeological research on the site will aid in understanding the development of Vatnsfjörður from its first settlement throughout the Medieval period. It is of great importance to continue to gain further archaeological data on the development of the settlement in Vestfirðir as recent research has shown that it differs in many respects to the rest of Iceland. The area itself is understudied and there is growing demand for an increase in research in Vestfirðir as it will improve our understanding of Viking Age and Medieval politics, society and economy.

Historical overview

The farm of Vatnsfjörður is located on a

peninsula between Reykjafjörður and Mjóifjörður in the fjord of Ísafjarðardjúp (see map). The farm is situated at the bottom of a fjord by the same name. The oldest written sources mentioning the farm are from the 12th and 13th centuries AD. As the farm is recorded in most of these oldest sources, it is probable that the farm was settled early in the 10th century or possibly earlier (Harðardóttir 2003).

The Book of Settlements states that Snæbjörn, the son of Eyvindur Austmann, settled the area between Mjóifjörður and the river of Langidalur (Ísl.sög.I., 112). The settlement of Snæbjörn was quite large, from Skálavík in Mjóifjörður to Nauteyri in Ísafjörður. Between AD 900-1100, Snæbjörn's original settlement farm began to split into 22 smaller farms. The farm of Vatnsfjörður was Snæbjörn's main farm and the core of his settlement. It is clear that very early in its existence this farm became one of the most important and largest seats of power in Vestfirðir as it was the main farm of the most powerful chieftains in Iceland from AD 1000 to approximately AD 1300.

A church was built on the farm in the 12th century and it is likely that a chapel had already been built there shortly after the christianization of Iceland c.a. AD 1000 (D.I.XII.,14). The church at Vatnsfjörður continued to be a rich and important church throughout the Middle Ages; and remained so until after the Reformation in the mid-16th century. After which, it was a parish church until the latter part of the 20th century.

In the beginning of the 13th century there were two families in power in Vestfirðir. The Vatnsfirðingar family ruling the northern part of the Vestfirðir

peninsula, including Strandir; and the other was the Seldælir family ruling the southern part of the peninsula (Sigurjónsson 1975, 12). During the Age of the Sturlungs these families fought for power but neither managed to gain complete control (Thorsson, 1988). The balance of power had not changed between these families through most of the 14th century. During this time, the Seldælir family had more power than the Vatnsfjörður family. However, at the same time, the power and influence of the Vatnsfjörður family was increasing slowly until the 15th century when in AD 1433 Björn Þorleifsson came into possession of Vatnsfjörður and the farm became, along with Skarð at Skarðsströnd, the base of his economic and political power. (D.I.IV., 133-135) Björn Þorleifsson was the richest and most powerful individual in the area in the 15th century and owned a large number of farms in the Vestfirðir peninsula (Sigurjónsson 1975, 114-116).

The Vatnsfjörður farm lost its position as the most important seat of power in Vestfirðir after the death of Björn Þorleifsson in 1467. In the beginning of the 16th century the power in the region had shifted to the farm of Ögur, which is located a few kilometers west of Vatnsfjörður (see map). Even though Vatnsfjörður had lost its position as the main seat of power in the beginning of the 16th century, it continued to be an important farm with holdings still evident in AD 1700 in such regions as Ísafjarðardjúp, Hornstrandir and Strandir (Á.M.,1940). The farm remained an important farm and a parish church into the late 20th century when the parish church was moved to the town of Súðavík.

Settlement patterns of Vestfirðir

In this paper it is argued that the initial settlement patterns of the Vestfirðir peninsula, in general, appear to be considerably dissimilar to the rest of Iceland. This may be a result of the landscape as it consists mostly of narrow fjords with high mountains and little agricultural land. Most areas of the peninsula are ill-suited for agriculture and, therefore, other resources were of greater importance to the inhabitants of this region than a farming economy. Thus, it would seem obvious that initial settlement patterns and the development of the settlement in this region must be examined with a different set of criteria in order to draw a more accurate depiction of the economic situation of Vestfirðir, including farm economy.

The hypothesis presented here examines the beginning of the settlement and its development with the idea that the sea was the most influential factor. This hypothesis further indicates that the first settlers of Vestfirðir came by sea and would, without a doubt, have based their first settlements close to safe harbors for their ships. Thus, the choice of initial settlement was dictated by the sea and not land. Land-based factors only played a secondary role in the location of the first settlement. This appears to be the case for example in Bolungarvík where longhouses have been located close to a safe anchorage and the location of these longhouses can only be explained from a marine perspective (Edvardsson 1996). Later, other factors became important and the original settlements were abandoned and moved to a new location. This can clearly be seen in various places in Vestfirðir, such as Bolungarvík, Kaldrananes- and Árneshreppur.

