VATNSFJÖRÐUR 2010

FRAMVINDUSKÝRSLUR / INTERIM REPORTS

Ritstjóri / edited by: Karen Milek

Höfundar efnis / with contributions by:
Ásta Hermannsdóttir, Céline Dupont-Hébert, Dawn Elise Mooney, Eileen Tisdall, Ian Simpson, Jamie Anderson, Garðar Guðmundsson, Guðrún Alda Gísladóttir, Karen Milek, Kyle Munro, Oddgeir Isaksen, Rebecca Barclay, Robert McCulloch, Thomas Birch, and Véronique Forbes

FS461-030910
Reykjavík 2011

FORNLEIFASTOFNUN ÍSLANDS

Bárugötu 3
101 Reykjavík

Sími / tel: 551 1033
Fax: 551 1047
Netfang / email: fsi@instarch.is
Heimasíða / website: www.instarch.is

EFNI / CONTENTS

Appendices

SAMANTEKT

Garðar Guðmundsson
Fornleifastofnun Íslands

Árið 2010 vas áttunda ár rannsókna í Vatnsfirði við Ísafjarðardjúp (mynd 1). Þær eru liður í samstarfi nokkurra aðila sem standa að félaginu Vestfirðir á miðöldum. Markmið félagsins er að stuðla að nýjum rannsóknum á sögu og menningu Vestfjarða á miðöldum. Félagið stendur m.a. fyrir ráðstefnuhaldi, útgáfu á fræðiritum og fræðsluefni og umfangsmiklum fornleifarannsóknum.

Að rannsóknunum í Vatnsfirði sem hófust árið 2003, standa Fornleifastofnun Íslands ses, Vestfirðir á miðöldum, Háskólasetur Vestfjarða á Ísafirði, Háskóli Íslands, Atvinnuþróunarfélag Vestfirðinga, Byggðasafn Vestfjarða, Súðavíkurhreppur, Oslóarháskóli, North Atlantic Biocultural Organization (NABO), International Polar Year Program (IPY), Northern Science and Education Centre, City University of New York (CUNY), Laval háskóli í Quebeck í Kanada og Háskólinn í Aberdeen. Að rannsóknum hafa líka komið vísindamenn frá Háskólunum í Durham, Stirling, Southampton og Exeter, á Bretlandi auk UCLA, Kaliforníu, USA.

Sumarið 2005 barst verkefninu góður liðsauki því Fornleifaskólinn, sem Fornleifastofnun og NABO höfðu starfrækt í Mývatnssveit frá 1997–2004 flutti sig um set, kom sér upp bækistöð í Reykjanesi og varð þátttakandi í rannsóknunum við Ísafjarðardjúp. Verkefnið hefur hlotið styrki m.a. frá Alþingi, Fornleifasjóði og Carnegie Trust, Skotlandi (Carnigie Trust for the Universities of Scotland).

Presthjónin í Vatnsfirði, séra Baldur Vilhelmsson og Ólafía Salvarsdóttir, hafa sýnt aðstandendum verkefnisins ómetanlegan velvilja og aðstoð. Kann Fornleifastofnun þeim bestu þakkir fyrir. Ennfremur er Guðbrandi Baldurssyni í Vatnsfirði, starfsmönnum Náttúrustofu Vestfjarða í Bolungarvík, Byggðasafni Vestfjarða á Ísafirði, Biskupsstofu, Súðavíkurhreppi, Háskólsetri Vestfjarða og eigendum og starfsmönnum Hótels Reykjaness þakkað gott samstarf.

Yfirlit og saga rannsókna í Vatnsfirði

Fyrsti áfangi fornleifarannsókna fólst í því að taka saman yfirlit yfir fornleifar á Vestfjörðum og stöðu rannsókna í þeim tilgangi að meta hvaða minjaflokka og staði væri heppilegast að hefja rannsóknir á. Hefur samantektin verið birt í Ársriti Sögufélags Ísfirðinga[1], en meðal markverðustu minjastaða er Vatnsfjörður við Ísafjarðardjúp, enda er hann með helstu sögustöðum héraðsins. Var því ákveðið að leggja sérstaka áherslu á athuganir þar. Andrea S. Harðardóttir sagnfræðingur hefur tekið saman sögulegt yfirlit og safnað helstu heimildum um Vatnsfjörð og búsetu þar.[2] Ragnar Edvardsson fornleifafræðingur gerði sérstaka fornleifaskrá yfir Vatnsfjörð og fann 52 fornleifar á jörðinni. Fékkst þar ágæt samantekt um minjar í Vatnsfirði.[3] Ragnar stjórnaði jafnframt

[1] Adolf Friðriksson (2003). „Fornleifar á Vestfjörðum." *Ársrit Sögufélags Ísfirðinga* 43: 43-51.
[2] Andrea S. Harðardóttir (2003). „Vatnsfjörður við Djúp." *Vatnsfjörður við Ísafjarðardjúp. Rannsóknir sumarið 2003*. Adolf Friðriksson and Torfi H. Tulinius. Reykjavík, Fornleifastofnun Íslands. FS213-03092: 10-14.
[3] Ragnar Edvardsson (2003). „Fornleifaskráning í Vatnsfirði við Ísafjarðardjúp sumarið 2003." *Vatnsfjörður við Ísafjarðardjúp. Rannsóknir sumarið 2003*….s. 15-29.

forkönnun á bæjarstæði Vatnsfjarðar **sumarið 2003**. Grafnir voru nokkrir könnunarskurðir, sem m.a. leiddu í ljós að fornleifar í bæjarhól og túni eru vel varðveittar og ákjósanlegt rannsóknarefni. Í túninu fundust leifar skála með langeld í miðju.[4]

Árið 2004 var rannsókn haldið áfram á skálaleifum, en þær eru um 100 m norðan við gamla bæjarhólinn[5]. Uppgraftarsvæðið var 70 fermetrar að stærð, en hvergi dýpra en 20 sentimetrar. Minjarnar voru aðeins nokkra sentimetra undir yfirborði. Skálinn er um 16 m langur og 6 m breiður að innanmáli og sneri norður og suður. Skilyrði til varðveislu voru þokkaleg nema fyrir bein, enda jarðvegur súr.

Árið 2005 var uppgraftarsvæðið stækkað verulega til austurs, eða um 310 fermetra. Suðaustast á svæðinu fundust leifar lítillar byggingar sem voru rannsakaðar að hluta undir stjórn Karen Milek. Í ljós kom að húsið hefur líklega verið smiðja sem gæti hafa orðið eldi að bráð. Rannsóknir á fornum bæjum á Íslandi hafa takmarkast við húsin sjálf. Hér var ráðist í þá nýjung að grafa fram og rannsaka opin svæði utan húsa. Að þessu sinni var svæðið milli skála og smiðju opnað og til norðurs á móts við norðurgafl skála. Þar komu fram áberandi, tröðkuð mannvistarlög, svo sem vænta mátti, en athyglisvert var að sjá að þar leyndust einnig soðhola og tvö lítil eldstæði. Líklega hefur eldamennska verið stunduð utandyra og má vera að þessi niðurstaða kalli á frekari athuganir á athöfnum fólks utandyra að fornu en hingað til hefur verið gert. Þetta ár – 2005 - varð verkefnið viðameira. Fornleifaskólinn var fluttur frá Mývatni til Vatnsfjarðar og 11 nemendur víða að úr heiminum stunduðu nám í uppgraftartækni undir leiðsögn kennara. Þá bættist við nýr rannsóknarþáttur þar sem lögð er áhersla á að kanna staðhætti í því augnmiði að varpa ljósi á uppruna og þróun byggðar í Vatnsfirði. Landslagsathuganir eru nýleg en ört vaxandi grein innan fornleifafræði en þar eru minjar og landslag skoðað í nýju ljósi og staðfræðilegu samhengi. Einnig var byrjað á verkefni sem lýtur að því að rannsaka frjósemi jarðvegs og hvernig honum er viðhaldið með áburði. Vonir standa til að með slíkum rannsóknum verði hægt meta grasnytjar og hagvöxt jarðarinnar og hve stóran þátt jarðnytjar túnsins áttu í vexti og framgangi búsins.

Árið 2006 var opnað enn stærra svæði við skálann og þrjár nýjar byggingar fundust – allar frá víkingaöld. Þá hófust einnig rannsóknir á bæjarhól Vatnsfjarðar en þangað er talið að bærinn hafi verið fluttur í öndverðu og verið fram á 20. Öld (mynd 2). Þar fundust vel varðveittar leifar seinasta torfbæjar Vatnsfjarðar. Auk þess voru grafnir könnunarskurðir til að kanna dýpt og umfang bæjarhólsins í því augnmiði að afmarka og staðsetja rannsóknarsvæði framtíðarinnar. Fornleifaskólinn var starfræktur áfram og 17 nemendur og 2 sjálfboðaliðar frá ýmsum löndum sóttu hann: Noregi, Danmörku, Englandi, Skotlandi, Írlandi, Frakklandi, Bandaríkjunum, Kanada, Ástralíu og Nýja-Sjálandi.

Sumarið 2007 kom enn ein rúst í ljós á víkingaaldarsvæðinu og var hafinn uppgröftur á henni auk þess sem klárað var að grafa fram minjar sem fundust sumarið á undan. Á bæjarhólnum var opnað um rúmlega 400 fm2 svæði og austari hluti yngsta torfbæjarins í Vatnsfirði afhjúpaður. Sá bær fór í gegnum umtalsverðar breytingar frá því hann var byggður 1884 og þar til hann lauk hlutverki sínu í gerbreyttri mynd á 6. áratug síðustu aldar, þá sem skemma og smiðja. Einnig voru gerðar viðnámsmælingar á hólnum í tilraun til að kanna eðli, þykkt og umfang mannvistarlaganna. Landslagsrannsóknir héldu áfram, gengið var um Vatnfjarðardal og minjar skráðar, en einnig var landslagið skoðað af sjó, siglingaleiðir farnar og mið skoðuð. Þá voru aðstæður til þess að gera rannsóknir á sjávarstöðubreytingum kannaðar, einnig tekin sýni úr seti í vötnum til að kanna jarðvegsþykknun, gjóskulögog vísbendingar um gróðurfar og loftlagsbreytingar.

---

[4] Ragnar Edvardsson (2003). „Fornleifarannsókn í Vatnsfirði 2003.“ *Vatnsfjörður við Ísafjarðardjúp. Rannsóknir sumarið 2003*. …s. 30-47.

[5] Sbr. Ragnar Edvardsson (2004). *Fornleifarannsókn í Vatnsfirði við Ísafjarðardjúp* 2004. Reykjavik: Fornleifastofnun Íslands.

Sem fyrr voru nemendur víða að, 15 talsins auk 4 sjálfboðaliða sem eru meistara- og doktorsnemar og unnu jafnframt að sínum rannsóknum.

Sumarið 2008. Grafið var í Vatnsfirði í 4 vikur, frá 7. júlí til 1. ágúst. Rannsóknirnar hófust viku fyrr eða 28. júní en þá voru snið í niðurgröfnum lækjarfarvegi vestantil í bæjarhólnum könnuð af prófessor Ian A. Simpson jarðvegsfræðingi við Stirling háskóla í Skotlandi og nemendum hans. Tekin voru sýni úr mismunandi mannvistarlögum til að fá hugmynd um eldsneytisnotkun í gegnum aldirnar. Einnig voru tekin sýni til aldursgreingar og sýna þau að elstu minjar í bæjarhólnum eru frá því í kringum 1000 (sjá skýrslu Simon Parkin, Stuart Morison og Ian A. Simpson). Sem fyrr stýrði Garðar Guðmundsson fornleifafræðingur verkefninu en fornleifafræðingarnir Guðrún Alda Gísladóttir og Uggi Ævarsson stjórnuðu uppgreftinum og unnu úrvinnslu auk Asridar Daxböck. Auk þess unnu á bæjarhólnum meistaranemi í fornvistfræði, Véronique Forbes frá Háskólanum í Laval, Quebeck. Hún sá um að taka skordýrasýni og vinna úr þeim (sjá skýrslu) og Gunnhildur Garðarsdóttir sem vann sitt 3 sumar sem grafari. Markmiðið var að afhjúpa síðasta torfhúsið á bæjarhólnum og hefja rannsókn á því og hafa þau markmið náð fram að ganga. Hús þetta (kallað mannvirki 7500) var byggt árið 1884 en rifið að stórum hluta 1907 þegar timburhús með niðurgröfnum kjallara var byggt suðvestan þess. Leifar þessa húss frá 1907 má núna sjá í suðvesturhorni uppgraftarsvæðisins. Ljóst er eftir sumarið 2008 að mannvirki 7500 var margoft breytt á sinni stuttu ævi. Þegar 1907 húsið var byggt var hið eldra rifið að stórum hluta, sennilega til að nýta grjót og viði úr því. Eftir stóð aðeins austasta húsið og það áfram notað fram á miðja 20. öld sem smiðja og geymsla. Margir gripir hafa komið upp frá því rannsóknirnar hófust, nálægt 5000 í allt. Gripirnir, dýrabein (matarleifar), jurta – skordýraleifar mun einnig segja sína sögu og saman mun rannsókn sérfræðinga á þessum minjaflokkum gefa okkur mynd af lífshlaupi og háttum manna í Vatnsfirði og endurspegla líf á reisilegum bæ á Vestfjörðum í lok 19. aldar og í byrjun þeirrar 20. Sumarið 2009 er áætlað að mannvirki 7500 verða kannað áfram og markmiðið er að reyna að ljúka þeirri rannsókn og komast niður á eldri minjar. Fyrsti hluti fornleifauppgraftarins á bæjarhólnum yrði þá langt kominn í lok uppgraftartímabilsins 2009.

Norður í túninu, um 100 metra frá uppgreftinum á bæjarhólnum, fara fram rannsóknir á fyrstu búsetu í Vatnsfirði, minjum frá 10. öld. Á víkingaaldarsvæðinu stjórnar Karem Milek uppgreftri auk þess að vera skólastjóri Fornleifaskólans sem nú var starfræktur 4ja árið í röð í Vatnsfirði. Með Karen unnu fornleifafræðingarnir Astrid Daxböck, sem einnig bar hitann og þungann af innslætti gagna frá Vatnsfirði, og Ramona Harrison, sem einnig sá um dýrabeinin á vettvangi og að kenna þau fræði í Fornleifaskólanum. Svæðið var stækkað umtalsvert og nú var áherslan lögð á ´útisvæði´, svæðið austan við aðal rústasvæðið. Í ljós komu vísbendingar um mikil umsvif m.a. tvær djúpar og umfangsmiklar eldaholur fullar af eldasteinum og kolum. Einnig kom í ljós ræfill af byggingu austast á svæðinu og þar í hruni perla frá Víkingaöld. Auk þess voru grafnir tveir könnunarskurðir í vænlegar þústir norðan skálans og í þeim fundust mannvistarleifar sem rannsakaðar munu verða á sumri komanda. Rannsóknir á Víkingaaldarsvæðinu í Vatnsfjarðar komast langt í sumar og mun verða lagst í úrvinnslu þeirra þátta á vetri komanda.

Sem fyrr fóru fram landsháttarannsóknir í Vatnsfirði, af sjó og landi og skráning á fornleifum í Vatnsfjarðardal og nágrenni.

Sumarið 2009. Gríðarmikill árangur varð á báðum uppgraftarsvæðum í Vatnsfirði. *Víkingaaldarsvæði:* Nú sér fyrir endann á rannsóknum á víkingaaldarsvæði, aðeins á eftir að klára eitt hús og kanna tvö svæði. Stefnt er að því að ljúka uppgreftri þar í sumar og hefja úrvinnslu af krafti, sem mun enda með heildarútgáfu ár rannsóknarniðurstöðum svæðisins ásamt landslags- og umhverfisrannsóknum (mynd 3). *Bæjarhóll:* Það markmið að kanna og grafa yngsta torfbæinn í Vatnsfirði náðist að mestu (mynd 4). Ljóst er að sá bær fór í gegnum miklar breytingar á síðasta skeiði sínu. Rannsóknin hefur leitt í ljós að

bærinn sem var reistur árið 1884 var byggður utan í og á grunni eldri bæjarhúsa og hluti eldri húsa notuð áfram samtímis þeim yngri. Það hefur sýnt sig að byggingarsaga bæjarhóla er flókin og skil milli byggingarstiga oft ekki skörp. Sífellt var verið að endurbyggja; laga veggi, fylla upp í rými og hlutar af eldri byggingarstigum nýtt í þau yngri t.d. öflugir inn-og útveggir en auk þess líka tekið hleðslugrjót úr eldri byggingarstigum og endurnýtt annarsstaðar. Mikið safn dýrabeina fannst í herbergi sem hafði verið fyllt af ösku og úrgangi eftir að fyrra hlutverki þess lauk. Minna magn af gripum fannst sé miðað við undanfarin ár enda var aðallega unnið í byggingarleifum en ekki yfirborðs- og ruslalögum.

Auk uppgraftarins þá var landslagsrannsóknum framhaldið og voru meðal annars tekin borkjarnasýni úr nærliggjandi vatni, Sveinshúsavatni, til að freista þess að fá hugmyndir um sögu sjávarstöðu í Vatnsfirði sem getur gefið vísbendingar um forsögulegt landslag og e.t.v. varpað ljósi á athafnir mannsins við sjávarsíðuna. Þá voru tekin viðtöl við Vatnsfirðinga og í heimsókn kom fólk af svæðinu sem gat frætt okkur um sögu jarðarinnar og umhverfisins á 20. öld. Allt er þetta akkur fyrir þjóðháttafræðilega hlið rannsóknarinnar. Sem fyrr komu að rannsókninni fjöldi manns (sjá yfirlit yfir starfsemi fornleifaskólans í fylgiskjali); með sérþekkingu á greinum innan fornleifafræði; gripafræði, beinafræði, skordýrafræði, plöntufræði og örformgerðarfræði, svo eitthvað sé nefnt. Fjölmargir gestir komu m.a. Allison Bain skólastjóri vettvangs-fornleifaskóla Lavalháskóla í Qebeck í Kanada og auk þess prófessor við háskólann þar. Hún vann við uppgröft í nokkra daga við hlið nemenda sinna. Þá vann Dr. Peter Langdon frá háskólanum í Southampton með nemendum í viku. Aðrir gestir og fyrirlesarar eru tíundaðir í fylgiskjali um starfsemi fornleifaskólans.

Átak var gert í kynningarmálum á staðnum og fjölmörg skilti reist með upplýsingum um umhverfi, jarðfræði, náttúrufar og síðast en ekki síst sögu staðarins og helstu niðurstöður uppgraftarins á íslensku og ensku. Sem fyrr var prentaður upplýsingabæklingur fyrir ferðamenn á íslensku, ensku, þýsku og dönsku, og dreift í söluskála víða um land. Þá var að venju opinn dagur, svokallaður, einn laugardaginn. Samkomulag hefur verið um það milli kennara, starfsmanna og nemenda í Vatnsfirði að vinna einn laugardag í þessu augnmiði. Til okkar lögðu leið sína fjöldi manns (milli 40 og 50) í blíðskaparveðri og gengu um svæðið og fengu leiðsögn og fræðslu.

Sumarið 2010 lauk rannsóknum á víkingaaldarsvæðinu í Vatnsfirði (mynd 5). Sú bygging sem síðast var grafin reyndist vera lítið niðurgrafið hús, en á sama stað, ofan á þetta litla jarðhýsi, höfðu tvær yngri byggingar verið byggðar, en báðar eldri en gjóskulagið frá 1693. Jarðhýsið er aðeins 3x2 metrar að innanmáli og það næstminnsta sem enn hefur verið rannsakað á Íslandi. Ummerki eru um að þar hafi verið setbekkur og í húsinu fundust m.a. þrír steinar með gati, sennilega kljásteinar, sem gefa vísbendingar um að þar hafi verið vefstaður. Úrvinnsla á gögnum rannsóknarinnar á víkingaaldarsvæðinu er í fullum gangi og að þeirri vinnu kemur fjöldi sérfræðinga. Húsaþyrping og útisvæðið sem grafin voru fram sem og sýni og gripir munu auka skilning okkar á upphafi byggðar í Vatnsfirði og á Vestfjörðum og upplýsingarnar munu bæta þekkingu okkar á jaðarsvæðum við Norður-Atlantshaf. Allnokkrir könnunarskurðir á svæðinu í leit að víkingaaldarminjum svo svæðið telst allvel kannað.

Á bæjarhólnum var haldið áfram rannsóknum á flóknum byggingaleifum bæjarhúsa sem í gegnum aldirnar var sífellt verið að breyta og umbylta (mynd 6). Markverðast var að veggiur, sem kalla má stofnvegg og er gríðarlega miklill, allt að þriggja metra þykkur, virðist mun eldri en áður var talið. Veggur þessi er hluti af herbergi sem hefur verið í notkun a.m.k. frá 17. öld og fram til 1900. Upp að veggjunum að utan og vestan liggur þykkt gjóskulag sem er úr Heklugosi árið 1693 og er eina gjóskan sem barst vestur í Djúp í því magni að lagið er vel greinanlegt. Gripasafn sumarsins tók miklum breytingum eftir því sem dýpra var grafið og í lok sumars var komið talsvert af 17. og 18. aldar leirkerjum,

tóbakspípum, ofnum og prjónuðum efnispjötlum og viðargripum.

Í raun er lítið vitað um byggingargerð og endurbyggingar torfbæjar á Vestfjörðum. Norðanlands, þar sem loftslag er þurrara og kaldara en sunnanlands, var þumalputtaregla að veggi þyrfti að endubyggja á um 100 ára fresti. Á Suðurlandi var endurbyggingartíminn hins vegar 60 árr enda rignir þar meira og veggir fúnuðu því hraðar.[6] Sennilega hafa vestfirsku veggirnir verið skyldari þeim norðlensku og samkvæmt rannsóknum í Vatnsfirði virðast traustir veggir hafa, með góðu viðhaldi, geta orðið nokkur hundruð ára gamlir.

Þar sem uppgreftir bæjarhóla eru langtímaverkefni voru Vatnsfjarðarverkefninu reistar nokkrar áfangavörður á leið aftur í tímann. Fyrsti áfangi miðar að rannsóknum á yngstu bæjarleifunum, þeim frá 19.-20. öld. Næsti áfangi sem beinist að minjum frá 17.-18. öld er nú hafinn. Vel hefur gengið að fylgja markmiðum og mun vinna við rannsóknina halda ótrauð áfram.

Landslagsrannsóknum var enn framhaldið í Vatnsfirði og nágrenni Skráðar voru fornleifar innnantúns á bæjum í Vatnsfjarðardal, það er í Vatnsfirði, Vatnsfjarðarseli, Miðhúsum, Hálshúsum og Sveinhúsum. Fornleifarnar eru fjölbreyttar, bæði hvað varðar gerð og aldur. Skráðar voru minjar allt frá víkingaöld fram á 20. öld, eyðibýli og selstöður langt inni í landi og hjallar og verbúðir við sjávarsíðuna. Fornleifarnar voru í mjög misjöfnu ásigkomulagi, sumum er ógnað m.a. vegna ábúðar og uppblásturs á meðan aðrar standa grónar á fáförnum stöðum þar sem fátt virðist geta orðið þeim að tjóni. Landslagsrannsóknir og fornleifaskráning veita ýmsar upplýsingar t.d. um tengsl milli bæja, samband við höfuðból og landnýtingu s.s. torfskurð og beitiland. Áfram voru tekin viðtöl við staðkunnuga og eru þau gulls ígildi.

Vatnsfjörður vex sem ákjósanlegur áfangastaður ferðamanna. Í uppgraftarlok var haldinn fundur í Vatnsfirði og í Reykjanesi um samvinnu ýmisa aðila um Vatnsfjörð. Á þeim fundi var ákveðið að boða til vinnuþings í Heydal og var það haldið á haustnóttum. Þingið sátu ýmsir aðilar t.d. úr ferðaþjónustu, sveitastjórnum, en einnig velunnarar staðarins og fræðimenn og voru möguleikar staðarins skilgreindir. Upp úr því var sett saman Inndjúpsnefnd og hefur sú nefnd þingað reglulega og á döfunni er að slá saman hinum árlegu "opnu dögum" í Vatnsfirði við Inndjúpsdaga með ýmsum viðburðum.

Sem fyrr var fornleifaskólinn starfræktur og hann sóttu 11 nemendur að þessu sinni. Verklega kennsla fór fram á uppgraftarsvæðinu í Vatnsfirði en einnig er kennd fornleifaskráning og uppmæling minja. Á kvöldin og um helgar voru fyrirlestrar, kennsla í úrvinnslu uppgraftargagna auk verkefnavinnu. Einnig var farið í vettvangsferðir með hópinn víða um Vestfirði með svipuðu sniði og undanfarin ár.

Eins og venja er orðin var haldinn opinn dagur í Vatnsfirði sumarið 2010 og sótti fjöldi manns staðinn heim og hefur gestagangur vaxið ár frá ári.

Um verkefnið

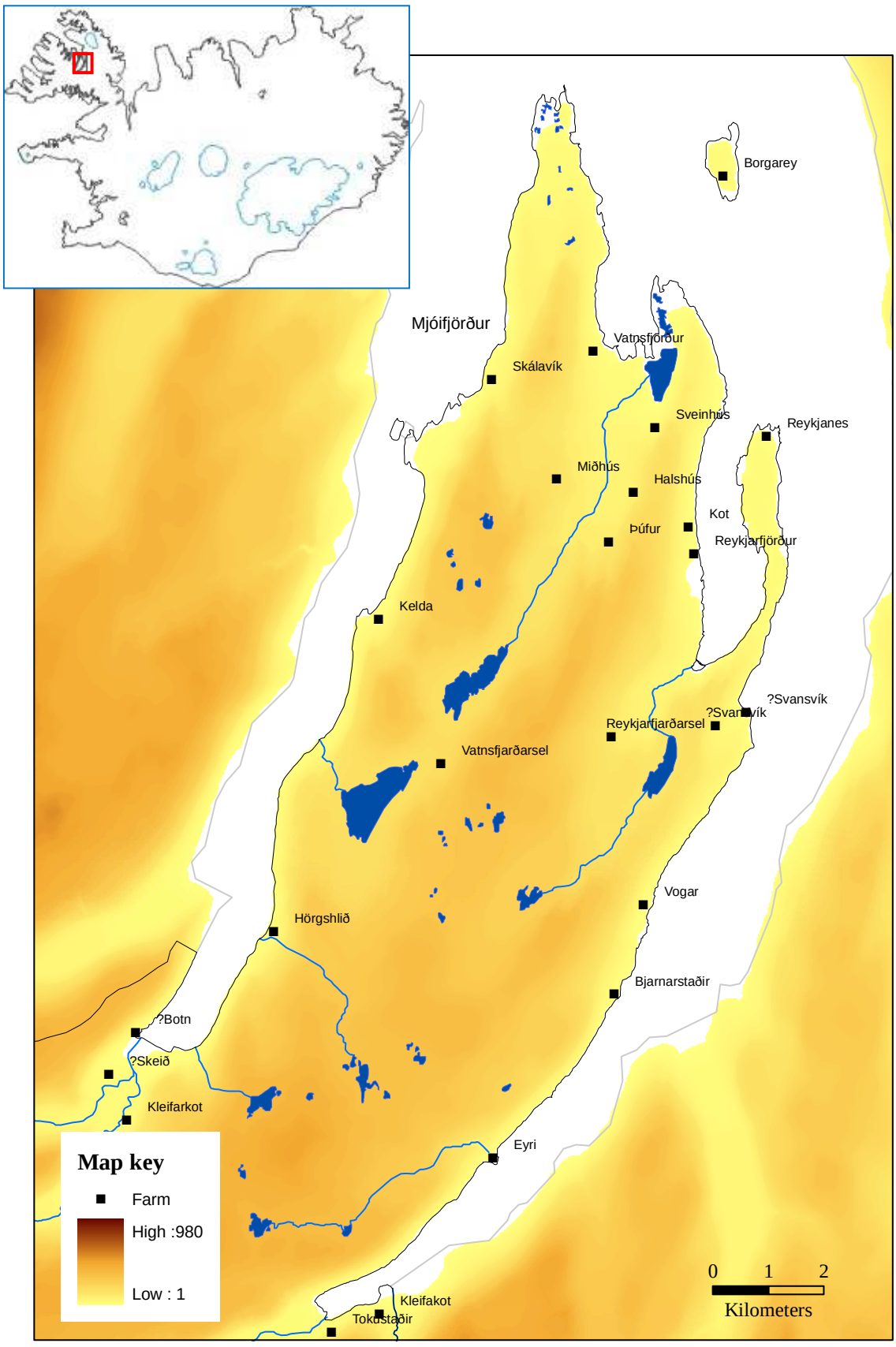
Verkefni sem þetta er ekki einangrað fyrirbrigði, styrkur þess liggur í því að vera þverfaglegt rannsóknarverkefni. Stefnt er að því að rannsóknir á höfuðbólinu Vatnsfirði við Ísafjarðardjúp verði notaðar til að draga fram hinar afdrifaríku breytingar sem hafa orðið á félags- og hagkerfi Vestfjarðakjálkans sem og á menningu landsvæðisins í ljósi náttúru- og menningarlandslags sem hefur verið í sífelldri þróun. Með fornleifauppgreftri, landshátta- og umhverfisrannsóknum í samvinnu fornleifafræðinga, sagnfræðinga og umhverfisfræðinga er ekki einungis unnt að auka verulega þekkingu okkar á umhverfis- og menningararfi og gagnvirkni manns og náttúru á Vestfjörðum heldur einnig skapa

[6] Orri Vésteinsson (2010). ´On Farm Mounds´. *Archaeologica Islandica* 8:13-40, hér, 21.

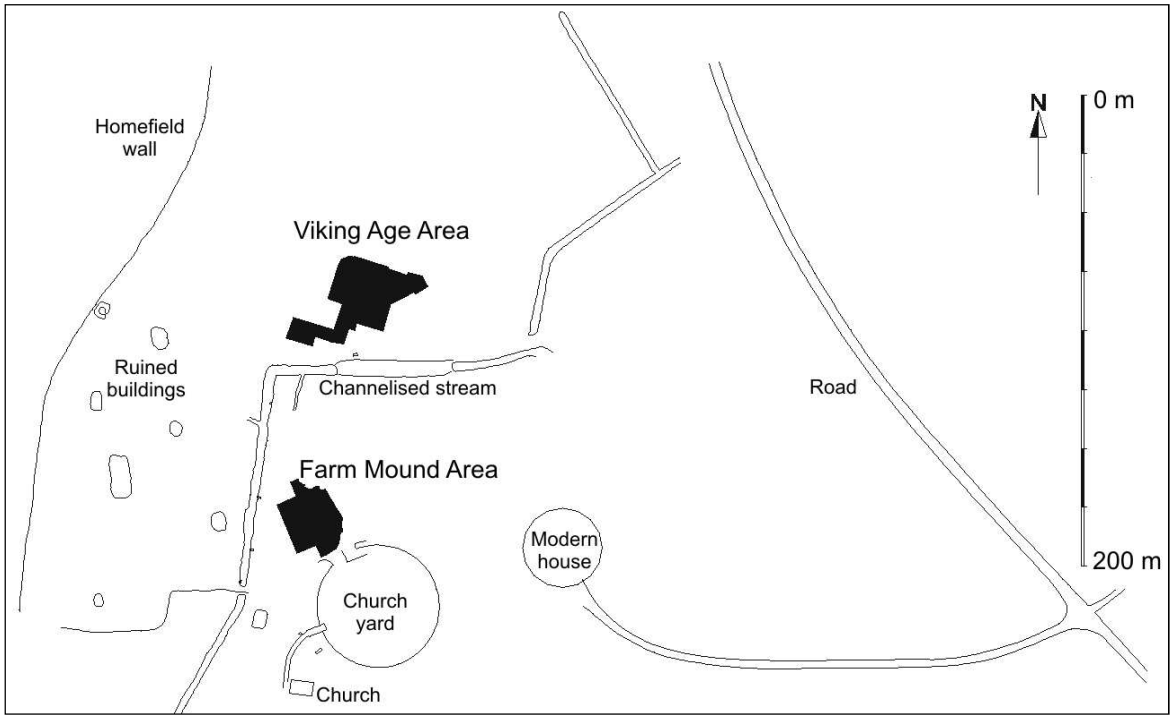
grundvöll til samanburðar á sambærilegum ferlum í öðrum landshlutum og við norræna menningu annars staðar á Norður-Atlantshafssvæðinu.

Framundan 2011

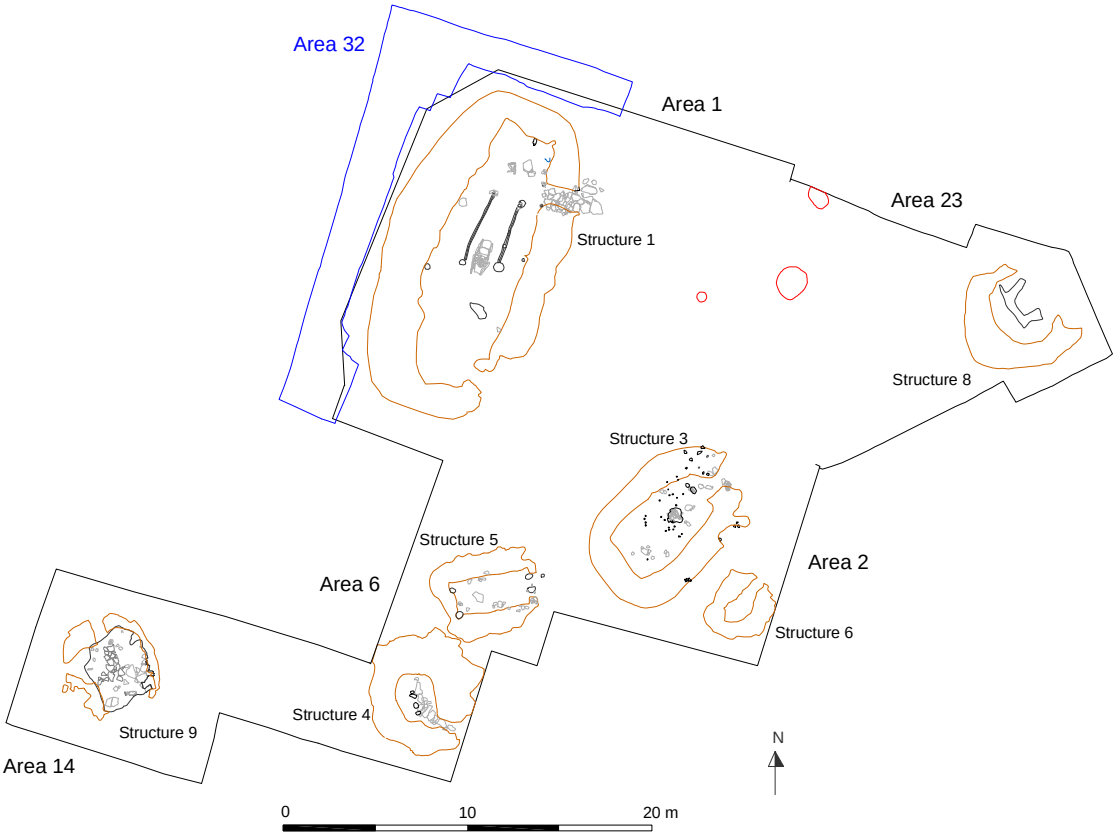
- Rannsókn á 17. -18. aldar minjum Vatnsfjarðar.
- Áframhaldandi rannsóknir á minjum við sjávarsíðuna, uppgröftur.
- Áframhald verður á rannsóknum á landslagi, umhverfi og samfélagi.
- Undirbúningur útgáfu rannsókna Víkinaaldarsvæðis í Vatnsfirði.



Mynd/Figure 1. *The location of Vatnsfjörður and other farms within the study area (by Oscar Aldred).*



Mynd/Figure 2. *Map of Vatnsfjörður in 2010, showing the full extent of the two excavation areas – the Viking Age Area and the Farm Mound Area, where remains are being excavated from the 18th-20 century.*



Mynd/Figure 3. *Plan of the Viking Age area at Vatnsfjörður, showing the buildings (brown), structural features such as stones (grey) and post holes (black), and pits (red) excavated prior to 2010. Structure 2, which overlay Structure 1, and Structure 7, a probable medieval building that overlay Structure 9, are not*

shown.

Mynd/Figure 4. *Stitched aerial photograph of the excavations on the Farm Mound at the end of the 2009 field season, showing the major context groups.*

Mynd/Figure 5. *The final excavation on the Viking Age part of the site at the beginning of the 2010 field season, showing the wall of Structure 9 under excavation. Some of the features associated with the pit house, Structure 10, are already appearing.*

Mynd/Figure 6. *Excavations in progress on the farm mound in 2010.*

OVERVIEW

Karen Milek
University of Aberdeen, UK

Introduction to Vatnsfjörður, the Excavation Project, Collaborators, and Sponsors

According to the *Book of Settlements* (*Landnámabók*), the earliest extant version of which dates to around AD 1275-80, but which had originally been compiled a few decades earlier, Vatnsfjörður, in the eastern part of Ísafjarðardjúp, was one of the original *landnám* farms in the Westfjords, settled during the initial period of colonisation between c. 870 and 930. According to this source, the farmer who first settled at Vatnsfjörður, Snæbjörn Eyvindsson, laid claim to a large tract of land between Mjóifjörður in the west and Langidalur in the east (Figure 1, above).[7] Although the complex agendas behind the writing of the *Book of Settlements* make it impossible to know whether the size of the land claim or the name of the settler are true,[8] there is no doubt that the farm, which was strategically located in the very centre of the Westjord regon, quickly became a regional centre occupied by chieftains. By AD 1118, according to the *Story of the Conversion* (*Kristni saga*), which probably dates to the mid-thirteenth century, Þórðr Þorvaldsson of Vatnsfjörður was one of the thirteen great chieftains in Iceland, and Vatnsfjörður was the only chieftain's farm in the west of Iceland that was specifically named in this text.[9] One of the twelfth-century chieftains who lived at Vatnsfjörður, possibly Þorvaldur Snorrason, established a church there before AD 1200, and by 1273 it was reputed to be the second wealthiest church in the country.[10]

From the the time that written records about contemporary events become available in the thirteenth century, Vatnsfjörður played a dominant role in the politics of power in the Westfjords. Eiríkur Sveinbjarnarson , who lived at Vatnsfjörður from AD 1277-1342, was the richest magnate in the area and had the prestigious role of the head of *hirðstóri*, the Norwegian court for the North and West of Iceland.[11] In 1433, part of Vatnsfjörður (which was by then part-owned by the church as half had been given away as a *beneficium*) was inherited by Björn Þorleifsson, who was reconned to be the most powerful man in Iceland in his day.[12] The wealth of the farm, which included cattle and was greatly bolstered by rents from tenant farms and access to resources such as peatland, woodland, and driftwood, made it much coveted by the church, but despite many years legal disputes with the bishops of Skálholt, often referred to the King of Denmark himself, half the farm remained in private hands until 1530.[13] The farm remained very wealthy throughout the sixteenth century, with the large size and beautiful furnishings of the dwelling buildings and the church remarked upon by visitors, but by the mid-seventeenth century the grand old

[7] Hermann Pálsson and Paul Edwards (1972). *The Book of Settlements: Landnámabók*. Winnipeg: University of Manitoba Press, p. 71.
[8] Adolf Friðriksson and Orri Vésteinsson (2003). 'Creating a past: a historiography of the settlement of Iceland', in J. Barrett (ed.), *Contact, Continuity and Collapse: The Norse Colonization of the North Atlantic*. Turnhout: Brepols, pp. 139-161.
[9] Siân Grønlie (2006). *Íslendigabók – Kristin saga – The Book of Icelanders – The Story of the Converson*. London: Viking Society for Northern Research, pp. xxxii-xxxiii, 54.
[10] *Diplomatarium Islandicum* (1896-1950). Reykjavik and Kaupmannahöfn. Volume XII, pp. 14-18.
[11] Torfi H.Tulinius (2005). 'The Westfjords', *Archaeologia Islandica* 4: 9-15, p. 12.
[12] *DI* IV, pp. 529-530.
[13] *DI* IX, pp. 535-540.

buildings were considered too extravagant and expensive, and the preist Hjalti Þirsteinsson received permission to reduce them in size.

What the rich textual sources fail to explain is *why* the seemingly infertile farm of Vatnsfjörður was chosen to be a chieftain's seat to begin with, and what the factors and processes were that led to its flourishing as an economic, social, and cultural powerhouse between the thirteenth and seventeenth centuries. These are important questions, at the root of of our understanding of the colonisation of Iceland, the use and control of its landscape and resources, and the development of the power structures that came to govern the lives of Icelanders in the Middle Ages. Realising that the texual evidence needed to be integrated with archaeological and environmental research if these questions were to be answered, the Medieval Westfjords Society teamed up with the Institute of Archaeology of Iceland and, in 2003, with an international, interdisciplinary team of archaeologists and natural scientists, began the work of excavating at the site of Vatnsfjörður and conducting landscape surveys in the surrouding region. The eighth field season of archaeological excavation and landscape survey at the farm a of Vatnsfjörður and the valley of Vatnsfjarðardalur took place from July 26-August 20, 2010, the preliminary results of which are provided in this report.

An important aspect of the project is the sharing of knowledge about the cultural heritage of this part of the Westfjords with residents of the local community and with visitors, and to actively stimulate heritage tourism in the region. The project team has therefore developed a public archaeology programme that includes an annual Open Day, multi-lingual interpretation signs at the site, and a pamphlet about the site that is distributed at tourist information centres around the country as well as hotels in the Westfjord region. Several several dozen visitors came to the site in 2010, as well as school children from Reykhólasveit and Súðavíkurhreppur Work Schools, all of whom were given tours of the site.

The Vatnsfjörður Project is made possible by the cooperation of a large team of professionals, volunteers, and students from Iceland, North America, and Europe, who contribute enormous amounts of time, expertise and labour to the project. The project also owes its existence and success to the Icelandic church and to the former (now retired) priest of the Vatnsfjörður church, Baldur Vilhelmsson, his wife Ólöf Salvarsdóttir, and their family, who have kindly permitted us to excavate at Vatnsfjörður, and who have provided us with facilities and logistical support in the field. In 2010, the Vatnsfjörður excavation was funded by the Icelandic parliament (Alþingi), the University Centre of the Westfjords (Háskólasetrið Vestfjarða), the Medieval Westfjords Society (Vestfirðir á Miðöldum), the Icelandic Archaeological Fund (Fornleifasjóður), and the Royal Society of Edinburgh.

The project received invaluable support in 2010 in the form of staff, facilities, equipment, and logistical help from the Institute of Archaeology, Iceland (Fornleifastofnun Íslands), the National Museum of Iceland (Þjóðminjasafn Íslands), the Centre for Research in the Humanities, University of Iceland (Hugvísindastofnun HÍ), the University of Aberdeen, the Northern Science and Education Centre at the City University of New York, the North Atlantic Biocultural Organisation (NABO), Hotel Reykjanes (Ferðaþjónustan Reykjanesi), Atvinnuþróunarfélag Vestfirðinga, Súðavíkurhreppur, the Natural History Museum in Bolungarvík (Náttúrustofu Vesfjarða í Bolungarvík), the Maritime Museum in Ísafjörður (Byggðasafnið á Ísafirði), Biskupsstofa, and the Education Centre of the Westfjords (Fræðslumiðstöð Vestfjarða). The project team is also grateful to Ragnar Edvardsson, now at Fornleifavernd rísikins (The Archaeological Heritage Agency of Iceland), for his continued interest in and support for the project.

Summary of the Vatnsfjörður Research Project, 2003-2010

Excavations in the Viking Age Area 2003-2010

Research at Vatnsfjörður began in **2003**, when Ragnar Edvardsson identified low earthworks in the homefield – one of which appeared to be in the shape of a bow-sided Viking Age house, or *skáli*. That same year, a surface contour survey was conducted by Garðar Guðmundsson, three evaluation trenches were excavated by Ragnar Edvardsson, and a survey of relevant historical sources was conducted by Andrea Harðardóttir (Adolf Friðriksson and Torfi Tulinius 2003; see the list of project references, below). The evaluation trench excavated on the farm mound found only disturbed deposits, but the two evaluation trenches in the area that has now come to be known as the Viking Age area revealed walls and preserved floor deposits of two buildings (later called Structures 1 and 3) (Ragnar Edvardsson 2003). In **2004**, the putative *skáli*, the larger of the two buildings evaluated in 2003, was excavated by Ragnar Edvardsson (Structure 1, Area 1) (Ragnar Edvardsson 2004; Ragnar Edvardsson and Thomas McGovern 2005). The ruin was confirmed to be the typical size and layout of a Viking Age house, and was subsequently dated to the tenth or early eleventh century on the basis of a radiocarbon date from a cattle bone found on the floor of the building (Milek 2007).

In **2005**, when the excavation of the house was completed, its tenth-century date was confirmed by the discovery of a number of tenth-century artefacts in the fill of a pit cut into the east wall of the building, including five glass beads and a gold foil pendant that had originally been mounted on an Irish brooch (Adolf Friðriksson et al. 2005). The tenth-century house was very similar in size, shape, and internal organization to other contemporary dwellings in Iceland, and included two entrances in the eastern long wall, a central hearth, three-aisles separated by the roof-supporting posts, and a stone box in the main entrance passageway (Ragnar Edvardsson and McGovern 2005) (see Figure 3, above).

In **2005**, when the Field School in North Atlantic Archaeology was moved to Vatnsfjörður, the scale of the excavation doubled, and it has continued to expand every year since (Figure 3). In addition to the completion of the Viking Age house in Area 1, a new excavation area (Area 2) was opened up to the east and southeast of the house. In this area, a smithy was found, as well as an outdoor cooking pit, a couple of temporary outdoor hearths, extensive sheet midden deposits, and a gully on the eastern edge of the *skáli*, which was filled with domestic rubbish (Milek 2005). There was no stratigraphic connection between the smithy (Structure 3) and the well-dated Viking Age house (Structure 1), and although its proximity to a Viking Age dwelling suggests contemporaneity, the lack of diagnostic artefacts in the smithy means that it will not be possible to be sure about its date until the
radiocarbon dating dating programme is completed.

In **2006** the area around Structure 3 was reopened in order to continue the excavation of the smithy, and a new excavation area was opened up west and southwest of the smithy (Area 6), where a new building that had been identified in a test pit in 2005. This open area excavation brought to light three new outbuildings. The eastern long wall of the smithy was abutted by a very small oblong building (Structure 6) that had no diagnostic features or finds in it and was probably used for storage – perhaps the storage of fuel for the smithy (Figure 3, above). To the south and west of the smithy there was a small rectangular outbuilding with an entrance in one of its gable walls, a central flag stone, and a very thin, dark brown floor lens containing small fragments of charred seaweed (Structure 5). The only significant find in the building was a small grinding wheel, and this, together with the

lack of diagnostic features, the thin floor deposit, and the lack of synanthropic insects in the building, led this building to be interpreted as an unheated workroom and/or a storeroom. Surrounding the Viking Age buildings were widespread sheet middens and trampled deposits, which produced a Borre-style strap end and a multi-coloured Viking Age glass bead (Milek 2007).

South of Structure 5 was another small, slightly-sunken rectangular building with a paved entrance on its eastern gable end, a stone pavement on the northeastern half of its floor and a curious hole in its northeastern wall at knee level (Structure 4). This building was first exposed in **2006** and its excavation was completed in **2007**, when a piece of whale bone was found under its north wall – probably representing a foundation deposit (Konrad Śmiarowski and Ramona Harrison in Milek 2008). The function of the building remains elusive, and it is tentatively interpreted as a fish drying or storage room.

In **2007**, a new excavation area opened up to the west of Structure 4 (Area 14), which uncovered a small rectangular building with internal dimensions of about 3.1 x 4.4m, red and black turf walls about 1.6m thick, a stone pavement, and two entrances, one on its eastern side, and one on its southwestern gable end (Structure 7). The excavation of Structure 7 was continued in **2008**, when the stone pavement and occupation deposits belonging to the last phase of the stone-paved building were removed. Below this phase of the building there was an earlier stone pavement, and earlier phases of walls containing the greyish (podzolised) turf so common in the earlier Viking Age buildings at Vatnsfjörður. In the centre of the building where a linear section of the stone pavement was lightly sunken, there were distinctively organic-rich and worm-reworked soils that extending out below the walls, forming a curious linear, trench-like feature now interpreted as a drain. Soil samples from the organic-rich occupation deposit confirm that this building was used to house herbivorous animals such as sheep or cows.

In **2008**, six evaluation trenches were also excavated in the Viking Age area, two of which prompted the excavation of a new area to the west and north of Area 2 and Structure 3 (the smithy). This new area, Area 23, contained thin but extensive sheet midden deposits, and two large pits filled with charcoal and fire-cracked rock, that could either be cooking pits or charcoal-burning pits (Astrid Daxböck et al. in Milek 2009). In addition, in the northeastern corner of Area 23, a small, poorly preserved building constructed of the greyish turf typical of the other Viking Age structures on the site, including the *skáli* (Structure 8). Only three walls from this building survived, the northeastern wall presumably having eroded down the slope the building is situated on. With no directly associated artefacts or floor deposits, and the only internal feature being a shallow u-shaped trench, it is very difficult to know the function of this building, but the steepness of the slope it was on and the very lack of floor deposits suggests that the building might have had a raised wooden floor, with the u-shaped trench having been used as a wooden sill foundation. Three blue glass Viking Age beads found in collapse deposits associated with Structure 8, in combination with the podolized turf used to construct the building, provide a tentative Viking Age in date for the building.

