Midden Excavations at Skútustaðir N. Iceland, 2011

Megan Hicks

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Note: Artifacts are curated at FSI, Reykjavik and will eventually be accessioned by the Icelandic National Museum after analysis. Bones are currently being analyzed at CUNY Hunter College NORSEC zooarchaeological laboratories. Photographs are curated both at FSI and Hunter College CUNY. Please contact t.h.mcgovern@gmail.com or meganthicks@gmail.com.

Adolf Friðriksson og Megan T. Hicks

Öskuhaugsrannsóknir á Skútustöðum í Mývatnssveit 2011 – samantekt

Fornleifauppgröftur sem fram fór á Skútustöðum sumarið 2011 er liður í rannsóknum sem þar hófust árið 2008. Markmið rannsóknanna er að afla efniviðar í athuganir lífsháttum fólks fyrr á tíð.

Í lok síðustu aldar var sett á laggirnar stórt rannsóknarverkefni í því augnamiði að afla nýrrar vitneskju um samspil manns og náttúru (Landscapes of Settlements). Rannsóknin er liður í samstarfi Fornleifastofnunar, háskólans í New York (CUNY), samtökum fornleifafræðinga og fornvistfræðinga við N-Atlantshaf (NABO) og fleiri aðila. Stór liður í þessu samstarfi er fólginn í rannsóknum á öskuhaugum. Húsarústir og grafreitir eru jafnan hin hefðbundnu viðfangsefni fornleifafræðinga, en öskuhaugar eru líka fornleifar. Á öskuhauginn fer heimilisúrgangurinn, sem er í augun fornleifafræðingsins merk heimild um hversdagslegt líf íbúanna. Þar finnast bein húsdýra, sem endurspegla ýmsa þætti úr efnahagslegri sögu þjóðarinnar, svosem bústofna og mataræði, en einnig veiði, fiskar, fugl og jafnvel egg. Sjálf askan er vitnisburður um hvernig eldsneyti var nýtt til eldunar og upphitunar á húsakynnum. Auk alls þessa er algengast að finna gamla gripi í öskuhaugum fremur en annarsstaðar. Úr sér gengin og brotin áhöld og gripir lenda á haugnum ásamt öðrum úrgangi.

Á síðustu árum hafa leifar öskuhauga m.a. verið athugaðar á Sveigakoti, Hrísheimum og Hofstöðum í Mývatnssveit og var gerð forathugun hjá Skútustöðum 2007. Borkjarnar sýndu að á Skútustöðum leyndust stórir öskuhaugar, allt að 2 metra djúpir, með þykkum lögum af beinum, ösku, kolum og eldjfallagjósku frá mörgum eldgosum á sögulegum tíma. Niðurstaðan sýndi að öskuhaugarnir á Skútustöðum geymdu heimildir um 1100 ára búsetu í landinu. Árið 2008 voru þrjú svæði (E1-2, D, F) valin til frekari rannsókna, árið

2009 voru tvö stór svæði (G, H) opnuð og grafin upp og tvö svæði (H, E3) rannsökuð 2010.

Markmið sumarsins 2011 var að ljúka rannsókn á stóru svæði sem nefnt hefur verið H og grafa þar til botns, þar sem elstu mannvistarlögin er að finna. Svæðið er all stórt eða

8.36 x 4 m og voru öll jarðlög grafin uns komið var að óhreyfðum jarðvegi og náttúrulegu hraunlagi undir mannvistarlögum. Úrgangslögunum var skipt upp í tímabil til samræmis við legu þekktra gjóskulaga, þ.e. V 1477, V1410, H 1104/1158, V940, og V871. Eins og á öðrum reitum í rannsókninni þá fannst mjög lítið af dýrabeinum eða gripum í jarðlögum frá lokum miðalda, þ.e.a.s. lögum sem liggja beint ofan á eða rétt undir V1477. Á hinn bóginn reyndist mikið magn úrgangs frá hámiðöldum, þ.e. ofan á og undir gjóskulögum frá Heklugosi á fyrri hulta 12. aldar. Neðstu lögin, þau sem lágu ofan á V940 gjóskunni voru mjög gjöful. Neðst í bæjarhólnum eru sprungur sem ganga djúpt ofan í hraunið og voru þær sneisafullar af dýrabeinum.
Löngu ljóst er orðið hvaða kosti öskuhaugarnir á Skútustöðum hafa sem rannsóknarvettvangur. Skútustaðir eru ekki einungis þekktur sögustaður, heldur hefur þar verið óslitin búseta í 11 aldir. Þar er að finna mörg, skýr lög af eldfjallagjósku til að ákvarða aldur mannvistarlaga. M.ö.o., þá gefa Skútustaðaminjar möguleika á að rekja þróun og sögu yfir langt tímabil. Rannsóknir á náttúru og umhverfi Mývatns síðustu áratuga skapar einnig betri skilyrði til nýrra fornleifarannsókna auk þess sem nýlegar fornleifarannsóknir hér og hvar í S-Þingeyjarsýslu dýpka skilning á afrakstri Skútustaðauppgraftar.

Garðar Guðmundson myndaði staðinn úr lofti og mældi upp rannsóknarsvæðið og nágrenni þess. Liggur nú fyrir nákvæmt kort með hæðamælingum af öllum bæjarhólnum og hluta af túninu umhverfis. Gerð var leit að kirkjustæði miðaldakirkjunnar, með hliðsjón af fyrirliggjandi fornleifaskráningu, auk gamalla og nýrra ljósmynda. Í ljós kom að enn má sjá leifar af sökkli kirkjunnar milli húsa á Skútustöðum.
Þegar þessi orð eru rituð standa enn yfir athuganir á gripum, beinum og jarðvegssýnum á rannsóknarstofum Fornleifastofnunar og Hunter College í New York. Liggur nú fyrir

álitlegt safn dýrabeina og gripa sem eflaust mun varpa ljósi á sögu og menningu Mývatnssveitar í gegnum aldanna rás. Fyrirhugað er að halda áfram uppgrefti árið 2013. Sumarið 2011 fékk Skútustaðaleiðangur heimsókn frá fróðleiksfúsum nemendum Fornleifaskóla barnanna á Litlulaugum í Reykjadal. Auk þess hélt Hið þingeyska fornleifafélag opinn dag um yfirstandandi fornleifarannsóknir í héraðinu í Hafralækjarskóla, þar sem til sýnis voru m.a. gripir og bein úr Skútustaðarannsókn. Þar var einnig haldið erindi fyrir almenning og var ánægjulegt hve vel það var sótt[1].

Stjórnandi rannsóknarinnar er Megan T. Hicks og uppgraftarstjóri var Adolf Friðriksson. Auk þeirra unnu Frank Feely, George Hambrecht, Garðar Guðmundsson, Lilja Pálsdóttir, Orri Vésteinnsson, Hildur Gestdóttir og Óskar Gísli Sveinbjarnarson við rannsóknina til lengri eða skemmri tíma. Magnús Á. Sigurgeirsson rannsakaði gjóskulög og Guðrún Alda Gísladóttir og Sólveig Beck hafa annast athuganir á forngripum. Unnsteinn Ingason og Sif Jóhannesdóttir hafa veitt margháttaða aðstoð á hverju ári. Árni Einarsson líffræðingur varð fyrstur til að taka eftir öskuhaugsminjum í rofi, sem leiddi til þessara rannsókna. Hann hefur veitt ómælda aðstoð við verkið frá upphafi. Er öllu þessu fólki hér með þakkað fyrir aðstoðina.

Rannsóknin naut veglegra styrkja frá Vísindasjóði Bandaríkjanna og Human Ecodynamics Research Center í New York. Fornleifavernd ríkisins veitti rannsóknarleyfi.

Gerður Benediktsdóttir og Þorlákur Jónsson hafa góðfúslega gefið leyfi til rannsókna á Skútustöðum og er þeim þökkuð liðveisla, hvatning og góðar móttökur.

[1] Adolf Friðriksson, Megan T. Hicks o.fl., „Leyndardómar Skútustaðaminja. Aska, bein og brotnir munir“, *Opinn Dagur Hins þingeyska fornleifafélags, Hafralækjarskóla, 10. júlí 2011*.

Megan Hicks

Summary

Excavations have been ongoing at the N. Icelandic farm, Skútustaðir, since 2008 as an outgrowth of the *Landscapes of Settlement* project. The major objective of the 2011 excavation season at Skútustaðir was to complete the excavation of an already begun, large Trench, Area H (measuring 8.36 x 4 meters) by continuing the excavation down to the natural bedrock surface. This was completed by a four person team from CUNY and FSI directed by Adolf Friðrikson, with Francis Feeley, George Hambrecht and Megan T. Hicks (of CUNY, Ph.D. Program in Archaeology). The archaeological deposits encountered contained animal bone, artifacts and were divided by several datable volcanic tephra layers: the V 1477, V1410, H 1104/1158 and the V940, and the V871 were all identified both in the field and reconfirmed in the lab by Magnus Á. Sigurgeirsson. As in other trenches previously excavated, the late medieval phases directly above and below the V1477 volcanic tephra were nearly entirely void of bone and artifacts. The high medieval phase – above and below the 12th c Hekla volcanic tephra generally rich, culminating in a very dense deposit which lay upon the V940 tephra, context [317]. As always, a program of initiatives outside the excavation enriched the digging season. Garðar Guðmundson (FSÍ) completed a contour survey of the entire farm mound which will contextualize other GIS features. A small survey was carried out, locating potential remains of Skútustaðir´s medieval church and churchyard- this was completed using both late 19th c. photographs and modern photography.

An annual session of educational programming with KAPÍ (Kid´s Archaeological Program, Iceland), included on-site experiences and a mock-excavation for the school age kids in the county. Analysis of artifacts, bones, soils, and archaeobotanical remains is currently underway at the Hunter College Laboratories and Fornleifastofnun Íslands.

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Background to Ongoing Research

For nearly two decades, interdisciplinary archaeological work has been carried out in the Mývatn Area of N. Iceland (Mývatnssveit). The *Landscapes of Settlement* project (NSF OPP 0352596) centered on creating an extensive chronology of settlement for the earliest established farms in Mývatnssveit during the Viking age (871-1000 CE). The NSF funded *Human and Social Dynamics of Global Change* program led by Dr. Astrid Ogilvie (NSF OPP 0527732) aimed at connecting the archaeological record with the historical record. These research programs culminated in a regional study of human and ecological relationships and settlement history whose publication in *American Anthropologist* won the Gordon Willey Award for interdisciplinary research (McGovern *et al* 2007).