However, the sea continued to play the primary role in the development of the settlement as farms were placed in such a location that it would enable them to maximize the exploitation of marine resources.

It has long been stated by scholars that Vestfirðir was settled last because it was an agriculturally poorer region compared with other regions in Iceland. There is little evidence to support this, except for a few passages in Landnámabók (The Book of Settlements). In the same written source there is equally strong evidence to support the fact that certain settlers came to the region looking for an area such as Vestfirðir to settle. The settlers that preferred to settle an area such as Vestfirðir were people who came from a similar environment and came from an economy that based its main income on the exploitation of marine resources. Landnámabók mentions a few settlers who came from areas in Norway that have fjord systems similar to Vestfirðir. One such settler was Þuríður sundafyllir who came from Hálogaland in northern Norway and settled in Bolungarvík. She was known in her home in Norway for knowledge of fishing and fishing grounds and one of the first things she did when she settled in Bolungarvík was to locate fishing grounds and establish a fishing station. This passage in Landnámabók makes reference to a person who is applying her acquired knowledge to a new, but similar, environment. Other settlers of the northwest such as Þórólfur fasthaldi from Sogn and Geirmundur heljarskinn from Rogaland in Norway also came from environments in Norway that were similar to Vestfirðir (Ísl.sög. I., 109, 91, 116). The suggestion here is that any person

settling in a new land would be influenced by a lifetime of acquired knowledge about his or her environment and would therefore look to settle in an area where that knowledge would be more useful than in an unknown and alien environment.

The assumption of Vestfirðir as a backward and poor region came into being during a period when the area had lost most of its economic base and was forced to rely primarily on agriculture, which reduced the region to poverty. This picture of Vestfirðir, created by historians in the 18th and 19th centuries, was based on the general idea of continuity in Icelandic society. The society of that period was thought to have remained more or less the same and thus it could be used as a model for earlier periods - an idea that has persisted up to the present without critique. Archaeologists have also been influenced by this notion and therefore have not attempted to develop research designs that would question or contradict this assumption.

The historical view is that this landscape is agriculturally poor, therefore initial settlers of Iceland would not want to settle this region while there were better prospects still available. This argument and its corollary, that the settlers of this region must have been poor and continued to be so throughout Icelandic history, does not hold water. The archaeological evidence emerging from Vestfirðir today is both producing the same type of material as elsewhere in Iceland as well as showing that the area was based on a very different economy (Edvardsson 2004). The area was poor in agriculture but that alone is not proof of an inferior economy; only that it was different.

The Vatnsfjörður farm is certainly situated in an area where agriculture would be considered average at best so the agricultural resources alone cannot explain the economic prosperity and accumulation of wealth from the beginning of the settlement until the 16th century. One of the most important economic factors within the political system of Viking Age Iceland was the control over natural resources and their distribution. Any farmer intending to elevate himself to the position of chieftain had to locate his farm in a place where such control was possible. It is quite likely that the first settlers of any region in Iceland actually looked for such a site for their farms. It is also quite likely that in some cases such location was successful wherein in other locations it was not.

In Vestfirðir the main resources were fish, stranding (both whale and other), driftwood and oil (cod and shark liver oil), all of which were important for the Icelandic economy during the Viking Age. A farmer who was in a position to control the distribution of these resources was in a position to gain wealth and power. Vatnsfjörður became a successful power base because of its ownership over a number of farms in Vestfirðir and of its position in Ísafjarðardjúp where it had direct control over the route between Strandir, the southern part of Vestfirðir and the northern part of the Vestfirðir peninsula. It was also in a good position to watch over any traffic in the fjord of Ísafjarðardjúp. The region in the bottom of Ísafjarðardjúp was a place where people from Strandir, traveling over the heath of Steingrímsfjarðarheiði, and the southern part of Vestfirðir, traveling over Þorskafjarðarheiði, gathered at certain times of the year to buy dried fish

(Hjaltason n.d., 28). Vatnsfjörður owned this site and thus was in control over the distribution of this particular resource.

