

Handlist of sites in Iceland with whale-bone assemblages

analysed for the project

*Norse Use of Marine Mammals (Whales, Seals, Walrus) in the
Medieval North Atlantic (NUMNA)*



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Fornleifastofnun Íslands

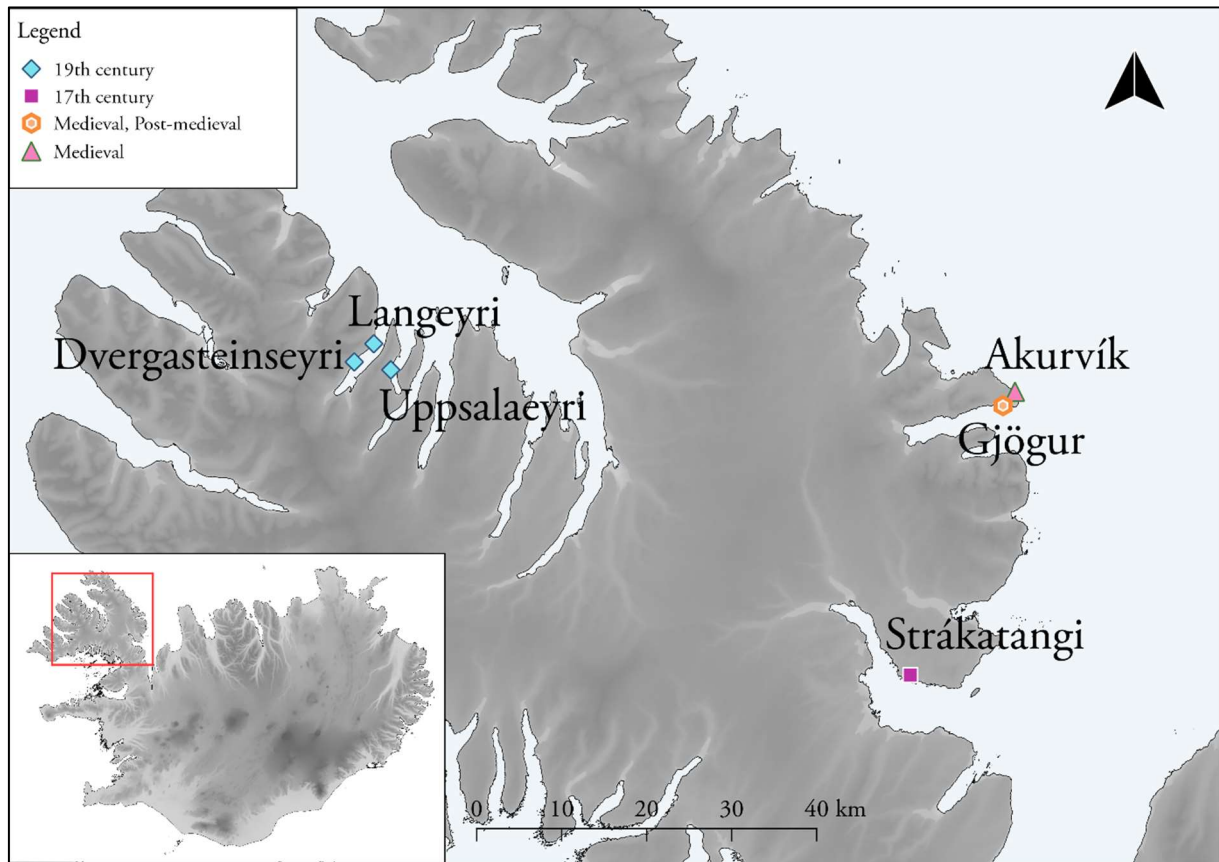
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Vestfirðir

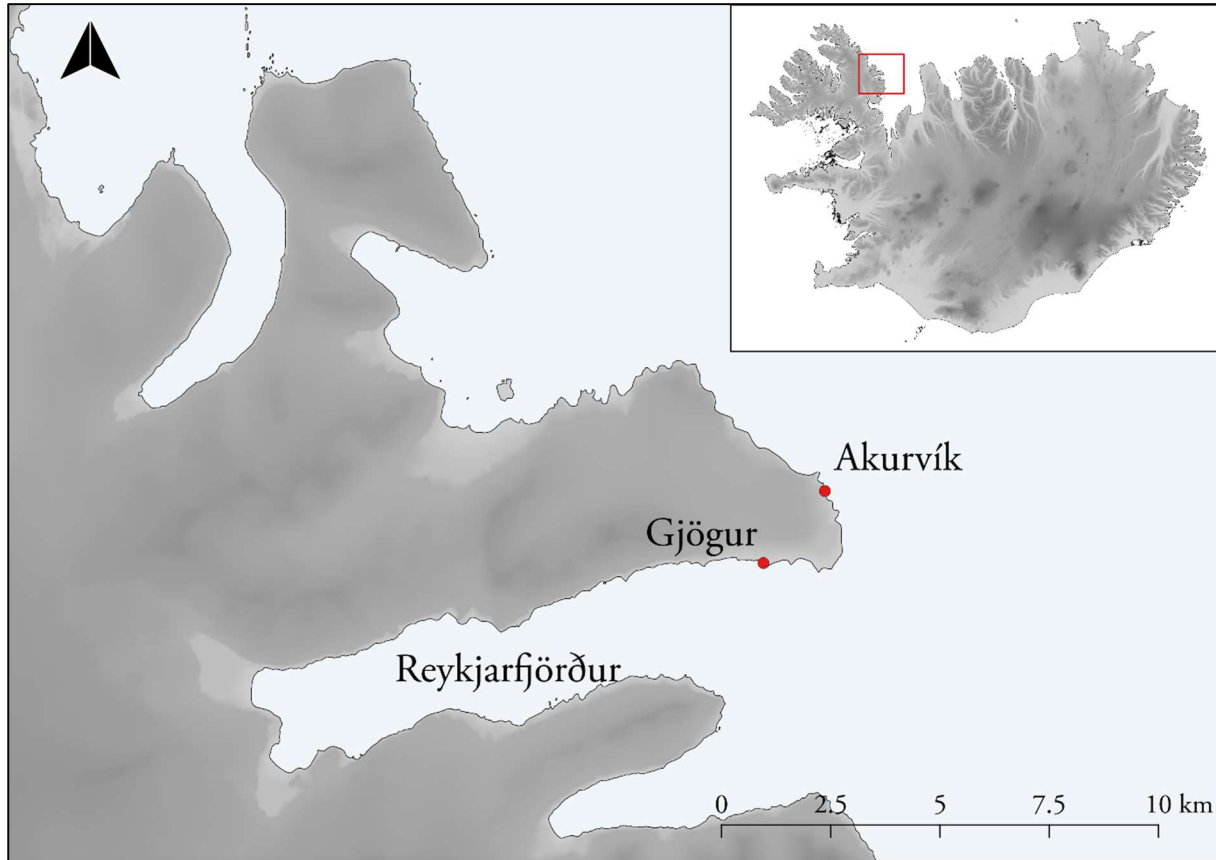


Location of sites in Vestfirðir

Akurvík

395283, 613575 (ISN93)

The medieval (seasonal) fishing station at Akurvík is on the coast on the tip of Reykjarnes

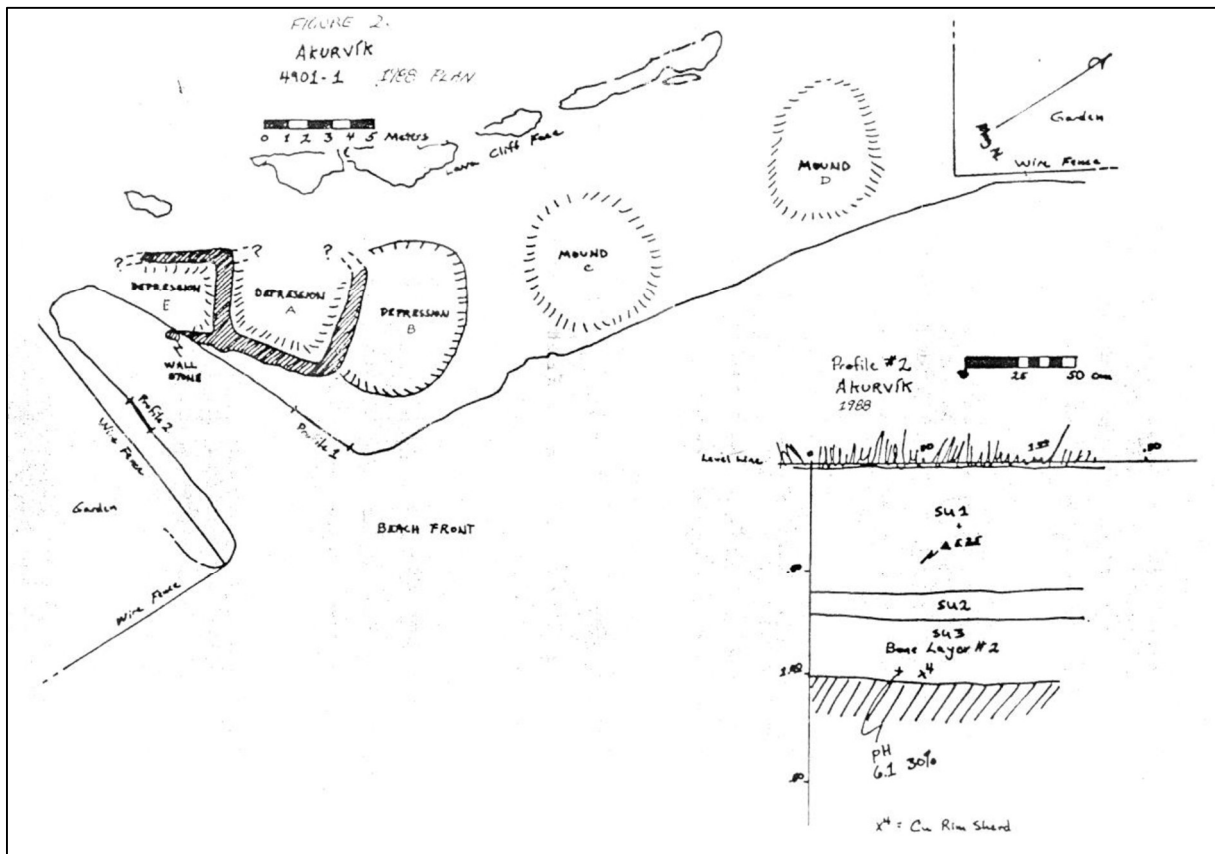


The location of Akurvík

peninsula in Árneshreppur (Vestfirðir). The booths at Akurvík are less than 50 m from the sea, c 2 km NE of the low/middle status Gjögur farm and is on the border between that farm and neighbouring Reykjarnes. The site is not mentioned in any pre-modern records and was first identified in 1988. The place name indicates cereal cultivation. The landing is now considered poor, but the location is close to rich fishing grounds (Lárusdóttir et al. 2003, 18–20). The next farm over, Ávík, is mentioned in the early 12th century as a base for seasonal marine hunting (Sturlunga saga ch 11–13).

When first described in a preliminary walkover survey conducted by members of Hunter College in 1988 the booths at Akurvík had been badly damaged by coastal erosion and later historical vegetable garden cultivation (Amorosi 1996, 282–283; Edvardsson 2002, 42). Akurvík was excavated in 1990 by Amorosi and McGovern as a part of the Palaeoeconomic Project (IPP)¹ to determine the site's nature and dating by cleaning and partly excavating some profiles (Amorosi and McGovern, 1992, 8). Preservation of organic artefacts at the site was excellent: a shell-sand matrix – pH (6.9–7.5). All material was sieved (4 mm mesh, of which 5% was sieved through 1 mm mesh).

¹ As a point of general interest, the site was visited in 2010 as a part of a PhD, *Human Ecodynamics in the North Atlantic: environmental and interdisciplinary reconstructions of the emergence of fish trade in Iceland and the Faeroes, c. 800-1480*. Profiles surveyed in 1990 no longer existed in 2010 (Dufeu and Guðmundsson 2010).



Plan of Akurvík site in 1990 – structures G and F were observed only in the profiles (Amorosi and McGovern 1992, fig 2)

Altogether, seven structures were identified at the site, which has two phases of occupation, 11–13th century and 15–16th century. Of interest here are structures ‘F’ and ‘G’ which are turf-built structures laid on sand; most likely not permanently roofed, e.g. tents. Both had whale bones in the corners, possibly supports for coverings. A few artefacts were unearthed in the structures consistent with their interpretation as seasonal fishing booths, including worked whalebones (Amorosi 1996, 291–296; Amorosi and McGovern 1992, 18). Below is information on analysed whalebones.

FL_WCUMM0009–10, and **MMB0105, 06, 08, 10–16, 148–149** come from a midden associated with a fishing booth dated to 15–16th century based on radiocarbon dating on a terrestrial mammal bone at one sigma.

MMB0107 come from a deposit post-dating the abandonment of a 11–13th century fishing booth, based on stratigraphy.

MMB0109 come from a midden deposit from a 11–13th century fishing booth based on radiocarbon dating on a terrestrial mammal bone at one sigma.

MMB0103–104 come from a midden deposit from a 11–13th century fishing booth based on radiocarbon dating on a terrestrial mammal bone at one sigma.

	Context 24 NISP	Context 22 NISP	Context 24 %NISP	Context 22 %NISP
Domestic Mammals	2	15	0.02	0.02
Seals	26	8	0.29	0.01
Whale	67	1,528	0.75	1.53
Birds	82	124	0.92	0.12
Fish	8,200	93,349	91.91	93.48
Shellfish	545	4,834	6.11	4.84
Total NISP	8,922	99,858		
Medium terrestrial mammal	4	23		
Small terrestrial mammal		4		
Unidentifiable mammal fragment	44	119		
Unidentifiable bone fragment	859	1,085		
Total Number of Fragments	9,829	101,089		

Archaeofauna analysed from Akurvík (Amundsen et al 2005, fig 2)

Bones were analysed at CUNY. SU 22 and 24 represent 90% of the recovered archaeofauna from the site. The report, along with radiocarbon results was published in *Environmental Archaeology* in 2005: “The large numbers of whale bone fragments recovered at Akurvík presents a more difficult interpretive problem. It is possible to bring home tons of boneless whale meat, but alternatively it is possible to transport meatless whale bone for construction material or craft work from stranded carcasses [...]. The district is historically known for whale stranding, and these were probably more common before the impact of early modern whalers. It is possible that active whaling was pursued from Akurvík at some point in the occupation, though this cannot be conclusively proved from current evidence. The large number of whale fragments recovered range in size from small chips produced by craft work to the complete great whale vertebrae used as a corner support for structure F. Whalebone was extensively used in reinforcing the foundations of the small turf huts, and also seems to have been used as one element in the rough pavement of their floor layer. Craft debris and partially completed whalebone artifacts also make up a large proportion of the finds, including the remains of the production of a whalebone disk, perhaps destined to become a gaming piece, from context 31. It is unclear whether the occupants of the booths at Akurvík actively hunted great whales or not. They certainly made extensive use of their bones, possibly engaging in whalebone craft activities during periods of bad weather.” (Amundsen et al 2005, 133).