While the work in Mývatn 1996-2006 had produced multiple archaeofauna dating to the Viking age (McGovern *et al* 2006), including the major collections from Hofstaðir (McGovern et al. in Lucas 2009) only relatively small exposures of medieval middens at Steinbogi (2004) and Selhagi (2001) had taken place. The next step was to attempt to extend the time period of study and connect the settlement age and early medieval period

record (871 to 1350 CE) of the Mývatn region to the early modern period and the present.

In 2007, a survey of 8 sites in the Mývatn area was led by Orri Vésteinsson and Thomas H. McGovern in order to find stratified deposits that could expand and extend the record for the Mývatnssveit (Vésteinsson 2008). Soil-coring of middens and selective test pitting was carried out by the team in an effort to localize deeply stratified deposits. Skútustaðir was found to have a remarkable sequence of tephras intersected by substantial midden deposits that appeared to extend over 1.5 meters in depth. The following year (2008) four test trenches were excavated to verify the locations of the densest midden and collect initial data. In 2009, 2010, and 2011, larger areas were excavated in a successful effort to recover substantial artifact and ecofact collections.

Figure 1. Aerial Kite Photograph (by Garðar Guðmundsson) showing excavation areas 2008-2012.

Year	**Area**	**Trenches Excavated**	**Published**
2007	Coring Survey	A,B,C	Vésteinsson 2008
2008	Test Trenches	D,E1,E2, F	Edwald and McGovern 2008
2009	Large Trenches	G,H	Edwald 2009, Hicks and Harrison 2009
2010	Large Trenches	E3, H,	Hicks and Pálsdóttir 2011
2011	Large Trenches	H	Hicks 2013 (present pub.)

The completion of the excavation of midden Trench H was the main goal of the 2011 field season and was therefore a much smaller scale project than in previous years, when at times, multiple large trenches were opened. In 2009, trench H was unturfed as a test trench, but rapidly expanded because of the richness deposits present. In 2009, the V1717 tephra was located among midden, and below were bone and charcoal rich contexts deposited on a sharp slope and extremely friable. To the north side of the trench, immediately below the turf, there was a significant depth historic turf dump overburden which we believe corresponds to the demolition of the 19th c farm house. In next year (2010) the excavation continued to the point of the removal of the V1477 tephra, above which anthropogenic deposits dissipated significantly as excavation continued. Under the V1477 tephra, we encountered deposits of sterile soils. Due to time constraints in 2010, we ended the excavation after removal of the V1477 tephra. This report focuses on the completion of the excavation of trench H in 2011, and notes ongoing work in collaborative analysis. The description of excavations in other areas, and can be found in the reports listed above.

Figure 2 Area H - this was the state of the trench after the 1477 tephra was removed in 2010. The 2011 excavation began here.

Excavations in 2011 began with the opening of Trench H from under a large volume of backfill under which the archaeological layers were protected by barrier cloth. As always, we received generous help from archaeologists working on nearby projects at Hofstaðir and on greater Mývatn area survey projects. Excavation in 2011 began where that in 2010 it had left off, the deposit directly below the V1477 tephra and context numbering began at [300]. The two deposits following the V1477 tephra were void of anthropogenic material as those directly above the V1477 tephra. Soon below, we encountered the V1410 tephra, context [302], again encapsulated by deposits mostly devoid of bone and artifacts. It is notable that these "empty" deposits surrounding the V1477 and V1410 tephra are lacking signs of human activity during a period in which Iceland is known to be impacted by the bubonic plague. Other reasons for their lack of finds and ecofacts may be changes in spatial organization of activities on the farm.

Figure 3 Opening and excavating trench H in 2011, Day 1

The character and pattern of lower midden deposits in Trench H were similar in some ways to the deposits in adjacent Trench G, as they were separated only artificially by excavation years and a 60 centimeter baulk left in place to stabilize backfill deposits.

Figure 4 Excavation of contexts just below the 1477 tephra produced very little bone or artifacts.

Below these sterile layers, a context was identified containing turf with a visible tephra resembling the H1300 in color and grain size [303], though this tephra was not found as an intact, isochronic deposit in the trench it was found below the 1410 tephra and above the H12th c. tephra stratigraphically. Below this turfy context, deposits containing midden bone, charcoal, ash and artifacts again appeared. Two large lenses [309] [310] contained significant twig-like wood ash, and [311] was pink-hued peat ash, and bone.

The white Hekla 12th c tephra, though present only in wisps in the east side of the trench, was trace-able. Below the Hekla 12th c tephra, the contexts began to dip further into what we suspected were crevices in the bedrock, seen in previous years in Trenches G and E 1,2, and 3.

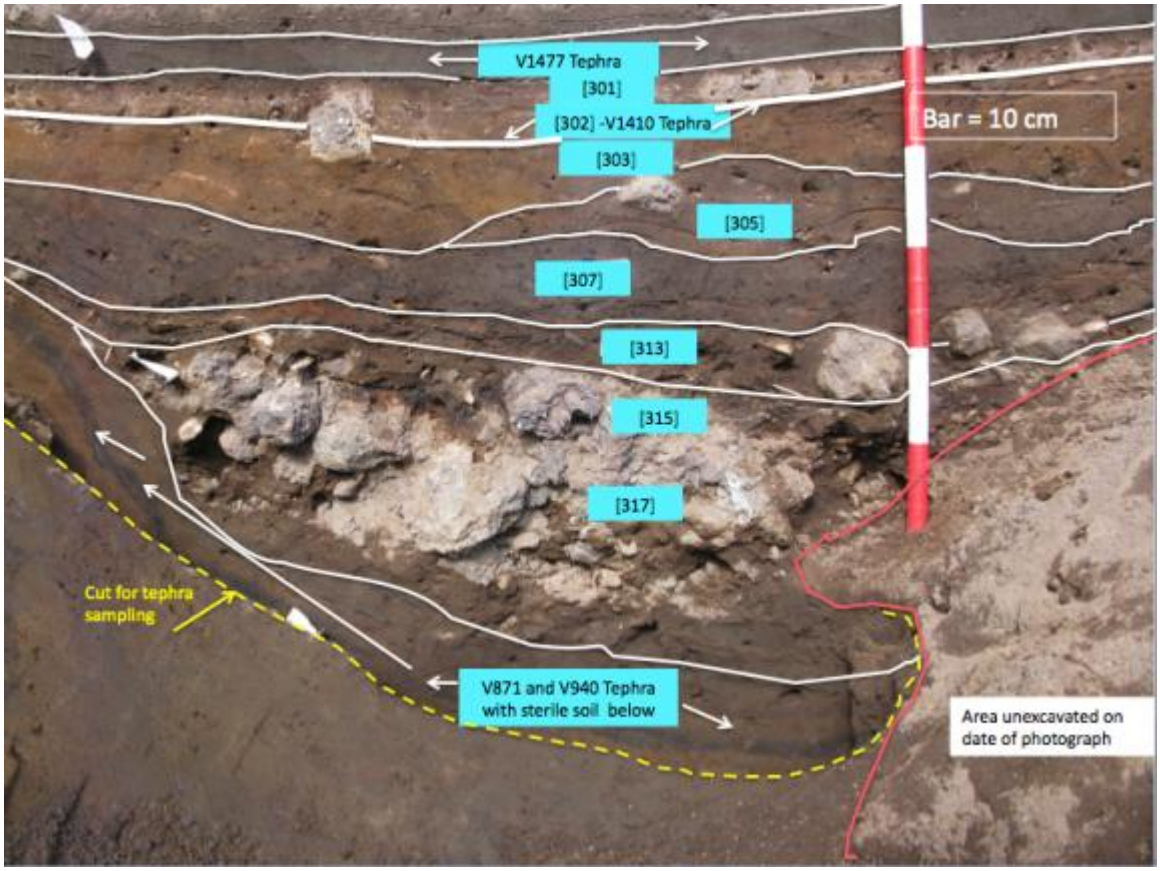


Figure 5. A superimposed profile drawing of deposits visible below the V1477 tephra, in the west of Area H.

The deposits we found at the base of Trench H in 2011 were nearly identical to those found in 2009 in the base of area G, though they sloped downward significantly to the east with the natural ground surface. The largest contexts in H were [315] and [317] and they resembled context [161] in Area G in 2009. All were non-compact midden layers with ample, large mammal bones, fire cracked rock, egg shell and large gravel; charcoal fragments were present and the deposit appeared to be mixed with the V940 tephra, but was later confirmed to be laying just above.

It seems the inhabitants of Skútustaðir were filling natural crevices with midden until about the high middle ages, when the soils and middens filling the surface are level with the crevice edges. This activity could have been a very purposeful or incidental: either inhabitants were seeking out uneven terrain for dumping household garbage, to eventually even or improve it or they were scattering their midden material which would be trodden and roll down into the small ravines and stay there. Whether intentional or not, this long-term pattern of activity made the terrain more even, easier to traverse, and eventually, soil-rich.

Figure 6 A first glimpse of the bone rich contexts [315] and [317] in bedrock crevices.

Figure 7 Bone, eggshell and loose gravel forming context [317].

Contexts [315] and [317] had a very unclear transition between them. It was the sheer thickness, friability and mixed nature of [315] that necessitated their being separated, somewhat arbitrarily, in to upper [315] and lower [317] layers. A closer inspection, described in the phasing section of the present work, found the V940 tephra to be just below and in contact with the midden remains in [317]. Further refinement of phasing of these sloping and friable midden deposits might be possible with the help of ongoing artifact analysis.