For most of the farms in Vestfirðir, the marine resources were the central focus of the economy and agriculture was primarily for subsistence. In most cases, farmers paid their rent in the form of dried fish or other marine products. This is a key element in the economy of the region as these products are easily exchanged and the archaeological evidence strongly supports the idea of an "Icelandic market," as marine products are found on sites far inland in various places in Iceland (Amundsen et al. in press).

Vatnsfjörður acquired dried fish, shark and cod liver oil and driftwood from its farm holdings located around the entire Vestfirðir peninsula. The dried fish and liver oil was probably stocked and any surplus traded or exchanged with other farms both within and outside the Vestfirðir peninsula. Driftwood was equally important for use in building houses and boats and more than likely also being traded or exchanged. It is likely that prior to the 13th century, farms in Vestfirðir traded marine products for agricultural products with farms outside the peninsula. In the 13th century, European markets became available for Icelandic marine products. This was due to developments in ship construction as ships could, at that time, carry a larger cargo than before which made the export of fish products more worthwhile. The creation of merchants' guilds, such as the Hansa, also played an important role in the development of the fish trade in the Vestfirðir area during the Middle Ages (Nash 1995; Kurtz 1983).

These developments opened a

new chapter in the history of the Vatnsfjörður farm. The farm was already in a position of power in the Vestfirðir area, owning a number of farms and controlling land routes in and out of the northern portion of the peninsula. The farmers paid their rent in marine products, which now could be sold directly to the foreign merchants who, more than likely, exchanged such items for prestige goods and also paid cash. The base of the economic power of the Vatnsfjörður farm is therefore firmly rooted in the ownership of farms in the Vestfirðir area, not because of their agricultural products but because of the marine products they supplied. In the 13th-15th centuries Vatnsfjörður slowly increased the number of farms in the area and at the end of the 15th century most farms in the peninsula were under direct control of the Vatnsfjörður family.

Archaeological survey and test trenches

The goal of the 2003 project was to test the possibilities for archaeological research on the site of Vatnsfjörður. The objective was to survey the entire farm to locate possible areas for more detailed investigation. The archaeological survey was divided into two parts: historical research and field survey. The aim of the historical research was to locate references to possible sites, which were then located during the field survey. The historical research found references for 52 sites of which 33 were located during the field survey (approximately 70%). The sites that could not be located had disappeared as a result of field clearing, road building and other 20th century construction. A few sites were also located during the field survey that were not mentioned in the written sources. The majority of

the surveyed sites (21 sites) were within or just outside the old homefield boundary. East of the farm, near the sea, were 4 sites, 3 more just north of the field boundary, 3 about a kilometer north of the farm, 1 further west of the farm on a small peninsula called Sveinhúsanés and 1 site in the hills west of the farm. Two of the surveyed sites were turf-cutting areas where material for house building was collected.

The surveyed sites date mostly to the late 19th to early 20th centuries and provide an idea of the distribution of houses prior to the 20th century agricultural revolution. It has been noted during field surveys in Iceland that houses are often built on the same place as older buildings, creating a small mound over time. The location of houses, as they were at the beginning of the 20th century, offers a useful guide about the siting of various buildings on an Icelandic farm, at least for the past 200 years. It is, however, important to point out that occasionally houses changed their function over time (e.g. a late 19th century sheep house may well be standing on an earlier smithy structure).

Two farm mounds were recorded, one at the Vatnsfjörður farm itself and one on the island of Borgarey where a farm stood in the 18th century. The island of Borgarey is part of the Vatnsfjörður farmland but it was not always so; prior to the 17th century it was an independent farm but became the property of Vatnsfjörður probably in the 16th or 17th century. The Borgarey farm was not surveyed in 2003 but further research on the island would be fruitful as it has been abandoned since the 18th century (Á.M.VII, 215-216). The Vatnsfjörður farm mound is relatively undisturbed as

the mound was abandoned in 1950 and a new house built just east of the farm mound.

Various ruins were surveyed west of the Vatnsfjörður farm mound. All were outhouses and all were standing on top of large mounds suggesting continuous activity on each of these sites. North of the farm two sites were surveyed which are believed to be þurrabúð, i.e. a place where poor families lived and were totally dependent on the main farm. This interpretation was based on the location and the general layout of the site. These houses were quite common on church farms in the 18th and 19th centuries.