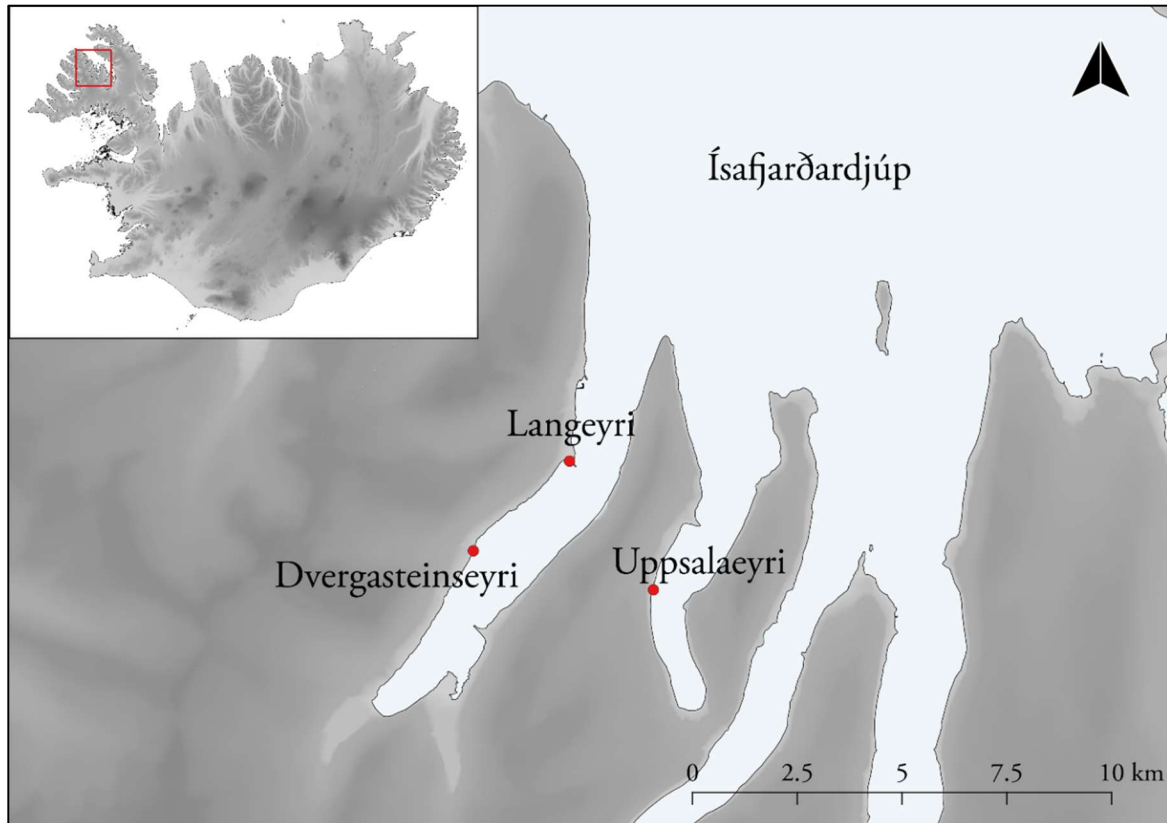
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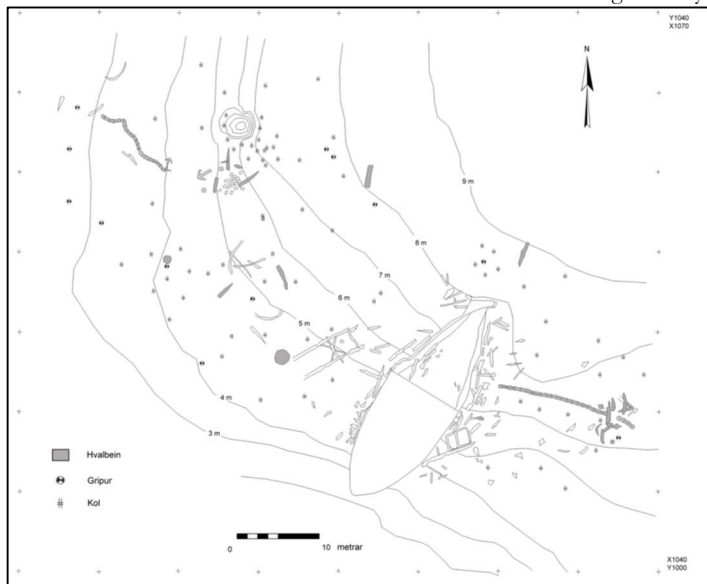
Dvergasteinseyri

316797, 617269 (ISN93)

Between 1883 and 1915 Norwegians hunted whales in Iceland, first in Vestfirðir and then moved



The location of Dvergasteinseyri



The underwater assessment area at Dvergasteinseyri (Helgason et al 2020, fig 5)

to Austfirðir before whale hunting was banned in Iceland in 1915. Norwegians erected eight whaling stations in Vestfirðir. The station at Dvergasteinseyri was built in 1896 by A/S Harpunen and abandoned in 1903 (Helgason et al. 2020, 55, 64). It is situated on a small spit-of-land sticking out into the fjord Álftafjörður, less than 50 m from the sea.

Whalebones were collected in an underwater survey by Ragnar Edvardsson in 2015. An assessment area of 150 x 150 m was defined north of

Dvergasteinseyri. Within the underwater area, whalebones, and other artefacts were collected associated with the Norwegian whaling activity (Helgason et al 2020, 64–68).

The bones from Dvergasteinseyri have not yet been analysed.

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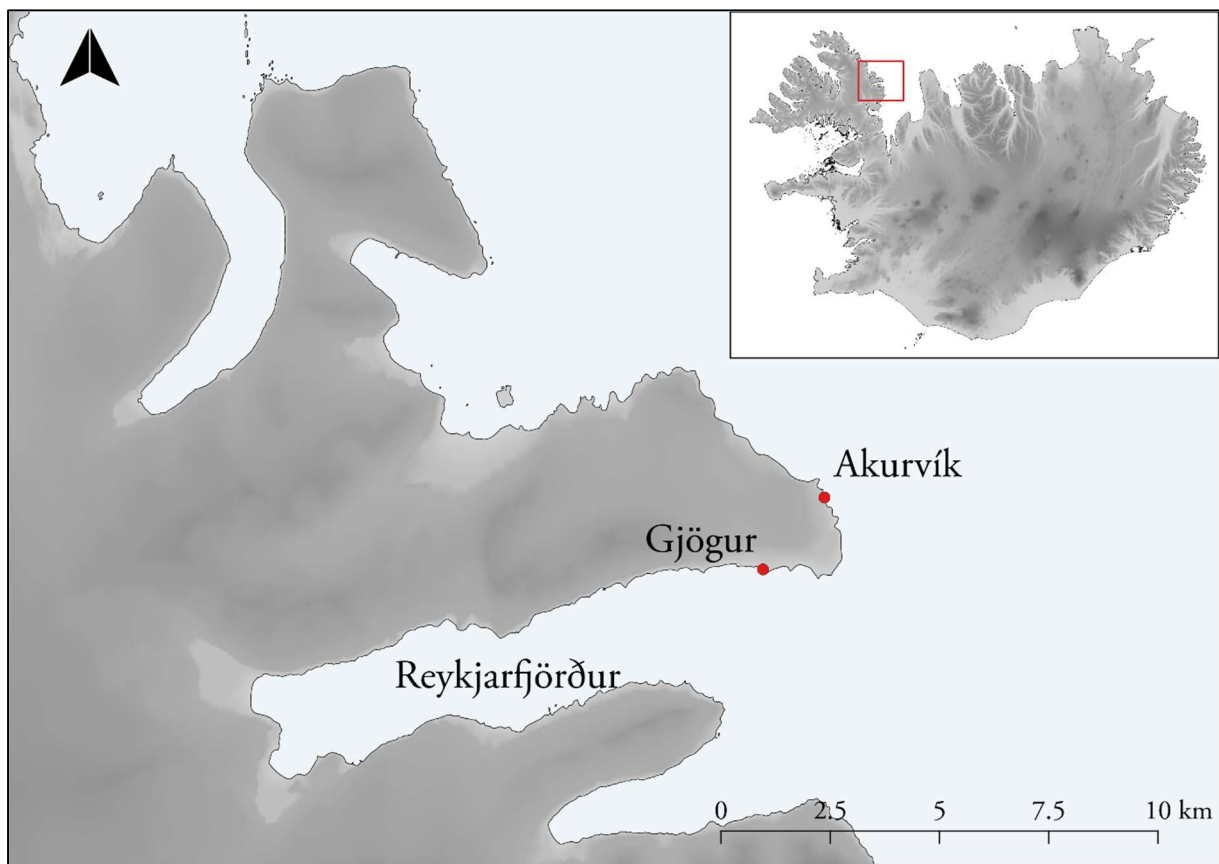
Helgason, G., Tyas, A. and Edvardsson, R. 2019. “Fornleifarannsókn á 19. aldar hvalveiðistöðvum á Vestfjörðum.” *Árbók hins íslenska fornleifafélags* 108, pp. 55–84.

Gjögur

393113, 612125 (ISN93)

Gjögur is a middle/low-status farm on the southern side of Reykjarnes peninsula, in Vestfirðir, less than 100 m from the sea, c. 2 km SW of Akurvík. The farm is mentioned in Grettis saga (ÍF VII, 29), and in a 1509 property list (DI IX, 266–267). During the 19th century, the farm was a centre for the shark oil industry.

A large trench was excavated in Gjögur's midden in 1988 and 1990 by McGovern and Amorosi as a part of the Palaeoeconomic Project (IPP). exposing midden layers down to a depth of c 2 m. All excavated earth was sieved through 4 mm mesh (Amorosi and McGovern 1992, 25). In short, the eco-and artefacts gathered indicate an economy based on a combination of (farming and marine resources. The earliest layers examined date to the 11th century with continuous occupation down to later historical times. Worked whalebone was found at the site (Amorosi and McGovern 1992, fig 23), but it is not clear which context it came from. Below is information on analysed whalebones.



The location of Gjögur farm

MMB0102 and **MMB0094–98** come from an early modern deposit. Other bones include numerous large sized codfish (1,5–2 m long) and seals. Very few livestock or birds were identified.

MMB0099 come from a late medieval deposit. Codfish were numerous yet their actual size decreased (much closer to modern codfish). No seals were identified, whilst domestic livestock appeared. No birds remain were recovered as well.

MMB0101 and **MMB0100** come from early medieval/possible settlement layers. Progressively wet nearer the bottom, and bone preservation tended to worsen as well. Bird remains in large number were recovered, with large size codfish, seal and domestic livestock.

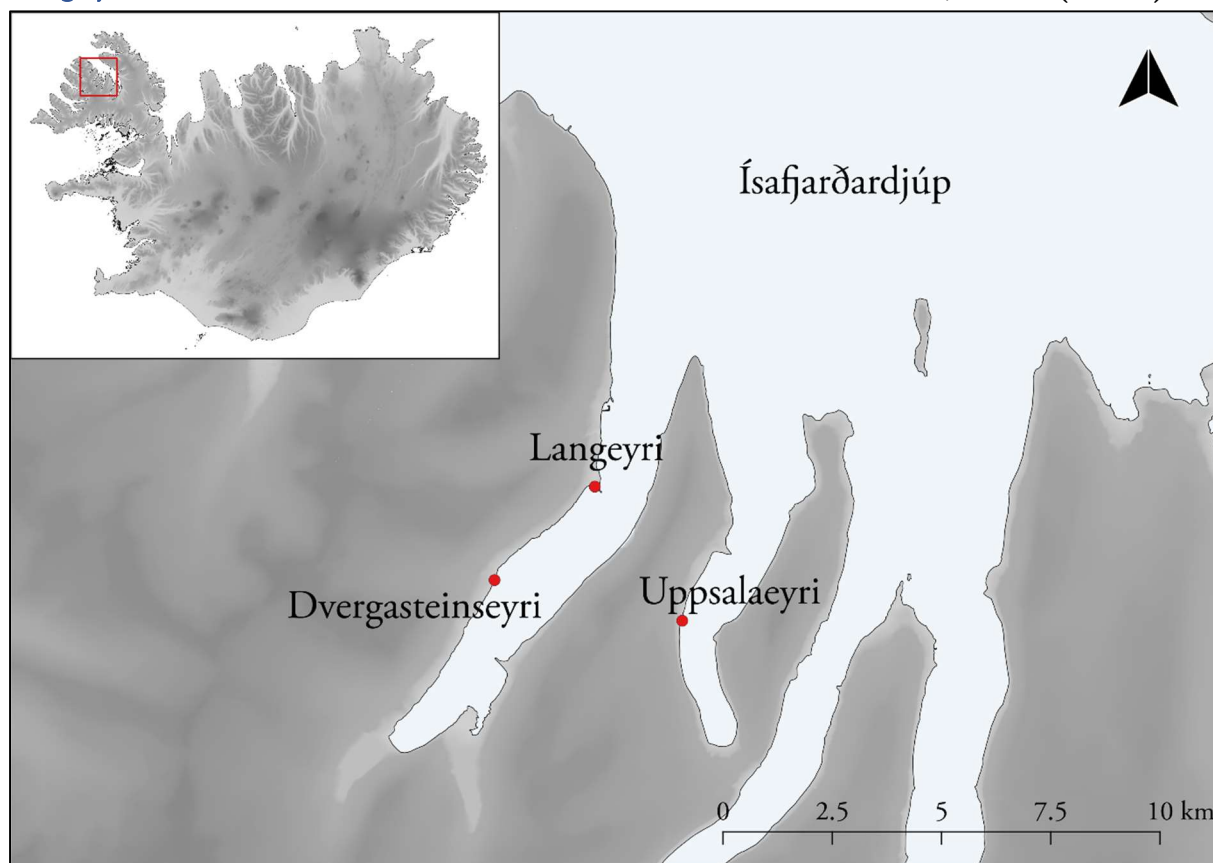
	<i>Gjögur E. Medieval</i>	<i>Akurvík E. Medieval</i>	<i>Gjögur L. Medieval</i>	<i>Akurvík L. Medieval</i>
	NISP	NISP	NISP	NISP
Domestic Mammals	77	2	96	15
Seals	21	26	51	8
Whale	18	67	30	1,528
Birds	7	82	24	124
Fish	8,611	8,200	7,685	93,349
Shellfish	889	545	1366	4,834
total NISP	9,623	8,922	9,252	99,858
Medium terrestrial mammal	207	4	142	23
Small terrestrial mammal	1		1	4
Large terrestrial mammal	16		17	
Unidentifiable mammal fragment	117	44	206	119
Unidentifiable bone fragment	308	859	43	1,085
Total TNF	10,272	9,829	9,661	101,089

Archaeofauna from Gjögur (Krivogorskaya et al 2005, table 2)

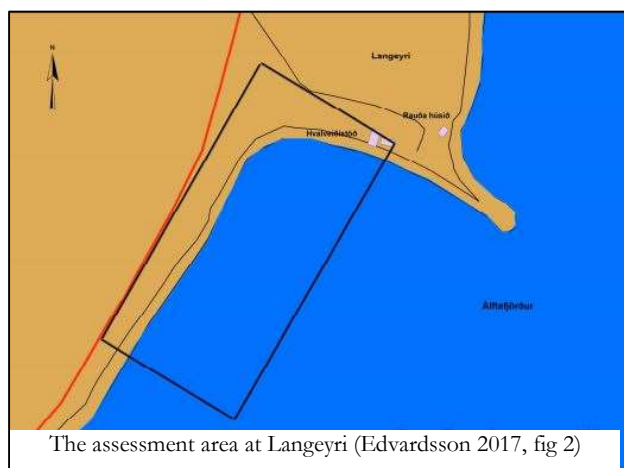
Faunal materials were processed at CUNY. Only samples taken from the lower (early medieval) and upper (late medieval) layers at Gjögur were analysed. Again, there is mention of some worked whalebone, probably the same information mentioned above, but not much other information is given (Krivogorskaya et al. 2005, 5).