A description of similar deposits excavated in 2009, in contiguous Trench G, was published by Edwald 2009:

" Only 20 cm below the V1477 tephra we began to encounter a deposit rich in large mammal bones and comprised of a looser deposit with small lava stones and lava gravel mixed in with the many animal bones, bird egg shell, fire cracked rocks, and charcoal fragments (Figure 10 below). This deposit resembled other Viking Age middens in Mývatnssveit, and proved to be associated with two 9th-10th c tephra- the V c 940 tephra and the Landnám sequence (V 871). This bone rich

deposit rests directly upon the V 871 LNS, which could be traced widely across the unit, but it appears to also be just above or mixed with the later V 940 tephra and is probably mid-10th c in date; perhaps contemporary with the late 9th c fill in Area E1 across the home field."

The uncertainty of the relationship of the 2009 deposit [161]´s relationship to the V940 tephra lead the team to settle on a 10th c. phase for that context.

Context [317] similarly rests upon the V940 tephra however, its upper limit in age is less clear, but perhaps securely medieval, based on artifacts present and discussed in later sections. Both the midden deposit and the tephras lay on small sloped crevices with little soil on the lava bedrock surfaces. Below [317] was a clear boundary to a gritty, silty deposit on an undulating lava bedrock surface, banded with the Landnám sequence and bearing no anthropogenic contents. The removal of this gravelly midden layer on to the 10th c tephra and bedrock concluded the 2011 excavation.

Figure 8 The bedrock surface cleared of all midden remains. Dark patches of tephra are visible.

Overall Trench H has provided the most dense, long-term remains, which should be kept in mind for future excavation years. Material from phases above the V1717 tephra has been recovered. The most dense midden layers dated to the phase between the V1717 and the V1477 excavated in 2009 and 2010. In 2011, the midden density was low around the two 15th c. tephras and became increasingly dense well below the 1410.

Backfilling of excavation Trench H was completed by machine using the spoil generated from un-turfing and sieving deposits, and high quality turves were placed down and watered in order to restore this area of the infield back to hay-production for the contemporary farmer.

Context Register

300	H	d	grey brown midden with charcoal and bone	29/6/11
301	H	d	brown silty deposit with some areas of charcoal very little bone	29/V6/1 1
302	H	d	thin grey tephra below context 301 (1410?)	29/6/11
303	H	d	Mid brown midden with turf	17/7/11
304	H	d	Turf, midden, charcoal mixed (equal to 306	17/7/12
305	H	d	Dark grey/black midden layer	17/7/13
306	H	d	turf with visible in tephra within	17/7/14
307	H	d	Ash and charcoal with some truf debris in places	17/7/15
308	H	d	Tephra in east side of the trench (1104/1158)	17/7/16
309	H	d	Grey ash and burnt twigs	17/7/17
310	H	d	Grey ash and burnt twigs	17/7/18
311	H	d	peat ash and charcoal with bone	17/7/19
312	H	d	dark midden lens south side only	17/7/20
313	H	d	dark brown soil with ash and bone	17/7/21
314	H	d	possible tephra (1104/58) traced more widely	17/7/22
315	H	d	bone rich gravely deposit in chasm	17/7/23
316	H	d	bone rich deposit above natural and below 307	17/7/24
317	H	d	Silt and gravel and bone below 315 and within the chasm – similar to 315 (related to 940 tephra?)	17/7/25
318	H	d	charcoal rich midden deposit with bone	17/7/26
319	H	d	dark, gritty deposit with bone.	17/7/27

Phasing and Tephrochronology

On July 11, 2011, Magnus Sigurgeirson visited the site to analyze the exposed tephras in situ and take samples for later analysis in the laboratory. The following text, in Icelandic and English is a summary of his findings that include the description of the following volcanic tephras in situ in Area H, below the 1477 tephra: V1410, H1104/58, V940, V870.

Magnús Á. Sigurgeirsson

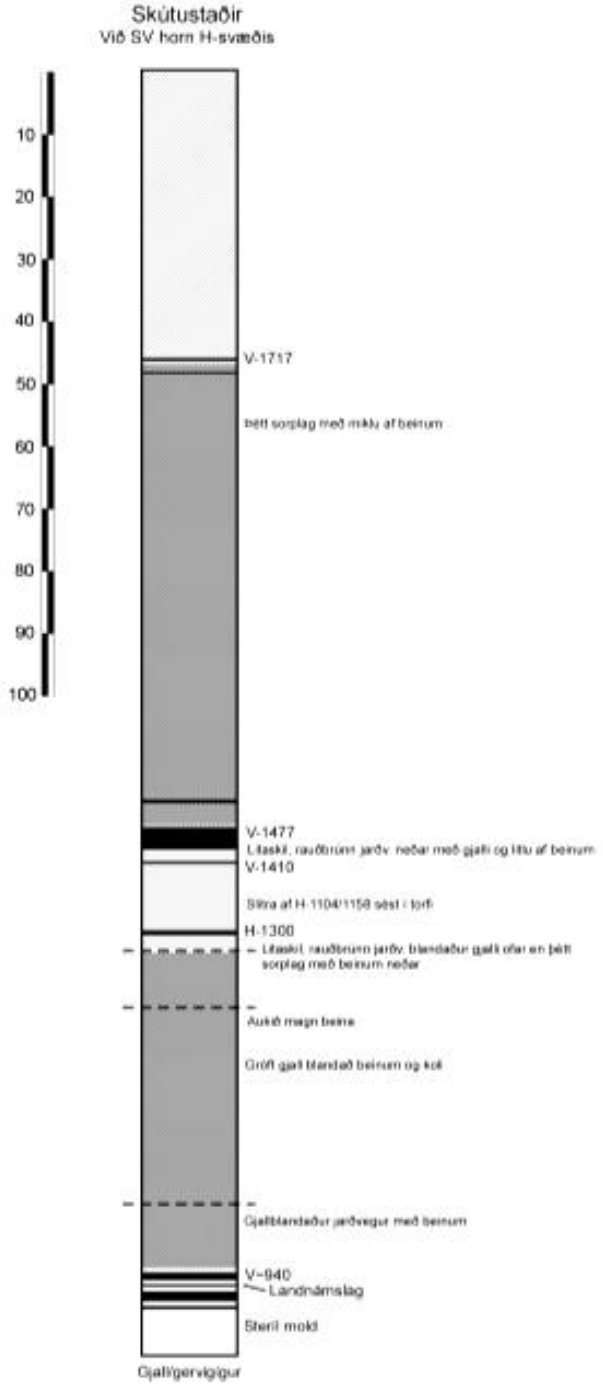
Fornleifarannsóknir í Suður-Þingeyjarsýslu sumarið 2011 Gjóskulagarannsókn

Skútustaðir – sorphaugur (svæði H)

Mælt er snið í vesturbakka gryfju-H. Sniðið er samsett, efstu ca. 60 cm eru mældir í SV-horni en neðri hlutinn um 1,5 norðar í vesturbakkanum (mynd 4). Mannvistarlög eru í öllu sniðinu niður að efri mörkum LNS. Í sniðinu koma fram ýmis þekkjanleg gjóskulög, s.s. V-1717, V-1477, H-1300 og í botni eru lög LNS. Rýnt var sérstaklega í elstu mannvistarlögin í von um að finna hámarksaldur þeirra. Lög LNS eru ágætlega varðveitt, undir mannvistarlögunum. Efst í LNS er grágrænt 1-2 cm þykkt gjóskulag. Lagið er nokkuð raskað en er þó sæmilega heillegt. Mannvistarlögin liggja næst ofan á þessu lagi. Við nánari skoðun og samanburð við önnur snið má telja næsta víst að þetta gjóskulag sé svonefnt V~940. Undir því er örþunnt grænleitt lag sem líklega er Landnámslagið frá um 870 e.Kr. Sé þessi greining rétt, eru elstu mannvistarlögin (sorplög) frá því um 940 eða litlu síðar.

Skoðað er í A-V bakka gryfjunnar við hnit; 504/120-121. Efstu 10 cm eru grasrót. Gjóskulagið V-1717 er ekki sjáanlegt, líklega rofið burtu. Gjóskulagið V-1477 er á 95 cm dýpi. Um 2,5 cm undir V-1477 er 0,5 cm þykkt dökkt gjóskulag og 22 cm undir því er ljóst 1-2 mm þykkt gjóskulag í ljósleitu moldarlagi. Það má sjá um 50 cm kafla í sniðinu (var einnig hægt að rekja í fleti að sögn grafara). Um 10 cm neðan ljósa gjóskulagsins er óhreift rauðoxað gjall. Víst má telja að um Heklugjóskuna H-1104 eða H-1158 sé að ræða.

Skoðað er í litla holu stuttu sunnan gryfju H. Þar mátti sjá þunnt grófsendið gjóskulag á 15 cm dýpi og þar fyrir neðan er að minnsta kosti 70 cm þykkt sorplag (ekki grafið dýpra). Gjóskulagið liggur um 55 cm yfir grjóthleðslu sem væntanlega tilheyrir einhverju mannvirki. Líklega er um gjóskulagið V-1717 að ræða (sýni skoðað). Gjóskulagið V-1477 er mögulega á 67 cm dýpi neðan grófu gjóskunnar og rétt ofan þess er þunnt dökkt gjóskulag. Afstaða gjóskulaganna til hvers annars líkist mjög því sem er í gryfju H. Líklegt verður að telja að grjóthleðslan sé frá seinni öldum, 16.-17. öld, en grafa þarf hana betur fram til að fá það staðfest. (Hnit: N65° 33.953´, V17° 01.980´)



Magnús Á. Sigurgeirsson

Archaeological research in South, Thingeyjarsysla, Summer 2011

Translation Adolf Friðdrikson, Megan Hicks 1.16.12

The western profile of area H was cleaned and examined. The profile is a composite: the top sixty centimeters are taken from the adjacent south western corner (as they were removed in a previous excavation). There are cultural layers in the entire section down to the upper limit of the Landnám sequence, the LNS. In this profile, there are a number of recognizable tephra layers such as: V 1717, V 1477, H1300, and on the bottom there are the layers of the LNS. A particular attention was paid to the earliest cultural layers with the hope of confirming the earliest date. The LNS layers are quite well-preserved below the cultural deposits. On the top of the LNS there is a grey-green layer about 1-2 centimeters thick. This layer is considerably disturbed, but nevertheless reasonably complete [intact]. The cultural layers lay immediately on top of this one. After a more detailed observation and comparison to more sections elsewhere, it is almost certain that this tephra layer is in fact the so – called V90. Below it there is an extremely thin greenish layer which probably is the Landnám tephra from about 870 [AD]. If this analysis is correct, the earliest deposit layers are from about 940 or shortly after.