In **2009**, excavations continued in Area 14, and a new excavation area was opened up on the northern and western sides of Structure 1 (the *skáli*), in order to determine if there were any middens or structural remains (Area 32). In Area 14, the two earliest phases of stone pavement and accompanying occupation deposits in Structure 7 were removed. The character of the building, with its organic occupation layers and stone pavements that sloped down towards a central, stone-lined drain, fits that of a cattle byre that could hold up to six animals. When the walls of Structure 7 were removed, an earlier building with a slightly different orientation and walls constructed of grey podsol turf was found (Structure 9; see Figure 3). This building had stone slabs over part of the floor and an organic-rich

floor layer, and is likely to an earlier (Viking Age) animal building. Surpisingly, the removal of the floor deposit in Structure 9 revealed yet another, small building, which was left for excavating in 2010.

In Area 32, on the northern and western sides of the *skáli*, only very thin sheet midden spreads were found, and these contained very few artefacts – mainly undiagnostic iron objects. One small turf deposit was found containing the greyish podsol turf that had been used in the *skáli*, but otherwise the small turf spreads that were found west and northwest of the house were composed of a different, redder type of turf, and were unconnected to the building. No new buildings were found in Area 32. The the turf walls of probable medieval buildings, constructed with red turf cut from wet, boggy areas, were found in evaluation trenches north and south of the Viking Age area though it is of course possible that Viking Age building lie below these.

In **2010**, only a very small area was left to be excavated in the Viking Age Area, focussing on the remains of asmall, slighly sunken building, Structure 10, that had been found at the end of the 2009 field season. This building, which was not associated with turf walls and must have had timber walls, was only 2 x 3 m in size, and had the remains of a collapsed oven in its southern corner. Flat stones had been layed against the cut of the building around the oven, and elsewhere strips of turf had been layed against the edges of the cut to prevent the gravel from collapsing inwards. The thin, charcoal-rich floor of the building had two phases, the first of which was associated with posts set in post holes, and the second of which was associated with posts set on post pads, and a low platform built up with gravel and lined with flat stones set on their edge. Although sunken only 30 cm below the 10th-century ground surface, this little building was very similar in to other Icelandic pit houses, which were common on Icelandic farms from the late ninth to the eleventh century. The only finds in the pit house at Vatnsfjörður were two loom weights and an iron punch (a tool used to work leather), suggesting that this building, like the other pit houses, was used as a women's work room – primarily for textile production (Milek forthcoming in *Medieval Archaeology* 54). Following its excavation, the internal features of Structure 10 were reconstructed in order to make it easier for the public to understand how the building would have looked while it was in use.

Excavations in the Farm Mound Area 2006-2010

About 60 m south of the Viking Age area there is a 'farm mound', an artifical hill that developed as a result of turf building construction and refuse deposition over the course of several centries, until the last turf house was abndoned in 1906. With a view to assessing the size of the farm mound, the depth and age of its deposits, and the degree of archaeological preservation, nine evaluation trenches were excavated in the mound in **2006**. These evaluation trenches revealed that the farm mound is exceptionally large: around 90 m long (north-south) and 60 m wide, with cultural deposits reaching thicknesses of around 1.5 m. The evaluation trench at the very top of the farm mound found the last turf dwelling house at Vatnsfjörður (1884-1906), and in 2006 the trench was extended to reveal very well-preserved wall foundations and a deep cellar infilled with early twentieth-century household rubbish. Three radiocarbon dates from birch charcoal recovered from the bottom of a section cut into the western edge of the farm mound suggested that the occupation of this part of the site may have began as early as the tenth century (Milek 2007). Three additional radiocarbon assays done on birch charcoal from a new section excavated on the western edge of the farm mound in 2008 pushed the possible foundation of the farm mound to the mid-ninth century (Simon Parkin et al. in Milek 2009), although as always we should

be cautious about early dates on charcoal due to the possibility that the earliest settlers used old dead wood for burning.

Starting in **2007**, the excavation area at the top of the farm mound expanded dramatically, and the historic period has been a major component of the Vatnsfjörður excavations ever since (Figure 4, above, and Figure 8, right). In a large open area of 400 m^2, thousands of artefacts and bones dating to the late nineteenth and early twentieth century were recovered, most coming from the fill of a second, even deeper cellar (Figure 8, cellar 7503), and from layers post-dating the abandonment of the the large, late nineteenth-century turf house (structure 7500), which had sub-sequently been re-used for storage, smithying activities, and the dumping of refuse (Guðrún Alda Gísladóttir and Uggi Ævarsson in Milek 2008). The analysis of insect remains by Véronique Forbes as part of her MSc thesis at Laval University showed that animal products (e.g. sheepskins, bird carcasses) and grain had been stored in the cellar (Véronique Forbes in Milek 2009).

The excavation area on the farm mound was expanded further west in **2008** in order to expose the western part of house 7500, creating a total excavation area of 700 m^2. House 7500, which was built in 1884, was a conventional turf and stone house with south-facing timber-panelled front gables (see Figure 4, above). The house had been partially demolished (particularly on its northern end) after 1906, and most of the 2008 field season was spent removing post-abandonment and demolition layers in order to clarify the layout of the walls, doorways, and stone pavements of the building, recovering 1661 artefacts and 38 kg of animal bone in the process (Uggi Ævarsson and Guðrún Alda Gísladóttir in Milek 2009). In 2008, Simon Parkin, a student of Ian Simpson at the University of Stirling, also excavated a 1m x 1m x 1.5m deep column on the western edge of the farm mound, where there were rubbish deposits that had already partially been truncated by the channelised and artifically deepened stream. His geoarchaeological analysis of the stratigraphy in this area, supported by several radiocarbon dates, revealed that the residents of Vatnsfjörður used a variety of fuel types, including peat, turf, and wood, and were able to respond to different fuel resource availablity from the ninth century to the present (Parkin et al. in Milek 2009).

In **2009**, with most of the demolition debris finally cleared away, the excavation on the farm mound was able to focus on the final phases of the 1884-1906 dwelling, structure 7500. The excavation concentrated on the westernmost side of the building, where it was possible to define eight main groups of features – many of them distinct rooms. As the excavation progressed, it was clear that many of these areas/rooms had undergone a series of modifications, including the blocking of doors, the reduction in size of rooms by the building of new walls, and the truncation of walls by later pits and demolition events (Guðrún Alda Gísladóttir in Milek 2010).

In **2010**, the excavation continued to work on the occupation deposits in the rooms and corridors defined in 2009, and the excavation area was extended slightly to the west in order to better observe and record the large turf and stone wall that was extending beyond the limits of the excavation. Eight main structures were excavated, each of which was bounded by thick walls constructed of turf and stone, and several of which contained several phases, or groups of associated deposits (see Oddgeir Isaksen, this report). Excavations of room 10662, a room in the north end of the excavation area, revealed three more phases, the latest of which had turf blockings sealing the north entrance of the building, the earliest dating as far back as the late 17th or early 18th century, when the north entrance was open. To the west of this room, where the excavation area had been exended (group 10515), the removal of collapse deposits revealed the full extent of the western wall and what was believed to be an external hearth to the west of it. After the removal of the hearth and several turf collapse and ashy midden deposits in this NW corner of the excavation area, the Hekla-1693 tephra layer was found *in situ* lipping up

against the 3 m thick, external western wall of the house. Two small rooms south of room 10662, close to the western edge of the excavation area, were also excavated further, with a focus on the low, stone-paved platform in room 9502 and the removal of midden, turf and stone deposits in room 8562. South of room 8562, a series of mixed gravel, turf debris and ashy deposits were cleared away to reveal a very narrow room, 10676. The removal of the western and northern walls of this room, and the underlying mixed deposits of turf, stones, and ash, revealed a new stone pavement belonging to an earlier phase of the building. To the east of rooms 9502 and 8562, the corridor 10590, which connects to the southern end of room 10662, was further excavated as well, including a sequence of dark, compacted floor deposits, finally revealing a floor rich in shells, egg shells, bones, textiles, and pottery sherds dating to the 17th-18th century. On the southern edge of the excavation area, the removal of turf and stone collapse deposits revealed another wall, 9560, which probably belonged to the 1884 house, and underneath this wall was revealed more of the pavement on the southern side of the house that first began to be uncoverd in 2008. Finally, mixed demolition deposits were cleared from the area to the east of the central corridor, which was used as a vegetable garden in the 20th-century. By the end of the 2010 field season, therefore, it had been confirmed that some of the walls of the 19th century house in fact date as far back as the late 17th century, and the goal of subsequent field seasons will be to bring the entire house into phase.

Landscape and Environmental Research at Vatnsfjörður 2003-2010

In addition to the excavations on the Vatnsfjörður farm, archaeological and environmental research on the homefield and the landscape around Vatnsfjörður have been ongoing since 2003. **Archaeological landscape surveys** directed by Oscar Aldred since 2005, assisted by Poul Baltzer Heide in 2007 and 2008, recorded 65 new sites in **2006**, 333 new sites in **2007**, and 224 new sites in **2008**, and 159 in **2009**, bringing the total number of cairns, structures, burials, pits, tracks, boat landing places, fox traps, walls, pots, peat cuttings, enclosures, crossings and bridges in the study area to 977 (Aldred 2005; Aldred 2006; Aldred in Milek 2007, 2008, 2009, and this volume). The most abundant sites in the region are stone-built cairns, which Oscar Aldred and Poul Baltzer Heide have been able to classify according to their shape and building style, though it has so far not been possible to devise a way to date them. The extensive network of cairns in the hills around Vatnsfjörður served as route markers, boundary markers, and navigation aids for sea-faring boats, and the distribution of these cairns lends support to the idea that Vatnsfjörður was a central place in this landscape. In addition to finding new sites in the vicinity of Vatnsfjörður, the work of Oscar Aldred and Poul Heide has also been making an important contribution to our understanding of how people interacted with their environment in Vatnsfjarðardalur: how they moved through the landscape, how they experienced sights and sounds, and how they made decisions about where to situate their settlement sites and landscape markers.

This work continued in **2010** with a detailed survey of the farms in Vatnsfjarðarlur by Ásta Hermannsdóttir, who recorded a total of 132 individual monuments in the homefields of Vatnsfjörður (82), Vatnsfjarðarsel (15), Sveinhús (18), Miðhús (10), and Hálshús (7) (Ásta Hermannsdóttir, this report). Two of these farms, Hálshús, and Vatnsfjarðarsel, were also the subject of an evaluation programme in order to determine the quality of bone preservation and the potential of these farms for future research. A test trench placed infront of an exposed midden section at Hálshús was investigated by Hildur Gestsdóttir (with post-ex analysis and write-up by Oddgeir Isaksen), and a coring programme was conducted at both Hálshús and Vatnsfjarðarsel by Céline Dupont-Hébert.

Unfortunately, though midden material in the form of wood ash and peat ash was found, as well as the remains of a turf wall, bone preservation proved to be poor and a bone-rich midden has yet to be found on these sites.

During the **2007** field season, a preliminary coring programme was conducted on three lakes in Vatnsfjarðardalur by Pete Langdon (University of Southampton) and Chris Caseldine (University of Exeter) in order to investigate the sequence of chironomids, non-biting midges that provide a good signal for **temperature change**. Although the cores were not deep enought to penetrate earlier medieval or Viking Age sediments, they were able to identify a number of particularly cold phases between AD 1683–1710, AD 1765–1780 and AD 1890–1917, which had relative drops in summer temperatures in the order of 1.5–2°C (Langdon et al. in press). It is hoped that in the future the animal bones and plant remains from the Farm Mound Area can be dated at a high enough resoluton to determine if and how farm management and the the exploitation of wild resources changed during these cold phases.

In **2007**, Jerry Lloyd (Durham University) conducted a coring programme at Sveinhúsavatn which demonstrated the potential of this lake to contribute to an understanding of **sea-level changes** on the coast of Vatnsfjörður over the last 1100 years, and he returned in **2009** in order to take longer cores from Sveinhúsavatn and to examine other isolation basins along the coast. While detailed results are still forthcoming, it is clear that sea-levels have dropped 1-2 m since the Viking Age.

The character and fertlity of the soils of Vatnsfjörður's **homefield** have been under investigation by Ian Simpson (University of Stirling) since **2005**. In **2007** Ian was joined by Doug Bolender, who conducted a preliminary survey of soil depths and phosphorus levels in the homefield (Bolender in Milek 2008). So far there is little evidence of active improvement of the homefield at Vatnfjörður, but radiocarbon dates obtained by Ian Simpson from the bottom of the peat in the wet meadow downslope (east) of the Viking Age part of the site dated this peat development to the tenth century. In addition, a soil augering and test trenching programme by Claire Cavaleri and the author in **2008** showed that the the peat developed up against – and was therefore later than – the eastern part of the homefield boundary wall. In order to explore whether this wet meadow might have been developed deliberately, Ian Simpson was joined in 2008 by the palynologist Eileen Tisdall and their student, Rebecca Barclay (University of Stirling), who excavated and sampled a number of soil test pits in the wet meadow for pollen and micromorphological analysis. They found that midden material had occasionally been spread over this wet meadow, and that the flora in the meadow remained dominated by grasses and remarkably consistent, which they believe supports the view that the wet meadow was deliberately created and maintained in order to improve the homefield's productivity (Barclay 2008; Barclay et al. this report).

Proposed Future Research

Future research at Vatnsfjörður should aim to achieve the following:

- The excavation in the Farm Mound Area will focus on removing the 19th and early 20th deposits (especially in the southwest corner and in the area of the vegetable garden), in order to bring the entire building into the late 17th - 18th century phase already reached in some areas

- The digital terrain model of the homefield and the ruins within it, as well as the surrounding boundary wall, will continue to be developed
- Survey work will intensify on the Vatnsfjörður coastline, followed by evaluation trenches in the ruins identified along the coast and the excavation of at least one of them

Excavation Team: Staff and Students of the 2010 Field School in North Atlantic Archaeology

Since it was founded in 1997, the Field School in North Atlantic Archaeology has served as a focal point for interdisciplinary, cooperative teaching and research by archaeologists and natural scientists from Iceland, Europe, and North America. This tradition continued in 2010, with archaeologists and palaeoecologists from Canada, Iceland, and the United Kingdom contributing to the field school teaching curriculum while carrying out original research at Vatnsfjörður and the surrounding region.

Figure 7. *Field school student Solveig Lecoutourier and being advised by excavation assistant and instructor Óskar Gísli Sveinbjarnarson in the Farm Mound Area.*

The field course provides students with four weeks of instruction and experience in Icelandic archaeology, landscape survey, and the archaeological sciences. It also aims to encourage students to develop research interests in North Atlantic history and archaeology, and to facilitate graduate research in Iceland. Eleven students from the USA, Ireland, England, Scotland, France, Austria and Greenland attended the field school in 2010. The field school is accredited by the University of Iceland (admissions coordinated by Dr. Orri Vésteinsson), the City University of New York (coordinated by Prof. Thomas McGovern), and the University of Aberdeen (coordinated by the author), and students attending universities worldwide can use the course towards their degrees through ECTS or another credit transfer programme.

Eleven university students attended the field school in 2010: Bernadette McCooey (Irish MPhil student from the University of Birmingham, England), Brenda Prehal (American MA student from the City University of New York), Charlotte Diffey (English BA student from the University of Oxford), Claire Cotter (American BA student from the City University of New York), Colin Connors (American MA student from the University of Iceland), Elizabeth Cottrell (American MA student from the American Museum of Natural History), Jeannette Plummer (American MA student from the City University of New York), Mairi Maclean (Scottish MA student from the University of Aberdeen), Melanie Marx (Austrian BA student from Leopold Franzens University, Innsbruck),

Michael Nielsen (Greenlandic BA student from the University of Greenland), and Solveig Lecouturier (French MA student from the the University of Nanterre, Paris).

Figure 8. *Staff and students of the 2010 field project and field school at Vatnsfjörður. Back row: Melanie Marx, Ásta Hermansdóttir, Charlotte Diffey, Mairi Maclean, Colin Connors, Michael Nielsen, Bernadette McCooey, Hildur Gestsdóttir, Oddgeir Isaksen. Middle row: Dawn Elise Mooney, Véronique Forbes, Céline Dupont-Hébert, Garðar Guðmundsson. Front row: Robert Milek, Claire Cotter, Brenda Prehal, Jeannette Plummer, Guðrún Alda Gísladóttir, Elizabeth Cottrell, Solveig Lecouturier, Karen Milek. Front: Óskar Gísli Sveinbjarnarson. Missing: Oscar Aldred.*

The 2010 field school was directed by Karen Milek, with all excavation and survey staff contributing to the teaching and supervision of field work and post-excavation work, including Céline Dupont-Hébert, Dawn Elise Mooney, Garðar Guðmundsson, Guðrún Alda Gísladóttir, Hildur Gestsdóttir, Karen Milek, Oscar Adred, Oddgeir Isaksen, Óskar Gísli Sveinbjarnarson, and Véronique Forbes. Finally, two visiting scholars made important contributions to the teaching and research programme, Ragnar Edvardsson (Fornleifavernd / Icelandic Heritage Agency) and Torfi Tulinius (University of Iceland). As in previous years, the field school greatly benefited from the support of Tom McGovern of the City University of New York, who managed student recruitment from North America.

ÚTGEFNAR, SKÝRSLUR, RITGERÐIR OG GREINAR UM VATNSFJÖRÐ
PUBLICATIONS, REPORTS, DISSERTATIONS AND ARTICLES ON VATNSFJÖRÐUR

Adolf Friðriksson og/and Torfi H. Tulinius (ritstj./eds) (2003) *Vatnsfjörður við Ísafjarðardjúp: Rannsóknir sumarið 2003* (FS213-03092). Höfundar efnis/Contributing authors: Adolf Friðriksson, Andrea S. Harðardóttir, Ragnar Edvardsson, Torfi H. Tulinius. Reykjavík: Fornleifastofnun Íslands.

Adolf Friðriksson, Torfi H. Tulinius og/and Garðar Guðmundsson (ritstj./eds) (2005) *Vatnsfjörður 2005: Fornleifarannsóknir/Fieldwork at Vatnsfjörður, NW-Iceland* (FS301-03095). Höfundar efnis/Contributing authors: Adolf Friðriksson, Oscar Aldred, Colleen Batey, Ramona Harrison, Aaron Kendall, Kate Krivogorskaya, Tom McGovern, Karen Milek, Seth Brewington, Torfi H. Tulinius, Ragnar Edvardsson, Ian Simpson. Reykjavík: Fornleifastofnun Íslands.

Aldred, Oscar (2005) *Landscape research in the Northwest 2005* (FS298-03094). Reykjavík: Fornleifastofnun Íslands.

Aldred, Oscar (2006) *Landscape research at Vatnsfjörður 2006* (FS343-03096). Reykjavík: Fornleifastofnun Íslands.

Alston, Grant (2008) *Historical Homefield Management and its Contribution to the Early Economy of Vatnsfjörður, Iceland*. BSc dissertation, University of Stirling.

Barclay, R. (2008) *Homefield Formation and Management at Vatnsfjörður, NW Iceland – A Geoarchaeological Interpretation.* BSc Thesis, University of Stirling.

Craig, David (2007) *Grazing Pressure and Landscape Degradation in Vatnsfjörður, Iceland.* BSc dissertation, University of Stirling.

Dufeu, Valerie (2006) *Environmental Resources and Economic Patterns: Role and Place of Fishing in Viking Age and High Medieval Iceland.* MRes dissertation, University of Stirling.

Forbes, Veronique (2009) *Les Modes et les Conditions de Vie des Fermiers Islandais au 20e Siècle: Reconstitutions archéoentomologiques de la vie quotidienne sur la ferme de Vatnsfjörður*. MA dissertation, Université Laval.

Forbes, Veronique, Alison Bain, Guðrún Alda Gísladóttir, and Karen Milek (2010) Reconstructing aspects of the daily life in late 19th and early 20th-century Iceland: Archaeoentomological analysis of the Vatnsfjörður farm, NW Iceland. *Archaeologia Islandica* 8: 77-110.

Langdon, P.G., Caseldine, C.J., Croudace, I.W., Jarvis, S., Wastegård, and Crowford, T.C. (in press) A chironomid-based reconstruction of summer temperatures in NW Iceland since AD 1650. *Quaternary Research*.

Milek, Karen (ritstj./ed.) (2007) *Vatnsfjörður 2006: Framvinduskýrslur / Interim Reports.* (FS356-003096). Höfundar efnis / Contributing authors: Albína Pálsdóttir, Garðar Guðmundsson, Gavin Lucas, Guðrún Alda Gísladóttir, Karen Milek, Magnús Á. Sigurgeirsson, Oscar Aldred, Thomas McGovern, Uggi Ævarsson, Véroniques Forbes. Reykjavík: Fornleifastofnun Íslands.

Milek, Karen (ritstj./ed.) (2008) *Vatnsfjörður 2007: Framvinduskýrslur / Interim Reports.* (FS383-03097). Höfundar efnis / Contributing authors: Albína Pálsdóttir, Astrid Daxböck, Brian Damiata, Christopher Caseldine, Dawn Elise Mooney, Douglas Bolender, Elín Ósk Hreiðarsdóttir, Garðar Guðmundsson, Gavin Lucas, Guðrún Alda Gísladóttir, Jeremy Lloyd, Karen Milek, Konrad Śmiarowski, Krissy Larkin, Marjorie Gorsline, Oscar Aldred, Peter Langdon, Ramona Harrison, Thomas McGovern, Todd Kristensen, Uggi Ævarsson, Véronique Forbes. Reykjavík: Fornleifastofnun Íslands.

Milek, Karen (ritstj./ed.) (2009) *Vatnsfjörður 2008: Framvinduskýrslur / Interim Reports.* (FS426-03098). Höfundar efnis / Contributing authors: Astrid Daxböck, Céline Dupont-Hébert, Dawn Elise Mooney, Elín Ósk Hreiðarsdóttir, Garðar Guðmundsson, Gavin Lucas, Guðrún Alda Gísladóttir, Ian A. Simpson, Karen Milek, Konrad Śmiarowski, Oscar Aldred, Poul Baltzer Heide, Ramona Harrison, Simon Parkin, Stuart Morison, Uggi Ævarsson, Véronique Forbes. Reykjavík: Fornleifastofnun Íslands.

Milek, Karen (ritstj./ed.). (2010) *Vatnsfjörður 2009. Framvinduskýrslur / Interim Reports* (FS449-03099). Höfundar efnis / Contributing authors: Céline Dupont-Hébert, Garðar Guðmundsson, Guðrún Alda Gísladóttir, Leszek Gardeła, Łukasz Mikołajczyk Oscar Aldred, Véronique Forbes. Reykjavík: Fornleifastofnun Íslands.

Mooney, Dawn Elise (2008) *Fuel Use in Viking Age Iceland: An Archaeobotanical Approach with Special Reference to the Site of Vatnsfjörður*. MPhil Dissertation, University of Cambridge.

Munro, Kyle (2010) *Micromorphology Study of Viking Age Outbuildings on the Icelandic Farmstead of Vatnsfjörður.* MA dissertation, University of Aberdeen.

Ragnar Edvardsson (2003) *Fornleifarannsókn í Vatnsfirði við Ísafjarðardjúp sumarið 2003* (FS211-03091). Reykjavík: Fornleifastofnun Íslands.

Ragnar Edvardsson (2004) *Fornleifarannsókn í Vatnsfirði við Ísafjarðardjúp sumarið 2004* (FS249-03093). Reykjavík: Fornleifastofnun Íslands.

Ragnar Edvardsson og/and Thomas H McGovern (2005) Archaeological excavations at Vatnsfjörður 2003-04. *Archaeologia Islandica* 4: 16-30.

ERINDI UM VATNSFJÖRÐ
PRESENTATIONS ON VATNSFJÖRÐUR

Aldred, Oscar (2006) *Place to Place: Movement and the Journey through Iceland's Landscape*. Paper presented at The View from Here, a conference of the North Atlantic Biocultural Organisation (NABO), Université Laval, Quebec, Canada. September 2006.

Aldred, Oscar (2008) *An Archaeology of the Interview*. Paper presented at the Theoretical Archaeology Group (TAG), Columbia University, New York, USA., in the session *Gossip, Rumor, Legend, and Lore: Informal, intimate, and important sites of knowledge.* May 2008.

Aldred, Oscar (2008) *An archaeology of movement: seasonality and cycles of transhumance in Iceland.* Paper presented at Joukowsky Institute for Archaeology and the Ancient World, Brown University, USA., Brown Bag series. Nov 2008.

Aldred, Oscar (2009) Archaeologies of landscape. Paper presented at Hugvísinaþing, University of Iceland, in the session *Archaeology: history and philosophy of things*. March 2009.

Aldred, Oscar (2009) *Going along, remembering the way: an archaeology of movement in Iceland.* Paper presented at the Theoretical Archaeology Group (TAG), Stanford University, USA., in the session *Archaeology: the discipline of things*. May 2009.

Aldred, Oscar (2009) *An archaeology of movement*. Paper presented at Archaeology, Masters and Doctoral studies within School of Humanities Day, University of Iceland. Nov 2009.

Aldred, Oscar (2009) *The (im)materiality of movement*. Paper presented at Department of Archaeology, University of Aberdeen, UK., in the *Northern Archaeology Research Seminar Series*. Dec 2009.

Aldred, Oscar (2010) Archaeology and the illusions of mobility. Paper presented at the Theoretical Archaeology Group (TAG), Brown University, USA, in the session *Archaeological Ambulations: Integrative Approaches to Movement*. May 2010.

Aldred, Oscar (2011) *1.e4 e5 2.Nf3 Nf6 (The Russian Game): materialised movements archaeological interventions*. Paper presented at Hugvísinaþing, University of Iceland, in the session *Archaeology: Archetypal Iceland and the Changing Faces of the Past: Silent objects? Material narratives?* March 2011.

Aldred, Oscar (2011) *Mobilizing the past and following its objects: an archaeology of movement in Iceland.* Paper presented at the School of Historical Studies, Newcastle University, UK., in the Monuments and Landscape research strand. June 2011.

Forbes, Veronique (2008) *The Relationship Between Humans and their Environment in NW-Iceland – Archaeoentomological study of the Vatnsfjörður site.* Paper presented at Archaeological Futures: A Research Agenda for the North Atlantic, a conference of

the North Atlantic Biocultural Organization, 29 August-1 September 2008, University of Bradford, UK. Flutt á NABO ráðstefnu í Bradford, Englandi í ágúst 2008.

Forbes, Veronique (2010) *Lifeways and living conditions of 19-20th century Icelandic farmers: Archaeoentomological reconstructions of daily life at Vatnsfjörður, NW-Iceland.* Paper presented to the Association for Environmental Archaeology Conference, March 30-April 1, 2010, University of Aberdeen, Scotland.

Guðrún Alda Gísladóttir (2007) *Kynning Vatnsfjarðarverkefnis / Recent Research at Vatnsfjörður*. Erindi flutt hjá Félagi íslenskra fornleifafræðinga / Paper presented to the Icelandic Archaeological Society.

Guðrún Alda Gísladóttir (2010) *Vatnsfjarðarverkefnið / Research at Vatnsfjörður*. Erindi flutt á námskeiði Fræðslumiðstöðvar Vestfjarða í október 2010. / Presented in a course at Fræðslumiðstöðvar Vestfjarða in October 2010.

Milek, Karen, Garðar Guðmundsson, Guðrún Alda Gísladóttir, Uggi Aevarsson og/and Oscar Aldred (2008) *Recent Research at Vatnsfjörður, Northwest Iceland / Kynning Vatnsfjarðarverkefnis.* Paper presented at Archaeological Futures: A Research Agenda for the North Atlantic, a conference of the North Atlantic Biocultural Organization (NABO), 29 August-1 September 2008, University of Bradford, UK. / Erindi flutt á NABO ráðstefnu í Bradford, Englandi í ágúst 2008.

Mooney, Dawn Elise (2010) An Archaeobotanical Perspective on Fuel Resources in North-West Iceland during the Viking Age. Poster presented to the Association for Environmental Archaeology (EAA) Conference, March 30-April 1, 2010, University of Aberdeen, Scotland.

Mooney, Dawn Elise (2010) Wood Identification in Archaeology: Applications and Methods, with a case study from Vatnsfjörður, north-west Iceland. Presentation to Co-Reach European-Chinese Bioarchaeology Collaboration workshop, January 2010, Chinese Academy of Social Sciences, Beijing, China.

Mooney, Dawn Elise (2010) The Use of Native Wood, Driftwood and Imported Wood in Viking and Medieval Iceland/L'Utilisation du bois indigène, du bois flotté et du bois importé en Islande pendant l'Âge Viking et la Période Médiévale. Poster presentation to Trees and Dynamics conference, October 2010, Université Blaise-Pascal, Clermont-Ferrand, France.

Mooney, Dawn Elise, Trbojevic, Nikola and Bell, Aiden (2011) Firewood in Viking Age Iceland: An Experimental Approach. Presentation to 5th Experimental Archaeology conference, January 2011, University of Reading, UK.

ANNAÐ
PUBLIC OUTREACH

Opinn dagur / Open days

Svokallaður *opinn dagur* hefur verið haldinn í Vatnsfirði sumrin 2007–2010. Hefur þá verið tekið á móti gestum og gangandi, sagt frá rannsókninni og staðháttum.

Open days have been held at Vatnsfjörður every summer from 2007-2010. Visitors have been greeted and walked around the site, and spoken to about the research and local environment and customs.

Vinnuskóla / Work Schools

Tekið hefur verið á móti nemendum vinnuskóla Reykhólasveitar og Súðavíkurhrepps og þeim kynnt starf fornleifafræðinga, svæðið og rannsóknin.

Students from the Reykhólasveit and Súðavíkurhreppur Work Schools have been received at the site, and they were introduced to the archaeologists, the area, and the research being conducted.

EXCAVATIONS IN THE VIKING AGE AREA

Karen Milek
University of Aberdeen

Introduction

2010 was the seventh year of research in the Viking Age Area. After placing two evaluation tranches in this area in 2003, Ragnar Edvardsson had excavated a tenth-century house, or *skáli* (Structure 1), and a later, smaller building, which contained a large cooking pit (Structure 2), in 2004. Eight outbuildings were then excavated in this area between 2005 and 2009: a smithy (Structure 3) with a small storage building next to it (Structure 6), a small building with a stone pavement, which was probably used for storage or for drying fish (Structure 4), a small building with had a grinding stone in it, which might have been a workshop (Structure 5), a poorly preserved building on the slope east of the *skáli*, which might have had a wooden floor (Structure 8), and two square buildings with several phases of stone pavements and organic floor deposits, one of which had been built on top of the other after a period of abandonment, which were probably Viking Age and Medieval animal buildings (Structures 9 and 7). In addition, the outdoor surfaces between these buildings was also excavated, revealing sheet middens, pathways, ephemeral outdoor hearths, and three cooking pits. The 2010 field season saw the excavation of what was believed to be the last remaining Viking Age building on the site, a small pit house (Structure 10) (Figure 1).

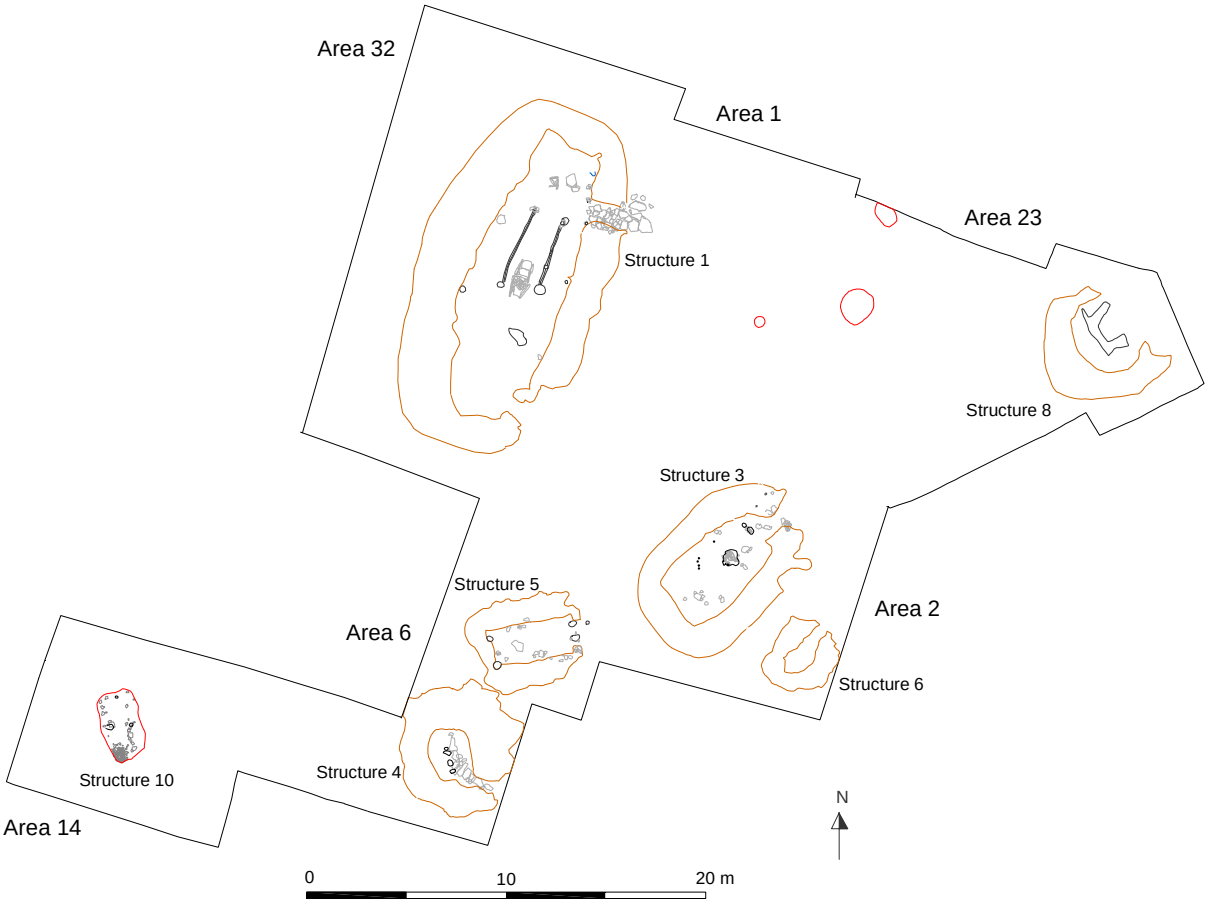


Figure 1. *Plan of the Viking Age area at Vatnsfjörður, showing the buildings (turf walls in brown), structural features such as stones (grey) and post holes (black), and pits (red).*

Excavation Methods

The excavation of the Viking Age Area was directed by the author with the assistance of a team of students attending the Field School in North Atlantic Archaeology. The excavation was conducted entirely by hand using the single context recording system, and followed the guidelines issued by the Institute of Archaeology, Iceland (Lucas 2003). All of the deposits were 25-100% sieved: turf walls were 25% sieved, and all other units were 100% dry sieved with 4 mm mesh, with the exception of midden layers and occupation surfaces, which were 100% recovered for flotation and wet sieving with 1 mm mesh. Due to the gravelly character of the underlying soils, it was unfortunately not possible to take intact blocks for soil micromorphological analysis from Structure 10, and Véronique Forbes determined that there was very little preservation potential for insects in the floors of the building, so archaeoentomology samples were not taken.

Results of the Excavations in Area 14

The Earliest Phase of Structure 9

In 2010, excavations in the Viking Age Area concentrated on the earliest remains associated with Structure 9 and the excavation of Structure 10: a very small, slightly sunken building, which had been discovered at the end of the 2009 field season upon the removal of the main floor layer of Structure 9 (Milek 2010) (Figure 2).

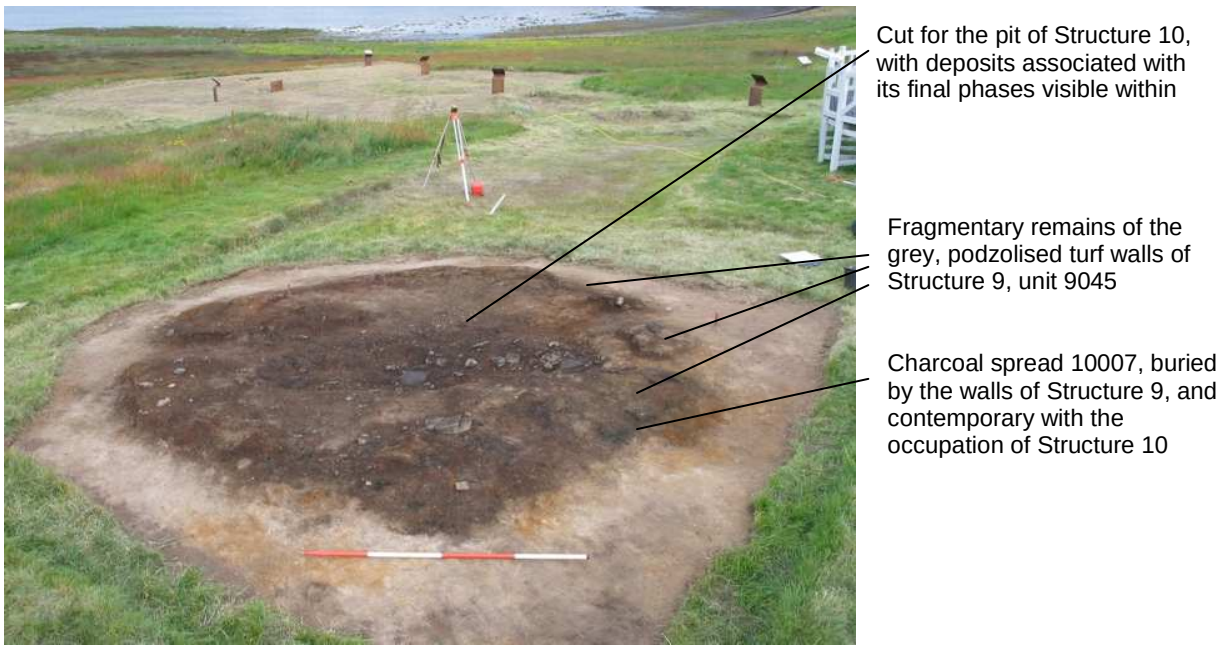


Figure 2. *The fragmentary walls of Structure 9 (grey, podzolised turf) prior to their removal, facing east. Within the walls it is possible to see the cut of the underlying Structure 10 and its dark occupation deposit and associated stones.*

Underneath this very organic floor layer and its associated paving stones, unit 9038, there were a few small flat stones (10001, 1004), which had probably been set there to level or support the larger paving stones above them. There were three small occupation deposits

underneath these flat stones, which lipped up against the eastern and southern walls of Structure 9, units 10002, 10003, and 10005. These were very dark brown with spots of dark reddish brown – organic soils mixed with turf fragments (perhaps as a base to help make the stone pavement even) – but they contained 1-3% small charcoal fragments and a few small, poorly preserved bone fragments as well. On the removal of these final deposits associated with the use of Structure 9, the walls of this building, unit 9045, were fully exposed and could be removed. These walls, which were composed of the same grey, podzolised turf found in all of the other tenth-century buildings on the site, were rather thin and fragmentary, but were best preserved on the eastern side of the building, where they were present to a hight of 10 cm (see Figure 2). While excavating wall 9045, it was noticed that there were some clusters and lines of charcoal – including quite large pieces – in the brown lenses within the turf that represented the fomer A horizon of the soil the turf was cut from. This must have been present in the turf *when it was cut*, which suggests that woodland had been burnt before the turf was cut.

Abandonment Phase of Structure 10

Overlying the layers and features associated with the occupation of Structure 10, there were a few deposits associated with its abandonment. Unit 10009 and unit 10011, which was immediately below it, were very organic silty clay and clayey silt deposits, which lipped up against the western side of the cut for the sunken building. These layers contained abundant inclusions of pebbles and charcoal that appeared to have originated from the slumping of the edges of the pit (the charcoal was probably from midden layer 10007, which will be discussed further below). Units 10012 and 10014 were stoney layers associated with the collapse of the oven in the southwest corner of the building. The uppermost of these, unit 10012, contained a large flat slab that must have served as the lintel stone or one of the side slabs of the hearth, as well as many rounded cobbles, frequently fire-blackened, which were embedded in a very peaty/organic dark brown clayey silt (Figure 3). Underlying unit 10012 was 10014, another layer of disturbed and more widely scattered hearth stones and heated, fire-blackened cobbles. The fact that these abandonment / collapse deposits were restricted to the western edge of the building, and were surprisingly few, suggests that the building may have been rapidly closed and built over by the animal building, Structure 9.

***Figure 3**. Unit 10012, the uppermost layer of stones associated with the collapsed hearth in Structure 10, facing south. The edge of the cut for the pit house can clearly be seen, with the original thin podzol that was the tenth-century ground surface (thin brown A horizon, overlying a grey elluviated E horizon, overlying a reddish, iron oxid- rich B horizon), overlying beach pebbles.*

Occupation Phases of Structure 10

Structure 10 contained two main occupation phases, each associated with a different floor layer and a different layout of features. The hearth, which was present for both occupation phases, had been badly disturbed when the building was abandoned. It was composed of many flat stones, some of which had been layed on their edge up against the cut of the building in its southwest corner, where they helped to prevent the collapse of the gravels into which the pit for the building had been cut (unit 10018, Figure 4). These disturbed hearth stones were associated with wood ash and charcoal, which contained some calcined bone and shell fragments, and spread from the southwest corner of the building towards its centre. This ash layer butted up against a very compact, trampled turf layer, which appears to have been placed on the floor of the building in order to infill a slight depression (unit 10020). This trampled turf deposit was just slightly overlapped by an extensive, gravelly, organic-rich occupation deposit that covered the northern half and eastern half of Structure 10 (where it was clearly part of a raised platform), which suggests that organic matter accumulated on these parts of the floor during the occupation of the building (unit 10022; Figure 5). This layer, which had many flat stones on it that must have served as post pads, contained a few bone fragments, as well as as stone weight – probably a loom weight (F-8; see Gísladóttir, this report). This gravelly occupation layer slightly overlapped the main floor deposit associated with this later phase of the building, unit 10024, which varied in thickness from 0.5-4 cm, was very compact, and very black, being composed of very finely comminuted charcoal fragments, as well as minute fragments of poorly preserved burnt and unburnt bones (Figure 5). This black floor layer was contemporary with (and had a diffuse boundary with) the soft black and light grey wood ash (unit 10027) that filled the stoney base of the corner oven, unit 2028.

Figure 4. *The disturbed hearth with its associated wood ash and charcoal deposit, unit 10018, facing south.*

The black floor layer 10024 was bounded on its north, south and east sides by a low platform, around 15 cm thick, which was constructed of gravel with flat stones on it (unit 10029; see Figure 6). The flat stones were organised in a clear line along the western edge of the platform in the eastern half of the building, serving to strengthen the edge and maintain it at right angles to the floor. Like the mixed gravel and organic silt occupation layer that accumulated on top of it (unit 10022), this platform contained a stone weight, which was probably a loom weight (F-9). There was some overlap in the flat stones on the

western edge of the platform; the lowermost stones were recorded separately and given the unit number 10030, although they were still embedded in the gravelly deposit 10029.

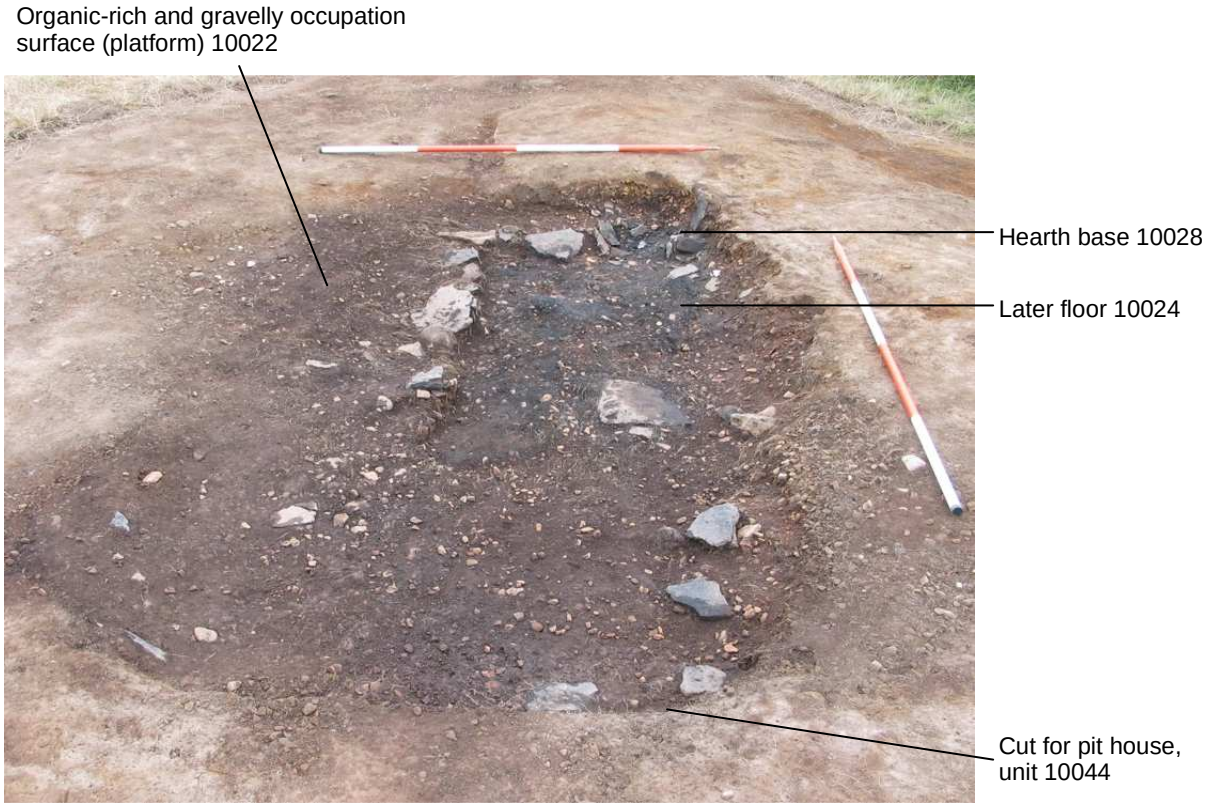


Figure 5. *The later occupation phase of Structure 10, facing south, showing the layed gravelly, organic-rich platform on the east and north sides of the building (10029), the post pads, and the black, charcoal-rich floor layer (10024) associated with the ash in the hearth, 10027.*

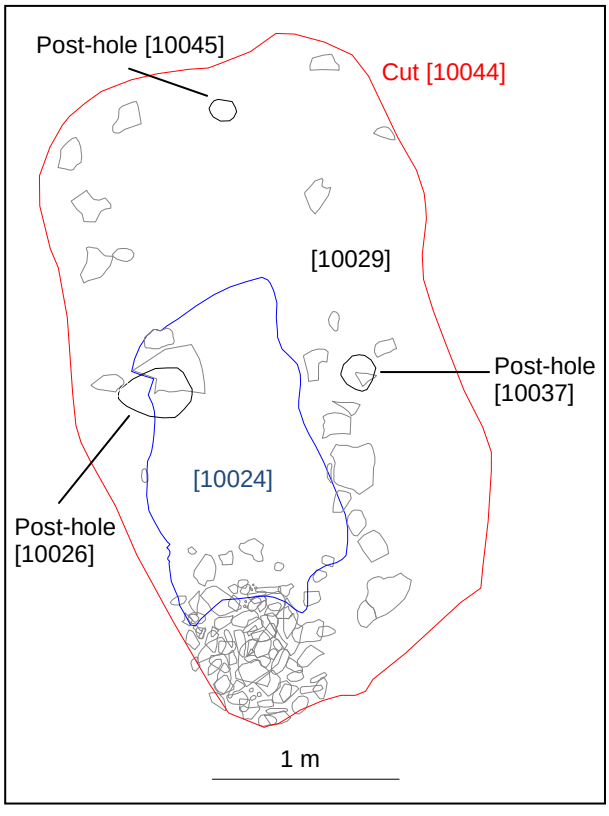


Figure 6. *Plan of Structure 10, showing the original cut of the pit (unit 10044, in red), the extent of the later floor layer, unit 10024 (in blue), which lipped up against the low gravel platform, 10027, and the relationship between the earlier post-holes and the later post pads. The disturbed hearth stones form a cluster in the southwest corner of the building (north is up).*

Upon the removal of the gravel platform, two small, 1 cm-thick patches of black, charcoal-rich, compacted floor layers were found (units 10031 and 10032), which clearly pre-dated the construction of the gravel platform and must therefore belong to an earlier phase of the building. This makes it possible (even likely) that the lowermost few millimeters of floor 10024 actually belonged to this earlier occupation phase, though the central black floor deposits had been completely excavated away when units 10031 and 10032 were found. Below unit 10032 was a more extensive, very dark brown, organic-rich and gravelly occupation layer, unit 10033, which contained another probable loom weight, find 11, which had been nicely shaped from a green Rhyolitic tuff (Gísladóttir, this report; see Figure 7).

Figure 7. *Find 11, a stone weight carved from a green Rhyolitic tuff ,* in situ *in the earliest occupation layer in Structure 10, unit 10033 (facing west).*

At the base of the pit house, cut into the floor, were a number of post-holes (units 10026, 10037, 10039, and 10045) from which the posts had been removed. The depressions from these replaced posts had subsequently been sealed by the occupation layers and platforms already described (10033, 10024) or by small levelling layers subsequently used as occupation surfaces (units 10035 and 10043), one of which contained an iron punch that may have been used for tasks such as working leather (F-12). In the later phase of the building all the posts were set on post pads; Figure 6 illustrates the relationship between some of these earlier-phase post holes and the later post pads. The original cut for the building which was only 30 cm deep, had rounded corners and was 2 m wide by 3.45 m long.