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The location of Langeyri



The assessment area at Langeyri (Edvardsson 2017, fig 2)

There is a vague evidence of a 17th century whaling station at Langeyri. In an 18th century travel diary there are mentions of ruins at Langeyri, including a furnace to boil whale blubber. The ruins were said to have belonged to Hansa merchants, but it is a possibility that they relate to some (foreign) 17th century whaling activity (Edvardsson 2017, 9).

In the Norwegian period of whaling in Iceland, between 1883 and 1915 eight whaling stations were established in

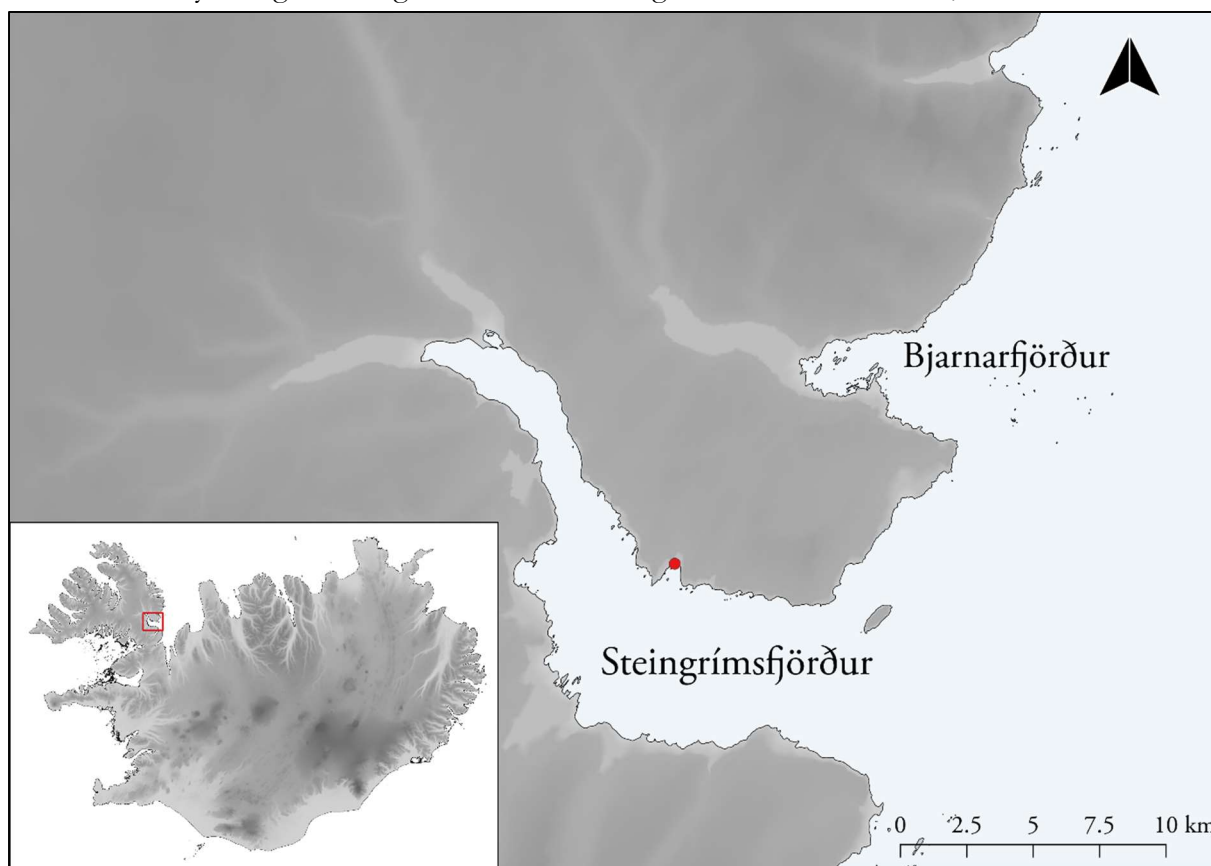
Vestfirðir. The one at Langeyri was built in 1884 and was abandoned in 1904. It was one of the largest stations in Vestfirðir (Edvardsson 2017, 12; Helgason et al 2020, 55, 68). It is situated on a small spit-of-land sticking out into Álftafjörður, less than 50 m from the sea.

Whalebones and 19th century artefacts were collected in an underwater development-led survey by Ragnar Edvardsson (2017) in advance of construction work at Langeyri. Neither the bones nor artefacts from Langeyri have been analysed by a specialist.

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The 17th century foreign whaling station at Strákatangi is located in Hveravík, in



The location of Strákatangi marked with a red dot

Steingrímsfjörður (Vestfirðir), less than 50 m from the sea. No written records mention the site at the time of its operation, and it is first mentioned in a travel diary by O. Olavius (1964, 239) in the late 18th century. The station has been associated with Basque whaling activity in Iceland in the early 17th century.

The site was excavated (open area, single context) between 2004–2010 (Edvardsson and Rafnsson 2011; an English version can be found here: Edvardsson 2015). The excavation was led by Ragnar Edvardsson. At Strákatangi peninsula, five structures associated with whaling activity were identified (Edvardsson 2015). Below is information on the analysed whalebones.

MMB0238–41 come from a surface deposit (Edvardsson and Rafnsson 2005, 11); it is thus undated and has no context with any artefacts unearthed the site.

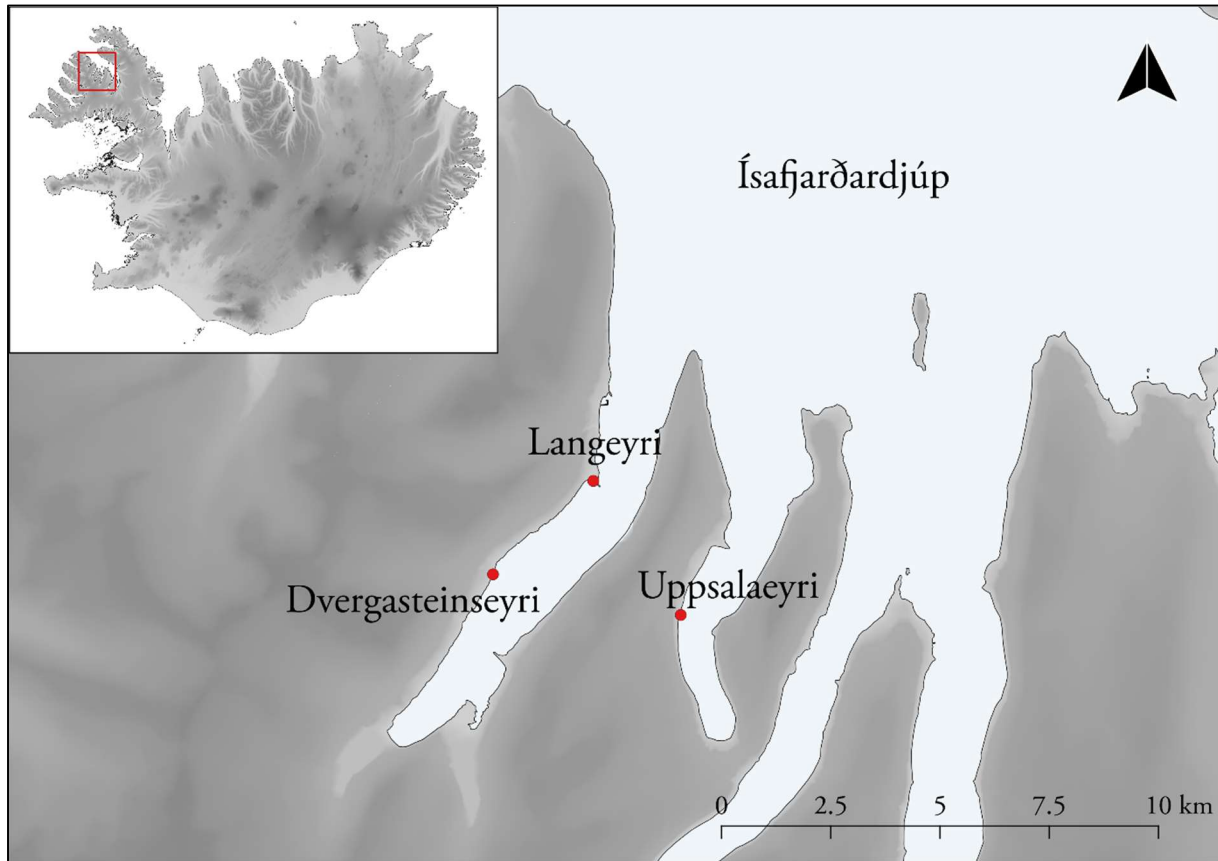
MMB0239 and **MMB0119** are missing a context number and it is unclear where they are from or their date.

Bones from Strákatangi have not yet been analysed by a specialist.

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The location of Uppsalaeyri

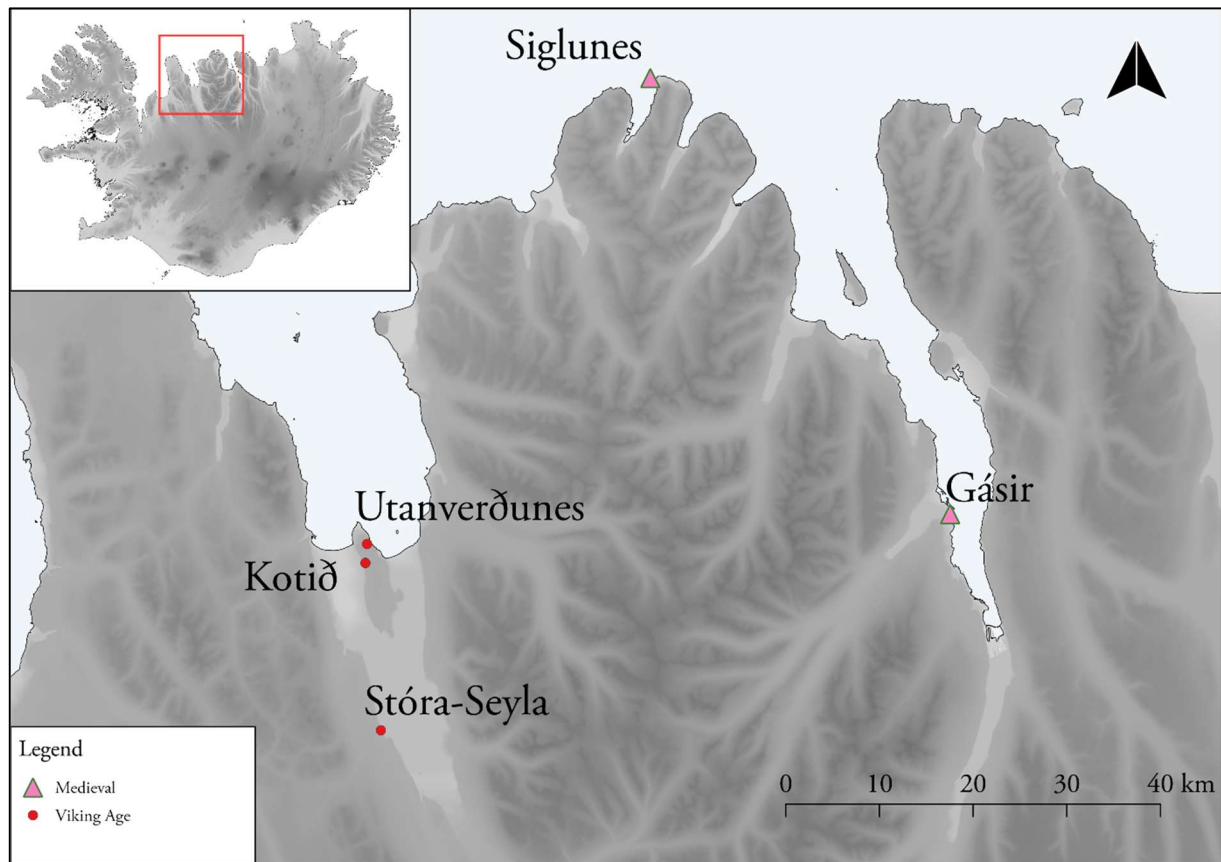
were established in Vestfirðir. The one at Uppsalaeyri was built in 1897 by Hval Industri Aktieselskabet Island and abandoned in 1904 (Helgason et al. 2020, 55, 68). It is on a small spit-of-land sticking out into Seyðisfjörður (fjord), less than 50 m from the sea.

Whalebones were collected in an underwater survey by Ragnar Edvardsson in 2015. An assessment area of 150 x 150 m in size was defined, south of Uppsalaeyri. Within the assessment area, whalebones, and other 19th century artefacts were collected, but they have not yet been analysed (Helgason et al. 2020, 68–71).

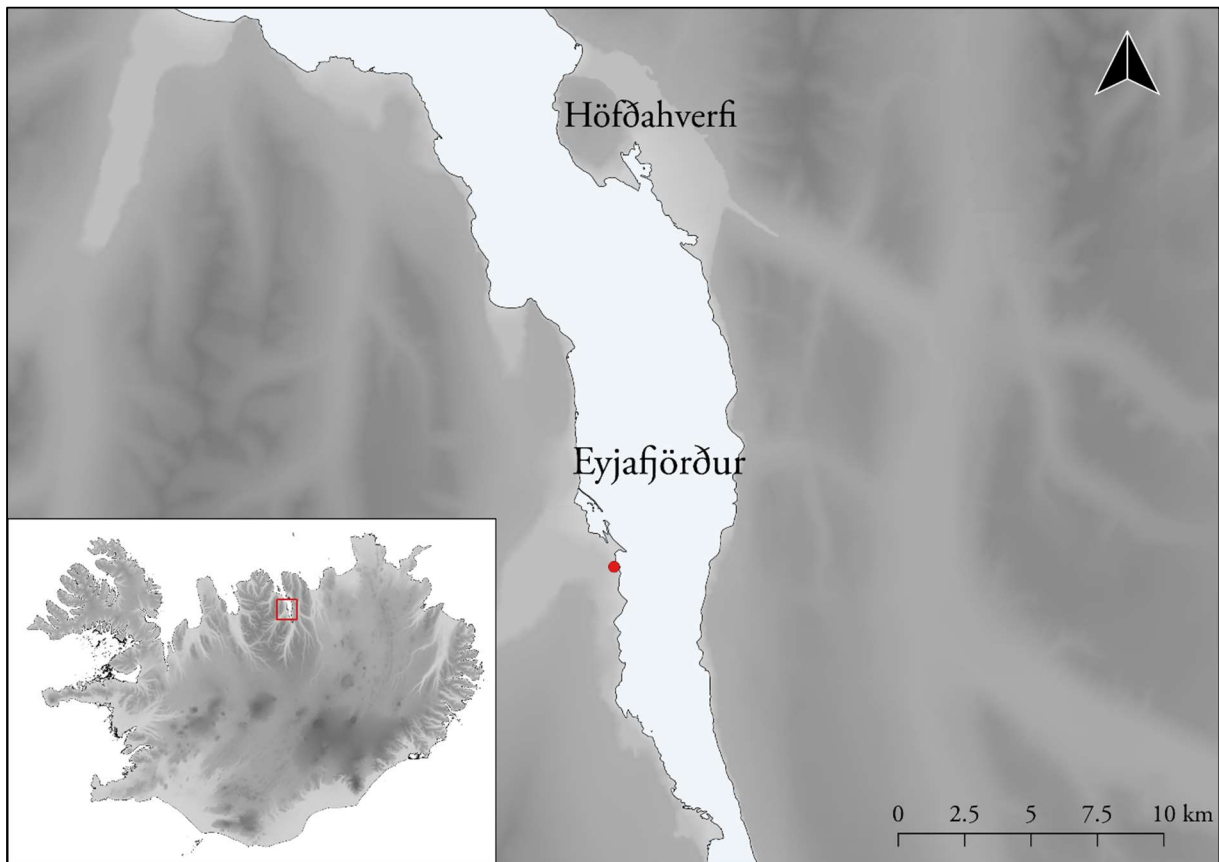
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North



Location of sites in the north of Iceland



The location of Gásir

Gásir is a medieval seasonal merchants' camp, on the western side of Eyjafjörður, North-Iceland, less than 50 m from the sea. The camp is first mentioned in *Prestsaga Guðmundar góða* in AD 1163 (Sturl I, 119), but seems to have been abandoned by the early 15th century. It was definitely out of use by 16th century when Akureyri became the central trading port in Eyjafjörður (Pálsdóttir and Roberts 2006; see also Harrison et al 2008).



