

# Öskuhaugsrannsóknir á Skútustöðum í

## Mývatnssveit 2009

### Framvinduskýrsla II



**Ritstjóri:** Ágústa Edwald

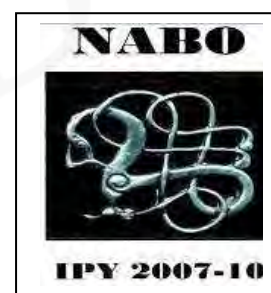
**Höfundar efnis:** Megan T. Hicks, Guðrún Alda Gísladóttir, Sigríð Juel Hansen, Elín Ósk Hreiðarsdóttir og Gavin Lucas.




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Bárugötu 3

101 Reykjavík

Sími: 551 1033

Fax: 551 1047

Netfang: [fsi@instarch.is](mailto:fsi@instarch.is)

Heimasíða: [www.instarch.is](http://www.instarch.is)

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## Inngangur:



FIG 1: Teikning af Skútustöðum frá 1892

Skútustaðir í Mývatnssveit eru forn jörð frá fyrstu tímum Íslandsbyggðar. Jarðarinnar er getið í Reykdælasögu þar sem Víga-Skúti er sagður hafa keypt sér land að Mývatni og að hann búi þar sem heiti að Skútustöðum (ÍF X, 204). Jörðin er líklega með elstu jörðum við Mývatn og hefur fljótt orðið miðstöð jarðanna við sunnanvert vatnið. Skútustaðir eru

krikujörð og er elsti varðveitti máldagi krikjunnar frá 1318 (DI I, 430). Jörðinni hefur verið skipt í þrennt, helmingur hennar tilheyrir Skútustöðum I, og fjórðungur hvorri Skútustöðum II og III.

Dagana 8. júní – 12. Júlí 2009 var unnið að uppgrefti á öskuhaugi í bakgarði Skútustaða III. Uppgröfturinn er hluti af stóru alþjóðlegu verkefni sem lýtur að landnámi og byggð á Norðurlandi og hefur verið unnið að síðan 1996. Verkefið nefnist á ensku *The Landscapes of Settlement: Historical Ecology of the Colonization of Northern Iceland* (sammstafað LoS) og er sérstök áhersla lögð á umhverfisvístfræði Mývatns og nágrennis sem er rannsökuð með hjálp sagnfræði- fornleifafræði og umhverfisvísinda.<sup>1</sup> Sumarið 2007 voru tekin borkjarnasýni á lóð Skútustaða III sem bentu til þess að þar væri umfangsmikill öskuhaugur undir sverði og var það tilefni rannsókna sumarið 2008 þar sem umfang, dýpt og gerð öskuhaugsins var áætluð auk þess sem uppgroftur var hafinn á þremur svæðum, E1&2., D og F (Ágústa Edwald et.al. 2009). Sumarið 2009 var svæði D stækkað til austurs í þremur áföngum (svæði G, H1 & H2) með það að markmiði að safna frekari upplýsingum um búsetu á Skútustöðum frá landnámi til 20. aldar. Að uppgreftinum unnu: Ágústa Edwald (uppgraftarstjóri), Tomas H. McGovern, George Hambrecht, Frank Feeley, Megan Hicks, Aaron Kendall (CUNY), Marianne Bradford (University of Bradford), Reaksha Persaud, Jessica Vorbornik og Jasmine Patel (REU).

Gerður Benediktsdóttir ábúandi á Skútustöðum III veitti okkur hlýjar móttökur og eru henni færðar bestu þakkir fyrir sem og Árna Einarssyni á Náttúrurannsóknarstöðinni við Mývatn fyrir margvíslega aðstoð og greiðasemi.

Gamli bærinn á Skútustöðum sem sést á teikningunni hér að ofan frá 1892 (FIG 1) var nálega á milli núverandi íbúðarhúsa á Skútustöðum II og III og sneri því sem næst norður-suður. Enginn eiginlegur bæjarhóll er á þeim stað, en íbúðarhúsið á Skútustöðum III stendur á talsverðum hól sem og austara húsið, þó sá hóll sé ívið lægri. Nú er grænmetisbeð þar sem bærinn stóð og sagði frú

<sup>1</sup> Ágætt yfirlit yfir verkefnið í heild sinni er gefið í nýlegri grein: McGovern et.al. í *American Anthropologist* 2007 109 (1) 27-51

Gerður Benediktsdóttir á Skútustöðum III frá því að þar hefði komið upp aska, beinarusl og ýmislegt fleira innan um rófurnar.

Uppgriftarsvæðið, þar sem grafið var sumrin 2008 og 2009, er sunnan við íbúðarhús Gerðar og aftan, vestan, við gamla bæjarstæðið. Þar voru opnaðir tveir skurðir sumarið 2008, svæði D og F auk þess sem snið, sem varð til þegar stungið var frá íbúðarhúsinu að Skútustöðum III haustið 2007 vegna vinnu við klæðningu, var hreinsað og stækkað til suðurs, svæði E1 og E2. Sumarið 2009 var svæði D stækkað til austurs og grafið á svæðum G, H1 og H2. Hvert jarðlag ver grafið fyrir sig og teiknað upp og skráð sérstaklega (sjá jarðlagaskrá í viðauka) og hvert mannvistarlag var sigtað í 4mm sigti til að tryggja að öll bein og gripir væru hirt. Einnig var tekið 10 ltr sýni til blautsigtunar fyrir plöntuleifar úr hverju mannvistarlagi sem var stærra en 30 ltr og fór blautsigtunin fram á vettvangi.

Í þessari skýrslu er fyrst sagt frá uppgriftarskurðunum sem voru opnaðir sumarið 2009. Þar á eftir fylgir skýrsla um dýrabein á ensku eftir Megan Hicks ásamt samantekt um uppgriftarskurðina og fyrri rannsóknar-sumur á ensku. Þá fylgir fundaskýrsla eftir Guðrúnu Öldu Gísladóttur, einnig á ensku þar sem er fjallað um gripina eftir tímabilum (enska: *phase*). Þá er helstu gripaflokkum gerð skil; Gavin Lucas skrifar um leirker og gler, Elín Ósk Hreiðarsdóttir fjallar um perlurnar þrjár sem fundust og Sigríð Juel Hansen fjallar um brýni. Þar á eftir er fjallað um Fornleifaskóla barnanna og að lokum er stutt samantekt á íslensku.

## Uppgriftarskurðir:

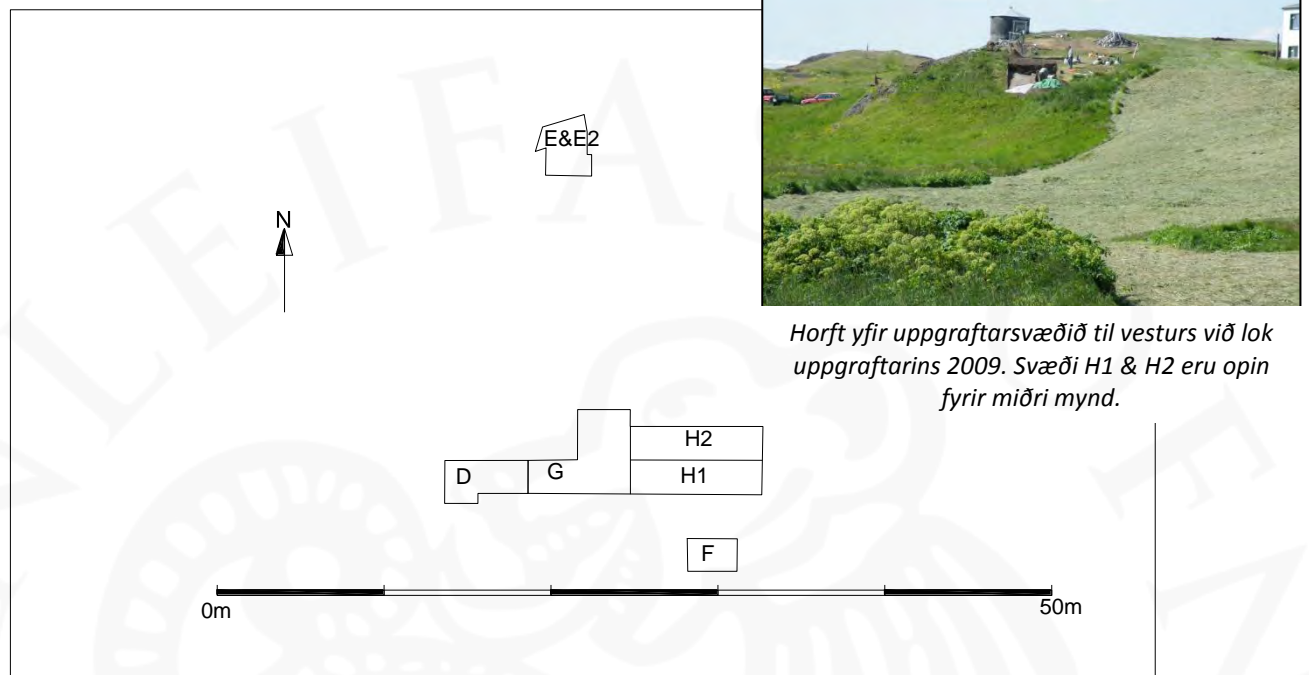


FIG 2: Teikning af uppgriftarsvæðum frá 2008 og 2009. Svæði G, H1 og H2 voru opnuð sumarið 2009.

Ljósmyndin í hægra horni sýnir uppgriftarsvæðið við lok uppgriftarins 2009.

Markmið uppgriftarins sumarið 2009 var að stækka svæðið frá 2008 til þess að safna dýrabeinum og gripum frá sem lengstu tímabili og til að auka skilning á mannvistarlögunum á svæðinu, hvenær og með hvaða hætti þau voru mynduð. Ákveðið var að stækka svæði D til austurs þar sem uppgröfturinn á því svæði sumarið 2008 leiddi í ljós mikið safn dýrabeina og gripa. Auk þess voru þykk gjóskulög greind í skurðinum sem auðvelduðu tímasetningu jarðlaga. Þá bentu jarðvegsborar sem teknir voru sumarið 2008 til þess að öskuhaugurinn dýpkaði til muna austan við svæðið og því voru góðar líkur taldar á að unnt yrði að safna beinum og gripum frá sem lengstu tímabili á því svæði.

### Svæði G:

Svæðið sem opnað var fyrst sumarið 2009 er L-laga. Það er annars vegar 2 m breið ræma sem liggur 6 m til austurs frá austurenda svæðis D (hnit: 107,500/107,502 – 113,500/113,502) og þá til norðurs, 3x3 m stórt svæði (að hnitum 113, 505 og 110,505). Þetta svæði er alls 21 m<sup>2</sup> og var nefnt svæði G (sjá FIG 2).

Efst jarðlagið á svæði G var mjög þykkt lag úr hleðslu torfi sem lá á ýmsa vegu (lag 102). Gjóska úr Veiðivatnagosi frá árinu 1717 (V-1717) var greinileg í torfinu og ljóst er að það er úr byggingu sem var byggð eftir árið 1717. Torfið er hugsanlega úr síðasta torfbænum á Skútustöðum sem var rifinn á þriðja áratug 20. aldar og stóð tæpum 20 metrum norðan við svæði G. Fyrir neðan

Þetta þykka lag af byggingartorfi voru fjölmörg ruslalög sem voru mismunandi þykk. Gjóskulag úr Veiðivatnagosi frá 1717 (V-1717 (lag 118)) lá yfir öllum skurðinum og fyrir neðan það voru enn fleiri ruslalög. Ruslalögin á svæði G voru tiltölulega „hrein“ þ.e. ekki var mikið um dýrabein eða gripi í þeim, aðeins fáein fiskibein og fuglabein auk smærri gripa, s.s. hnappa og festinga af fatnaði. Fundasafnið benti til þess að þangað hafi verið hent rusli eftir einstaka tiltektir en stærra og „skítugara“ rusli, s.s. matarúrgangi hafi verið hent annað, því var tekin ákvörðun um að opna skurð austan við svæði G (svæði H). Uppgreftinum á svæði G var þó haldið áfram þótt að lítið af beinum fundust og þegar komið var niður fyrir gjóskulag úr Veiðivatnagosi frá 1477 breyttist gerð öskuhaugsins talsvert. Eingungis um 0.25 m af jarðlögum aðskildu Veiðivatnagjóska frá 1477 og Landnámsgjóska sem lá því sem næst beint ofan á Laxárhrauni yngra en þau innihéldu mikið meira magn beina. Það virðist því vera sem að svæðið hafi ekki verið notað sem ruslahaugur í sama mæli á miðöldum og það var notað á Víkingaöld og á tímabilinu eftir 1477. Gríðarlegt magn dýrabeina fannst í hraunsprungu sem lá NA-SV neðst í skurðinum (sjá FIG 4-7). Hraunsprungan hefur verið fyllt af rusli á stuttum tíma (sum beinin lágu lóðrétt í sprungunni) fljótlega eftir landnám sem bendir til þess að snemma hafi hópur af fólki verið saman komið á þessum stað. Nokkrir gripir fundust í hraunsprungunni, járnnaðlar og –brot, járnstangabrot (hugsanlega úr steikingarstöngum (*e. roasting spits*)), einn snældusnúður, eitt brýni og hugsanlega einn taflmaður.

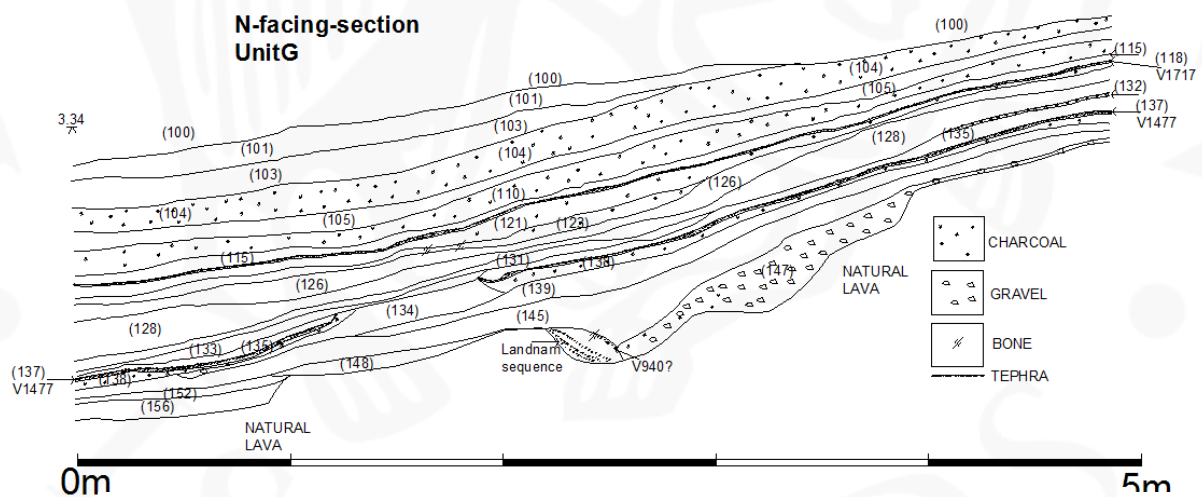


FIG 3: Snið í suðurhlið svæðis G





FIG 4: Hraunsprungan á svæði G, horft til austurs

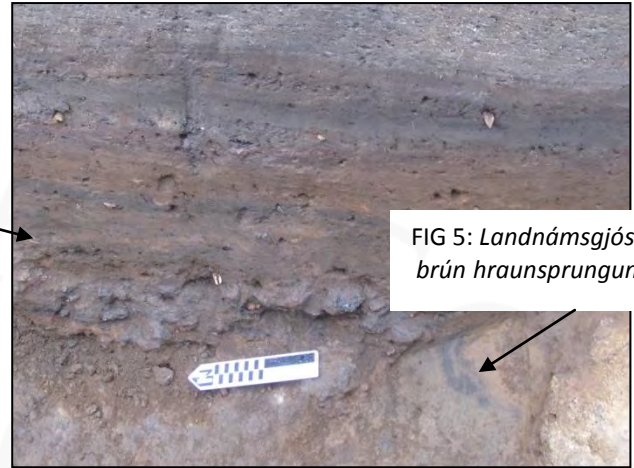


FIG 5: Landnámsgjóska á brún hraunsprungunnar

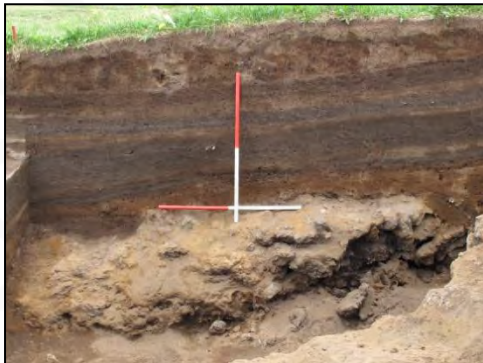


FIG 6: Hraunsprungan á svæði G, horft til suðurs



FIG 7: Dýrabein og eggjaskurn sem fundust í hraunsprungunni

## Svæði H:



FIG 8: Megan T. Hicks and George Hambrecht grafa efstu jarðlög úr skurði H

2 x 2 m stór skurður var opnaður 6 m fyrir austan austurenda skurðar G (hnit: 119,500/119,502 – 121,500/121,502) og var það svæði nefnt svæði H (sjá FIG 8). Jarðlögin á svæði H innihéldu mikið magn dýrabeina og var því ákveðið að stækka það til muna til vesturs og tengja svæði G og H og var svæðið þá orðið 8 x 2 m stórt. Svæðið var einnig stækkað 2 m til norðurs og var sú ræma nefnd svæði H2 (sjá FIG 2). Alls voru svæðin, G, H1 og H2, 45 m<sup>2</sup> stór.

Gjóska úr Veiðivatnagosi frá 1717 var einnig greinileg á svæði H1 og H2, hún var þó ekki jafn þykk og jöfn og á svæði G enda svæði H1 og H2 í brekku sem hallar til austurs. Þrjú jarðlög voru grafin upp fyrir neðan gjóskuna en þá var numið staðar að sinni. Stefnt er að því að opna svæði H1 og H2 aftur sumarið 2010 og grafa þar niður á hraun líkt og gert var á svæði G. Jarðvegskjarnar sem teknir voru við lok uppgrافتarins benda til að enn sé allt um 1 meter af rulsalögum á svæðinu.