Observations made at coordinate 504/120-121 in the NORTH side of area H. The top 10 cm are grassroots. The tephra V1717 is not visible possibly it has eroded [it is intact in the rest of the profile]. The tephra V1477 is at the depth of 95 centimeters. Some 2.5 centimeters below V1477, there is a dark tephra 0.5 cm thick. And 22 cm further below that layer there is another light colored tephra 1-2 millimeters thick in a light colored soil layer. One can see a continuation of this layer for about 50 centimeters (and it could also be traced in plan according to the excavator). About 10 cm below the light colored tephra there is undisturbed red oxidized slag. It is certain that the layer in question is the Hekla tephra H1104/H1158.

...A small test pit - Area F - a short distance from area H was also investigated. Area F was partially excavated in 2008, but some phase issues were unconfirmed. Excavation there ceased because a structure was found and decidedly left unexcavated. The area was consolidated, but firm tephra identification needed attention. We re-opened this area in 2011…

There one could observe a thin and coarse tephra layer at a depth of 15 cm. Below that there is a midden deposit at least 70 cm thick (the unit did not go further down [to natural]). The mentioned tephra lies 55 cm above a stone structure which probably belongs to a building. On the basis of the analysis of a sample, it is probably the V1717 tephra. The V1477 tephra is at 67 cm below the coarse tephra. And just above [the 1477 tephra] there is a thin, dark colored tephra. The relative position of these layers resembled very much what one can observe in Area H. It is highly probably that this stone structure is from the 16th or 17th centuries, but it would need to be excavated further in order to have that dating confirmed. (coordinate: N65° 33.953´, V17° 01.980´) Because it contains structural remains, which are not a part of our projected excavation plans for Skútustaðir, area F was consolidated with *teram* permeable fabric, turf, and soil; it remains as currently the only incomplete excavation area.

Matrix

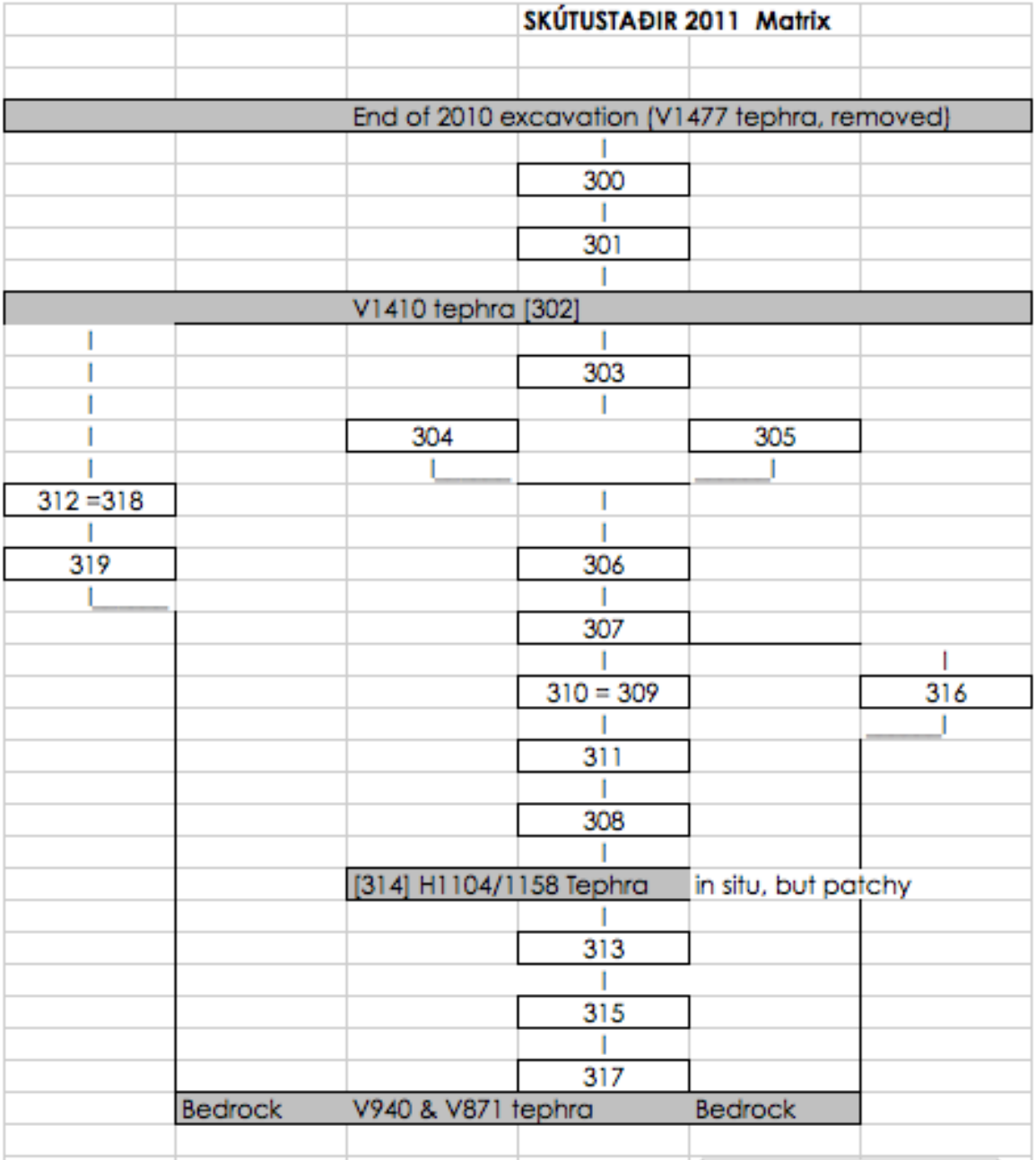

SKÚTUSTAÐIR 2011 Matrix
End of 2010 excavation (V1477 tephra, removed)
300
301
V1410 tephra [302]
303
304
305
312 =318
319
306
307
310 = 309
316
311
308
[314] H1104/1158 Tephra
in situ, but patchy
313
315
317
Bedrock
V940 & V871 tephra
Bedrock

Figure 9 Garðar Guðmundsson

Mapping

During the 2011 excavation season, GIS specialist Garðar Guðmundsson (FSI) generously conducted a walking contour survey of the farm mound at Skútustaðir. The image below is augmented by the overlaid contours in black showing the intensity of changes in elevation via line density. The southern shore of lake Mývatn is visible to the north (top) and bordered by the modern road which passes through the farm's land, to the north of the major cluster of houses and the church as well as the pond system on the southern side of the cluster of farm buildings. The dull green, featureless area to the south and west of the image are the fringes of the expansive wet hay meadows that provided Skútustaðir and other nearby farms with an excellent source of outfield hay. Contour lines are superimposed on the image below in black and also shown is the 2011 excavation area in red. It is clear that the significant midden deposits on the Skútustaðir

farm mound comprise and are clustered around the highest point of the farm mound- it is truly an anthropogenic feature in the landscape, accumulated atop an undulating lava surface marked with large pseudocraters. Also visible is the artificial flattening undertaken in the area of the rectangular churchyard and to the north of the churchyard.

Figure 10 Contour Survey results by Garðar Guðmundsson. Shows also the location of Trench H in red.

Small Scale Survey for Medieval Churchyard Remains

A walking survey of the farm mound was completed with the hope of finding the precise location of the medieval phase churchyard at Skútustaðir. The general location of the churchyard was known from previous surveys carried out by Hreiðarsdóttir and Vésteinsson (1999). The 2011 efforts used the information from that report alongside a late 19th century photograph in which the remains of the churchyard are visible. The photograph was printed and carried to the site location; it was aligned with still present geological features to gain the near-precise position of the photographer, and the relative position of his century-old subjects. It is an approximate exercise as similar uses of photographs have been applied in historical archaeology, and many recommend obtaining a camera and lenses that are the same as were used by the original photographer. Our

improvised technique was immediately rewarded as a linear stone feature was immediately visible in the area indicated by inference from the original photographs; the ground surface in the area of interest had been eroded by modern use as a gravel-lined driveway, leading to the barn.

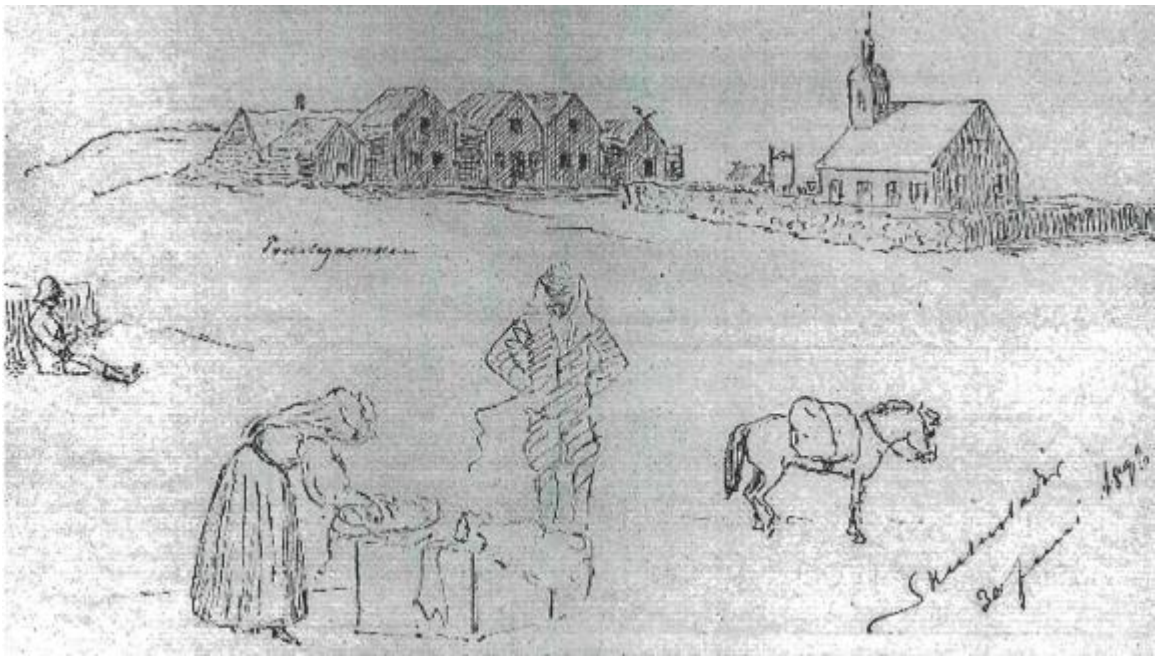
Figure 11 Archival late 19th c photograph of medieval phase church in the main farm area. Photograph Daniel Bruun.