Discussion

The shape and size, the sunken character of Structure 10, its timber construction (without turf walls) and the oven in one corner, place it within the category of structures known as pit houses, which are common on Viking Age farmsteads in Iceland. This one is on the smaller and shallower end of the spectrum, but is nevertheless within the range found on other sites (Milek forthcoming). There were only four artefacts found in Structure 10 – three stone weights that were probably loom weights, and an iron punch that was probably used for tooling leather – suggesting that this small building, like other pit houses, was used as a small workshop, and included textile production. The floor deposits, which were composed predominantly of compacted and finely comminuted charcoal, also contained

very small calcined bone fragments, which suggests that food had been consumed in the building, and that the bones had been tossed into the fire, only to spread about again with the fuel ash residues – either deliberately, or accidentally, during the cleaning/rake out of the oven. The reason for the consistent use of ovens rather than open hearths in pit houses is not known, but it has been suggested that these might have been the ideal fire installations when only radiating heat was needed, and when it was important to guard against flying sparks, such as might have been the case in a textile workshop (Milek forthcoming). It is likely that this small building was predominantly used by women.

References

Lucas, Gavin (ed.) (2003) *Archaeological Field Manual, 3rd edition*. Reykjavik: Fornleifastofnun Íslands.

Milek, Karen (2010) Excavations in the Viking Age Area. In K. Milek (ed.), *Vatnsfjörður 2009:Framvinduskýrslur / Interim Reports*. Reykjavik: Fornleifastofnun Íslands, pp. 51-64.

Milek, Karen (forthcoming in 2012) Pit houses in Viking Age Iceland: interdisciplinary evidence for the role of the *jarðhús* in early Icelandic households. *Medieval Archaeology*.

EXCAVATIONS IN THE FARM MOUND AREA

Oddgeir Isaksen
Fornleifastofnun Íslands

Introduction

The fifth field season on the Vatnsfjörður farm mound lasted from the 26th of July to the 20th of August 2010. In 2009 emphasis had been on excavating post abandonment deposits which filled rooms and corridors which had been revealed during the 2008 field season. The 2008 season had mostly been dedicated to the removal of demolition deposits created by a late 20th century levelling of the home field and farm mound (see Guðrún Alda Gísladóttir in Milek 2010, 66-77). By the end of the 2009 season most of the excavation area could be divided into separate areas, defined by different rooms and corridors (see Figure 1 below), some of which had thick floor deposits that were mostly left to be excavated in 2010.

With demolition deposits and post abandonment deposits out of the way, the goal of the 2010 season was to continue work on those rooms as well as extending the excavation area to the west in order to get a clearer view of a large turf and stone wall, aligned north-south that had been uncovered in 2009 and was clearly extending beyond the western limits of excavation. The areas excavated in 2010 are shown in Figure 1 below.

The project managers were Guðrún Alda Gísladóttir and Garðar Guðmundsson, who also supervised the excavations along with the archaeologists Óskar Gísli Sveinbjarnason, and Oddgeir Isaksen, Véronique Forbes and Céline Dupont-Hébert. The excavation was staffed by the students of the 2010 Field School in North Atlantic Archaeology. Post-excavation work was carried out by Oddgeir Isaksen, Guðrún Alda Gísladóttir and Garðar Guðmundsson.

Excavation Methods

The excavation method followed the FSÍ protocol, using "single context planning" the method by which each deposit (feature or layer) is considered an individual event (unit) in the creation of an archaeological site. Each unit is recorded, planned, elevations taken and photographed as well as being given a textual description. Each unit is given a number from a running numbering sequence that is unique within the research area. Thus there is one numbering system used for all deposits excavated in the Farm Mound and Viking age areas in Vatnsfjörður. A Harris Matrix is established on site, and refined during the post-excavation phase. Deposits which are found within the same area, structure or are thought to belong to the same phase are given a collective group number to keep track of their relationship. A group number is taken from the same numbering sequence as the units (Lucas, 2003).

In Vatnsfjörður, finds were categorized and labelled on site, washed, dried, packed and registered in the excavation database. Finds were given basic conservation attention if necessary. All bones were collected, bagged and will be sent to the University of Laval for identification and analysis. Bulk soil samples were taken for archaeoentomological and botanical analyses, and undistrubed blocks were taken for micormorphological analyis, most of which are still awaiting analyses at this stage.

Figure 1. *An overview of the excavation area on the Vatnsfjörður farm mound, showing major context groups.*

The Excavations

Group 10662

Group (10662) contains several phases of a structure excavated at the northern part of the farm mound research area. Excavations in 2008 of various demolition deposits from the 20th century levelling of the farm mound had revealed a complex area of walls and blockings framed by the external walls of a primary structure. This seemed to have gone through various changes, such as a reduction in size during the course of its use (Gísladóttir in Milek 2010, 74).

Excavations in 2009 confirmed that by the last phase of use (group 9530), the primary structure (22.5m²) had been reduced by half. By this phase the structure was most likely being used as a dwelling for animals (Gísladóttir in Milek 2010, 74-75).

Figure 2. *Structure (10662) at the end of the 2008 field season. Facing north-east.*

Figure 3. *Structure (10662) at the end of the 2009 field season. Facing north-east.*

The 2010 excavations revealed three more phases of the structure (subgroups 9650, 10663, 10664), defined by minor changes such as additions to walls and blockings, the latest being group (9650) and the earliest group (10664). The 2010 excavations also established that the structure could in all likelihood be dated to late 17th-or early 18th century. The south-east corner if this structure had been truncated by an early 20th century vegetable garden, group 8590, referred to in the 2009 report as the "middle area" (Gísladóttir in Milek 2010,72-73. See also discussion on group 8590, below).

Group (9650)

Group (9650) contains deposits belonging to the second-latest phase of structure (10662) and is defined by a turf blocking, unit [10509], which partially sealed its north entrance.

Associated with turf blocking [10509] was one dark floor deposit, up to 25 cm thick, (unit [9633]), excavated in 2009. This covered most of the interior of the structure. This floor deposit was heavily organic and seemed to be composed of animal waste and remains of hay and contained pieces of bones, wood and textiles. The organic nature of the floor was the main reason for the 2009 assumption that the structure was the remains of sort of dwelling for animals. Immediately under floor [9633], concentrated in the north-west and north-east corner of the structure, were two levelling deposits, [10505] and [10507], both composed of turf and stone. It is possible that these deposits were the foundations for wooden structures, possibly mangers.

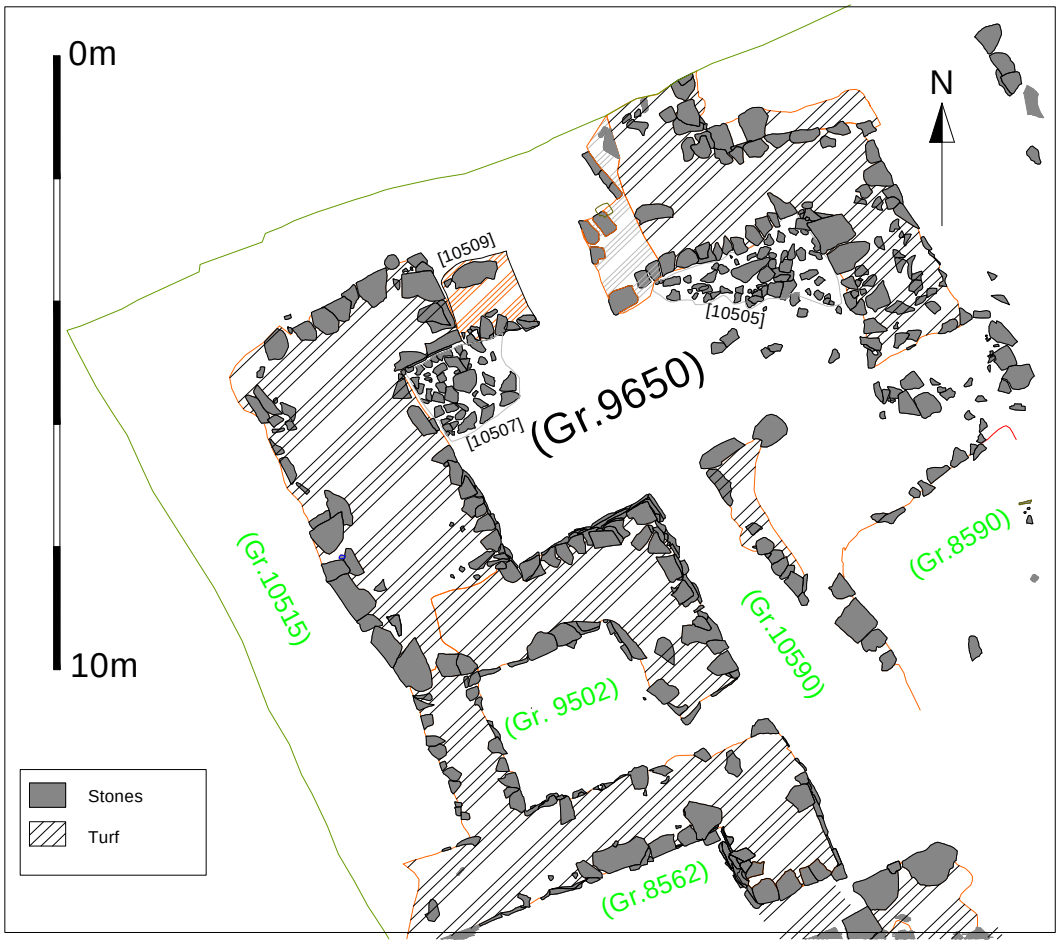


Figure 4. *A simplified drawing of phase (9650) of structure (10662).*

The half blocked north entrance of the structure led to a front room covered with three firm levelling or floor deposits that were clearly associated with blocking [10509] (in chronological order youngest - oldest: [10504], [10506], [10512]). All of these deposits were composed of large stones and turf, but were heavily mixed with charcoal which might indicate the proximity to a hearth. In the earliest of these, deposit [10506], a sherd of 17th century pottery was recovered, and furthermore when turf blocking [10509] was removed, the bowl of a 17th century clay pipe was found at its base, an indication that the structure could be dated to that period. Excavations in the north-west corner of the research area confirmed this, when it became clear that the western wall of structure [10662] was sealed by the *in situ* tephra from the 1693 eruption in Mount Hekla in southern Iceland (see group

10515 below).

Group 10663

Group (10663) contains the next phase below group (9650) and is defined by a block of turf and stone, unit [10606] sitting up against the east side of the north entrance of structure (10662) and overlying deposits.

Immediately under turf blocking [10509] in group (9650) was a thick (up to 20 cm) floor deposit, unit [10510] which covered most of the interior of the structure. This floor

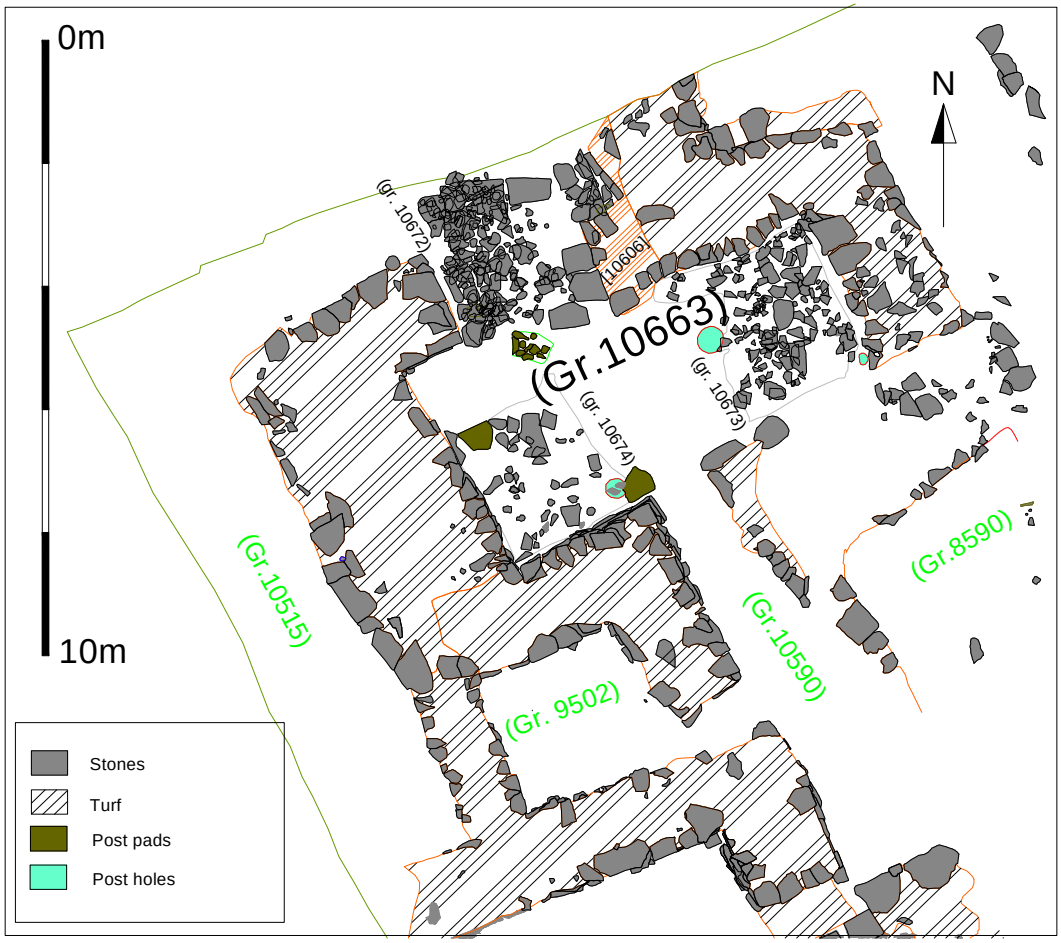


Figure 5. *A simplified drawing of phase (10663) of structure (10662).*

was mainly composed of sandy turf, probably put down to level the interior. In the southern part of the structure the turf contained lenses of wood ash, with frequent inclusions of fragments mostly fish bone. Also found in this deposit were two 17th century clay pipe bowls, a few sherds of 17th century pottery, frequent fragments of textile, a spindle whorl, a fish hammer, and a single button made of wood.

Immediately under deposit [10510], extending through the northern doorway and into the "front room" mentioned above, was a sequence of deposits (in chronological order youngest-oldest: [10525], [10576], [10593], [10603] and [10614]). These were made of turf and stones, and formed a coarsely made pavement, group (10672). These deposits

contained similar finds as were found in deposit [10510], 17th -18th century pottery, 17th century clay pipe bowls of which one was decorated as well as fragments of bones, leather and animal hair.

Concentrated at the eastern end of the main structure, immediately under [10510], was a sequence of deposits (in chronological order youngest-oldest: [10599], [10538], [10584], [10588], [10578], [10594], [10601]) mostly made of stone and turf, but with lenses of ash and organic material. These formed a platform, group (10673), which possibly was the base for an internal structure, possibly a manger. Within these deposits were a few fragments of 17th-18th century pottery and one stem of a 17th century clay pipe.

Concentrated in the south-west corner of the main structure was another similar platform (group 10674) of stone and turf made up of two deposits (in chronological order youngest–oldest: [10532], [10539]). Artefacts found within these deposits were of a similar nature as the ones found elsewhere in the structure. Three postholes, units [10667], [10669] and [10598], and three possible post pads, units [10531], [10665] and [10670] were also excavated within this group (see Figure 5).

Group 10664

Group (10664) is the next phase below group (10663). It is also the oldest phase of structure (10662) excavated in 2010, although not to its completion. At this stage the turf and stone block [10606] had been removed to reveal what looked like the full extent of the original structure.

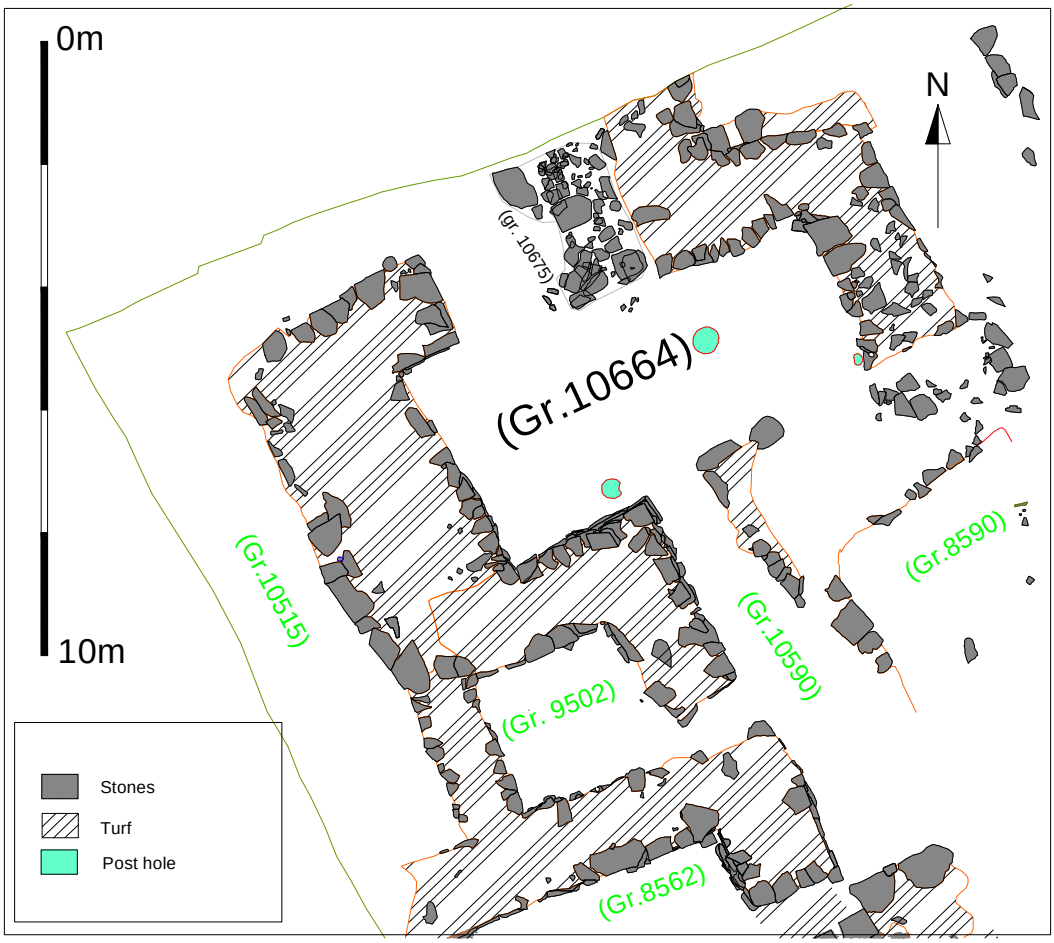


Figure 6. *A simplified drawing of phase (10664) of structure (10662) with platform (10675).*

Eleven deposits belonging to this phase were excavated in the 2010 field season. At this stage all blockings had been removed from the north entrance of the structure revealing one continuous space, or an extension to the main structure (formerly known as the "front room"). This extension was about 3 m wide and seems to continue beyond the northern limits of the excavation area. Concentrated up against the east side of the extension was a sequence of seven deposits (in chronological order youngest – oldest: [10611], [10622], [10627], [10635], [10639], [10645], [10649] and [10653]. Those deposits were mostly composed of turf and stone, and formed a low platform, group (10675), which possibly served as the foundation for an internal structure, although it is also possible that it simply was a coarsely made pavement.

Two dark floor deposits (in chronological order youngest – oldest: [10613], [10630]), separated only by a small lens of clean turf, unit [10624], were excavated in the central part of the main structure. Both were up to 4 cm thick, extremely firm and made of brownish grey turf material, probably laid down to level the surface of the structure. Both these deposits contained fragments of wood, as well as pottery sherds and glass fragments, which have yet to be analysed.

The removal of the deposits excavated so far in group (10664) revealed a number of features which will be excavated during the 2011 field season. This includes, among other things, a possible hearth in the eastern part of the main structure; what seems to be a sub-circular negative feature lined with stones in the east side of the north extension to the main structure as well as further postholes and possible foundations for internal structures.

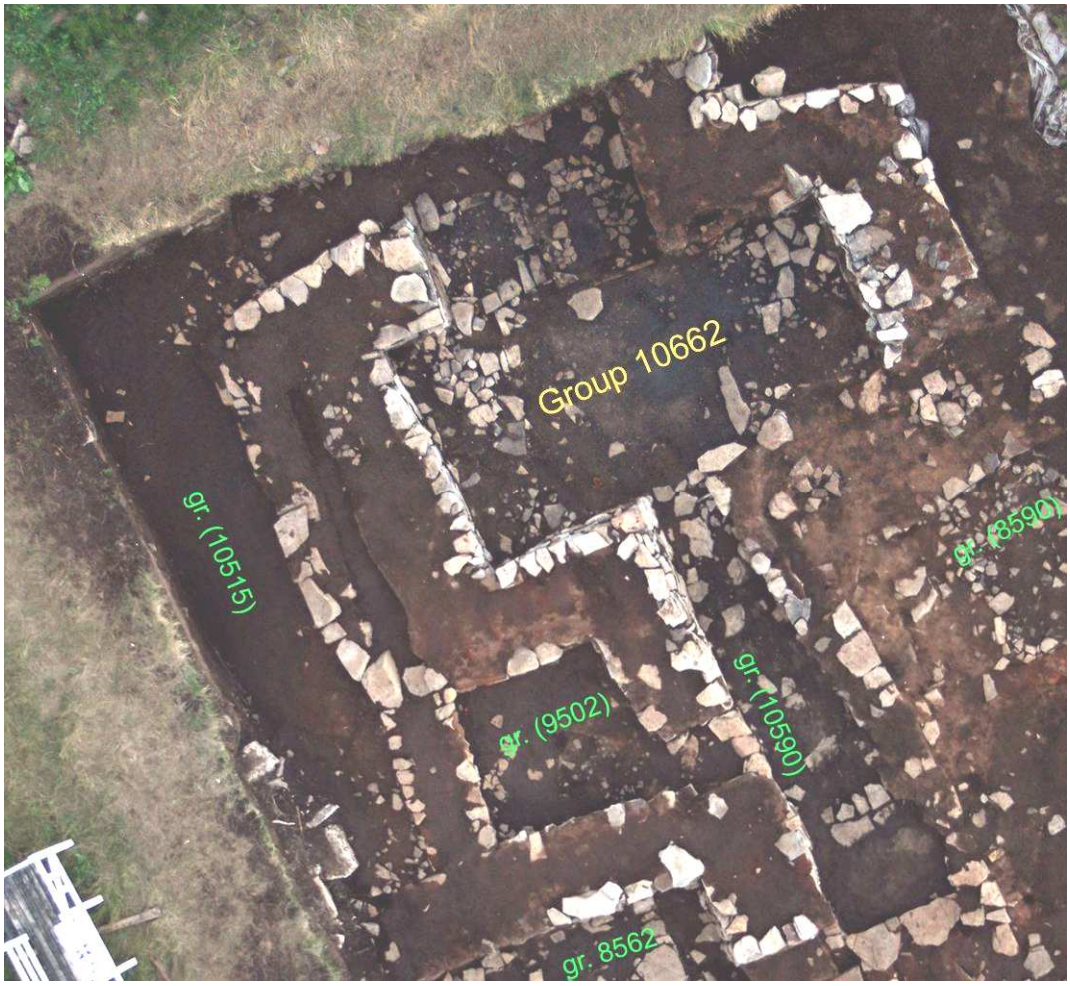


Figure 7. *An overview of structure (10662) at the end of the 2010 season.*

Group 10515

In 2010 the decision was made to extend the excavation area further to the west in order to get a clearer view of the north-south running wall remains uncovered in 2009 which were clearly running beyond the western limits of the excavation. Group (10515) contains deposits excavated in this extension area that was around 0.4 m wide at the south end and 3.3 m wide at the south end.

The removal of turf and topsoil revealed a thick post abandonment deposit possibly deposited during the 20th century levelling of the farm mound (unit [10501]). This

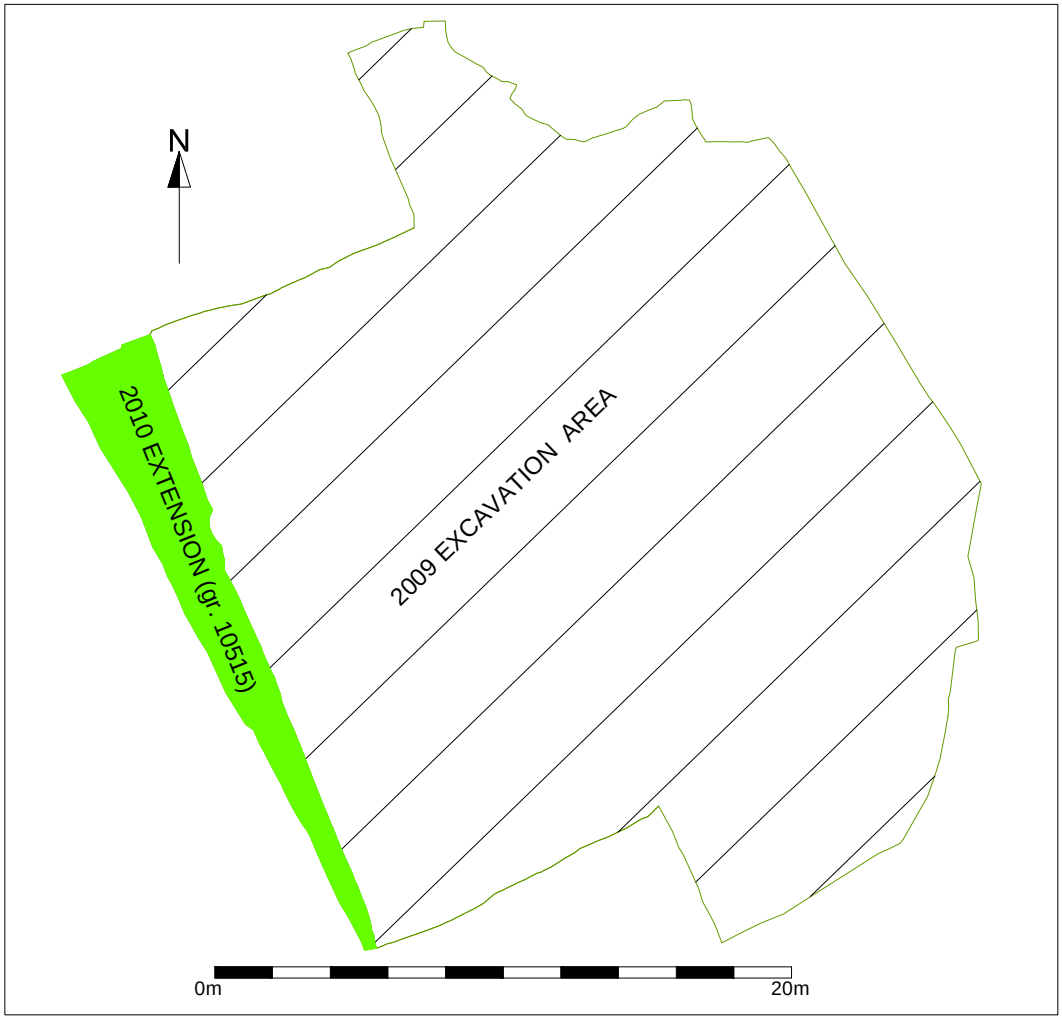


Figure 8. *A drawing showing extension area (10515).*

consisted of mixed material and covered the full extent of the new excavation area. The deposit was between 0.3-1 m thick, a mixture of sandy silt, turf debris and gravel, and contained, among other things, a number of bone fragments, as well as one bowl of 17th century clay pipe and one sherd of 19th century pottery.

With the removal of deposit [10501], a sequence of structural collapse deposits ([10514], [10523], [10521], [10529] and [10527]) was revealed. These covered the northern part of the new area and were mostly made of turf, but also contained bits of structural timbers and rocks. Also found within these were a few 17th-18th century pottery

sherds, a possible indication of the age of the deposits.

The removal of the aforementioned collapse deposits revealed a hearth (subgroup 10540) in the north-east corner of the new area. Spilling from it to the south was a soft deposit (unit [10533]) of wood ash and charcoal, up to 10 cm thick. The hearth, which was up to 25 cm deep, was only partially excavated since it extended beyond the western and northern limits of the excavation. It was filled with a mixture of wood ash, peat ash and charcoal, as well as a few small rocks (two units in chronological order youngest-oldest: [10534] and [10562]). It appeared to be sub-circular in shape, but with irregular sides gradually sloping to the centre. The cut for the hearth was about 15 cm deep and had a cluster of eight small postholes in its centre (units [10553], [10555], [10557], [10561], [10669], [10573], [10575] and [10621]) as well as five more along its edge (units [10545], [10565], [10567], [10569] and [10571]), suggesting that the hearth had some sort of a framework built over it.

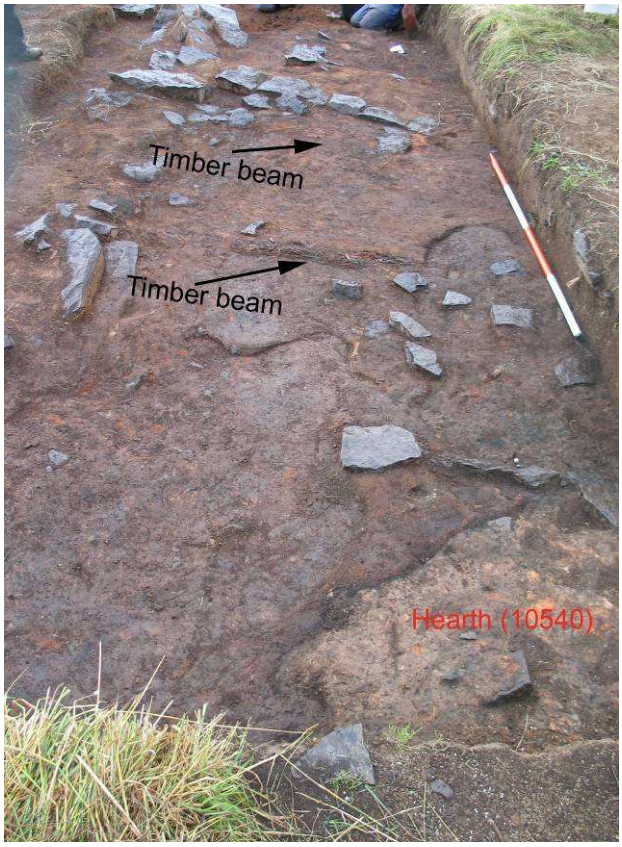


Figure 9. *Turf collapse deposits in area (10515). Facing south.*

Around the edge of the hearth pit was a turf deposit, up to 15 cm high (unit [10542]), probably to prevent burning material spilling out of it.

As mentioned above, the main reason for extending the excavation area had been to get a clearer view of the turf wall, running north-south that had been partially uncovered in

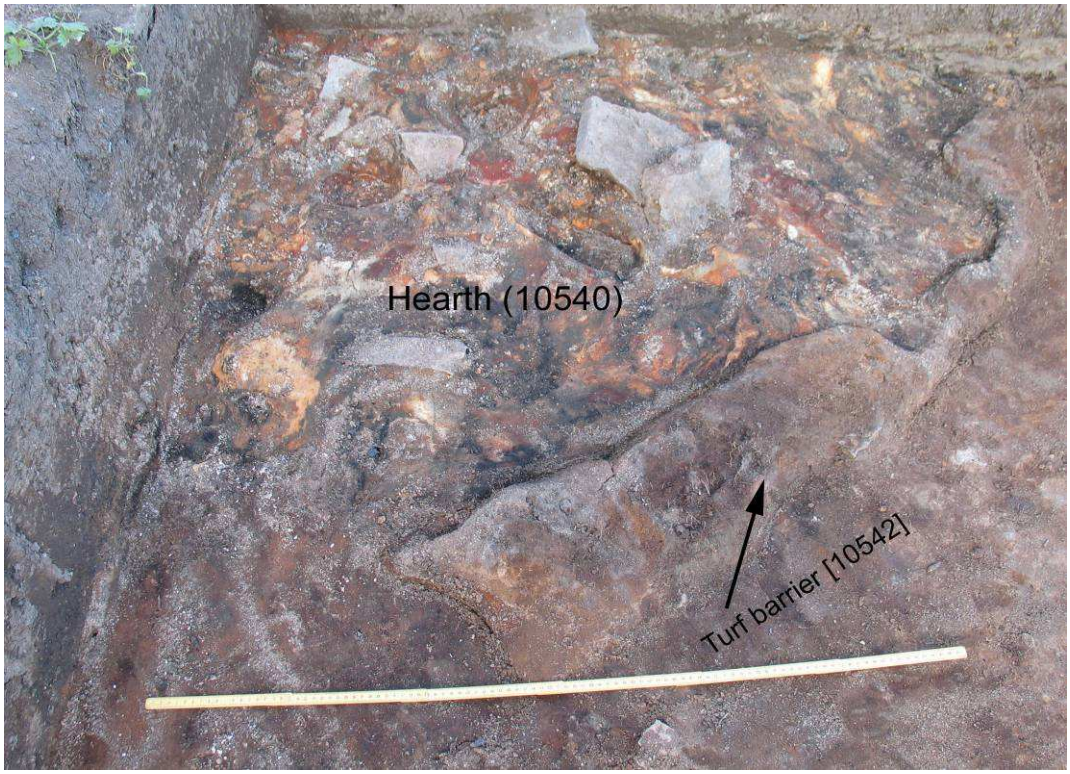


Figure 10. *Hearth (10540). Facing north*

2009. The removal of the aforementioned post-abandonment deposits had revealed the full width of the wall, running a long the eastern edge of the new area. The wall was up to three metres thick, which suggests that it was an external wall. Hearth (10540) was therefore in all likelihood external, which is also supported by the absence of floor deposits associated with it.

The removal of the collapse deposits, mentioned above, also revealed the base of a turf and stone wall, subgroup (10549), composed of a turf core (*strengur*), unit [10548], with a stone facing, unit [10547], on either side. The wall, which appeared to be contemporary with hearth (10540), ran east-west from the aforementioned external wall, about 4 m from the northern limits of excavation and extended beyond the western limits of the excavation area.

Figure 11. *An overview of extension area (10515) showing hearth (10540) and wall (10549). Facing north.*

Wall (10549) was around 5 cm high composed of a stone lining on the outside (flat side out) and turf on the inside possibly *strengur*.

Directly under the western end of wall (10549) was a small, 20 cm thick sheet midden deposit, unit [10608], rich in fish bones but also containing pieces of glass iron and wood. This extended beyond the western limits of the excavation area. Also immediately under the eastern half of wall (10549), extending all the way to the northern limits of the excavation, was a sequence of three turf collapse deposits (in chronological order youngest – oldest: [10580], [10604], and [10628]). The turf contained flecks of the H~1693 tephra and therefore postdates it. Two of these deposits, units, [10580] and [10628] were 1-15 cm thick and thickest along a large wall of turf and rock which runs along the eastern part of the extension area framed by group (10515). Deposit [10604] on the other hand, was 1-30 cm thick, thickest towards the north-west corner of the excavation area.

Under deposit [10604], running from the north-west corner of the excavation area, along its northern limits, was a soft deposit, unit [10618], up to 13 cm thick. This was composed of wood ash and peat ash with charcoal and wood fragment inclusions, possibly a sheet midden. Deposit [10618] was sitting right on top of extensive turf collapse, unit [10641] which extended across the width of the new extension from the northern limits of excavation to about 6 m to the south. Deposit [10641] was up to 25 cm thick and contained one sherd of 19th-20th century pottery, possibly a contamination from younger deposits or an indicator of an unknown later disturbance.

Deposit [10641] was sitting directly on top of the H~1693 tephra (unit [10661]) which extended across the width of the extension area, from the northern limit of excavation to about 10 m to the south. The tephra was not excavated in 2010 but was clearly overlying a 3 m thick wall of turf and stone that makes up the western wall of structure (10662) (see above) and structure (9502) (see below).

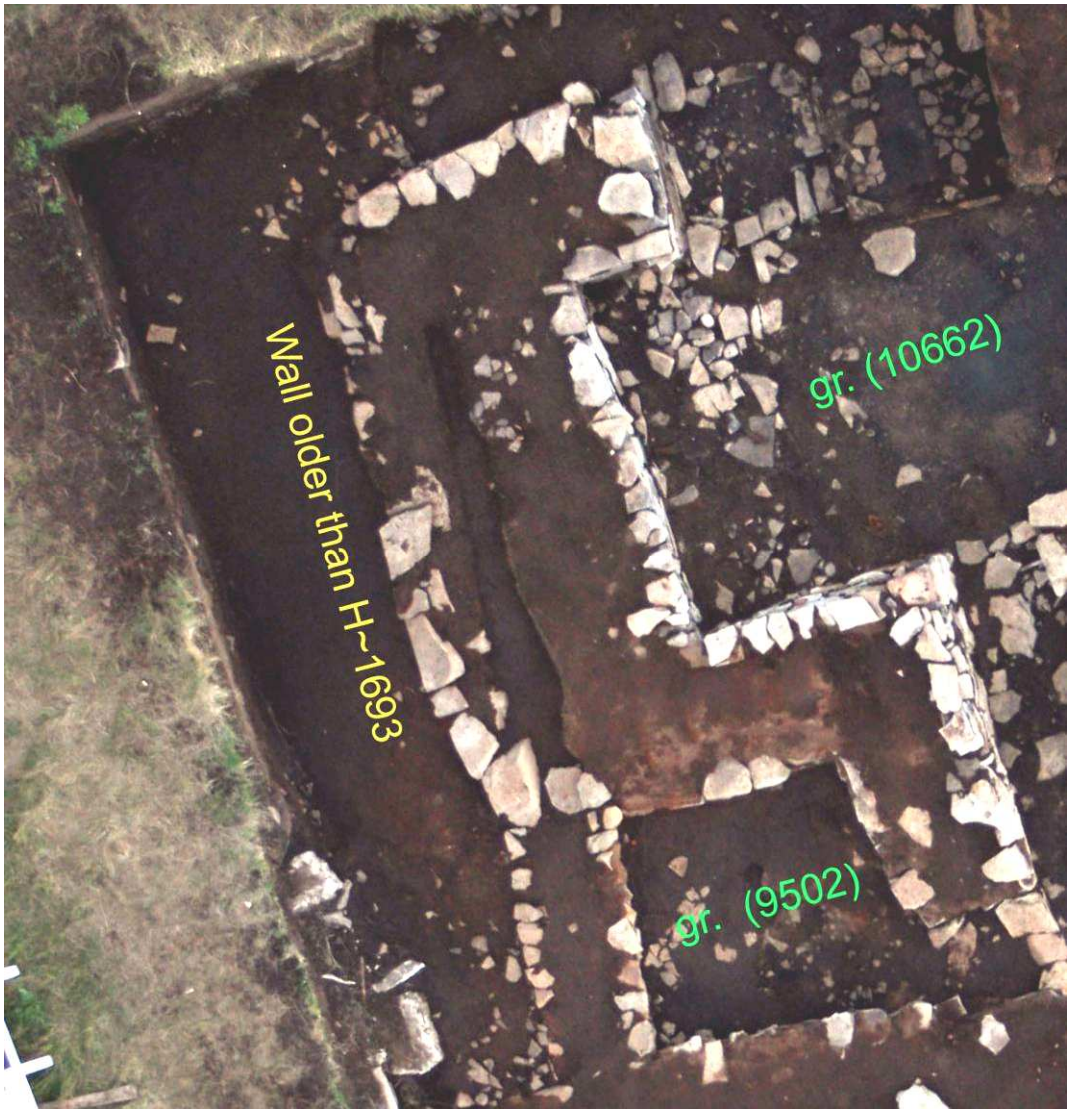


Figure 12. *An overview of the wall predating the H~1693 tephra*

Group 9502

Group (9502) contains deposits belonging to the northern most of the two adjacent rooms south of structure (10662), close to the western limits of the excavation area. This room was 2.5 x 2.5 m in size (internally), with a doorway in the south-west corner connecting it to corridor (10590) (see below). It was mostly excavated in 2009 down to a floor deposit, unit [9619] which was clearly running under the southern wall that separates it from room (8562) (see below). This led to the conclusion that the rooms were parts of a larger structure, which was divided at some point to create two separate rooms (Gísladóttir in Milek 2010, 70-71).

In 2010, only two deposits were excavated in room (9502), a stone platform, unit [10634] possibly the foundations for an internal structure, sitting up against the northern wall, and under that a small deposit of turf collapse, unit [10640]. At this stage it has not been established if the platform belongs to the latest phase of the structure or to the phase before the wall separating rooms (9502) and (8562) was constructed.

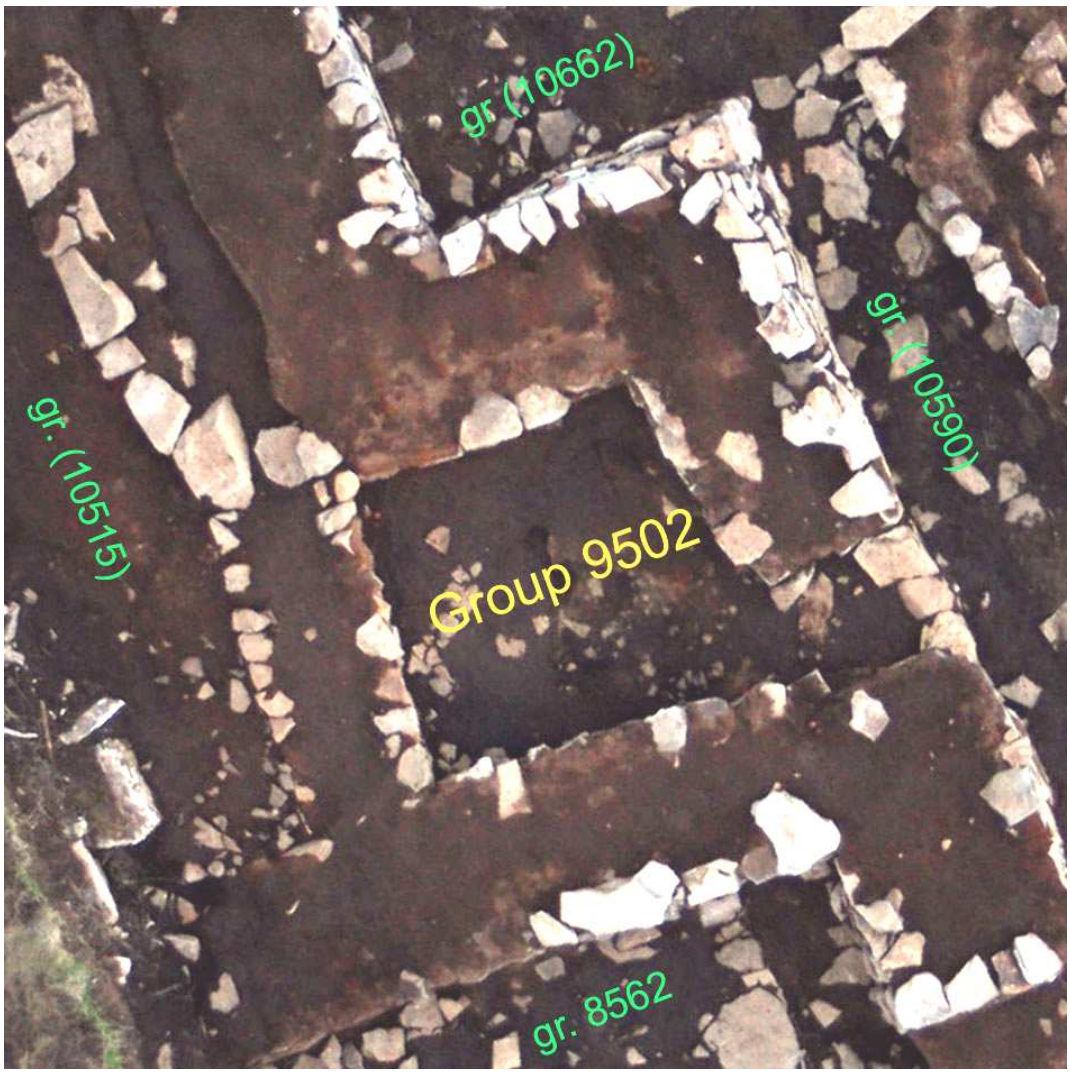


Figure 13. *An overview of structure (9502)*

As for the function of the room, it is still unknown but it is hoped that the analysis of the entomological and micromorphology samples taken from floor deposits in 2009 will shed some light on this matter.

Figure 14. *Structure (9502) with platform [10634]. Facing east.*

Group 8562

Group (8562) contains deposits excavated within a room south of and adjacent to room (9502) which was badly disturbed by the foundations of a house built in 1906 (see figure 15 below). In 2009 this room was referred to as the "Midden room" since it contained a sequence of midden deposits, quite rich in animal bones, which were sitting on top of a sequence of turf collapse deposits. It was therefore concluded that the room was used as a waste dump after its abandonment. The collapse deposits were sitting directly on top of a platform made of turf and flat stones, units [9597] and [9598] in the north-east corner of the room and a possible floor deposit, unit [9602] mostly composed of turf but with flat stones. The removal of deposit [9602] marked the end of the 2009 excavations in this area.

In 2010 the area was extended to the west (see also above) which revealed the rooms full extent in that direction. Excavations continued with the removal of yet another midden deposit, unit [10518], and a sequence of six turf and stone deposits (in chronological order youngest – oldest:, [10541], [10579], [10587], [10596], [10592] and [10602]) which were mostly concentrated along the northern wall, and seemed to be a part of the same platform as deposits [9597] and [9598]. The removal of deposit [10587] in the west half of the structure also revealed a shallow pit, unit [10615], about 10 cm deep which was filled with a mix of clay, silt, turf debris and charcoal (unit [10600]). Within this deposit were also fragments of wood, small stones and one bowl of a 17th century clay pipe.

The removal of deposit [10602], the earliest and the easternmost of the deposits along the northern wall, revealed a sequence of four soft deposits (in chronological order youngest – oldest: [10595], [10609], [10617], [10625], and [10632]), all up to 5 cm thick, that were spreading into the centre of the room. These were composed of turf and silt, but

Figure 15. *An overview of structure (8562).*

contained inclusions of large quantities of bones as well as charcoal, possible midden deposits.

The removal of the earliest of those deposits, unit [10632] marked the end of

excavations in the room since at that point it was discovered that the room was running under deposits in area (10671) (see below) to the south and therefore further excavations were abandoned.

Group 10671

Group (10671) contains deposits belonging to a badly disturbed area or a room south from and partially overlying room (8562), referred to as the "kitchen", group (8563), where a large hearth had been found in 2009 (Gísladóttir in Milek 2010, 71-72). Due to extensive disturbance caused by the 1906 foundations (see figure 16) and the levelling of the farm mound, the interpretation of this part of the excavation remains problematic. This will hopefully be resolved during the 2011 season. The hearth in the "kitchen", excavated in 2009, was sitting up against a badly disturbed wall of turf and stone, units [10528] and [10530], which defined the western edge of this area. The hearth was dug into a sequence of four deposits [units in chronological order youngest – oldest: 9617, 9634, 9635 and 10503] composed of gravel but also mixed with turf debris and peat- and wood ash. As the excavations went on it became clear that the gravel deposits were filling up an earlier structure that the wall seemed to belong to, and eventually a room was revealed that was given the group number (10676).

Group 10676

Room (10676) was made up of two badly disturbed walls (north and west) and one (east) that was relatively well preserved. The western wall, units [10528] and [10530] was entirely missing its western facing, due to the 1906 foundation cut. Its northern half, unit [10528], about 0.7 m in height, seemed to be more or less *in situ* although its was appeared to have been slightly displaced into the room, probably pushed during the digging of the 1906 foundation cut. The southern part of the wall, unit [10530], was in a much poorer state, and seemed to have collapsed towards the west during the digging of the 1906 foundation cut. One sherd of 19th - 20th century pottery was found near the bottom of the wall. The northern wall which ran from the northern end of the western wall, about 5 m to the east towards the disturbance by the 20th century vegetable garden (group 8598, see below), was in a much poorer state than the other two since it had been flattened out probably by the levelling, so very little of it was left *in situ*, which made it difficult to excavate it as a whole. It was therefore excavated in nine parts (in chronological order youngest – oldest: [10524], [10520], [10522], [10650], [10583], [10586], [10589], [10654], and [10660]), group (10582). The eastern wall was not excavated in 2010 and has therefore not been given a unit number. It appeared to be older than the other two and much better preserved. It was about 1.7 m wide and up to 15 cm high.

Together these walls made up an 8 m long and 1.7 – 2 m wide room, widest at the northern end.

One levelling deposit, unit [10537], made of turf and stone, about 25 cm thick that seemed to belong to this phase of the room, was excavated but no artefacts were found except a few bones.