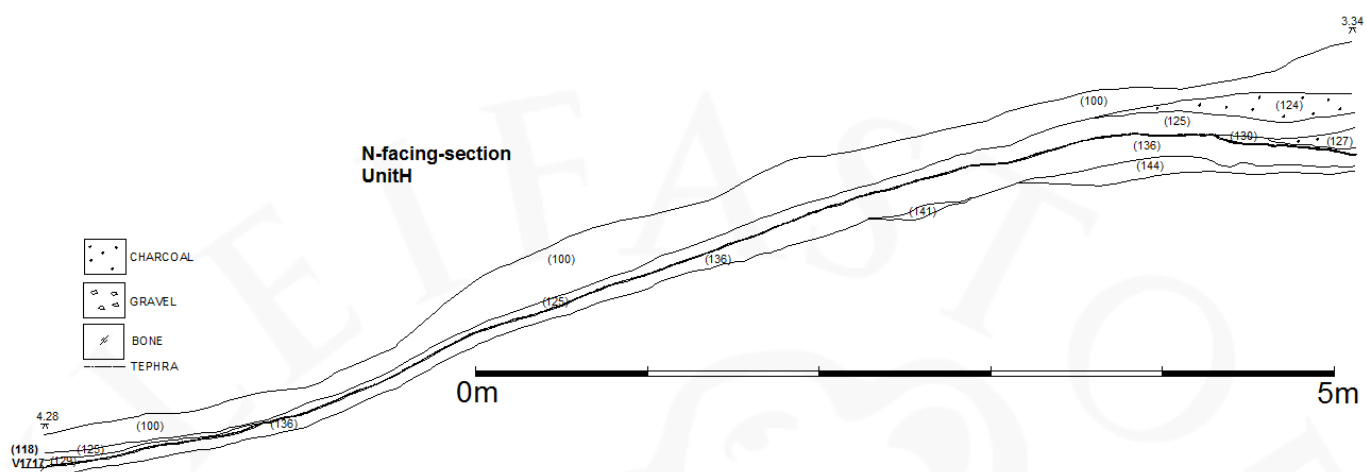


FIG 9: *Snið í suðurhlið svæðis H*

# **Skútustaðir: an Interim Zooarchaeological Report Following Field Excavation in 2009**

Megan T. Hicks, Ph.D. Program in Archaeology, City University of New York  
meganhicks@yahoo.com

## **Introduction**

The discovery of an intact midden at Skútustaðir's historic farmstead in 2007 was a key finding for the planned investigation of the medieval and early modern periods in the lake Mývatn area of northern Iceland. The 2009 field season followed a coring survey and surface collection in 2007 and the excavation of four test trenches in 2008. 2009 was the third year of investigation by an international team of archaeologists (hailing from the City University of New York (CUNY), North Atlantic Biocultural Organization (NABO) Fornleifastofnun Islands(FSÍ) and the University of Bradford) as part of an ongoing NSF IPY project focusing on long term subsistence practices. Zooarchaeological evidence from Skútustaðir excavation seasons 2008 and 2009 is reviewed in this report, and laboratory analysis of animal bones is ongoing at the CUNY Hunter College and CUNY Brooklyn College Zooarchaeology Laboratories.

## **The Field Team 2009**

Thomas McGovern (CUNY) and Ágústa Edwald (FSÍ) led our team which included students from the Ph.D. program at CUNY : Francis Feeley, George Hambrect, Megan Hicks, and Aaron Kendall. Joining our team from the University of Bradford Ph.D. Program in Archaeology, was Marianne Robson. Jasmine Patel, Reaksha Persaud, and Jessica Vobornik represented the Research Experience for Undergraduates program out of Brooklyn College Zooarchaeology Laboratory. As part of a large interdisciplinary project, we worked alongside archaeological teams pursuing related projects nearby from the University of Sterling, Durham, and FSÍ.

### **Many thanks to:**

Dr. Árni Einarsson who first noticed archaeological remains at Skútustaðir and who has been an important source of support since the inception of the project. Kind thanks are also due Gerður Benediktsdóttir and the other residents of Skútustaðir for welcoming our team. We are grateful to Fornleifaskóli Barnanna (Kid's Archeological School) who's company we enjoyed for some valuable and fun learning experiences. Thanks to Unnsteinn Ingason for hosting our team so warmly at

Narfastadir. nd gratitude is due to Norman Kennard (Hunter College, CUNY) for his assistance in laboratory analysis. Funding support from the US National Science Foundation Office of Polar Programs Arctic Social Science Program through International Polar Year grant 0732327 is gratefully acknowledged. This report is a product of the International Polar Year program and of the NABO research cooperative.

## Beginnings: 2007

Skútustaðir was investigated in 2007 as part of an extensive survey of farms in the Lake Mývatn Region of Northern Iceland. Orri Vésteinsson and Adolf Friðriksson of the *Archaeological Institute of Iceland (FSÍ)* Orri Vessteinsson lead this excavation and coring regime with the purpose of establishing the archaeological potentials of additional farms in an area that had been intensively investigated since 1991 as part of the *Landscapes of Settlement Project* and the *Human and Social*

*Dynamics in Myvatssveit Project* (Vésteinsson ed 2008). Until 2008, the large scale excavations in the area (Hosftadir, Sveigakot and Hrisheimar) had illuminated the nature of settlement, economy and ecology of the settlement period (ca 870- 1000 AD) and a portion of the medieval period (ca through the 13 c AD) (for more information on the above excavations see McGovern et al 2007). Through the coring survey, a team of CUNY archaeologists lead by Orri Vésteinsson hoped to find archaeological sites that would contribute to our understanding of long term, post- Viking settlement in the Mývatn area- i.e. sites that included archaeological remains dating to the medieval and early modern periods (ca 1000 AD through 1900 AD).

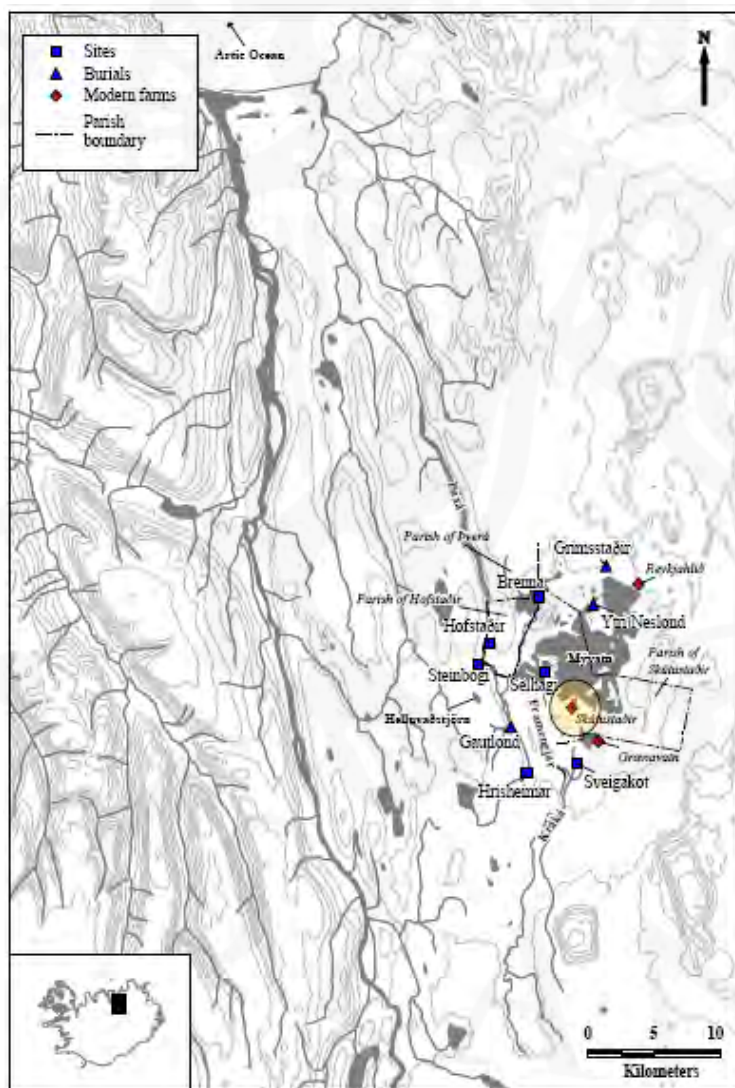


FIG 10: Archaeological sites in the Mývatn Area



The extensive coring survey of Skútustaðir focused on three promising areas: Area A was a cluster of possible structural remains on the high point of the site; Area B, a steep slope southeast of area A, and downslope and pond-side Area C called “Oskutangi” or ash peninsula- possibly indicating a historic rubbish disposal area (McGovern in Vésteinsson 2008). Area B proved to yield the best results for the presence of deep midden deposits- prefaced by a surface collection carried out by Arni Einarsson of the Mývatn science station- the coring survey found there to be extensive midden material with very good preservation. The following year, test trenches would be excavated to explore the extent, preservation and temporality of the midden and to obtain a collection of animal bone and artifacts for analysis.

### The 2008 Field Season

Four test pits (Areas D, E1, E2, and F) and extensive soil coring were the focus of the excavation in 2008. The test pit areas E1 and E2 indicated archaeological deposits on the landnam surface, a bare and craggy lava bedrock. The results of the coring survey by Frank Feeley and George Hambrecht showed the midden to occupy a massive area and pointed to the impressive archaeological potential of the site. The zooarchaeological report of the following summarized analysis is available online at [www.nabohome.org](http://www.nabohome.org) (Hicks and Harrison 2009).

Following the field season, radiocarbon dating of bone recovered from Skútustaðir was done by Gordon Cook and Philippa Ascough at the Scottish Universities Environmental Research Centre (SUERC) and the results are presented in the table below.

Lab Code	Radiocarbon age	delta C13 ‰	Delta N15 ‰	C/N ratio	C14 BP	1 sigma range	2 sigma range
SUERC 20218	1215 +/- 30 BP	-22.1	5.7	3.6	1215 +/- 30	770-870 AD	690-890 AD
SUERC 20219	1040 +/- 30 BP	-21.4	2.6	3.4	1040 +/- 30	985-1025 AD	890-1040 AD
SUERC 20220	785 +/- 30 BP	-20.8	1.6	3.3	785 +/- 30	1220-1265 AD	1205-1285 AD
SUERC 20225	625 +/- 30 BP	-21.8	2.8	3.3	625 +/- 30	1295-1395 AD	1280-1400 AD
SUERC 20226	525 +/- 30 BP	-22	4.3	3.3	525 +/- 30	1395-1435 AD	1320-1450 AD

TABLE 1: Radiocarbon dates from terrestrial mammal bone courtesy of Dr. Gordon Cook and Philippa Asough

These results (from terrestrial mammal bone) were of great help where tephrochronology was not fully resolved, and the results, along with the clear presence of the V 1477 tephra and V 1717 tephra among cultural layers firmly established the long term inhabitation of the site.

## **The 2009 Field Season**

During the 2009 field season, the focus of the excavation was the area south east of area D, where deep midden deposits had been located during the coring survey of 2008. A 13 square meter, L shaped trench was laid first, called trench G, followed later by a contiguous long rectangular (4x5m) trench - called Trench H - extending south east down –slope and toward area F. Trench G was excavated down to the natural lava surface while still there remains approximately 1 meter depth of cultural material to excavate in 2010. The ground surface below the remaining material is very uneven so it is difficult to predict the actual depth of the deposits. The recovery of faunal material from the site in 2009 was very successful and the data resulting from analysis so far is presented below.

## **2009-2010 Laboratory Analysis and Progress**

From October 2008 through May of 2009, analysis was completed of all Mammal and bird bones recovered in 2008 test trenches. The information is presented below along with data analyzed so far from the 2009 excavation. The in-depth report of the material from 2008 alone is available on nabohome.org (Hicks and Harrison 2009). Following the present report, the official Norsesec Interim report will be available shortly on nabohome.org and will include additional perspectives.

During November 2009 through May of 2010 Analysis was completed of the entirety of the mammal bones from large, 10<sup>th</sup> c. context [161] which produced 28 bags of bone. This archaeological layer was an extremely bone rich midden layer mixed with gravel that was deposited directly on the lava surface at some point during the earliest phase of settlement of Skútustaðir. It was associated with the 10<sup>th</sup> century tephra V940 and likely dates closely to this time. The layer appeared to be an intentional in-filling of a fissure in the craggy, once bare lava surface. This inhospitable surface, exposed before human settlement, had been augmented by 1000 years of midden deposition to be a rich and productive infield for the farm. Context [161] would have represented the initiation of this project, the direct deposition of bone and household debris onto the rough lava bedrock. The excellent level of preservation of the context was observable immediately in the field and as a result,

this context was the first priority for laboratory analysis.

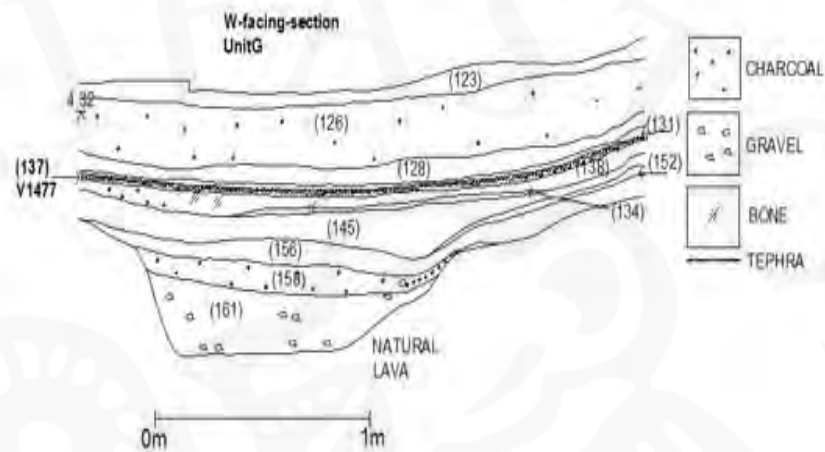


FIG 11: West facing section showing location of context [161].

During excavation, the following measures were taken in accordance with NABO and FSI recommendations to ensure excellent recovery of faunal material and other artifacts the field: all midden material bearing bone was dry-sieved through 4mm mesh. Regular checking of the resulting back-dirt suggests that few elements were missed by the sieving methods. All articulated elements and *in situ* clusters of bird egg shell fragments were placed in one bag or in bulk soil samples in the field and subsequently recorded as one specimen to reduce interdependence. Thorough recovery of the faunal material was further ensured through the careful excavation by several team members with previous zooarchaeological training.

### **Laboratory Methods**

Analysis completes so far was carried out at the Hunter College Zooarchaeological Laboratory and made use of the extensive reference collections there. Analysis of the fish bones recovered in 2008 and 2009 will be carried out at the Brooklyn College and the Hunter College Zoarchaeological Laboratories. All elements (bird and mammal) were identified as far as taxonomically possible (a selected element approach was not employed) but most mammal ribs, long bone shaft fragments and vertebral fragments were assigned to “Large Terrestrial Mammal” (cattle or horse sized) , “Medium Terrestrial Mammal” (sheep, goat, pig or large dog sized), and “Small Terrestrial Mammal” (small dog-fox sized). Only elements positively identified as *Ovis aries*

and *Capra hircus* were assigned to the separate sheep and goat categories respectively while all other sheep/goat element were assigned to the “caprine” category potentially including both sheep and goats.

Digital records of all data collected were made following the 9<sup>th</sup> edition of the NABONE recording package (a Microsoft Access database supplemented with specialized Microsoft Excel spreadsheets). The Animal bones excavated will be permanently curated at the National Museum of Iceland. This report, other reports and data are available from [nabo@voicenet.com](mailto:nabo@voicenet.com) and the NABO website: [www.nabohome.org](http://www.nabohome.org).

Curation followed the NABONE protocols followed for other archaeofauna from Iceland, Faroes, Greenland, and northern Norway (NABONE, 2004, see [www.nabohome.org](http://www.nabohome.org) for downloadable version 9). Following widespread North Atlantic tradition, bone fragment quantification makes use of the Number of Identified Specimens (NISP) method (Grayson 1984). Mammal measurements (with a Mituyo Digimatic caliper) followed the approach outlined by von den Driesch (1976), and sheep/goat distinctions follow Boessneck, (1969) and Halstead and Mainland (2005). Tooth-wear stage studies follow Grant (1982) and long-bone fusion stage calibrations follow Reitz and Wing (1999).

### ***Taphonomy***

The physical condition of bone transforms multiple times during its journey from a living animal to a laboratory specimen through decay, fragmentation and other processes. This may inhibit our ability to derive information from an archaeofaunal assemblage and may impede its comparison of multiple assemblages (Lyman 1994). It is because of these factors of change that zooarchaeological evidence is indirect evidence and an assessment of taphonomic (post death) factors is important in any analysis.

Most bone found in middens is significantly fragmented having undergone processes such as butchery by humans, natural decay, trampling and gnawing by carnivores. Burnt bone is especially prone to fragmentation. Specimens analyzed were classed in to size categories to determine the extent of fragmentation of the assemblage. A total sieving regime, as detailed above, often results in a collection with a high proportion of specimens in the smaller size classes and thus, the unidentifiable classes.

The taphonomy of context [161] is unusual for Icelandic midden deposits and invokes interesting questions regarding its formation. The first and most noticeable difference between the layer and others is that it contained an extremely low percentage of burnt bones relative to other sites. Analysis of all bird and mammal bones from 2008 demonstrated a consistent level of burnt

bone between 10 and 40 percent. Burnt bone fragments readily, contributing to such high numbers. Context [161], however contained only .005% burnt bone or 21 specimens burnt and 4141 unburnt. This contrasts with other findings where settlement period ( ca 870-1000 AD) deposits contained more burnt bone than later deposits (Bigelow 1985).

Another anomaly was the presence in context [161] of a large amount of coprolites- likely dog coprolites, as well as gnawed bone and partially digested bone. These traces not only point to the presence of dogs but also to a moderate level of disturbance of the faunal collection that we must take into account. Overall, though evidence of the presence of dogs is common, the intensity of gnawing expressed in % of gnawed specimens, seems to be relatively low.

<b>SKU Phase</b>	<b># bones</b>	<b>% Gnawed of Total Number of Fragments (TNF)</b>
9 <sup>th</sup> c	0	0
10 <sup>th</sup> c [161]	29	.01%
1262-1300	20	1.23%
1477-1717	128	2.66%
14th c	2	0.06%
post 1717	38	1.08%

TABLE 2: *Number and percentage of gnawed bones according to phase*

Butchery of bones in context [161] was common at levels seen in other Icelandic sites. However, this mammal rich collection, with good preservation allowed for some additional observations of butchery patterns. Several patterns emerged as evidence of regular manners of carcass disarticulation- this included innominates that were frequently chopped and severed distal humeri. This points to a pattern of expedient disarticulation probably using a heavy chopping tool- as opposed to attempting to dismember a joint, which would be hampered by thick tendons and ligaments. There were several examples of heavily chopped vertebrae, both caprine and of cattle. While heavily chopped vertebrae seen at the site of Hofstaðir pointed (with other behaviors) toward ritual sacrifice and consumption of cattle, some of the vertebrae at Skútustaðir were clearly chopped from the ventral side of the animal, suggesting again an expedient manner of dismemberment. Such patterns demonstrate how the site residents would break down a carcass into manageable, smaller parts. Other butchery patterns included removal of horns from skulls of caprines and cattle, most likely for hornworking; splitting of caprine skulls- a preparation called *svið*; as well as the very regular dividing of the mandible between of the last present molar and the ascending ramus which was commonly done for tongue extraction. All bones of the axial and appendicular skeleton were present in the midden suggesting that butchery, consumption, and disposal occurred on site- in contrast to

outside provisioning which sometimes leaves narrow categories of species and elements as remnants (Crabtree 1996). Very surprisingly, there were few fish bones present in context [161]- out of 28 bags of faunal remains, there are merely a few handfuls of fish bones. Immediately visible were several Haddock cleithra and several salmonid vertebra. The fish bones from Skútustaðir will be analyzed in the Brooklyn College Zooarchaeology laboratory. (For a full analysis of the taphonomy of the collection excavated in 2008 please refer to Hicks and Harrison 2009).