A Whale bone artefact from Gásir (Harrison 2009, fig 18)

There has been considerable archaeological research at Gásir: Several large and small trenches were excavated at Gásir in 1907 and four 3 x 1 m trenches were dug in 1986 (Hermannsdóttir 1987). Following a geo- and topographical survey in 2002, an open-area excavation was undertaken at Gásir between 2001–2006 by FSÍ's team members and the same team also unearthed a merchant church (Pálsdóttir and Roberts 2008; Vésteinsson 2008, 2009). Only a small

part of the medieval camp area was excavated. All deposits in the camp area (Area A) date to the 14th century while Area B (the churchyard) dates to the 12th–14th centuries. All midden deposits

Taxon	Aggregated fragment count total
Domestic mammals	
Cow (<i>Bos taurus</i> L.)	720
Horse (<i>Equus caballus</i> L.)	14
Pig (<i>Sus scrofa</i> L.)	28
Dog (<i>Canis lupus familiaris</i> L.)	11
Goat (<i>Capra hircus</i> L.)	16
Sheep (<i>Ovis aries</i> L.)	245
Unidentified caprine	1152
Total caprine	1413
Total domestic	2186
Wild Mammals	
Harp Seal (<i>Pagophilus groenlandicus</i> (Erxleben))	5
Small seal	11
Unidentified seal species	34
Total seal	50
Small cetacean	11
Large cetacean	3
Unidentified whale species	15
Total whale	29
Arctic fox (<i>Vulpes lagopus</i> (L.))	5
Walrus (<i>Odobenus rosmarus</i> (L.))	1
Total wild mammal	85
Birds	
Gyrfalcon (<i>Falco rusticolus</i> L.)	2
Mallard (<i>Anas platyrhynchos</i> L.)	1
Common eider (<i>Somateria mollissima</i> L.)	33
Guillemot family (<i>Uria</i> spp.)	16
Atlantic puffin (<i>Fratercula arctica</i> (L.))	5
Fulmar boreal (<i>Fulmarus glacialis</i> (L.))	0
Gull species (<i>Larus</i> spp.)	4
Razorbill (<i>Alca arctica</i> L.)	5
Mute swan (<i>Cygnus olor</i> (Gmelin))	2
Unidentified bird species	112
Total bird	180
Fish	
Cod (<i>Gadus morhua</i> L.)	427
Haddock (<i>Melanogrammus aeglefinus</i> (L.))	216
Pollack (<i>Pollachius pollachius</i> (L.))	11
Atlantic Halibut (<i>Hippoglossus hippoglossus</i> (L.))	3
Gadid species	1066
Brown trout (<i>Salmo trutta</i> L.)	19
Pleuronectiformes	1
Salmonid species	2
Total fish species identified	1745
Unidentified fish species	4365
Total fish	6110
Mollusca	
Periwinkle (<i>Littorina</i> spp.)	2
Clam (<i>Mya</i> spp.)	46
Unidentified mollusc species	38
Total mollusca	86
Total number of identified species (NISP)	8647
Unidentified large terrestrial mammal	770
Unidentified medium terrestrial mammal	1820
Unidentified small terrestrial mammal	19
Unidentified mammal fragments	6369
Total number of fragments (TNF)	17,625

Gásir's fauna (Harrison et al 2018, table 2)

were dry-sieved through 4-mm mesh. The post-excavation work at Gásir is still on-going; therefore, there is some limit what can be said – still some information can be glimpsed out of ‘raw’ field working data:

FL_WCUMM0064 comes from an unstratified context, and as such there can be nothing said regarding its date or connection to other activities at the site.

FL_WCUMM0059–63 come from the western part of area A, all found in a turf collapse apart from **62** and **63**, which were found on a floor/fireplace. The deposits are dated to the 14th century based on typology and tephrochronology.

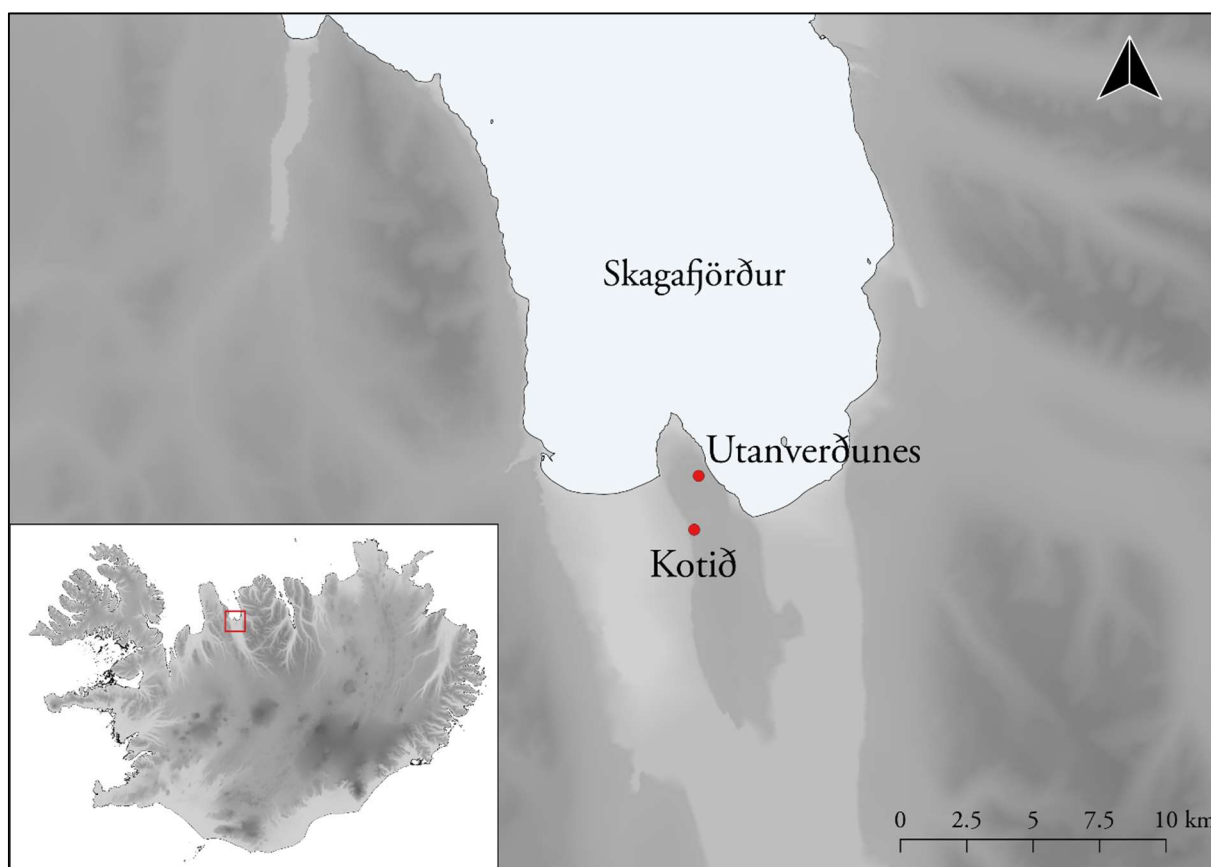
FL_WCUMM0065–69 are from dumping deposits/upcast in area A, from 14th century layers.

The faunal material was analysed at CUNY (Harrison et al 2004; Harrison 2005, 2006; Woollett and McGovern 2003). “Whale remains of smaller sized individuals such as pilot whales, narwhal, beluga or porpoise were analyzed and may have constituted food debris. Some larger-sized whale remains that were most likely used for artifact working were also present in the collection.” (Harrison 2009, 21). Also: “Except for the porpoise-size whales, the majority of whale bones found at Gásir bear marks that derive from bone working. A substantial number of cut-marked cattle horn cores have been recovered from several contexts, and these are most likely to be understood as horn craft-working debris. The Gásir archaeofauna thus suggests that the seasonal trading center was not just a marketplace or warehousing center, but also saw substantial craft work aimed at production and finishing of bone and ivory items for local sale or for shipment to Europe.” (Harrison et al. 2018, 114–115).

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The location of Kotið

Kotið is a low-status farm, formerly in the land of Helluland, c 2,5 km from the sea.

Archaeological evidence points to the site being occupied between c 872 and 1140. The ruins were probably used as a *stekkur* or as a sheep house after its abandonment, perhaps up until the 18th century (Catling et al. 2018, 60; Pálsson 2010, 169). There is no information on Kotið in written records.

Coring and 1 x 1 m / 2 x 2 m test pits were undertaken at Kotið in 2016–2017 as part of the Skagafjörður Church and Settlement Survey (Catlin et al 2017; 2018). Below is information on analysed whalebone from a midden layer.

MMB0119 comes from a midden layer dated to c AD 950. Other finds from the midden include a bone ring pin and a worked lithic fragment.

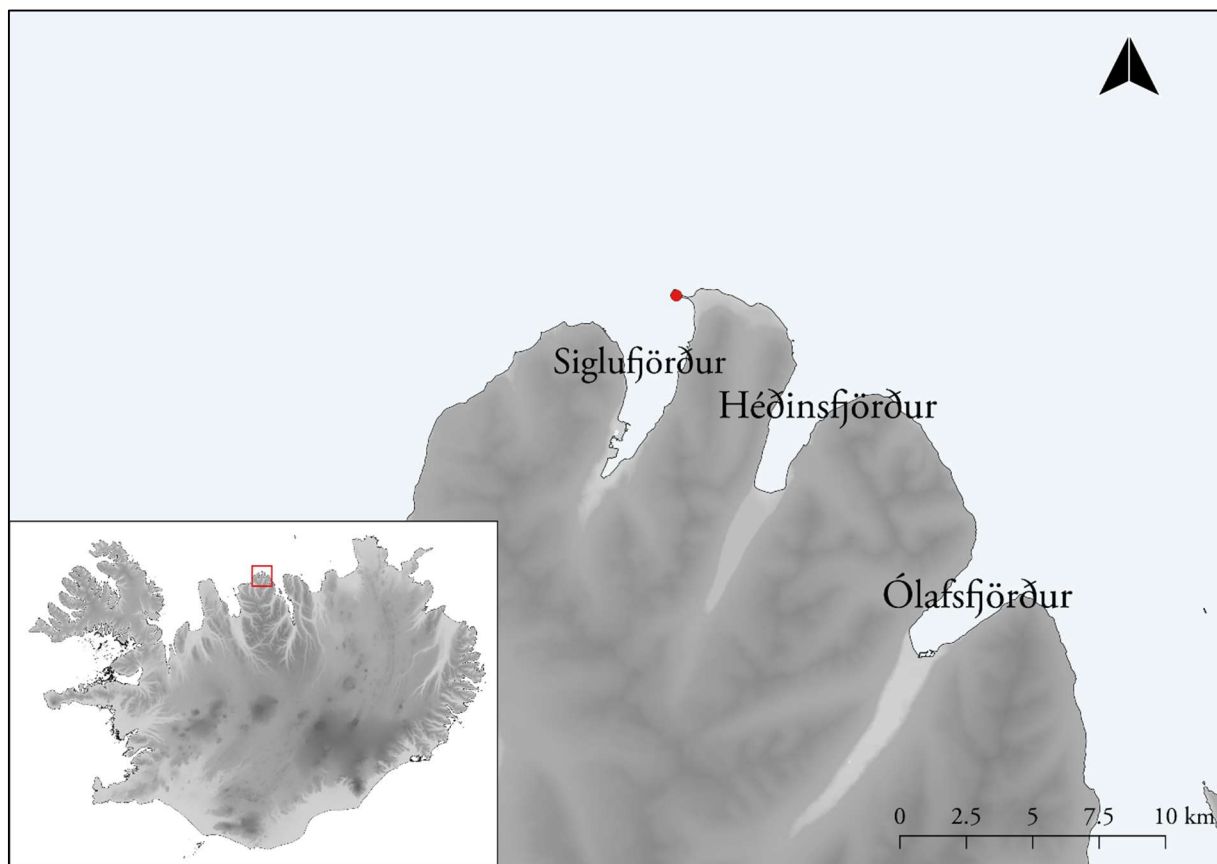
	TOTAL NISP
Domesticates	
<i>Bos taurus</i>	57
<i>Equus caballus</i>	13
<i>Sus scrofa</i>	3
<i>Ovis aries</i>	45
<i>Ovis/Capra sp.</i>	215
SEALS	
<i>Phocid sp.</i>	10
CETACEA	
Small whale/porpoise	10
Cetacea sp.	1
BIRDS	
Wildfowl - sea birds	304
Wildfowl - land birds	28
Bird sp.	351
FISH	
Gadid sp.	614
Salmonid sp.	1
Other Fish	1
Fish sp.indet.	325
MOLLUSCA	
Mollusca sp.	12
TOTAL NISP (identified fragments) =	1,990
Small Terrestrial Mammal	15
Medium Terrestrial Mammal	286
Large Terrestrial Mammal	100
Unidentifiable Fragments	1,661
TOTAL TNF (all fragments)	4,052

Overview of species at Kotið (Cesario 2018, table 1)

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Bones were analysed at CUNY by Grace Cesario (2018) as part of her Phd thesis. “There are also two whale bones that have been worked and chopped. Whalebone is also used in craftworking, though more as a platform or table for working on other materials [...]. Eleven cetacean bones were identified in total. Nine of these are vertebrae from a small cetacean (Figure 15) and they seem to belong to the same individual based on where they were found and their size. The single piece from a larger cetacean is a fragment that is unidentifiable without aDNA analysis. The final piece is a mandible found in 2016. Ancient DNA (aDNA) analysis on this mandible fragment came back as belonging to the dolphin family (Delphinidae) (Szabo, personal communication).“ (Cesario 2018, 8, 18).



The location of Siglunes marked with a red dot

The excavated ruins at Siglunes farm are probably Viking Age/Early medieval fishing booths. They are situated on the southern part of the peninsula, less than 50 m from the sea, but a little more than 1 km from the farmhouse. The fishing booths are not mentioned specifically in any pre-modern records but the Siglunes farm figures widely in medieval and early modern sources as a high-status settlement where the district's parish-church was located until the early 16th century



Excavated mounds marked with a red dot

(Lárusdóttir ed. 2008, 68). Siglunes is mentioned as a major fishing station already in the 13th century and repeatedly after that (Kristjánsson 1982, 67–70).