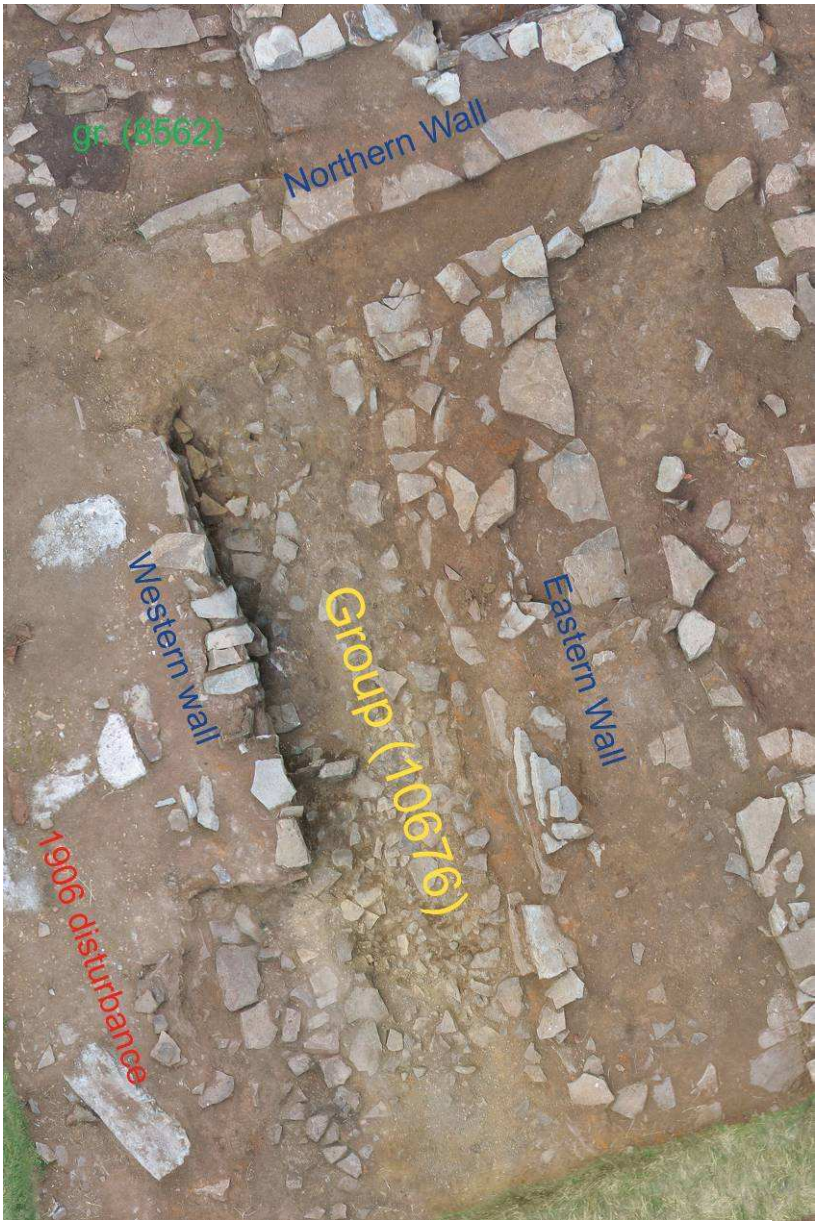


Figure 16. *An overview of room (10676) at the beginning of the 2010 field season.*

After the removal of the western and northern walls, a sequence of mixed deposits of turf, stones and ash (units [10563], [10577], [10536], [10543], [10638], [10546], [10646]) were excavated to reveal a stone pavement which seemed to run under the aforementioned eastern wall.

Although the 2010 excavations seemed to reveal a coherent structure (group 10676) in area (10671) the exact relationship and boundaries between the phases excavated so far and the phase starting to emerge at the end of the 2010 season (the pavement), are still unclear due to the severe disturbance caused by 20th century construction and levelling of the farm mound. Hopefully excavations in 2011 will shed some light on this.

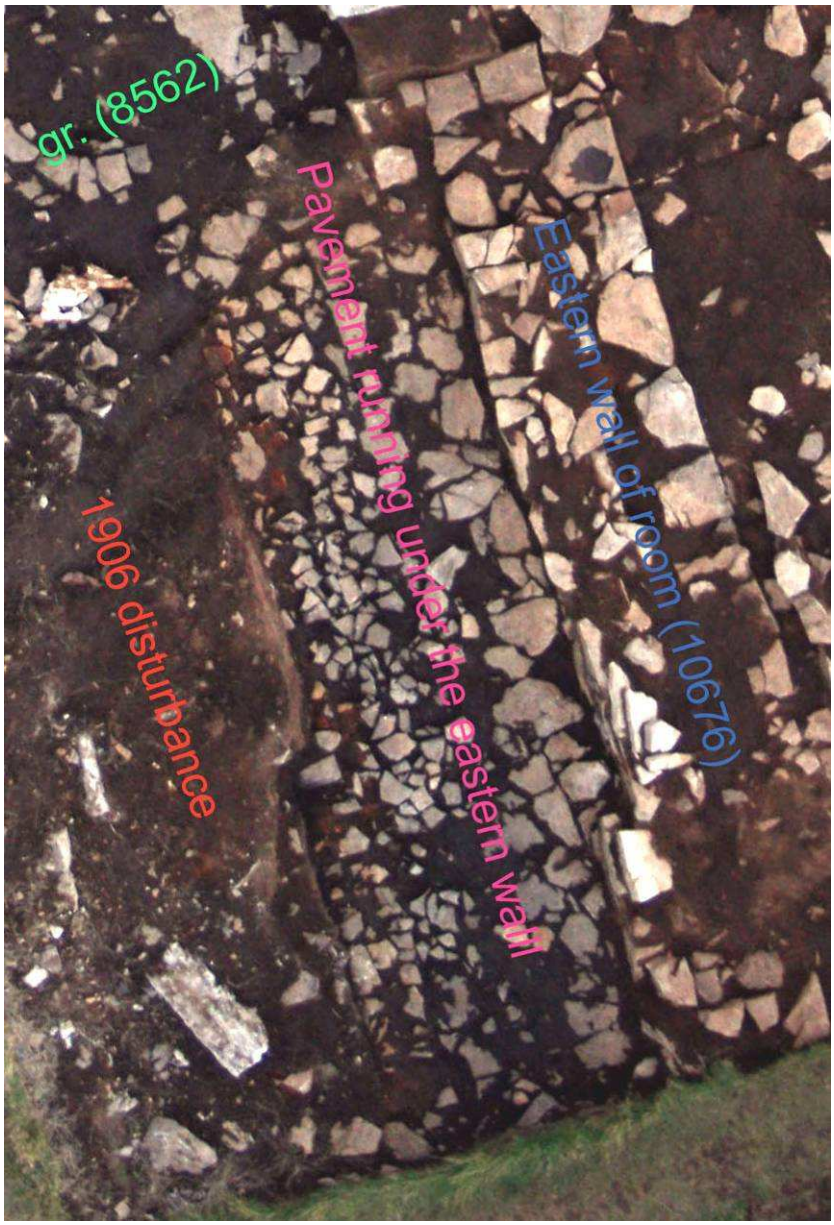


Figure 17. *An overview of area (10671) at the end of the 2010 field season.*

Group 10590

Group (10590) is a 7m long and 1 m wide corridor running south from structure (10662). It seems to be associated with that structure and room (9502) although the precise nature of that relationship yet to be determined. It was uncovered in 2009 by the removal of a number of collapse- and midden deposits filling which filled the corridor, which exposed a compacted dark grey deposit, rich in fish bones, which was believed to be a floor but was left unexcavated at the end of the 2009 season.

In 2010 it was established that this deposit, unit [10502], that was up to 5 cm thick and contained one sherd of 20th century pottery, was in all likelihood a midden layer, deposited after the corridor went out of use, as it was sitting on top of a thick collapse deposit (up to 20 cm) of stone and turf, unit [10511].

The removal of deposits [10502], [10511] as well as a turf collapse deposits, unit

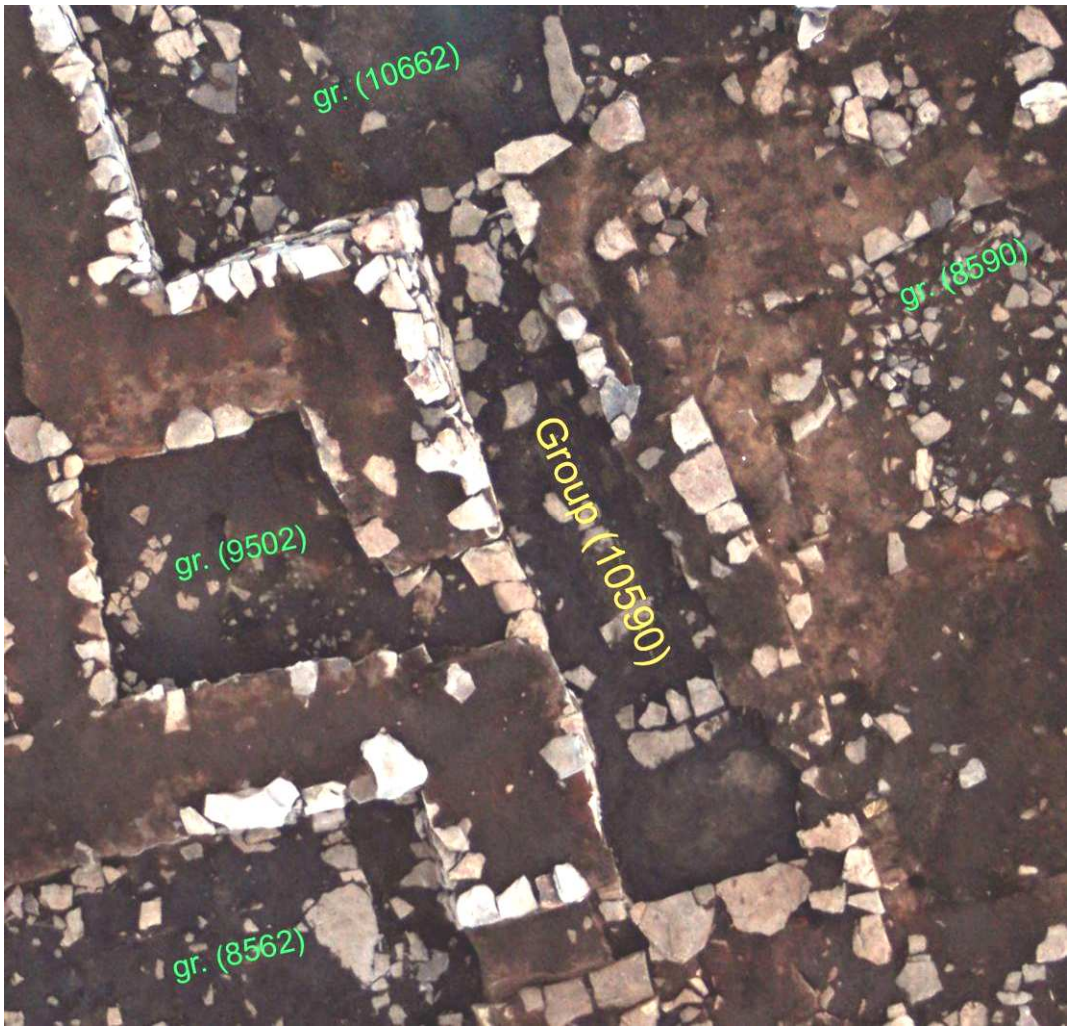


Figure 18. *An overview of corridor (10590).*

[10585], at the southern end of the corridor, revealed a dark compacted deposit, unit [10526], up to 20 cm thick, which covered a large part of the interior of the corridor and was believed to be a floor. Under the floor was a sequence of three deposits (units, [10607], [10643], [10581]) mostly made of turf, but some also organic in nature, which

were all quite compacted and were therefore interpreted as surface or floor layers, deposited during the use of the corridor. Directly under "floor" [10526], close to the south side of the entrance into room (9502), was a row of three stones embedded in turf, unit [10610], probably possibly a base for an internal structure. That structure was probably only temporary, since under [10610] was yet another sequence of four floor deposits made of turf, but some quite organic in nature. These were distributed across the south half of the corridor (in chronological order, youngest to oldest, [10612], [10616], [10619] and [10633]). These deposits were interpreted as being floors or surface layers deposited during the use of the corridor.

The last deposits to be excavated in the corridor were two deposits, units [10591] and [10648] which made up a pavement of stone and dark turf material. Both contained large amounts of sea shells and egg shells as well as a number of finds such as textiles, bones, pieces of wood, bits iron and copper, and sherds of 17th - 18th century pottery, giving an indication as to the period of use of the corridor. At the end of the 2010 excavation, more floors seemed to be appearing in the corridor, which appeared to be running under deposits in the disturbed area (group 8590) to the east. Hopefully the excavation of the corridor will be completed during the 2011 season.

Group 8590: 20th century vegetable garden

Group (8590) includes a large area in the middle of the excavation area which was badly disturbed by an early 20th century vegetable garden. In the 2008 season a number of mixed demolition deposits were excavated and at the end of the 2009 season a number such deposits were still covering a large part the area, although a few structures were starting to emerge. In 2010 the main focus of the excavations was on structures with already exposed floors as well as extending the excavation area to the west. Little work was therefore done on (8590) except on three mixed demolition deposits at the northern end of the area, units [10651] and [10659], and along the western edge, unit [10652], that were all a mix of turf and stone, and contained fragments of 19th to 20th century pottery and glass an indication of a relatively young age of the deposits.

At the end of the 2010 season it had become clear that most of the structures and deposits so far exposed on the farm mound in Vatnsfjörður predate deposits in the area disturbed by the 20th century vegetable garden. Therefore, the main focus of the 2011 excavations will be getting this area in to phase with the rest of the site.

Figure 19. *An overview of area (8590).*

Group 9560

Group (9560) consists of deposits excavated in a small area along the south edge of the farm mound excavation area, right up against the south end of room (10676). First to be removed were four deposits of turf and stone collapse (in chronological order youngest to oldest [10623], [10626], [10629], [10631], [10636], [10637], and [10642]). Once these had been removed, a wall, 2 x 2.4 m and 20 cm high wall, made of stone and turf, unit [10644] which appears to have been constructed at the end of the pavement mostly revealed in 2008

Figure 20. *An overview of area (9560).*

which had been interpreted as belonging to the farmhouse built in 1884 and torn down in 1907 (Gísladóttir in Milek 2010, 6). This wall sat up against a stone built extension to a wall which marks the north-western border of the pavement, unit [10656]. This extension

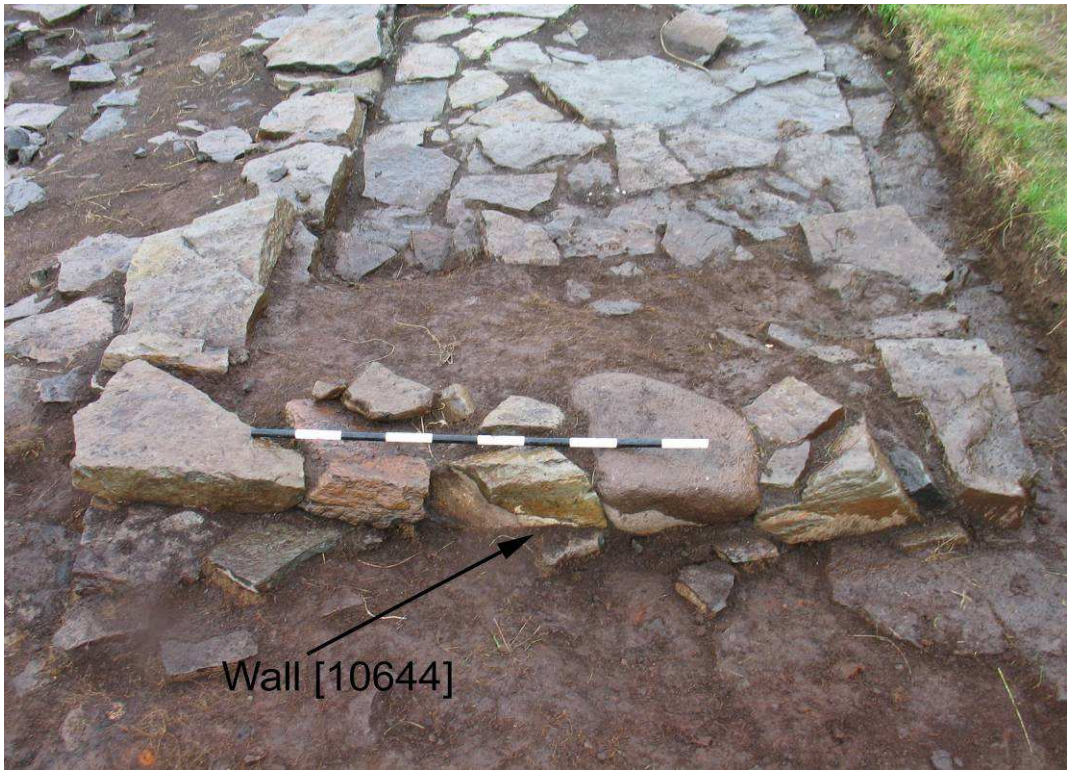


Figure 21. *Wall [10644]. Facing east.*

had concrete in between the stones.

The removal of the wall and the other aforementioned deposits revealed more of the aforementioned pavement, as well as a second pavement which had been seen appearing at a slightly lower level along the southern limits of the excavation area. Whether this pavement is older, or laid up against the upper one is difficult to determine, as only a small portion of it was revealed. The lower pavement does however extend further east, along the southern edge of wall [10644]. Since very little has been excavated in this area so far, relationship to nearby areas is still unclear and to shed light on that matter it will be necessary to extend the excavation area further to the south.

Conclusion

As stated above, the aim of the 2010 field season was to continue excavations on structures already exposed in 2008 and 2009 as well as extending the research area to the west in order to fully expose a large turf and stone wall running along and beyond the 2009 limits of excavation. The findings from the 2010 season are mostly preliminary at this stage and therefore will mainly serve as a guideline for excavations in 2011.

Preliminary findings of the 2010 field season

In exposing the wall that along the western edge of the 2009 excavation area, it was established that it predates the H~1693 tephra and given its size, and the nature of the deposits excavated on its western side, it is clearly an external wall. It makes up the western wall of structures (10662) and (9502) as well as being connected to the northern

wall of structure (8562), which indicates that those structures can at least be dated back to the 17th century, pre-1693. Preliminary analysis of pottery and clay pipes found within these structures as well as corridor (10590), suggests however that the deposits excavated so far are in all likelihood dated to the 17th-18th century, and therefore do not belong to the earliest phases of these structures. As for the function of the structures, it is still unclear, partially as samples taken from excavated floors within them are still pending analysis.

It was also established that deposits left in corridor (10590) and in structure (8562) are running under deposits in areas (10671) and (8590) that were associated with deposits in area (9560). Preliminary analysis on pottery suggests that deposits excavated so far in those areas are from the late 19th to early 20th century.

The 2011 field season

Based on the findings from 2010 it is clear that the main goal of the 2011 field season will have to be to ensure that the entire research area is within the same phase. The main focus will therefore be on excavations in areas (8590), (9560) and (10671) which are still sealed by 19th and 20th century deposits (see Figure 22, below), as well as emptying the 1906 foundation cut in the south-west corner of the excavation area.

Bibliography

Lucas, G. (2003). *Archaeological field manual.* Fornleifastofnun Íslands, Reykjavík.

Milek, K. (ed.) (2010) *Vatnsfjörður 2009. Framvindurskýrslur/Interim Report.* FS449-03099, Fornleifastofnun Íslands, Reykjavík.

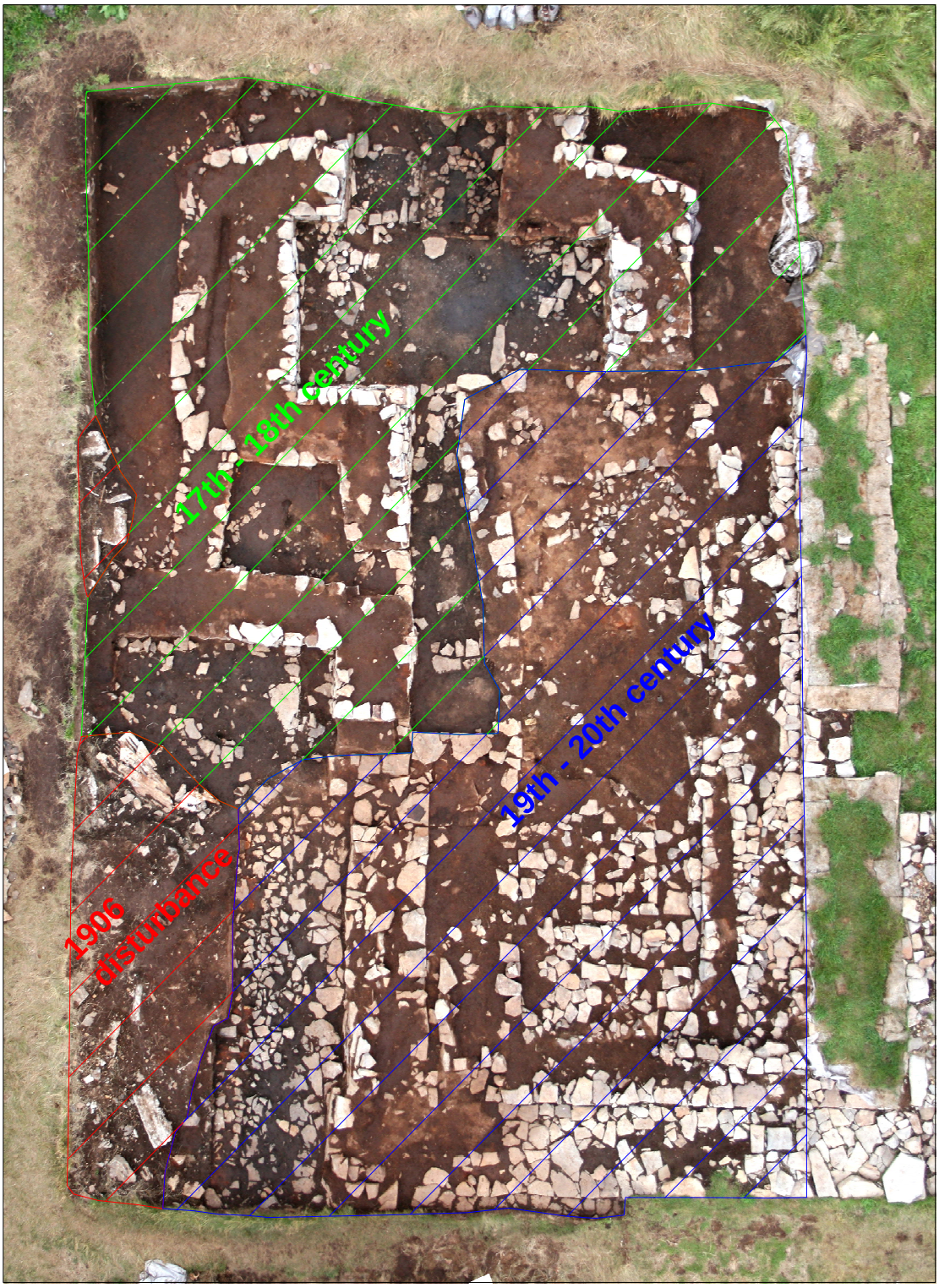


Figure 22. *An overview of the phasing of the farm mound research area at the end of the 2010 field season.*

SECTIONS THROUGH THE HOMEFIELD BOUNDARY WALL

Karen Milek
University of Aberdeen

Introduction

The homefield at Vatnsfjörður is surrounded by a turf-built boundary wall, which has a nearly complete circuit (see Ásta Hermannsdóttir, this report). In 2010, two sections were excavated through the southern and western sides of the boundary wall in order to investigate how it had been built, and to seek evidence for dating the structure (Figure 1). The excavation of Trench 42, in the southern part of the boundary wall, was conducted by Karen Milek and Brenda Prehal, and the excavation of Trench 43, in the western part of the boundary wall, was conducted by Michael Neilsen and Colin Connors. Sections were drawn and photographed, and two micromorphology samples were taken from the section in Trench 42.

Figure 1. *Locations of the two sections cut through the homefield boundary wall at Vatnsfjörður in 2010.*

Descriptions of Sections

Trench 42

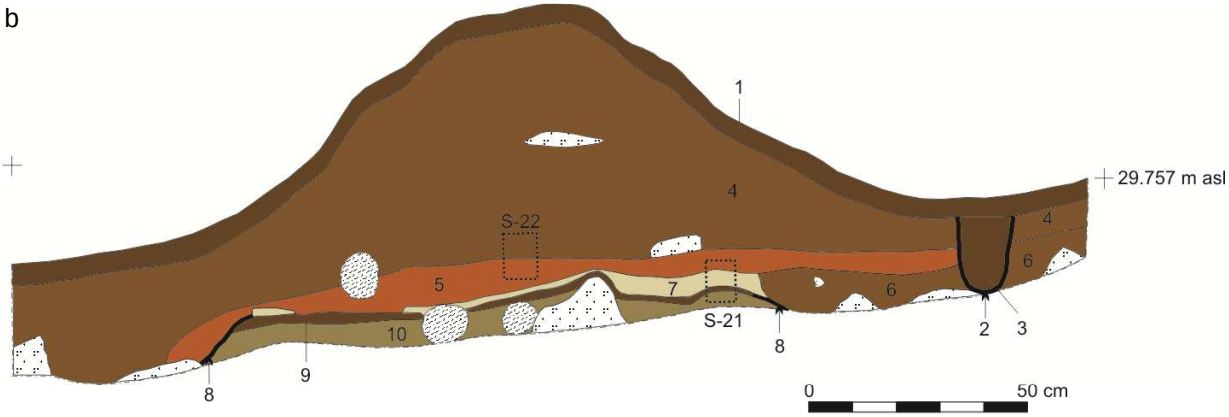
The southern part of the boundary wall was clearly resting directly on a podzol with a thin A horizon and an eluviated E horizon (grey coloured), similar to the soils directly underlying the Viking Age buildings, which had also been used to construct their turf walls. As can clearly be seen in Figure 2, this podzol was truncated to the north and south of the wall, and had been used to construct the earliest phase of the wall (light coloured layer 7, Figure 2b). Only two courses of this eariest wall were preserved, and there was second phase of wall construction overlying it, which was made from a more reddish coloured turf. Although not visible in the section, in the sourthern part of the trench, resting on this reddish turf, there was a large stone that must have been deliberately placed there in order to help shore up the southern edge of the wall and keep it from collapsing down the slope to the south. This reddish turf was only preserved to a maximum thickness of 15 cm, and was overlain by a third phase of wall construction, this one consisting of a dark brown andisol that was indistinguishable from the surrounding soils (see Figure 2a). Since the Hekla-1693 tephra was not visible in this turf, it seems likely that this third phase is relatively recent in date – perhaps 18th or 19th century – but of course this remains impossible to prove. Finally, a fence post had been placed on the northern edge of the wall, and a piece of barbed wire (introduced to Iceland in 1903-4; Broddi 1904) was found in the topsoil, indicating that this boundary had been in use until at least the early 20th century, even though the fence line is now considerably further south.

Trench 43

Unlike the southern part of the boundary wall, the western part of the wall buried a very stoney/gravelly brown soil with no clear evidence for an eluviated horizon; it was wetter in this immediate area and was apparently not well enough drained for a podzol to develop. Two different phases of wall construction were clearly in evidence, the earlier of which was constructed of turves taken from this brown soil, but also contained one turf that was taken from a podzol (see Figure 3a and the light coloured layer 5 in Figure 3b). At least three courses of this turf phase were preserved in the section. Overlying it was another phase of turf construction preserved to at least three courses, which was made up of a strong brown and dark brown coloured turf, which had been stacked mainly on the eastern (inner edge) of the older turf. Finally, a post hole was dug directly into the top of the turf wall, probably in the early 20th century, when farmers were encouraged to use barbed wire fencing to enclose their homefields (Broddi 1904). This fence post was subsequently removed, and the current fence line was placed a few meters to the east of the turf boundary wall.

a

b



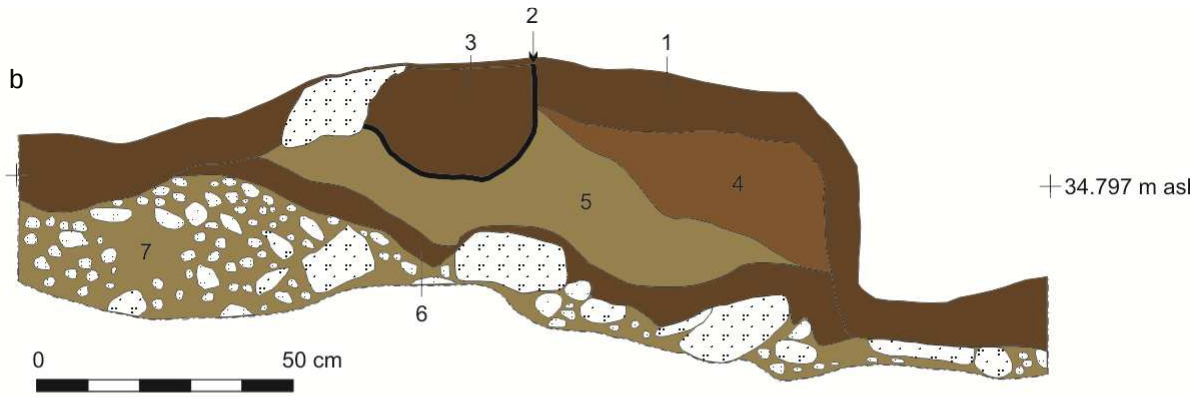
1 7.5 YR 2.5/2 very dark brown silt with humus and roots = *modern A horizon and roots = unit 10064, which contained barbed wire*
2 Cut for 3
3 7.5 YR 2.5/2 very dark brown clayey silt with humus = *fill of modern fence post hole*
4 7.5 YR 3/4 dark brown silt with abundant roots = *modern andisol with roots, including 3rd phase of turf wall (indistinguishable)*
5 2.5 YR 4/8 red silt with lenses of 2.5 YR 2.5/1 reddish black silt and 10 YR 3/4 dark yellowish clayey silt; firm and friable = *2nd phase of turf wall*
6 7.5 YR 3/4 dark brown silt loam with speckles of dark reddish brown and abundant stones; compact
7 10 YR 4/2 dark greyish brown silt with lenses of 7.5 YR 3/2 dark brown silt; firm and friable = *1st phase of turf wall*
8 Cut truncating 9 and 10 = *event associated with building the 1st phase of the turf wall*
9 7.5 YR 3/2 dark brown silt; firm and friable = *buried A horizon of podzol below the wall*
10 10 YR 3/4 dark yellowish brown clayey silt with speckles of 5 YR 4/6 yellowish red silt; compact = *buried E horizon of podzol below the wall*

Animal burrow Stone Cut Edge of excavation Micromorphology sample

Figure 2. *East-facting section through the southern part of the homefield boundary wall, Trench 42: (a) photograph, (b) drawing with soil descriptions and locations of micromorphology samples.*

a

b



1 7.5 YR 2.5/2 very dark brown silt with humus and roots = *modern A horizon and roots*
2 Cut for 3
3 7.5 YR 2.5/2 very dark brown clayey silt with humus = *fill of modern fence post hole*
4 Lenses of 7.5 YR 4/4 brown, 7.5 YR 3/2 dark brown and 10YR 3/3 dark brown clayey silt = *2nd phase of turf wall*
5 Lenses of 10 YR 3/3 dark brown and 10 YR 4/6 dark yellowish brown clayey silt with a lens of 10 YR 5/4 yellowish brown and a lens of 5 YR 3/4 dark reddish brown clayey silt = *1st phase of turf wall*
6 7.5 YR 2.5/2 very dark brown clayey silt = *buried A horizon of soil below the wall*
7 10 YR 4/6 dark yellowish brown clayey silt = *buried B horizon of soil below the wall*

Figure 3. *South-facting section through the western part of the homefield boundary wall, Trench 43: (a) photograph, (b) drawing with soil descriptions.*

Discussion

The two sections excavated through the boundary wall in 2010 revealed that it had several building phases and had been in use for a very long period of time. Unfortunately, neither section contained any visible tephra layers, but the differences in the colours of the turf construction phases – and in particular the fact that a podzol was directly underlying the southern part of the boundary wall and had been used in the earliest construction phase in both sections (identical to the Viking Age part of the site) – suggests that the earliest phase of the wall can be dated to the Viking Period. Moreover, modern fence posts set into the top of the wall and a fragment of barbed wire found in the top soil of Trench 42 indicate that the same boundary had been used until the early 20th century, although the fence line today is a few meters east of the western part of the turf boundary wall, and stretches considerably further to the south of the southern part of the wall (see Figure 2a for a view of the current fence line). It is hoped that in future field seasons more sections can be placed in the boundary wall in its eastern and northern sections in order to further investigate its construction and date.

References

Broddi (1904) Gaddavírslögin. *Ingólfur* II ár, 6 blað.

EVALUATION TRENCHES EXCAVATED AT VATNSFJÖRÐUR

Dawn Elise Mooney
University of Aberdeen, Fornleifastofnun Íslands

Introduction

During the 2010 excavation season, six evaluation trenches (Trenches 36-40) were excavated in order to determine the possible location of further Viking Age and Medieval structures, and to determine the date of several known structures and features. In each of the trenches, the overlying topsoil and aeolian sediments were removed to expose the upper surface of underlying archaeological deposits. The archaeological deposits observed were photographed, drawn and described, but were not excavated unless they were deemed to be potentially overlying archaeological deposits of greater significance. The locations of these eight trenches are shown on the map below (see Figure 1).

Descriptions of Evaluation Trenches

Trench 36

A low mound to the south of the smithy (Structure 3) was identified by Oscar Aldred as a potentially productive location for Viking Age ruins. A 1 x 2 m evaluation trench was excavated by the author to determine the presence or absence of Viking Age occupation deposits at this location (see map Figure 1). The test trench was positioned towards the south-eastern side of this mound, where the slope seemed steepest and most likely to represent the wall of a structure. At the northern edge of the trench, below the aeolian soil and the Hekla 1693 tephra, a thin charcoal spread [10034] was identified within reddish-brown soil, also containing fragments of calcined bone. This layer was recorded and excavated in order to assess the presence of any structural remains below. The deposit proved to be rather ephemeral, at most 1 – 2 cm thick, and produced no finds. This layer probably represents the spread of cultural material by trampling between the smithy and other structures in the Viking Age area. Below this deposit, the aeolian soil continued down to the natural podsol and beach gravel. On the southern side of the trench, the aeolian soil bottomed out directly on to the natural beach gravel. The Hekla 1693 tephra was not visible either during excavations or in the section at the edge of the trench, nor was the podsolised old land surface present above the gravel. It was concluded that the mound visible on the surface was a natural feature which had been eroded to the south by a stream, thus accounting for both the steep edge of the southern side of the mound, and the absence of both the natural podsol and the Hekla 1693 tephra in this area.

[10034] Firm mid to dark reddish brown silt with frequent charcoal patches and occasional small natural gravels. 0.5 – 2 cm thick. Bioturbated by roots and worms.

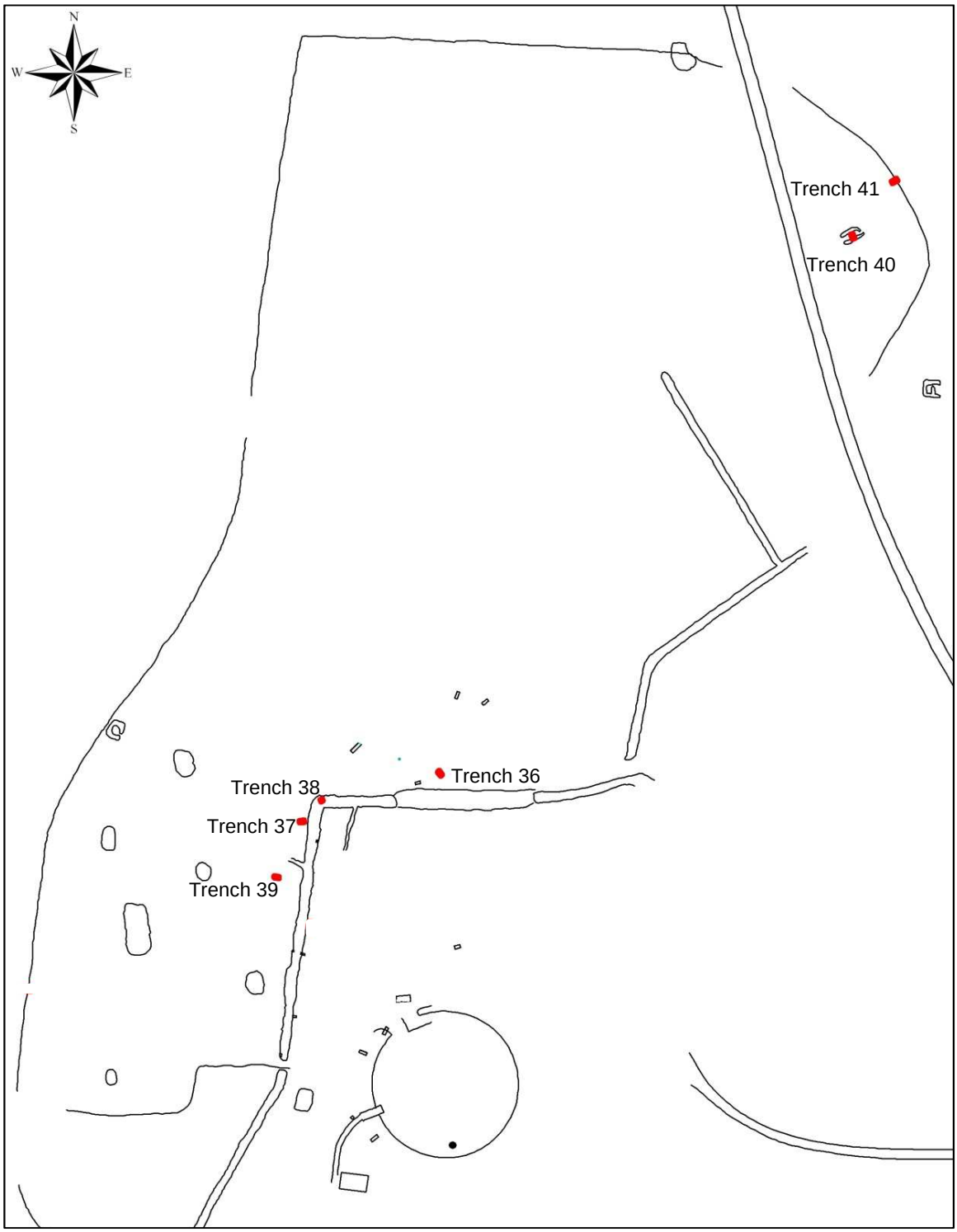


Figure 1. *Locations of the six evaluation trenches excavated at Vatnsfjörður in 2010.*

Trench 37

Around 20 m south-west of Area 14, uphill from the Viking Age area excavations, a structure was identified by Ásta Hermannsdóttir during a survey of ruins in the homefield. A GPS contour survey conducted by Óskar Gísli Sveinbjarnarson and Robert Milek revealed the structure to be around 15 m long and 5 m wide, with clearly defined walls, particularly towards the southern end of the structure. A 1 x 2 m evaluation trench was excavated towards this southern end of the structure, across the eastern wall (see map Figure 1). Below the aeolian soil, a reddish turf wall [10040] was immediately visible, with the Hekla 1693 tephra included within the turves. This gave a *terminus post quem* date of 1693 to the structure, and thoroughly dashed the author's hopes of finding a Viking Age cattle byre or a second *skáli*! The inner edge of the wall was clearly defined by a row of three large stones (see photograph Figure 2). The western portion of the trench was covered by a layer of collapsed turf [10041] of the same colour and composition as the turf of the eastern wall, which probably relates either to the upslope western wall of the structure, or to its roof. No floor deposits were visible in the trench, and the area to the west of the wall was extremely disturbed through bioturbation by roots. After the trench had been excavated, its location in relation to the farm mound was measured by Garðar Guðmundsson and Ásta Hermannsdóttir. The location of the structure was found to match with the location of a *fjós* or cattle byre on a map of the farm dating to around 1920, suggesting that this building was still in use in the early 20th century.

Figure 2. *Wall of Early Modern cattle byre in Trench 37*

[10040] Firm mid orangey-brown sandy silt with light brown patches and occasional charcoal flecks. Bioturbation by roots. H1693 tephra within turves.

[10041] Firm mid orangey-brown sandy silt with occasional charcoal flecks and small natural gravels. Significant bioturbation by roots. H1693 tephra within turves.

Trench 38

On the northern bank of the stream immediately to the south of Area 14 the stones of a wall were seen to be eroding out of the bank. This section was cleaned in order to establish the date of this building (see map Figure 1 and photograph Figure 3). Two rows of stones were preserved [10048] with a layer of mid orangey brown turf collapse above with the Hekla 1693 tephra within the turves. As with the structure in Trench 37, this gives a *terminus post quem* date of 1693 for the structure, which probably dates from the 17th to 19th century. The turf collapse lay immediately below the aeolian topsoil. Below the wall the section was stepped out around 40 cm in order to prevent the stones collapsing. The section below showed natural topsoil and subsoil above the podsolised old land surface and natural beach gravel. No further archaeological deposits were observed in the section, nor was the Hekla

1693 tephra observed *in situ*.

[10046] Root mat and topsoil. Moderately compacted very dark brown sandy silt with occasional natural gravels. Very bioturbated by roots. Munsell: 5YR 2.5/2 Dark Reddish Brown.

[10047] Turf collapse. Firm mid orangey brown sandy silt mottled with mid reddish orange and mid greyish brown, with occasional natural gravels and charcoal flecks. H1693 tephra within turves. Bioturbated by roots and worms. Munsell: 2.5YR 3/4 Dark Reddish Brown.

[10048] Stones of wall.

[10049] Firm mid orangey greyish brown silt, bioturbated by roots and worms. Munsell: 7.5YR 4/4 Brown.

[10050] Thick root mat and modern turf around step of section.

[10051] Topsoil. Firm mid to dark brown sandy silt with occasional small natural gravels. Substantial bioturbation by roots. Same as [10046]. Munsell: 5YR 2.5/2 Dark Reddish Brown.

[10052] Firm mid reddish brown silt bioturbated by roots and worms. Possibly same as [10049]. Munsell: 7.5YR 2.5/2 Very Dark Brown.

Figure 3. *Section of Early Modern ruins in Trench 38*

[10053] Upper horizon of old land surface. Firm pale yellowish grey silt with occasional small natural gravels. Munsell: 2.5Y 5/3 Light Olive Brown.

[10054] Lower horizon of old land surface. Firm bright rust orange silt with occasional natural gravels. Munsell: 5YR 4/6 Yellowish Red.

[10055] Natural old beach terrace. Firm and friable orangey brown sandy silt with very frequent natural gravels of all sizes. Munsell: 7.5YR 4/3.

Trench 39

Around 15 m south of Trench 37, a small mound approximately 5 m wide by 2 m high was identified during the GPS contour survey conducted by Óskar Gísli Sveinbjarnarson and Robert Milek (see map Figure 1). A 1 x 2 m trench was excavated to the western side of this mound where the sloping side seemed most pronounced. This area also displayed a distinct change in vegetation from the Field Horsetail (*Equisetum arvense*) which dominates this area of the homefield to a patch of Meadow Foxtail (*Alopecurus pratensis*), which could potentially indicate a change in soil thickness or drainage, and as such a ruin or feature. Immediately below the topsoil was an ashy modern midden deposit [10056], containing charcoal, peat ash and wood ash. This layer produced many finds, including

glazed ceramics, burnt stone, window and vessel glass, vitrified clay, plastic, wood fragments, well-preserved animal and fish bone, and fish scales. This layer was excavated in order to establish whether this modern midden was infilling an earlier ruin. After 20 – 30cm of excavation revealed only more modern artefacts and peat and wood ash, the decision was made to place an auger core through the remaining deposits. Midden layers consisting mostly of peat ash with some charcoal lenses were found extending to at least 110 cm in depth, which was the maximum depth of the auger. Upon examining the report by Tom McGovern (2005), this seems to match the stratigraphy found in 'Area 4'. This area was located in the report as being further north that Trench 39, but the location and description of the deposits are sufficiently similar that it is possible to say confidently that these are the same midden deposits.

[10056] Ashy modern midden deposit. Fairly loosely compacted mid orangey-brown sandy silt mottled c. 10% with greyish brown, with frequent charcoal flecks and moderately frequent natural gravels. Substantial bioturbation by roots.

Auger Core

0 – 10 cm Topsoil

10 – 78 cm 20th century midden deposit. Mid brown (Munsell: 7.5YR 3/3 Dark Brown) silty sand with frequent charcoal flecks, calcined bone, well-preserved bone and fish scales and lenses of peat ash and wood ash.

78 – 80 cm Firm black charcoal and wood ash layer. Charcoal black with with whitish grey wood ash patches.

80 – 92 cm Firm compact layers of peat ash and wood ash with charcoal flecks and lenses. Colours: layers of charcoal black, 2.5YR 2.5/4 Dark Reddish Brown, 2.5YR 2.5/2 Very Dusky Red, and 10R 2.5/6 Dark Red.

92 – 97 cm Firm very dark brown (Munsell: 7.5YR 2.5/2 Very Dark Brown) silty clay with moderately frequent charcoal flecks and poorly preserved bone.

Full Depth of Auger

Trench 40

During a survey of the coastal ruins around Vatnsfjörður in 2009 by Leszek Gardela and Lukasz Mikolajczyk, a structure on a promontory to the east of the homefield was identified as the most likely location for a Viking Age boat house (Gardela & Mikolajczyk 2010). In order to assess the potential of this ruin, an evaluation trench was excavated across the southern wall of the structure (see map Figure 1). This was where the wall seemed clearest, just to the east of a smaller internal wall, which is likely to have been added to the structure at a later date. It had previously been suggested that the building had later been reused as a sheep house or sheep shelter (Gardela & Mikolajczyk 2010). The excavation revealed a wall approximately 30 cm in height, primarily composed of yellowish brown turf [10057] (see photograph Figure 4). In the centre of the wall was a cut or disturbance to this wall turf, which had been infilled or repaired with more reddish brown turf [10058], which showed the Hekla 1693 tephra within the turves. North of the wall was a layer of brown turf collapse and stones [10060], with a patch of reddish brown collapse [10059] in the centre, which had the Hekla 1693 tephra within it and as such probably relates to the later repair phase of the building. The H1693 tephra was not visible in situ above the walls or the floor deposits, but this could potentially be explained by the re-use of the structure and the repair of the walls. The yellowish brown earlier wall turf was comparable in appearance to other Medieval and earlier turf deposits found at the site, so

despite the fact that this turf is not demonstrably below the Hekla 1693 tephra, the building seems likely to be of Medieval date, and as such is worth further investigation during future excavations at Vatnsfjörður.

thouse in

[10057] Firm mid to light yellowish brown sandy silt with rare small natural gravels. Some bioturbation by roots. Munsell: 10YR 3/6 Dark Yellowish Brown.

[10058] Firm mid greyish brown sandy silt with layers of reddish orange, with rare small natural gravels. Substantial bioturbation by roots. H1693 tephra within turves. Munsell: 5YR 3/3 Dark Reddish Brown with 2.5YR 4/6 Red.

[10059] Moderately compacted mid to dark orangey brown sandy silt with occasional small natural gravels. Substantial bioturbation by roots. H1693 Tephra within turves. Munsell: 5YR 3/3 Dark Reddish Brown.

[10060] Moderately compacted mid brown silt with occasional natural gravels and charcoal flecks, and large stones. Substantial bioturbation by roots. Munsell: 5YR 2.5/2 Dark Reddish Brown.

Trench 41

On the same small peninsula as the boathouse evaluated in Trench 40, a wall around 70 cm high and following the topography of the shore around 15m inland of the current shoreline had been surveyed as part of the homefield boundary wall. However, the actual boundary wall of the homefield runs west of the modern road. A 1 x 2 m trench was opened on the landward side of this feature to attempt to establish its composition and function (see map Figure 1).

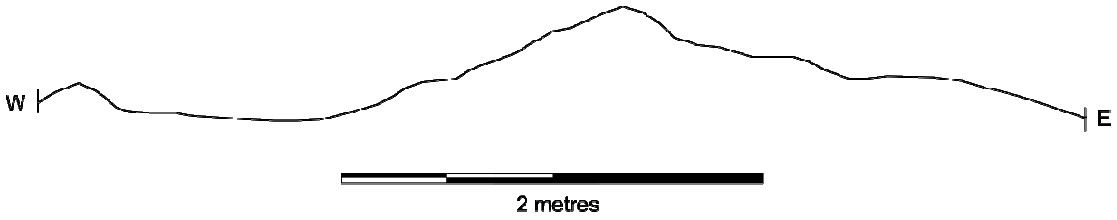


Figure 5. *North Profile of Sea Wall*

Immediately below the thin topsoil, a thick layer of stones about 40cm deep was uncovered. These stones were not beach cobbles but angular rocks from the natural bedrock. They were interspersed with coarse sand and other beach material such as fragments of shell, and also patches of soil. Several large stones were found to the landward side of the wall. The layers of stones were sitting immediately on top of a clean

bluish-grey layer of coarse sand [10061], which was interpreted as an old beach surface or seabed. To the west of this was a thin layer of reddish brown turf collapse [10063], sitting on top of a dark brown sandy silt with very frequent gravels and stones [10062]. This layer seems to be infilling a cut, which can be seen as a depression in the profile across the wall (see Figure 5). This feature appears to be some sort of sea wall, probably built to protect the boats being stored in the boathouse from tidal surges and storms, lined by large stones and also with a turf cladding. As there was no soil layer above the natural ground surface, it seems that the area was deturfed before the wall was built. Due to the fact that the Hekla 1693 tephra was not observed above, within or below the wall, and no datable artefacts or cultural material was recovered, it is not possible to date the wall without further investigation.

Acknowledgements

The author is very grateful for the advice of Karen Milek and Garðar Guðmundsson during the process of evaluation trench location and interpretation, and also to Ásta Hermannsdóttir for her input regarding the relationship between the structures discovered and the 19th and 20th century homefield maps (*túnkort*). The author would also like the thank Charlotte Diffey, Jeannette Plummer, Bernadette McCooey and Claire Cotter for their assistance.