Figure 12 A Northeast facing photograph of a linear feature, possible remains of the same church photographed above.

A drawing was made of this feature using the southeastern corner of the modern storage barn as a datum point. The drawing (curated at FSI) indicates a point 9 meters site east from this datum. The current area is a driveway, used to access a large storage barn and located to the east of this barn. Further to the east is a modern residence. To the north, there is a clear, rounded, transition to a slope, down toward a smokehouse, a chicken house and further north, the public road.

The linear feature of laid stones is oriented along an east to west axis, providing another hint that it could be remains of the previous church phase; church buildings in Iceland were traditionally aligned E-W. Skútustaðir ’s economic and political position as a church farm and parish administrative center is well-documented. As a church farm, and later a district center, its resources and land rights will have interacted with the particular ways of raising stock and consuming food. Therefore the church influence on daily life has clear implications for the interpretation of the zooarchaeological record. In the late 1800’s a medieval phase church and churchyard were de-sanctified to make way for an early modern church and churchyard at Skútustaðir.

This survey was unplanned, yet informative, it was surmised, in previous surveys that the surrounding area would have been the churchyard (Hreiðarsdóttir and Vésteinnson 1999). The finding of intact remains potentially of the church (later used as a thinghús) suggests that in addition to having excellently preserved middens and numerous tephra, Skútustaðir might be able to contribute to archaeological studies of local administrative assembly houses, churches or burial grounds.



A Summary of Ongoing Zooarchaeological Analysis

Investigations at Skútustaðir have focused on obtaining information about economy, ecology and daily life through the excavation of middens- which are nearly two meters deep in some places with outstanding conditions of organic preservation (bone, marine shell, bird egg shell) and interspersed with multiple volcanic tephra layers datable to 871, c.940, 1158, 1265, 1300, 1410, 1477, c. 1600, and 1717 CE. Most of these tephra have been located in strata in the two major excavation areas (H and E). A suite of AMS C14 dates on fully terrestrial cattle and caprine bones supports and refines this tephra-based chronology, with datable artifacts thus far providing close correlation. The archaeological record is rich and accurately datable, making Skútustaðir a unique and important archaeological resource.

While the specific pattern and timing of initial settlement in the Mývatn region, in the 9th c. is the subject of ongoing study, it is clear that the first residents of Skútustaðir were able to secure a highly strategic physical location in the region that allowed them access to riverine resources, lake resources, ample hay meadows and perhaps control over the southern passable, lakeside terrain in Mývatn. A find of a gold foil-lined, Byzantine

bead in Viking age deposits may attest to the early residents' high status, or at least access to prime luxury items. Coupled with a Viking-age radiocarbon date, indicates an early presence.

The faunal record from the Viking age so far indicates that the residents were making use of terrestrial mammals for much of their food, managing sheep for wool and meat, cows for dairy and meat, horse and pig bones are rarely found –horses were likely mostly for transport. Thick and extensive layers of bird egg shell and the occasional trout or char bone indicate early exploitation of wild resources in the farm's immediate territory. As in other inland Viking Age sites, there are abundant remains of headless marine fish (mainly haddock and cod) imported from the coast 60-70 km away. Viking age deposits at Skútustaðir have proven exceptionally rich and extensive generating a count of 95 standard bone sample bags (from contexts between the 871 – 1104/58 tephras) of a total collection of 647 bags. This provides excellent comparative material for the other known Viking Age archaeofauna from the region and the wider North Atlantic, and analysis of this phase will provide a major contribution for cross regional comparative study. Analysis of the animal bone from Skútustaðir's middens is currently underway at the Hunter College NORSEC Laboratories and the results presented here are preliminary and expected to change slightly as more data is added.

	Unstr at.	9th c	10th c [161]	1262-1300	14th c	pre 1477	1477-1717	post 1717	Total
Cow (*Bos taurus*)	8		198	110	13		112	84	**525**
Horse (*Equus caballus*)			1	1			1		**3**
Dog (*Canis familiaris*)								1	**1**
Pig (*Sus scrofa*)	1		11					1	**13**
Sheep (*Ovis aries*)	5	2	57	13	4		78	49	**208**
Goat (*Capra hircus*)			9					1	**10**
Ovis/Capra sp.	22	5	594	159	19		467	380	**1646**
Total Domestic Mammals	**36**	**7**	**870**	**283**	**36**		**658**	**516**	**2406**
Harp seal (*Pag. Groenlandicus*)								2	**2**
Phocid spp. (unident. seals)				1			34	18	**53**
Cetacea (small whales/porpoise)				1					**1**
Arctic fox (*Alopex lagopus*)		1		2				1	**4**
Mouse (*Mus musculus*)							2		**2**
BIRDS (all)	3	9	6	35	11		62	49	**175**
MOLLUSCA			3	3	1		14	2	**20**
TOTALNISP(No. of Ident Specimens)	**39**	**17**	**879**	**325**	**48**		**770**	**588**	**2666**
MM (Marine mammal)							1	3	**4**
STM (Small terrestrial mammal)									
MTM (Med. terr. mammal)	9	49	766	322	43		981	517	**2687**
LTM (Large terr. mammal)	2	25	195	64	14		120	102	**522**
UNIM (Unidentified mammal)	3	299	2384	905	184	7	2928	2277	**8987**
Total Number of Fragments	**53**	**390**	**4221**	**1616**	**289**	**7**	**4800**	**3487**	**14866**
Fish (Preliminary count)	6	175	127	321	272	2	4065	1131	**6099**
Total Number of Fragments (incl. fish)	59	565	4342	1937	561	9	8865	4618	**20965**

Figure 13 Number of Identified Specimens from Skútustaðir (Hicks 2010)

The early modern period (1550-1910 CE), corresponding roughly to after the fall of the V1477 tephra) is also well represented in the deposits excavated thus far, with 311 standard bone sample bags recovered from deposits that also

generated a large number of datable finds, particularly post-1600. In 2009, 2010 and 2011, excavations allowed the recovery of an excellent assemblage of faunal remains and artifacts from the early modern period (1550-1900).

The analysis of this ample early modern (1550-1900) evidence from Skútustaðir demonstrates a continued focus on sheep rearing for wool, meat, and dairy, as told by the variety of ages at which sheep are killed off. Extensive tooth eruption and wear studies clearly demonstrates some sheep being killed off at a very young age as part of a culling and dairying regime, large bodied, almost mature sheep are killed off as ideal meat, as well as very mature individuals likely kept in to old age for their wool (Hicks 2010). Where cows are found in the archaeofauna they are very often neonatal, suggesting constant dairying activity. Both horses and pigs are low in numbers in the midden, not being the main choice as food items consistently in this and other Icelandic archaeofauna.

Significantly more marine resources are present during the later phases than in earlier phases and there are indications of changing foodways. Preliminary counts suggest that the amount of Cod family (*gadidae*) fish steeply rises, including both cranial and post-cranial elements for the first time. Finds of ice-riding harp seal bones in the 16th-17th c deposits at Skútustaðir may reflect both these coastal impacts and their effects deep inland, and the many pottery and kaolin tobacco-pipe finds from the 17th-19th c layers clearly reflect world-system connections and impacts. It is as yet unclear whether the early modern residents of Skútustaðir were among the less vulnerable elite during this time or whether they were as many other Icelanders “coping with hard times” (Edvardsson *et al*. 2004). However, literature and primary sources from the early modern period points to many large farms being of mixed status.

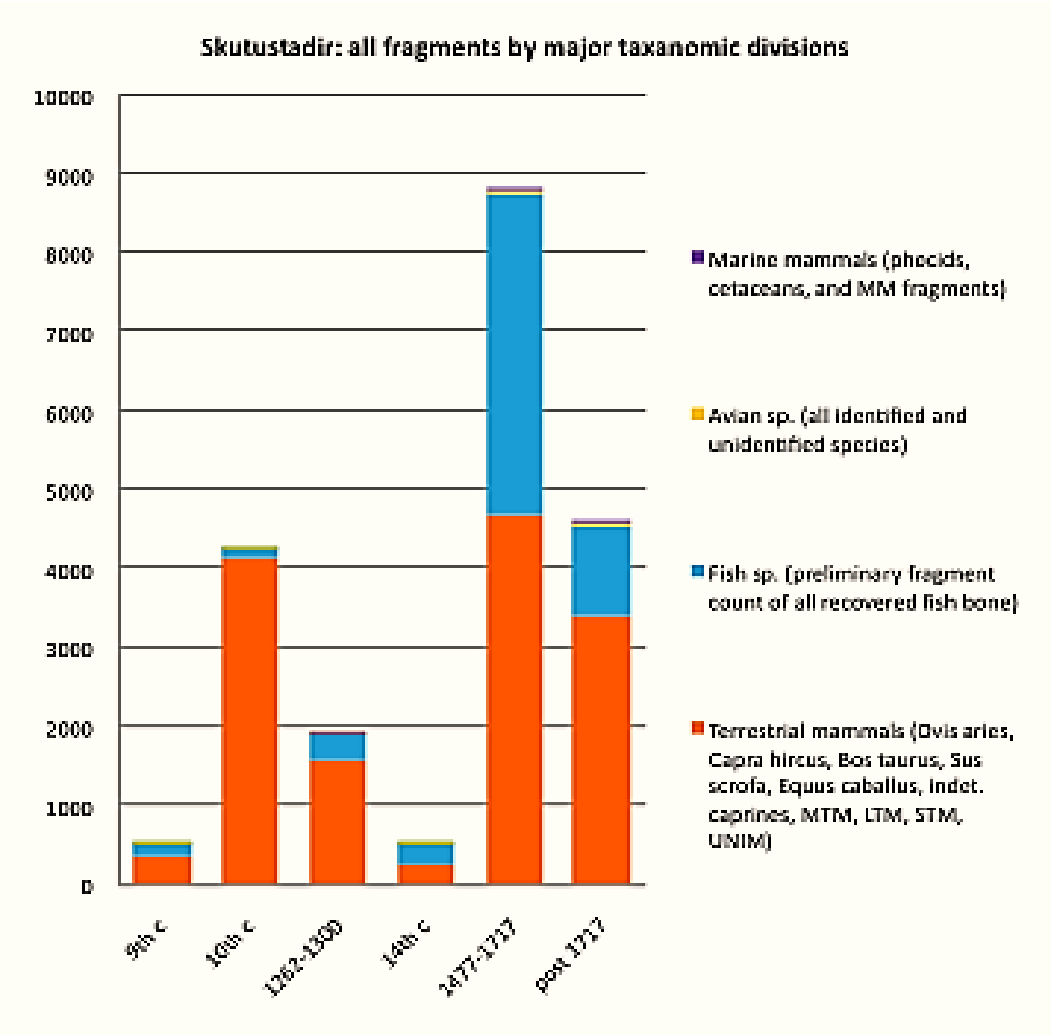


Figure 14 NISP chart from Hicks 2010. Data analysis is underway.