The mounds are heavily damaged by coastal erosion and much of the archaeology at the peninsula is damaged. The site was originally surveyed in 2006 (Lárusdóttir et al 2008). A preliminary survey of the site was done in 2011 and eroding ruins mapped, and a small-scale midden excavation undertaken on several mounds. All layers were 100% dry sieved on site through a 4 mm mesh (Lárusdóttir et al 2012; 2014). Below is information on analysed whalebones.

FL_WCUMM0024–26, 48–52 come from mound B - one of the larger mounds at the site, c 15 m in diameter (3–4 m lost to the sea) and date between the 10th and 12th century (Harrison 2014, 4). The mound itself is dated from pre-AD 1104 to c 1300.

FL_WCUMM0020–22, 28, 40–42, 43, 46, 54, come from mound B (see above) – dated between 1104 and 1300 based on stratigraphy and tephra layers. Some worked whalebones were also found, one of which is a possible gaming piece.

FL_WCUMM0057–58 come from mound D (medieval period), most likely from mixed surface debris. Mound D was c 10 m in diameter when surveyed in 2006 but seems to be eroding fast and very little remained of the mound when it was excavated in 2011–2013. A whalebone, possibly structural, was beneath the wall of the structure. The southern part of the mound has also been significantly truncated by a ‘large’ subcircular pit, containing modern artefacts (Lárusdóttir et al. 2012, 15; see also Lárusdóttir et al. 2008, 8).

FL_WCUMM0056 also comes from mound D (see above) but is most likely from early modern times based on stratigraphy (comes from a surface layer).

FL_WCUMM0023, 44–45 come from mound E and were found in a post-1300 context based on stratigraphy and tephra layers – based on radiocarbon dating they are from the 14th century (Harrison 2014, 4). The mound is c 10 m long (E-W), but much of the mound seems have eroded away, dated 1104 and somewhat post-1300 based on tephra layers (Lárusdóttir 2012, 17). The mound consists of an accumulation of cultural material. Structural features or extensive middens/bones are not present. Extensive cultural layers are visible above the 1300 tephra (Lárusdóttir 2012, 17).

FL_WCUMM0055 comes from mound F and is most likely of modern origin based on stratigraphy. Mound F is the remains of a 6 x 4 m (N-S) structure. The southern part of the ruin had eroded. Activities that took place in/around the structure included occupation and some burning, possibly for cooking. It is a pre-1104 structure but in later times (19th–20th century?) a boat house/or sheep-house was erected on top of the Viking Age structure (Lárusdóttir 2012, 8). The bone comes from this later phase.

MMB0271–72 and **FL_WCUMM0053** are without context, so it is unclear where they were found or what their date is.

Scientific Names	English Common Names	10th-12th c. NISP	10th-12th c. NISP %	13th c. NISP	13th c. NISP %	14th c. NISP	14th c. NISP %
<i>Phoca vitulina</i>	common or harbor seal	2	7.14				
<i>Phoca groenlandica</i>	harp seal			1	3.57		
Large phocid	large seal	2	7.14				
Phocid species	seal species	19	67.86	18	64.29	3	15.79
Large cetacean	Great whale	1	3.57				
Small cetacean/porpoise	small-sized whale/porpoise	1	3.57	2	7.14		
Cetacea species	whale species	3	10.71	7	25	16	84.21

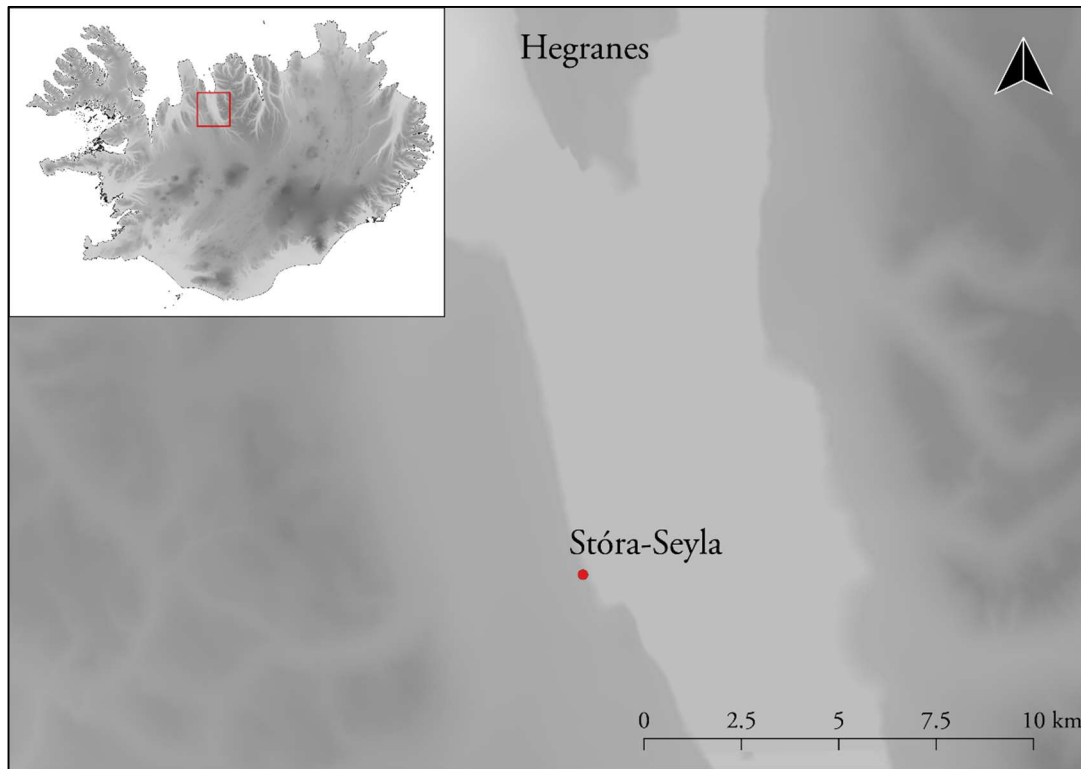
Wild Mammal Species recovered from Mounds B and E (Harrison 2014, table 2)

Parts of the animal bone assemblage have been analysed by Ramona Harrison, at CUNY laboratories in New York and Brooklyn (see Harrison 2014, also as appendices to Lárusdóttir's report).

Mainly, the 14th century fauna from mound E has been analysed. All available tables and figures represent fauna from that mound. "With exception of the 14th c. archaeofauna, the Number of Identified Specimens (NISP) is very low per occupation period: 247 NISP for the 10th – 12th c. phase, and 278 NISP for the 13th c. collection [...]. The whale elements included in this Wild Mammals NISP table are only those not obviously modified for artifact production. Besides these more intact whale elements, hundreds of splinters have been recovered as part of whale bone working debris. Selected elements were used for an upcoming aDNA study by Dr. Cecilia Anderung, University of Uppsala." (Harrison 2014, 6, 11).

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The location of Stóra-Seyla

Stóra-Seyla is a (very) high-status farm in Langholt, Skagafjörður, c 20 km from the sea. Archaeological evidence points to the site being settled fairly soon after *landnám* (Bolender et al 2011, 86). A church at Stóra-Seyla is first mentioned in Sturlunga saga in 1255 (**Sturl** I, 516), and there was still a chapel there in the beginning of the 18th century (**JÁM** IX, 90; Zoëga and Sigurðsson 2010, 102–103). The farm was also an assembly site for the district in later-historical times (Björnsson 1972, 110).

The Viking Age farmstead of Stóra-Seyla was excavated in an open area (single context) as a part of the Skagafjörður Archaeological Settlement Survey in the late 2010s (SASS – Bolender 2008; Bolender et al. 2009; on midden excavation see Steinberg et al. 2008), and the church cemetery was excavated there as well (See Zoëga 2014 for an English version of the archaeological research in Skagafjörður). The farm was abandoned/relocated before 1104 so all deposits at this site date to the 10th or 11th centuries. Concerning the sieving program at the midden excavation: “What was excavated [...] was screened through ¼ inch mesh. Screen detritus was retained for examination in the lab. Flotation and micro-morphological samples were also taken.” (Steinberg et al 2008, 2). Below is information on analysed whalebones.

Other Mammals							
Small terrestrial mammal	0	2	0	13	3	2	20
Medium terrestrial mammal	64	108	69	499	158	200	1098
Large terrestrial mammal	27	60	37	116	45	55	340
Indeterminate mammal	627	2228	204	2393	439	1245	7136
Indeterminate	0	0	0	347	43	0	390
Total	955	2543	450	4114	809	1730	10575

Part of Stóra-Seyla's fauna, Area C and D (Cesario 2019, table 1)

MMB0117 comes from a midden layer associated with the farm. Dated to pre-950 AD based on stratigraphy and tephra layers. A nearby stream had undercut some of the midden.

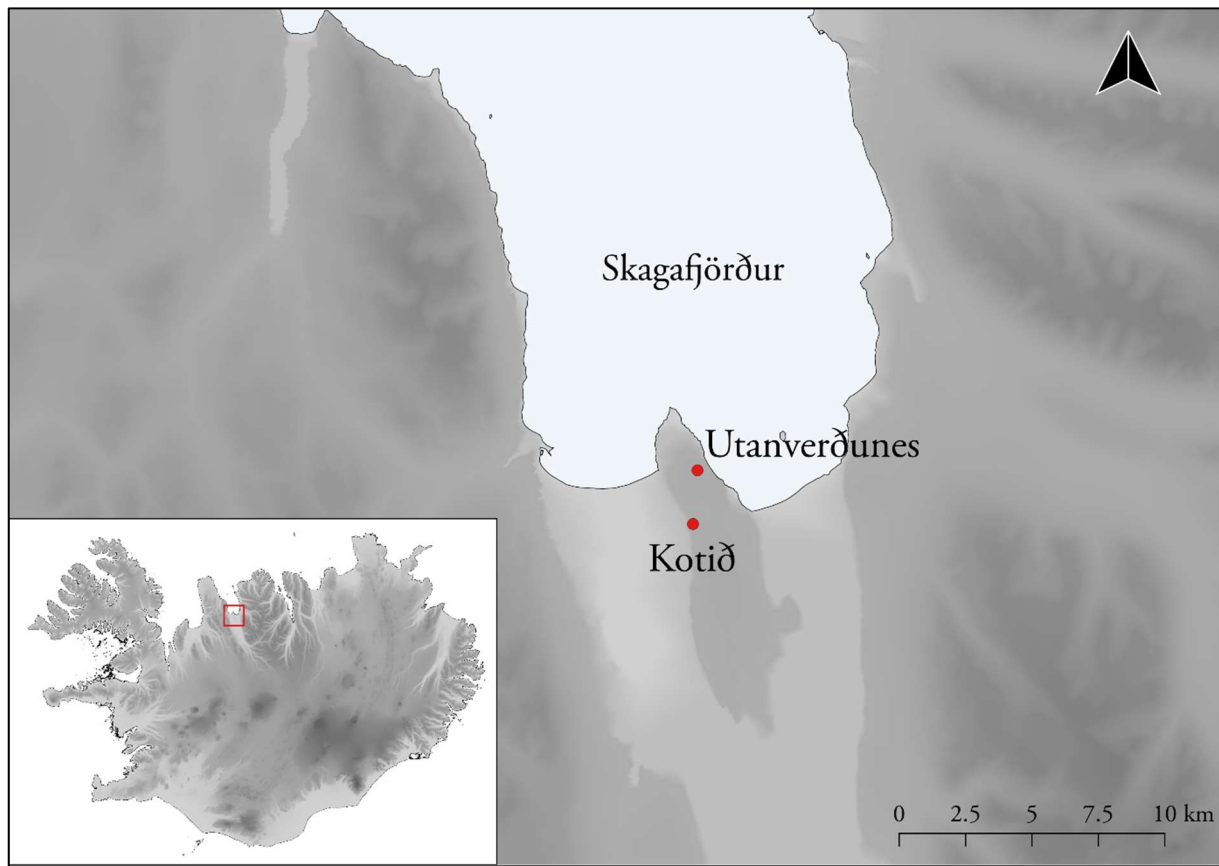
Bones were analysed at CUNY by Grace Cesario (2019) as part of her Phd thesis: “There were two whale bones in this archaeofauna. One was clearly an artefact; the other piece is a fragment of spongy bone, likely broken off a large piece used as a tool. These bones do not show any indication of butchery, so we cannot know if they were eating whale. However, it is clear that they had access to whale bones right at settlement, as the unworked piece is from a pre-950 A.D. context. These bones could have been scavenged from the beach for use as tools or in craftworking. It is also possible that the bones are from a beached whale or one that was purposely hunted and killed for its meat.” (Cesario 2019, 29)



Whale bone artefact (Clamp or vice?) (Cesario 2019, fig 22)

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The location of Utanverðunes

Utanverðunes is a middle-status farm in Skagafjörður, c 500 m from the sea. The farm is first mentioned in 1374 (**DI** III, 278–279). In *Jarðabók Árna Magnússonar og Páls Vídalíns* 1713 it says that the farm has been abandoned for six years (**JÁM** IX, 61) but it seems to have been occupied again soon after 1713 (Pálsson 2010, 173–174).

Two 1 x 1 m tests pits were excavated near the farm with a single context method (Bolender et al. 2017, 30–31) but faunal remains were only found in one of the test pits: “Most of the bones come from one context, [116], which was collected nearly in its entirety and then wet screened to retrieve all of the small bones. This context was full of mostly bird remains, though some domesticated mammals were also identified [...]” (Cesario 2018, 7). Below is information on analysed whalebones.