One large boathouse was surveyed, measuring 13 x 8 meters and open at one end. From the dimensions, it would appear that this boathouse was built for a large vessel, much larger than the fishing boats that were common in the Vestfirðir region prior to the 20th century. It would be possible for a boathouse of this size to hold a boat used for the transport of cargo from different farms belonging to Vatnsfjörður.

One circular graveyard was surveyed just west of the modern farm. The graveyard is old and has been in continuous use for the past 200 years, and possibly since the Medieval period. No archaeological research has been conducted on the churchyard except for a small excavation on the north side just outside the yard itself in 1997 (Sveinbjarnardóttir et al. 1997). The local priest noted that during the placement of new graves in the center of the yard, the gravediggers found remains of structures. (Vilhelmsson, pers. comm.) These structures could well be remains of the oldest church at Vatnsfjörður as churches at that time were usually placed in the

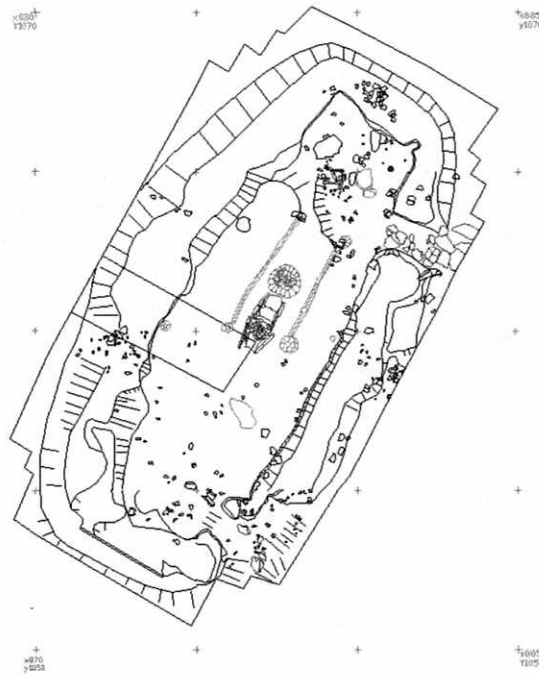


Figure 1. The longhouse at the end of excavation

center of the graveyard. The modern church stands a few meters south of the graveyard and was constructed in 1913.

Certain areas were selected for excavation based on the results of the archaeological survey. The areas selected for testing were the old farm mound and an area within the homefield where the survey had located an oval shaped building. Four test trenches, each measuring 5 x 2 meters were excavated. One was placed in the farm mound, another in the oval-shaped structure and two in close proximity of this structure.

The results of the 2003 excavation indicate extensive cultural remains in the area around the oval structure, which probably date to the 10th century.

The conclusion of the 2003 excavations suggested that the oval structure was more than likely the remains of a Viking Age longhouse as the excavation had revealed a central hearth and some post-holes typical of such structures. The test trench on the farm mound showed that the mound had been damaged by modern activity but the damage did not seem to be extensive. In combination, these results present the research with an unusual opportunity to examine the development of the settlement at Vatnsfjörður from its earliest beginnings in the Viking Age to its present-day function in the 21st century.

The 2004 archaeological excavations

The excavation at Vatnsfjörður continued in June 2004 and focused on the oval-shaped building recorded in 2003. Two occupational phases were recorded in the summer of 2004. The earliest phase was a Viking Age longhouse. This longhouse was well-preserved with the exception of the walls which had been damaged by field leveling. This damage was more severe in the southern end of the building. The latter phase saw major construction changes to the longhouse. In particular, the longhouse had been shortened by the erection of a new southern wall bisecting the longhouse. The function of this latter-phase structure is unknown.

Early occupation phase

The longhouse at Vatnsfjörður is approximately 15 x 5 meters (measured on the inside), with bow-shaped walls. The walls were constructed of turf and foundation stones were not visible. It is likely that the reason why foundation stones were not recorded during the excavations may well be because the walls had sustained considerable damage at later periods and that they have not been not fully excavated. The walls were completely flattened and at no point were they higher than 10-20 centimeters. The condition of the walls made it difficult to determine what type of turf was used in the construction of the walls but all the available evidence suggests that they had originally been made of the strengur type. This type of turf was often used in buildings in Iceland and is recorded at all periods. Turf of this type is cut from a bog and is made of a turf block, ca. 0.50 x 1.0 meters long and 10-20 centimeters thick. The turf block is placed in such a way

that it locks into the block beside it and then another layer of turf is added on top until the wall is constructed.