References

GARDEŁA, L. & MIKOLAJCZYK, Ł. 2010. 'GPS Survey in the Coastal Area of Vatnsfjörður'. In Milek, K. (Ed) *Vatnsfjörður 2009. Framvinduskýrslur/Interim Reports*. Reykjavík: Fornleifastofnun Íslands. Report number FS449-03099. Pp. 41-50.

MCGOVERN, T., KRIVOGORSKAYA, K., BREWINGTON, S., KENDALL, A. & HARRISON, R. 2005. 'Midden Investigations at Vatnsfjord, NW Iceland July 2005'. In Friðriksson, A., Tulinius, T.H., & Guðmundsson, G. (Eds) *Vatnsfjörður 2005. Fornleifarannsóknir / Fieldwork at Vatnsfjörður, NW-Iceland 2005*. Reykjavík: Fornleifastofnun Íslands. Report number FS301-03095. Pp. 63-72.

TEST TRENCHING AT HÁLSHÚS

Oddgeir Isaksen
Fornleifastofnun Íslands

Introduction

Hálshús farm is on the east side of the Vatnsfjörður valley about 2.5 km south-east from

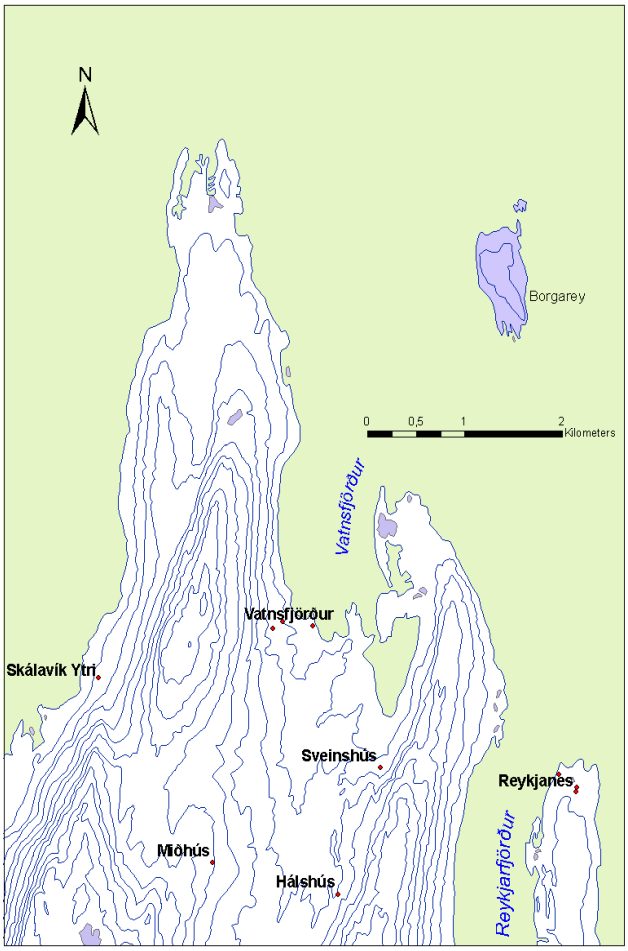


Figure 1. *The location of Hálshús and Vatnsfjörður.*

the farm of Vatnsfjörður. Earliest mention of Hálshús is found in a register (*rekaskrá*) from 1327, describing Vatnsfjörður church right to driftwood from the farmland (DI. II; 620). Hálshús was originally a tenant farm to Vatnsfjörður farm. However, in 1383 it became the property of Vatnsfjörður church (DI. III; 366). Hálshús was abandoned just before 1940, and in 1965 the land was sold to the owners of the neighbouring farm, Þúfur (http://www.althingi.is/altext/86/s/pdf/0034). Shortly after the farm was abandoned, all buildings Hálshús were demolished. The ruins of the last farm which stood there can however still be seen on top of a tall farm mound.

In 2009 archaeologists working at Vatnsfjörður became aware of a large erosion face at Hálshús where lenses of midden material (wood ash with charcoal) could be seen.

This was thought to be an indication to the location of the farms midden which could possibly contain useful comparative material for the research at Vatnsfjörður. Following some aguring work done on the site (see Dupont-Hébert C., this report) the decision was there fore made in 2010 to dig a test trench up against the erosion phase. Work was carried out by the archaeologist Hildur Gestsdóttir and took place on the 11th of August. Post-excavation work was carried out by Oddgeir Isaksen.

Description

The erosion face is located on the western slope of the farm mound at Hálshús. It is about 14 m long and 0.9 m high. The trench was 1 x 1 m in size and 1.2 m deep and was located up against the erosion face, about 5 m from its northern end. Two sections were recorded in the trench, the 2.12 m high west facing section and the 1.2 m high north facing section (Figure 3; Table 1). In addition the west facing section within the erosion surface above the test trench was cleaned.

Figure 2. *The test trench. Direction of camera, south-east*

The overburden in the test trench was a 15 cm thick deposit of sheep dung, an indication that sheep have been seeking shelter there and probably aiding the erosion. This sealed a dark gray and firm deposit of flaky soil with bits of charcoal (unit [001]). Under deposit [001], was a lensed deposit [unit 024] of wood ash with charcoal as well as flecks of the H~1693 tephra indicating that the deposit post-dates it (these units are only visible in the north facing section).

The overburden seen in the west facing section consisted of a deposit of flaky soil which contained a lot of pieces of birch wood (unit [013]) on top of homogenous soil (unit [014]). This in turn sealed a sequence of grey wood ash lenses (unit [015]), about 25 cm thick. Directly under [015] was a 5 cm thick silt deposit mixed with flecks of turf (unit [016]) and under that a thin deposit of black wood ash (unit [017]) about 1 cm thick. Under deposit [017] came a sequence of three light brown to medium brown deposits (in chronological order, youngest to oldest: [018], [019] and [020]), with combined thickness of about 21 cm, which all contained birch chippings. All of them were composed of flaky soil but the earliest of them, unit [020], was also slightly mixed with fragments of turf. Deposit [020] was sitting directly on top of the H~1693 tephra *in situ.*

The H~1693 tephra sealed a mixed deposit, about 9 cm thick, of turf debris and silt (unit [021]), which also contained some wood chippings. This was in turn sitting on top of a very compacted, about 10 cm thick, deposit of homogenous soil (unit [022]). Deposit [022] sealed a 8 cm thick deposit (unit [023]) of silt, slightly mixed with charcoal which was also the lowest unit exposed by the erosion face as (see figure 3).

The north facing section showed clearly how the deposits were sitting on a rather steep slope (the west side of the farm mound) which dropped from east to west (see Figure 3). Deposits [003] was thickest (11 cm) in the north facing section but became thinner, up slope to the east. It was mostly about 2 cm thick in the west facing section where it was clearly sealing a 20 cm thick lensed deposit (unit [025]) of firm, medium brown and orange turf, a possible turf wall. Also sealed by [003] but only visible in the north facing section

was a 4 cm thick deposit (unit [005]) of firm turf, possibly collapse from "wall" [025], which was excavated in plan.

The face of possible turf wall [025], as seen in the west facing section is the wall's real face (i.e. it has not been truncated), so it was neither visible in plan, nor the north facing section.

Underneath "wall" [025] came a sequence of thin (c. 2-7 cm thick) wood ash deposits with a high charcoal content which separated much thicker (c. 12-16 cm), very clean peat ash deposits which were excavated to a depth of 1 m (units [026], [006], [007], [008], [009], [010], [011], [012], [027], [028], [029], [030], [031], [032] & [033]). These units all clearly respected a north-south aligned break in slope which dropped quite steeply to the west, immediately west of "wall" [025]. Most of these deposits were thinnest to the east, thickening the further down the slope they went. These units, in particular the peat as deposits, were all remarkably clean, no bones were recovered from them, and only one artefact, a nail, from unit [008]. Coring in the bottom of the trench then revealed a continuation of peat ash rich deposits running at least as deep as 1 m.

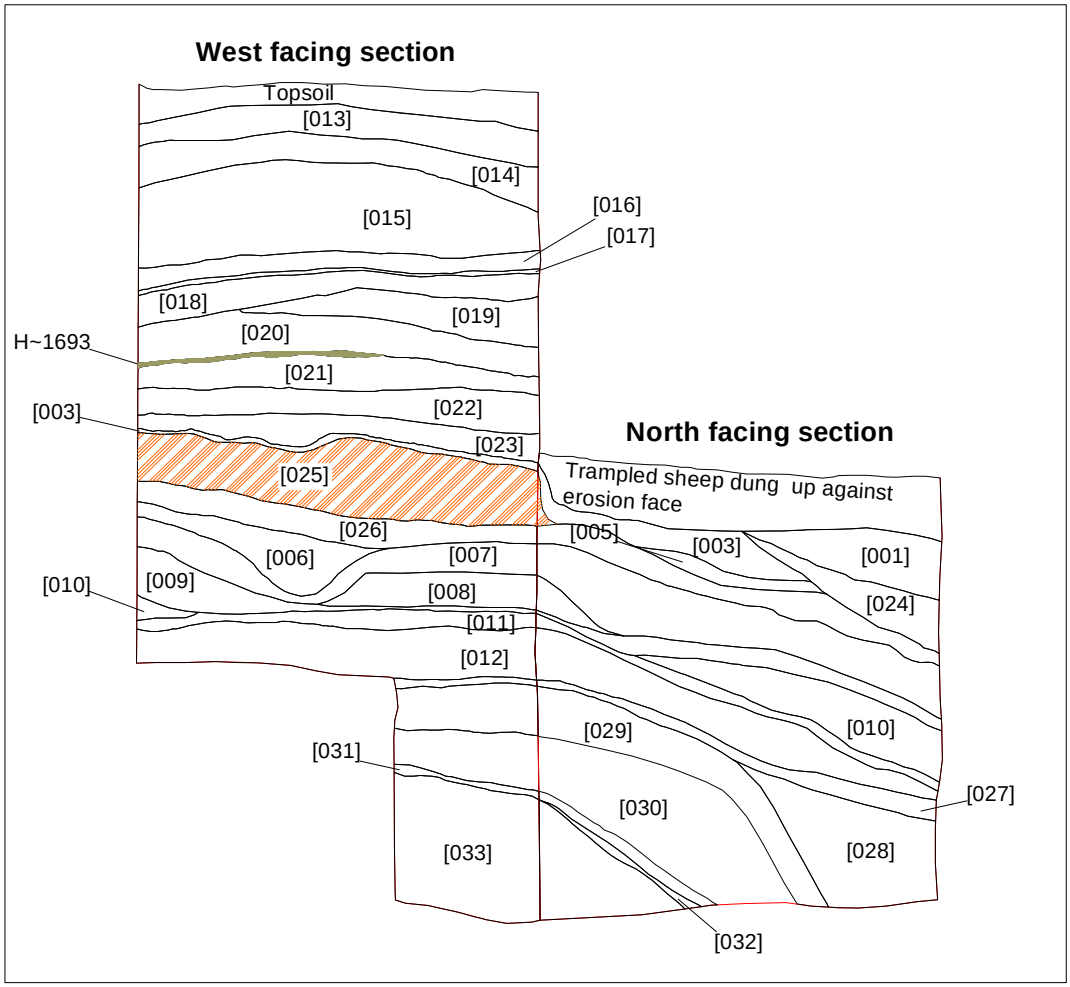


Figure 3. *A drawing of the north- and west facing sections in the test trench at Hálshús.*

Table 1. *Register of units recorded at Hálshús.*

Unit No.	Unit Type	Description
1	D	Dark gray and firm deposit of flaky soil . Contained few bits of burned bones and 1piece of glass
3	D	A mixed deposit of wood- and peat ash.
5	D	A firm deposit of turf collapse.
6	D	A mixed deposit of wood- and peat ash.
7	D	A deposit of mostly clean peat ash with lenses of black wood ash. Contained fire cracked rocks and one iron nail
8	D	A lensed gray and pink peat ash deposit.
9	D	A clean black wood ash deposit high content of charred birch wood.
10	D	A clean deposit of peat ash. Contained one iron nail.
11	D	A black wood ash deposit containing a few bits of charred birch wood and iron slag.
12	D	A clean and thick peat ash deposit. Contained one piece of wet stone.
13	D	A deposit of flaky soil with high bits of birch wood content.
14	D	A deposit of homogenous soil
15	D	A sequence of gray wood ash lenses.
16	D	A deposit of silt mixed with flecks of turf.
17	D	A thin deposit of black wood ash.
18	D	A medium brown deposit of flaky soil. Contained birch chippings.
19	D	A medium light brown deposit of flaky soil. Contained birch chippings.
20	D	A medium brown deposit of flaky soil. Contained birch chippings.
21	D	A mixed deposit of turf debris and silt. Contained some birch chippings
22	D	A deposit of homogenous soil
23	D	A deposit of silt, slightly mixed with charcoal
24	D	A lensed deposit of wood ash with charcoal
25	D	A possible turf wall. Made of lensed orange and brown turf
26	D	A mixed wood ash deposit with high charcoal content
27	D	A deposit of fine black wood ash.
28	D	A deposit of mixed peat ash with charcoal
29	D	A thick deposit of clean peat ash
30	D	A very thick deposit of mixed peat ash with a few bits of charcoal
31	D	A thin deposit of clean peat ash
32	D	A thin deposit of black wood ash with charcoal
33	D	A thick peat ash deposit. Contained a few bits of burned bone

Conclusion

The goal of the test trenching at Hálshús was to locate a midden of a similar date as the one in Vatnsfjörður in the hope it would contain comparative material for the site. Wood ash lenses, (unit [015]), which were seen in the coring on top of the slope as well as in the erosion face on the west slope of the farm mound were thought to be a good indication to the location of a midden at Hálshús. These wood ash lenses [015] clearly do not represent the main body of an occupation midden, but rather seem to be isolated events of waste material deposition, postdating the H~1693 tephra. The main midden body is earlier than possible wall remains [025] which clearly predates the H~1693 tephra considerably. The midden is mostly composed of peat ash and occasional lenses of wood ash, where artefacts and bone are almost non-existent, indicating that it is possibly industrial waste rather than waste associated with the occupation of the farm. There is therefore little information to be gained from further excavations within this area. The objective to collect comparative

material for Vatnsfjörður therefore has to be deemed unsuccessful.

Bibliography

DI: *Diplomatarium Islandicum I-XVI. Íslenzkt fornbréfasafn, sem hefir inni að halda bréf og gjörninga, dóma og máldaga og aðrar skrár, er snerta Ísland eða Íslenzka menn.* Copenhagen.1872-1972, Hið Íslenzka bókmenntafélag,

CORING AT HÁLSHÚS AND VATNSFJARÐASEL

Céline Dupont-Hébert
Université Laval

Introduction

Surveying the landscape by auguring fields and archaeological features have proven to be a productive way to evaluate the potential of archaeological sites. This means of probing site stratigraphy has been used in many different ways by archaeologists and geologists around the world but a typical procedure for archaeological use in Iceland does not exist. Most of the time, a strategy is elaborated in an *ad hoc* fashion according to the research objectives, landscape feature's length and width, knowledge of the area and intuition of the archaeologist. Interpretation of core results and data synthesis are somehow open to misinterpretation. This matter will be discussed later.

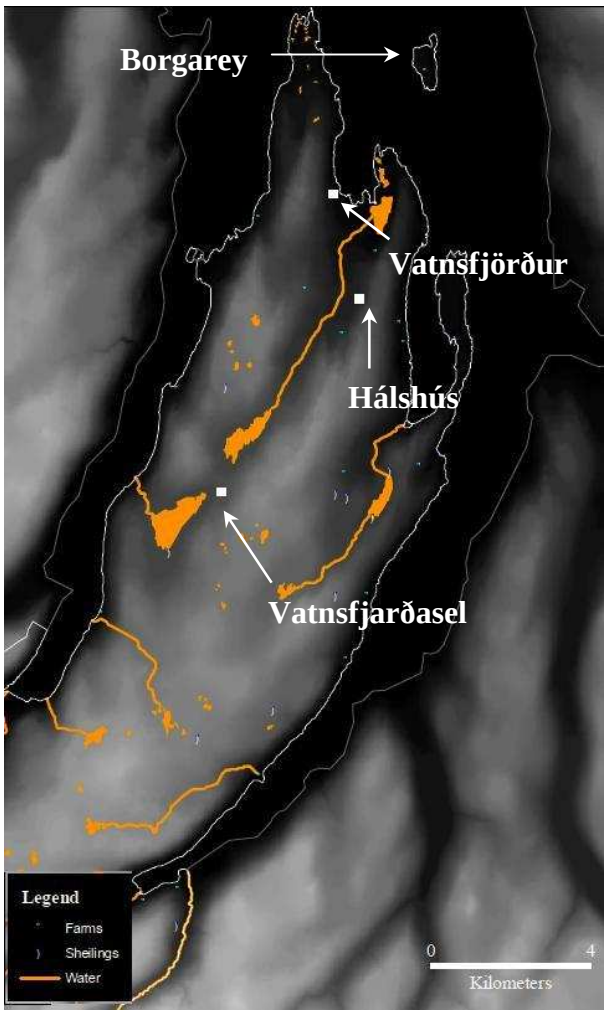


Figure 1. *Location of archaeological sites under discussion in this assessment (modified map from Aldred 2008)*

During the summer of 2010, two auguring experiments were undertaken by the field school staff in the Vatnsfjörður area. The first one was done at the farm of Hálshús where an eroded profile showed archaeological deposits. The second experiment was done at Vatnsfjarðasel, a shieling– *sel*- that became an independent farm in the early modern period (Figure 1). This assessment will show the application of auguring in the evaluation process for both rescue and potential research using both Hálshús and Vatnsfjarðasel as examples.

Hálshús

During the summer of 2010, field staff at Vatnsfjörður were advised that severe erosion had occurred on a slope east of the farm of Hálshús, near the Vatnsfjörður farm. An exposed profile showed stratified deposits of peat ash, charcoal and faunal remains interpreted as a possible midden feature. In order to evaluate its extent, damage caused by the erosion, and to plan an eventual rescue excavation, the author and a student from the field school undertook the coring procedure around the possible midden.

Brief historical background of Hálshús and previous archaeological work

Little is known about the history of the farm of Hálshús. The first mention in historical sources dates its occupation around 1327 (Aldred, 2008: 40). *Jarðabók* suggested that the farm was a tenant farm owned by the main farm of Vatnsjörður until the early modern period (JÁM: 214-215) when it probably became an independent farm until its abandonment in modern times, just like many farms and shielings in the area (eg Sveinhús, Miðhús and Vatnsfarðasel). Today, the farm is in ruins: turf and stone walls, a sheep house and hay storage silo annexed to the main turf structure and other unidentified features are the only witness of an ancient occupation. East of this structure, at the edge of a gentle slope, lies the eroded face with midden deposits appearing in the profile. In order to record the profile and gather more information on successive deposits, a member of the staff undertook a small evaluation trench where the profile showed its thickest deposits (see Oddgeir Isaksen, this report).

Coring methodology

Based on the location of the evaluation trench excavated earlier during the summer and the shape of the feature, a coring strategy was established. A total of five coring transects were done; four of them – oriented more or less north/south – were concentrated around the possible midden east of the main turf structure and another one – oriented east/west – was done between the main structure and a visible feature lying east of the farm (Figure 2). A five meter distance between each core was respected. A list of all core descriptions can be found in Table 1. Core locations were flagged in order to later locate them with a total station.

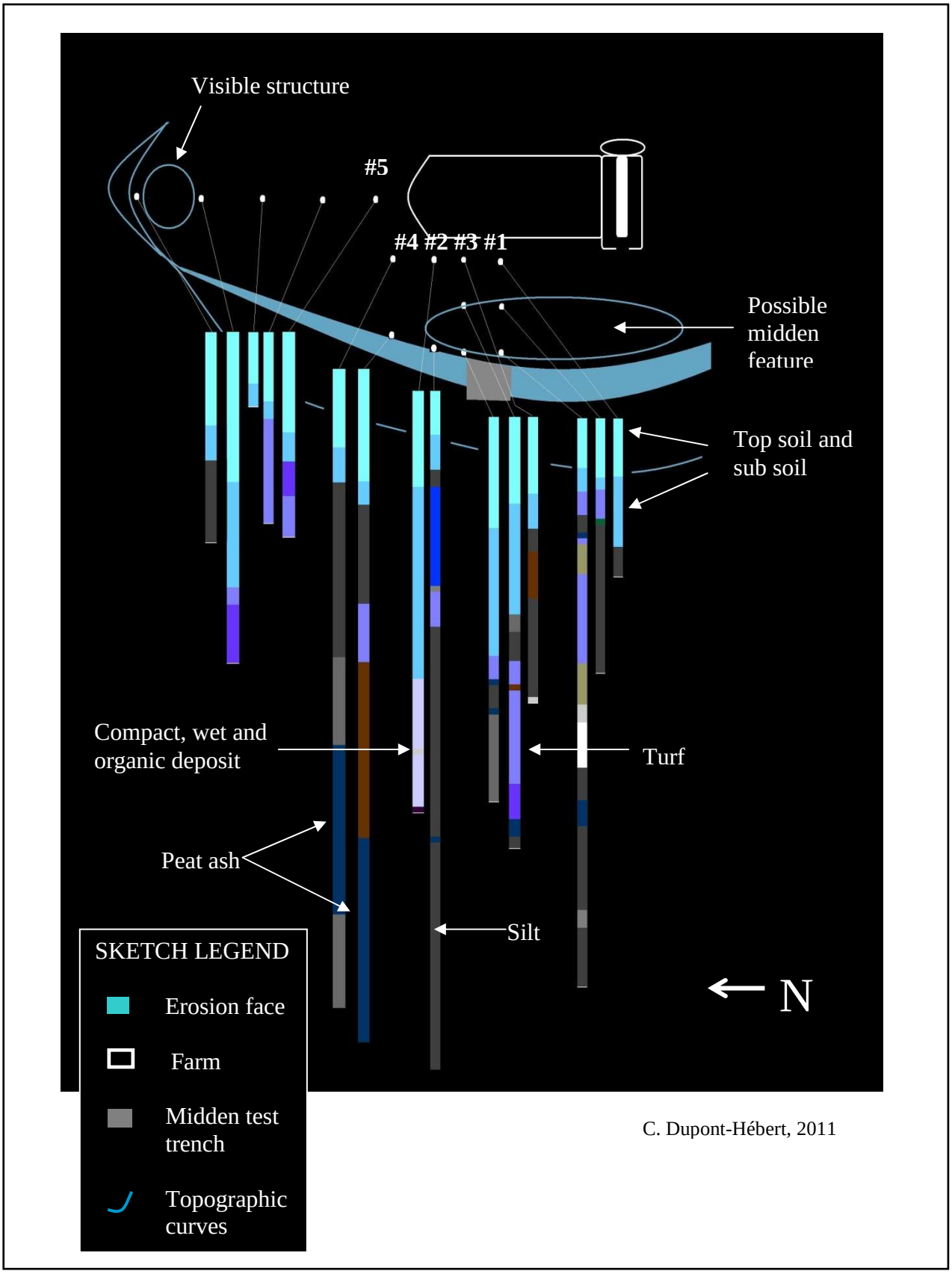


Figure 2. *Sketch of Hálshús farm with coring locations and results.*

Interpretation of the coring results from Hálshús

Of all the cores located close to the midden, only two showed stratified peat ash and charcoal that are typically associated with a midden. Even where the eroded bank showing peat ash and the evaluation trench where the feature was identified, no clear evidence of the midden was found in the coring tests. Instead, turf (sometimes laminated - wall material), charcoal lenses and silt deposits with traces of charcoal and bones were found next to the possible midden feature. In the absence of clear midden deposits in the cores, few interpretations of the stratigraphic events are possible. The first possibility is that the feature was indeed a midden but was mostly destroyed by the erosion process. This however seems unlikely since the profile shows deposits of more than one meter; the three-dimensional principles of natural and anthropogenic sediment deposition processes render the eventuality hardly possible (Figure 3). The second possibility is that the feature as been truncated by a more recent feature which is not clearly identifiable in the core sediments. This could be the case since turf, stones, charcoal deposits and also wet compacted organic layers have been identified in the stratigraphy of the cores (Figure 2 and Table 1). Another possibilty would be the presence of a "pit house" or a depression filled with domestic rubbish. This also seemed unlikely since the visible profile does not show any cut or any aspect of a feature of this nature.

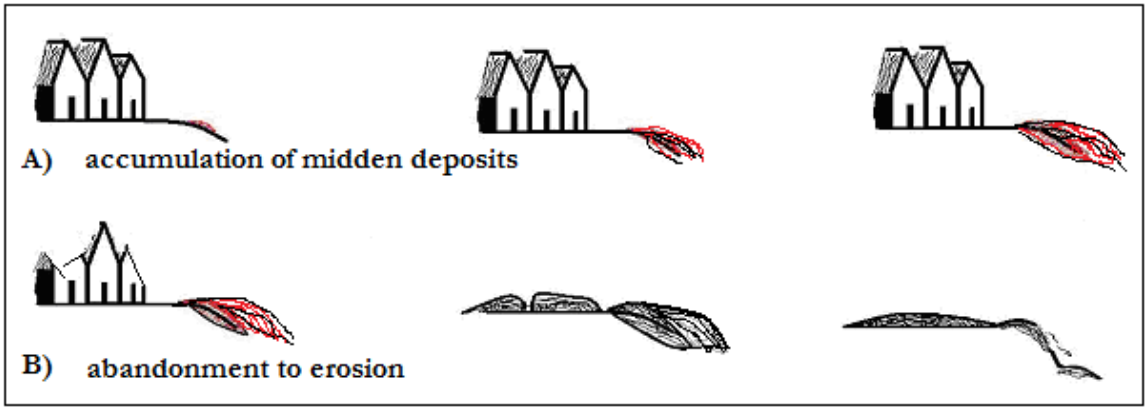


Figure 3. *Midden accumulation process, both vertical and horizontal (a), until deposits become archaeology and are being affected by taphonomic processes like erosion (b).*

Conclusions about this investigation are as follows: given that the midden is small, that there seems to be poor bone preservation and that the feature appears to be limited in extent, a rescue excavation for the recovery of faunal remains is deemed not productive. Sampling of deposits for dating purposes or sampling for micromorphology would be a possible way to gather data for a better understanding of the farm occupation.

Vatnsfjarðasel

Vatnsfarðasel is located deep in the valley between two lakes named Neðra-Selvatn and Fremra-Selvatn more than 10 km west of the main farm of Vatnsfjörður (Figure 1). A lot of modern material like wood stakes, nails, wooden structures laid around the different unidentified structures. Coring was undertaken in order to identify the location of a midden that could be attributed to the occupation of the main turf house when contemporaneous to early modern Vatnsfjörður farm but also to figure the possibility of further archaeological research and field work. Coring evaluation took place east-northeast of the main turf structure by two members of the field school staff.

Brief historical background of Vatnsfjarðasel and previous archaeological work

The shieling of Vatnsfjarðasel is thought of having been owned by the main farm of Vatnsfjörður from the Middle Ages to early modern times. It is possible that the shieling was transformed in an independent farm during that period. The Jarðabók doesn't mention Vatnsfarðasel as owned by Vatnsfjörður but the authors note the possibility of having the sheep usually raised on Borgarey's island (a rented farm of Vatnsfjörður) grazing on the main land when water lacks on the island or when there is bad weather (*Jarðabók*: 214-215). It is also noted that eggs from Great-Backed gull and Black-backed gull are collected in Neðra-Staðarvatn which could have been the ancient name of today's Neðra-Selvatn. No archaeological work has been done at the shieling except landscape surveys done by Oscar Aldred from 2005 to 2007 and also by Ásta Hermannsdóttir in summer 2010.

Coring methodology

Since the location of the midden was not known, landscape around the farm was surveyed in order to identify its possible situation. Two little mounds were identify as eventual locations of a midden feature, both close to the edge of a slope and to the main structure (figure 4). A total of four (4) coring transects were done, two on each feature, and with a 5 meters distance between each core. Results are presented in figure 4 (next page) and the core register is annexed to this assessment.

Vatnsfjarðasel Results

Vatnsfjarðasel area is rich in landscape features and ruins. The size of the buildings, enclosure and potential productivity of grassland seem to show that it was a more important farm than Hálshús. The search for a comparable midden to those of Vatnsfjörður has been more than promising. One feature has been identified as corresponding to a possible midden northeast of the main structure as shown by the stratified sequence of peat ash and charcoal deposits. A coring test was done inside the main building as it seems that midden deposits are frequenly discovered underneath or inside structure. The test showed peat ash and charcoal deposits in one of the rooms where the test was done.

Problems and Potential

The practice of coring can help identify the extent of archaeological features or locate them, although some difficulties can emerge. First, the stratigraphy released by this exercise represent only a small sample of the whole feature and could eventually represent a single event (like postholes or small hearth feature). Second, in the case of middens, only bone fragments are seen in cores due to its width and therefore it is difficult to estimate with certainty bone preservation and real archaeological potential of the feature. Third, in the case of Vatnsjarðasel and Hálshús, the peat ash and charcoal deposits, having almost no inclusion, can illustrate the burning of peat used as fuel. Also, because peat ash is a threat to bone preservation, faunal remains could have been destroyed by chemical action (acidity). Finally, the depth that can be reached by the tool is limited and therefore full extent of feature can be missed. Nonetheless, coring is a usefull way to discern differences between natural and anthropogenic depositions, and to characterize stratigraphy on a large scale basis with little site impacts, minimum effort and labour.

Bibliography

Aldred, Oscar (2007) Landscape Reseach in the Vatnsfjörður Environs, in Milek K. (ed.) *Vatnsfjöður 2007 Framvinduskýrslur/Interim Report*, FS383-03097. Fornleifastofnun Íslands, Reykjavík, pp. 21-42.

JÁM VII (1984) *Jarðabók Árna Magnússonar og Páls Vídalíns VII*. Ísafjarðar-og Strandasýsla,Hið Íslenska Fræðafjélag, Kaupmannahöfn.

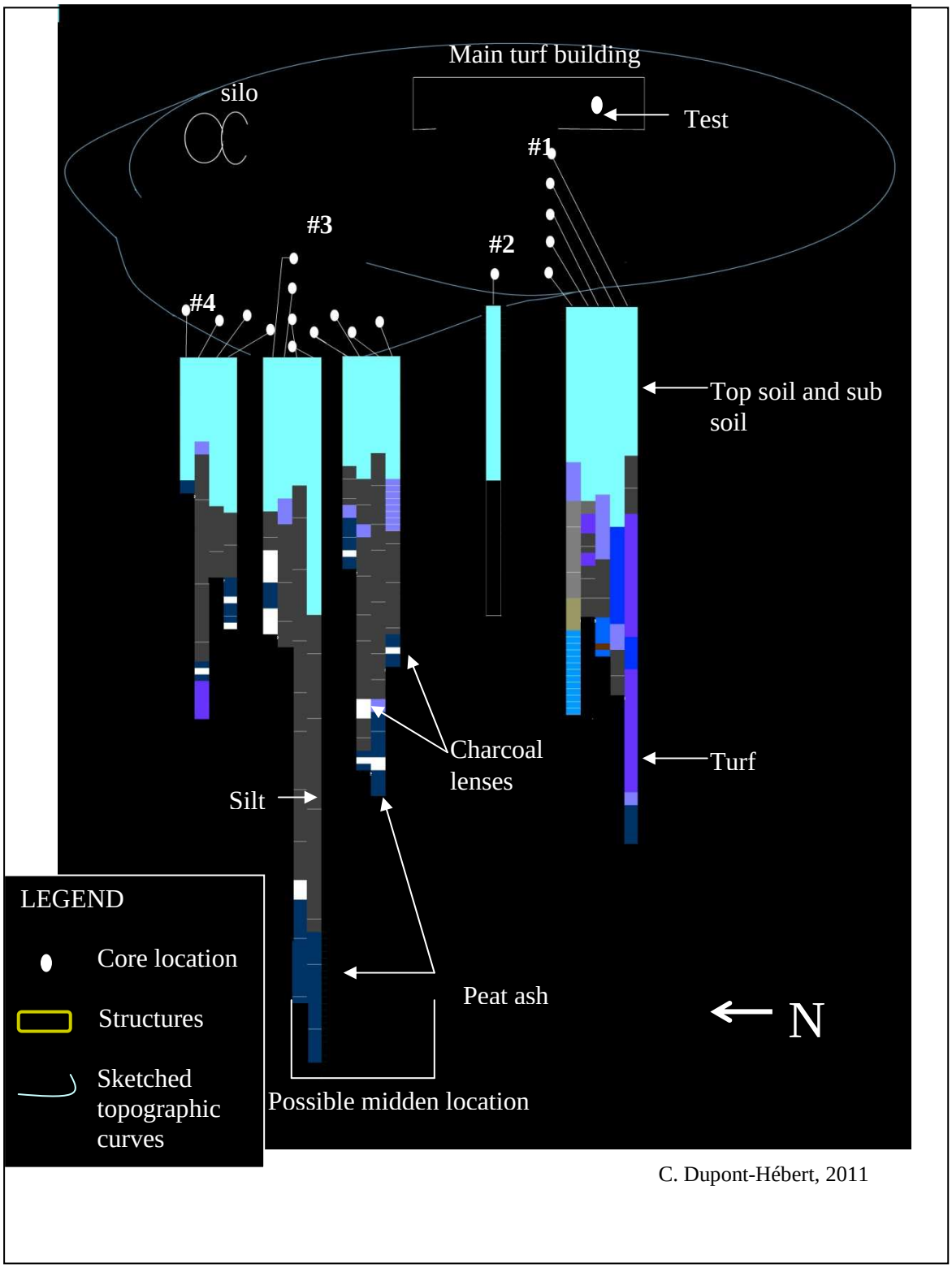


Figure 4. *Sketch of Vatnsjarðasel farm with coring locations and results*

Table 1. *Coring results from Hálshús*

Date: 15/08/2010 cloudy, little rain **pH:** 4,1 **EC:** 1014 **Init.:** C.D.-H. & R.M

Transect #	Core #	Layer thickness	Description
1	#1	0-10 cm	top soil, rooty, medium brown, dry, organic matter, loose
		10-22 cm	sub soil, loose
		22-27 cm	medium brown silty layer with roots, charcoal bits, loose
		27 cm	stone
	#2	0-11 cm	top soil, rooty, medium brown, dry, organic matter, loose
		11-13 cm	sub soil, loose
		13-19 cm	dark brown turf with peat ash at bottom
		19-44 cm	silt and turf layer with charcoal bits, medium brown
		44 cm	stone
	#3	0-9 cm	top soil, rooty, medium brown, dry, organic matter, loose
		9-13 cm	sub soil, loose
		13-17 cm	reddish turf with green tephra
		17-20 cm	silt and turf layer with charcoal bits, medium brown
		20-21 cm	light brown bleach soil and more charcoal
		21-22 cm	medium brown turf with charcoal and birch
		22-27 cm	medium brown silty layer, roots, clean
		27-42 cm	medium brown to orange reddish brown turf, compact, charcoal bits
		42-49 cm	medium brown silty layer, roots, clean
		49-52 cm	really compact wet turf, with charcoal and birch wood, black, **floor?**
		52-59 cm	compact, wet, dark brown layer with wood fragment and organic matter
		59-64 cm	dark brown turf, compact, with charcoal bits, traces of wood, organic matter
		64-69 cm	peat ash, wood ash and charcoal layer
		69-78 cm	silt and turf layer with charcoal bits, medium brown
		78-84 cm	silty, medium brown layer, wet, with charcoal bits and traces of burnt bones
		84-87 cm	dense charcoal layer, dark brown
		87-98 cm	dark brown clayish silt, wet, tiny charcoal bits, bone butter?
		98 cm	stone
2	#4	0-17 cm	loose top soil
		17-32 cm	sub soil, loose
		32-50 cm	same as above
		50-53 cm	really wet dark brown organic layer
		53-72 cm	same as above, with charcoal layer at 63 cm
		72-73 cm	gravely medium brown layer
		73 cm	stone
	#5	0-12 cm	top soil, rooty, medium brown, dry, organic matter, loose
		12-18 cm	sub soil, traces of charcoal
		18-21 cm	dry silt layer with traces of burnt bones
		21-29 cm	dry silty turf with traces of charcoal and birch wood

		29-38 cm	same as above
		38-39 cm	charcoal layer? Or lenses, loose
		39-45 cm	reddish and medium brown turf, dry
		45-57 cm	wet dark brown organic layer with charcoal and wood bits
		57-81 cm	same as above
		81-82 cm	peat ash layer ?
		82-89 cm	really wet dark brown organic layer
		89-124 cm	same as above
3	#6	0-17 cm	top soil, rooty, medium brown, dry, organic matter, loose
		17-23 cm	subsoil
		23-27 cm	organic layer, turfy, with traces of peat ash, wet
		27-33 cm	light brown silt clean and dry (Aeolian?)
		33-35 cm	same as above
		35-52 cm	wet turf and organic matter with wood fragments and traces of charcoal
		52-53 cm	charcoal layer and organic matter, compact, **floor** deposit?
		53 cm	stone
	#7	0-21 cm	top soil, dry
		21-40 cm	sub soil, dry
		40-43 cm	dry silt, medium brown, traces of light grey tephra
		43-48 cm	dry medium brown silt with traces of charcoal
		48-53 cm	light brown and reddish turf layer
		53-54 cm	clean silty layer
		54-57 cm	wet reddish and dark brown turf with birch
		57-69 cm	same as above
		69-74 cm	wet reddish brown and orange turf layer, wet and clean
		74-77 cm	charcoal and peat ash layer
		77-79 cm	wet medium brown silt with traces of charcoal
		79 cm	stone
	#8	0-21 cm	dry and compact top soil
		21-32 cm	dry and compact subsoil
		32-43 cm	same as above
		43-47 cm	wet reddish and dark brown turf with traces of charcoal, compact
		47-52 cm	silty medium brown layer with traces of charcoal and wood
		52-53 cm	silty medium brown layer with peat ash
		53-61 cm	wet medium brown silt with traces of charcoal, compact and organic
		61-68 cm	same as above with more charcoal, birch and wood traces
		68 cm	stone
4	#9	0-17 cm	top soil, dry
		17-24 cm	sub soil, dry
		24-34 cm	medium brown wet silty layer with traces of charcoal and wood
		34-54 cm	same as above, traces of burnt bones
		54-62 cm	same as above with traces of burnt bones, more compact and more wet, darker
		62-69 cm	same as above

		69-82 cm	peat ash and charcoal, compact and clean
		82-101 cm	same as above
		101- 116 cm	wet organic layer, dark brown, traces of unburnt bone (bone butter)
	#10	0-21 cm	top soil
		21-25 cm	subsoil
		25-34 cm	medium brown silty layer with traces of charcoal, wood and bone fragment
		34-42 cm	same as above
		42-51 cm	wet turfy layer with charcoal bits
		51-62 cm	light brown silt compact and wet with traces of birch wood and charcoal, bone butter?
		62-80 cm	same as above
		80-90 cm	layers of charcoal and peat ash, possible bone butter
		90-119 cm	laminated layers of peat ash, charcoal and medium brown silt, wet.
5	#11	0-18 cm	top soil
		18-23 cm	subsoil
		23-28 cm	turfy layer with charcoal ,compact and dry
		28-33 cm	wet reddish turf, traces of charcoal, burnt bones (minimal)
		33-35 cm	same as above
		35 cm	stone
	#12	0-16 cm	top soil and subsoil
		16-22 cm	turfy layer with charcoal ,compact and dry
		22 cm	Stone
	#13	0-13 cm	top soil and subsoil
		13 cm	stone
	#14	0-26 cm	topsoil
		26-35 cm	subsoil
		35-46 cm	same as above
		46-57 cm	laminated reddish brown and light brown turf
		57 cm	stone
	#15	0-17 cm	topsoil, dry
		17-23 cm	subsoil, dry
		23-32 cm	dry silty layer with traces of charcoal
		32-35 cm	same as above
		35 cm	stone

Table 2. *Coring results from Vatnsfjarðasel*

Date: 17/08/2010 cloudy **Init.:** C.D.-H. & Ó. G.

Transect #	Core #	Layer thickness	Description
1	#1	0-23 cm	top\subsoil, wet and organic
		23-32 cm	turf mixed with topsoil, medium brown, wet and compact
		32-39 cm	red brown turf, wet, soft, traces of charcoal
		39-51 cm	same as above
		51-55 cm	light to medium brown turf gravel,-burnt bones and NO charcoal
		55-63 cm	reddish brown turf, traces of charcoal, wet

		63-74 cm	same as above
		74-76 cm	laminated reddish brown to dark brown turf, traces of burnt bones?
		76-82 cm	bright orange unidentified soil with charcoal layer
		82 cm	stone
	#2	0-35 cm	top\subsoil loose
		35-39 cm	reddish brown turf, traces of charcoal, wet, burnt bones
		39-50 cm	same as above
		50-53 cm	reddish brown laminated turf with light brown turf and traces of charcoal
		53-60 cm	wet dark brown layer with traces of reddish turf and charcoal
		60 cm	stone
	#3	0-24 cm	topsoil
		24-29 cm	subsoil
		29-39 cm	laminated reddish brown, light brown and dark brown turf, charcoal bits and organic matter
		39-48 cm	dark brown organic layer charcoal and reddish brown turf
		48-55 cm	reddish orange with charcoal and light brown turf at 54 cm
		55 cm	stone
	#4	0-30 cm	top\subsoil loose
		30-32 cm	rooty medium brown silt
		32-35 cm	reddish brown and light brown turf
		35-38 cm	medium to dark brown wet organic traces of charcoal and turf
		38-40 cm	reddish brown and light brown turf
		40-48 cm	medium to dark brown wet organic traces of charcoal and turf
		48 cm	stone
	#5	0-24 cm	top\subsoil loose
		24-30 cm	reddish and medium brown turf, wet with charcoal
		30-38 cm	dull medium brown layer, traces of charcoal
		38-45 cm	same as above
		45-49 cm	uniform medium brown silty layer with traces of charcoal and gravel
		49-62 cm	laminated bright orange turf?, clean, oxidised turf, natural, compact
		62 cm	end of coring
2	#6	0-27 cm	top\subsoil, rooty
		27-48 cm	natural, sterile soil
		48 cm	end of coring
3	#7	0-25 cm	top\subsoil
		25-29 cm	loose medium brown turfy soil with gravel
		29-34 cm	charcoal layer
		34-38 cm	peat ash layer, clean
		38-42 cm	charcoal layer
		42 cm	stone
	#8	0-22 cm	top\subsoil
		22-26 cm	reddish brown turf
		26-45 cm	medium brown wet soil with traces of charcoal, peat ash and gravel
		45 cm	stone
	#9	0-22 cm	top\subsoil
		22-29 cm	medium brown wet soil with traces of charcoal
		29-37 cm	same as above with traces of peat ash
		37-40 cm	same as above but with more peat ash and charcoal, possible charcoal layer at 34 cm

		40-53 cm	same as above
		53-57 cm	medium brown wet soil with traces of charcoal
		57-65 cm	medium brown soil with traces of charcoal and peat ash
		65-68 cm	laminated charcoal layers with medium brown soil between
		68-76 cm	medium brown wet soil with traces of charcoal
		76-82 cm	same as above
		82-84 cm	charcoal layer compact, coarse
		84-94 cm	peat ash, charcoal and burnt bones
		94-101 cm	same as above
		101 cm	stone
	#10	0-40 cm	loose top\subsoil
		40-70 cm	medium brown wet traces of charcoal and loose
		70-89 cm	same as above
		89-94 cm	peat ash and charcoal
		94-111 cm	same as above plus burnt bones
		111 cm	stone
4	#11	19 cm	peat ash
		21 cm	stone
	#12	0-14 cm	top\subsoil
		14-16 cm	reddish brown turf
		16-31 cm	medium brown wet layer with charcoal and gravel
		31-48 cm	same as above
		48-51 cm	charcoal and peat ash
		51-57 cm	very compact wet medium brown and dark brown layer of turf, charcoal
		57 cm	stone
	#13	0-23 cm	top\subsoil
		23-34 cm	wet medium brown layer with traces of charcoal
		34 cm	stone
	#14	0-24 cm	top\subsoil
		24-37 cm	medium brown wet layer with traces of charcoal
		37-42 cm	charcoal, peat ash and turf
		42 cm	stone
	#15	0-17 cm	top\subsoil
		17-23 cm	medium brown wet layer with traces of charcoal
		23-26 cm	reddish brown and medium brown turf
		26-33 cm	peat ash and charcoal
		33 cm	stone
	#16	0-19 cm	top\subsoil
		19-26 cm	medium brown wet layer with traces of charcoal
		26-28 cm	reddish brown turf
		28-33 cm	medium brown layer, wet, with traces of charcoal and burnt bones
		33-53 cm	same as above
		53-57 cm	charcoal layer with traces of bones
		57-63 cm	medium brown and light brown soil with traces of charcoal
		63-64 cm	peat ash and charcoal
		64 cm	stone
	#17	0-17 cm	top\subsoil
		17-27 cm	medium brown rooty layer with traces of charcoal
		27-36 cm	medium brown layer, traces of charcoal and reddish turf
		36-53 cm	same as above

	53-57 cm	laminated reddish brown, light brown and dark brown turf, traces of charcoal
	57-62 cm	peat ash layer
	62-66 cm	charcoal layer compact, coarse
	66-68 cm	peat ash layer
	68 cm	stone
#18	0-19 cm	top\subsoil
	19-31 cm	laminated layers of charcoal and reddish turf wet and compact
	31-36 cm	medium brown wet traces of charcoal
	36-45 cm	same as above
	45-49 cm	peat ash and charcoal
	49 cm	stone

ASSESSMENT OF THE ARTEFACTS FROM VATNSFJÖRÐUR

Guðrún Alda Gísladóttir
Fornleifastofnun Íslands

With stone analysis by Sólveig Guðmundsdóttir Beck, Fornleifastofnun Íslands
and pottery analysis by Gavin Lucas, University of Iceland

Artefacts from the Viking Age Area

The material retrieved this field season is very sparse, only iron and stone finds, numbering 11 altogether. All of the finds are from a small house (structure 10) in Area 14, dated to the Viking Age.

The iron objects are fragmented and their type and function cannot be determined except for find no. 12 from context [10035] which is a gravel spread inside the structure. This find is a tool, probably a punch. The stone finds consist of weights and a manuport. Find 8 from [10022], find 9 from [10029] and find 11 from [10033] – are all weights found within the building. Stone weights 8 and 9 are perforated crudely probably partly through a natural hole but find no. 11 is made of Rhyolitic tuff, worked and has a round and small perforation. Those stone weights are probably loom weights and suggest that a warp-weighted loom was housed in structure 10.

Table 1. *Finds from Area 14, in the Viking Age part of the site.*

Find No	Unit No	Object	Material	Sub-material
10-001	9045	Indeterminate	Iron	
10-002	9045	Indeterminate	Iron	
10-003	9045	Manuport?	Stone	Red-Interbasaltic sedimentary rock
10-004	10006	Food waste	Animal bone	
10-005	10008	Food waste	Animal bone	
10-006	10007	Indeterminate	Iron	
10-008	10022	Weight	Stone	Gabbro
10-009	10029	Weight	Stone	Basalt?
10-010	10029	Indeterminate	Stone	Basalt?
10-011	10033	Weight	Stone	Rhyolitic tuff
10-012	10035	Tool	Iron	

Artefacts from the Farm Mound Area

Unlike previous years the finds from the 2010 field season were chiefly recovered from occupation deposits, not primarily from post-abandonment deposits, as in 2009, or severely disturbed deposits created by the levelling of the home field, as in the field seasons 2006-2008.

The finds retrieved are of diverse types and material and date from the early 20th century back to the 17th, but substantial proportion are dated to the 17th to early 18th century.

All finds were processed and given basic conservation care on site but further conservation work was carried out during post excavation work by Jannie Amsgaard Ebsen (Odense Bys Museet, DK) and Þórdís Baldursdóttir (Forvarslan.is). The preservation condition of the finds varies; in the moist condition of the excavated layers the organic material is in very good condition, but preservation of metal objects is poorer.

Organic preservation was generally very good especially in the 17th century layers of the room given the group number 10662, where large amount of organic material as wood, textile, leather and bone were found. Most of the finds were retrieved from floor deposits which included large amounts of wood items (mainly of broken artefacts and splinters, probably from woodworking), textiles (both shreds and larger pieces, some identifiable items among them – both woven and knitted) and bone fragments (fish and mammals). The animal bones are being analysed by Céline Dupont-Hébert at the Université Laval (see this report).

Most of the retrieved pottery vessels date to the 17th – 18th centuries. These vessels were mainly found in structures given the group numbers 10662, 10151, 10590 and 8562. Pottery dated to the 19th -20th centuries were mainly found in structures 8563, 8590 and 8563. The assemblage is diverse and there are many interesting pieces such as Westerwald jugs and tripod cooking vessels. All the clay tobacco pipes found in field the 2010 field season can be dated to the 17th century. The glass finds consist both of window pane and vessel fragments from bottles, phials, beakers and stemware, some very decorative. Few beads are also present in the finds assemblage. The glass material is dated to the 17th -20th centuries, as the pottery.

Figure 1. *The two pottery fragments on the left are from 10506. The one on the right is from context 10578.*

Figure 2. *Clay pipes, stems and bowls from context 10510.*

Most of the metal objects are of iron and copper alloy but lesser amount of lead and lead alloys. The preservation of metal is average to bad and many of the finds in very poor condition. The metal finds are also very diverse, most of the iron finds are nails – both forged and machine manufactured, shovel blades, knives, sewing needles and cooking vessels. The finds made of copper alloy are of more personal nature, clothing items, thimbles but also cutlery. Stone objects are mostly hammers and weights but also schistose whetstones.