Pre-1104	Helluland	Ásgrímsstaðir	Egg	Rein		Útanverðunes	Keta	Hendiðkot	Næfursstaðir
DOMESTICATES				TP1	TP2				
<i>Bos taurus</i>	0	0	20	0	0	6	2	3	15
<i>Equus caballus</i>	0	1	0	0	0	0	0	0	0
<i>Canis familiaris</i>	0	0	0	0	0	1	0	0	0
<i>Sus scrofa</i>	1	0	0	0	0	0	0	0	0
<i>Ovis aries</i>	4	0	0	0	2	0	2	0	1
<i>Capra hircus</i>	0	0	0	0	0	0	0	0	0
<i>Ovis/Capra</i> sp.	0	1	12	0	0	4	13	22	9
SEALS									
Phocid sp.	0	0	0	1	0	0	0	0	1
CETACEA									
Cetacea sp.	0	0	0	0	0	3	0	0	0
BIRDS									
Wildfowl - sea birds	5	0	1	1	0	198	3	5	5
Wildfowl - land birds	0	0	0	0	0	0	0	1	0
Bird sp.	5	2	16	3	1	291	1	15	9
FISH									
Gadid sp.	2	0	0	0	3	0	0	12	32
Fish sp.indet.	11	0	0	0	9	1	2	29	141
MOLLUSCA									
Mollusca sp.	1	0	0	2	0	0	0	2	45
TOTAL NISP=	29	4	49	7	15	504	22	89	259
Medium Terrestrial Mammal	20	0	5	15	3	27	24	33	54
Large Terrestrial Mammal	4	0	3	3	0	19	9	0	12
Unidentified Frags	47	0	22	10	9	333	32	265	113
TOTAL TNF=	100	4	79	35	27	883	87	387	496

Fauna from SASS project (Cesario 2018, table 1)

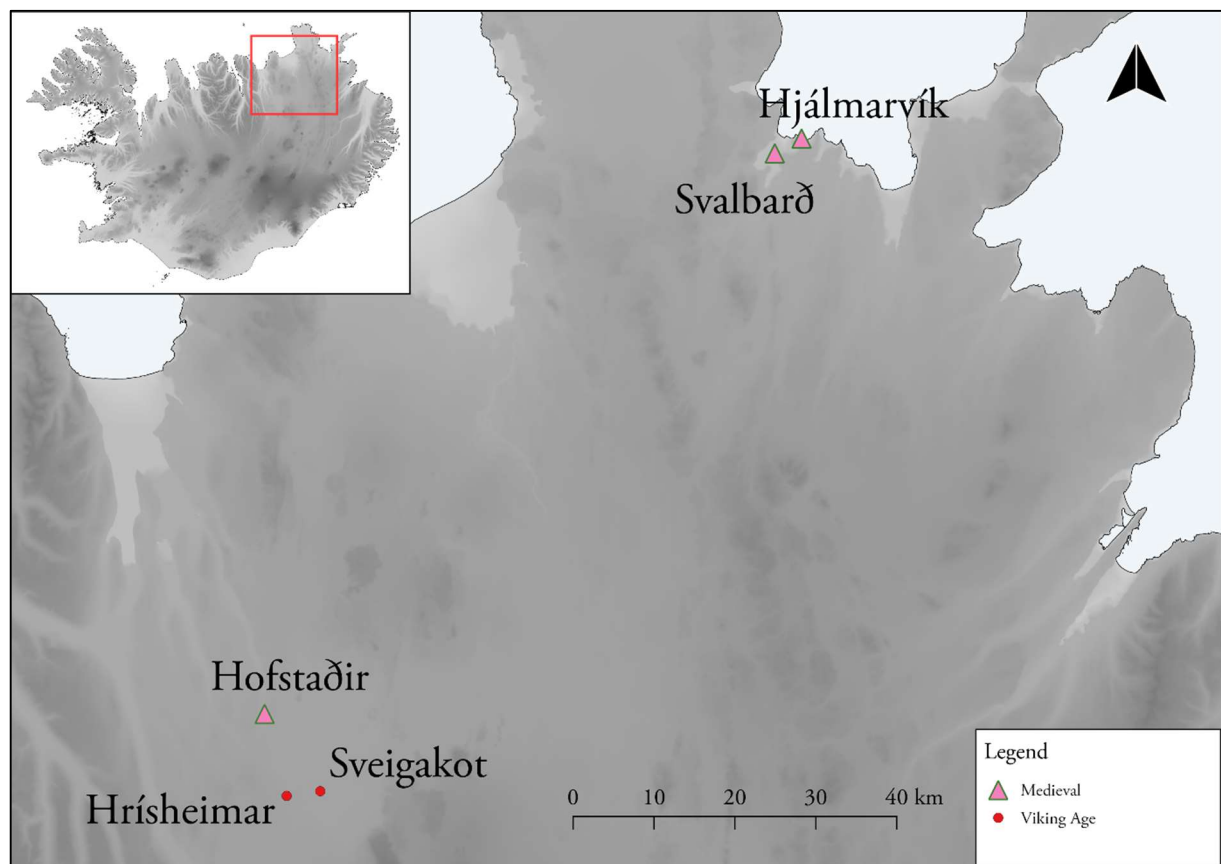
MMB0120–121 come from fill layers between midden layers, dated with stratigraphy and tephra layers as pre-1104 contexts.

Bones were analysed at CUNY by Grace Cesario (2018) as part of her Phd thesis: “The presence of whale bone fragments does not necessarily mean that people were hunting whales specifically, but often represent scavenged beach finds. Whalebones are large and often used as surfaces, like chopping blocks, or raw material for craft projects. Whales also get stranded and washed ashore, and whoever has legal rights to the whale stranding spot can take its meat.” (Cesario 2018, 7).

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North-East

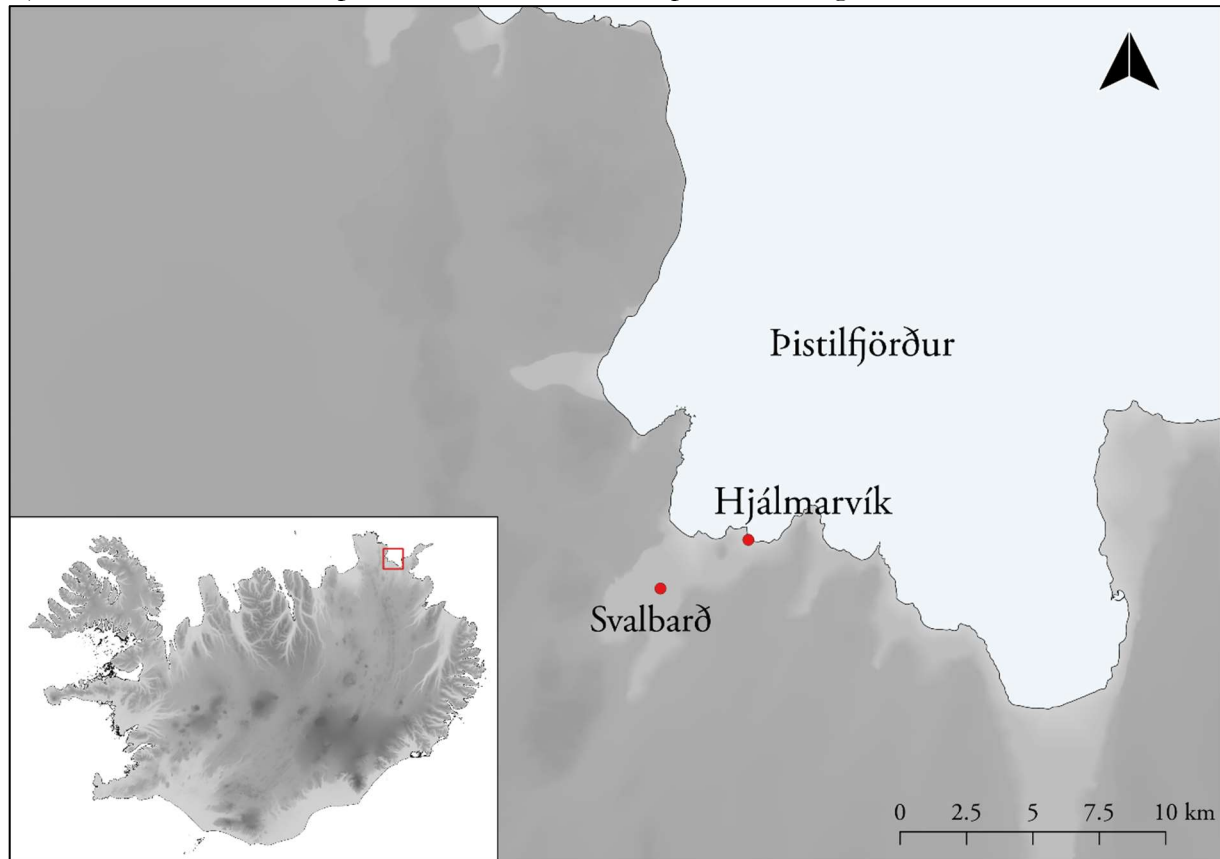


Location of sites in north-east Iceland

Hjálmarvík

651096, 640197 (ISN93)

Hjálmarvík is low status dependent farm which was a part of the high-status Svalbarð estate in



The location of Hjálmarvík farm

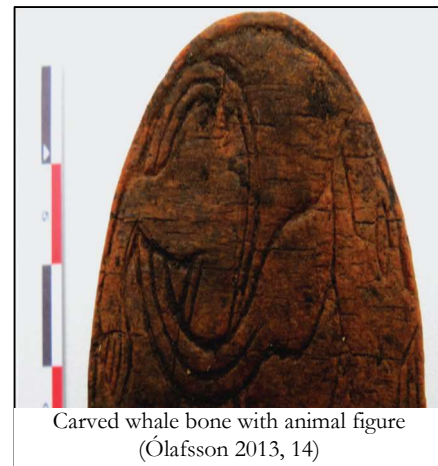
Northeast Iceland. The site is less than 50 m from the sea. Hjálmarvík is first mentioned in 1318 (**DI** II, 425–426) and the record indicates that the then subsidiary farm may initially have been a separate property. It seems to have been farmed more or less continuously as a subsidiary unit (**JÁM** XI, 361) until it was abandoned in 1783 following the Laki eruption (see Gísladóttir et al. 2013, 92–94).

In 2009 a possible farm mound was cored at Hjálmarvík, revealing cultural layers from the Viking Age (Gísladóttir and Wollett 2010, 37–38). The Hjálmarvík midden was excavated in 2012–2014 as a part of the Svalbarð project (Gísladóttir et al 2013). A trench was opened over the midden (single context) and all layers were sieved with a 6 mm mesh. The excavation's aim was to dig through a substantial proportion of Hjálmarvík midden. Of interest here is that gaming pieces (find no 2, 26, and 27) were found, but in a unstratified or 'young' context (Gísladóttir et al. 2010, 39). Below is information on analysed whalebones.

MMB0010–12, 14–15, 16–18 come from midden layers dated between 1300–1477 based on stratigraphy (tephra). An impressive artefact made from whalebone with carved animal figures was also found.

MMB0001–009, 013, 019–024 come from midden layers dated before 1300 based on stratigraphy (tephra). Below 1300 tephra gaming bone pieces were found, and some worked whalebones.

Faunal materials were processed at Univ' of Laval Final report and were analysed Céline Dupont-Hébert as a part of her PhD thesis: “Un grand nombre d’ossements de baleine de petite et grande taille sont présents dans la plupart des dépositions du dépotoir, témoignant de l’importance de l’exploitation des ressources marines [...]”.



Espèces	Nom scientifique	TNF (AD 940- 1477)	TNF (AD 1477- XIX ^e siècle)	TNF total	% du TNF total
Phoque commun	<i>Phoca vitulina</i>	202	13	215	0,2%
Phoque du Groenland	<i>Phoca groenlandica</i>	2	4	6	Non significatif
Phoque gris	<i>Halichoerus grypus</i>	1	0	1	Non significatif
Grand cachalot	<i>Physeter macrocephalus</i>	2	0	2	Non significatif
Phocidé non identifié	<i>Phocidé</i>	156	1	157	0,2%
Petit phocidé	-	3 085	192	3 277	4%
Grand phocidé	-	14	0	14	Non significatif
Cétacé non identifié	<i>Cétacé</i>	4 955	146	5 101	6%
Grand cétacé	-	19	1	20	Non significatif
Petit cétacé	-	84	19	103	0,1%
Sous-totaux		8 520	376	8 896	~11%

Part of Hjalmarvík fauna. TNF 86. 370 (Dupont-Hébert 2018, table 6)

Autrement, ce sont les restes fauniques associés à la famille des cétacés qui dominent parmi les mammifères marins. Le grand cachalot (*Physeter macrocephalus*) y est représenté par deux dents seulement, mais leur identification serait à confirmer à l’aide de comparatifs en taille réelle (figure 52). Les autres espèces présentes n’ont pu être identifiées par l’analyse zooarchéologique. Toutefois, la présence de certaines espèces est attestée par les analyses sur l’ADN ancien. Grâce aux résultats préliminaires de ces analyses (Szabo et al. 2018), l’identification des espèces suivantes a pu être confirmée : la baleine à bosse (*Megaptera novaeangliae*), la baleine franche (*Eubalaena glacialis*), la baleine bleue (*Balaenoptera musculus*), 133 l’hyperoodon boréal (*Hyperoodon ampullatus*), la baleine grise (*Eschrichtius robustus*) et le dauphin à bec blanc (*Lagenorhynchus albirostris*). Dans cette diversité, c’est la baleine grise qui retient l’attention puisqu’elle est aujourd’hui éteinte dans l’Atlantique Nord et que sa distribution se limite actuellement au Pacifique (Bryant 1995). Selon Bryant (1995), cette espèce de baleine aurait fait l’objet d’une chasse intensive au cours du Moyen Âge et jusqu’au XVII^e siècle. Les biologistes,

qui ont d’abord découvert l’espèce à l’aide de spécimens fossiles, et les historiens s’accordent sur ce point. Fait étonnant, la plus récente mention de cette espèce dans les sources historiques appartient à un Islandais, Jón Gudmundsson qui, vers AD 1640, l’aurait dessinée, avec de nombreuses caractéristiques diagnostiques, et nommée « sandloegja » (ang. Sand-lier) (Bryant 1995 : 859; Hermannsson 1924). Des analyses radiocarbone pratiquées sur des ossements archéologiques au Royaume-Uni appuient une disparition au plus tard au début du XVIII^e siècle (Bryant 1995 : 860).“ (Dupont-Hébert 2018, 122, 132–133; see also 215–217).

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Hofstaðir

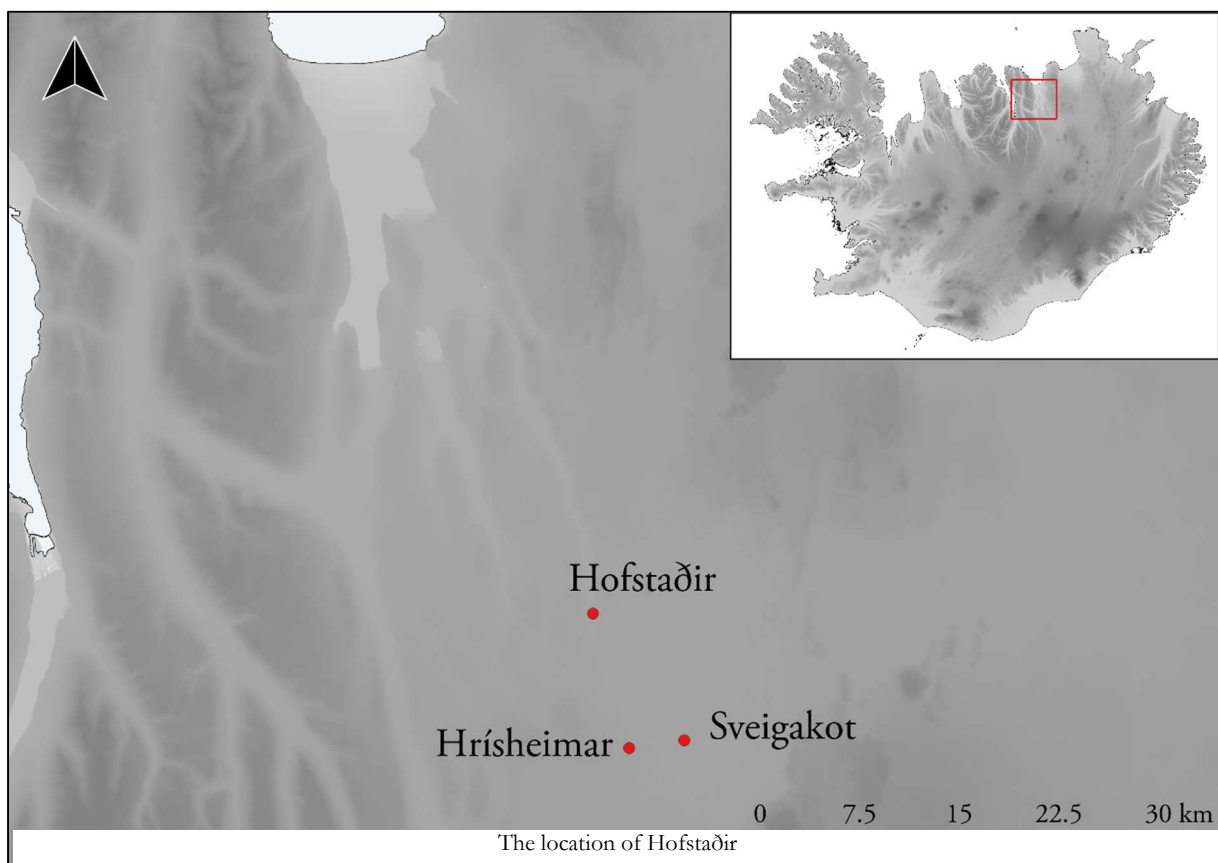
584715, 569088 (ISN93)

Hofstaðir, in Mývatnssveit, Northeast Iceland, is the site of a Viking Age feasting hall, and a partly contemporary Christian cemetery and church. It is an inland site, c 45 km from the sea. The feasting hall is dated to between 940 and c. 1050 (Lucas 2009) and the cemetery was in use from c. 950 to the 13th century (Gestsdóttir 2016). A chapel is mentioned in the earliest record of the farm from 1477 (**DI VI**, 110).