**SKU 08 and 09(partial): An Overview of Species Present, Number of Identified Specimens and Total Number of Fragments**

	Uns trat.	9th c	10th c (161)	1262- 1300	14th c	pre 1477	1477- 1717	post 1717	Total
Cow ( <i>Bos taurus</i> )	8		194	110	13		112	84	521
Horse ( <i>Equus caballus</i> )			1	1			1		3
Cat ( <i>Felis domesticus</i> )								1	1
Dog ( <i>Canis familiaris</i> )								1	1
Pig ( <i>Sus scrofa</i> )	1		11					1	13
Sheep ( <i>Ovis aries</i> )	5	2	55	13	4		78	49	206
Goat ( <i>Capra hircus</i> )			9					1	10
Ovis/Capra sp.	22	5	582	159	19		467	380	1634
<b>Total Domestic Mammals</b>	<b>36</b>	<b>7</b>	<b>852</b>	<b>283</b>	<b>36</b>		<b>658</b>	<b>516</b>	<b>2388</b>
Harp seal ( <i>Pag. Groenlandicus</i> )								2	2
Phocid spp. (unident. seals)				1			34	18	53
<b>CETACEA</b> (small whales/porpoise)				1					1
<b>OTHER MAMMALS</b>									
Arctic fox ( <i>Alopex lagopus</i> )		1		2				1	4
Mouse ( <i>Mus musculus</i> )							2		2
<b>BIRDS</b>	3	9	5	35	11		62	49	174
<b>MOLLUSCA</b>			3	3	1		14	2	20
<b>TOTAL NISP (No. of Ident Specimens)</b>	<b>39</b>	<b>17</b>	<b>860</b>	<b>325</b>	<b>48</b>		<b>770</b>	<b>588</b>	<b>2647</b>
MM (Marine mammal)							1	3	4
STM (Small terrestrial mammal)									
MTM (Med. terr. mammal)	9	49	745	322	43		981	517	2666
LTM (Large terr. mammal)	2	25	186	64	14		120	102	513
UNIM (Unidentified)	3	299	2370	905	184	7	2928	2277	8973

mammal)										
<b>Total Number of Fragments</b>	<b>53</b>	<b>390</b>	<b>4158</b>	<b>1616</b>	<b>289</b>	<b>7</b>	<b>4800</b>	<b>3487</b>		<b>14803</b>
<b>Fish (Preliminary count)</b>	<b>6</b>	<b>175</b>	<b>n/a</b>	<b>321</b>	<b>272</b>	<b>2</b>	<b>4065</b>	<b>1131</b>		<b>5972</b>
<b>Total Number of Fragments</b>	<b>59</b>	<b>565</b>	<b>4158</b>	<b>1937</b>	<b>561</b>	<b>9</b>	<b>8865</b>	<b>4618</b>		<b>20775</b>
<b>(including fish)</b>			fish not incl							

TABLE 3: An Overview of Species Present, Number of Identified Specimens and Total Number of Fragments

## Domestic Mammals

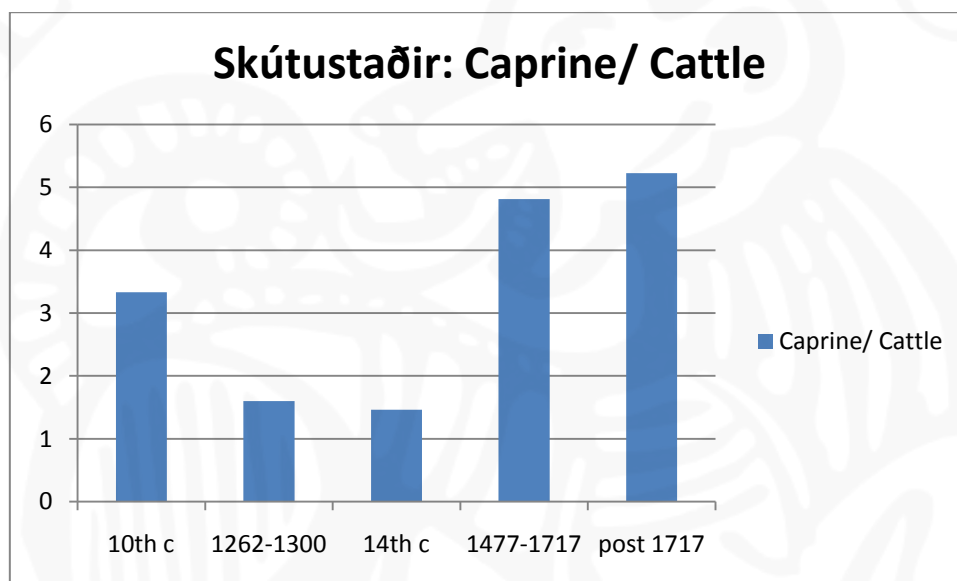


FIG 12: Caprine to Cattle ratio

Previous zooarchaeological studies have suggested that in Northern Icelandic farms, after ca. 1200, there is a pronounced increase in numbers of caprines when compared to cattle in Icelandic stocks (McGovern 2007, Brewington et al 2004). Preliminary results suggest here that there is at first a decrease in the number of caprine kept per cattle, with the fewest sheep per cattle being kept in the middle ages. This is followed by an increase over time in the caprine to cattle ratio at Skútustaðir- reaching 5 caprines per every head of cattle in the early modern period (see FIG 11). These numbers of sheep per cattle are all comparatively low, however, when we look at some nearby examples. The 13<sup>th</sup> c. evidence from the site of Steinbogi (Brewington et al 2004) shows that the caprine to cattle ratio reaches approximately 22:1. Furthermore, the early 18<sup>th</sup> century farm inventory (Jardabok) describes Mývatn area farms as having approximately 24 caprines per cattle at the time it was written. As a third example, the Viking age high status site of Hofstaðir maintained approximately 4:1 caprine to cattle ratio from 930-1050 CE (McGovern in Lucas ed. 2009). The lower status site of Sveigakot transitioned from a 3:1 caprine to cattle ratio to a 10:1 ratio from the late 9<sup>th</sup>



c to the 11<sup>th</sup> c. Skútustaðir's archaeofaunal record may suggest that they were apart from the trend of a clear and pronounced increase in sheep per cattle going into the middle ages. The picture of Skútustaðir's long term subsistence will be continuously revealed as analysis is ongoing.

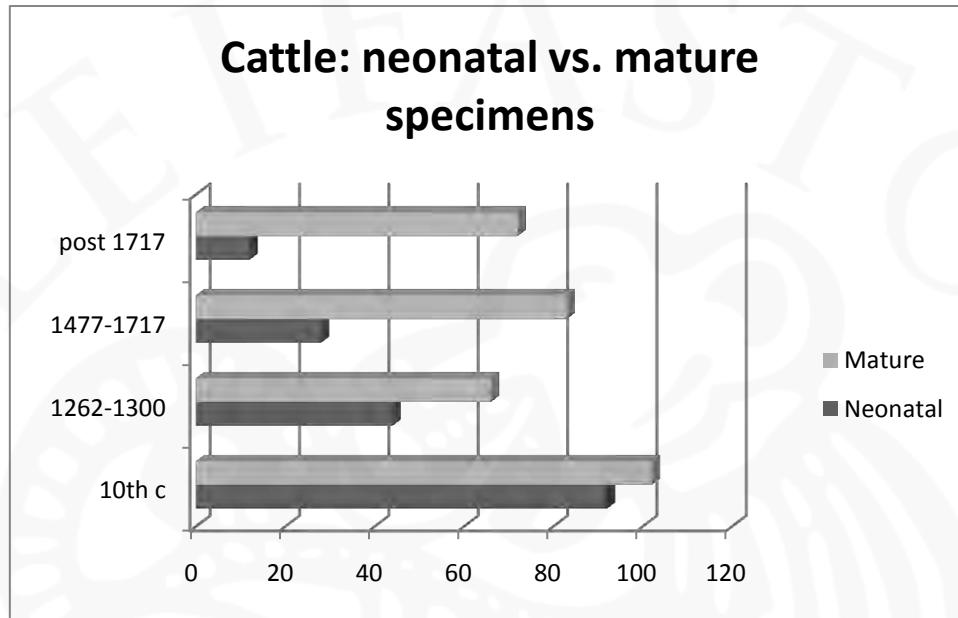


FIG 13: Neonatal vs. mature cattle specimens

Halstead has argued that where cattle-based dairying is important, a large proportion of neonatal cattle bone is found in an archaeological assemblage (1998). By keeping cows in calf-bearing cycles while culling the calves, cows continuously produce milk and calves for human consumption. On the other hand, in a cattle economy based solely on meat production, cattle are slaughtered when they reach mature body size.

Neonatal bone is identified by a variety of traits including size, shape, porosity, state of fusion of long bone epiphyses, tooth eruption stage (where possible), and extensive use of comparative neonatal specimens. The archaeofauna collected in the 2008 field season suggest that past residents of Skútustaðir were killing of many young calves and were likely practicing a dairy economy to some extent. In some contexts, nearly half of the cattle bones recovered are those of newborn calves (see chart below). The proportion of neonatal cattle being killed off appears to decrease in the late medieval to early modern period. It may be best to reserve final conclusions until more specimens are recovered in the following excavations of Skútustaðir.

Horse (*Equus caballus*) remains were represented by three total specimens. It is believed that horses were not eaten approximately after the Christianization of Iceland around 1000 CE as Icelanders increasingly adopted alternate customs alongside their new religion (Karlsson 2000, p 46).

A total of 13 specimens of pig (*Sus scrofa*) remains have been found during ongoing analysis of the material from 2008 and 2009. An ulna came from an unstratified context in area E, and a canine tooth, Area F, in an early modern context. The remainder seen so far have been found in the large context [161], excavated in 2009 and dating to the 10<sup>th</sup> c. This supports a previously seen pattern of a decrease in the apparent keeping of pigs in the Mývatn area which is believed to have peaked during the settlement age. Of course, more data is desirable.

### ***Domestic Mammal Tooth rows***

A Large number of caprine and cattle mandibular and maxillary tooth rows were recovered in 2009 and these were especially abundant in context 161 discussed above. The full analysis of age and wear will appear in full length zooarchaeological report of this additional material and will be available on Nabohome.org.

### ***Seals***

While present in other phases, no seal remains were found in the large 10<sup>th</sup> century deposit [161]. Phocid remains present interesting evidence of the movement of subsistence items between the coast and this farming area, approximately 60 km inland. As more of the collection is processed it is hoped that we will gain an understanding of the nature such exchanges or movements of animal products and whether it changed over time.

### ***Birds***

Bird species found throughout the site include mallards (*Anas platyrhynchos*), red breasted merganser (*Mergus serrator*), scaup (*Aythya marilla*), swans (*Cygnus sp.*), swan/goose sized specimens, slavian grebe (*Auritus podiceps*), long-tailed ducks (*Clangula hyemalis*). Another present avian species was ptarmigan (*Lagopus mutus*), a local terrestrial bird. Marine avian species were not found in the assemblage except for one sea eagle claw (*Haliastur albicilla*) from an unstratified context.

Bird egg shell was found but will require analysis at the micro-level in order to be identified to a species level. Bird egg shell previously found in other lake Mývatn archaeofauna has pointed to a long term tradition of sustainable harvest of bird eggs, beginning in the 9<sup>th</sup> centuries and still carried out today (McGovern et al 2007). The presence of a variety of local (non marine) birds in the midden suggests that the harvesting of local birds as food was not focused on a single local species.

During the 2009 excavation season, very dense, but thin, layers of fragmented bird egg shell were found in the midden. Because the fragments would be too small to be recovered in the sieve, they were sub-sampled directly into small bags or into the soil samples that will be screened through

fine mesh and sorted. Their stratigraphic relationships were recorded, and future analysis will help determine the species origin of the egg shell. Overall, the analysis of 10<sup>th</sup> century context 161 from the 2009 excavation season did not add a great deal of evidence of birds being consumed as food; five specimens of bird bone were recovered and none were identifiable to the species level. However the absence of bird bones is significant in that it continues to support the apparent pattern of wild eggs, rather than wild birds themselves as food.

Latin name	Common English name	9th c	1262-1300	14th c	1477-1717	Post 1717	Un-stratified	Total
AVSP	Avian sp.	8	28	10	43	34		128
<i>Gallus gallus</i>	Chicken		2					2
<i>Clangula hyemalis</i>	Tufted/long tailed duck		2			1		3
<i>A. Platyrhynchos</i>	Mallard				1	1		2
<i>Aythya marilla</i>	Scaup	1	3					4
<i>Anas sp.</i>	Duck sp.				2	3	1	6
<i>Bird (avsp)egg shell</i>	Avian sp.			1	15	3		19
<i>Cygnus sp.</i>	Swan sp.				1			1
<i>Lagopus mutus</i>	Ptarmigan					4		4
<i>Mergus serrator</i>	Red-Breasted Merganser					2		2
<i>Podiceps auritus</i>	Slavonian grebe					1		1
<i>Haliaetus albicilla</i>	Sea Eagle						1	1
<b>Total</b>		9	35	11	62	49	2	173

TABLE 4: Bird specimens from the Skútustaðir archaeofauna

The 2009 excavation season at Skútustaðir has so far accomplished several major goals. First, deposits containing bone and artifacts from all periods were located- in zooarchaeological terms, this is the unique site in Mývatnssveit to yield such a long term record. Especially rich deposits from the early modern period and the settlement period were found in 2009. Analysis of context [161] in addition to analysis following the 2008 field season has added to our understanding of the variability in the use of domestic mammals and bird resources in this well-studied region. Future directions include a full analysis of the fish bone from Skútustaðir as well as the continuation of the important international and interdisciplinary projects aimed at integrating large, long term data sets and illuminating the human and environmental interactions in Mývatnssveit.



## Preliminary Finds report

Guðrún Alda Gísladóttir (FSÍ)

The preliminary discussion of finds from the 2009 midden excavation in Skútustaðir in Mývatnssveit, includes 2518 finds are registered under 432 finds number. Few finds have been found in bone bags and samples and will be included at later stages. Six finds numbers were deleted in post-excavation process as being unworked basalt stone pebbles (finds no. 190, 315, 343, 444, 479, 488). Conservation is concluded by Jannie Amsgaard Ebsen at Odense By Muesser. Finds processing and data entering was done by Astrid Daxböck.

The assemblage is diverse in material and types but mainly includes distorted and broken items - a fact correlating to the find circumstances. The diverse list of retrieved materials is listed below.

Material	Count
Bone and bone?	20
Ceramic	1036
Coal	1
Composite	1
Glass	800
Leather	2
Linoleum	1

Material	Count
Metal	583
Rubber	1
Slag	
Stone	68
Tar paper?	1
Wood	4
Grand Total	2518

TABLE 5: Number of objects of each material type from the 2009 excavation

The excavation took place east of area D, which was excavated in 2008. In this discussion the assemblage has been divided in three phases based on tephra deposits V 1717 and V 1477.

- **Phase I:** Below 1477 tephra
- **Phase II:** Above 1477 and below 1717 tephra
- **Phase III:** Above 1717 tephra

It is important to keep in mind that the tephra layers provide a *terminus ante quem* for the artefacts found below them, but that finds from above the layers are not necessarily later. Many of the finds, especially iron finds are hard to date or analyse by their form which is often 'timeless' and

fragmented. However, the time frame given by the tephra layers adds greatly to our knowledge and helps our interpretation and understanding of the data.

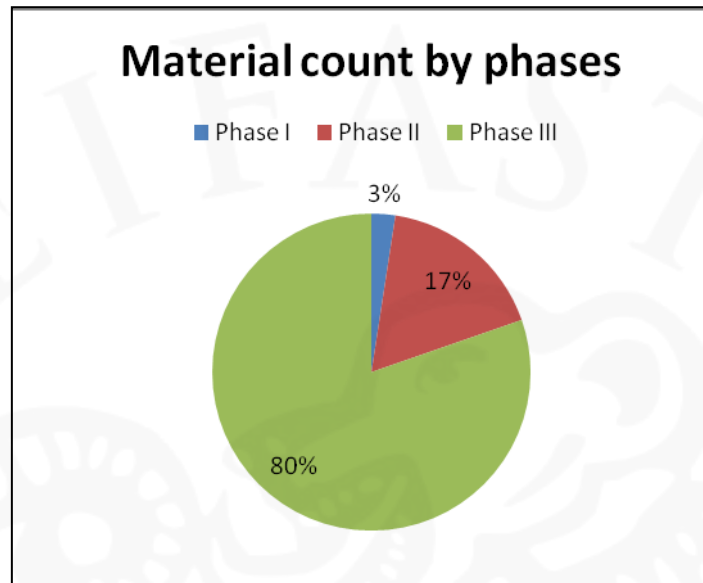


FIG 14: *Material Count by Phase*

As can be seen on the pie-chart above (FIG 8) 80% of the finds retrieved this field season are from modern deposits that accumulated after the 1717 tephra fell. 17% of the finds are found in deposits sandwiched between 1477 tephra and 1717 tephra and only 3% are from deposits that accumulated before the 1477 tephra fell.

The numbers of excavated contexts were 78 and of them 50 produced finds. The find richest contexts with 30-35 finds are topsoil [100], 20th century dump [122] and [164=135] grey brown ashy midden below 1717 tephra. Three contexts produced the finds count of 20-23; [104] a grey ashy midden deposit above 1717 tephra; [136] a mottled midden deposit below 1717 tephra and [167] a turf dump with grey ashy lenses below 1717 tephra. Other contexts have a find count of 1-19.

## Phase I

From phase I total of 60 finds are registered under 41 find numbers, 3% of collected material. All of the finds are from area G.

Material Type (Basic)	Total
Bone	4
Metal	36
Stone	20
Grand Total	60

TABLE 6: Number of finds of each material type from phase I.

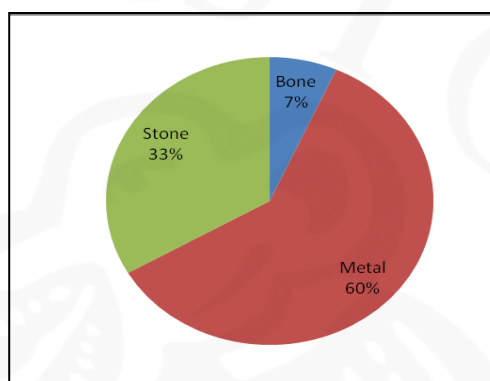


FIG 15: Percentage of each material type in phase I

## Bone

Finds no	Area	Context	Type	Material Type (Basic)
282	G	139	Worked bone	Bone
324	G	148	Needle	Bone
340	G	152	Worked bone	Bone
401	G	156	Worked bone?	Bone

TABLE 7: Bone finds from phase I



FIG 16: Bone needle 324.

The preservation of bone is excellent. Retrieved bone finds are four. No. 324 is a upper fragment of a bone needle. The cross section is flat, the head has the dimensions 10x3 mm, and the central perforation is 4 mm in diameter. Beneath the head is a gently sloping notch. The shaft cross section is rounded flat, 4 x 2mm (see FIG 16). Find 282 is a whale bone object, with two sides flat, carved to a point with a swelling in

the arm above the point. A groove is along one side. Other finds needs further analysis.

### ***Metal***

Copper alloy and lead is rather well preserved but the iron heavily corroded.

#### Copper alloy

Four artefacts are registered under three finds numbers. Find no. 251 is a decorative, lozenge shaped rove with centred perforation and find 280 is a triangular plate with incised lines along the edges, cut sides. Other finds are scrap.

Finds no	Area	Context	Type	Sub Material
251	G	142	Rove	Copper alloy
280	G	149	Indeterminate	Copper alloy
290	G	138	Sheet	Copper alloy

TABLE 8: *Copper alloy finds from phase I*

#### Iron

Total of 31 find is registered under 18 finds numbers.

Finds no	Area	Context	Type	Sub Material
253	G	138	Nail	Iron
254	G	138	Nail	Iron
255	G	142	Nail	Iron
258	G	139	Nail	Iron
306	G	145	Nail?	Iron
328	G	158	Tool	Iron
342	G	147	Nail	Iron
346	G	148	Nail	Iron
347	G	148	Nail	Iron

Finds no	Area	Context	Type	Sub Material
373	G	149	Nail	Iron
380	G	161	Nail	Iron
381	G	149	Nail	Iron
388	G	158	Nail	Iron
402	G	156	Nail?	Iron
404	G	156	Rivet	Iron
551	G	139	Sheet	Iron
576	G	145	Knife	Iron

TABLE 9: *Iron finds from phase I*



Most of the finds are nails/nails?, which are broken and/or bent. Rivet 404 is complete. Other finds are a badly corroded knife with broken blade but complete tang, sheet metal, iron spit/rod, and a possible tool with a tapering arm to a point, the shank/arm is little bent below mid arm.