In the centre of the longhouse was a hearth made of stones. The hearth was oval-shaped and measured 2 x 1 meters, but it had been damaged on both ends and its original size was probably 4 x 2 meters. The hearth was constructed of upright stones which have been dug into the ground and large flat stones placed between them. All the stones in the fireplace showed evidence of extensive burning and the flat stones were all fire cracked.

The longhouse had two entrances both on the eastern wall. The northern entrance was better preserved as field flattening had badly damaged the southern entrance. The northern entrance was 1.20 meters wide and paved with large flat stones, which extended eastwards from the building. Some of the stones had obviously been removed as there were gaps in the pavement. On the inside of the entrance two postholes were recorded which probably are the remains of doorposts. These postholes were aligned with small stones which supported the doorposts. The southern entrance was badly damaged and all pavement stones had been removed from it except for a few small flat stones. The entrance was similar in size to the northern entrance.

The floor deposits in the longhouse extended over the entire area inside the longhouse with the exception of the western side of the building where there was approximately 1 meter between the floor deposits and the wall. This may be a result of having benches along the western wall but not along the eastern wall. The floor deposits were

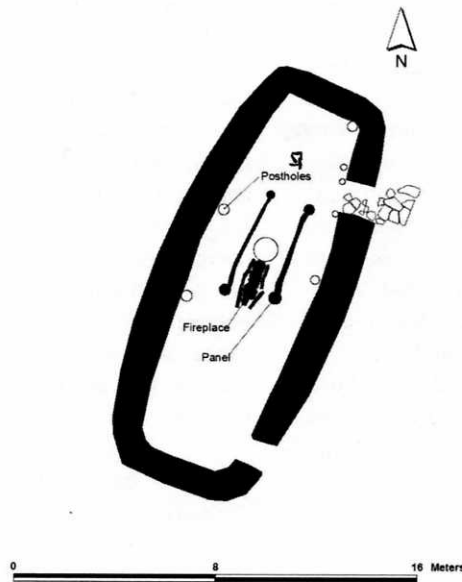


Figure 2. The earlier occupation phase

black, compact, with charcoal and small fragments of burned bones. The entire floor was sampled for various analyses including retrieval of plant remains, although results are still pending. The thickest and best preserved floor deposits surrounded the fireplace due to the intense activity around the hearth.

A small slot, a few centimeters in width, was recorded on both sides of the hearth. These slots ran parallel with the hearth and within them were regularly spaced postholes. These slots appear to be the remains of paneling that were on both sides of the hearth. Similar paneling has been recorded on other longhouse excavations in Iceland (Roussell 1943). In the northern end of the longhouse was a small pit of an unknown function. This pit measured approximately 50 x 50 cen-

timeters and was dug into the subsoil, small flat stones placed upright along the edges and flat, small stones were placed at its base. Along the western and eastern walls of the longhouse both postholes and postpads were recorded. However, more postholes and postpads will probably be discovered once the walls of the building have been fully excavated.

Later occupation phase

The longhouse was partially abandoned at the end of the earlier occupation phase and from it was created a smaller structure with an unknown function. This smaller building measured approximately 9 x 5 meters (measured on the inside). The building used the earlier longhouse walls on its north, east and west sides, however, a new gable wall was erected in

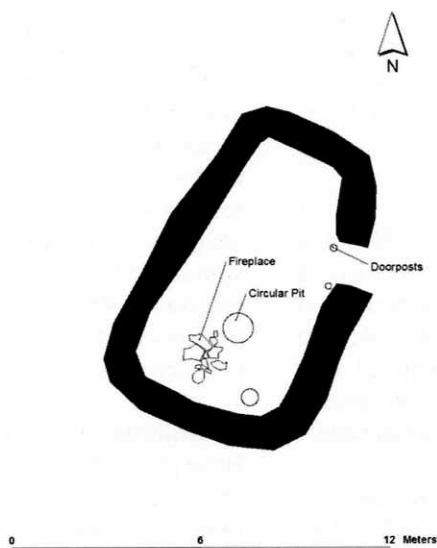


Figure 3. The later occupation phase

the centre of the former longhouse, partially covering the southern end of the hearth. The turf in the new wall was similar to the turf in the longhouse walls and was probably also of the strengur type.