The find assemblage from room group 10662 is a very interesting one. The amount of fish bones and fish hammers reflect food processing activity but great numbers of textiles shreds and fragmented wood found in the floor layers might suggest that the rags and shavings were thrown on the floor to keep it dry.

Figure 3. *Whetstones. Above: from context 10529. Below context 10651.*

It is firmly believed that ongoing excavation during the forthcoming 2011 excavation season will add further to our understanding of the daily life in the 17th and 18th centuries at Vatnsfjörður.

Finds from Evaluation Trenches 36, 37 and 42

The 14 finds from evaluation trenches 36, 37 and 42 are all modern, late 19th – mid 20th century; i.e. ceramics, glass, a probable writing implement (slate stylus) and a barbed wire.

Table 2. *Finds from the Evaluation trenches.*

Find No	Unit No	Area	Object	Material	Sub-material
10-013	10064	42	Barbed wire	Iron	
10-014		37	Bottle	Glass	
10-015		37	Window pane	Glass	
10-016		37	Fuel ash	Slag	
10-017		37	Pottery	Ceramic	
10-018		37	Food waste	Animal bone	Sheep rib
10-019		37	Unworked wood	Wood	
10-020		36	Pottery	Ceramic	
10-021		36	Stylus?	Stone	Slate

ASSESSMENT AND EVALUATION OF THE ARCHAEOMETALLURGICAL RESIDUES

Thomas Birch
University of Aberdeen

Introduction

The survey and excavation of a Viking farmstead complex at Vatnsfjörður, in Ísafjarðardjúp, is nearing completion this year (2011) since its beginning in 2003 by Fornleifastofnun Íslands and members from the University of Aberdeen. The site spans from the tenth to the twentieth centuries AD, being a chieftains seat from the thirteenth to the seventeenth centuries (Milek 2008). This report is concerned with the archaeometallurgical residues recovered during excavations on the Farm Mound and in the Viking Age part of the site. Structure 3 was identified as a Viking Age smithy with its eastern wall abutted by a small oblong building (Structure 6) which was probably a storage building. During fieldwork from seasons 2005 to 2009, a minimum of approximately 150 kg of metallurgical waste was recovered from contexts in association with these structures, believed to be dated to the tenth century/Viking period.

This report presents the results and observations made based on a macroscopic assessment and scientific investigation of the assemblage carried out at Fornleifastofnun Íslands (Reykjavik, Iceland) and the University of Aberdeen (Scotland, UK) in July and August 2010. The main aims of the study were:

i) to confirm the identification of the slag remains and other metallurgical residues as being related to ferrous metallurgy;
ii) to establish which metallurgical processes took place; smithing and/or smelting;
iii) to consider the possible presence of other pyrotechnical and non-ferrous metallurgy processes on site, and
iv) to evaluate the potential for further research and analytical study of the assemblage.

This study followed the methodology for the identification and reporting of slag outlined in the Archaeometallurgy guidelines published by English Heritage (Bayley et al. 2001) and the research framework proposed by the Historical Metallurgy Society (Bayley et al. 2008). This report presents the observations and results of the assessment and scientific investigation of the assemblage in order to contextualise the technological information yielded from the different remains. A brief introduction into pre-industrial iron metallurgy is provided relating to Viking Age and Early Medieval Iceland.

Viking Age and Early Medieval Iron Metallurgy in Iceland

With reference to Viking Age and Early Medieval sites, Fridriksson and Hermanns-Audardóttir (1992) proposed a model for iron production in Iceland until its decline with the collapse of the Catholic Church in the 1560s. They propose a model for the movement of iron in Iceland, making conclusions about the trade and import of the material, with reference to historical accounts. Smith (2005) furthered previous work by focusing on the socio-political and economic context of iron production in Iceland. Using Háls as a case study, Smith has made detailed suggestions about the scale of production and organisation. Whilst providing an approximate overview of iron production and its role in Viking Age and Early Medieval

Iceland, the previous two studies have been fundamental in making careful deductions about furnace morphology. They outline a general furnace model based on the archaeological referents, deducing that it consists of a subterranean stone-lined base with a turf walled superstructure. Not only is this implied by the evidence in the archaeological record, but it corresponds neatly with the apparent absence of technical ceramics associated with iron production. This also reflects the scarcity of good clay deposits from which to construct a furnace. The parent material of Iceland's young geology consists mostly of basic extrusive igneous rock (mainly basaltic) that has yet to produce mature clay sediments through chemical weathering.

Relatively little work in the way of archaeometallurgical studies exist for Iceland when compared to the wider context of North-Western Europe. It is during the last decade that analytical data on slag compositions has been published from archaeological sites. Tap slag from two iron production sites, Belgsá and Lundur (Fjnóskadalur), along with a few slag inclusions from an anvil found in Skógar (southern coast), were analysed for their composition and microstructure by Buchwald (2005: 332-333). Production slags, metallic fragments and bog ores were also examined and analysed by Espelund (2003: 158-161; 2007: 65-67) from Viðivellir and Sandartunga in addition to the latter two sites mentioned. Sigurðardóttir's (1999; 2004) investigation into the provenance of iron in Iceland examined smelting and smithing slags from a number of sites, as well as undertaking extensive programme of analyses of slag inclusions entrapped in iron artefacts. The most recent and comprehensive analysis of iron production and iron working residues comes from McDonnell and Maclean's (2010) slag report for Hofstaðir.

The difference in the format of the results and in aspects of the methodology of slag analyses between publications prevents an effective comparison of their compositions. Espelund's results only report an incomplete selection of oxides present, making it difficult to judge how representative the data is of the overall composition. Only individual slag phases were analysed in Sigurðardóttir's study, and so the results are not fully representative of the bulk average slag composition. McDonnell and Maclean's reported results, as well as Buchwald's few analyses, list the full range of oxides detected, which are representative of the average slag composition. Future slag analyses and report of results should promote comparability with previous studies in order to gain a better understanding of iron production and iron working in Iceland.

The 'bloomery/direct' process

Iron may have be recovered from the earth's surface in the form of meteoric iron, however, the most common way of obtaining iron was to extract it from its ore. During the Viking Age and Early Medieval Period, the main method was to smelt iron ores by the 'direct' process, or 'bloomery' method. Bog iron ore deposits were widespread in Iceland due to the leaching of iron compounds from the basaltic bedrock that precipitate to form accumulations or concretions of 'bog ore' (hydrated iron oxides). The unwanted non-metallic mineral component of any ore is known as 'gangue', and can often be separated from the iron bearing minerals through a process often termed 'ore dressing' or 'beneficiation'. Crushing, sorting and roasting may contribute towards benefiting the ore, as well as removing sulphur from sulphidic ores.

The direct process is a solid state reaction in which iron ore is processed in a furnace with fuel (charcoal) at below 1500°C, usually at around 1200°C. In this reaction iron oxides are reduced to metallic iron, which coalesces and sinters to form a large lump of slag-rich iron known as the 'bloom'. The bloom forms around the blow hole, or tuyère, on the inside of the furnace. The main by-product of this smelting process is known as 'slag'. A great deal in

depth has been written about the direct process in iron smelting technology, of which only a brief description has been given here (McDonnell 1989: 474; Rostoker and Bronson 1990: 25-32, 89-91; Scott 1990: 158-70; Tylecote 1980: 209-20).

Slag has been generalized as the "waste product of smelting processes", however, "slag is a rather general term, much like 'ceramic', and any given smelting site often comprises a multitude of subtypes of slag" (Pleiner 2000: 251; Rehren et al. 2007: 215). Slag is formed during the bloomery process from unreduced iron oxides, silica and alumina. The silica and alumina may come from the furnace clay lining, any additional fluxes added, or may be present in the ore being processed (as 'gangue'). Slag liquates at around 1000°C, and is often described as being liquid or 'semi-liquid' during the smelting process. Slag may also be made from the technical ceramics (such as the 'tuyeres' or furnace lining), the fuel ash and other impurities in the gangue component of the ore.

There are, generally, two furnace construction types; those that tap the slag from the furnace, and those that do not tap the slag from the furnace. Smelting slag morphologies have been used to identify different slags produced due to the variation in the furnace structure, conditions of the smelt, and the raw materials used. Tapping furnaces allow the slag to run out of the furnace as a slag flow, whilst non-tapping furnaces retain the slag which solidifies into a solid block at the bottom of the furnace.

Non-tapping furnace constructions usually collect the slag at the bottom of the furnace. Non-tapping furnace slags are often referred to as 'slag blocks', 'slag cakes' or 'furnace bottoms' (Paynter 2007: 205). One must be wary that there is a distinction between 'slag blocks' formed in a pit underneath the furnace, and those formed at the bottom of the furnace referred to as 'furnace bottoms' (Joosten 2004: 16). Slag-pit furnaces utilize pits which are completely filled with slag to form heavy slag blocks, and these can be recognised by their characteristic cauldron or 'plano-convex' shape due to their cast impression from the subterranean hearths of slag pit furnaces (Pleiner 2000: 257-9). 'Furnace bottom' slag is often a direct impression of the bottom of the furnace. As a result, iron slag can provide us with specific information about the furnace design, its shape and dimensions (Pleiner 2000: 251-9).

'Tap slag', is formed in tapping furnaces where the structure taps away the slag from the smelt, often resulting in flows of slag (or 'runnels') similar in texture to lava with runs on its uppermost surface, sometimes referred to as 'ropey' (Joosten 2004: 17; Pleiner 2000: 262). There is also 'furnace slag' which is formed in the shaft of the structure, often containing cinder and charcoal. Overall, iron slag can inform us of the mode of operation; how the slag was removed from the furnace, providing us with a fundamental insight into the smelting operations of the furnace used. The composition of slag can lead us to further conclusions on the temperature of the smelting operations. As already mentioned, it can provide us with information about the furnace being used. Slag morphology has helped distinguish between tapped furnaces and non-tapping furnaces; however, the study of slag morphology is not free from limitations.

Slag can often be inconclusive as to the processes by which it was derived (Joosten 2004: 18), as often the term 'undiagnostic slag' is used, as well as the fact that there can be a great deal of similarity between slags, which offer "little representation of the variability in furnace designs" (Rehren et al. 2007: 212). Tap slag may be present in archaeological assemblages associated with non-tapping furnaces (Paynter 2007: 206). Similarly, 'reheating slags' can often be mistaken for furnace bottoms (Joosten 2004: 18). Slag that is tapped into a pit away from the furnace, in a similar fashion to a slag-pit furnace, can be mistaken for slag blocks from a non-tapping furnace construction, therefore it is imperative that the contextual evidence is considered when studying slag (Pleiner 2000: 62-63, 257). In summary, we must accept that the visual analysis of slag may not always be a conclusive method for distinguishing between mode of operation in bloomery smelting, or furnace designs. A lot of

detail has been paid to the study of slag, of which only a short summary has been given here (Bachman 1982; McDonnell 1989: 373; Paynter 2006; Rostoker and Bronson 1990: 91-4; Scott 1990: 155-8; Tholander 1989; Tylecote 1980: 223-4, 1987: 291-324).

The 'bloom' of iron that is formed at the bottom of the furnace is often rich in slag during bloomery smelting. In order to remove the majority of this slag, the bloom is usually hammered on an anvil in a process known as 'primary smithing'. 'Secondary smithing' is where the metallic iron bar, or billet is formed into a finished object, and is also the process by which iron objects are reworked, modified or repaired. Slag that is expelled from the iron bar, or object, accumulates in the hearth to form 'smithing hearth bottoms' (SHB's), also referred to in shape as 'plano-convex bottoms'. During the secondary smithing stage hammerscale is formed whereby flakes of oxidised iron and spheroidal droplets (that solidify in the air before landing) detach from the surface of the object being worked during striking.

Methodology

The archaeometallurgical residues collected were first examined visually, before samples were selected for further chemical and microscope analysis. The methods employed for this study are described in detail below. All abbreviations, symbols and acronyms used throughout the report in the text and illustrations are listed in Appendix 1.

Visual assessment

The maximum and minimum dimensions for each classification type were recorded, as well as the frequency[14] (where possible) and the total weight (g). The classifications used for this assessment are described and justified in the following section.

Sample selection

Five samples were selected from the assemblage representative of the different slag morphologies identified. Two smelting slag fragments were sampled, along with one sample of tapped slag, flowed slag, hearth bottom, and undiagnostic slag. All samples analysed in this report derive from the most productive slag context W319 (VSF05) and correspond with Finds Number 113. Rather than compare different samples from different archaeological contexts, it was decided to gain a representative selection from one context where the slag residues are assumed to be related.

Preparation and analytical methods

Each sample was obtained using a water-lubricated rotary silicon carbide (SiC) grinder cut-off machine. The sample was ground using 120 grade SiC abrasive paper prior to being mounted in a two-component epoxy resin. The resin block was ground using SiC abrasive grade paper (grade 120-4000) and then flatly polished using diamond paste mediums 6 and 0.25μm.

A metallographic study was performed on each sample using a metallographic optical microscope in plane polarised light (PPL) to assess the microstructure and distinguish different zones of interest. All micrographs are provided with scale bare (in micrometers) and microscope magnification (100X, 200X). Each sample was carbon-coated for chemical analysis. The bulk composition of each sample was determined based on five area analyses

[14] For some contexts, a count is provided for 'hammerscale'. This count represents the number of slag spheres that were identified, and do not represent the total count of the magnetic residues collected.

using an ISIS ABT-55 scanning electron microscope equipped with an Oxford Link Analytical AN 10/55S energy dispersive spectrometer system (SEM-EDS). Measurements were performed with a 15kV accelerating voltage with a ≈40% deadtime. All sample preparations and analyses were performed at the University of Aberdeen.

The precision and accuracy of the instrument used in this study was tested through repeated analysis of reference materials relevant to the analysis of slag (see Table 1). Three reference glasses, produced by Brill (1999) from the Corning Museum of Glass were analysed (Glass B, Glass C and Glass D). The results from recent microbeam analyses of these standards were employed as the reference values for this study (Vicenzi 2002). The accuracy and precision tests for the lead-rich reference glass (Glass C) were significantly higher than those results obtained from the other two glasses, perhaps owing to an internal matrix affect. Subsequently, it was decided to focus to pay greater attention to the results obtained from Glass B and Glass D. The results are generally good. Minor elements can be detected and quantified for amounts over 0.2 %. The relative quantification error for minor element oxides (<1 wt%) was up to 20%, and for major element oxides (>1 wt%) the relative error was around 2-3%. The accuracy of the calibration and validity of the ZAF correction procedure for SEM-EDS was tested with the latter mentioned reference materials. The calibration of the scanning electron microscope was based on pure elements and simple compounds. Oxygen was not measured in this study, but was calculated based on stoichiometry. All results are reported as averages and expressed in weight percent of the element oxides.

Slag classification and terminology

There is no consensus on how slag should be classified and the terminology employed to describe those classifications[15]. Due to the variety of slag and residues, reports should consider each assemblage within a flexible framework that is site specific, as each site can produce its own specific types (Crew 1996). Different types of slag are produced during the iron smelting and smithing processes, which can often be differentiated by their morphology, size, and characteristic features. Density and colour can also be used to differentiate slag types, but these properties can vary greatly between slags from the same process. Slags from the bloomery-smelting and smithing process are compositionally very similar, and so this is not often used to differentiate between the two processes. Slags can also exhibit mixed characteristics, or intermediate characteristics that make them difficult to relate to a metallurgical process easily, and so it is worthy to conceive of a continuum of slag types rather than a division of easily definable types.

Initial efforts to categorise metallurgical residues from Vatnsfjörður found close parallels to those devised by McDonnell and Maclean (2010) for their archaeometallurigcal assessment of the residues from Hofstaðir (a Viking Period Hall in north-eastern Iceland). This report employs a similar terminology and classification system to that employed by McDonnell and Maclean (2010). Some terms have not been employed due to their ambivalent meaning. For purposes of clarity and comparability, the terminology and classification system employed here will be described in detail with reference to previous slag assessments in Iceland.

The archaeometallurgical residues can be separated into two groups, those that are

[15] For a general introduction and outline of slag morphologies (classification systems) that have been utilised in archaeological studies, the reader can be guided towards the online glossary of terms and definitions produced by the Historical Metallurgy Society, as well as their catalogue of the National Slag Collection containing exemplary photographs. The archaeometallurgy guidelines produced by English Heritage provides an informative and useful introduction to slag types and descriptions.

diagnostic, and those that are non-diagnostic. Diagnostic residues exhibit clear characteristics that identify the process that they derive from, such as iron production and iron working. Non-diagnostic residues present no clear characteristics or features that identify them clearly with a specific technological process. Non-diagnostic slags can often be related to ferrous metallurgy generally, but it is unclear whether they originate from bloomery-smelting or smithing. Often, non-diagnostic slag residues can comprise the majority of an assemblage whereby they are fragmentary, weathered and corroded pieces of slag displaying intermediate characteristics that prevent them from being assigned to a particular metallurgical process. Despite previous use of the terms 'smithing slag lumps' and 'cinder' in other slag reports, they will not be employed here as will be justified later. Some examples of the slag types discussed in this section can be found in Appendix 2, along with the figures included in the text.

Diagnostic residues

Slags that can be associated with a particular process are considered diagnostic. The diagnostic slags derived from iron production are tap and/or smelting slag (see Fig.1). Diagnostic iron working slags are smithing hearth bottoms and hammerscale.

Tap Slag

This slag is generated by the bloomery smelting process and has flowed from the furnace in a liquated state. This may not always have been an intentional act. It is characterised by the flow texture on the upper cooling surface that has commonly been referred to as a 'lava-like' appearance or 'ropey' morphology. The upper cooling surface of tap slag exhibits a free flowing texture consisting of 'runnels' or 'rivulets'. In cross-section and on fractured edges, tap slag is dense, often with small spheroidal vesicles (bubbles) near the upper surface formed by escaping gases. There may be a few large voids. The differential in cooling between the faster cooling surface and the slower cooling bottom can form a two-banded appearance in section with a fine crystalline fracture. The base, or 'under-surface', of tap slag may be rough and display impressions, sometimes with adhering residues of matter the slag has run upon.

Smelting Slag

Slag that has been formed by the bloomery smelting process that has not flowed from the furnace can be described as smelting slag. It often has a medium to low density and may exhibit great variability in its porosity. Vesicles may range in size, frequency and shape, often having an irregular character. Compared to the free flowing nature of tap slags, smelting slag is often more viscous in appearance. Sometimes there a long or large viscous flows displaying the course and direction of the flow. The most characteristic feature of smelting slag is the presence of large charcoal impressions, and in cases, embedded charcoal. Some smelting slag may incorporate other residues and inclusions indicative of the smelting environment and construction, such as stones, technical ceramics (furnace wall or lining) and organic matter. Some furnaces may produce a 'furnace bottom', a dense cake of smelting slag that may include pieces of ore and fuel, as well as provide an impression of the base of the furnace structure.

Smithing Hearth Bottom

During the process of smithing, slag may accumulate in the bottom of a hearth. Forming the bottom of the heart, smithing hearth bottoms (SHB's) typically have a convex base and are circular to oval shape. The upper surface, the 'top' of an SHB may be planar (plano-convex SHB) to concave, a depression caused by the air blast (concavo-convex SHB). The upper surface may also be irregular. For the purpose of this study, a diagnostic SHB (or fragment thereof) should exhibit a planar-to-concavo top, defined by a 'rim' which follows into a convex bottom. Sometimes referred to as hearth cakes, SHB's can range in size and weight depending on the amount of slag that has accumulated. Primary smithing (bloom-refining), often generates larger SHB's due to the slag-rich nature of the bloom being worked, compared to secondary smithing (manufacture, repair, re-working). SHB's can be magnetic due to the fragments of iron and hammer scale that has been incorporated into the slag. The base may include impressions of charcoal, remnants of hearth lining, and sometimes other material (sand, stones) adhering to the surface. SHB's and furnace bottoms can be mistaken for one another, and so careful attention needs to be paid to the diagnostic features.

Hammerscale

Iron oxides and microslags generated from smithing are known as hammerscale. They can be identified by their shape and size. There are two types of hammerscale: platy (sometimes termed 'flake'), and spheroidal. During smithing, the iron can be heated in the reducing or oxidising part of the hearth. When the iron oxidises, it forms a thin scale of iron oxide at the surface. Upon being struck by a hammer, the iron oxide skin will usually break away from the metallic iron substrate to produce platy hammerscale. Platy hammerscale is often very small and magnetic, with flakes rarely being greater than 5mm in length. Platy hammerscale may be associated with primary and secondary smithing. Spheroidal hammerscale (microslag) is often associated with primary smithing. As a bloom is refined, the iron is consolidated as it becomes depleted in slag. The entrapped slag inclusions are extruded from the iron during smithing, squeezed out in a liquated state during the high temperature process. The extruded slag cools upon contact with the air and solidifies into a spheroidal globule. The spheroidal globules formed from primary smithing may contain a central void of vesicle that forms as the rapid cooling of liquated slag rapidly cools in combination with the process of any escaping gases. Spheroidal hammerscale may also form from any fluxes that have been utilized during the smithing process, which liquate and are expelled from the surface of the worked iron along with the departing iron oxide fragments. This hammerscale consists of an iron oxide core subsumed within a globular spheroid of slag, and may result from primary or secondary smithing. For the purposes of this report, the category 'magnetic residues' is employed, in which hammerscale is included. Due to their microscopic nature, it is difficult to assess whether all magnetic residues represent hammerscale, and so the term 'magnetic residues' will be employed.

Hammerscale is often missed during excavation due to its size. Only by employing certain excavation strategies can it be systematically recovered. The Society for Historical Metallurgy provide the most up-to-date methods dedicated to the recovery of metallurgical remains in archaeology (Bayley et al. 2001; Bayley et al. 2008:29; Dungworth & Paynter 2006: 7, 13; McDonnell & Starley 2002; Starley 1995, 2002). Mapping the distribution of hammerscale may yield information on the location of the hearth and anvil using during smithing.

Non-diagnostic residues

The terms ‘smithing slag lumps’ and ‘cinder’ are utilised as terms in some classification systems. These two definitions are not used to classify the residues in this investigation. McDonnell and Maclean describe work on the premise that all slag should be described as smithing slag “unless there is good evidence to indicate that it derived from the smelting process” (2010: 272). They describe such “smithing slag lumps” as “randomly shaped pieces of iron silicate slag generated by the smithing process” (ibid.). It may appear logical to assume that slag is smithing slag until proven to originate from smelting, but this assertion can be misleading. An assemblage of highly fragmented and altered smelting slag lumps may appear non-diagnostic and, working within McDonnell and Maclean’s terminology and classification system, would be misconstrued as ‘smithing slag’. Whilst smithing slag produced in a hearth can comprise randomly shaped lumps, they cannot necessarily be distinguished from other slag types. To avoid any misidentification, this report does not adopt the term or classification of ‘smithing slag lumps’. Such slag lumps, exhibiting no clear features indicative of a particular process, will be deemed undiagnostic. This does not mean to negate the term ‘smithing slag lumps’ altogether. Contextual evidence can significantly increase a confident identification of slag lumps generated by smithing, such as when they are found in-situ in a hearth.

‘Cinder’ has appropriated several different meanings during its usage and is imbued with ambiguity. Burnt or part-burnt material that has sintered (not melted) together to form lumps may be called cinder. The term is not exclusive to metallurgy. It can be used loosely to refer to material deriving from pyrotechnical processes generally. In metallurgy, it may refer to agglomerated material that floats above molten metal or slag. Historically, the term generally meant ‘slag’ (though no always). ‘Cinder’ has also been used as a term to refer to coke, or a coke oven (Neilson 1842: 17). McDonnell and Maclean defined cinder as “high silica-content slag that forms between silica and ferruginous material... [which] may include pieces of lava” (2010: 273). Equally broad definitions have been used in other categorisation systems to include ‘fused earth’ and ‘siliceous-slag’. The breadth and ambiguity of the term cinder prevents it from being used in this report. Slag that would be identified as ‘cinder’ is likely to be identified as either ‘undiagnostic slag’, or ‘fuel ash slag’.

Undiagnostic slag

Slag lacking diagnostic features often is often difficult to assign to a particular process, i.e. smelting or smithing. ‘Undiagnostic slag’, as it has come to be termed, can form significant portions, if not the majority, of slag assemblages. Undiagnostic slag often consists of small or fractured pieces of slag, sometimes corroded. As larger diagnostic slag entities undergo various post-depositional processes, they inevitably fragment into smaller pieces, depreciating in diagnostic features. Despite the difficulty of identifying a particular process, it can be assumed that some form of iron-working is taking place. Some undiagnostic slag fragments may exhibit intermediate characteristics of specific slag types, hinting at a process without full certainty.

Flowed Slag

During the assessment of the residues from Vatnsfjörður, an category of undiagnostic slag was identified, closely matching the description provided by McDonnell and Maclean (2010: 273). This slag exhibits no diagnostic features indicative of any particular process. However, different to undiagnostic slag proper, this slag does display different morphological features.

Fingers, or ‘tendrils’ of flowed slag characterize the surface of these undiagnostic lumps. These prills indicate that the slag has reached some degree of viscosity, allowing the formation of the surface ‘flows’. The surface prills can vary in size, often erratic, extruding from the surface of the slag lumps in multiple directions. The flowed slag could be smelting slag, or smithing slag that has reached melting temperatures. Some flowed slag pieces exhibited small charcoal impressions on the surface, with few internal impressions.

Fuel Ash Slag

Distinguished from other residues by its appearance and low-density, fuel ash slag is not considered diagnostic of any process relating to ferrous metallurgy. This high silica-content slag is sometimes described as having a ‘bubbly’ appearance due to its typically vesicular structure. Fuel ash slag can vary in colour from off-white to yellowish/or brownish grey, usually with a glassy appearance. The lumps are lightweight due to their low density and high porosity, and are not magnetic. The term adopted here does not subsume all non-diagnostic slags that have formed as a reaction between silicates and ferruginous material, as would be the case with the term ‘cinder’.

Ash from fuel reacts with silicates in the surrounding environment to form a vitrified material that is typically described as being glassy, often of low-density. The fuel ash may derive from charcoal, wood or peat. Fuel ash slag can be formed from any high-temperature fire in which alkalis and silicates are present (Bayley et al 2001), and so may be produced by an oven, a hearth, a kiln, a furnace (glass production/working), or another heat related episode such as a burning building. Fuel ash slag on its own, or even in conjunction with vitrified clay, is not indicative or diagnostic of any metallurgical activity.

Charcoal

Charcoal has been identified in the sampling bags storing the residues that have been recovered. Most often, this is in the form of highly friable fine fragments. Larger charcoal fragments have been identified, some embedded in slag.

Technical vitrifications

Several fragments of a thin black lining were frequently identified during the assessment. These siliceous pieces were not identified as slag, as they appeared to be related to a technical construction, such as a furnace wall or lining. These pieces displayed two characteristic surfaces, a heavily vitrified surface presumed to be the interior surface, and a heavily undulating, spikey surface presumed to be the exterior. These fragments were identified as ‘technical vitrifications’. In most slag reports, similar residues are labelled as ‘vitrified technical ceramic’, due to their composition. The fragments identified in this study were glassy and not made of ceramic, which would reflect the absence of clay deposits.

Ferruginous concretions

Ferruginous concretions are not uncommon naturally, but their frequent appearance throughout the contexts assessed may suggest an anthropogenic deposition. It was not possible to distinguish confidently between corroded pieces of iron and reduced pieces of ore, due to their similar composition and appearance. They all mostly conform to a three-banded structure, as revealed by fragmented pieces: the core is yellow, the middle layer is blueish-grey (metallic sheen), and the outer surface is purplish-red.

Ferruginous concretions were identified throughout the assemblage. Many of these lumps appear to be heavily corroded pieces of iron. Their amorphous shape and iron hydroxide banding cause them to fragment and flake easily, also making it impossible to be certain that they originally derive from metallic iron. Some pieces were tentatively identified as nail fragments. Those ferruginous lumps that were confidently identified as nails were separated and united with the collection of finds for further investigation; most of these appeared totally oxidised and corroded bearing no existent metallic phases. Some ferruginous concretions may also derive from amorphous metallic fragments such as pieces of bloomery iron, showing no shape or form.

It is likely that some of these lumps represent pieces of reduced ore. The reddish-purplish appearance of many lumps are common to roasted ores. Some of these lumps were subsumed within, or adhered to, slag (in these cases, the weight recorded is not reflective of the actuall ferruginous concretion identified, but the agglomerate itself). Further analysis, in the form ox x-ray diffraction, would be necessary to confirm the identification of these pieces of reduced ore.

Other

Any material not pertaining to the categories already described was identified as ‘other’. This category mostly represents stone and lava. Some fragments of burnt bone were recovered during this assessment, included within this category, which are highlighted in those contexts concerned.

Results

Visual assessment

A summary of the results from the visual examination are provided here. A detailed description of the count and weights of the residues examined are listed by context in Appendix 3, each with a brief description and discussion. Some contexts containing metallurgical residues (described in previous reports) were not examined during this assessment. Those contexts that were not examined, though deemed relevant to the investigation, are also included in Appendix 3.

In total, over 10,000 items were counted and examined. This figure does not represent the actual number of pieces of slag recovered, as large quantities consisting of small fragments were recovered in the heavy residue fraction by flotation. The total weight of the archaeometallurgical residues assessed is nearly 160kg. Figure 3 illustrates the weight of archaeometallurgical residues recovered for each context to allow for comparison and to graphically highlight certain features of the overall assemblage.

Classification	Counts	Weight (kg)
undiagnostic slag	5066	91.9
flowed slag	3599	22.1
tap slag	43	3.4
smelting slag	928	2.7
smithing hearth bottom	29	3.0
hammerscale	232	0.3
fuel ash slag	48	0.3
technical vitrifications	93	2.4
ferruginous concretions	526	4.1
charcoal	2	0
other	7	3.4
Total	**10573**	**158.4**

Tap Slag

Tap slag was recovered from six contexts, two of which contained much higher concentrations. Whilst contexts [324], [332], [6069] and [6096] each contained upto several hundred grams worth of tap slag, context [204=251=302] contained roughly 1kg, and context [319] just under 2kg. In these contexts richer in tap slag, the tap slag usually takes the form of accumulations that sometimes reveal internal layering as a result of multiple tapping episodes. The accumulations indicate seem fairly consistent in their size, filling small shallows that are usually between 9-12cm in diameter. Images of the tap slag recovered can be seen in Figure 3. Two tap slag fragments one each from contexts [319] and [324] show additional features that provide a negative impression of where the slag cooled (see Figure 4). Both fragments show a 'spout-like' feature, from which the tap slag tapers outwards into wedge shape, consistently with a curved underside and a flattish cooling surface. Another fragment with similar characteristics was observed in context [6069] (see Figure 5). These funnel-shaped fragments may reveal the initial exit point of the tap slag from the furnace. The spout provides some information on the size of the exit hole, and the accumulation of the tap slag itself shows the shape of the shallow channel it cooled in. Similar to the tap slag accumulations earlier, the similarity in the size and shape of the funnel-shaped tap slag fragments would indicate a repetition in smelting practice, a degree of consistency. Tap slag appears to be characteristic of the contexts discussed, notably absent from the earlier contexts.

Smelting Slag

Most of the contexts assessed contain some smelting slag. It often was fragmented and varied in size, but it was recognised clearly by the presence of large charcoal impressions and slag flows. Notable concentrations of this iron production slag were observed in contexts [204=251=302], [319], [324], [6057], [6096] and [7012]. Context [319] produced over 13kg of smelting slag, context [204=251=302] just over 4kg, and the other contexts previously mentioned between 2-3kg each. Overall, just over 27kg of smelting slag was recovered, demonstrating that this site was producing iron. It is not clear yet, however, whether this activity was a continuous practice from the earlier deposits, through to the latest deposition.

Context [7012] contained conglomerates of smelting slag and small stones (see Figure 6). In two cases, these conglomerates were adhering to larger flattish stones. This indicates that the smelting slag had fused the stones together when it was viscous, during smelting,

providing some information about the smelting environment. The flattish stones are likely to form part of the furnace architecture. The smaller stones may also define the lower subterranean limits of the furnace.

Smithing Hearth Bottoms

The recovery of smithing hearth bottoms/fragments and hammerscale indicates that the activity was taking place on site. Of the 29 fragments recovered, nearly half of them derive from context [319]. Notable concentrations of SHB's also occur in context [204=251=302], [6057] and [6096]. Despite having the most fragments, context [319] is exceeded by context [6057] in weight, due to the fact the SHB's are large and mostly complete. The more complete fragments indicate that they were roughly 10-11cm in diameter, although there is some variation in size. They all show a degree of curvature and roughness to the under surface, the bottom, generally with a flattish or slightly concave upper surface. Some examples of smithing hearth bottoms can be seen in Figure 8. Some of the smithing hearth bottoms have a relatively smooth upper surface, which may owe its presence to high smithing temperatures allowing for some liquation of the slag. This would also explain the abundance of flowed slag, which display the flowed characteristics induced by high smithing temperatures (however, not all flowed slag necessarily relates to smithing). The smithing hearth bottoms do vary in appearance slightly. Those from context [6057] have a reddish luster with a rust type residue, probably incorporation of smithing residues rich in iron. Alone, the smithing hearth bottoms are not indicative of primary or secondary smithing, as this interpretation relies heavily on the presence/absence of smelting residues and spheroidal hammerscale.

Hammerscale

Magnetic residues were collected from almost every context examined. Whilst these residues are informative of smithing, not all magnetic residues are necessarily hammerscale. The difficulty in separating hammerscale from other magnetic material is difficult. In contect with the other archaeometallurgical residues, the magnetic residues collected here are probably hammerscale, which can be microscopic. The contexts most abundant in magnetic material are [204=251=302], [319] and [6057], which corresponds well with the recovery of smithing hearth bottoms/fragments. Over 230 slag spheres were recovered from the sampling bags. Almost all of these derive from context [6057]. Although this sample does not reflect the real extent and number from the site, their presence is informative of the type of smithing that was taking place. Whilst secondary smithing (repair, rework, manufacture) is a common activity, bloom refining (primary smithing) is not. The evidence for iron production yielded from the slag assemblage, in conjunction with the spheroidal hammerscale recovered from the sampling bags, demonstrates that primary smithing took place.

Undiagnostic slag

The majority of the slag assemblage examined was either too small to identify, and/or the fragments exhibited no diagnostic features. However, when taking into account the diagnostic residues examined, the nature of the diagnostic slag may imply a particular process. Contexts [204], [319] and [324] are all strongly indicative of iron production due to their quantities of smelting slag and tap slag. These contexts also show an abundance of flowed slag. The undiagnostic slag are larger than the undiagnostic residues of other contexts, which may indicate that these undiagnostic and flowed slag lumps are fragmentary iron production slags.

Conversely, the small size of undiagnostic slag fragments from contexts [6020], [6057], [6069], [6096] and [6126] are all very similar. Whilst only [6020], [6057] and [6096] show clear evidence of smithing, the small size and fragmentary nature of the undiagnostic slag may derive from crumbled smithing slags. Therefore, the undiagnostic residues can also provide further insights into understanding which processes were taking place.

Context [6057] contains the most undiagnostic slag (55kg). Most of this was recovered in the heavy fraction through flotation.

Flowed Slag

Over 22kg of flowed slag was identified in the assemblage, just over one seventh of the total assemblage. A great deal of the undiagnostic residues recovered did display intermediate characteristics in the form of flow textures. Although most flowed slag can be attributed to smelting, the nature of the flows on this type of undiagnostic slag were erratic, often small, in the form of 'tendrils' or 'fingers'. The prills observed could not be attributed to any particular process.

The distribution of flowed slag, by weight, follows the same trend as undiagnostic and smelting slag. The notable concentrations can be observed in contexts [204=251=302]. [319], [324] and [6057]. The mirroring trend in the distribution of smelting and flowed slag would suggest that the flowed slag represents highly fragmented iron production residues.

Fuel Ash Slag

Very little fuel ash slag was identified in the assemblage. As fuel ash slag can derive from a variety of pyrotechnical processes, its absence here confirms that smelting and smithing were the main activities taking place. The majority of the fuel ash slag recovered comes from context [319], which may be attributed to activities not related to ferrous metallurgy, such as a burning event.

Charcoal

Although charcoal was collected for sampling on site, the only charcoal collected in this study was from the sample bags containing the slag. Virtually no charcoal was examined. The charcoal that was recovered was identified as Birch (*Betula*) (pers. comm. Dawn Mooney, 2010).

Technical vitrifications

Some vitrified material was identified as being technical. The lack of clay, geologically, precludes any fired ceramic from being the main composition of any furnace or hearth constructions. The technical vitrifications identified in this study tend to be very dark, almost black, with a glassy sheen. Sometimes, the vitrifications are reddish with a dull surface lacking the siliceous appearance of the dark black vitrifications. The technical vitrifications identified are found in the contexts most abundant in iron production residues, namely contexts [204=251=302], [319], [324], [6057] and [7012], with smaller amounts in other contexts. Examples can be seen in Figure 9. One fragment from context [6020] is very thick, showing discolouration and curvature, context [6020]. The discolouration presumably derives from the oxidising/reducing conditions, creating the colour differential. The curvature of the circumference can be extrapolated to a diameter of between 14-15 cm, and the curvature in profile indicates that this measurement is located towards the base of the larger body from

which the fragment originates. A small fragment had a smooth curved inner surface, with the impression of some sort of channel no more than 2cm in diameter, context [6057]. The inner surface is smooth due to heavy vitrification, and may bear the cellular impression of a wooden fragment such as a branch. This technical vitrification may be the impression of an air hole or a tapping hole through the furnace wall.

Several other smaller fragments of technical vitrifications were identified. Their size, unfortunately, does not allow for any estimate of the size or shape of the larger parent body. It is possible that some of the fragments may relate to a hearth. However, the contextual evidence suggests that these fragments are related to a furnace construction used for smelting, due to the concurrence of technical vitrifications with contexts abundant in iron production residues.

Ferruginous concretions

Iron rich concretions appear frequently throughout the assemblage. The contexts with the highest concentration of ferruginous concretions correspond with those contexts prevalent in iron production residues. In particular, the largest concentrations are contexts [319], [6057] and [7012], which also bear considerable quantities of smelting slags. The other contexts containing notable amounts of ferruginous concretions are [204=251=302], [318], [324] and [332]. Some concretions were identified as nails and excluded from this assessment. Most of the ferrugionous concretions displayed colours common to iron corrosion products, such as reddish and yellowish iron oxides and purplish iron hydroxides. These need not be restricted to metallic objects. Although it is likely that some of the ferruginous concretions represent metallic bodies that have completely corroded, many of the lumps identified have a close resemblance to reduced pieces of ore. Further analysis is needed to confirm the nature of the iron rich concretions in order to better establish whether they represent discarded/unused iron ore.

Other

Most of the other residues identified within the assemblage were stones. One type of material that may be worthy of further investigation is the burnt bone that was found within two deposits, [6069] and [6096]. Although burnt bone is not uncommon to many archaeological sites, there is a possibility that it may be related to ferrous metallurgy as it has been demonstrated in other contemporaneous sites in Scandinavia that it was used as a fuel for smithing (Gansum 2004). If this were the case, the material should be more prevalent, however, the fragments recovered here represent those incorporated with the slag in sampling bags and not the reality of any on-site deposit.

Special finds

In context [7059], ten unrefined iron blooms were recovered. The deposit represents some 44kg of unused iron. The description of each unrefined bloom can be found in Table 4 and seen in Figure 20. Although the weight of each bloom varies between 3 and 5.5kg, they show a strong degree of similarity in terms of their dimensions, shape and form. Two forms appear to exist: a plano-convex bloom and a flattish-oval bloom. Although there is some variation in the diameter, they largely appear to be around 18cm across. They are not all perfectly circular, but tend to be more oval shaped.

Microscopy

The results from the optical microscopy and the SEM-EDS analysis for each sample are presented in Table 5. The results from the chemical analyses have been normalised, with the averages given (*n*= number of analyses), to assist comparability between analyses. All elements measured and quantified are expressed in oxides (stoichiometrically) in weight percent (wt%) as normalised values, along with the average value for the raw analytical totals. All phases identified through optical microscopy were confirmed through chemical analysis.

Tap slag

Figure 10 shows a BSE image of the tap slag analysed. The microstructure consisted of a largely even distribution of angular and skeletal magnetite in a very fine matrix of fayalite and glass. The magnetite is quite densely dispersed throughout the sample, except towards the upper cooling surface which is characterised by large vesicles and a glassy matrix with a decreased concentration of iron oxides. The high degree of homogeneity within the microstructure of the sample indicates that the tap slag formed at the same temperature. The oxidising conditions of the slag formation may be inferred by the high concentration of densely packed magnetite.

Smelting slag

Two fragments of smelting slag were analysed. The slag contained multiple phases. Wūstite and fayalite were identified in different crystalline forms along with a glassy phase. A single iron prill can be seen in Figure 11, surrounded by fine branching wūstite dendrites embedded in a matrix of acicular fayalite and glass. Many iron prills were discovered in the slag matrix, demonstrating that the slag was formed from ferrous metallurgy. Different areas within the slag were characterised by changes in the microstructure, as well as distinctive boundaries and cracks between the different zones of interest. Transgranular cracks were common throughout the slag (Figures 13 and 14), which often separated different zones of interest. The zones differ in their microstructure. This feature was also observed in areas where transgranular cracks had not formed. The boundary between these different zones is very distinctive, separating one area densely packed with wüstite in a matrix of large grains of fayalite, from another area characterised by a much finer grain structure of acicular fayalite and fewer dendrites of wüstite (Figure 12). The heterogeneity of the crystalline forms reflects changes in the temperature conditions in which the slag was produced. The contrast between the high concentration and low concentration regions of wüstite reflect the variability in oxidation.

Smithing hearth bottom

One fragment of smithing hearth bottom slag was analysed. This slag exhibited a microstructure consisting of iron oxide grains in a matrix of fayalite and glass.

Undiagnostic slag

Two fragments of undiagnostic slag were analysed. Figure 15 shows the microstructure of one fragment consisting of globular wūstite with few dendritic structures embedded in a matrix of polycrystalline fayalite and glass. What is interesting is the second fragment of undiagnostic slag, which revealed semi-fused structure showing mineralic inclusions (Figure 16 and 17). Although a representative proportion of the mineralic inclusions have been chemically

analysed, the inclusions are awaiting formal identification to distinguish between the different geological types. Many were confirmed as angular grains of silica. This semi-fused structure may provide information on the make-up and input materials of the original smelting environment. Figures 17 and 18 show obvious cellular structures of vegetatious matter that have been incorporated into the semi-fused structure. Figure 18 shows a negative impression of charcoal, whilst figure 17 has preliminarlity been identified as conifer (pers. comm. Dawn Mooney). There is also the possibility that this semi-fused material derives from another pyrotechnical activity or event.

Flowed slag

The flowed slag exhibited a similar microstructure to the undiagnostic slag sample analysed, revealing a microstructure consisting of an even distribution of globular wüstite (some developing into dendrites), in a matrix of blocky fayalite and glass. Prills of iron were also confirmed on analysis in the slag (Figure 19).

Composition

The bulk composition of the slag samples analysed show a strong degree of similarity. This would indicate that they derive from the same, or similar, smelting systems As per most ferrous slags, the main components of the composition are iron oxides (FeO at around 55-60 wt%), silica (SiO_2 19-23% wt%) and alumina (Al_2O_3 5-7 wt%). The slag contains less than 1 wt% soda (Na_2O), which we cannot quantify accurately due to the quantification error, often associated with sodium and SEM analyses. They all contain around 1% phosphorous (P_2O_5) and less than 0.5 wt% sulphur. The alkali elements present, such as potash (K_2O) and calcium oxide (CaO) are quantified to around 1 wt% and 3-4 wt% respectively. What is interesting to observe are the amounts of manganese oxide (MnO), which are consistently high in the production slags at 5-7 wt%, which could be associated with a manganese-rich bog ore. Small amounts of titania (TiO_2) and barium (BaO) were also detected.

Differences between the slag compositions are worthy to note. The undiagnostic slag is richer in iron oxides than the corpus of slags analysed, by about 10 wt%, which also marks the lesser quantity of silica at around 16 wt%. Both the undiagnostic slag and the hearth bottom fragment analysed contain considerably less manganese than the flowed and smelting slags analysed. This may indicate some transformation in composition as a result of smithing, or that the slags themselves derive from a different type of ore.

The smelting slags contain less iron oxides, allowing them to flow more easily than the other types of slag that are slightly richer (by 5 wt%) in iron oxides. The undiagnostic residues and smithing hearth bottom may show less fluidity in their appearance which may be explained by their higher levels of iron oxides. Tap slag is characterised as containing the least silica, at around 12%, which seems to be substituted by an increase in alkali oxides, magnesia and iron oxides.

The chemical composition of the slags analysed confirms that the archaeometallurgical residues result from ferrous metallurgy. When the three main chemical components are normalised (see Table 6) and the composition plotted onto a FeO-SiO_2-Al_2O_3 ternary phase diagram, information on the temperatures of slag formation can be deduced (see Figure 21).

Discussion and results

The archaeometallurgical assessment of the residues from Vatnsfjörður clearly demonstrate

that iron production and smithing were taking place at this site. The evidence for smelting is pronounced in contexts [204=251=302], [319], [324], [6057] and [7012]. The prevalence of smelting slag in these deposits is concurrent with the increases in flowed slag and undiagnostic residues, making it clear that these are slag-rich deposits. Many of these deposits also produce technical vitrifications that are thought to represent constructions relating to smelting, and/or smithing. The technical vitrifications indicate that a siliceous material was formed during smelting that bears impression of the furnace shape. The slag-stone conglomerate, and flattish stone recovered in connection with the residues, provides some information concerning the subterranean environment of at least one furnace. The curvature of some technical vitrifications provide an idea about the size of the lower parts of the furnace. These deposits also see a pronounced deposition of ferruginous concretions, many of which are thought to be reduced iron ore fragments. Further analysis is necessary to confirm that these iron concretions are indeed ore bodies. The microscopic and chemical analysis shows that there may have been changes in temperature and atmosphere in the smelting conditions that produced under which the slag formed. It is not clear whether the changes in conditions represent certain technological practices, or an unstable smelting environment. The ternary phase diagram reveals that the smelting slags were produced between 1100-1200°C in the fayalitic range. These temperatures confirm that any reduction of ore would have successfully produced metallic iron. It also reveals that high-temperature nature of the smelting taking place. The tap slag accumulations suggest that slag tapping was part of the process of smelting iron. It is not clear yet, however, whether this slag-tapping technology was a feature throughout the time iron was being smelting. The charcoal fragments identified show that *betula* was the fuel used for smelting. This would agree with the preliminary results of ongoing research into fuel usage at Vatnsfjörður (Mooney 2008, 2009). The conifer impression revealed in the microscopy of the undiagnostic fragment needs further investigation to determine whether this wood was a fuel, or the fragment itself derives from another pyrotechnical process not related to ferrous metallurgy.

There is also evidence for smithing at Vatnsfjörður. Smithing hearth bottoms show distinct similarities in their size and shape. The spheroidal hammerscale identified in association with the SHB's and smelting residues indicates that primary smithing was taking place. Although there is evidence of bloom refining on site, the partially refined iron blooms recovered from [7059] need to undergo further chemical analysis in order to confirm that they were produced at Vatnsfjörður. The burnt bone fragments found in two contexts may be the result of re-deposition, or may be directly related to smithing activites that were taking place, as has been demonstrated at other contemporaneous sites in Scandinavia.

The assessment of the archaeometallurgical residues from Vatnsfjörður demonstrates that both smelting and smithing were taking place at the site. It is difficult to articulate the scale of the smelting and smithing without further understanding the temporal relationship between deposits. Should the residues represent a constrained time frame, the residues would suggest that smelting on site far exceeded any domestic demands. Further investigation into the residues should yield a greater understanding on the smelting and smithing activities taking place at Vatnsfjörður.

Evaluation

The archaeometallurgical residues from Vatnsfjörður form the second slag assemblage in Viking period Iceland that have been comprehensively studied. As such, they represent an important insight into the technological activities that were taking place. Relatively little work has been undertaken into the metallurgical debris of archaeological sites in Iceland,

highlighting the importance of such a study. The residues from Vatnsfjörður are fundamental to understanding how individuals were adapting to a new environment technologically, as well as how their relationship to the environment may have developed and changed. The evidence for smelting and smithing at this Viking farmstead is clear. Further work is necessary, however, to understand the activities that were taking place in more detail. It remains unclear exactly how iron was produced in Viking period Iceland, making Vatnsfjörður an exceptional opportunity for future studies.

Further work

The following areas form the next stage of the investigation into the archaeometallurgical residues from Vatnsfjörður. These action points are necessary to further understanding the smelting and smithing technology at Vatnsfjörður, as well as the context in which it was taking place.

- spatial and temporal relationships (stratigraphic understanding of the contexts, and order of events);
- distribution map of the archaeometallurgical residues across the site;
- identification and investigation of the mineralic inclusions observed in the undiagnostic slag fragment;
- confirm that the blooms were produced on site via slag inclusion analysis, and,
- experimental investigation into the smelting technology employed at Vatnsfjörður.

Further work needs to be conducted investigating the temporal and spatial relationship between contexts in order to understand whether the residues represents one, or several, episodes of activity. This information will also reveal whether or not the smelting and smithing activities were concurrent. 'Surfit' software will prove a useful tool (freeware application) for producing a colour contour map illustrating the distribution of the various slag types identified across the site.

The mineralic inclusions observed in this study would benefit from a proper petrographic analysis. If this semi-fused fragment is related to metallurgical activity, then information concerning the materials used may be obtained through a careful study of the minerals identified. Are the materials used geological? Have they been modified through human intervention? Are they local to the site? In being able to understand the nature of the materials used, we may be able to better understand the metallurgical processes that were taking place.