### Lead

The only lead find from this period is indeterminate, a possible broken pin/shank, no. 554 [147].

### **Stone**

In total 20 stone finds are registered under 14 finds numbers.

Finds no	Area	Context	Type	Material Type	Sub Material
300	G	142	Manuport	Stone	Zeolite
341	G	158	Manuport	Stone	1 tholeiit stone, 1 zeolite
350	G	148	Manuport	Stone	1 quartz (possibly onyx or agate), 2 zeolites
352	G	156	Manuport	Stone	1 milky quartz, 1 onyx, 1 zeolite, 1 quartz (onyx?)
353	G	161	Manuport	Stone	Flint
371	G	149	Manuport	Stone	Tholeite
391	G	161	Manuport	Stone	Zeolite
292	G	145	Spindle whorl	Stone	Claystone?
394	G	161	Spindle whorl	Stone	Red sandstone
370	G	158	Unworked stone	Stone	Unidentifiable
418	G	145	Unworked stone	Stone	Basalt
288	G	149	Whetstone	Stone	Schist
393	G	161	Whetstone	Stone	Schist

417	G	145	Whetstone	Stone	Schist
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TABLE 10: *Stone finds from phase I*

The largest group in this category are unworked stone pebbles, manuports, of diverse stone types. Two spindle whorls are present, both broken and of common Viking age and post Viking age types. No. 292 is a hemispherical spindle whorl broken in half, the spindle hole is conical 10-13 mm in



FIG 17: *Spindle whorl 394*

diameter. The height is 21 mm and diameter is 40 mm. Spindle whorl no. 394 is fragmented - only two fragments survive; one is a side fragment the other is a base and side fragment and part of the spindle hole side, in total ca. 1/6 of a whole whorl is present (see FIG 17). The height is 19 mm. Both whorls are of York type A1 that is a common form in York in 9<sup>th</sup> and 10<sup>th</sup> century and declines in the 11<sup>th</sup> century (Rogers, W.P, 1997).

In Iceland this type is well known in both Viking age and Post Viking age period but no complete comparison has been done on spindle whorl forms in Iceland. Two unworked stones are present, one of basalt but the other unidentifiable. Three schistose whetstones where found, all of Norwegian Eidsborg type, see Sigrid Juel Hansen discussion.

## Phase II

In phase two 435 finds are discussed here, registered under 135 finds numbers, 17% of the retrieved material. All finds except two are from area H (314 and 318). The material assemblage changes greatly in the deposits that are sandwiched between 1477 and 1717, from earlier deposits.

Material Type	Total
Bone	4
Bone?	1
Ceramic	108
Composite	1
Copper alloy	1
Glass	78
Metal	201
Slag	x
Stone	38
Wood	3
Grand Total	435

TABLE 11: *Number of finds of each material type in phase II*

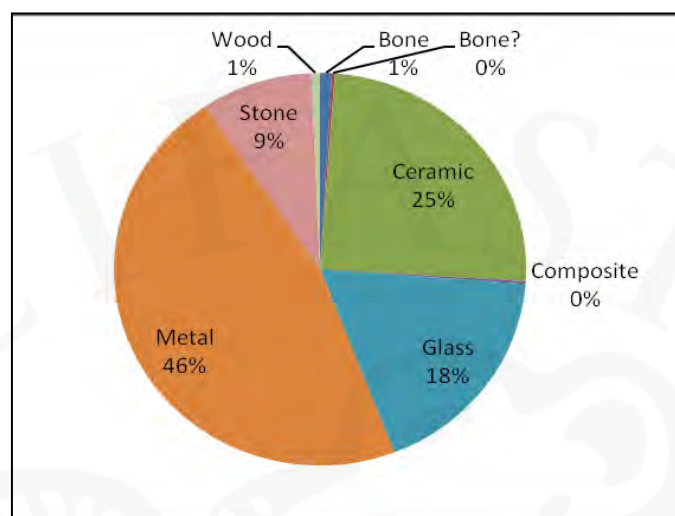


FIG 18: Percentage of each material type in phase II

### **Bone**

Four definite bones and one find that await further analysis (bone?) are registered in the database.

Find no. 422 is most interesting, a carved small miniature, a bird from Haddock cleithrum. Other finds in this category are fragments, unworked bone and indeterminate bone artefacts.

Finds no	Former finds no	Area	Context	Type	Material Type
422		H	164	Worked bone	Bone
430		H	164	Fragment	Bone
587	448	H	164	Unworked bone	Bone
588	427	H	164	Unworked bone	Bone
497		H	175	Indeterminate	Bone?

TABLE 12: Bone finds from phase II

### ***Ceramic***

Vessels and tobacco pipes are 25% of the material from this period. The assemblage is very fragmented and has broad dating but the earliest material dates to early-mid 18th century. See report by Gavin Lucas.

### ***Glass***

Glass is 18% of the material in this phase. The assemblage mostly consists of vessels and window panes, but also buttons and beads. See reports by Gavin Lucas and Elín Ósk Hreiðarsdóttir.

### ***Metal***

The preservation of lead and copper finds is good but the iron artefacts are badly corroded.

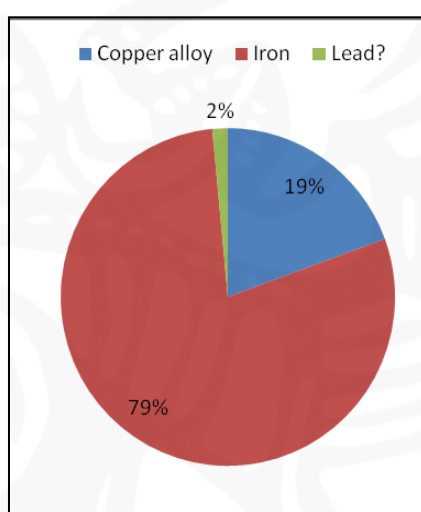


FIG 19: Percentage of each metal type in phase II

### **Copper alloys**

Total of 40 copper alloy objects were found within this period, registered under 20 finds numbers, 19% of the whole metal assemblage.

Finds no	Former finds no	Area	Context	Type	Sub material
252		H	144	Sheet	Copper alloy
264		H	136	Sheet	Copper alloy
278		H	136	Stud	Copper alloy

295		H	144	Mount	Copper alloy
314		G	133	Sheet	Copper alloy
318		G	133	Mount	Copper alloy
319		H	141	Scrap	Copper alloy
364		H	144	Fitting	Copper alloy
365		H	144	Rivet	Copper alloy
420		H	141	Thimble	Copper alloy
421		H	141	Mount	Copper alloy
423		H	164	Rivet	Copper alloy
426		H	164	Button	Copper alloy
427		H	164	Hinge	Copper alloy
434		H	164	Sheet	Copper alloy
460		H	170	Book hinge	Copper alloy/leather
471		H	167	Fitting	Copper alloy
490		H	173	Sheet	Copper alloy
548	264	H	136	Fitting	Copper alloy
563	427	H	164	Sheet	Copper alloy

TABLE 13: *Copper alloy finds from phase II*



FIG 20: Book hinge 460

Most of the finds are broken; scrap items, sheets and fittings, with and without perforations. Few mounts, decorative mounts and rivets are present, probably furniture fittings. The assemblage also includes one complete but indented thimble and a decorated book hinge (see FIG 20).

### Lead

Two probable lead finds are in the assemblage, an integral rivet 268 and button 274, both come from context [136].

### Iron

The vast majority of metal finds are made of iron, total of 159 finds were retrieved registered under 46 finds numbers.

Find no.	Former find no.	Area	Context	Type	Material
257		H	144	Nail	Iron
263		H	141	Clothing fastener	Iron
267		H	141	Nail	Iron
270		H	136	Nail	Iron
273		H	141	Fish hook	Iron
275		H	136	Needle	Iron
285		H	136	Bar	Iron
287		H	136	Clothing fastener	Iron
351		H	144	Indeterminate	Iron
366		H	144	Nail?	Iron
399		H	136	Indeterminate	Iron

424		H	164	Key	Iron
428		H	164	Nail	Iron
435		H	164	Fish hook	Iron
436		H	164	Nail	Iron
445		H	167	Nail	Iron
446		H	167	Fish hook	Iron
447		H	167	Staple?	Iron
459		H	164	Indeterminate	Iron
466		H	170	Clench bolt	Iron
472		H	167	Nail	Iron
473		H	167	Sheet	Iron
474		H	167	Nail	Iron
480		H	164	Nail	Iron
482		H	164	Nail	Iron
484		H	176	Nail	Iron
489		H	173	Nail?	Iron
492		H	174	Rivet/nail?	Iron
499		H	175	Nail	Iron
501		H	174	Nail	Iron
549	285	H	136	Staple	Iron
550	285	H	136	Nail	Iron
552	263	H	141	Nail	Iron
553	365	H	144	Nail	Iron



559	499	H	175	Needle?	Iron
560	499	H	175	Indeterminate	Iron
561	427	H	164	Clothing fastener	Iron
562	427	H	164	Scrap	Iron
564	427	H	164	Loop	Iron
565	428	H	164	Clench bolt	Iron
566	434	H	164	Nail	Iron
567	434	H	164	Sheet	Iron
568	434	H	164	Wire	Iron
573	447	H	167	Clothing fastener	Iron
575	447	H	167	Nail	Iron
585	136	H	136	Knife	iron

TABLE 14: *Iron finds from phase II*

Just under half of the iron finds are from context [164], 71 items. 38 finds came from context [136].



FIG 21: *Iron nails 428*

Most of the finds are forged nails, 114, they are mostly T-shaped with flat or little raised head or nails with circular flat head. In addition four clench bolts and nail/rivet was found. Four small fish hooks are in the assemblage, all have barbed points, three have flat headed terminal and one has loop eye terminal, three of the fish hooks are complete. Nine simple clothing fasteners, all loops, with main eye and two fastening loops were retrieved but no clothing hooks. Two needles were

also found, one broken through the eye, the other not definite. One complete key of medieval type is amongst the finds, it is badly corroded. Other finds are sheets, staples, scrap and indeterminate objects.

## Slag

The traces of metalworking are very sparse, only 2.69 g of metalworking waste was found within context [164]. The slag awaits further analysis (find no. 569).

## **Stone**

Total of 38 diverse stones are registered under 18 finds numbers.

<b>Finds no.</b>	<b>Former finds no.</b>	<b>Area</b>	<b>Context</b>	<b>Type</b>	<b>Sub material</b>
269		H	136	Whetstone	Schist
271		H	141	Whetstone	Schist
276		H	136	Stylus?	Slate?
286		H	136	Manuport	1 flint, 2 obsidian, 1 onyx, 1 basalt stone with zeolite amygdales, 2 zeolites
322		H	144	Whetstone	Schist
323		H	136	Unworked stone	Basalt
425		H	164	Manuport	2 zeolites, 2 quartz
429		H	164	Unworked stone	Andesite
451		H	167	Whetstone	Schist
458		H	164	Loom weight?	Basalt
486		H	176	Loom weight	Basalt
487		H	176	Whetstone	Schist
500		H	174	Fish hammer	olivine tholeiite, vesicular
522	453	H	164	Manuport	Obsidian
523	452	H	164	Manuport	Obsidian
524	442	H	167	Manuport	Obsidian

525	462	H	167	Manuport	Flint
586	286	H	136	Whetstone	Schist

TABLE 15: *Stone finds from phase II*

Most of the finds are unworked stone pebbles. They are manuports, mostly stones with special often glossy look such as obsidian and flints but also possible andestite. Obsidian and flints where used as strike-a-lights (Batey, C., 2009). The alleged flints await further analysis as flint is not formed naturally in Iceland. Imported flints are often found in Iceland, and few pieces were found during the Viking age research in Hofstaðir in Mývatnssveit. Their origins are suggested from Baltic and/or from Northern Sea (Batey C., 2009). Other finds are perforated weights, possible loom weights, one (probably slate) stylus small surface fragment of a fish hammer, broken through perforation. Finally one unworked basalt stone is within the assemblage. Seven whetstones where retrieved, five are of definite importation from Norway, Eidsborg type. One whetstone awaits more detailed geological analysis and one has not been analysed yet, see report on whetstones by Sigrid Juel Hansen.

### **Wood**

One burnt wood fragment and three wood fragments were retrieved from this phase, they wait further analysis.

### **Phase III**

This latest phase consists of deposits that accumulated after the 1717 tephra fell. This is the find richest phase, total count of 2020 finds registered under 254 finds numbers.

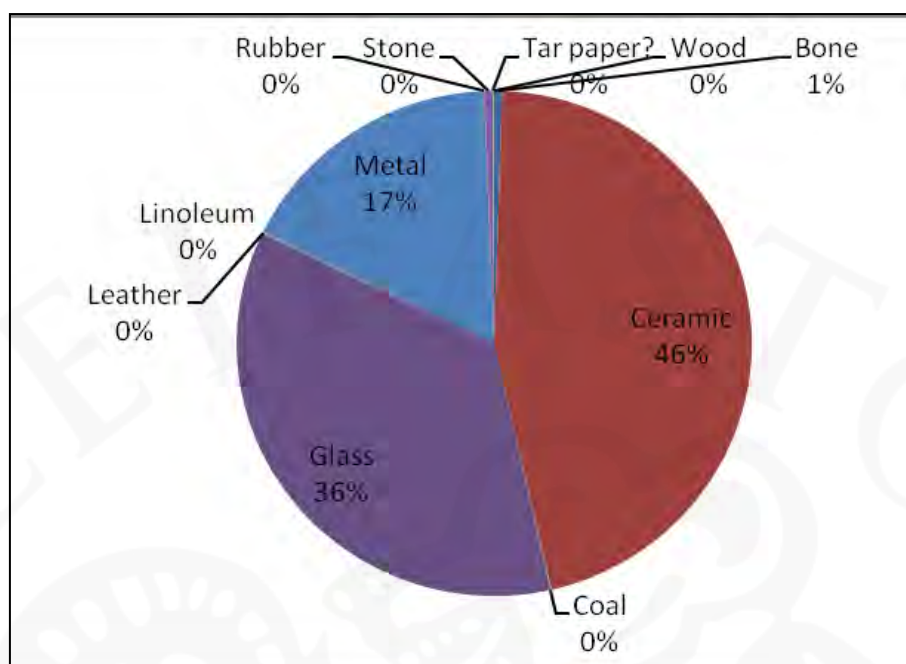


FIG 22: Percentage of each material type in phase III

### Bone

Ten bone finds are registered under seven finds numbers.

Finds no	Area	Context	Type	Material Type (Basic)	Sub Material
161	G	104	Figurine	Bone	Haddock cleithrum
184	G	104	Button	Bone	
205	H	122	Ring	Bone	
325	H	157	Figurine	Bone	Haddock cleithrum
395	H	157	Pin	Bone	Horse
407	H	163	Unworked bone	Bone	
503	H	100	'Ferrule'	Bone	

TABLE 16: Bone finds from phase III

Two carved birds figures made of haddock cleithrum are within the assemblage. The tradition of carving in haddock cleithrum goes back to Viking age in Iceland, examples are known from e.g. Sveigakot, Mývatnsveit. There are ethnographic records of carvings in haddock cleithrum from 18<sup>th</sup>

20<sup>th</sup> centuries and a considerable collection of figures (cats, foxes, seals, birds) also buttons and chess pieces but those were more common in the 18<sup>th</sup> century (Batey, C., 2005).

One complete thin, flat and disc shaped button was found, with central perforation and two incised lines around edges. Two beautiful bone finger rings were found: A) Diam. 21 mm. Cross section 2x4 mm. B) Diam. 20 mm. Cross section 2,5x3,5mm. Both are highly polished and complete. Interesting and simple 'ferrule' of bone 503 was found by profile cleaning. It has wear use but its function is obscure.

### ***Ceramics and glass***

Together glass and ceramics are 82% of all material from this period. See report by Gavin Lucas.

### ***Leather***

Two leather scrap pieces are from this period, no. 202 [122] and 209 [127].

### ***Linoleum***

One piece of linoleum no. 377 is from context [150], just beneath the topsoil in area H.

### ***Metal***

Total of 344 metal finds are registered under 126 finds numbers. The majority of the assemblage is iron, almost 90%, the rest is lead objects and a possible silver item.

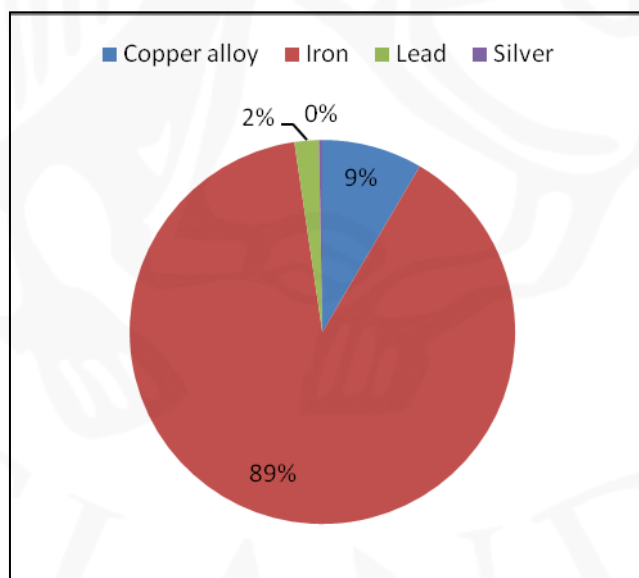


FIG 23: *Percentage of each metal type in phase III*

### Copper alloy

In total 29 objects of copper alloy were retrieved, registered under 26 finds numbers. The objects are of diverse nature.

Finds no	Former finds no	Area	Context	Type	Sub Material
152		G	100	Cartridge base	Copper alloy
153		G	104	Clothing fastener	Copper alloy
154		G	104	Ornament	Copper alloy
158		G	103	Button	Copper alloy
162		G	104	Thimble	Copper alloy
163		G	104	Fitting	Copper alloy
164		G	104	Cartridge base	Copper alloy
165		G	105	Button	Copper alloy
168		G	103	Button	Copper alloy
169		G	104	Stud	Copper alloy
201		H	122	Coin	Copper alloy
207		H	100	Fitting	Copper alloy
218		H	120	Indeterminate	Copper alloy
231		G	124	Button?	Copper alloy
234		G	123	Ornament	Copper alloy
240		G	123	Pin	Copper alloy
243		G	123	Fitting	Copper alloy
283		H	120	Bell?	Copper alloy

299		H	130	Button	Copper alloy
330		H	100	Cartridge base	Copper alloy
334		H	151	Button	Copper alloy
383		H	127	Fitting	Copper alloy
405		H	157	Pin	Copper alloy
440		H	100	Rivet	Copper alloy
547	383	H	127	Fitting	Copper alloy
571	260	H	130	Sheet	Copper alloy
572	461	H	165	Fitting/mount	Copper alloy

TABLE 17: *Copper alloy finds in phase III*



FIG 24: *Ornament 234*

Seven buttons and one probable button are within the assemblage. The buttons are all broken, they often have a loop and simple incised decoration is common. Three cartridges are amongst the finds, all fired. One badly preserved coin was found probably of late 19<sup>th</sup> or early 20<sup>th</sup> century date. Fine pins with spherical heads are two in total and one almost complete thimble. Other finds are fittings, some with perforation, decorative mount/fitting no. 572, rivet and sheet. Interesting is the decorated ornament or

token 234 with an engraved figure or a letter (see FIG. 24). This piece has created lively discussion and many theories of what it might be, or what it may represent.