The rich research history of Hofstaðir and is summarised by Friðriksson and Lucas (2009, 1–10). In the last decade of 20th century an open area (single context) excavation took place at feasting hall in Hofstaðir (Lucas 2009). The churchyard was excavated in 2004–15, and materials from the excavation are currently being analysed (Gestsdóttir 2016). There is also an on-going archaeological research at another Viking Age farm at Hofstaðir (Dávíðsdóttir and Vésteinsson 2018). Much of the whalebone comes from a 14th century midden near the Hofstaðir's chapel (Isaksen and Gestsdóttir 2012) as well as from middens associated with the Viking Age feasting hall. Below is information on analysed whalebones.

MMB0146 comes from a surface layer, modern (19th century) from the 'feasting hall area' at Hofstaðir.

MMB0122–25, 28–136, 138–41, 69 come from midden layers immediately post-dating the H1300 tephra



near the chapel. Several animal bones were collected, mainly caprines, as well as artefacts, which are currently being analysed.

MMB0126 come from phase II of a midden deposit after the post-940 Feature G – a pithouse – was abandoned, no later than 980. Almost all artefacts found were loomweights (most likely *in situ* parts of a loom). After the abandonment of the pit house its ruin used as a midden, probably from structure A5 (Sunken floored building I). Radiocarbon dates from bones return a date spanning late 10th/early 11th century. Over 46,000 fragments of animal bones were collected along with some finds, such as nails and beads.

Bones from the Viking Age feasting hall were analysed by Tom McGovern (2009). “The “Small cetacean” bone identified could come from a porpoise (porpoise bone has been identified at the nearby site of Sveigakot) or one of the smaller toothed whales. Whale “species indeterminate” fragments may be the product of craft working rather than food preparation, as whalebone was a widely employed raw material for many artifacts. The single whale fragment from Phase III is in fact a fragment of vertebrae used as a chopping block.” (McGovern 2009, 186). Below is a table from McGovern that shows an overview of species present at Hofstaðir.

[illegible]

Charr (<i>Salvelinus alpinus</i>)	-	-	-	-	-	-	-	717	1406	2
Trout (<i>Salmo trutta</i>)	-	-	-	-	-	-	-	3582	4063	31
Salmon (<i>Salmo salar</i>)	-	-	-	-	-	-	-	-	4	53
Salmonid sp	-	-	-	-	-	-	-	2084	3446	-
Cod (<i>Gadus morhua</i>)	-	-	-	-	-	-	-	481	873	12
Haddock (<i>Melanogr. aeglefi</i>)	-	-	-	-	-	-	-	204	252	2
Saithe (<i>Pollachius vir.</i>)	-	-	-	-	-	-	-	22	36	-
Ling (Brosme b.)	-	-	-	-	-	-	-	3	5	-
Gadid sp	-	-	-	-	-	-	-	1090	1552	16
Halibut (<i>Hippoglossus hipp.</i>)	-	-	-	-	-	-	-	-	3	-
Wolf fish (<i>Anarcho. lupus</i>)	-	-	-	-	-	-	-	2	1	-
Flatfish sp.	-	-	-	-	-	-	-	2	-	-
Fish species indeterminate	-	-	-	-	-	-	-	1761	4190	55
Mollusca, Arthropods, Gastropods										
Mussel (<i>Mytilus edulis</i>)	-	-	-	-	-	-	-	307	32	-
Clam (<i>Mya sp</i>)	-	-	-	-	-	-	-	30	17	-
Snail (<i>Radix peregrina</i>)	-	-	-	-	-	-	-	34	1	-
Barnacle (Cirripedia sp.)	-	-	-	-	-	-	-	-	1	-
Mollusca sp	-	-	-	-	-	-	-	46	437	-
total NISP	51	1	3	15	0	0	8	12913	19411	1538
Large Terrestrial Mammal	12	-	3	3	-	-	1	595	894	338
Medium Terrestrial Mammal	28	-	-	38	9	2	6	2640	3641	805
Small Terrestrial Mammal	-	-	-	-	-	-	-	16	87	-
Unidentified Mammal Fragment	138	-	12	154	34	10	24	12013	22072	3623
total TNF	229	1	18	210	43	12	39	28177	46105	6304

HST group 5114	circa 1300 AD	NISP	% total	% group
Domestic Mammals				
Bos taurus Dom.	Cattle	426	19.55	21.85
Equus cab. Dom.	Horse	14	0.64	0.72
Canis fam. Dom.	Dog	20	0.92	1.03
Felis dom. Dom.	Cat	3	0.14	0.15
Ovis aries Dom.	Sheep	185	8.49	9.49
Ovis/Capra indet	Caprine	1302	59.75	66.77
	total caprine	1487	68.24	
	total domestic	1950	89.49	
Whales				
	Large whale sized	3	0.14	
	Porpoise sized	36	1.65	
	Whale sp. Indet.	6	0.28	
	total whale	45	2.07	
Seals				
P. groenlandicus	Harp seal	21	0.96	
Phoca vitulina	Harbor seal	1	0.05	
Phocid sp. Indet.	Seal sp. Indet.	158	7.25	
	all seals	180	8.26	
Fox				
	Arctic fox	3	0.14	
Birds				
Lagopus mutus	Ptarmigan	1	0.05	
Cygnus sp.	Swan	1	0.05	
	Bird sp. Indet.	3	0.14	
	all birds	5	0.23	
Fish				
Melanogr. a.	Haddock	9	0.41	
Gadid sp.	Cod family	11	0.50	
Salmonid sp.	Trout or Charr	1	0.05	
	Fish sp. Indet.	3	0.14	
	all fish	24	1.10	
	NISP total	2,179		
	large terr. Mammal	745		
	medium terr. Mammal	2,428		
	unident. Fragment	4,567		
	TNF total	9,919		

Overview of the species present at the midden near the chapel (McGovern et al 2013 table 1).

Animal bones from the Hofstaðir church are currently being analysed at CUNY. Analyses have however been carried out on a discrete assemblage from midden A (McGovern et al. 2013): “Many of these fragments are fragments of artifacts and tool making debris and can usually only be identified as whale or occasionally great whale bone. However, as noted above the Hofstaðir (5114) archaeofauna also contains bones of at least one and possibly more porpoise-sized cetaceans, mainly represented by thoracic and caudal vertebrae (most showing chopping marks) and a toothless fragment of a lower jaw [...]. Samples of the whale bone recovered in 2011 have been sent for potential aDNA analysis to Dr. Cecilia Anderung at the University of Uppsala [...]. The relatively large number of marine mammal bones, including a substantial number of harp seals associated with drift ice raises immediate questions about changes in climate and marine resource use on this inland farm. The evidence for extreme levels of predepositional bone processing (by both humans and dogs) further suggests some level of hunger or nutritional stress, and the unique collection of dog and cat remains from animals apparently deliberately

put down seems to reinforce a sense of a “hard times” scenario at Hofstaðir in the late 13th - early 14th century.” (McGovern et al. 2013, 18, 20).

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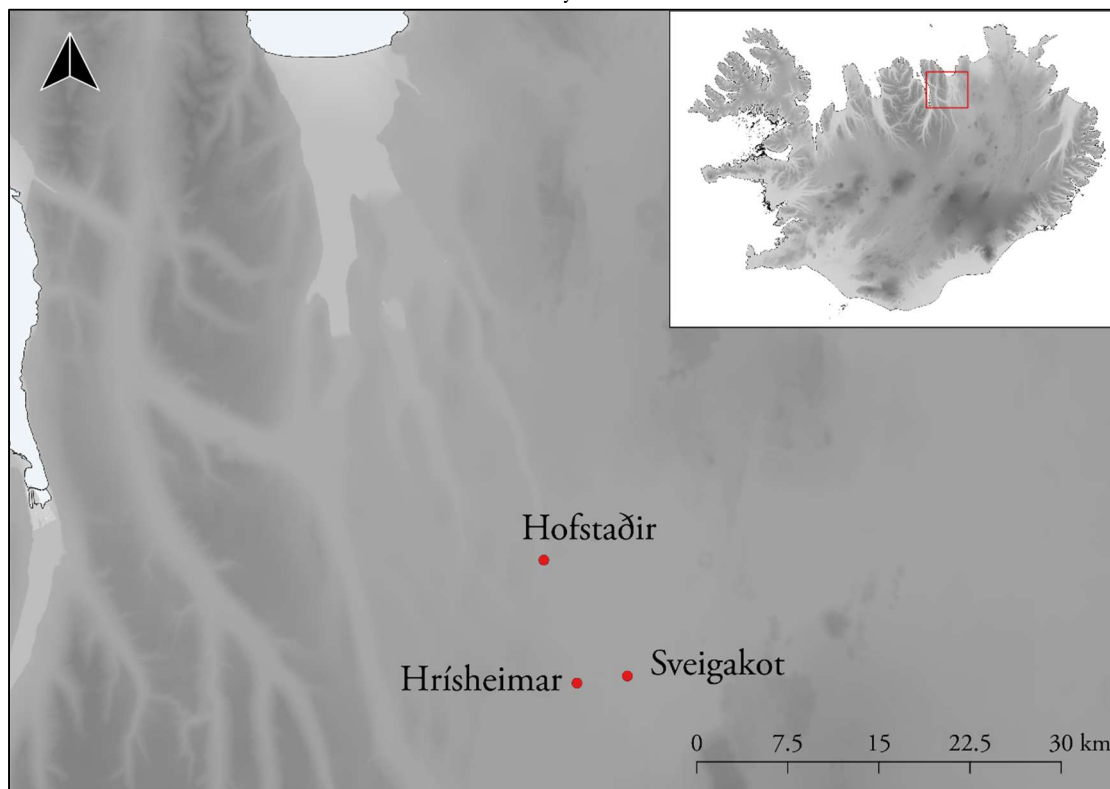
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Hrísheimar

587444, 558956 (ISN93)

Hrísheimar is a middle-status medieval farm in Mývatnssveit NE-Iceland and is c 50 km from the



The location of Hrísheimar

sea. The site was in use from the late 9th to the 12th century and is not mentioned in any written records.

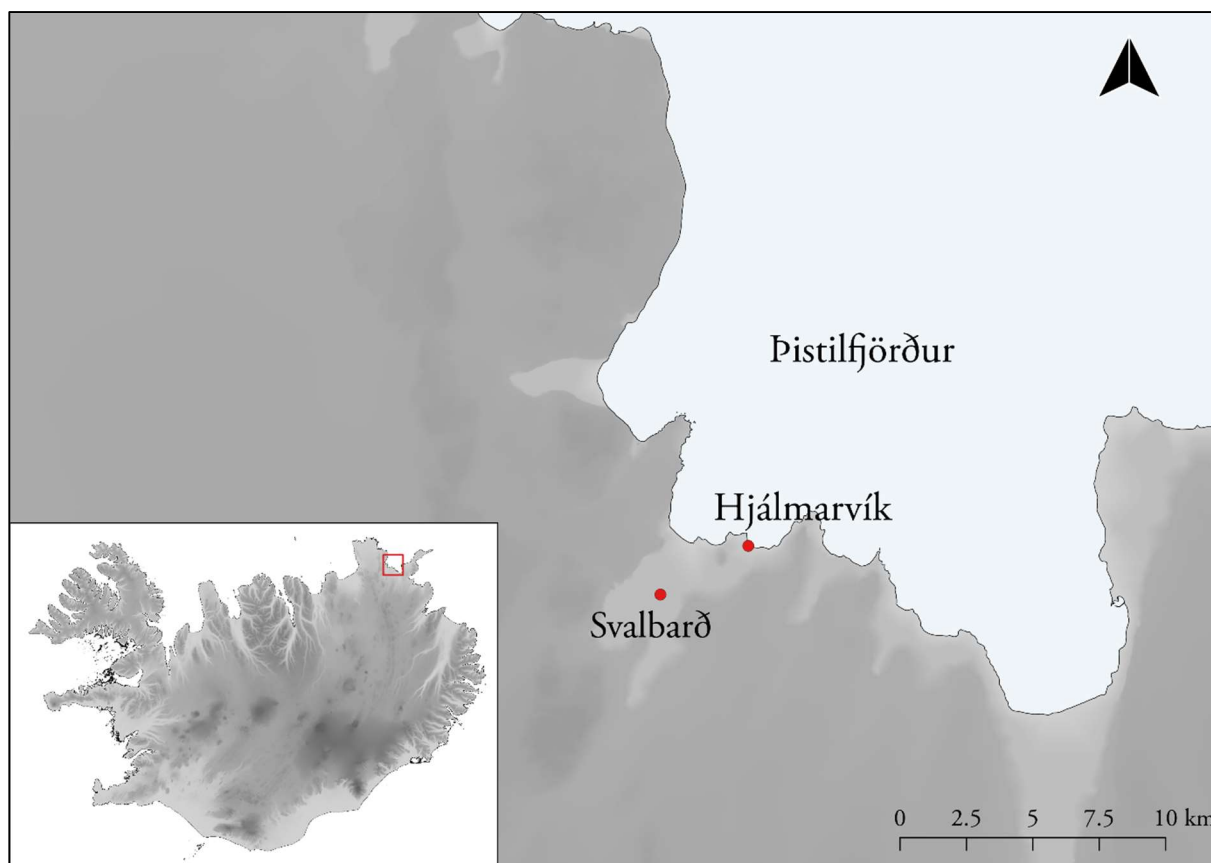
An overwalk survey at the site was undertaken in 1998 by FSÍ (Hreiðarsdóttir et al 1998, 16) followed by coring to locate midden deposits (Edvardsson 2005). The site was excavated in 2002–2006 in an open-area (single context) by FSÍ. Whilst much of the site had been destroyed by wind erosion, the excavators unearthed four structures, two pit-houses/smithies, latrine, and a midden. Iron was probably processed in an industrial area adjacent to the farm buildings (Edvardsson and McGovern, 2006). A possible pagan grave has been identified at Hrísheimar (Friðriksson 2013, 245). Below is information on the analysed whalebones.

MMB0144 and **MMB0143–144** come from a midden deposit dated to the 9–10th century based on three radiocarbon dates of neonatal cattle bones (McGovern and Perdikaris 2002, 3; see also McGovern and Perdikaris 2006, 7–8). The midden was rich in eggshells, indicating waterfowl and egg collection at Hrísheimar (Edvardsson 2005, 8; McGovern et al 2007, 41–42). Of interest here, a gaming piece (die) of whalebone was found in the midden over the V-Sv (c. 940) tephra (Batey 2004, 13), as well as a knife handle made of walrus bone (McGovern and Perdikaris 2006, 4).