A new hearth was constructed west of the older hearth. This hearth, however, was smaller (1.50 x 1.50 meters) and it was clear that stones had been removed after the abandonment of the structure. The hearth appears to have been rectangular with upright stones along the edges and flat stones in between. North of the older hearth a large circular hole had been dug into the subsoil damaging the northern end of the hearth. This hole had a diameter of approximately 1 meter and was full of small fire cracked rocks.

The floor deposits of the later occupation phase were black, compact

with charcoal and burnt bones. No clear interfaces between the longhouse floor and the later floor were visible which suggest that the later occupation phase followed immediately after the earlier longhouse phase. A number of iron objects were found in the floor deposits and most of them were nails. These objects possibly came from the timber frame of the building, i.e. posts, beams and paneling as the building collapsed.

No tangible evidence was recorded which would enable the determination of the function of this later building. The floor deposits are typical for a house occupied by humans and not animals and therefore it is highly unlikely that the house was an outhouse for animals. The position of it, quite a distance from the farm mound and the presence of

slag within the floor deposits, may suggest that the building was used as a smithy. However, this is difficult to determine based on the existing evidence and it is hoped that further analysis of the floor deposits will shed some light on this issue.

Finds

During the excavation at Vatnsfjörður, a total of 103 artefacts were recorded. A large portion of the artefacts were iron objects (40%) consisting of nails and tools. Other artefacts included two beads, a spindle whorl, a whetstone, worked whale bone, a loom weight and a fish hammer.

Broken down by occupational phase 40 objects were found in the floor deposits of the later phase. This represents approximately 40% of the total number of finds. Most of which were made of iron including a door lock. The iron objects were scattered across the floor, which suggests that they came from the timber frame of the building (roof, paneling or posts), and fell to the floor when the building collapsed or was torn down. Also recovered in this floor deposit was a double yellow bead. Double beads are a type of bead that is well-recorded in Viking Age graves in Iceland and across the Viking world. One such Icelandic bead was found in the pagan burial at Kornsa in Árneshreppur. Beads of this type have been dated to the late 10th century (Eldjárn 2000).

Approximately 15 artefacts were recovered from the longhouse floor deposits, about 15.5% of the total number. These objects were comparable to those recorded in the later phase. Similarly, most of the artefacts comprising this phase were made of iron, includ-

ing nails, unidentified iron fragments, whetstone, etc. Also recorded in this phase was a complete, opaque, paste bead. This type of bead is also common in Viking Age burials and was recorded at Kornsa. As before, this bead more than likely dates to the 10th century. Other artefacts that could be identified in the longhouse floor deposits were two loom weights, a fish hammer and a broken spindle whorl made of stone. The remaining 45.5% came from various deposits, such as wall collapse and rubbish deposits.

Vatnsfjörður Archaeofauna

Bone preservation at Vatnsfjörður is variable, ranging from excellent to poor, with most of the damage apparently caused by mechanical soil processes rather than soil acidity (upper layers were more exposed to freeze-thaw cycles). Deeper deposits will produce more consistent levels of bone preservation, and the site has the potential to produce significant collections. The animal bones from the 2003-2004 Vatnsfjörður excavations thus far comprise 142 identifiable bones out of a total of 314 fragments recovered. This NISP count is thus far well below the number required for a fully quantified analysis, but is large enough to suggest some general patterns (NISP=number of identified specimens). Table 1 presents the current archaeofauna by taxon, combining all contexts. Table 2 presents the same data broken down by context. The full range of domestic mammals is present, including pig bones and a single goat. Pigs are common on Icelandic sites from the 9th-11th centuries but become increasingly rare by the 12th-13th centuries. A complete adult pig mandible from the floor of the long hall is a partic-

Vatnsfjord 2003-4 Archaeofauna

<i>Taxon</i>	<i>total NISP</i>	<i>%</i>
DOMESTIC MAMMALS		
<i>Cattle</i>	22	15.49
<i>Horse</i>	1	0.70
<i>Pig</i>	3	2.11
<i>Goat</i>	1	0.70
<i>Sheep</i>	8	5.63
<i>Caprine</i>	49	34.51
SEA MAMMALS		
<i>Seal sp</i>	8	5.63
<i>Harbor seal (Phoca vitulina L.)</i>	3	2.11
<i>Whale sp</i>	2	1.41
<i>Large whale</i>	1	0.70
BIRDS		
<i>Murre or Guillemot</i>	4	2.82
<i>Puffin</i>	7	4.93
<i>White tailed sea eagle</i>	1	0.70
<i>Swan sp</i>	2	1.41
<i>Goose sp (possibly domestic)</i>	1	0.70
<i>Bird sp</i>	8	5.63
FISH		
<i>Cod</i>	3	2.11
<i>Haddock</i>	1	0.70
<i>Gadid</i>	3	2.11
<i>Fish sp.</i>	12	8.45
SHELLFISH		
<i>Clam sp</i>	2	1.41
NISP TOTAL		
	142	
TNF TOTAL		
<i>Large Terrestrial Mammal</i>	19	
<i>Medium Terrestrial Mammal</i>	36	
<i>Unidentified fragments</i>	117	
	314	