### Iron

In total 307 pieces of iron finds are registered under 94 finds numbers.

Finds no	Former finds no	Area	Context	Type	Sub Material
167		G	104	Nail	Iron

170		G	104	Strip	Iron
171		G	100	Nail	Iron
185		G	103	Nail	Iron
186		G	002	Nail	Iron
187		G	104	Nail	Iron
188		G	105	Sheet	Iron
195		H	122	Sheet	Iron
196		H	122	Nail	Iron
198		H	122	Wire	Iron
204		H	122	Tin	Iron
212		H	100	Sheet	Iron
213		H	100	Nail	Iron
217		H	120	Nail	Iron
228		G	105	Nail	Iron
241		G	124	Nail	Iron
242		G	123	Nail?	Iron
245		G	110	Needle	Iron
249		G	110	Nail	Iron
250		G	126	Nail	Iron
260		H	130	Scrap	Iron
298		H	130	Nail	Iron
302		H	129	Scrap	Iron
332		H	150	Sheet	Iron



335		H	151	Nail	Iron
338		H	127	Sheet	Iron
339		H	127	Nail	Iron
355		H	120	Nail?	Iron
363		H	157	Nail?	Iron
374		H	150	Nail	Iron
376		H	150	Nail	Iron
379		H	100	Spring	Iron
382		H	151	Nail	Iron
389		H	150	Nail	Iron
397		H	157	Nail	Iron
403		G	150	Nail	Iron
406		H	163	Nail?	Iron
409		H	157	Nail	Iron
415		H	155	Nail	Iron
461		H	165	Staple?	Iron
470		H	169	Nail	Iron
475		H	165	Nail	Iron
505		H	122	Sheet	Iron
526	212	H	100	Tin	Iron
527	212	H	100	Rove	Iron
530	213	H	100	Nail	Iron
531	185	H	103	Wire	Iron

533	170	G	104	Sheet	Iron
534	188	G	105	Nail	Iron
536	357	H	120	Wire	Iron
537	203	H	122	Thimble	Iron
540	203	H	122	Rivet	Iron
541	203	H	122	Pellet?	Iron
545	233	H	124	Nail	Iron
555	332	H	150	Object	Iron
557	361	H	160	Nail	Iron
558	432	H	165	Scrap	Iron
577	338	H	127	Nail	Iron
578	338	H	127	Scrap	Iron
580	198	H	122	Ring	Iron
581	198	H	122	Strip	Iron
582	198	H	122	Object	Iron

TABLE 18: *Iron finds in phase III*



FIG 25: *Iron nails 196*

Most of the finds are nails or probable nails (mostly suggested shanks). The total count of this type is 197 pieces. Many of the nails are modern wire nails that can be dated to late 19<sup>th</sup> or 20<sup>th</sup> century – other nails are forged: T-shaped, L-headed and with flat, circular shaped head. One complete staple was found.

Two buttons were found and simple clothing fasteners, both loops and a hook. Four fish hooks were found, all with barbed point, two with flattened terminal and one with loop eye terminal. Broken needle and a broken thimble are amongst the finds. Many scrap finds are within

the assemblage, also sheet metals, strip, wires, fittings and iron bars.

## Lead

Seven finds of lead were found, one probable net sinker, a token with inscription that awaits further analysis, a complete button with two perforations and folded sheetings.

Finds no	Former finds no	Area	Context	Type	Sub Material
200		H	122	Sinker?	Lead
203		H	122	Token	Lead
311		H	129	Button	Lead?
532	170	G	104	Sheeting	Lead?
544	203	H	122	Object	Lead

TABLE 19: *Lead finds in phase III*

## Silver

One possible silver button was found, no. 247 [110]. It is a complete, flat disc shaped with loop fastening.

## Slag

Little traces of metalworking activity was found in contexts [100 and 169], total of 13 g.

## ***Rubber***

One footwear label is in the assemblage, no. 208 [122]. It is marked:

M.M FOOT WEAR MADE IN JAPAN

## ***Tar paper***

Small piece of tar paper is no. 150 from context [104]. Tar paper was used for house insulation.

## ***Stone***

Total finds of stones are 11 registered under 10 finds numbers.

Finds no.	Area	Context	Types	Sub Material

156	G	105	Whetstone	Schist
192	G	100	Unworked stone	Tholeiite, vesicular (basalt)
193	G	104	Roof tile?	Slate
199	H	122	Whetstone	
222	H	120	Manuport	Obsidian
291	H	120	Whetstone	Schist
320	H	120	Worked wood?	
349	H	157	Whetstone	Schist
354	H	120	Manuport	Flint
457	H	165	Manuport	Zeolite, most likely scolecite

TABLE 20: *Stone finds in phase III*

Four manuports were retrieved and four whetstones, all of Norwegian Eidsborg type except one that is considered to post date 1850, see Sigrid Juel Hansen's report on whetstones. A fragment of a slate roof tile was also retrieved and an unworked basalt stone.

## **Ceramics, clay pipes & glass**

Gavin Lucas

### ***Ceramics***

A total of 1.25 kg or 974 sherds of pottery were recovered from the 2009 excavations; the majority of the material consisted of very small fragments and for the most part, unidentifiable except to broad fabric group. Most of the ceramics comprised industrial refined white earthenwares either plain or undecorated and in a variety of forms, but chiefly bowls and plates. Decorative styles included tissue-printed, sponged, banded and painted wares. Porcelain was also present in some quantity, often plain or with simple edge banding (e.g. gilt) but in some cases with decal prints. At least one maker's mark was noted, Villeroy & Bosch, and some of the spongewares are likely to be East German (VEB, 1945-1989). Besides these, there was also a number of glazed red earthenwares, mostly from cooking pots and a number of feet from such vessels were recovered. Rarer types of

pottery included a few tin-glazed sherds, some stoneware and miscellaneous other coarse glazed earthenwares. 2 fragments of tile or thick-walled vessel were also present.

The dating of the assemblage is quite broad – there are almost certainly early groups here, probably from the early-mid 18th century (e.g. contexts 165, 167); some are also probably early-mid 20th century (contexts 100, 122), while most of the others date to the 19th century. More precise dating would be possible if the pottery is linked to the stratigraphic sequence.



FIG 26: Left: Pottery from phase I, 166. Right: Pottery from phase II, 495.

### Clay Pipes

There is quite a substantial collection of clay pipes, possibly more than one might normally expect; 60 fragments in total. Most are stems, and fairly thick types. The few bowls all point to an early-mid 18th century date. One bowl has a makers stamp but it is too poorly defined to identify with any certainty. The pipes all appear to be also fairly rough and low quality types, unpolished.

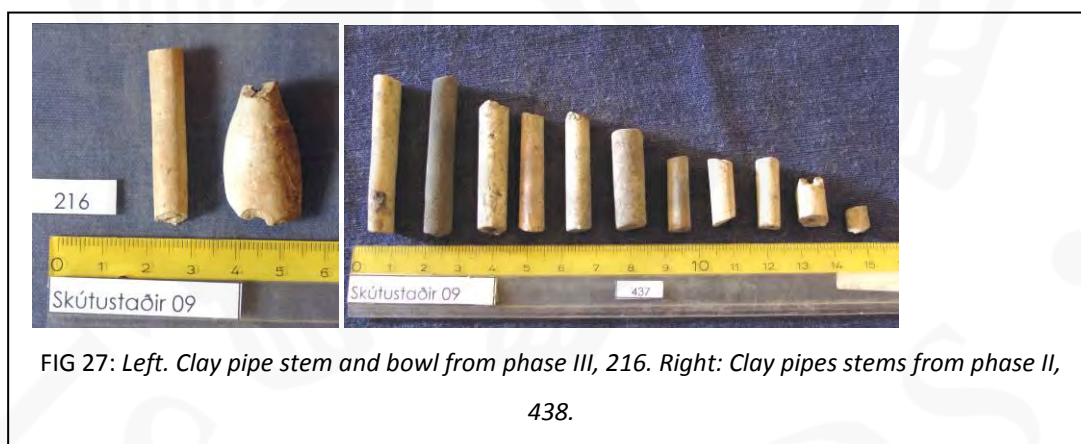


FIG 27: Left. Clay pipe stem and bowl from phase III, 216. Right: Clay pipes stems from phase II, 438.

### Glass

Glassware consisted primarily of vessels and window panes, but also buttons and beads. The beads will be reported on separately and not discussed further here.

A total of 444 fragments of vessel glass (1.07 kg) were recovered. The vessel glass is predominantly composed of green bottle fragments, with occasional brown/amber and clear bottles. Nothing

particularly diagnostic was noted, though some of the clear glass vessels included smaller phials and jars as well as bottles. One near complete faceted tumbler was recovered, along with a complete clear small-sized soda bottle, the latter machine-made. In addition to vessels, there was also a small collection of kerosene lamp chinmey (clear) and shade (white) fragments.

A total of 349 fragments of window glass (0.32 kg) was recovered, consisting of both handmade green and clear machine made glass.

4 glass/ceramic buttons were found, in different colours, but one with a printed twill pattern on its upper surface.

The few diagnostic pieces of glass all belonged to the late 19th/early 20th century, though there is no reason not to suppose some of the smaller fragments could not be earlier in date.

### **Beads found during excavation in Skútustaðir, Mývatnssveit in 2009**

Elín Ósk Hreiðarsdóttir

During excavation of a midden in Skútustaðir in the summer of 2009 three beads were found, two in area H and one in area D.

#### SKU 09-333

*Material:* Glass.

*Condition:* The bead is whole but in very bad condition and heavily affected by glass disease.

*Shape:* Rounded with eight, faceted sides.

*Size:* Length 0,52, cm, diam. 0,68-0,7 cm, diam. of hole: 0,2 cm.

*Method of manufacture:* wounded glass.

*Colour:* unidentifiable

*Found in context:* Area H [151].



FIG 28: Bead SKU 09-333

Bead SKU 09-333 is a wounded bead with four facets pressed into it from each of the ends. The bead is heavily affected by glass disease and all colour has eroded away. The bead is now white with slightly coarse surface. The hole of the bead is very regular and in it the orientation of the glass can

be seen, around the hole. This bead was found in layer [151] which was close to the surface in area H, above tephra from V.1717.

Two similar glass beads have been found in Iceland before, both in the south (in Skálholt and Steinsholt). The bead from Skálholt was dated by context to 1784-1896, but the bead from Steinsholt (a colourless glass bead Þjms. 10596) could only be presumed to be earlier than the abandonment of the farm in 1803. The bead from Skútustaðir is in fact a lot smaller than both of these beads but shares material and shape and could well be from similar period or late 18<sup>th</sup> or 19<sup>th</sup> century.<sup>2</sup>

#### SKU 09-337

*Material:* Glass.

*Condition:* The bead is whole and in good condition.

*Shape:* Rounded.

*Size:* Length 0,4, cm, diam. 0,43 cm, diam. of hole: <0,1 cm.

*Method of manufacture:* Drawn glass.

*Colour:* Turquoise.

*Found in context:* Area D [100].

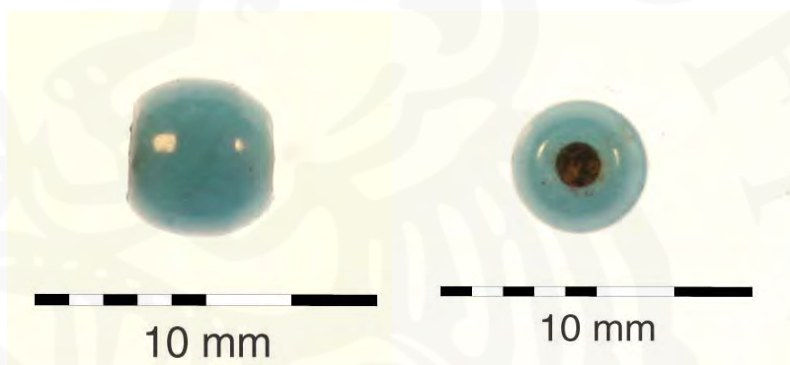


FIG 29: Bead SKU 09-337

Drawn beads are usually the most common on archaeological sites from later times and make up 43% of the total Icelandic glass bead collection from the period. Bead SKU 09-337, found in Skútustaðir in 2009 is in many ways typical for drawn beads from later times. It is turquoise (which is a very popular colour) and less than 0,5 cm in diameter. The size indicates that it might have been used in embroidery of some sort. The bead is well made and in good conditions. It was found in a surface layer [100] in area D, well above tephra from V.1717.

Drawn beads like this, were made by blowing heated glass into a hollow form and then drawing out the hot glass in opposite directions making a long tube or hollow cane. This cane was then cut into small segments. The final stage in making simple, monochrome glass beads was

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<sup>2</sup> It should be mentioned that three other beads with same shape but made of amber have also been found in Iceland (SKH-2229, Þjms2003-37-3000 and SKH04-6503). Two of these beads come from Skálholt, where they are dated to the 18<sup>th</sup>-19<sup>th</sup> centuries, and one from Hólar.



variable. They were sometimes reheated to get rounded edges or polished in sand and wood ash (or plaster and graphite), first in a large pan on fire and later (after 1817) in iron drums in an oven (Karklins 1985:88). This process produces simple-shaped beads of different angularity and length. (Sprague 2000:203-205). Most of the small drawn beads from later times found in Iceland come from excavations at the episcopal manor and school at Skálholt but an occasional bead of this type has been found in other excavations across the country. Where tightly dated they almost always come from a 17<sup>th</sup>-19<sup>th</sup> century context and that added to the information that the tephra in Skútustaðir gives it can be said that the bead is most likely from 18<sup>th</sup>-19<sup>th</sup> century.

Without further analysis (of glass) it is difficult to determine where the bead from Skútustaðir was made. Still it is not unlikely that it was made on the Island of Murano in Venice where such beads were produced in large quantities in this period.

#### SKU 09-289

*Material:* Amber

*Condition:* The bead is whole and in good condition.

*Shape:* Rounded.

*Size:* Length 0,63, cm, diam. 0,71 cm, diam. of hole: 0,2 cm.

*Method of manufacture:* Cut and polished

*Colour:* Reddish-brown.

*Found in context:* Area H [141].



FIG 30: Bead SKU 09-289

One amber bead was found in Skútustaðir in the summer of 2009. The bead was found in a layer [141] between two tephra from V.1477 and V.1717. The bead is rather well made. It is rounded and is of rather light, transparent amber. One end of the bead is rather flat (cut) and the other is rounded. The hole at the rounded end is slightly asymmetrical. Amber beads were made by roughly cutting out the bead with a knife, then a hole was drilled (often from both ends) before any fine carving or polishing took place (see for example Egan and Pritchard 2002:307).

Just under a hundred amber beads have been found in Iceland from medieval and early modern times and about half come from a dated context. Amber beads are usually simple and do not have any clear typological characteristics. The simplicity of the vast majority of amber beads makes it difficult to say much about them, their development or chronology. Nevertheless when



taking a closer look at the amber beads from the Viking age and later time a clear difference emerges in terms of their shape and size as well as a minor colour difference. As a generalization, the amber beads from later centuries have a brighter orange/yellow tone whereas among the Viking age beads, a darker, reddish brown tone is more dominant. The beads from later times have a smaller diameter while at the same time being proportionally wider. A further difference can be seen in the perforations of the beads, which seem to get much narrower in later times. These differences are interesting, especially since the chronological variability of amber beads has received very little attention. The bead from Skútustaðir has all the characteristics of an amber bead of later times.

It is difficult to determine where the amber bead might have come from. Amber is found in various places all around the globe but the most renowned is probably the so called *Baltic amber* that washes up along the shores of the Baltic Sea and as far away as Norway, Holland and England. Amber is a soft material and is therefore easy to work with. Because of this it is likely that small-scale amber bead production took place in previous centuries wherever amber was found. It is possible that some of the amber beads found in Iceland might have been of such small-scale production but it is likely that most came from the more centralized workshops in central and north-eastern Europe. The most fruitful extraction area of Baltic amber has, for a long time, been the eastern Baltic, more specifically the Kaliningrad area (formerly Königsberg). It is likely that most, if not all of the Icelandic amber beads are made from Baltic amber, which dominated the European bead market in the medieval period and later. It is possible to identify the provenance of amber through *absorption spectra tests*, but this only gives a broad provenance and it does not of course reveal where the amber was worked.

## **Whetstones**

Sigrid C. J. Hansen Mars 2010

12 whetstones and whetstone fragments were found during the 2009 field season at Skútustaðir or just over 200 gr of whetstone material. The collection primarily consists of the light grey Eidsborg schist type that has been mined and exported from the Telemark region in Southern Norway since the late Iron Age. This stone type has been used in Iceland from the settlement period and until ca. 1950 and does therefore not provide any good dating possibilities. One other stone type used for whetting has been recovered from the site (199) but further studies need to be carried out to determine the geological origins. It is schistose but dark grey and rather coarse grained. My

preliminary studies of modern whetstone types used in Iceland indicated that this might be a so called “stickle” that was imported from Britain from the end of the 19<sup>th</sup> century and used to sharpen scythes. One other example of the same type has been found at Hólar in Hjaltadalur.

The collection comprises of both whole whetstones and smaller fragments but in general most of the examples are somewhat fragmented. However, they are preserved in a size still usable for continuous grinding purposes. The most complete and well shaped examples are all from contexts predating AD 1717. A high proportion of the collection shows signs of extensive use (in particular 271a+b) and in some examples re-use after breakage (156 and 291). This could indicate lack of good whetting material during some periods, though this picture is not general for the entire whetstone collection from the 2009 excavation.

### **Area G**

**Find nr.:** SKU09-156, **Context:** 105, **Area:** G

**Material:** Light grey, fine grained mica schist of the Eidsborg type

**Condition:** Stable

**Shape and type:** End piece of, presumably, a medium sized whetstone but has been re-used for a while after breakage, at the present size. Straight end piece, parallel sides looking at the broad side and tapering towards the point of breakage looking at the narrow side. Uneven rectangular cross section at points almost oval due to the rounded edges.

**Size:** Length 4,6cm, width 2cm, thickness 1cm, weight: 14g

**Use/fragmentation:** Extensively used. Preserved with four smooth grinding surfaces, slightly convex on the broad sides. The edges are all rounded due to use but no grinding grooves visible. It is preserved in a size usable for continuous grinding purposes.

**Find nr.:** SKU09-288, **Context:**149, **Area:** G

**Material:** Light grey, fine grained mica schist of the Eidsborg type

**Condition:** Well preserved

**Shape and type:** Probably end and centre piece of a medium sized whetstone, but could also be a whole whetstone with damages on one end piece. It has straight ends with hew marks, parallel sides, rectangular cross section and sharp edges.

**Size:** Length 6,5cm, width 1,3cm, thickness 0,7cm, weight: 13g

**Use/fragmentation:** Only moderately used. Preserved with four intact and smooth grinding surfaces and is still in a size well usable for continuous grinding purposes. No clear sign of grinding marks except from a small depression in the surface of one broad side near the end-piece.

**Find nr.:** SKU09-417, **Context:** 145, **Area:** G

**Material:** Light grey, fine grained mica schist of the Eidsborg type

**Condition:** Stable

**Shape and type:** Fragmented part of an end piece, impossible to estimate original size or shape of the whetstone.

**Size:** Length 4,4cm, width 1,1cm, thickness 0,7cm, weight: 4g

**Use/fragmentation:** Remains of smooth grinding surfaces and relatively sharp edges. Very fragmented and not usable for grinding purposes.