The unrefined blooms deposited in [7059] are a rare find archaeologically. Blooms are not common finds as iron was often used and recycled after its initial production. This cache represents a large quantity of iron that would have demanded a great deal, in terms of resources and time, to produce. It should not be assumed, however, that these blooms were produced on-site. Further work is necessary, in the form of slag inclusion analysis, to demonstrate whether these blooms derive from Vatnsfjörður. This work is fundamental in providing firm evidence that these blooms were either made at Vatnsfjörður, or transported from elsewhere.

Finally, experimental investigations into the smelting and smithing technology employed at Vatnsfjörður could be useful in better understanding what may have taken place, and in understanding the archaeological deposits that remain. Considering little work has been undertaken into the ferrous metallurgy of Iceland during the Viking and Medieval periods, it

would be a worthy pursuit. The lack of clay deposits geologically also suggests that the technology that arrived with the norse settlers had been adapted to their new environment. It has been suggested already that furnaces were constructed of turf, a suggestion that requires further empirical investigation.

Acknowledgements

This archaeological assessment of the archaeometallurgical residues performed on the slag assemblage in Reykjavik would not have been possible without the assistance of Solveig Beck. Thanks are also due to the members of FSI

Bibliography

Bachman, H.-G. (1982). *The Identification of Slags From Archaeological Sites.* Institute of Archaeology Occasional Publication No. 6. London: University of London.

Batey, C. (2005). Interim Finds Statement. In Adolf Friðriksson, Torfi H. Tulinius and Garðar Guðmundsson (eds), *Vatnsfjörður 2005: Fornleifarannsóknir/ Fieldwork at Vatnsfjörður, NW-Iceland 2005*. Reykjavík: Forneifastofnun Íslands. Pp. 77-82.

Bayley, J., D. Crossley & M. Ponting (2008). *Metals and Metalworking: A research framework for archaeometallurgy.* London: The Historical Metallurgy Society.

Bayley, J., D. Dungworth & S. Paynter (2001). *Archaeometallurgy.* Centre for Archaeology Guidelines. London: English Heritage.

Brill, R. H. (1999). *Chemical Analyses of Early Glasses: Volume 2 Table of Analyses.* Corning, New York: The Corning Museum of Glass.

Buchwald, V. F. (2005). *Iron and steel in ancient times*. Copenhagen: Det Kongelige Danske Videnskabernes Selskab/The Royal Danish Academy of Sciences and Letters.

Crew, P. (1996). "Bloom Refining and Smithing Slags and other Residues", *Archaeology Datasheet No. 6,* Historical Metallurgy Society.

Clogg, P. (1999). The Welham Bridge slag. in *Rural settlement and industry: studies in the Iron Age and Roman archaeology of lowland East Yorkshire*, eds. P. Halkon & M. Millet. Yorkshire Archaeological Report no. 4. Leeds: Yorkshire Archaeological Society, Roman Antiquities Section.

Daxböck, A. and Milek, K. (2008). Excavations in Area 2: Structure 3 – The Smithy. In Milek, K. (ed.) *Vatnsfjörður 2007: Framvinduskýrslur/Interim report.* (FS383-03097. Reykjavík: Fornleifastofnun Íslands. Pp. 52-64.

Espelund, A. (2007). 'Ancient Ironmaking in Iceland, Greenland and Newfoundland'. *Archaeologia Islandica* 6, 48-73.

Dungworth, D. & S. Paynter (2006). *Science for Historic Industries: Guidelines for the investigation of 17th- to 19th-century industries.* Centre for Archaeology Guidelines.

London: English Heritage.

Espelund, A. (2003). 'Ironmaking in Northern Iceland. Analogies and contrasts to "Mainland" Europe', *Archaeometallurgy in Europe: 24-25-26 September 2003, Milan Italy: Proceedings organised by Associazione Italiana di Metallurgia*. Milan: Associazone Italiana di Metallurgia.

Fridriksson, T. Á., Hermanns-Audardóttir, M. (1992). 'Ironmaking in Iceland', in Espelund, A. (ed), *Bloomery Ironmaking During 2000 Years: Seminar in Budalen 1991, Volume II: Iron in the West Nordic Region During the Middle Ages*. Trondheim: Budalseminaret, Metallurgisk institutt. Pp. 5-16

Gansum, T. (2004). 'Role the bones – from iron to steel', *Norwegian Archaeological Review* 37 (1), 41-57.

Guðrún Alda Gísladóttir (2007). The Finds from Areas 2 and 6. In Milek, K. (ed.) *Vatnsfjörður 2006: Framvinduskýrslur/Interim report.* (FS356-003096. Reykjavík: Fornleifastofnun Íslands. Pp 64-70.

Hodgkinson, J. S. (1999). Romano-British iron production in the Sussex and Kent Weald: a review of current data. *Journal of the Historical Metallurgy Society,* 33(2).

Joosten, I. (2004). *Technology of Early Historical Iron Production in the Netherlands.* Geoarchaeological and Bioarchaeoloical Studies 2. Amsterdam: Vrije Universiteit.

McDonnell, G. and Maclean, P. (2009). 'The Metalworking Slags and Residues', in Lucas, G. (ed), *Hofstaðir: Excavations of a Viking Age Feasting Hall in North-Eastern Iceland*. Reykjavik: Institute of Archaeology.

McDonnell, J. G. & D. Starley (2002). *Excavation and Sampling Strategies for Metalworking Sites.* Archaeology Datasheet No 8 Downloaded from hist-met.org: The Historical Metallurgy Society Ltd.

McDonnell, J. G. (1989). Iron and Its Alloys in the Fifth to Eleventh Centuries AD in England. *World Archaeology,* 20(3), 373-82.

McGuire, E.-L. H. (2006). 'Archaeology in Iceland: Recent Developments'. *Scandinavian-Canadian Studies* 16, 10-26.

Mills, A. & J. G. McDonnell (1992). *The identification and analysis of the hammerscale from Burton Dassett, Warwickshire.* Ancient Monuments Laboratory Report 47/92. London: English Heritage.

Milek, K. (2010). Excavations in the Viking Age Area. In Milek, K. (ed.) (2010) *Vatnsfjörður 2009: Framvinduskýrslur/Interim report.* (FS449-03099). Reykjavík: Fornleifastofnun Íslands. Pp. 51-64.

Milek, K. (2010). Overview. In Milek, K. (ed.) (2010) *Vatnsfjörður 2009: Framvinduskýrslur/Interim report.* (FS449-03099). Reykjavík: Fornleifastofnun Íslands. Pp. 13-23.

Milek, K. (2009). Excavations in the Viking Age Area: Introduction. In Milek, K. (ed.) (2009) *Vatnsfjörður 2008: Framvinduskýrslur/Interim report.* (FS426-03098). Reykjavík: Fornleifastofnun Íslands. Pp. 54-57

Milek, K. (2008). Archaeological Excavations at Vatnsfjörður: 2003-2007 Overview. In Milek, K. (ed.) *Vatnsfjörður 2007: Framvinduskýrslur/Interim report.* (FS383-03097. Reykjavík: Fornleifastofnun Íslands. Pp. 11-20.

Milek, K. (2008). Archaeological Excavations in the Viking Age Area. In Milek, K. (ed.) *Vatnsfjörður 2007: Framvinduskýrslur/Interim report.* (FS383-03097. Reykjavík: Fornleifastofnun Íslands. Pp. 50-51.

Milek, K. (2007). Archaeological Excavations in Areas 2 and 6. In Milek, K. (ed.) *Vatnsfjörður 2006: Framvinduskýrslur/Interim report.* (FS356-003096. Reykjavík: Fornleifastofnun Íslands. Pp. 34-42.

Milek, K. (2005). Vatnsfjörður 2005: Area 2 Report. In Adolf Friðriksson, Torfi H. Tulinius and Garðar Guðmundsson (eds), *Vatnsfjörður 2005: Fornleifarannsóknir/ Fieldwork at Vatnsfjörður, NW-Iceland 2005*. Reykjavík: Forneifastofnun Íslands. Pp. 41-61.

Mooney, D. E. (2009). Fuel Resources at Vatnsfjörður: An Archaeobotanical Perspective. In Milek, K. (ed.) *Vatnsfjörður 2008: Framvinduskýrslur/Interim report.* (FS426-03098). Reykjavík: Fornleifastofnun Íslands. Pp. 117-131.

Mooney, D. E. (2008). Assessment of Botanical Remains from Structures 1 and 3 in the Viking Age Area. In Milek, K. (ed.) *Vatnsfjörður 2007: Framvinduskýrslur/Interim report.* (FS383-03097. Reykjavík: Fornleifastofnun Íslands. Pp. 111-116.

Neilson, J. B. (1842). *The Trial before The Lord Justice-Clerk and a Special Jury, or the issues in the auction of Count, Reckong, Payment and Damages, at the Instance of James Beaumont Neilson of Glasgow, Engineer, and Others, against The Househill Coal and Iron Company. (Infringement of Patent Right*. Edinburgh; Alex Laurie and Company.

Parkin, S., Morison, S. and Simpson, I. A. (2009). Preliminary Geoarchaeological Report on Fuel Resource Utilization at Vatnsfjörður Based on Thin Section Micromorphology of Farm Mound Sediments In Milek, K. (ed.) *Vatnsfjörður 2008: Framvinduskýrslur/Interim report.* (FS426-03098). Reykjavík: Fornleifastofnun Íslands. Pp. 132-142.

Paynter, S. (2006). Regional variations in bloomery smelting slag of the Iron Age and Romano-British periods. *Archaeometry,* 48(2), 271-92.

Paynter, S. (2007). Innovations in bloomery smelting in Iron Age and Romano-British England. in *Metals and Mines: Studies in Archaeometallurgy*, eds. S. L. Niece, D. R. Hook & P. T. Craddock. London: Archetype, British Museum, 202-10.

Pleiner, R. (2000). *Iron in Archaeology: The European Bloomery Smelters.* Praha: Archeologický ústav AVČR.

Rehren, T., M. Charlton, S. Chirikure, J. Humhris, A. Ige & H. A. Veldhuijzen (2007). Decisions set in slag: the human factor in African iron smelting. in *Metals and Mines: Studies in Archaeometallurgy*, eds. S. L. Niece, D. R. Hook & P. T. Craddock. London: Archetype, British Museum, 211-8.

Rostoker, W. & B. Bronson (1990). *Pre-Industrial Iron: Its Technology and Ethnology.* Philidelphia: Archaeomaterials Monographs No. 1.

Scott, B. G. (1990). *Early Irish Ironworking.* Ulster: Ulster Museum.

Sigurđardóttir, Kristin Huld (2004). 'Provenance studies of iron from Iceland', in Guđmundsson, Garđar (ed), *Current Issues in Nordic Archaeology: Proceedings of the 21st Conference of Nordic Archaeologists 6-9 September 2001 Akureyri Iceland*. Reykjavik: Félag íslenska fornleifafrćđinga/Society of Icelandic Archaeologists.

Sigurđardóttir, Kristin Huld (1999). Viking Iron Relics from Iceland – with a special emphasis on provenance studies. Vol I. Unpublished PhD thesis: Institute of Archaeology, University College London.

Smith, K. P. (2005). 'Ore, Fire, Hammer, Sickle: Iron Production in Viking Age and Early Medieval Iceland', in Bork, R., Montgomery, S., De Vegvar, C. N., Shortell, E. and Walton, S. (eds), *De Re Metallica: The Uses of Metal in the Middle Ages*. Aldershot: Ashgate Publishing.

Starley, D. (1995). *Hammerscale.* Archaeology Datasheet No 10 Downloaded from hist-met.org: The Historical Metallurgy Society Ltd.

Starley, D. (2002). *Metalworking Evidence and the Managing of Archaeological Sites.* Archaeology Datasheet No 16 Downloaded from hist-met.org: The Historical Metallurgy Society Ltd.

Tholander, E. (1989). Microstructure examination of slags as an instrument for identification of ancient iron-making processes. in *Archaeometallurgy of Iron*, ed. R. Pleiner. Prague: Archaeometallurgy of Iron. International Symposium of the Comite´ pour la Siderurgie Ancienne de L'UISPP, 35-41.

Tylecote, R. F. (1980). Furnaces, Crucibles, and Slags. in *The Coming of the Age of Iron*, eds. T. A. Wertime & J. D. Muhly. New Haven and London: Yale University Press, 183-228.

Tylecote, R. F. (1987). *The early history of metallurgy in Europe.* London and New York: Longman.

Veldhuijzen, H. A. & T. Rehren (2006). Iron smelting slag formation at Tell Hammeh (az-Zarqa), Jordan. in *Proceedings of the 34th International Symposium on Archaeometry, Zaragoza, 3-7 May 2004.*, ed. J. Pérez-Arantegui. Zaragoza: Institución Fernando el Católico, 245-50.

Veldhuijzen, H. A. & T. Rehren (2007). Slags and the city: early iron production at Tell Hammeh, Jordan, and Tel Beth-Shemesh, Israel. in *Metals and Mines: Studies in*

Archaeometallurgy, eds. S. L. Niece, D. R. Hook & P. T. Craddock. London: Archetype, British Museum, 189-201.

Whitbread, I. K. (1995). *Greek Transport Amphorae: A Petrological and Archaeological Study.* Athens: The British School at Athens.

Table 1. *Results from precision and accuracy tests performed on glass reference materials from the Corning Museum of Glass with United States National Museum (USNM) number provided. The four rows for each reference glass present the certified values of the reference material ("reference"), the normalised results of the mean of 3 SEM-EDS area measurements of the three reference glasses ("analysed"), the standard deviation for those 3 measurements ("STDev"), the absolute difference between the analyses and reference values for each compound ("δ abs"), and the relative difference between the analysed and the reference values for each compound expressed in percent ("δ ref (%)"). All oxides are in weight percent (wt%). Below detection limits = bd.*

Corning	**USNM No.**		**Na_2O**	**MgO**	**Al_2O_3**	**SiO_2**	**P_2O_5**	**K_2O**	**CaO**	**TiO_2**	**MnO**	**Fe_2O_3**	**CoO**	**CuO**	**ZnO**	**Sb_2O_5**	**BaO**	**PbO**
B	117218.001	Reference	17.0	1.03	4.36	61.55	0.82	1.00	8.56	0.089	0.25	0.34	0.046	2.66	0.19	0.46	0.12	0.61
		Analysed	17.3	1.04	4.09	61.77	0.96	0.98	8.69	0.134	0.20	0.33	0.100	2.79	0.14	0.51	0.05	0.89
		STDev	0.59	0.19	0.03	0.56	0.13	0.07	0.16	0.036	0.07	0.11	0.130	0.13	0.14	0.11	0.04	0.31
		δ abs	0.30	0.03	0.27	0.22	0.14	0.02	0.13	0.045	0.05	0.01	0.054	0.13	0.05	0.05	0.07	0.28
		δ rel (%)	1.8	2.9	6.2	0.4	17.1	2.0	1.5	50.6	20.0	2.9	117.4	4.9	26.3	10.9	58.3	45.9
C	117218.002	Reference	1.07	2.76	0.87	34.87	0.14	2.84	5.07	0.79	0.82	0.34	0.18	1.13	0.052	0.03	11.4	36.7
		Analysed	1.20	2.75	0.77	31.86	0.01	2.56	4.72	0.69	0.01	0.28	bd	1.19	0.156	0.08	11.3	42.4
		STDev	0.16	0.10	0.10	0.43	0.02	0.15	0.13	0.08	0.02	0.13		0.21	0.144	0.14	0.05	0.42
		δ abs	0.13	0.01	0.10	3.01	0.13	0.28	0.35	0.10	0.81	0.06		0.06	0.108	0.05	0.1	5.7
		δ rel (%)	12.1	0.4	11.5	8.6	92.9	9.9	6.9	12.7	98.8	17.6		5.3	207.7	166.7	0.9	15.5
D	117218.003	Reference	1.20	3.94	5.30	55.24	3.93	11.3	14.80	0.38	0.55	0.52	0.023	0.38	0.10	0.97	0.51	0.48
		Analysed	1.60	3.94	5.15	55.15	4.13	11.0	14.92	0.47	0.61	0.46	0.095	0.46	0.16	1.17	0.35	0.37
		STDev	0.26	0.10	0.17	0.14	0.03	0.04	0.04	0.11	0.05	0.05	0.10	0.20	0.06	0.43	0.10	0.04
		δ abs	0.40	0.00	0.15	0.09	0.02	0.3	0.12	0.09	0.06	0.06	0.072	0.08	0.06	0.20	0.16	0.11
		δ rel (%)	33.3	0.0	2.8	0.2	0.5	2.7	0.8	23.7	10.9	11.5	313.0	21.1	60.0	20.6	31.4	22.9

Table 2. *Showing the size, weight and descriptions of the tap slag accumulations recovered.*

ID. [...]	Class.	Max. Dimensions (cm)			Diam. (cm)	Weight (g)	Description
		L	W	D			
204	Tap	6.0	5.5	3.0	12	189.19	ropey surf., rough bott., straight sides; plan.-block.
204	Tap	7.0	7.0	3.0	9	166.06	ropey surf., rough bott., straight sides; plan.-conv.
204	Tap	6.5	6.5	6.5	9	255.46	bubbly surf., dense bott., smooth sides; plan.-conv.
204	Tap	6.0	5.0	3.0	9	84.04	ropey surf., rough bott., straight & ropey sides
302	Tap	5.5	3	2	10	58.84	rough surf., smooth bott.; conc.-conv.
302	Tap	5	3	2.5	8	48.86	ropey surf., smooth bott.; plan.-conv.
302	Tap	7	6	3	10	116.44	ropey surf., rough. bott.; plan.-conv.
319	Tap	9.5	6	6.5	12	250.17	rough curved bott., sharp rim
319	Tap	8.5	7	3.5	14	250.38	rough ropey surf., smooth bott., internal layering; plan.-conv.
319	Tap	7	6.5	5.5	12	280.81	ropey surf. & sides, rough bott., dense; plan.-conv.
319	Tap	11	8	6	22	402.91	smooth surf. (large flow?), internal layering; plan.-conv.
319	Tap	4.5	3.5	2.5	5	61.48	smooth side & rim, v. dense; plan.-conv.
319	Tap	3.5	2.5	2.5	6	29.43	smooth surf. (large flow?), dense; plan.-conv.
319	Tap	5	4	2.5	5	68.69	ropey surf., rough bott., interal layering; plan.-conv.
319	Tap	4	2.5	1.5		21.35	ropey surf., ropey curved bott., internal fractures (layering?)
319	Tap	6	4	2.5			ropey surf., dense, smooth bott., irreg. shap. with a 'spout' (impression of tap flow?)
319	Tap	7	5.5	3	10	116.92	smooth surf. (large flow?), smooth bott.; conc.-conv.
319	Tap	5.5	5.5	4	11	134.04	ropey surf., rough ropey bott., internal layering; conc.-conv.
324	Tap	4.5	4	2	6	40.12	ropey surf., rough bott., irreg. shap. With a 'spout' (impression of tap flow?)

Table 3. *Showing the size, weight and descriptions of the smithing hearth bottoms/fragments.*

ID. [...]	Class.	Max. Dimensions (cm)			Feature			Diam. (cm)	Weight (g)	Description
		L	W	D	Upp. Surf.	B	R			
204	SHB?	5.0	5.0	3.0	x	x	x	9	85.12	rough surf., rough bott., curved sides and base, stone incl.
204	SHB?	5.5	4.5	3.0		x			66.74	rough curved side/bott.; conv.
204	SHB?	5.5	4.0	2.5		x	?		39.61	smooth curved side/rim; conv.
204	SHB?	4.5	3.5	2.5		x			40.47	rough curved bott.; conv.
204	SHB?	5.0	3.5	2.5		x			54.93	rough curved bott.; conv.
319	SHB?	6	3.5	2	x	x	x	9	54.05	ropey surf., smooth curved bott.; plan.-conv.
319	SHB?	5	2.5	3	x		x	8	59.49	upper surface fragmented.
319	SHB	10	6	3.5	x	x	x	10	242.91	rough bott., concavo surf., section shows Fe prills; conv.-conv.
319	SHB?	7.5	5.5	3	x	x	x	12	178.02	rough concavo surf., rough curving bott., sharp rim; conv.-conv.
319	SHB?	6.5	4.5	3	x	x	x	10	105.38	rough surf., smooth bott. & sides.
319	SHB?	5	5	2	x	x	x	7	43.81	rough concavo surf., rough curving bott. & sides; conv.-conv.
319	SHB?	4.5	4	2.5	?	?	?	8	37.12	top & side, or side & bott., smooth, internal layering?
319	SHB?	4	3	2.5	x		x	4	27.11	rough surf., smooth sides
319	SHB?	5	3.5	2.5	x	x	x	7	55.96	rough concavo surf., smooth base, dense; conc.-conv.
319	SHB?	5	4	2	x	x	x	7	40.68	rough concavo surf., smooth curved bott.; conc.-conv.
319	SHB?	3.5	2.5	2	x	x	x	6	19.42	rough concavo surf., smooth curved bott., dense; conc.-conv.
332	SHB?	8	5.5	4	x	x	x	12	130.94	Concavo surface, rough, flowy, ropey convex base, charcoal impressions
6057	SHB	9	6	3	x	x	x	11	158.24	smooth bott., smooth surf., heavily rusted; plan.-conv.
6057	SHB	9.5	7.5	4	x	x	x	11	343.76	rought bott., rough surf., poss. FB?; plan.-conv.
6057	SBH?	7	3.5	4.5	x	x	x	11	138.29	smooth bott., rough surf., charc. imp.; conc.-conv.
6057	SHB	7	3.5	2	x	x	x	7	61.89	very dense; plan.-conv.
6057	SHB?	7.5	7	5	x	x	x	8	322.43	flat surf., oval, quite dense, poss. FB?; plan.-conv.
6057	SHB?	9.5	5	4	x	(x)	x	14	165.57	rough bott., rough surf., charc. imp.; conc.-conv.
6073	SHB?	4	5	3		x	x	10	56.84	small frag
6074	SHB?	7	5	2.5	x	x	x	10	113.96	rough bott., rough surf.; conc.-conv.
6074	SHB?	6	4.5	3	x	x	x	11	103.58	smooth bott., rough surf.; conv.-conv.
6074	SHB?	4.5	3.5	3	x	x	x	6	57.47	rough bott., rough surf., charc. imp.; conc.-conv.

Table 4. *Showing the dimensions and weight of the iron lumps deposited in context [7159].*

ID. [7159]	Class.	Dimensions (cm)			Weight (g)	Description
		L	W	D		
Iron Lump 1	Bloom	18.5	15.5	5	3025	Flattish top; slight convex bottom; oval; partially refined bloom.
Iron Lump 2	Bloom	21	18	7	5350	Flattish top; slight convex bottom; oval; partially refined bloom.
Iron Lump 3	Bloom	19.5	15	11	4575	Concaving top (meniscus, rised rim)/undulating; convex bottom; oval; partially refined bloom.
Iron Lump 4	Bloom	17	14.5	10.5	5375	Undulating top; convex bottom; oval; partially refined bloom.
Iron Lump 5	Bloom	19.5	17	4.5	3150	Flattish top; flattish bottom; flat sides; rounded triangle
Iron Lump 6	Bloom	20	18	7	5125	Flattish top; slight convex bottom; oval; partially refined bloom.
Iron Lump 7	Bloom	18.5	14	6.5	3925	Weakly concaving top (meniscus rim); slight convex bottom; pronounced flattish sides; partially refined bloom.
Iron Lump 8	Bloom	19	17.5	7.5	5500	Flattish top; slight convex bottom; pronounced flattish sides; oval; partially refined bloom.
Iron Lump 9	Bloom	21	19	6	4575	Flattish top; slight convex bottom; pronounced flattish sides; oval; partially refined bloom.
Iron Lump 10	Bloom	18	15.5	6.5	3500	Flattish top; slight convex bottom; pronounced flattish sides; oval; partially refined bloom.

Table 5. *Normalised average SEM-EDS data from the bulk analysis of each slag sample (n = number of area analyses). The total column gives the average analytical total prior to normalisation.*

Slag sample		Na_2O	MgO	Al_2O_3	SiO_2	P_2O_5	SO_3	K_2O	CaO	TiO_2	MnO	FeO	BaO	Total
Smelting (i)	(*n*=5)	0.63	1.15	7.72	21.45	0.82	0.28	0.78	2.84	0.49	6.98	56.84	0.02	103.40
Smelting (ii)	(*n*=5)	0.80	1.49	6.48	23.31	1.20	0.29	1.32	4.17	0.47	5.42	55.01	0.03	103.49
Tapped	(*n*=5)	0.37	4.55	4.39	12.22	3.90	0.16	2.17	5.94	0.18	2.42	63.64	0.08	93.37
Flowed	(*n*=5)	0.53	1.28	6.26	19.54	1.21	0.31	1.03	3.68	0.31	5.02	60.70	0.12	101.29
Hearth bottom	(*n*=5)	0.60	1.52	5.04	22.51	1.11	0.27	1.33	3.44	0.42	2.81	60.91	0.04	101.68
Undiagnostic	(*n*=5)	0.07	0.58	4.72	16.17	0.80	0.20	0.46	1.48	0.08	2.24	73.12	0.08	99.86

Table 6. *The normalised data used to plot the slag compositions in the ternary phase diagram, Figure 1.*

Slag sample	FeO	SiO_2	Al_2O_3
Smelting (i)	66	25	9
Smelting (ii)	65	27	8
Tapped	79	15	6
Flowed	70	23	7
Hearth bottom	69	25	6
Undiagnostic	78	17	5

Figure 1. *Illustration of diagnostic iron production slags (by the author).*

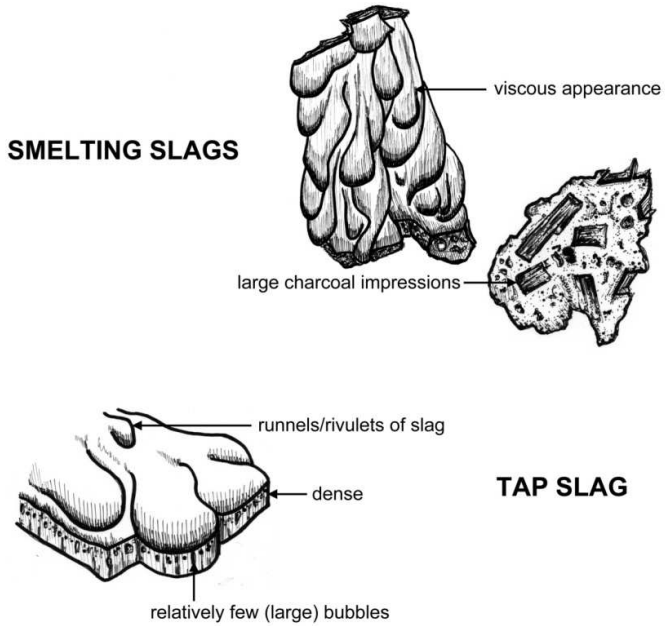


Figure 2. *Illustration of fuel ash slag (by the author).*

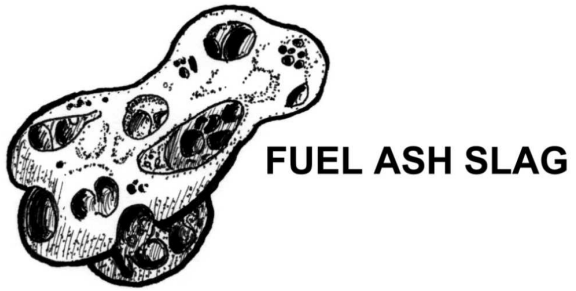


Figure 3. *A 3-Dimensional bar chart diagram highlighting the weight of each residue recovered for each context.*

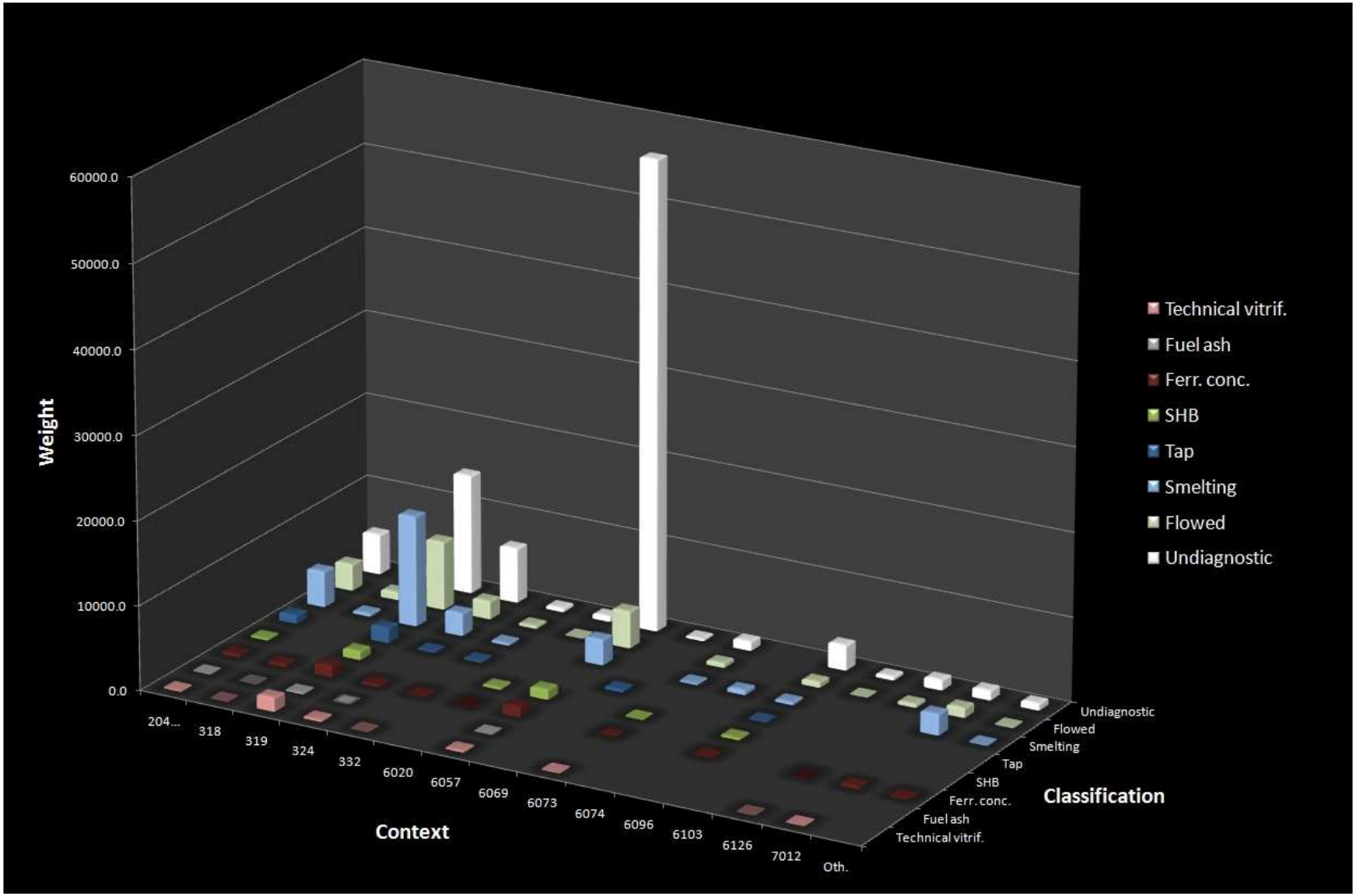


Figure 4. *Photographs of a selection of tap slag fragments and accumulations.*

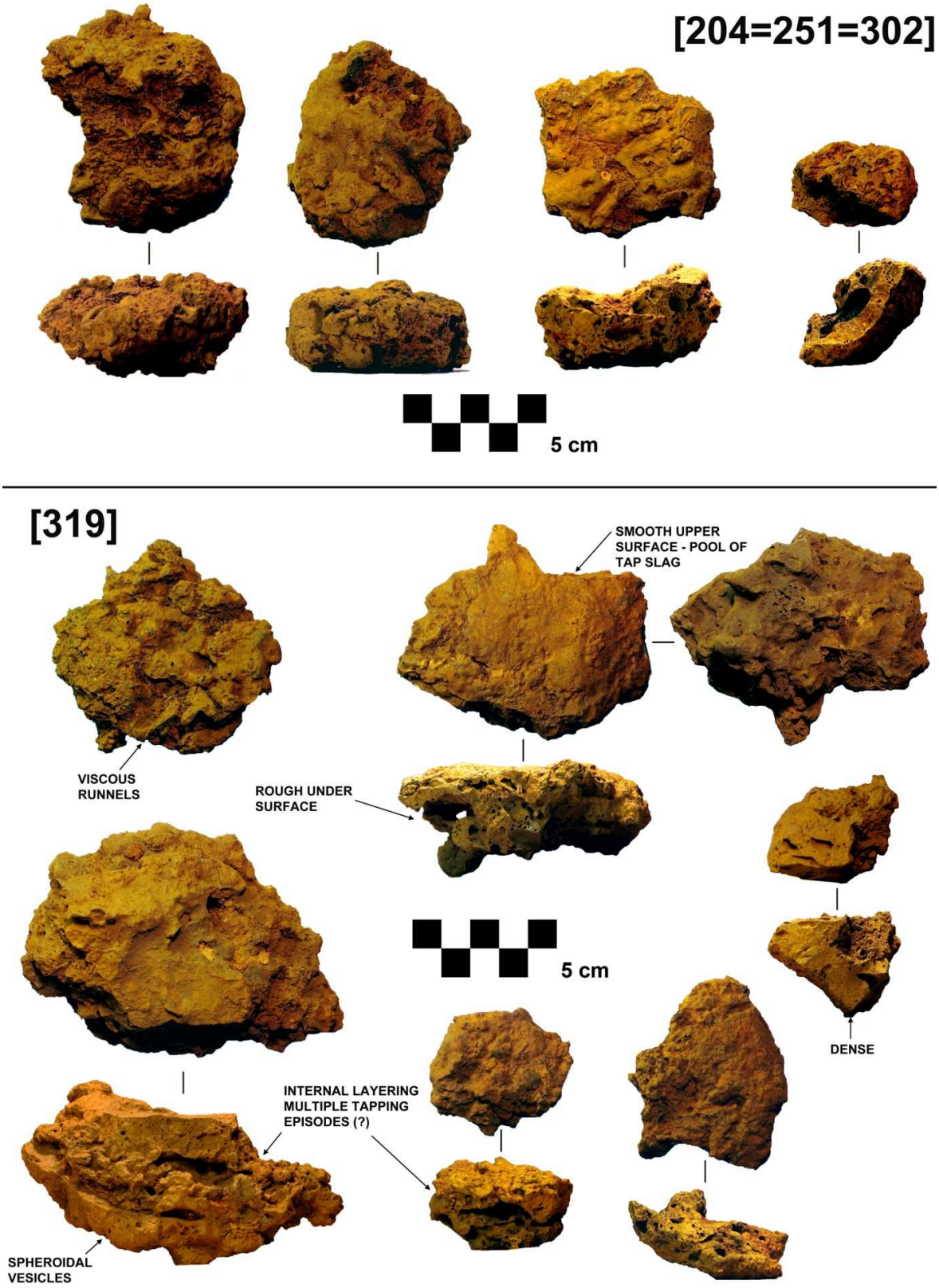


Figure 5. *Photographs of two 'funnel-shaped' slag accumulations, illustrating the assumed flow direction from the 'spout' feature, tapering outwards.*

Figure 6. *Photographs of a 'funnel-shaped' slag accumulation with the 'spout' feature, tapering outwards.*

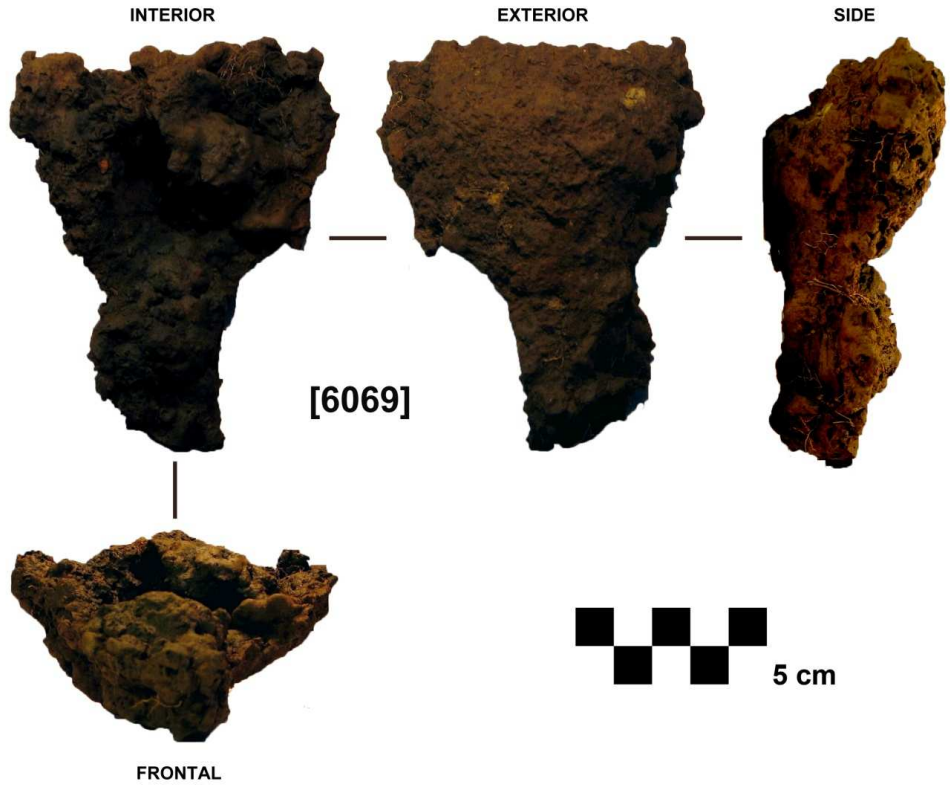
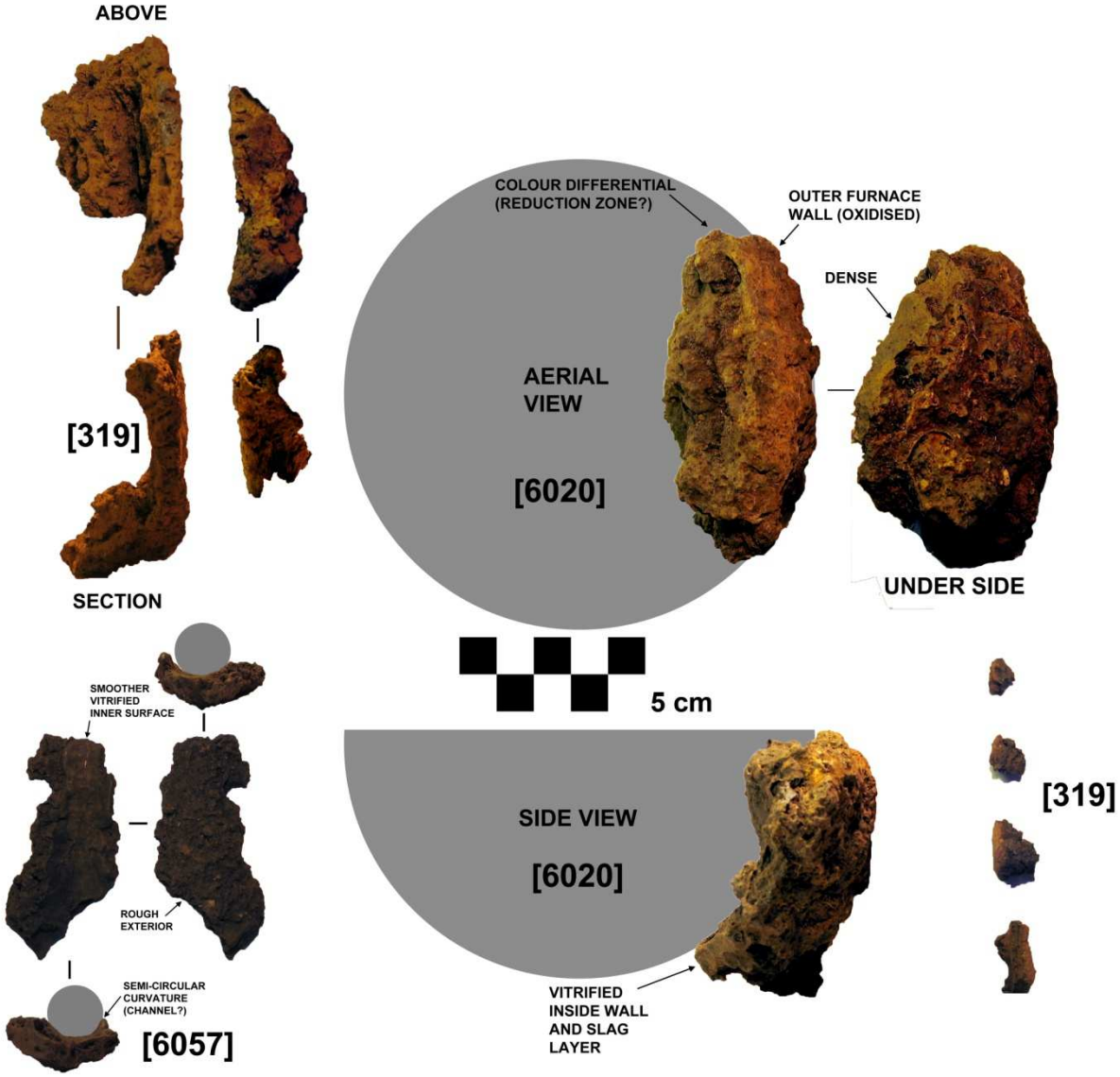


Figure 7. *Conglomerates of smelting slag and small stones, some adhering to flattish stones from context [7012].*

Figure 8. *Examples of smithing hearth bottoms from context [6057].*

Figure 9. *Examples of technical vitrifications, illustrating the curvature on some fragments.*



Tap slag

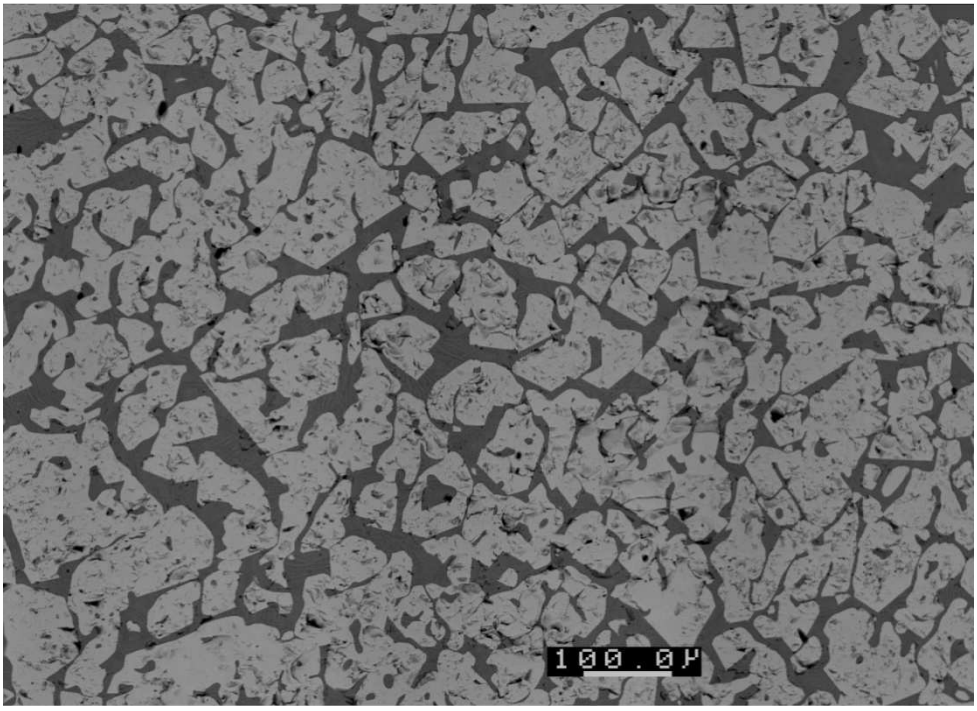


Figure 10. *BSE image of tap slag showing magnetite (light grey) in a glassy matrix (dark grey). x100.*

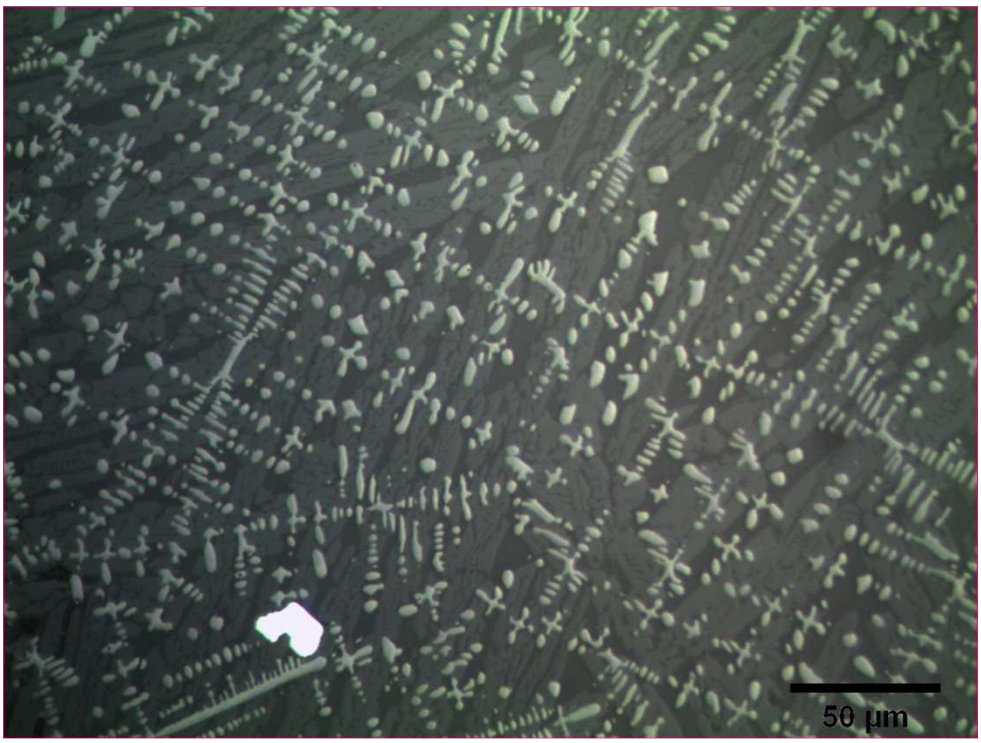


Figure 11. *Optical micrograph of smelting slag showing a single iron prill (white) with fine branching wūstite dendrites (light grey), embedded in a matrix of acicular fayalite (mid-grey) and glass (dark grey). Unetched, PPL, x200.*

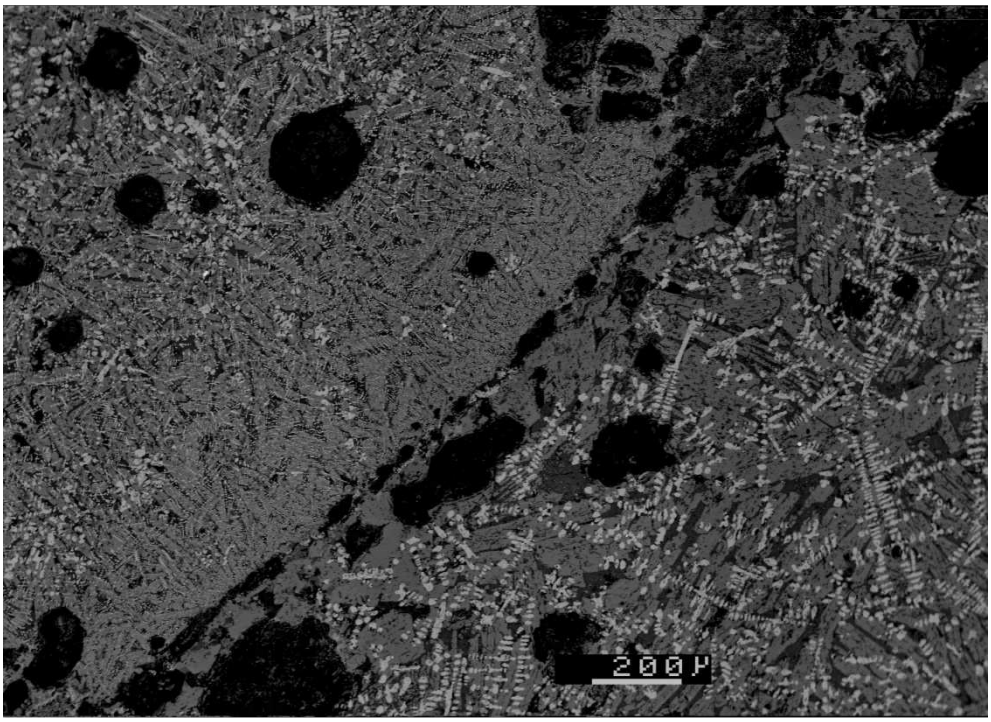


Figure 12. *BSE image of smelting slag showing a linear feature of planar voids separating two different zones. To the right of feature, larger grains of blocky fayalite and a higher density of wūstite dendrites distinguish it from the area left of the feature, characterized by a much finer grain structure of acicular fayalite with fewer and finer dendrites of wūstite. x50.*