While the Viking age and high medieval assemblages at Skútustaðir will provide excellent comparative collections for Mývatn region work, the early modern archeological layers at Skútustaðir will contribute new information from lake Mývatn to the growing archaeology of early modern Iceland (Lucas & Snaesdottir 2006, Edwald & Hicks in press, Hambrecht 2008, 2010) and to the wider application of environmental perspectives to the human ecodynamics of the past 500 years.

Sheep and their grazing has been a central concern of the rich zooarchaeological and landscape studies produced by interdisciplinary research teams in Mývatn in the last decade. A significant increase in sheep relative to other animals is archaeologically

visible at around 1300 CE (Brewington *et al* 2004 McGovern *et al* 2007). Furthermore, the 1710 Jarðabok documented about 1 to 25 cattle to sheep in the 18th c. A productive session of archival research focusing on early modern period livestock management was begun in the summer of 2012 with support of the Comparative Islands Ecodynamics Grant (PI Thomas H McGovern, CUNY, National Science Foundation Office of Polar Programs Grant 1202692) and with the welcoming help of Sif Jóhannesdóttir at Husavik Museum and Culture house and Águsta Edwald (University of Aberdeen). By collecting the precise livestock counts provided by 19th c. Hay Reports (Hey Ásetning Skyrsla), this archival research hopes to provide a detailed understanding of early modern herd management strategies and landscape use in Southern Mývatn, adding to the timeline understood by years of interdisciplinary work (McGovern *et al* 2007). The outcomes of analysis of those documents as so far yielded the following critical understandings of late 19th and early 20th century sheep farming and landscape use at Skútustaðir and surrounding farms: outfield hay sources are the major factors in making two farms, Graenavatn and Skútustaðir, the richest in hay in the district in the late 19th c. The ratio of sheep to cows approached 75:1 on the Southern Mývatn Districts in the late 19th c. There was in increase in the opportunity for farmers to export sheep and sheep products thanks to the Husavik Trade Association after 1882, but earlier, similar forms of trade seem to persist just before.

Skútustaðir's zooarchaeological record is clearly impacted by large scale economic interaction, like export markets, over the long term while other sets of evidence highlight localized practices.

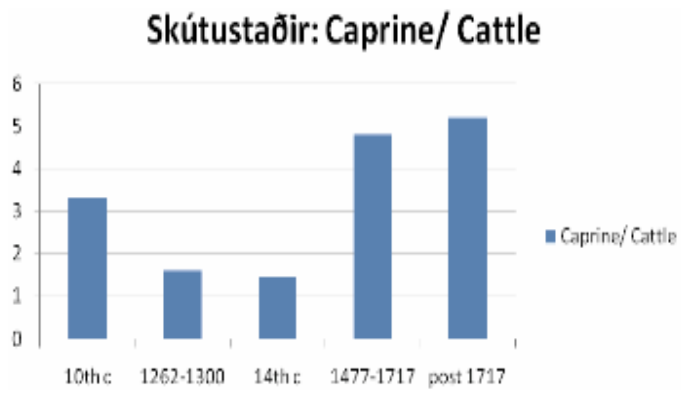


Figure 15 The caprine to cattle ratio appears to rise in the later, postmedieval phases.

Currently underway is a project focusing uniquely on the apparently long term and sustainable legacy of wild bird egg collection from Lake Mývatn. Generously funded by the NSF Office of Polar Programs (Centennial Scale Human Ecodynamics in Skútustaðir N. Iceland Awarded 2012 PIs McGovern and Hicks). Skútustaðir's archaeofaunal collection uniquely provides this long term archaeological record for this work. Beyond terrestrial farming and regular fishing, modern residents of Mývatnssveit annually collect 10,000 or more eggs from nests of a wide range of waterfowl migrating from both Europe and North America to breed and nest in what is now a UNESCO recognized world natural heritage area. Adult birds are not hunted, and a specific number of eggs are left in each nest to ensure successful reproduction and a sustainable harvest. Records extending back to the mid-19th century document a remarkable local level management strategy that continues to the present. Extensive layers of archaeological eggshell has been found in most Mývatn area excavations, dating from first settlement in the late 9th c. through the 20th century. A pilot study is now underway to identify this eggshell following the methods laid out by Jane Sidell (British Museum of Natural History). Using SEM technology McGovern *et al* previously demonstrated that most of the eggs recovered archaeologically were from waterfowl, but others were from the resident ptarmigan (grouse) and a few derived from sea birds (2006). Skútustaðir's temporally extensive archaeological record makes possible the study of this practice from the settlement age through to the present. This millennium-long sustainable use of this

fragile natural resource is now subject of a documentary film and will be subject to coordinated ethnographic, historical, and biological investigation with the active cooperation of local residents during the next few years (see Edwald 2012).

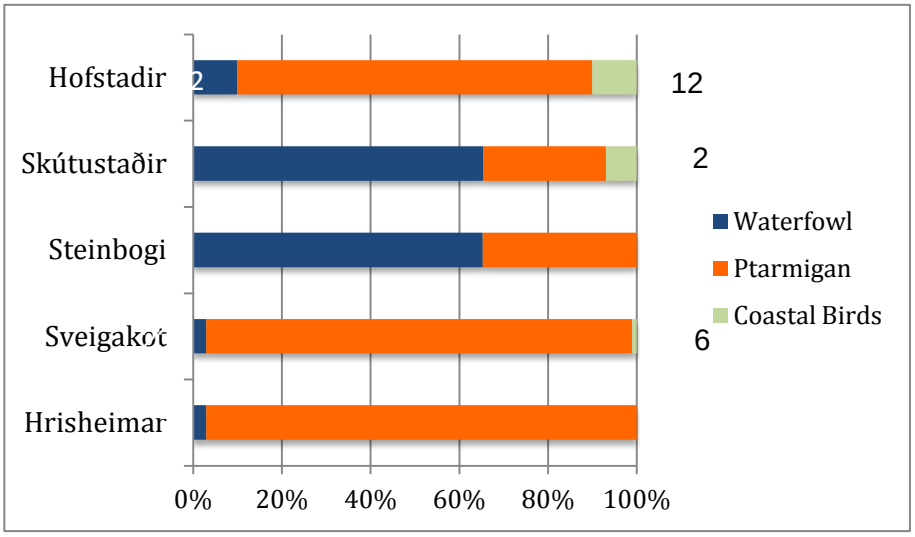


Figure 16 Bird bones at Mývatn Archaeological Sites (McGovern *et al* 2006 and Hicks 2010)

It is clear that Skutustaðir´s rich and long term archaeological record can help us reveal significant economic shifts and important local practices. It is key to continue midden excavations there for at least one more year to ensure large sample sizes from each temporal phase. Excavation in subsequent years should focus on rounding out the sample of bones from all phases. While the current Skútustaðir archaeofauna does contain well-dated material from the medieval period (48 bags), the period, which we may delineate by tephras from ca. 1150-1410 represents the smallest portion of the current collection (many contexts did not *fill* one sample bag to capacity). Apparently patterns of deposition on the farm midden shifted from Viking age to medieval periods, with very little medieval material ending up in the large area H unit compared to the rich Viking and early modern deposits. There is excellently preserved medieval material in the area E excavation unit, with sheet midden extant between the 1262-1300 and 1410-1477 tephras providing particularly good finds of bone and artifacts, but these layers are thinner than the deep deposits in the H unit. This medieval material from unit E is very useful, but given the importance of the period for our knowledge of settlement pattern

and ecodynamics there is an urgent need to expand the excavation of these sheet middens to recover sample sizes more directly comparable to the Viking age and early modern collections.

Progress made in the 2011 excavation season will expand our knowledge, and the size of our data sets for the early medieval period in the Mývatn region. By far the most bone was recovered from the settlement age/medieval context [317]. This information is extremely valuable as it will provide excellent comparative material for other early farm settlements in the Mývatn area including Hrísheimar, Sveigakót, and Hofstaðir. As described in the previous excavation narrative contexts [315] and [317] in filled the uneven lava surface which was the ground surface exposed in the Viking age through medieval period of settlement. This distinct surface is noteworthy because it so contrasts the modern surface and function which is a rich hay infield. Not only bone was recovered from these rich contexts but charcoal and eggshell samples were taken for further specialist study at CUNY, in collaboration with Háskoli Íslands and at Durham University. Finally the archaeofaunal data and analysis will be continued as the Ph.D. thesis work of CUNY archaeology graduate, Megan T. Hicks.