**Find nr.:** SKU09-393, **Context:** 161, **Area:** G

**Material:** Light grey, fine grained mica schist of the Eidsborg type

**Condition:** Well preserved

**Shape and type:** Completely preserved example of a medium sized whetstone with tapering sides toward both ends on both broad and narrow sides. It must have been held in around the centre when used and the blade drawn out towards the ends. One end piece is straight but rounded and the other is slightly slanting. All sides are rounded due to use. Square cross section.

**Size:** Length 10,3cm, width 1,4cm, thickness 1,3cm, weight: 28g

**Use/fragmentation:** Preserved with four intact, smooth grinding surfaces. One of the broad sides has a vague u-shaped grinding grooves running on the longitude of the surfaces. It is still preserved in a size usable for grinding purposes.

## **Area H**

**Find nr.:** SKU09-199, **Context:** 122, **Area:** H

**Material:** Mid grey, medium fine grained schistose stone type of unknown origin. Need to be geologically determined.

**Condition:** Well preserved

**Shape and type:** End and centre piece of, presumably, a medium sized whetstone of modern type. A qualified guess would be post-dating 1850, but further research into modern whetstone types is ongoing. Unknown origin but not unlikely British. Straight end piece, parallel sides, rounded edges and oval square section.

**Size:** Length 7,8cm, width 2,5cm, thickness 1,6cm, weight: 49g

**Use/fragmentation:** Moderately used, with convex grinding surfaces, possibly been attached to some sort of handle and used to grind scythes (stone stickle). It is preserved in a size usable for continuous grinding purposes.

**Find nr.:** SKU09-269, **Context:** 136, **Area:** H

**Material:** Light grey, fine grained mica schist of the Eidsborg type

**Condition:** Well preserved

**Shape and type:** End and centre piece of, presumably, a small or medium sized whetstone. No signs of use after breakage. Very nicely shaped and only moderately used, with straight parallel sides, slightly rounded edges and straight end piece. Rectangular, almost even sided, cross section.

**Size:** Length 6,2cm, width 1,1cm, thickness 1cm, weight: 15g

**Use/fragmentation:** Preserved with four intact, smooth grinding surfaces. No grinding marks. It is still preserved in a size usable for grinding purposes.

**Find nr.:** SKU09-271a, **Context:** 141, **Area:** H

**Material:** Light grey, fine grained mica schist of the Eidsborg type

**Condition:** Stable

**Shape and type:** Upper end-piece of, presumably, a small or medium sized whetstone. Straight end piece, parallel sides looking at the broad side and tapering towards the point of breakage looking at the narrow side. Uneven rectangular cross section at points almost oval due to the rounded edges.

**Size:** Length 2cm, width 1,5cm, thickness 0,8cm, weight: 4g

**Use/fragmentation:** Very extensively used. Preserved with two smooth surfaces but wavy grinding due to use. The edges are all rounded and several u-shaped grinding grooves are visible on one of the broad sides. It is no longer usable for grinding purposes.

**Find nr.:** SKU09-271b, **Context:** 141, **Area:** H

**Material:** Light grey, fine grained mica schist of the Eidsborg type

**Condition:** Stable

**Shape and type:** Lower end-piece of, presumably, a small or medium sized whetstone. Rounded end piece with gradual transition to the sides, tapering sides both looking at the broad and narrow side. Uneven rectangular cross section at points almost oval due to the rounded edges.

**Size:** Length 4cm, width 1,5cm, thickness 0,5cm, weight: 4g

**Use/fragmentation:** Very extensively used. Preserved with two smooth surfaces. The edges are both sharp and rounded and very irregular. Several grinding grooves across the edges of the broad sides and probably also a grinding groove running on the longitude of both the narrow sides. It is hardly usable for grinding purposes at the present state.

**Find nr.:** SKU09-291, **Context:** 120, **Area:** H

**Material:** Light grey, fine grained mica schist of the Eidsborg type

**Condition:** Well preserved

**Shape and type:** End and centre piece of a medium sized whetstone, but re-used for a while after breakage. Triangular cross section but probably initially rectangular and used so extensively that one side is almost worn down. The sides are very irregular in shape and all the edges rounded or damaged. The end piece is flat and slightly slanting.

**Size:** Length 7cm, width 2,4cm, thickness 1,4cm, weight: 29g

**Use/fragmentation:** Preserved with three intact grinding surfaces one rather rough, one smooth and flat and one smooth but convex. Several broad and u-shaped grinding grooves or depressions in the surface. Still usable for grinding purposes.

**Find nr.:** SKU09-322, **Context:** 144, **Area:** H

**Material:** Very light grey, fine grained mica schist perhaps of the Eidsborg type but not will need further geological determination.

**Condition:** Stabile

**Shape and type:** Lower end-piece of, presumably, a small or medium sized whetstone. Rounded end piece with gradual transition to the sides, parallel sides both looking at the broad and narrow side. Oval cross section and rounded edges due to extensive use.

**Size:** Length 3,5cm, width 1,8cm, thickness 0,5cm, weight: 5g

**Use/fragmentation:** Preserved with two smooth grinding surfaces. One vague u-shaped grinding groove running on the longitude of one of the broad sides. It is hardly usable for grinding purposes at the present state.

**Find nr.:** SKU09-349, **Context:** 157, **Area:** H

**Material:** Light grey, fine grained mica schist of the Eidsborg type

**Condition:** Stabile

**Shape and type:** Fragmented part of an end piece, impossible to estimate original size or shape of the whetstone.

**Size:** Length 2,2cm, width 1,6cm, thickness 0,4cm, weight: 1g

**Use/fragmentation:** Remains of smooth grinding surfaces and a rounded edge. Very fragmented and not usable for grinding purposes.

**Find nr.:** SKU09-451, **Context:** 167, **Area:** H

**Material:** Light grey, fine grained mica schist of the Eidsborg type

**Condition:** Well preserved

**Shape and type:** Completely preserved example of a medium sized whetstone with tapering sides toward the lower end piece looking at the broad side and parallel, slightly bone shaped looking at the narrow side. It must primarily have been held in around the upper end piece when used and the blade drawn down towards the lower end piece. Both end pieces are slanting. The edges are both rounded and sharp. Square cross section.

**Size:** Length 10,8cm, width 1,5cm, thickness 1,1cm, weight: 25g

**Use/fragmentation:** Preserved with four intact, smooth but wavy grinding surfaces, partially convex. No distinctive grinding marks. It is preserved in a size well usable for grinding purposes.

**Find nr.:** SKU09-487, **Context:** 176, **Area:** H

**Material:** Light grey, fine grained mica schist of the Eidsborg type

**Condition:** Stable

**Shape and type:** Fragmented part of a centre piece of, presumably, a medium sized whetstone. Impossible to fully estimate the original shape of the whetstone from this fragment, but it looks to be thickest in the centre and tapering towards both ends, looking at the narrow side and more parallel looking at the broad side.

**Size:** Length 5,9cm, width 2,4cm, thickness 0,5cm, weight: 12g

**Use/fragmentation:** Remains of two smooth grinding surfaces and rounded edges. No clear signs of grinding grooves. Fragmented and hardly usable for grinding purposes at the preserved size.

## Summary

Guðrún Alda Gísladóttir

Drastic changes in material culture can be seen in the midden excavations at Skútustaðir. In phase I the material is sparse, only 60 finds and the assemblage consists only of three groups: Bone, stone and metal. The absence of organic material other than bone points to bad preservation conditions. In phase II the total find count is 435 and the material groups are seven. Almost half of the material is metals but glass and ceramics are also common (over 40% of the material assemblage (including clay pipes)). The most dramatic change is in phase III when effects of the industrial revolution are obvious and items of mass production are predominant. The glass and ceramics are 80% of the materials; metals are second largest group only 17% but other materials still sparse: Rubber, linoleum, tar paper, which can all be dated to early of 20<sup>th</sup> century. The midden was probably out of use by the turn of the 20th century. Organic material is also lacking probably due to bad preservation. The whole material is predominantly from 18<sup>th</sup>-19<sup>th</sup> century but good amount of well

sequenced earlier material is present. The finds assemblage reflects voluminous and long residence, but interestingly many common 19<sup>th</sup>-century items are absent such as bricks, stove fragments, drains and textile fragments for example. No agricultural tools were found such as scythe or rake fragments but indications of fishery, probably in lake Mývatn are present as fish hooks and possible net sinkers are in deposits accumulated after 1477. More detailed analysis of the material, its component and the exploitation of the area will be concluded as the research evolves.





## Fornleifaskóli barnanna:



FIG 31: Ágústa Edwald sýnir nema í Fornleifaskólanum hvernig jarðlög eru grafin upp.

Vorið 2007 var Fornleifaskóli barnanna stofnaður að frumkvæði Unnsteins Ingasonar á Narfastöðum og Baldurs Daníelssonar, skólastjóra Litlulaugaskóla. Skólinn er samvinnuverkefni Ferðapjónustunnar á Narfastöðum ehf., Litlulaugaskóla, Brooklyn College og Hunter College í New York, Fornleifastofnunar Íslands ses, Þingeyssk sagnagarðs og Hins þingeyska fornleifafélags. Skólastarfið er enn í mótun, en markmiðið með stofnun skólans er að skapa nýjan vettvang fyrir samstarf ólíkra aðila, innan héraðs og utan, um fræðslu barna og unglinga um

menningararfinn og gildi hans með hliðsjón af árangri fornminjarannsókna í næsta nágrenni nemendanna.

Krakkar úr Fornleifaskólanum heimsóttu uppgröftinn að Skútustöðum tvo morgna sumarið 2008. Heimsóknin gekk mjög vel fyrir sig og allir sem stóðu að samstarfinu voru sammála um að halda því áfram sumarið 2009. Tveir hópar heimsóttu svæðið í lok júní og fyrstu dagana í júlí. Fyrsti hópurinn var á svæðinu hálfan daginn, dagana 23. – 25. júní og síðari hópurinn heimsótti uppgröftinn morgnana 30. júní – 2. júlí. Krökkunum voru sýndar helstu gerðir gripa sem fundist höfðu við uppgröftinn og kennt að greina mun á beinum úr mismunandi dýrategundum. Að því loknu fengu þau leiðsögn um svæðið auk þess sem þeim var sýnt hvernig borkjarnar er teknir, sýnum fleytt, hvernig hreinsað var ofan af fornleifum og jarðvegur sigtaður. Hvorum hóp fyrir sig var skipt í smærri hópa sem svo skiptust á að læra um mismunandi þætti fornleifauppgrafter og krakkarnir fengu að sjálf að spreyta sig við ýmiss verk, við uppgröft, fleytingu, sigtun jarðlaga, skráningu gripa auk þess sem þau lærðu að teikna snið og skrá niður allar nauðsynlegar upplýsingar. Eftir þrjá morgna á vettvangi fóru hóparnir í vettvangsferð að Hríshéimum í Mývatnssveit. Stefnt að frekara samstarfi við Fornleifaskólann sumarið 2010.



## Samantekt á íslensku:

Mikið magn dýrabeina og gripa fundust við uppgröfturinn sumrin 2008 og 2009. Dýrabeinasafninu hefur verið skipt niður í sex tímaskeið sem voru ákvörðuð út frá kolefna aldursgreiningu og gjóskulögum. Flest dýrabeinin voru frá tímabilinu ca. 1500-1800 og komu úr uppgraftarskurðum D og F en bein frá miðöldum fundust í svolitlu magni í skurði E1 og E2 ásamt færri en 100 beinum frá Víkingaöld. Það er athyglisvert að beinum úr fé fjölgar talsvert eftir því sem líður nær nútímanum og fjöld kálfabeina í safninu öllu. Hvort tveggja er raunin í öðrum dýrabeinasöfnum sem grafin hafa verið upp í Mývatnssveit en Skútustaðir eru einstakir fyrir það leyti að hlutfall fjár og nautgripa fer mest upp í 5 kindur fyrir hverja eina kú á tímabilinu eftir 1717 en í öðrum þekktum söfnum er hlutfallið mun hærra eða um 20 kindur fyrir hverja kú. Þetta hlutfall, auk slátrunar á kálfum, bendir til þess að bændur á Skútustöðum hafi lagt miklar áherslu á mjólkurbúskap í gegnum aldirnar. Þrátt fyrir að fé fjölgi í hlutfalli við nautgripi þegar líður á miðaldir er hlutfallið hvergi nærri eins hátt og á öðrum bæjum sem hafa verið rannsakaðir.

Sel og sjávarfiskur virðist hafa verið borðaður í nokkrum mæli og svo virðist sem heimilisfólkið á Skútustöðum hafi fengið ferskan sjávarfisk að borðum ólíkt því sem rannsóknir annars staðar í Mývatnssveit hafa bent þar sem allur sjávarfiskur hefur verið þurrkaður áður en hann var fluttur inn í land. Heimilisfólkið á Skútustöðum borðaði auk fjár og nautgripa ýmsar fuglategundir s.s. rjúpu, svan og endur en engin sjófuglabein voru í safninu. Nokkur hæsnabein og svínabein voru í safninu en fleiri slík bein væru æskileg áður en hægt verður að fullyrða að hænsni og svín hafi verið haldin á jörðinni.

Gripasafninu hefur verið skipt niður í þrjú tímaskeið eftir gjóskulögum. Mikill munur er í safninu frá fyrsta skeiði sem afmarkast af þeim tíma áður en gjóska féll í Veiðivatnagosi árið 1477, og síðari skeiðum, þ.e. á milli gjóskulaganna tveggja frá 1477-1717 og eftir að gjóska féll í Veiðivatnagosi árið 1717. Á fyrsta skeiðinu fundust einungis gripir úr beinum, steinum og málmum. Meðal þeirra funda er snældusnúður og nál úr beini (sjá FIG 16 og 17). Á skeiði tvö (1477-1717) fundust gripir úr þessum hráefnum einnig auk gripa úr leir og gleri sem saman mynda 43% gripasafnsins. Hlutfall gripa úr þessu hráefni eykst enn meira á skeiði þrjú (eftir 1717) þar sem leirker eru 46% gripasafnsins og glerbrot 36%.

Ef allt gripasafnið er tekið til greina er ljóst að mestur hluti þess er frá 18. og 19. öld þótt talsvergt magn hluta frá öðrum tímabilum hafi einnig fundist. Mikið af gripunum er úr fjöldaframleiddir og hafa verið fluttir inn til landsins á 19. öld. Gripasafnið bendir til stöðugar búsetu á Skútustöðum allt frá Landnámi til nútíma. Mjög fáir gripir úr lífrænum efnum fundust og bendir það til þess að ekki séu góð varðveisluskilyrði fyrir slíka gripi á Skútustöðum.

Stefnt era ð frekari rannsóknum á Skútustöðum sumarið 2010.



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## Viðauki/Appendix

### Jarðlagaskrá/Context Register

Code	Area	Context	Context Type	Interpretation
SKU	D	002	deposit	grey ashy dump
SKU	D	003	fill	fill of cut 004
SKU	D	004	cut	ditch or erosion feature- sheep trail???
SKU	D	005	deposit	windblown silty deposit
SKU	E2	006	deposit	midden deposit
SKU	E1	007	deposit	modern turf (above 1717)
SKU	E1	008	deposit	tephra V1717
SKU	E1	009	deposit	cultural deposit
SKU	E1	010	deposit	tephra V 1477 ?????? NOT
SKU	E1	011	deposit	cultural deposit
SKU	E1	012	deposit	tephra H 1300
SKU	E1	013	deposit	low density midden
SKU	E1	014	deposit	tephra V 1477
SKU	E2	014	deposit	tephra V 1477
SKU	E1	015	deposit	midden layer
SKU	E1	016	deposit	tephra, 1158 ?????? NOT
SKU	E1	017	deposit	midden layer
SKU	E1	018	deposit	thin ash layer
SKU	E1	019	deposit	Dk brn rich midden
SKU	E1	020	deposit	tephra K 1262
SKU	E1	021	deposit	midden layer
SKU	E1	022	deposit	tephra ???????
SKU	E1	023	deposit	midden layer
SKU	E1	024	deposit	tephra ??? V 940????? NOT
SKU	E1	025	deposit	midden layer
SKU	E1	026	deposit	tephra LNS V 871
SKU	E	027	natural rock	natural pre-occupation surface; lava rocks & stones, v. irregular
SKU	D	029	deposit	brown midden deposit
SKU	D	030	deposit	brown midden deposit
SKU	D	031	deposit	1717 tephra?
SKU	D	032	deposit	brown grey midden dump
SKU	F	033	deposit	turf and topsoil
SKU	F	034	deposit	grey black midden
SKU	F	035	deposit	Midden

SKU	F	036	deposit	midden
SKU	E2	037	deposit	cultural deposit
SKU	E2	038	deposit	cultural deposit
SKU	E2	039	deposit	cultural deposit
SKU	E2	040	deposit	midden layer
SKU	E2	041	deposit	probably part of LNS
SKU	E2	042	deposit	cultural deposit
SKU	E2	043	deposit	cultural deposit
SKU	D	044	deposit	mixed turf dump
SKU	F	045	deposit	black and grey mottled midden deposit
SKU	D	046	deposit	
SKU	F	047	deposit	peat and midden layer some structural turf
SKU	E1	048	deposit	tephra
SKU	E1	049	deposit	midden with lava gravel inclusions
SKU	F	050	deposit	
SKU	F	051	deposit	turf dump
SKU	D	052	deposit	mottled orange turf dump
SKU	F	053	deposit	dump of large stones under dump of displaced structural turf
SKU	F	054	deposit	white grey ashy dump w/lenses of turf bits
SKU	D	055	deposit	mixed ash and turf dump with a bit of peat
SKU	D	056	deposit	mixed black and redpeat ash
SKU	D	056	deposit	mixed black and red peat ash
SKU	D	057	deposit	mixed orange turf and green tephra
SKU	E2	058	deposit	midden layer
SKU	E2	058	deposit	midden layer
SKU	E2	059	deposit	midden layer
SKU	E2	060	deposit	midden layer
SKU	D	061	depost	brown blown silt
SKU	D	062	deposit	
SKU	E2	063	deposit	
SKU	d	064	deposit	midden layer
SKU	D	065	deposit	
SKU	D	066	deposit	
SKU	F	068	deposit	midden layer
SKU	D	069	deposit	
SKU	F	069	deposit	midden layer



SKU	D	070	deposit	ash dump?
SKU	D	071	deposit	turf dump
SKU	D	072	deposit	gritty deposit on natural (may be natural)
SKU	F	073	deposit	black and grey gravelly deposit
SKU	F	074	deposit	turf deposit
SKU	F	075	deposit	mixed turf and charcoal deposit
SKU	F	076	deposit	turf deposit
SKU	F	077	deposit	midden lying against wall
SKU	E1	078	deposit	tephra layer V 940
SKU	E1	079	deposit	cultural deposit
SKU	H	100	deposit	topsoil and root zone
SKU	G	101	deposit	turf
SKU	G	102	deposit	gravel mixed with silty soil, large stones, redeposited structural turf in secondary context
SKU	G	103	deposit	dump of structural turf
SKU	G	104	deposit	grey ashy midden dump (= (002))
SKU	G	105	deposit	grey ashy dump with brown windblown silt (= (030))
SKU	G	106/107	cut/fill	20th century cut(106) for pipe then filled (107)(prob cut in 1960's according to Gerdur)
SKU	G	108	deposit	Mixed grey ash dump + brown windblown silt(=(105))
SKU	G	109	deposit	1717 tephra
SKU	G	110	deposit	grey ash dump with charcoal inclusions
SKU	G	111	deposit	grey ash dump with charcoal inclusions (=(032 and =110)
SKU	G	112	deposit	Mixed orange turf and grey ash
SKU	G	113	deposit	mixed turf dump with charcoal lenses
SKU	G	114	deposit	1477 tephra (=(064))
SKU	G	115	deposit	brown silty deposit
SKU	G	116	deposit	mixed turf and gravel
SKU	G	117	deposit	mixed grey ash and gravel
SKU	G	118	deposit	1717 tephra
SKU	G	119	deposit	brown silty deposit forming against crater rim
SKU	H	120	deposit	grey black ash layer
SKU	G	121	deposit	mixed ashy dump
SKU	H	122	deposit	20th cmidden dump
SKU	G	123	deposit	dark grey ash deposit