Table 1. The Vatnsfjörður archaeofauna

ularly well preserved find that indicates a fairly small, long snouted animal comparable to other Viking Age pigs recovered from other parts of Iceland. Cattle bones are also present, including the bones of newborn (neonatal) animals indicating a dairying economy - again a pattern common to most periods in Iceland. Sheep and caprine (either sheep or goat) bones

include both juveniles and old adults.

Wild mammals are mainly seal, with a few elements that could be positively identified as harbor (common) seal (*Phoca vitulina L.*). Harbor seals are the most common in-shore seal species in Iceland, and also appear in other archaeofauna from Vestfirðir (Edvardsson et al. 2004). Whale bones are from large

Taxon	Context														
	5	6	15	19-20	39	42	48	56	59	63	64	65	70	73	74
DOMESTIC MAMMALS															
Cattle	5		1	3			2					3		1	7
Horse				1											
Pig							1	1			1				
Goat				1											
Sheep				7											1
Caprine		1		23	1		3			1	3	10	2		5
SEA MAMMALS															
Seal sp				1								1	1		
Harbor seal	1										1		1		
Whale sp				2											
Large whale							1				1				
BIRDS															
Murre or Guillemot				4											
Puffin				3			4								
White tailed sea eagle				1											
Swan sp							2								
Goose sp (possibly domestic)				1											
Bird sp				8											
FISH															
Cod							1								2
Haddock		1													
Gadid				2											
Fish sp.							7								5
SHELLFISH															
Clam sp				2											
Large Terrestrial Mammal				1							1	6			10
Medium Terrestrial Mammal				28			6		1						1
Unidentified fragments	6			29	14	21	10		10	3	21	6			6
TNF TOTAL	12	2	1	117	1	14	48	1	11	1	10	41	10	1	37

Table 2. Vatnsfjörður archaeofauna by contexts

species, but are too fragmentary for identification. All fragments recovered thus far show tool marks and cuts suggesting that they were debris left over from bone artefact manufacture. Birds include both guillemot and puffin (both common on coastal archaeofauna), and the rarer swan and sea-eagle. The goose bones recovered could come from either wild or domestic animals. Fish bones may be under-represented due to preservation issues, but it was possible to identify a few cod and haddock, the most important species for both commercial and subsistence fishing in historic times.

Overall the collection suggests an economy with both terrestrial and marine components, and indicates the potential for further zooarchaeological work on the site.

Discussion

The archaeological research at Vatnsfjörður has revealed considerable remains dating from the 10th century to present day. The archaeology on and around the farm mound extends over an area approximately 200 x 200 meters. The depth of deposits in the field around the longhouse were no more than 15-20

centimeters but on the farm mound itself 2-3 meters deep cultural deposits can be expected.

The 2004 excavations identified a Viking Age longhouse, north of the farm mound. This longhouse had two occupational phases and, during the later phase, the longhouse had been shortened and changed its function. It is interesting to note that the longhouse at Vatnsfjörður is very similar to the longhouse found during the excavation at Aðalstræti in 2001. Both longhouses have the same north/east to south/west orientation and have approximately the same length and width. The central hearths of the longhouses are similarly built with similar dimensions. The longhouse in Aðalstræti has been dated to the 10th century.

The archaeological evidence suggests an equally early date for the longhouse at Vatnsfjörður and, if radiocarbon dating concurs, makes the longhouse one of the oldest buildings excavated in the Vestfirðir region. The effects of such an early date for the site of Vatnsfjörður will also have a broader impact on the historical view of settlement in this region. The results of the research at this site alone are contrary to the long-held notion that Vestfirðir was settled later than the rest of Iceland.