Bone Sample Bag Register: Skútustaðir 2011

Context	Number of Sample Bags of Bone	Date Registered
300	2	7/17/11
301	1	7/17/11
302	1	7/17/11
303	1	7/17/11
304	1	7/17/11
305	1	7/17/11
306	1	7/17/11
307	6	7/17/11
308	1	7/17/11
309	1	7/17/11
310	1	7/17/11
311	1	7/17/11
312	1	7/17/11
313	5	7/17/11
314	1	7/17/11
315	19	7/17/11
316	1	7/17/11
317	49	7/17/11
318	1	7/17/11
319	1	7/17/11

A Preliminary Summary of Artifacts

With tephrochronology evidence, the contexts excavated in 2011, in Are a H can be placed into the following phases:

- Late Middle Ages 1410 - 1477 - CE
- High to Late Middle Ages 12th c. - 1410CE
- Settlement- Commonwealth 940 -12thC CE

Very few pottery fragments were present, though, iron, cupreous (Cu) alloys, bone and stone objects were common. Iron objects included nails, roves and unidentifiable fragments. Cu alloy objects recovered included a wire, fragments in sheet form as well as a particularly well crafted, small buckle. Bone/antler objects were combs, pins and fragments of unknown objects

Many stone artifacts were recovered including non-native schist whetstones, whetstone fragments, a spindle whorl likely carved from a local tuff (Beck pers. comm.), struck stone flakes (of indeterminate origin), and colorful, naturally polished non- local pebble manuports that may have been used in any manner. These manuports were kept as

they may be identified to an origin outside of Iceland or may provide some information on Icelandic interregional exchange geography.

One bead was found and the material may be of a greenish stone or glass, its identification is pending further analysis.

Several bone artifacts were recovered including bone pins and combs that could be bone, antler and or mixed material. A number of comb fragments still had copper or iron rivets present and one was ornately decorated with unusual inset copper "windows" as well as carved designs.

The objects and materials found don't contrast tephra identifications. However it is hoped that careful analysis of the artifacts in [315] and [317] by Guðrun Alda Gíslasdottir will help refine the latest dates of those contexts.

No industrial white wares, pipe stems, or machine-made nails were found in 2011 which might indicate post-depositional disturbance, severe contamination or vastly misinterpreted chronologies.

Four small contexts close to the bedrock, were not able to be particularly well phased- they were found below the V1477 tephra and above bedrock- lacking earlier tephras. However, these contained no artifacts and very little bone. Those contexts [312], [316] [318], [319], will not be included in the below phased tallies discussion of artifacts by material.

In all of the excavation areas in Skútustaðir, there has generally been a scarcity of bones and finds in the soil deposits approximately around the V1477 tephra. These include those below the 16th c tephra (where present such as in area H) and above the V1410 tephra. Where there have clearly been ample bones and finds in other phases pertaining to the early modern period, the early Middle Ages and the Viking Age.

This overall pattern can be seen in the record of artifact abundance in the abovementioned phases. The contexts [300], [301], [302], [303], [304] and [305] contained little bone or artifacts. Following the general pattern, the V1477-1410 phase, a general lack of archaeological finds there including both artifacts and ecofacts.

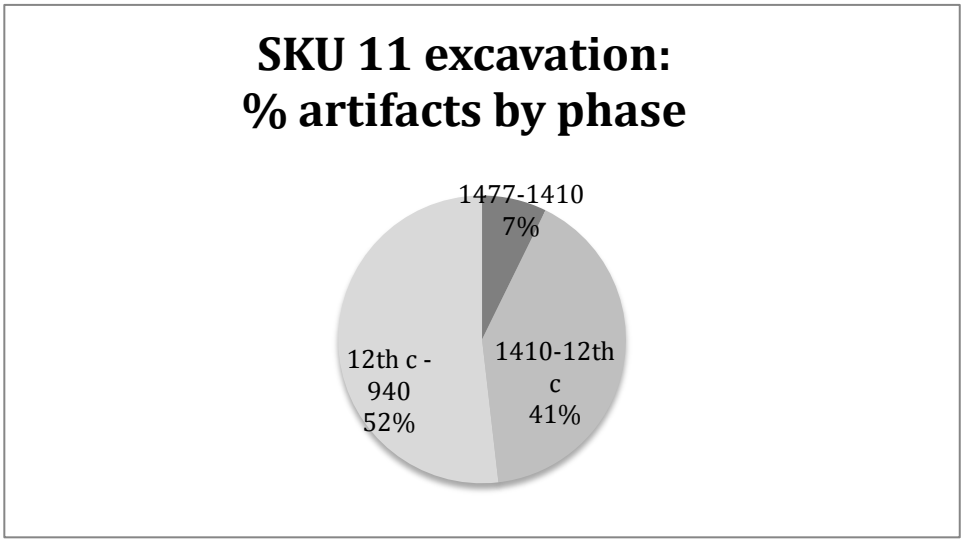
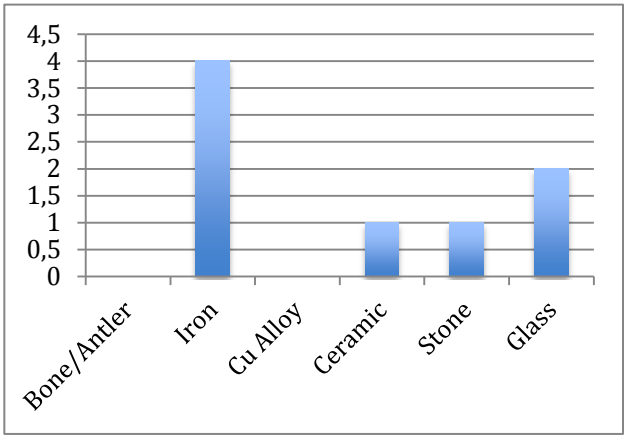
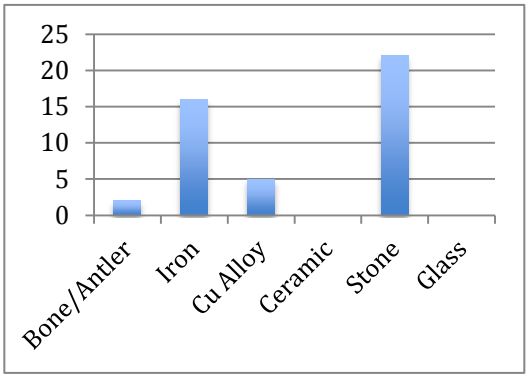


Figure 17 Percent of total artifact counts by phase.

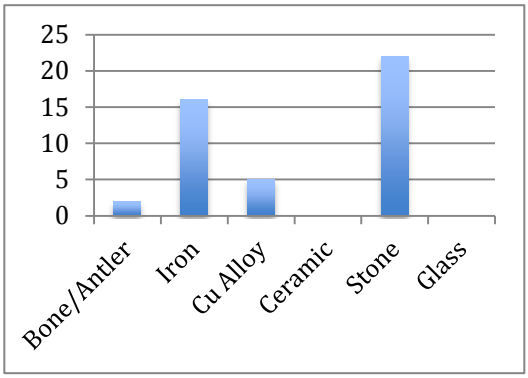
Artifacts found between V1477 and V1410 Tephra



Artifacts found between the V1410 and H 12th century Tephra



Artifacts found between the H 12th c. and V940 tephra



Artifacts are conserved and currently stored at FSI pending analysis under the supervision of Guðrun Alda Gisladottir and with the support of the Comparative Island Ecodynamics project lead by Thomas H. McGovern (National Science Foundation Office of Polar Programs Grant 1202692). As analysis is underway, further details will be published in future reports. Excavation conservation was undertaken to ensure their proper curation throughout the process. Their initial conservation undertaken by Janie Amsgaard Ebsen at FSI includes the following care (undertaken in October, 2011) and remarks gratefully republished below.

Bone Several bone objects were packed and of very special interest are the fragments of bone comb SKÚ11-1034 with small cut out “windows”. In the “windows” small thin decorative copper alloy plates have originally been placed. The comb can be glued together in the future if wanted.

Iron The iron objects are in a relative good state of preservation and show no signs of active deteriorating corrosion. All iron objects are put in an airtight box with desicating Rubin Silica gel to prevent future corrosion. The relative humidity in the drying box should be 15 % RH or lower. The relative humidity in the box should be checked regularly at the enclosed humidity indicator stick and additionally by the change in color of the silica gel from dark Rubin red e.g. dry state to lighter red or orange. And the silica gel changed if necessary. Remains of wood are present on some of the iron objects.

Conservation notes courtesy of Jannie Amsgaard Ebsen, Reykjavík, 4th of October 2011.

Figure 18 KAPI participants and Sif Jóhannesdottir 2011

Kid's Archaeology Project and Outreach – Continued Programming in 2011

The Kid's Archaeology Program Iceland was initiated in 2007 to connect international, interdisciplinary archaeological and paleoecological projects with education and community on a local level. The program has run alongside the excavations at Skútustaðir since 2008. The objectives of this program are to bridge generations with environmental history education, and to link Icelandic youth with the international research community. These and other goals are laid out in a full report of activities in 2009 led by Educator Sif Jóhannesdóttir, and developed by CUNY Professor Sophia Perdikaris (Jóhannesdóttir 2010).

Figure 19 The Kids Archaeology Program is based in Thingeyarsýsla county highlighted here but is widening its reach every year. Source: Wikipedia Commons.

In 2011, the Skútustaðir excavation joined up with KAPI for another successful season of collaboration. On Wednesday July 13th, 2011 local Thingeyjarsysla educators Sif Jóhanesdottir and Pétur Ingolfsson brought middle school students and high school students to participate in activities alongside the excavation process. Most students were from Thingeyjarsveit, the county extending north from Mývatn, shown in the above figure highlighted in red, and many were repeat participants in programming from years 2008 through 2009. Students aided archaeologists (Francis Feeley, Megan Hicks, from CUNY, Adolf Friðriksson, FSI) at the sieve, learning how to spot artifacts such as iron objects and ceramics and ecofacts such as bone and charcoal. While working with archaeologists at the sieve the group discussed how such objects come in to use for archaeological study of past activity and environments. Also part of the programming was a site tour discussing previous years' work on the long term midden remains. The students were instructed in the uses of tephrochronology, using the visible standing section in area H to show the visible layers of volcanic ash used to date the midden remains.