SKU	H	124	deposit	turf dump with ashy inclusions
SKU	H	125	deposit	midden
SKU	G	126	deposit	soft turf debris with ash deposit
SKU	H	127	deposit	brown silty turf with grey ash deposit
SKU	G	128	deposit	brown silt possibly windblown
SKU	H	129	deposit	midden below topsoil and above 1717 tephra
SKU	H	130	deposit	midden layer
SKU	G	131	deposit	mixed brown silt with ashy lenses
SKU	G	133	deposit	charcoal rich midden deposit
SKU	G	134	deposit	grit and turf debris in S/E corner
SKU	G	135	deposit	wind blown silt with patches of windblown 1477 tephra poss. 1525 tephra
SKU	H	136	deposit	midden layers
SKU	G	137	deposit	tephra v 1477
SKU	G	138	deposit	charcoal rich midden deposit
SKU	G	139	deposit	mixed turf debris and windblown silt with patches of green (tephra?)
SKU	G	140	deposit	sandy gravel in SE corner of G
SKU	H	141	deposit	turf dump
SKU	G	142	deposit	mixed turf with traces of green tephra and charcoal lenses
SKU	H	144	deposit	soft grey ash midden layer
SKU	G	145	deposit	very mixed layer w/ turf, possibly structural, traces of grey-green tephra possibly coming on to landnam
SKU	H	146	deposit	Light red-brown turf debris
SKU	G	147	deposit	volcanic grit
SKU	G	148	deposit	Dark Brown midden material
SKU	G	149	deposit	mixed midden deposit
SKU	H	150	deposit	turf dump with ashy inclusions
SKU	G	152	deposit	ashy midden material possible peat ash
SKU	H	153	tephra	17th c. Tephra - very fine
SKU	G	154	deposit	charcoal deposit, possibly in situ
SKU	H	155	deposit	ashy turf deposit
SKU	G	156	deposit	brown lensed midden in south side of G
SKU	H	157	deposit	turf dump mixed with midden material
SKU	G	158	deposit	dark brown midden south side of G
SKU	H	159	tephra	unknown ?19th c. tephra

SKU	H	160	deposit	ashy midden layer with silt and turf lenses
SKU	G	161	deposit	mixed truffy midden in G
SKU	H	162	deposit	turf deposit
SKU	H	163	deposit	ashy modern dump, dark grey soil with occasional turf lenses
SKU	H	118	tephra	1717 tephra? Previously excavated in area H and =166?
SKU	H	164	deposit	grey brown ashy midden with charcoal and bone
SKU	H	165	deposit	turf/ash mixed deposit
SKU	H	166	deposit	1717 tephra?
SKU	H	167	deposit	turf dump with grey ash lenses
SKU	H	169	deposit	grey ashy midden layer
SKU	H	170	deposit	turf block dump
SKU	H	171	deposit	tephra possibly 1717?
SKU	H	172	deposit	ash dump directly below 171 tephra, along with 1717 tephra lies against 170 turf
SKU	H	173	deposit	mixed ash dump
SKU	H	174	deposit	mixed ash dump with orange lenses of turf
SKU	H	175	deposit	mixed brown midden
SKU	H	176	deposit	orange brown turf with grey and brown ash and silt

### Fundaskrá/Finds Register

Finds no	Former finds no	Area	Context	Type	Material Type (Basic)	Sub Material	Quantity	Weight (g)	Phase
150		G	104	Scrap	Tar paper?		1	0.33	Ph III
151		G	104	Button	Glass		1	0.44	Ph III
152		G	100	Cartridge base	Metal	Copper alloy	1	1.06	Ph III
153		G	104	Clothing fastener	Metal	Copper alloy	1	0.46	Ph III
154		G	104	Ornament	Metal	Copper alloy	1	2.37	Ph III
155		G	002	Clay pipe	Ceramic		1	0.45	Ph III
156		G	105	Whetstone	Stone	Schist	1	14.33	Ph III
157		G	104	Button	Glass		1	0.41	Ph III
158		G	103	Button	Metal	Copper alloy	1	0.59	Ph III
159		G	104	Button	Glass		1	0.49	Ph III
160		G	104	Button	Glass		1	0.82	Ph III
161		G	104	Figurine	Bone	Haddock chleithrum	1	1.25	Ph III

162		G	104	Thimble	Metal	Copper alloy	1	2.74	Ph III
163		G	104	Fitting	Metal	Copper alloy	1	4.9	Ph III
164		G	104	Cartridge base	Metal	Copper alloy	1	3.67	Ph III
165		G	105	Button	Metal	Copper alloy	1	2.17	Ph III
166		G	104	Pottery	Ceramic		252	227.96	Ph III
167		G	104	Nail	Metal	Iron	1	1.42	Ph III
168		G	103	Button	Metal	Copper alloy	1	3.45	Ph III
169		G	104	Stud	Metal	Copper alloy	1	0.26	Ph III
170		G	104	Strip	Metal	Iron	1	12.61	Ph III
171		G	100	Nail	Metal	Iron	2	7.66	Ph III
172		G	104	Window	Glass		140	109.34	Ph III
173		G	105	Pottery	Ceramic		48	25.3	Ph III
174		G	100	Pottery	Ceramic		2	2.44	Ph III
175		G	103	Pottery	Ceramic		57	32.39	Ph III
176		G	103	Window	Glass		13	17.72	Ph III
177		G	104	Vessel	Glass		145	121.47	Ph III
178		G	103	Vessel	Glass		7	4.44	Ph III
179		G	103	Window	Glass		9	5.33	Ph III
180		G	105	Window	Glass		4	1.6	Ph III
181		G	105	Vessel	Glass		11	13.32	Ph III
182		G	100	Vessel	Glass		9	2.69	Ph III
183		G	100	Window	Glass		2	1.49	Ph III
184		G	104	Button	Bone		1	0.58	Ph III
185		G	103	Nail	Metal	Iron	10	29.29	Ph III
186		G	002	Nail	Metal	Iron	1	1.23	Ph III
187		G	104	Nail	Metal	Iron	57	149.72	Ph III
188		G	105	Sheet	Metal	Iron	5	11.63	Ph III
189		G	100	Slag	Slag			1.05	Ph III
190		DELETE D	DELETED	DELETED	DELETED		DELETED	DELTED	
191		G	101	Pottery	Ceramic		1	0.49	Ph III
192		G	100	Unworke d stone	Stone	Tholeiite, vesicular	1	103.9	Ph III
193		G	104	Roof tile?	Stone	Slate	1	5.02	Ph III
194		G	100	Pottery	Ceramic		10	11.28	Ph III
195		H	122	Sheet	Metal	Iron	13	138.32	Ph III
196		H	122	Nail	Metal	Iron	34	139.9	Ph III
197		H	122	Hook	Metal	Iron	3	20.09	Ph III
198		H	122	Wire	Metal	Iron	13	107.74	Ph III
199		H	122	Whetstone	Stone	?	1	48.73	Ph III
200		H	122	Sinker?	Metal	Lead	1	80.57	Ph III
201		H	122	Coin	Metal	Copper alloy	1	1.99	Ph III
202		H	122	Strip	Leather		1	0.51	Ph III

203		H	122	Token	Metal	Lead	1	6.55	Ph III
204		H	122	Tin	Metal	Iron	1	26.7	Ph III
205		H	122	Ring	Bone		2	1.54	Ph III
206		H	122	Pottery	Ceramic		204	115.00	Ph III
207		H	100	Fitting	Metal	Copper alloy	1	1.87	Ph III
208		H	122	Logo	Rubber		1	0.68	Ph III
209		H	122	Vessel	Glass		5	543.9	Ph III
210		H	100	Button	Metal	Iron	1	1.94	Ph III
211		H	100	Drainage	Ceramic		2	103.01	Ph III
212		H	100	Sheet	Metal	Iron	12	49.09	Ph III
213		H	100	Nail	Metal	Iron	9	14.00	Ph III
214		H	100	Pottery	Ceramic		110	357.18	Ph III
215		H	100	Clay pipe	Ceramic		1	0.72	Ph III
216		H	120	Clay pipe	Ceramic		2	6.11	Ph III
217		H	120	Nail	Metal	Iron	4	17.28	Ph III
218		H	120	Indeterminate	Metal	Copper alloy	1	1.23	Ph III
219		H	120	Vessel	Glass		70	185.30	Ph III
220		H	100	Vessel	Glass		3	70.05	Ph III
221		H	120	Pottery	Ceramic			6.67	Ph III
222		H	120	Manupor t	Stone	Obsidian	2	11.56	Ph III
223		G	100	Window	Glass		10	24.48	Ph III
224		G	121	Clay pipe	Ceramic		2	4.8	Ph III
225		G	121	Pottery	Ceramic		2	0.3	Ph III
226		G	121	Vessel	Glass		2	0.6	Ph III
227		G	105	Pottery	Ceramic				Ph III
228		G	105	Nail	Metal	Iron	1	1.00	Ph III
229		G	105	Vessel	Glass		16	5.39	Ph III
230		G	115	Window	Glass		1	0.46	Ph III
231		G	124	Button?	Metal	Copper alloy	1	1.07	Ph III
232			0	Vessel	Glass		1	95.65	
233		H	124	Bar	Metal	Iron	1	27.6	Ph III
234		G	123	Ornamen t	Metal	Copper alloy	1	2.02	Ph III
235		G	123	Clay pipe	Ceramic		2	2.04	Ph III
236		G	123	Window	Glass		2	0.75	Ph III
237		G	110	Pottery	Ceramic		4	3.39	Ph III
238		H	124	Pottery	Ceramic		5	3.98	Ph III
239		H	124	Vessel	Glass		1	0.32	Ph III
240		G	123	Pin	Metal	Copper alloy	1	0.3	Ph III
241		G	124	Nail	Metal	Iron	5	19.21	Ph III
242		G	123	Nail?	Metal	Iron	1	6.32	Ph III
243		G	123	Fitting	Metal	Copper alloy	1	0.91	Ph III
244		G	110	Clothing	Metal	Iron	1	0.3	Ph III

				fastener					
245		G	110	Needle	Metal	Iron	1	1.3	Ph III
246		G	110	Vessel	Glass		19	13.48	Ph III
247		G	110	Button	Metal	Silver?	1	1.63	Ph III
248		G	110	Indeterminate	Metal	Iron	4	2.91	Ph III
249		G	110	Nail	Metal	Iron	1	5.41	Ph III
250		G	126	Nail	Metal	Iron	7	24.72	Ph III
251		G	142	Rove	Metal	Copper alloy	1	0.75	Ph I
252		H	144	Sheet	Metal	Copper alloy	1	1.02	Ph II
253		G	138	Nail	Metal	Iron	1	2.42	Ph I
254		G	138	Nail	Metal	Iron	1	3.66	Ph I
255		G	142	Nail	Metal	Iron	1	5.51	Ph I
256		H	143	Nail	Metal	Iron	1	4.12	
257		H	144	Nail	Metal	Iron	2	11.75	Ph II
258		G	139	Nail	Metal	Iron	3	14.88	Ph I
259		H	127	Vessel	Glass		35	14.16	Ph III
260		H	130	Scrap	Metal	Iron	1	3.22	Ph III
261		G	126	Pottery	Ceramic		6	7.01	Ph III
262		G	126	Window	Glass		3	6.21	Ph III
263		H	141	Clothing fastener	Metal	Iron	3	1.62	Ph II
264		H	136	Sheet	Metal	Copper alloy	5	14.52	Ph II
265		H	136	Pottery	Ceramic		26	88.3	Ph II
266		H	130	Pottery	Ceramic		1	0.74	Ph III
267		H	141	Nail	Metal	Iron	16	91.95	Ph II
268		H	136	Rivet	Metal	Lead?	2	6.99	Ph II
269		H	136	Whetstone	Stone	Schist	1	14.3	Ph II
270		H	136	Nail	Metal	Iron	21	100.81	Ph II
271		H	141	Whetstone	Stone	Schist	2	7.63	Ph II
272		H	141	Clay pipe	Ceramic		5	14.24	Ph II
273		H	141	Fish hook	Metal	Iron	1	3.05	Ph II
274		H	136	Button	Metal	Lead?	1	2.38	Ph II
275		H	136	Needle	Metal	Iron	1	1.99	Ph II
276		H	136	Stylus?	Stone	Slate?	1	3.73	Ph II
277		H	141	Vessel	Glass		3	1.46	Ph II
278		H	136	Stud	Metal	Copper alloy	1	2.56	Ph II
279		H	136	Clay pipe	Ceramic		5	7.12	Ph II
280		G	149	Indeterminate	Metal	Copper alloy	1	0.46	Ph I
281		H	130	Pottery	Ceramic		5	1.86	Ph III
282		G	139	Worked bone	Bone	Whale	1	20.34	Ph I
283		H	120	Bell?	Metal	Copper alloy	1	5.53	Ph III

284		H	136	Vessel	Glass		19	18.88	Ph II
285		H	136	Bar	Metal	Iron	6	27.83	Ph II
286		H	136	Manupor t	Stone	1 flint, 2 obsidian, 1 onyx, 1 basalt stone with zeolite amygdales, 2 zeolites	7	51.42	Ph II
287		H	136	Clothing fastener	Metal	Iron	2	0.64	Ph II
288		G	149	Whetsto ne	Stone	Schist	1	12.5	Ph I
289		H	141	Bead	Glass		1	1.05	Ph II
290		G	138	Sheet	Metal	Copper alloy	2	2.76	Ph I
291		H	120	Whetsto ne	Stone	Schist	1	29.16	Ph III
292		G	145	Spindle whorl	Stone	Claystone?	1	12.75	Ph I
293		H	141	Pottery	Ceramic		9	24.8	Ph II
294		H	136	Pottery	Ceramic		1	0.41	Ph II
295		H	144	Mount	Metal	Copper alloy	1	6.57	Ph II
296		H	130	Clay pipe	Ceramic		2	1.65	Ph III
297		H	130	Vessel	Glass		9	7.14	Ph III
298		H	130	Nail	Metal	Iron	2	13.37	Ph III
299		H	130	Button	Metal	Copper alloy	1	1.24	Ph III
300		G	142	Manupor t	Stone	Zeolite	1	0.48	Ph I
301		H	144	Clay pipe	Ceramic		5	11.65	Ph II
302		H	129	Scrap	Metal	Iron	1	0.35	Ph III
303		H	129	Hinge	Metal	Iron	1	6.71	Ph III
304		H	129	Pottery	Ceramic		19	10.81	Ph III
305		H	127	Button?	Metal	Iron	1	0.42	Ph III
306		H	145	Clenchbo lt/nail?	Metal	Iron	1	9.48	Ph I
307		H	129	Clay pipe	Ceramic		1	0.89	Ph III
308		H	144	Vessel	Glass		2	4.15	Ph II
309		H	127	Scrap	Leather		1	0.59	Ph III
310		H	127	Pottery	Ceramic		39	37.24	Ph III
311		H	129	Button	Metal	Lead?	1	0.28	Ph III
312		H	129	Window	Glass		2	4.59	Ph III
313		H	129	Vessel	Glass		9	4.99	Ph III
314		G	133	Sheet	Metal	Copper alloy	1	0.7	Ph II
315		DELETE D	DELETED	DELETED	DELETED		DELETED	DELTED	
316		H	144	Pottery	Ceramic		3	6.26	Ph II
317		H	144	Burnt wood	Wood				Ph II

318		G	133	Mount	Metal	Copper alloy	1	0.38	Ph II
319		H	141	Scrap	Metal	Copper alloy	11	28.8	Ph II
320		H	120	Worked wood?	Wood		1	2	Ph III
321		H	144	Window	Glass		3	4.89	Ph II
322		H	144	Whetstone	Stone	Schist	1	5.13	Ph II
323		H	136	Unworked stone	Stone	Basalt	1	192.1	Ph II
324		G	148	Needle	Bone		1	0.45	Ph I
325		H	157	Figurine	Bone	Haddock chleithrum	1	1.36	Ph III
326		G	156	Spit	Metal	Iron	1	49.17	Ph I
327		H	100	Horse shoe	Metal	Iron	1	176.33	Ph III
328		G	158	Tool	Metal	Iron	1	14.89	Ph I
329		G	123	Clay pipe	Ceramic		2	5.96	Ph III
330		H	100	Cartridge base	Metal	Copper alloy	1	2.93	Ph III
331		H	150	Pottery	Ceramic		15	14.88	Ph III
332		H	150	Sheet	Metal	Iron	1	7.54	Ph III
333		H	151	Bead	Glass		1	0.28	Ph III
334		H	151	Button	Metal	Copper alloy	1	2.76	Ph III
335		H	151	Nail	Metal	Iron	3	18.01	Ph III
336		H	151	Pottery	Ceramic		13	10.23	Ph III
337		H	100	Bead	Glass		1	0.1	Ph III
338		H	127	Sheet	Metal	Iron	1	5.6	Ph III
339		H	127	Nail	Metal	Iron	13	30.48	Ph III
340		G	152	Worked bone	Bone		1	6.9	Ph I
341		G	158	Manupor t	Stone	1 tholeiit stone, 1 zeolite	2	5.27	Ph I
342		G	147	Nail	Metal	Iron	1	8.48	Ph I
343		DELETE D	DELETED	DELETED	DELETED		DELETED	DELTED	
344		H	155	Clench bolt/nail	Metal	Iron	1	9.27	Ph III
345		H	120	Vessel	Glass		1	0.41	Ph III
346		H	148	Nail	Metal	Iron	3	27,00	Ph I
347		G	148	Nail	Metal	Iron	3	11.86	Ph I
348		H	157	Bar	Metal	Iron	1	89.95	Ph III
349		H	157	Whetstone	Stone	Schist	1	1.75	Ph III
350		G	148	Manupor t	Stone	1 quartz (possibly onyx or agate), 2 zeolites	3	3.58	Ph I