A portion of the animal fauna was analysed at CUNY and two preliminary reports have come out (McGovern and Perdikaris 2002, 2006): “Sea mammal bones have been recovered from other early inland Icelandic sites, including Sveigakot, Hofstaðir, Háls, and Un[d]jir Sandmúla, and a few seal and small whale (probably porpoise) bones also appear in the Hrísheimar collection.” (McGovern and Perdikaris 2006, 4).

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The location of Svalbarð

Svalbarð is a high-status farm located in Svalbarðshreppur, Northeast Iceland, c 2 km from the sea. It has a parish church, which was first mentioned in 1318 (**DI** II, 448–449) and the farm was also the assembly site in medieval and later historical times for the district (Svalbarðshreppur) (Björnsson 1972, 112; see also Gísladóttir et al. 2013, 70–71 for a general historical overview for Svalbarð).

The farm was briefly visited in 1986 and small coring and surface collection was undertaken on its midden. In 1987–1988, trenches were excavated in the midden a ‘modified open area approach’. 5 cm were peeled regularly, but excavators shifted to stratigraphic excavations when possible (Amorosi 1991, 6). The sieving program at Svalbarð involved 50% of the sample passing through 4 mm mesh, with 2,5% sample wet sieved through 1 mm mesh (Amorosi 1991, 8; Amorosi 1992, 107–109). Below is information on analysed whalebones.

MMB0030–38, 42 come from feature 2 (also known as the ‘Whale Bone Layer’). Several bone combs were recovered from feature 2, suggesting a date of AD 1050–1150 for the layer. Bone material consists mainly of whalebones, but cattle and caprine bones were also identified. This layer may represent waste from an open-air workshop (Amorosi 1991, 9–10; Amorosi 1992, 114).

MMB0025–29, 39–41 are whalebones analysed from contexts excavated in 2014: no report is out, but they are all midden layers from the early modern period - postAD 1550.

ANALYTIC UNIT: DATE:		2 1050 -1150	4 1150 -1250	5 1250 -1400	7/8 1636 -1800	UNIT TOTAL
TAXON						264
<i>Bos taurus</i>	cattle	107	64	35	58	1
<i>Equus caballus</i>	horse	1				5
<i>Sus scrofa</i>	pig	5				108
<i>Ovis aries</i>	sheep	15	25	29	39	7
<i>Capra hircus</i>	goat		2		5	1080
<i>Ovis/Capra</i> sp.	caprine	431	153	225	271	
<i>Phoca vitulina</i>	common seal	9	4	1	32	46
<i>Pagophilus groenlandicus</i>	harp seal				33	33
Phocid sp.	seal sp.	82	44	22	691	839
Cetacea sp.	whale sp.	30	48	72	29	179
<i>Alopex lagopus</i>	fox				1	1
<i>Ursus maritimus</i>	polar bear			1	1	1
<i>Odobenus rosmarus</i>	walrus				1	
	Birds sp.	128	604	72	45	849
	Fish sp.	642	554	588	2027	3811
Mollusca sp.	Shellfish	52	96	14	430	592
Total NISP		1502	1594	1058	3663	7817

Table 3: Number of Identified Specimens (NISP) of each taxa from the OLD unit excavations at Svalbard 6706-60, 1987-88.

Fauna from OLD units (Amorosi 1992, table 3)

The fauna was analysed by Tom Amorosi (1992). The collection ranges from 40,000–70,000 identifiable fragments. Little was gathered from feature 2 (Whale bone layer), and only a small proportion of the fauna (mainly from OLD units) have been analysed. The most common game animals are seals. “The Whale bone material still remains to be identified, since only small and often modified chunks were recovered.” (Amorosi 1992, 123). Further, in his Phd thesis Amorosi (1996, 198) said: “Although further work on Svalbard’s archaeofauna an artefactual materials has been done, and continues to be conducted, the assessment of the general site patterns has not changed since the 1992 publication.”

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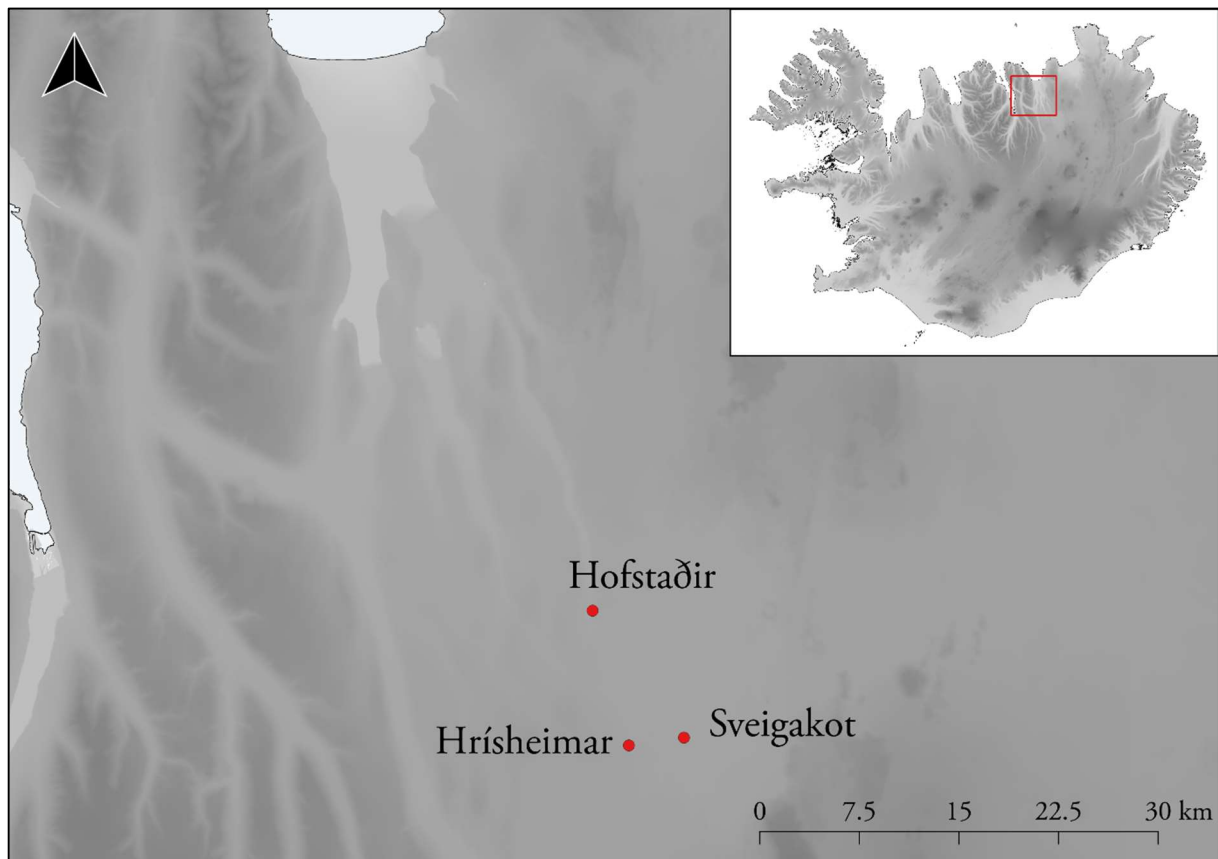
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Sveigakot

5915936, 559540 (ISN93)

Sveigakot is a low-status Viking Age farm in Skútustaðahreppur (Mývatnssveit), Northeast Iceland. It was established in the late 9th century and achieved ‘modest’ prosperity in the 10th century but started to decline after that. Possibly there were cycles of abandonment and re-occupation before the site was fully abandoned in the 12th century (Gísladóttir and Vésteinsson 2008). Sveigakot is an inland site, c 50 km from the sea. The site is not mentioned in any written records.

Sveigakot was first described following a walkover survey in 1998 (Hreiðarsdóttir and



The location of Sveigakot

Vésteinsson 1998, 75–77). The farmstead was unearthed in an open area (single context) excavation by FSÍ between 1999 and 2006 (Gísladóttir and Vésteinsson, 2008). Altogether, a small Viking Age hall was excavated, along with several pit houses, a byre and a Viking Age midden (Vésteinsson 2010). Below is information on the analysed whalebones.

FL_WCUMM0012 comes from an open-air activity area with fire-pits. The layer post-dates the 940 tephra and has a likely mid-10th c. date (Gísladóttir and Vésteinsson 2008, 32, 70). A couple of whale bone fragments were collected from the fire-pits and associated deposits.

FL_WCUMM0014 comes from a fireplace (Area S7) – possibly a smithy, which post-dates the V~940 tephra but pre-dates a late-10th c. hall and therefore has a likely mid-10th c date. A ‘substantial piece’ of whale bone from context 1461 was collected from the fireplace (Vésteinsson 2005, 14).

FL_WCUMM0013 and **MMB0147** come from the midden (Area M) associated with the earliest phase of the Sveigakot farm, dated between 877 and c. 940.

Bones were analysed at CUNY by Thomas McGovern, but a full report has not been published. But see: “Interesting objects, possibly made from whalebone, 099, were found in the fill [2547] of a pit that belongs to the earlier phase of MP1. These are a nicely worked staff and a bone fragment with a drilled hole, found in the ground with the staff sitting in the hole. The total length of the staff is 178 mm. It has an oval shaped section, measuring 19x12 mm at one end but tapers down to 7x7 mm at the other end where it has been crudely whittled.” (Gísladóttir 2008, 54).

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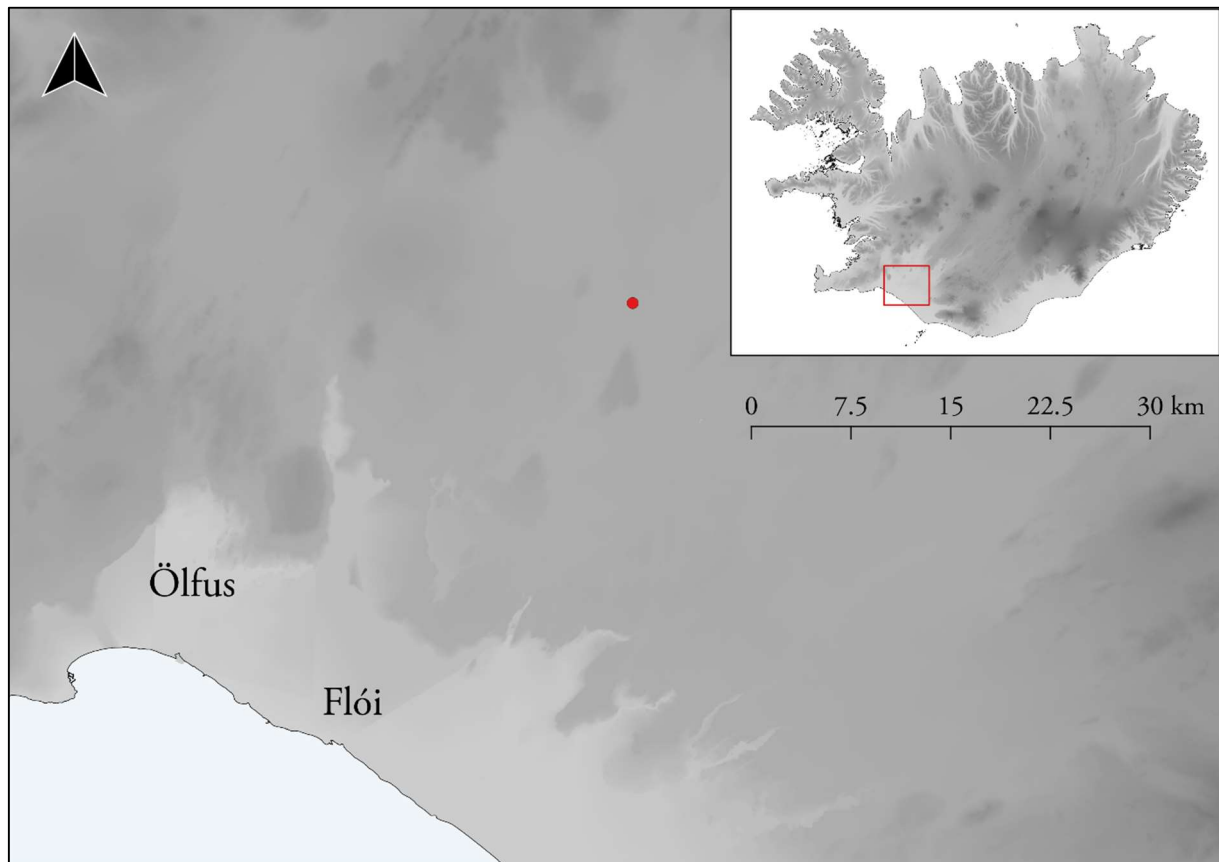
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South

Skálholt

425725, 403338 (ISN93)

Skálholt is an episcopal seat and high-status site in South-Iceland. It is an inland site, c 40 km



The location of Skálholt marked with a red dot

from the sea. Skálholt is first mentioned in the 11th century when it became the first episcopal see in Iceland (**Bsk** I, 61). It has a very rich documentary history (Grímsdóttir 2006).

Skálholt has a long research history and several excavations have taken place there, including the excavation at the medieval and early modern cathedrals (Eldjárn et al 1988; the archaeological research history at Skálholt is summarised in Friðriksson et al. 1998). Of interest here is that the site was excavated by the University of Iceland and FSÍ in 2001–2007 with an open area single context method. These excavations focused on the central part of the manor, the bishop's apartments and the school and dormitory. The exposed buildings date from the late 17th century to the early 20th. Post-excavation work is still on-going and much of it unpublished (Lucas and Snæsdóttir, forthcoming), but it was possible to gather some information on the whalebones from the excavation archive. Below is information on the analysed whalebones.

FL_WCUMM0019 comes from test trench in a 18th century midden dump (dating based on typology) on the edge of the farm mound, marked on an 1784 plan as an ash mound (Lucas 2004, 29). The midden was close to, and possibly associated with, a butcher's workshop. Butchery related artefacts such as a piece of whale bone butchering block and a possible whale bone knife handle were found in the midden (Hambrecht et al 2004, 37).

FL_WCUMM0018 comes from a cellar floor, dated c 1650–1785 based on pottery and c 1600–1650 based on glass.

Some of the archaeofauna from Skálholt has been analysed, but not from the contexts producing the abovementioned whalebone, and much of the assemblage remains to be analysed (but see Hambrecht 2012; Hambrecht et al 2005, 2006; Hambrecht and Woollett 2004; Wollett and McGovern 2003). Further: “The large cetacean elements in unit 454 [From the 18th century midden] are pieces of butcher block made out of a whale’s vertebra, while the porpoise element in unit 178 is a part of a knife handle.” (Hambrecht 2006, 5).

Table 1	
Domestic Mammals	Count
<i>Cattle (Bos taurus)</i>	887
<i>Horse (Equus caballus)</i>	3
<i>Dog (Canis familiaris)</i>	present
<i>Sheep (Ovis aries)</i>	27
<i>Caprine (Sheep and Goat)</i>	118
Total Caprines	145
total Domesticates	1035
Cetacea	2
<i>Arctic Fox (Alopex lagopus)</i>	2
Fish sp to be determined	2203
NISP total	4277
Large Terrestrial Mammal	888
Medium Terrestrial Mammal	94
Small Terrestrial Mammal	1
Unidentified mammal fragment	15,294
TNF total	20,554

Fauna from context 454 (Hambrecht 2006, table 1)

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