Figure 20 KAPI participants 2011

An afternoon program on July 13th, for elementary school- aged students introduced them to archaeology and excavation through a PowerPoint lecture by Sif Johannesdottir at Litlulaugarskóli (The elementary school serving Thingeyarsveit in the nearby town of Laugar). Behind the school, a mock excavation trench had been previously prepared by Sif Johannesdóttir, Pétur Ingolfsson and Unnstein Ingasson; it was first emptied of soil, then re-filed using layered, distinct soils as well as sand, meant to resemble tephras. Realistic artifacts such as modern beads, and realistic, plastic bone were placed in the unit. The elementary school-aged participants took turns excavating following the guidelines of the FSI excavation manual including, context identification, description, sieving, registering artifacts, and further record keeping through writing and photography. Through emphasizing recording, this activity was aimed at presenting archaeology as an ecological and social science, with documentation and description as an important aspect of field excavation. The results of the field work, such as photographs and written records are then ideally displayed in the school and re-cast in lessons throughout the year.

Throughout the field day we were accompanied by an Icelandic News program RÚV and reporter Snæfriður Ingadóttir for a national news story about KAPI´s programming and collaborative efforts, helping us present the collaboration to a national audience. The piece was shown on Sjónvarpið sunnadaga on August 7th, 2011, and archived at the link below.

http://dagskra.ruv.is/sjonvarpid/4579866/2011/08/07/1/

The KAPI program has integrated multiple levels of scholarship and learning with students and educators across generations, nations and disciplines and continues to bring us closer each year. It also sees archaeology as an ideal discipline for enhancing hands on environmental education as well as helping international archaeologists and students connect with place-based knowledge in Iceland and other places of study in NABO networks. For a detailed report on past work, participants and accomplishments , see reports on the NABO website nabohome.org. and report at: http://nabohome.org/projects/kap/fornleifaskolibarnanna1.pdf

Future Directions

Skútustaðir´s unique, well preserved and well stratified long-term record is providing excellent comparative material for Mývatn area studies of the Viking age and medieval period. It is also providing new information on the less understood early modern period. For this reason it will be essential to round out the medieval period assemblage by continuing midden excavations. To accomplish this, at least one more midden excavation season is proposed, focusing on Area E, near the modern house -an area where much medieval midden was uncovered in 2010.

Of further interest for future excavation years are Skútustaðir´s known intact structural remains, between the V1477 and V1717 tephras in Area F and the medieval phase churchyard. Future excavation of these features may improve our knowledge of landscape organization and settlement organization in the high medieval and late medieval periods. Ongoing, intensively collaborative projects in archaeology, ethnography and paleoecology, centered around excavations at Skútustaðir, are continually producing reports and publications available on nabohome.org. These as well as data are publicly curated in collaboration with TDAR (the Digital Archaeological Record) www.tdar.org.

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Appendices

Sample Register

FSI SAMPLE REGISTER					Wt	SITE CODE	SKU 11	sample count	
	Area	Context	Grid	Vol.	.	Quantity	Description	Date	ID
						Bag/ Buckets		Date	initial
1	H	307		40 L		2	For floatation		mth
2	H	309		20L		1	For floatation		mth
3	H	313		40 L		2	For floatation		mth
4	H	317		40 L		2	For floatation		mth
5	H	315		1 small bag		1	egg shell		mth
6	H	307		1 small bag		1	egg shell		mth
7	H	317		1 small bag		1	egg shell		mth
8	H	303		1 small bag		1	charcoal		mth
9	H	317		1 small bag		1	egg shell		mth
10	H	311		1 small bag		1	egg shell		mth
11	H	307		1 small bag		1	egg shell		mth
12	H	317		2 small bag			egg shell		mth

2011 Finds Register

Register no.	Context	Trench			Material	Object	Qty		Date registered	ID
940	307	H			stone	worked?	1		17 7 2011	mth
941	307	H			fe	obj	1		17 7 2011	mth
942	303	H			cu alloy	obj	1		17 7 2011	mth
943	307	H			fe	obj	1		17 7 2011	mth
944	307	H			fe	obj	1		17 7 2011	mth
945	307	H			fe	nail	1		17 7 2011	mth
946	307	H			fe	obj	1		17 7 2011	mth
947	305	H			stone	manuport	1		17 7 2011	mth
948	307	H			fe	obj	1		17 7 2011	mth
949	301	H			glass?	frag	1		17 7 2011	mth
950	306	H			ceramic	fragment	1		17 7 2011	mth
951	303	H			fe	rivet	1		17 7 2011	mth
952	300	H			glass	fragment	1		17 7 2011	mth
953	307	H			fe	fragment	1		17 7 2011	mth
954	307	H			fe	fragment	1		17 7 2011	mth
955	307	H			fe	rove	1		17 7 2011	mth
956	307	H			stone	manuport	11		17 7 2011	mth
957	300	H			fe	object	1		17 7 2011	mth
958	300 (cleaning)	H			ceramic	frag	1		17 7 2011	mth
959	300	H			fe	nail	1		17 7 2011	mth
960	300	H			fe	object	1		17 7 2011	mth
961	cleaning 1477 tephra	H			fe	object	1		17 7 2011	mth
962	306	H			stone	manuport	1		17 7 2011	mth
963	302	H			stone	manuport	1		17 7 2011	mth
964	306	H			stone	manuport	1		17 7 2011	mth
965	306	H			cu alloy	object	1		17 7 2011	mth
966	307	H			cu alloy	object	1		17 7 2011	mth
967	307	H			cu alloy	object	1		17 7 2011	mth
968	305	H			fe	nail	1		17 7 2011	mth
969	306	H			fe	object	1		17 7 2011	mth
970	306	H			bone	worked ?	1		17 7 2011	mth
971	topsoil deturf	H			cu alloy	lamp fragment	1		17 7 2011	mth
972	306	H			iron	object	1		17 7 2011	mth
973	307	H			cu alloy	object	1		17 7 2011	mth
974	306	H			fe	object	1		17 7 2011	mth

975	306	H			fe	object	1		17 7 2011	mth
976	306	H			fe	object	1		17 7 2011	mth
977	313	H			stone	flint	1		17 7 2011	mth
978	311	H			fe	object	1		17 7 2011	mth
979	313	H			stone	manuport	1		17 7 2011	mth
980	313	H			cu alloy	fragment	1		17 7 2011	mth
981	313	H			fe	object	1		17 7 2011	mth
982	313	H			fe	object	1		17 7 2011	mth
983	313	H			fe	object	1		17 7 2011	mth
984	313	H			stone	whetstone	1		17 7 2011	mth
985	313	H			fe	object	1		17 7 2011	mth
986	313	H			stone	worked?	1		17 7 2011	mth
987	313	H			stone	flint	1		17 7 2011	mth
988	313	H			fe	object	1		17 7 2011	mth
989	313	H			stone	whetstone	1		17 7 2011	mth
990	313	H			fe and cu	object	1		17 7 2011	mth
991	313	H			antler	comb fragments	2		17 7 2011	mth
992	313	H			fe	object	1		17 7 2011	mth
993	313	H			fe	object	1		17 7 2011	mth
994	311	H			stone	manuport	5		17 7 2011	mth
995	313	H			stone	pumice?	1		17 7 2011	mth
996	315	H			fe	object	1		17 7 2011	mth
997	315	H			flint	object	1		17 7 2011	mth
998	315	H			stone	object	1		17 7 2011	mth
999	315	H			flint	object	1		17 7 2011	mth
1000	315	H			unknown	bead	1		17 7 2011	mth
1001	315	H			fe	object	1		17 7 2011	mth
1002	315	H			stone	manuport	7		17 7 2011	mth
1003	315	H			cu alloy	wire	1		17 7 2011	mth
1004	315	H			fe	object	1		17 7 2011	mth
1005	315	H			schist	whetstone	1		17 7 2011	mth
1006	315	H			schist	whetstone	1		17 7 2011	mth
1007	315	H			bone	pin	1		17 7 2011	mth
1008	315	H			schist	whetstone	1		17 7 2011	mth
1009	315	H			Sandstone?	Spindle whorl	1		17 7 2011	mth
1010	315	H			bone/antler /iron	comb	1	y	17 7 2011	mth
1011	307	H			schist	whetstone	1		17 7 2011	mth
1012	307	H			stone	manuport	1		17 7 2011	mth

1013	307	H			bone	comb?	1	y	17 7 2011	mth
1014	317	H			bone	pin	1		17 7 2011	mth
1015	317	H			bone	pin	1		17 7 2011	mth
1016	317	H			stone	object	1		17 7 2011	mth
1017	317	H			fe	object	1		17 7 2011	mth
1018	317	H			bone/antler	comb frags	2	y	17 7 2011	mth
1019	317	H			bone/antler	comb frags	2	y	17 7 2011	mth
1020	317	H			iron/bone/antler	comb	1	y	17 7 2011	mth
1021	317	H			bone	comb	1	y	17 7 2011	mth
1022	317	H			bone	comb	1	y	17 7 2011	mth
1023	317	H			fe	buckle	1		17 7 2011	mth
1024	317	H			stone	manuport	2		17 7 2011	mth
1025	317	H			stone	manuport	1		17 7 2011	mth
1026	317	H			cu alloy	obj	1		17 7 2011	mth
1027	315	H			fe	obj	1		17 7 2011	mth
1028	317	H			stone	whetstone frag?	1		17 7 2011	mth
1029	317	H			cu alloy	buckle	1	y	17 7 2011	mth
1030	317	H			stone	manuport	2		17 7 2011	mth
1031	315	H			stone	manuport	4		17 7 2011	mth
1032	317	H			bone/antler	comb	1	y	17 7 2011	mth
1033	317	H			bone/antler	comb	1	y	17 7 2011	mth
1034	317	H			bone and antler comb		1	y	18 9 2011	mth

Selected Finds Photographs *Numbers in photograph correspond to finds register. For photographs or information on all finds. Please contact Guðrun Alda Gíslasdottir guðrun@instarch.is or Megan Hicks mhicks@hunter.cuny.edu.*

Selected Artifact Photographs

SKÚTUSTAÐIR 2011
977
CM

SKÚTUSTAÐIR 2011
984
CM

SKÚTUSTAÐIR 2011
1011
CM

SKÚTUSTAÐIR 2011
1018
CM

SKÚTUSTAÐIR 2011
1029
CM

SKÚTUSTAÐIR 2011
1021
CM

SKÚTUSTAÐIR 2011
1026
CM

SKÚTUSTAÐIR 2011
1002
CM

SKÚTUSTAÐIR 2011
1034
CM