351		H	144	Indeterminate	Metal	Iron	3	18.65	Ph II
352		G	156	Manupor t	Stone	1 milky quartz, 1 onyx, 1 zeolite, 1 quartz (onyx?)	4	17.37	Ph I
353		G	161	Manupor t	Stone	Flint	1	12.09	Ph I
354		H	120	Manupor t	Stone	Flint	1	4.56	Ph III
355		H	120	Nail?	Metal	Iron	1	0.99	Ph III
356		H	120	Clay pipe	Ceramic		1	4.04	Ph III
357		H	120	Bar	Metal	Iron	2	8.79	Ph III
358		H	160	Window	Glass		2	1.08	Ph III
359		H	160	Clay pipe	Ceramic		5	2.56	Ph III
360		H	160	Pottery	Ceramic		2	1.83	Ph III
361		H	160	Indeterminate	Metal	Iron	1	6.53	Ph III
362		H	157	Vessel	Glass		5	1.85	Ph III
363		H	157	Nail?	Metal	Iron	1	1.06	Ph III
364		H	144	Fitting	Metal	Copper alloy	1	0.87	Ph II
365		H	144	Rivet	Metal	Copper alloy	1	9.38	Ph II
366		H	144	Nail?	Metal	Iron	1	2.11	Ph II
367		H	144	Vessel	Glass		2	9.19	Ph II
368		H	144	Window	Glass		3	1.84	Ph II
369		H	144	Pottery	Ceramic		1	8.08	Ph II
370		G	158	Unworked stone	Stone	Unidentifiable	1	4.59	Ph I
371		G	149	Manupor t	Stone	Tholeite	1	44.2	Ph I
372		H	151	Vessel	Glass		9	5.2	Ph III
373		G	149	Nail	Metal	Iron	1	5.81	Ph I
374		H	150	Nail	Metal	Iron	1	5.61	Ph III
375		H	150	Window	Glass		4	3.07	Ph III
376		H	150	Nail	Metal	Iron	5	6.8	Ph III
377		H	150	Linoleum	Linoleum		1	0.51	Ph III
378		H	150	Vessel	Glass		3	1.89	Ph III
379		H	100	Spring	Metal	Iron	1	6.83	Ph III
380		G	161	Nail	Metal	Iron	2	6.01	Ph I
381		G	149	Nail	Metal	Iron	4	1.24	Ph I
382		H	151	Nail	Metal	Iron	2	9.13	Ph III
383		H	127	Fitting	Metal	Copper alloy	1	1.54	Ph III
384		H	157	Coal	Coal		1	1.2	Ph III
385		H	157	Window	Glass		1	3.88	Ph III
386		H	100	Pottery	Ceramic		21	33.1	Ph III

387		H	100	Vessel	Glass		12	49.36	Ph III
388		G	158	Nail	Metal	Iron	1	4.46	Ph I
389		H	150	Nail	Metal	Iron	2	8.57	Ph III
390		H	144	Scrap?	Wood		3	4.59	Ph II
391		G	161	Manupor t	Stone	Zeolite	1	8.93	Ph I
392		H	136	Vessel	Glass		2	3.84	Ph II
393		G	161	Whetsto ne	Stone	Schist	1	27.52	Ph I
394		G	161	Spindle whorl	Stone	Red sandstone	1	8.06	Ph I
395		H	157	Pin	Bone	Horse	1	5.96	Ph III
396		H	157	Pottery	Ceramic		26	21.98	Ph III
397		H	157	Nail	Metal	Iron	2	16.52	Ph III
398		H	120	Window	Glass		2	2.19	Ph III
399		H	136	Indeterm inate	Metal	Iron	1	6.26	Ph II
400		H	120	Vessel	Glass		1	0.32	Ph III
401		G	156	Worked bone?	Bone		1	0.17	Ph I
402		G	156	Nail?	Metal	Iron	1	3.9	Ph I
403		G	150	Nail	Metal	Iron	1	3.51	Ph III
404		G	156	Rivet	Metal	Iron	3	11.73	Ph I
405		H	157	Pin	Metal	Copper alloy	1	0.28	Ph III
406		H	163	Nail?	Metal	Iron	1	3.01	Ph III
407		H	163	Unworke d bone	Bone		3	0.74	Ph III
408		H	163	Vessel	Glass		3	1.9	Ph III
409		H	157	Nail	Metal	Iron	14	31.53	Ph III
410		H	157	Vessel	Glass		16	10.46	Ph III
411		H	157	Window	Glass		10	10.19	Ph III
412		H	157	Pottery	Ceramic		37	47.01	Ph III
413		H	155	Bar	Metal	Iron	1	1.88	Ph III
414		H	155	Vessel	Glass		1	0.42	Ph III
415		H	155	Nail	Metal	Iron	2	3.72	Ph III
416		H	155	Pottery	Ceramic		19	9.35	Ph III
417		G	145	Whetsto ne	Stone	Schist	1	3.96	Ph I
418		G	145	Unworke d stone	Stone	Basalt	1	74.23	Ph I
419		H	100	Clay pipe	Ceramic		1	1.02	Ph III
420		H	141	Thimble	Metal	Copper alloy	1	3.62	Ph II
421		H	141	Mount	Metal	Copper alloy	1	3.79	Ph II
422		H	164	Worked bone	Bone	Haddock chleithrum	1	1.62	Ph II
423		H	164	Rivet	Metal	Copper alloy	1	11.82	Ph II
424		H	164	Key	Metal	Iron	1	13.78	Ph II

425		H	164	Manupor t	Stone	2 zeolites, 2 quartz	4	18.02	Ph II
426		H	164	Button	Metal	Copper alloy	1	1.7	Ph II
427		H	164	Hinge	Metal	Copper alloy	2	5.4	Ph II
428		H	164	Nail	Metal	Iron	31	164.77	Ph II
429		H	164	Manupor t	Stone	Andesite?	1	4.59	Ph II
430		H	164	Fragmen t	Bone		1	0.6	Ph II
431		H	165	Knife	Metal	Iron	1	1.77	Ph III
432		H	165	Clothing fastener	Metal	Iron	1	0.42	Ph III
433		H	165	Clench bolt	Metal	Iron	3	25.97	Ph III
434		H	164	Sheet	Metal	Copper alloy	3	16.19	Ph II
435		H	164	Fish hook	Metal	Iron	2	5.67	Ph II
436		H	164	Nail	Metal	Iron	8	16.42	Ph II
437		H	164	Clay pipe	Ceramic		11	23.75	Ph II
438		H	164	Clay pipe	Ceramic		1	5.66	Ph II
439		H	100	Pottery	Ceramic		3	45.43	Ph III
440		H	100	Rivet	Metal	Copper alloy	1	5.28	Ph III
441		H	100	Vessel	Glass		1	5.09	Ph III
442		H	167	Vessel	Glass		2	3.67	Ph II
443		H	167	Pottery	Ceramic		4	17.05	Ph II
444		DELETE D	DELETED	DELETED	DELETED		DELETED	DELTED	
445		H	167	Nail	Metal	Iron	1	1.49	Ph II
446		H	167	Fish hook	Metal	Iron	1	3.3	Ph II
447		H	167	Staple?	Metal	Iron	1	3.28	Ph II
448		H	167	Clay pipe	Ceramic		1	5.07	Ph II
449		H	167	Knife	Composit e	Iron/bone	1	19.46	Ph II
450		H	167	Clay pipe	Ceramic		3	3.51	Ph II
451		H	167	Whetsto ne	Stone	Schist	1	24.99	Ph II
452		H	164	Pottery	Ceramic		13	46.42	Ph II
453		H	164	Vessel	Glass		2	2.12	Ph II
454		H	164	Window	Glass		20	9.76	Ph II
455		H	165	Pottery	Ceramic		3	31.94	Ph III
456		H	165	Vessel	Glass		2	2.03	Ph III
457		H	165	Manupor t	Stone	Zeolite, most likely scolecite	1	8.95	Ph III
458		H	164	Weight	Stone	Basalt	4	730.29	Ph II
459		H	164	Indeterm inate	Metal	Iron	1	17.7	Ph II
460		H	170	Book hinge	Metal	Copper alloy/leather	1	9.32	Ph II

461		H	165	Staple?	Metal	Iron	1	2.72	Ph III
462		H	167	Vessel	Glass		4	1.67	Ph II
463		H	167	Window	Glass		1	0.49	Ph II
464		H	165	Vessel	Glass		2	2.81	Ph III
465		H	165	Window	Glass		1	2.72	Ph III
466		H	170	Clench bolt	Metal	Iron	2	19.72	Ph II
467		H	170	Clay pipe	Ceramic		1	3.12	Ph II
468		H	169	Clothing fastener	Metal	Iron	1	0.3	Ph III
469		H	169	Slag	Slag			12.08	Ph III
470		H	169	Nail	Metal	Iron	1	6.51	Ph III
471		H	167	Fitting	Metal	Copper alloy	2	3.65	Ph II
472		H	167	Nail	Metal	Iron	2	9.96	Ph II
473		H	167	Sheet	Metal	Iron	1	7.08	Ph II
474		H	167	Nail	Metal	Iron	2	12.04	Ph II
475		H	165	Nail	Metal	Iron	1	2.02	Ph III
476		H	165	Fish hook	Metal	Iron	1	3.76	Ph III
477		H	165	Clay pipe	Ceramic		2	5.79	Ph III
478		H	164	Window	Glass		1	0.27	Ph II
479		DELETE D	DELETED	DELETED	DELETED		DELETED	DELTED	
480		H	164	Nail	Metal	Iron	1	5.46	Ph II
481		H	167	Pottery	Ceramic		8	87.84	Ph II
482		H	164	Nail	Metal	Iron	1	1.46	Ph II
483		H	172	Pottery	Ceramic		1	8.26	Ph II
484		H	176	Nail	Metal	Iron	1	7.79	Ph II
485		H	176	Clay pipe	Ceramic		5	16.47	Ph II
486		H	176	Weight	Stone	Basalt	1	528.1	Ph II
487		H	176	Whetstone	Stone	Schist	1	11.56	Ph II
488		DELETE D	DELETED	DELETED	DELETED	DELETED	DELTED	DELTED	
489		H	173	Nail?	Metal	Iron	1	1.79	Ph II
490		H	173	Sheet	Metal	Copper alloy	2	7.21	Ph II
491		H	174	Pottery	Ceramic		1	0.65	Ph II
492		H	174	Rivet/nail?	Metal	Iron	1	1.91	Ph II
493		H	176	Vessel	Glass		1	0.66	Ph II
494		H	176	Window	Glass		4	3.84	Ph II
495		H	176	Pottery	Ceramic		3	20.92	Ph II
496		H	175	Vessel	Glass		1	1.33	Ph II
497		H	175	Indeterminate	Bone?		1	3.15	Ph II
498		H	175	Clay pipe	Ceramic		1	0.82	Ph II
499		H	175	Nail	Metal	Iron	2	5.35	Ph II

500		H	174	Fish hammer	Stone	olivine tholeiite, vesicular	1	85.33	Ph II
501		H	174	Nail	Metal	Iron	1	3.06	Ph II
502		H	174	Vessel	Glass		1	2.81	Ph II
503		H	100	Ferrule	Bone		1	9.82	Ph III
504		H	168?	Worked bone?	Bone		1	29.71	
505		H	122	Sheet	Metal	Iron	1	1120	Ph III
506	219	H	100	Window	Glass		9	5.23	Ph III
507	387	H	100	Window	Glass		1	0.66	Ph III
508	178	G	103	Window	Glass		2	4.17	Ph III
509	177	G	104	Window	Glass		18	10.96	Ph III
510	229	G	105	Window	Glass		4	2.04	Ph III
511	209	H	122	Window	Glass		44	61.83	Ph III
512	259	H	127	Window	Glass		15	15.53	Ph III
513	297	H	130	Window	Glass		2	1.37	Ph III
514	277	H	141	Window	Glass		2	0.98	Ph II
515	372	H	151	Window	Glass		6	3.76	Ph III
516	414	H	155	Window	Glass		2	0.46	Ph III
517	362	H	157	Window	Glass		1	0.77	Ph III
518	410	H	157	Window	Glass		5	1.31	Ph III
519	398	H	120	Vessel	Glass		2	2.49	Ph III
520	368	H	144	Vessel	Glass		4	5.65	Ph II
521	239	H	124	Vessel	Glass		1	0.32	Ph III
522	453	H	164	Manupor t	Stone	Obsidian	5	11.74	Ph II
523	452	H	164	Manupor t	Stone	Obsidian	1	2.01	Ph II
524	442	H	167	Manupor t	Stone	Obsidian	4	25.6	Ph II
525	462	H	167	Manupor t	Stone	Flint	1	0.3	Ph II
526	212	H	100	Tin	Metal	Iron	1	9.84	Ph III
527	212	H	100	Rove	Metal	Iron	1	2.63	Ph III
528	212	H	100	Indeterminate	Metal	Iron	1	32.79	Ph III
529	213	H	100	Fish hook	Metal	Iron	1	1.71	Ph III
530	213	H	100	Nail	Metal	Iron	2	9.8	Ph III
531	185	H	103	Wire	Metal	Iron	1	3.94	Ph III
532	170	G	104	Sheeting	Metal	Lead?	3	5.84	Ph III
533	170	G	104	Sheet	Metal	Iron	4	4.26	Ph III
534	188	G	105	Nail	Metal	Iron	2	1.83	Ph III
535	188	G	105	Indeterminate	Metal	Iron	1	0.65	Ph III
536	357	H	120	Wire	Metal	Iron	1	0.94	Ph III
537	203	H	122	Thimble	Metal	Iron	1	0.73	Ph III

538	196	H	122	Clench bolt	Metal	Iron	1	11.6	Ph III
539	203	H	122	Cap	Metal	Iron	1	4.29	Ph III
540	203	H	122	Rivet	Metal	Iron	1	2.97	Ph III
541	203	H	122	Pellet?	Metal	Iron	1	3.61	Ph III
542	203	H	122	Clothing fastener?	Metal	Iron	1	1.26	Ph III
543	203	H	122	Fitting	Metal	Iron	1	2.69	Ph III
544	203	H	122	Object	Metal	Lead	1	6.93	Ph III
545	233	H	124	Nail	Metal	Iron	2	3.65	Ph III
546	250	G	126	Fish hook	Metal	Iron	1	1.22	Ph III
547	383	H	127	Fitting	Metal	Copper alloy	1	0.4	Ph III
548	264	H	136	Fitting	Metal	Copper alloy	1	1.97	Ph II
549	285	H	136	Staple	Metal	Iron	2	5.24	Ph II
550	285	H	136	Nail	Metal	Iron	4	4.38	Ph II
551	258	G	139	Sheet	Metal	Iron	2	3.23	Ph I
552	263	H	141	Nail	Metal	Iron	2	3.24	Ph II
553	365	H	144	Nail	Metal	Iron	1	1.45	Ph II
554	342	G	147	Indeterminate	Metal	Lead	1	1.5	Ph I
555	332	H	150	Object	Metal	Iron	1	15.67	Ph III
556	335	H	151	Clench bolt	Metal	Iron	1	10.42	Ph III
557	361	H	160	Nail	Metal	Iron	1	1.16	Ph III
558	432	H	165	Scrap	Metal	Iron	2	1.83	Ph III
559	499	H	175	Needle?	Metal	Iron	1	1.64	Ph II
560	499	H	175	Indeterminate	Metal	Iron	2	0.96	Ph II
561	427	H	164	Clothing fastener	Metal	Iron	3	0.77	Ph II
562	427	H	164	Scrap	Metal	Iron	1	1.77	Ph II
563	427	H	164	Sheet	Metal	Copper alloy	2	5.27	Ph II
564	427	H	164	Loop	Metal	Iron	1	0.16	Ph II
565	428	H	164	Clench bolt	Metal	Iron	1	11.67	Ph II
566	434	H	164	Nail	Metal	Iron	15	41.97	Ph II
567	434	H	164	Sheet	Metal	Iron	1	6.25	Ph II
568	434	H	164	Wire	Metal	Iron	4	3.41	Ph II
569	453	H	164	Slag	Slag			2.69	Ph II
570	217	H	120	Fish hook	Metal	Iron	1	3.18	Ph III
571	260	H	130	Sheet	Metal	Copper alloy	3	2.15	Ph III
572	461	H	165	Fitting/mount	Metal	Copper alloy	1	1.62	Ph III
573	447	H	167	Clothing fastener	Metal	Iron	1	0.25	Ph II
574	217	H	120	Indeterminate	Metal	Iron	1	12.74	Ph III
575	447	H	167	Nail	Metal	Iron	1	3.56	Ph II

576	306	G	145	Knife	Metal	Iron	1	8.75	Ph I
577	338	H	127	Nail	Metal	Iron	2	1.89	Ph III
578	338	H	127	Scrap	Metal	Iron	2	4.17	Ph III
579	198	H	122	Hinge	Metal	Iron	1	27.36	Ph III
580	198	H	122	Ring	Metal	Iron	1	3.44	Ph III
581	198	H	122	Strip	Metal	Iron	2	8.91	Ph III
582	198	H	122	Object	Metal	Iron	1	66.71	Ph III
583	198	H	122	Handle	Metal	Iron	1	29.13	Ph III
584	198	H	122	Fitting	Metal	Iron	1	74.28	Ph III
585	136	H	136	Knife	Metal	iron	1	14.58	Ph II
586	286	H	136	Whetstone	Stone	Schist	1	23.9	Ph II
587	448	H	164	Unworked bone	Bone		1	2.23	Ph II
588	427	H	164	Unworked bone	Bone		1	9.39	Ph II

### Beinaskrá/Bone Register

No	Area	Context	No. bags	Description	Date
1	G	001	1		06/09/2009
2	G/H	100	10	turf clearing and topsoil	16/6/09
3	G	101	2		06/09/2009
4	G	102	1		06/09/2009
5	g	103	4		06/10/2009
6	G	104	6		06/12/2009
7	G	105	6		15/6/09
8	G	107	3		15/6/09
9	G	110	3		15/6/09
10	G	112	1		15/6/09
11	G	113	1		15/6/09
12	G	115	4		16/6/09
13	G	116	1		15/6/09
14	G	117	1		16/06/09

15	G	111	1		16/6/09
16	G	119	1		16/6/09
17	G	120	3		16/6/09
18	G	121	3		16/6/09
19	H	122	1		17/6/09
20	G	123	5		18/6/09
21	H	124	1		17/6/09
22	H	120	1		22/6/2009
23	H	125	1		19/6/09
24	G	126	2		19/6/09
25	H	127	1		22/06/09
26	G	128	1		22/06/09
27	H	129	1		22/6/09
28	H	130	2		23/06/09
29	G	131	1		22/06/09
30	G	132	1		22/6/09
31	G	133	1		22/6/09
32	G	134	1		22/6/09
33	H	136	11		29/6/09
34	G	138	3		24/6/09
35	G	139	1		24/6/09
36	G	140	1		25/06/09
37	H	141	6		26/6/09
38	G	142	1		25/6/09
39	H	144	12		26/6/09 and 29/6/09
40	G	145	3	PLUS PIG	26/06/09



41	H	146	1		26/06/09
42	G	148	10	MANDIBLES	29/06/09
43	E	014	1		26/6/09
44	E	019	1		26/6/09
45	G	147	1		29/06/09
46	G	149	2		29/06/09
47	H	150	1	MANDIBLE	30/06/09
48	H	151	1	2 MANDIBLE FRAGMENTS	30/06/09
49	G	152	1	EGG SHELL	30/06/09
50	H	153	1	CLEANING	30/06/09
51	G	154	1		30/06/09
52	G	156	15	2 MANDIBLE BAGS, 4 EGG SHELL BAGS INCLUDED	07/01/2009
53	H	157	1		07/01/2009
54	H	155	1		07/01/2009
55	G	158	13	MANDIBLES, BEHEADING CUT VERT.	07/01/2009
56	G	161	28	WHALE BONE, MANDIBLE, SHEEP SK.	07/03/2009
57	H	160	1		07/03/2009
58	H	163	1		07/03/2009
59	H	135	1		07/03/2009
60	H	163	1	EGG SHELL	07/03/2009
61	H	141	1	EGG SHELL	07/03/2009
62	H	156	4	EGG SHELL	07/03/2009
63	G	152	1	EGG SHELL	07/03/2009
64	H	164	11	MANDIBLES, OTOLITHS	07/07/2009
65	H	165	5	MANDIBLE	07/07/2009
66	H	167	18	MANDIBLE	07/08/2009

67	H	167	2	EGG SHELL SAMPLES	07/08/2009
68	H	167	1	WOOD	07/08/2009
69	H	168	1	MANDIBLE	07/09/2009
70	H	169	1		07/09/2009
71	H	170	1		07/09/2009
72	H	172	1		07/09/2009
73	H	173	2		07/10/2009
74	H	174	2		07/10/2009
75	h	175	5		07/10/2009
76	h	176	16		07/10/2009