The excavations at Vatnsfjörður are greatly encouraging and further investigation at the site will be of a great assistance in understanding various aspects of the settlement and its development through time. The role of Vatnsfjörður in Icelandic history makes it, without a doubt, one of the more culturally important sites in Iceland. On a local level it is the single most important site in the region as it was the main seat of power in Vestfirðir from the 9th - 15th

centuries and is comparable in importance with later sites such as Skálholt and Hólar. Further research will also increase our knowledge of Viking to early modern economies and produce valuable information regarding wealth and status of chieftains of the period. Such research will enhance understanding of how chieftains came to power and more particularly, the foundations of that power in the Vestfirðir region.

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References

- Amundsen, C., Perdikaris, S., McGovern, T., Krivogorskaya, Y., Brown, M., Smiarowski, K., Storm, S., Modugno, S., Frik, M., Koczela, M. (in press). "An Archaeofauna from Akurvík, NW Iceland", in *Environmental Archaeology* 2005.
- Á.M.(1940). Jarðabók Árna Magnússonar og Páls Vídalíns, vol. VII, Kaupmannahöfn.
- Diplomatarium Islandicum, vol I-XV, Reykjavík og Kaupmannahöfn, 1896-1950.
- Edvardsson, R. (1996). *Fornleifaskráning í Bolungarvík*, 1996, Bolungarvík 1996.
- Edvardsson, R. (2004). "Coping with hard times in NW Iceland: Zooarchaeology, History and Landscape Archaeology at Finnbogastaðir in the 18th Century, *Archaeologica Islandica*, vol. 3, Reykjavík.

- Edvardsson, R., (2003). "Fornleifaskráning í Vatnsfirði, sumarið 2003", Vatnsfjörður við Ísafjarðardjúp, rannsóknir sumarið 2003, Torfi Tulinius, Adolf Friðriksson, ed., Fornleifastofnun Íslands, FS213-03092, Reykjavík 2003.
- Earle, T. ed., (1997). *Chiefdoms: Power, Economy and Ideology*, Cambridge.
- Íslendinga Sögur I, (1968). Guðni Jónsson ed., Reykjavík 1981.
- Harðardóttir, A.S., (2003). "Vatnsfjörður við Djúp", Vatnsfjörður við Ísafjarðardjúp, rannsóknir sumarið 2003, Torfi Tulinius, Adolf Friðriksson, ed., Fornleifastofnun Íslands, FS213-03092, Reykjavík 2003.
- Hjaltason, J. (n.d.), *Frá Djúpi og Ströndum*, Ísafoldarprentsmiðja, Reykjavík.
- Johnsen, J., (1847). *Jarðatal á Íslandi*, Kaupmannahöfn.
- Jóhansson, Þ., (1965). *Lýðir og landshagar*, vol. 1. Reykjavík.
- Eldjárn, K. and A. Friðriksson (2000). *Kuml og haugfé úr heiðnum sið á Íslandi*, Mál og menning, Reykjavík.
- Kurz, H.J., (1983). *I Hanseatenes tider: Handel og vandel pa Hansakotorene i Bergen, Brygge, London og Novgorod, Lübeck*.
- Magnússon, Þ. (1973). "Sögualdarbyggð í Hvítárholti", *Árbók hins íslenska fornleifafélags*, Reykjavík.
- Nash, E.G., (1995). *The Hansa*, New York.
- Roberts, H.M., Snæsdóttir, M., Mehler, N., Vésteinsson, O. (2003). *Skáli frá víkingaöld í Reykjavík*, *Árbók hins íslenska fornleifafélags 2000-2001*, Reykjavík.
- Roussell, A. (1943). *Forntida gardar I Island*, Copenhagen.
- Sigurjónsson, A., (1975). *Vestfirðingasaga 1390 - 1540*, Reykjavík.
- "Skarðsárannáll" 1400 - 1640, *Annálar 1400 - 1800*. 1. bindi, Reykjavík 1922 - 27.
- Thorsson, Örnólfur, ed., (1988). *Sturlungasaga*, vol. 1-3, Reykjavík.
- Þorsteinsson, B., and B. Jónson (1991). *Íslandssaga til okkar daga*, Reykjavík.
- Øye, I. (1988). *Textile Equipment and its Working Environment, Bryggen in Bergen c1150-1500*. The Bryggen Papers Main Series vol 2. Norwegian University Press.

Unpublished references

- Þjóðskjalasafn Íslands: Túnakort frá 1918
 Örnefnastofnun Þjóðminjasafns Íslands:
 Örnefnaskrá Vatnsfjarðar