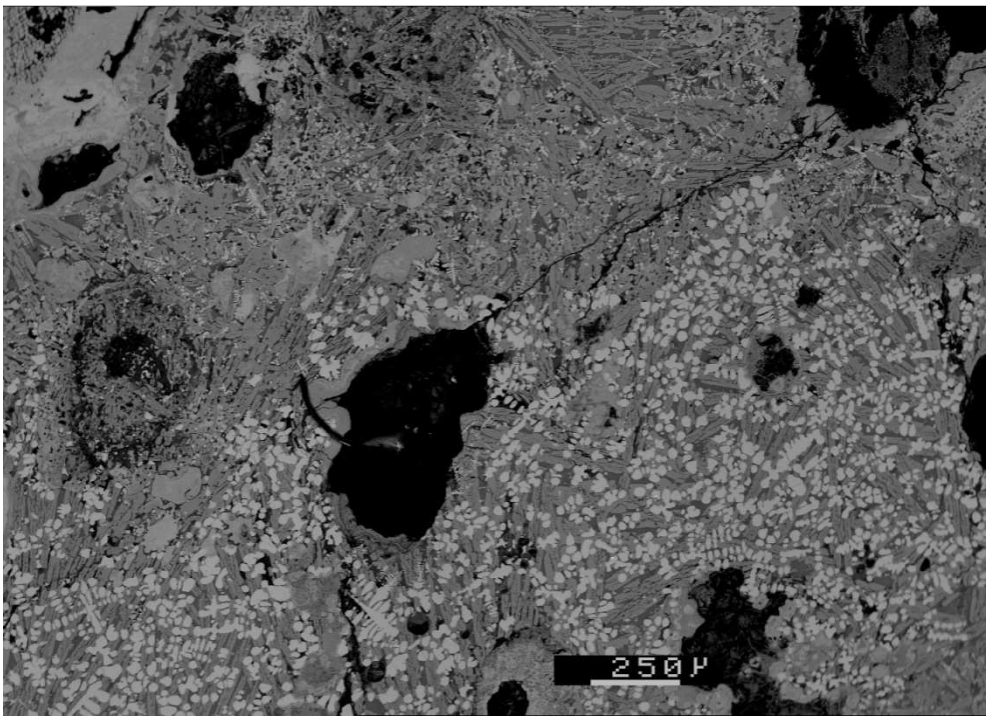


Figure 13. *BSE image of smelting slag showing a fine transgranular crack, separating an area of globular wūstite with larger polycrystalline fayalite grains, from an area relatively absent in comparison of wūstite, with smaller grains of fayalite that are acicular two distinct areas. x40.*

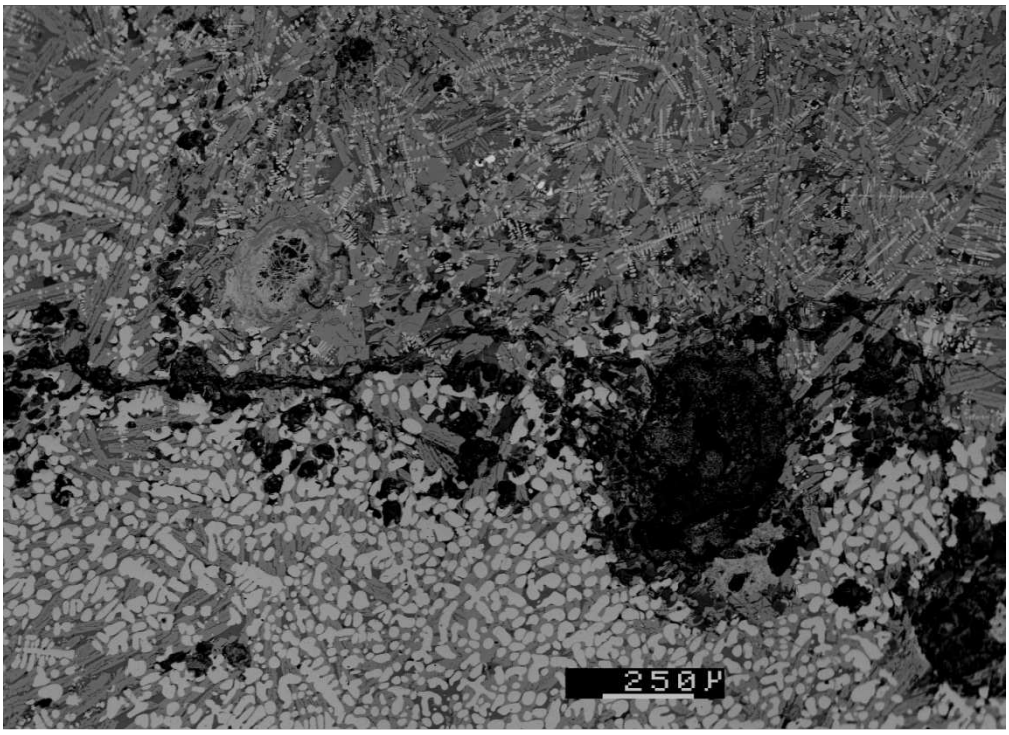


Figure 14. *BSE image of smelting slag showing a distinct transgranular crack dividing two distinct zones. Above the fracture is characterized by fine dendritic wūstite, whereas the area below is densely populated with larger rounded and knobbly grains of globular wūstite x40.*

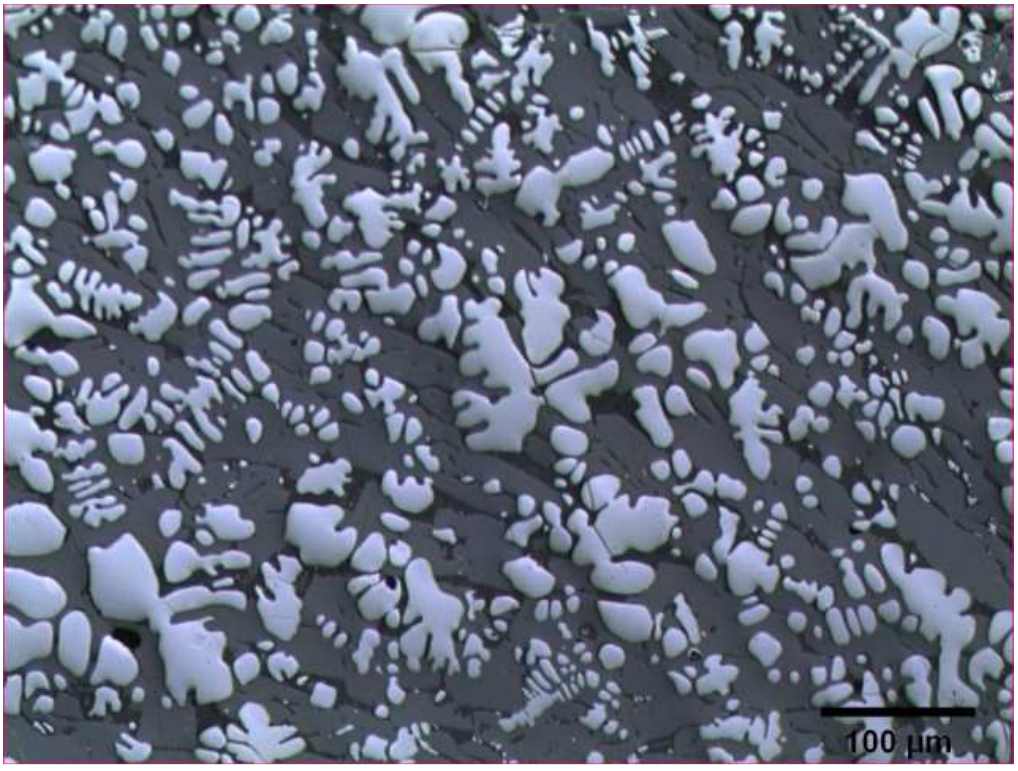


Figure 15. *Optical micrograph of undiagnostic slag showing globular wūstite (some dendritic structures) embdeed in a matrix of polycrystalline fayalite (mid-grey) and glass (dark grey). Unetched, PPL, x100.*

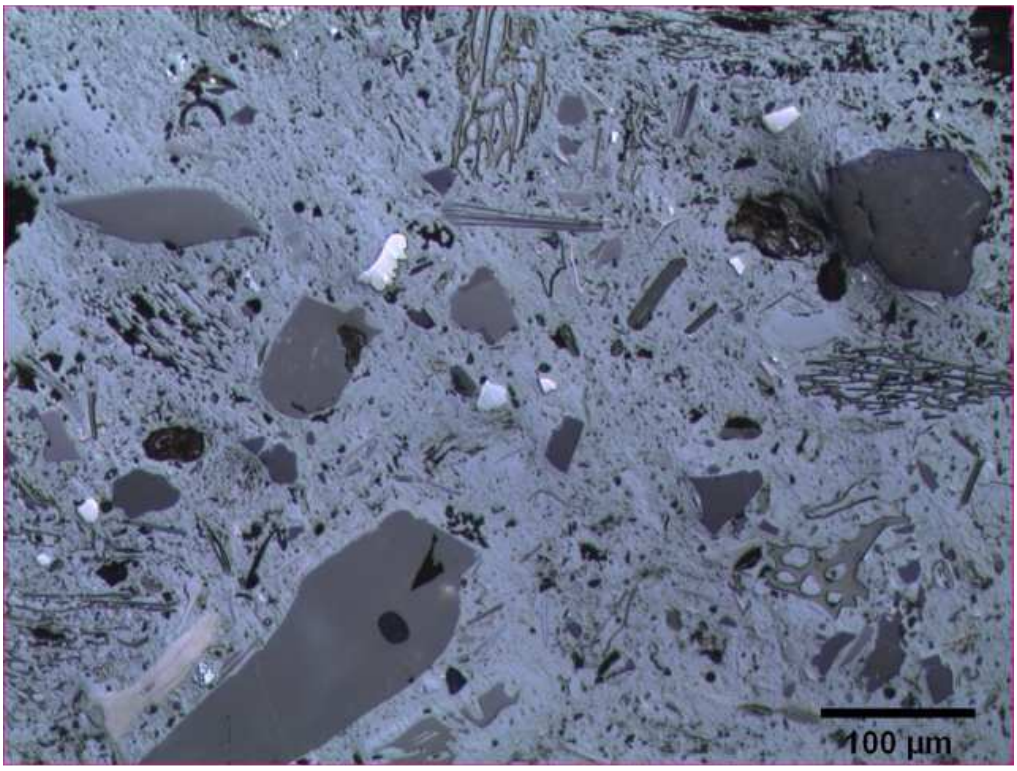


Figure 16. *Optical micrograph of undiagnostic slag showing fused material with obvious mineralic inclusions. PPL, x100.*

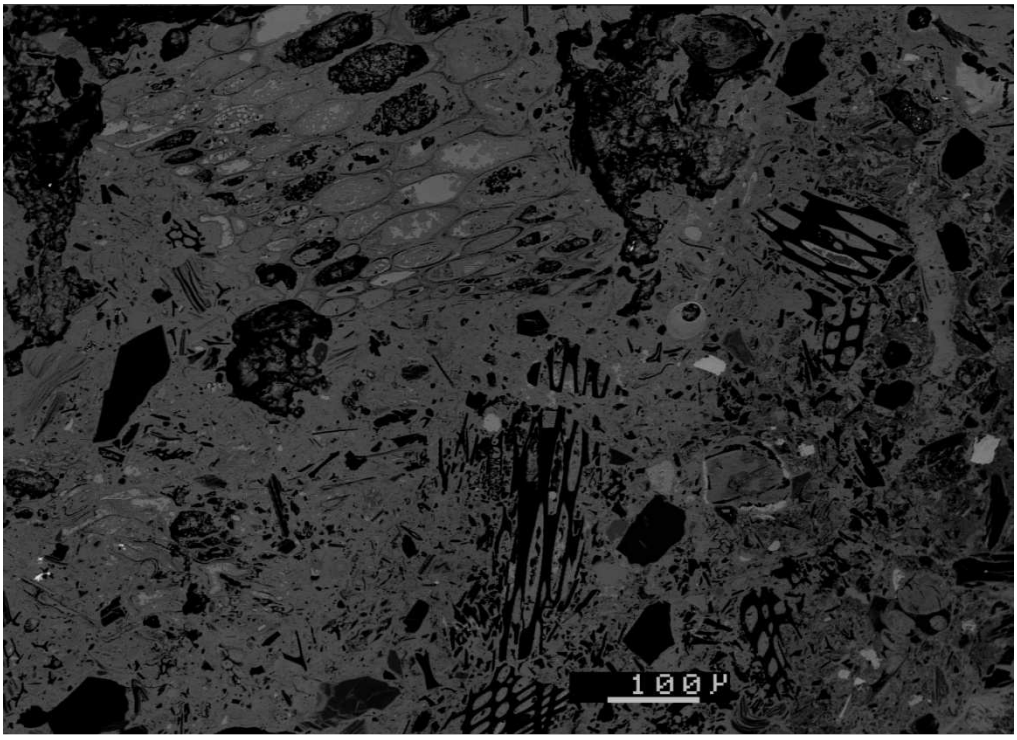


Figure 17. *BSE image of undiagnostic slag fragment showing the semi-fused structure containing mineralic inclusions. The structure has also taken on the cellular structure of some vegetatious elements, which have preliminarily been identified as conifer. x100.*

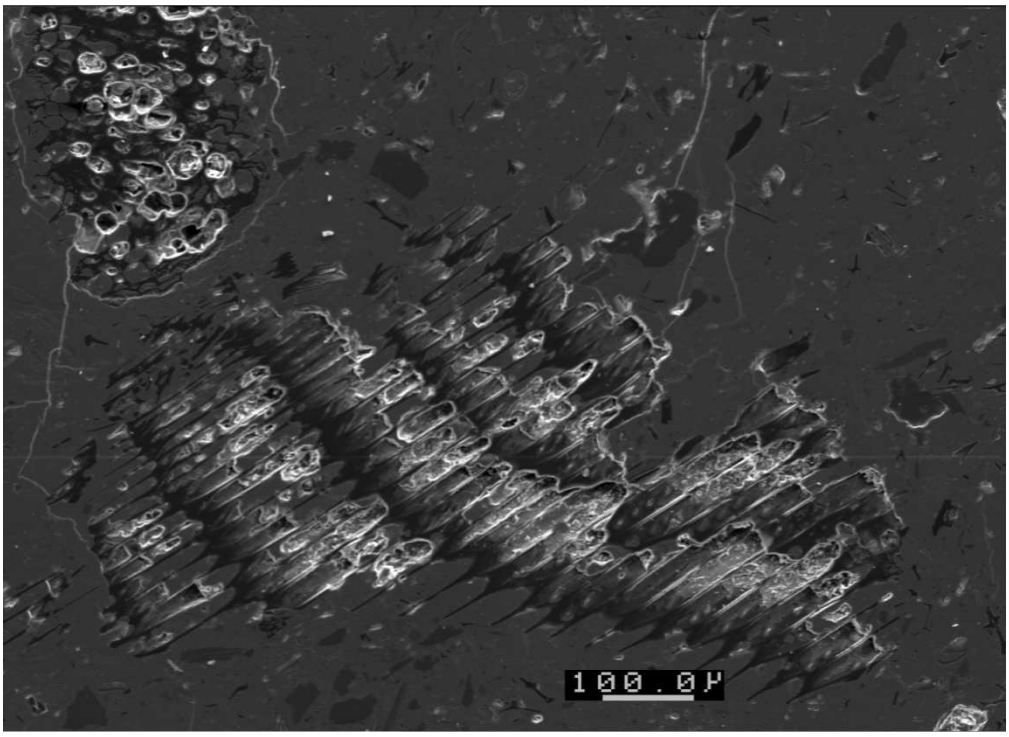


Figure 18. *Secondary electron image of undiagnostic slag fragment (semi-fused structure) showing a negative impression of a charcoal inclusion in the surface topography. x100.*

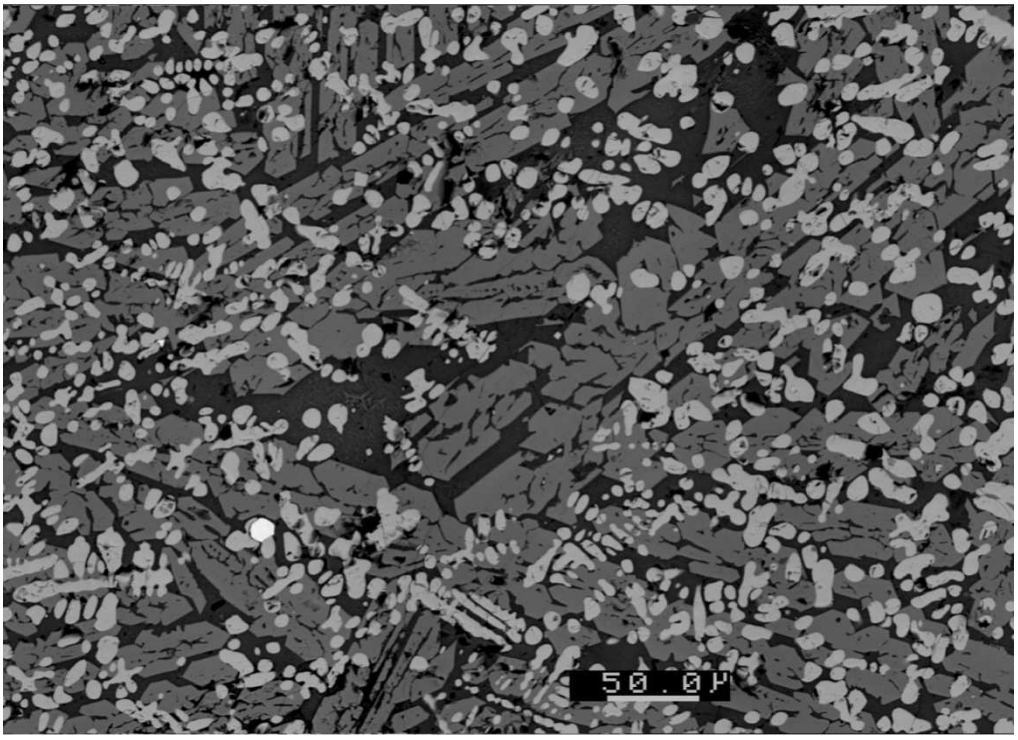


Figure 19. *BSE image of flowed slag showing an even distribution of globular wüstite (light grey), some developing into dendrites, in a matrix of blocky fayalite (mid=grey) and glass (dark grey). An iron prill (white) can be observed in the matrix. x200.*

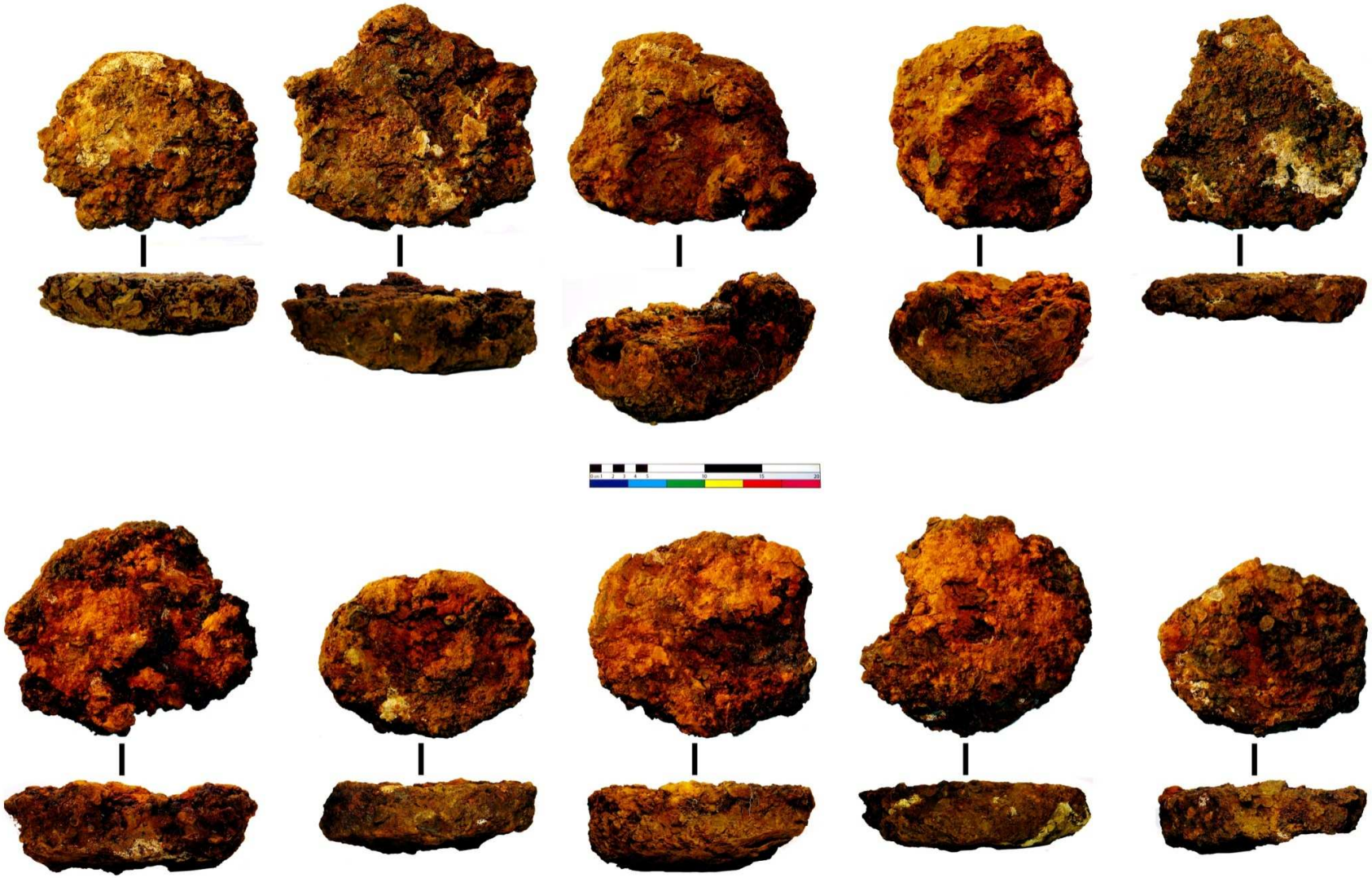


Figure 20. *Photographs of the ten partially refined blooms that were recovered from context [7059].*

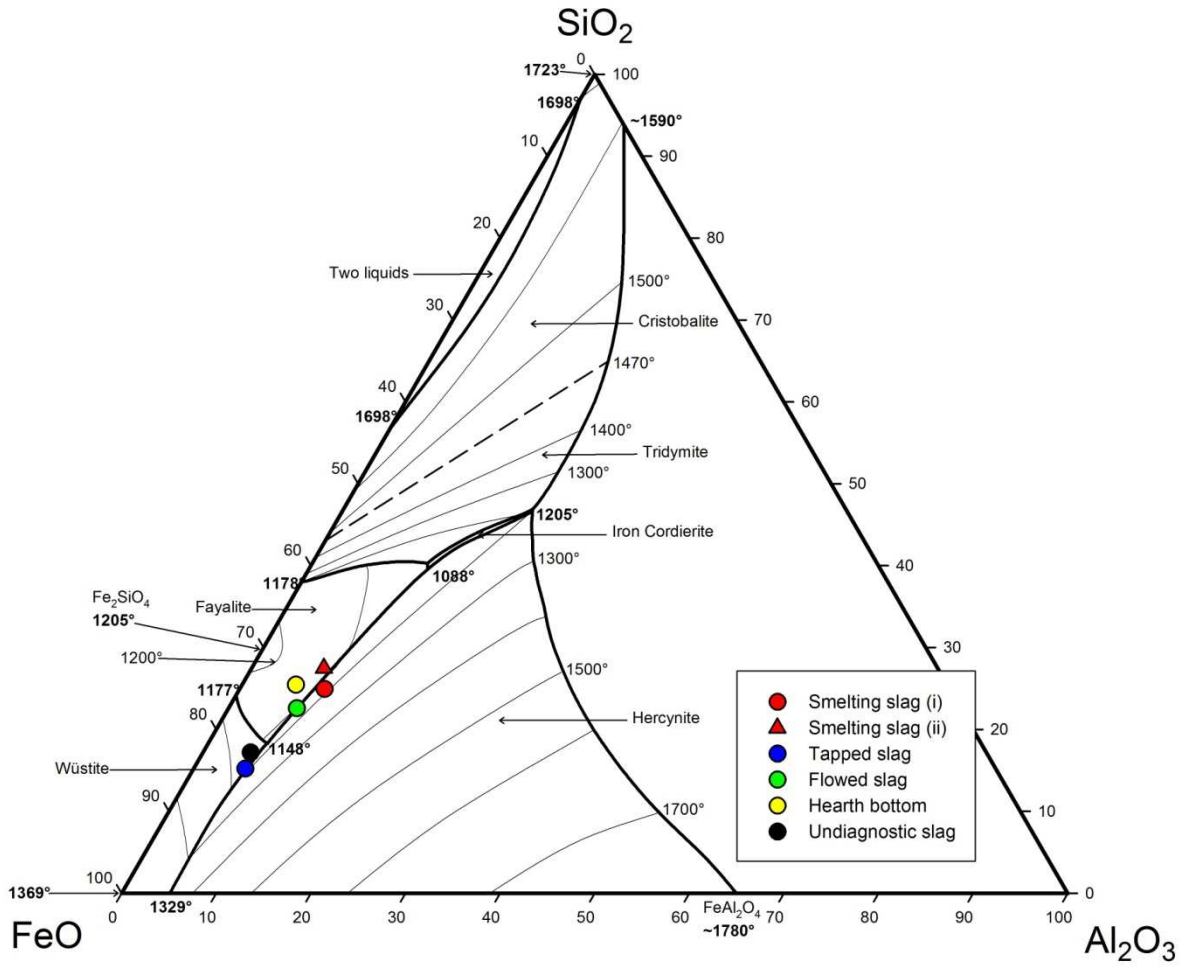


Figure 21. *FeO-SiO_2-Al_2O_3 ternary phase diagram with the slag compositions projected onto the system.*

Appendix 1: ***Abbreviations***

Undiagnostic	undiagnostic slag
Flowed	flowed slag
Tap	tap slag
Smelting	smelting slag
SHB	smithing hearth bottom
FB	furnace bottom
Hammerscale	hammerscale
Fuel ash	fuel ash slag
Technical vitrif.	technical vitrifications
Ferr. conc.	ferruginous concretions
Charcoal	charcoal
Other	other
ID […]	context idenfiticaion [context number]
Mag.	Magnetism (followed by * and x)
*	contains weakly magnetic pieces
x	contains strongly magnetic pieces (in the 'Mag.' Column
x	'yes' – exhibits this characteristic (table of SHB's)
Upp.	upper
Surf.	surface
Bott.	bottom
B	base
R	rim
Plan.-conv.	plano-convex shape
Conc.-conv.	concavo-convex shape
v.	very
irreg.	irregular
Max./Min.	maximum/minimum
L, W, D	length, width, diameter
Class.	Slag classification
Oth.	Refers to slag recovered from small sample bags of slags from 'other' contexts, listed in Appendix 3
>	greater than…
<	less than…
PPL	plane polarised light (mode for optical microscopy)
x40, x50, x100, x200	magnifications of images through optical/electron microscopy
SEM	scanning electron microscope
SE	secondary electron image (mode for SEM)
BSE	backscatter electron image (mode for SEM)

Appendix 2: ***Photographs of slags***

Smelting slag

Hammerscale

Ferruginous concretions

Appendix 3: *Slag counts and weights by context*

The total counts and weights for each context are provided in the tables below, before describing the discussing the archaeometallurgical residues for each context.

COUNTS	204...	318	319	324	332	6020	6057	6069	6073	6074	6096	6103	6126	7012	Oth.	Total
Undiagnostic	968	501	1009	1168	65				314		-	63	-	851	127	5066
Flowed	315	122	576	339	16	20	1234		93		123	6	160	591	4	3599
Tap	8		27	4	1			1			2					43
Smelting	98	15	390	164	7		130		9	1	16			96	2	928
SHB	5		13			1	6		1		3					29
Hammerscale						2	195		3		16		16			232
Fuel ash	12	1	24	5			6									48
Technical vitrif.	5	1	32	12	1		16		8				1	17		93
Ferr. conc.	28	22	147	31	19	8	174		6		4		6	65	16	526
Charcoal							1							1		2
Other									3			3			1	7
Total	1439	662	2218	1723	109	31	1762	1	437	1	164	72	183	1621	150	**10573**

WEIGHT (g)	204...	318	319	324	332	6020	6057	6069	6073	6074	6096	6103	6126	7012	Oth.	Total
Undiagnostic	4784.5	1351.0	14170.5	6527.7	463.23	629.1	55981.6	246.05	1108.9		3000.1	449.5	1223.2	1152.8	808.33	91896.3
Flowed	3164.1	919.3	8145.1	2150.7	364.19	47.0	4403.3		557.1		675.7	35.6	448.5	1167.6	69.5	22147.7
Tap	1010.3		1822.5	86.4	133.74			325.1			46.7					3424.7
Smelting	4273.8	343.7	13150.0	2698.7	278.45		3042.3		189.8	550.4	321.4			2515.5	47.94	27412.1
SHB	203.8		1037.5			274.3	1193.0		57.0		275.3					3040.9
Hammerscale	146.2	2.5	38.6	5.3	0.45	0.7	52.3		21.6		3.7		3.6	16.8		291.6
Fuel ash	45.5	12.9	149.4	28.0			34.9									270.7
Technical vitrif.	130.4	2.5	1668.2	237.6	21.05		205.4		61.6				4.3	45.9		2376.9
Ferr. conc.	335.9	337.0	1327.4	254.9	83.6	5.1	1189.9		32.8		52.2		21.8	366.5	112.61	4119.8
Charcoal		0.6		0.2			0.2							0.1		1.1
Other	91.1	2.1	472.0	39.6		404.0	672.2		0.4			1.5		80.0	1653.7	3416.6
Total	14185.7	2971.4	41981.2	12029.2	1344.7	1360.2	66775.0	571.1	2029.2	550.4	4375.0	486.6	1701.3	5345.2	2692.1	**158398.4**

2005 Excavation season

In 2005, 88 iron finds were recovered from Areas 1 and 2. Roughly half of the ferrous objects were identified as nails, as well as fragments from other small objects. A large proportion of these metallic finds comprise three apparent concentrations; aeolian silt and turf deposit [200] (18th-20th centuries), midden deposit [209=287] (late 10th century) and the organic/charcoal spread [288=241]. Colleen Batey has suggested that the iron finds, in conjunction with the slag and charcoal rich deposits, are evidence for the recycling of iron objects (2005: 77-79). These finds were not studied during this assessment.

[204=251=302]

Context [204=251=302] is described as an extensive homogenous aeolian silt deposit (5-10cm thick) covering Area 2 (Milek 2005: 51). A large concentration of slag was recovered from layer [204=251=302], in the region north of Structure 3. It is thought that the slag, like other material recovered from the layer, had worked up from layers underneath context [204=251=302]. The deposit corresponds to finds *31*, *97* and *100*. Within this deposit, small

pebbles of dense vesicular basalt, as well as some sandstone, were recovered.

This slag deposit is clear evidence of iron smelting. The majority of the residues assessed were identified as production slags, whilst the SHB's and hammerscale, in this context, indicate that primary smithing took place. Over 5kg was identified as iron production slag. Roughly 1kg of this production slag comes from eight individual accumulations of tap slag. The presence of technical vitrified materials, representative of some form of lining, may provide further evidence of smelting activity.

Some tap slag accumulations recorded in this assessment were originally identified as smithing hearth bottoms due to their size and shape. The tap slag accumulations (mostly identified in context [204=251=302] were plano-convex in form, leading to the initial mis-identification. On closer inspection, the dense nature, rough under surfaces, large vesicles and ropy texture of the upper surface (with individual rivulets observed) were cause for these slag remains to be assigned as tap accumulations. Exposed fractures and fragments of these slag accumulations often exhibited internal layering indicative of multiple taps.

The majority of the slag assessed from this context, by weight, is undiagnostic. Despite their fragmentary character, five slag pieces were identified as SHB's from their rough convex bases. However, it is possible some of these pieces may represent tap slag accumulations whose upper surfaces have since fragmented. The undiagnostic flowed slag is nearly equal in weight to the total weight of production slags. The strong evidence for smelting would indicate that the flowed slag represents production slags that have become fragmented with post-depositional processes. The spread of the residues of an extensive area would help explain the fragmentary, and in cases, undiagnostic nature, of the production slags. The slag recovered from this context corresponds to finds 31, 97 and 100.

ID. [204=251=302]	Mag.	Max. Dimensions (cm)			Min. Dimensions (cm)			Count	Weight (g)
		L	W	D	L	W	D		
Undiagnostic	*	7	5	3	<0.5	<0.5	<0.5	968	4784.5
Flowed	*	7.5	6	1.5	<0.5	<0.5	<0.5	315	3164.1
Tap		7	7	5	1.5	1.5	1	8	1010.3
Smelting	*	7.5	5.5	3	2	1.5	1	98	4273.8
SHB		7.5	6	5	4.5	3.5	2.5	5	203.8
Hammerscale	x							-	146.2
Fuel ash		3.5	2	1.5	1	1	0.5	12	45.5
Technical vitrif.		6.5	4	1.5	3	2.5	1	5	130.4
Ferr. conc.		4	3	2.5	1.5	1	1	28	335.9
Charcoal									
Other								-	91.1
							Total	**1439**	**14185.7**

Context [314]

Layer [314] is described as a being a thin deposit (0.5-4cm) containing sand-sized crumbs of oxidized iron (Milek 2005: 58). A magnet was passed through a sample (S-30) of the deposit, which found the layer to be 'rich in iron hammerscale' (Milek 2005: 53, 58). No samples from this context were studied during this assessment.

Context [318]

The turf layer sealing Structure 3, context [318], is thought to represent a roof collapse deposit (Milek 2005: 43, 56). Two small stones, one of sandstone and the other basalt, were recovered from this context. The slag assemblage from context [318][16] is indicative of iron production. There are no diagnostic smithing residues. A large proportion of the undiagnostic

[16] The slag from this context was labeled [318/33]. Due to the close stratigraphic relationship between contexts [318] and [333], it is assumed that the material recovered was subsumed into one and the same contextual unit.

slag was identified as flowed. The undiagnostic flowed slag fragments are likely to derive from production slags. The slag recovered from this context corresponds to find 119.

ID. [318]	Mag.	Max. Dimensions (cm)			Min. Dimensions (cm)			Count	Weight (g)
		L	W	D	L	W	D		
Undiagnostic	*	4	3.5	2.5	>0.5	>0.5	>0.5	501	1351.0
Flowed		6	4.5	3	>0.5	>0.5	>0.5	122	919.3
Tap									
Smelting		6	5.5	3.5	2.5	1.5	1	15	343.7
SHB									
Hammerscale	x							-	2.5
Fuel ash		3	2.5	1				1	12.9
Technical vitrif.		2.5	2	0.5				1	2.5
Ferr. conc.	*	6	5	2.5	1	1	1	22	337.0
Charcoal								-	0.6
Other								-	2.1
							Total	**662**	**2971.4**

Pit [329] (Fill contexts [319] and [324])

Pit [329] contained a large deposit of iron slag. It is important to note that this pit cut into the collapse of Structure 3, overlying the turf wall in the northeast corner (Milek 2005: 57). A large deposit of slag was recovered from pit [329]. Due to the grading of the deposit and diffuse boundary between its upper and lower parts, the fill was arbitrarily divided into contexts [319] and [324]. Towards the lower limits of the feature, the ratio of charcoal to slag increased (see Fig. 19, Milek 2005: 57).

Pit [329] contains a substantially large deposit of slag when compared to the rest of the site, totaling over 60kg. Nearly a third of the slag recovered was identified as iron production slag. A small proportion of the iron production residues could be distinguished as tap slag. Pit [329] also contained the highest concentration of technical vitrifications that are thought to originate from furnace construction(s). It is, therefore, not surprising to also observe that the pit contains the most ferruginous concretions compared to the other contexts, much of which is thought to represent iron ore residues. A significant amount of the undiagnostic residues is comprised of flowed slag, which appears to be fragmentary production slags due to the frequency of charcoal impressions observed. The assemblage contained fragments of smithing hearth bottoms which may derive from bloom refining in association with the smelting taking place. The slag recovered from context [319] corresponds to finds 113, and the slag from [324] corresponds with find 112.

ID. [319]	Mag.	Max. Dimensions (cm)			Min. Dimensions (cm)			Count	Weight (g)
		L	W	D	L	W	D		
Undiagnostic	*	9	7	6	>0.5	>0.5	>0.5	1009	14170.5
Flowed	*	8	5.5	3.5	1.5	1	0.5	576	8145.1
Tap	*	11.5	8.5	5.5	2	1.5	1	27	1822.5
Smelting	*	11.5	6	4.5	1.5	1	1	390	13150.0
SHB	x	10	7.5	3.5	3	3	2	13	1037.5
Hammerscale	x							-	38.6
Fuel ash		3	2.5	1.5	1	1	1	24	149.4
Technical vitrif.	*	11	9.5	4.5	2	1	1	32	1668.2
Ferr. conc.	x	6.5	4	4	>0.5	>0.5	>0.5	147	1327.4
Charcoal									
Other								-	472.0
							Total	**2218**	**41981.2**

ID. [324]	Mag.	Max. Dimensions (cm)			Min. Dimensions (cm)			Count	Weight (g)
		L	W	D	L	W	D		
Undiagnostic	*	6.5	4.5	4	<0.5	<0.5	<0.5	1168	6527.7
Flowed	*	5.5	3.5	2	<0.5	<0.5	<0.5	339	2150.7
Tap	x	5	4	1	2.5	2	1	4	86.4
Smelting	*	9	6	4	2	1	1	164	2698.7
SHB									
Hammerscale	x							-	5.3
Fuel ash	*	3	2.5	1.5	1.5	1	1	5	28.0
Technical vitrif.	*	7	4.5	3	2.5	2.5	1	12	237.6
Ferr. conc.	*	3	2.5	2	2	1	1	31	254.9
Charcoal								-	0.2
Other								-	39.6
							Total	**1723**	**12029.2**

Context [332]

The uppermost of the deposits within Structure 3, described as an occupation deposit, is context [332] (Milek 2005: 54). This layer, mostly comprised of charcoal, was 4mm at its thickest in the central space of Structure 3. Slag recovered from this layer is thought to be exposed remnants from underlying deposits containing greater concentrations. Charcoal layer [332] is deemed to be the burnt remains of the superstructure of Structure 3 containing elements of the timber framework, underlying the turf roof collapse [318].

In conjunction with the proportion of smelting slag and flowed slag, this context likely represents iron production residues that have been exposed from an underlying context. The general absence of smithing residues supports this view. One tap slag fragment was recovered from this context with obvious rivulets on the upper cooling surface. The internal layering exposed in the fractured edge of this tap slag fragment reveals multiple tapping episodes. The slag recovered from this context corresponds to find 118.

ID. [332]	Mag.	Max. Dimensions (cm)			Min. Dimensions (cm)			Count	Weight (g)
		L	W	D	L	W	D		
Undiagnostic	x	5	4	3.5	<0.5	<0.5	<0.5	65	463.23
Flowed		8	6	3.5	2	1	1	16	364.19
Tap		8	4.5	4				1	133.74
Smelting		8	5	3.5	2.5	2	2	7	278.45
SHB									
Hammerscale	x							-	0.45
Fuel ash									
Technical vitrif.		4.5	4	2				1	21.05
Ferr. conc.		4.5	3.5	2	1	1	0.5	19	83.6
Charcoal									
Other									
							Total	**109**	**1344.7**

Context [6020]

A charcoal rich deposit in Structure 3 has been identified as a substantial floor layer, containing charred seaweed and slag (Milek 2007: 37). A ferrous object that has since been identified as an iron punch tool, similar to a tool recovered from Anglo-Scandinavian York, was recovered from context [6020] (Milek 2007: 36, Guðrún Alda Gísladóttir 2007: 66).

The slag recovered from this deposit was too small to properly identify as the vast majority was recovered as heavy residue from flotation, hence only the weight is recorded. Some fragments of flowed slag were recovered, as well as two pieces of spheroidal hammerscale and a smithing hearth bottom fragment. The evidence is suggestive of smithing, though the nature of the undiagnostic slag residues is unclear. Due to the frequency and size

of the small slag fragments recovered in the heavy residue, the undiagnostic residues may derive from smithing activities. Pieces of stone were also recovered from this context. The slag recovered from this context corresponds to finds 75, 76, 77, 93, 94, 95, 99, 100,102, 103, 111, 112,117, 121, 122,123, 124, 125, 127, 128 and 129.

ID. [6020]	Mag.	Max. Dimensions (cm)			Min. Dimensions (cm)			Count	Weight (g)
		L	W	D	L	W	D		
Undiagnostic								-	629.1
Flowed								20	47.0
Tap									
Smelting									
SHB								1	274.3
Hammerscale								2	0.7
Fuel ash									
Technical vitrif.									
Ferr. conc.								8	5.1
Charcoal									
Other								-	404.0
							Total	**31**	**1360.2**

Context [6057]

In the eastern corner of Structure 3, a large deposit of slag was recovered, associated with pits [6100] and [6126], as well as stake holes [6155] (Milek 2007: 37). The vast majority of the slag collected from this context was recovered as heavy residue from flotation. Whilst larger fragments were assessed and classified, most of the fragments were too small to identify. Repeat counts were conducted for 100g samples, yielding on average *circa* 350 pieces, which would equate to nearly 200,000 pieces for the total weight of undiagnostic residues. Only 262 pieces of undiagnostic slag measuring over 3cm were counted, weighing 5102g. The small size nature of the undiagnostic slag may point towards smithing residues.

Context [6057] did generate evidence clearly indicative of smithing. Six smithing hearth bottoms (fragments of), were identified, along with nearly 200 spheres of spheroidal hammercale. The smithing residues are accompanied by iron production residues, with technical vitrifications, pieces of iron ore (ferruginous concretions) and smelting slag. The evidence for iron production and the spheroidal hammerscale recovered indicates that the smithing was likely to be primary, bloom refining slag-rich iron. The slag recovered from this context corresponds to finds 81, 84, 134, 139, 140, 141 and 142.

ID. [6057]	Mag.	Max. Dimensions (cm)			Min. Dimensions (cm)			Count	Weight (g)
		L	W	D	L	W	D		
Undiagnostic	*	9	7	4	<0.5	<0.5	<0.5	-	55981.6
Flowed		6.5	4.5	1.5	0.5	0.5	0.5	1234	4403.3
Tap									
Smelting	*	8.5	7.5	4	1.5	1.5	0.5	130	3042.3
SHB		9.5	7.5	4	7	3.5	2	6	1193.0
Hammerscale	x							195	52.3
Fuel ash		2	2	1.5	1	1	1	6	34.9
Technical vitrif.	*	7.5	4.5	2	1	1	0.5	16	205.4
Ferr. conc.	*****	8	5	4	<0.5	<0.5	<0.5	174	1189.9
Charcoal								1	0.2
Other								-	672.2
							Total	**1762**	**66775.0**

Context [6069]

Context [6069] has been identified as turf or peat ash deposit in Structure 3. All of the slag from this context, except one piece, was recovered via flotation. Some stones were observed

mixed with the small undiagnostic slag fragments. One piece of tap slag was recovered. This slag fragment had a funnel-like shape providing some impression of the space the tap slag filled/accumulated. The slag recovered from this context corresponds to finds 53 and 105.

ID. [6069]	Mag.	Max. Dimensions (cm)			Min. Dimensions (cm)			Count	Weight (g)
		L	W	D	L	W	D		
Undiagnostic								-	246.05
Flowed									
Tap								1	325.1
Smelting									
SHB									
Hammerscale									
Fuel ash									
Technical vitrif.									
Ferr. conc.									
Charcoal									
Other									
							Total	-	571.1

Context [6073]

In the northeast corner of Structure 3, a deposit of burnt turf and slag was recovered from the bottom of the slag pit, context [6073]. Within this deposit, a concave ceramic fragment was recovered (Find *61*), which has tentatively been identified as a possible mould fragment (Guðrún Alda Gísladóttir 2007: 69). This technical ceramic fragment was not examined during this assessment.

Some smithing residues were recovered from this context, in the form of one fragment of a smithing hearth and a few examples of spheroidal hammerscale. Most of the slag identified is undiagnostic, however several pieces were attributed to smelting. The interesting aspect of this context is the three fragments of burnt bone that were identified. It is difficult to assess whether this material was related at all to the activities taking place, however, there have been references to the use of bone in smithing at other Scandinavian sites (Gansum 2004). The slag recovered from this context corresponds to find 55.

ID. [6073]	Mag.	Max. Dimensions (cm)			Min. Dimensions (cm)			Count	Weight (g)
		L	W	D	L	W	D		
Undiagnostic	*	5	4	2.5	0.5	0.5	0.5	314	1108.9
Flowed	x	6.5	4	3.5	1	0.5	0.5	93	557.1
Tap									
Smelting		5.5	3.5	3.5	2	1	1	9	189.8
SHB		5	4.5	3				1	57.0
Hammerscale								3	21.6
Fuel ash									
Technical vitrif.		4	2.5	1.5	1.5	1	1	8	61.6
Ferr. conc.		3.5	2	1.5	1.5	1	1	6	32.8
Charcoal									
Other								3	0.4
							Total	437	2029.2

Context [6074]

East of Structure 4, a deposit of turf and gravel was excavated, context [6074], which has been interpreted as collapse. One fragment of smelting slag was recovered from this context. This slag might be a furnace bottom, as indicated by the dense nature of the slag as well as the shape. However, furnace bottoms and smithing hearth bottoms are difficult to distinguish easily. The large charcoal impressions point towards iron production as opposed to smithing. The slag recovered from this context corresponds to find 55.

ID. [6074]	Mag.	Max. Dimensions (cm)			Min. Dimensions (cm)			Count	Weight (g)
		L	W	D	L	W	D		
Undiagnostic									
Flowed									
Tap									
Smelting		8.5	7.5	5				1	550.4
SHB									
Hammerscale									
Fuel ash									
Technical vitrif.									
Ferr. conc.									
Charcoal									
Other									
							Total	1	550.4

Context [6096]

In Structure 3, deposit [6096] is deemed to be a turf or peat ash deposit. Three smithing hearth bottoms and 16 pieces of spheroidal hammerscale were identified in this context, a clear indication that the deposit was produced by some smithing activity. The smelting slag fragments and few pieces of tap slag, however, also demonstrate that the deposit relates to production. Most of the deposit consists of undiagnostic lumps of slag from heavy residue, containing 39 pieces larger than 3cm (weighing 618.4g). Fragments of burnt bone was also recovered from this context, which can be attributed to both iron production and iron working activities. The slag recovered from this context corresponds to finds 82 and 88.

ID. [6096]	Mag.	Max. Dimensions (cm)			Min. Dimensions (cm)			Count	Weight (g)
		L	W	D	L	W	D		
Undiagnostic	*							-	3000.1
Flowed		5.5	3	2.5	1	1	0.5	123	675.7
Tap		3.5	2.5	1.5				2	46.7
Smelting		5.5	5	1	2	1.5	0.5	16	321.4
SHB		7	6.6	3	5	3	1.5	3	275.3
Hammerscale	x	1	0.5	0.5	<0.5	<0.5	<0.5	16	3.7
Fuel ash									
Technical vitrif.									
Ferr. conc.		4.5	3.5	1.5	2.5	2	1.5	4	52.2
Charcoal									
Other									
							Total	164	4375.0

Context [6103]

The dark deposit surrounding Structure 3, described in 2005 as having a ‘burnt’, ‘scorched’, appearance, was identified as an extensive layer of burnt turf (Milek 2005: 57; 2007: 39). Amongst this extensive layer of burnt turf a small amount of slag was recovered, largely consisting of small undiagnostic pieces as well as some fragments of smelting slag. The slag recovered from this context corresponds to finds 65, 66, 67, 72 and 73.

ID. [6103]	Mag.	Max. Dimensions (cm)			Min. Dimensions (cm)			Count	Weight (g)
		L	W	D	L	W	D		
Undiagnostic		8.5	5.5	4	0.5	0.5	0.5	63	449.5
Flowed		3	3	2.5	2	1	0.5	6	35.6
Tap									
Smelting									
SHB									
Hammerscale									
Fuel ash									
Technical vitrif.									
Ferr. conc.									
Charcoal									
Other		2	1.5	1	1	1	0.5	3	1.5
							Total	72	486.6

Context [6126]

Pit [6126], located in the central area of Structure 3, is deemed to be associated with stone and ash deposits, and has been interpreted as a hearth with an unusual tongue shape (Milek 2007: 37). The presence of slag in this context, as well as the slag associated with the feature from other contexts, would suggest that the hearth was related to metallurgical activity. It would be premature to identify this hearth as a smithing hearth, as the subterranean feature, in combination with the apparent stone lining, would not be out of the ordinary for the base of a furnace construction. Due to the formation processes that lead to the slag depositions recovered, the lack of smelting slag does not imply that the feature is solely related to smithing. Cleaning a hearth or furnace of slag would not necessarily be an uncommon activity, in order to re-use the constructions.

The majority of the slag from this context was recovered from heavy residue, which contained a number of hammerscale spheroids and fragments of flowed slag. The lack of diagnostic residues in this context, in the form of smithing or smelting slags, make it difficult to understand which particular processes were taking place. The slag recovered from this context corresponds to finds 52, 59 and 62.

ID. [6126]	Mag.	Max. Dimensions (cm)			Min. Dimensions (cm)			Count	Weight (g)
		L	W	D	L	W	D		
Undiagnostic		5	4.5	3	1.5	1	1	-	1223.2
Flowed		4	4	3	<0.5	<0.5	<0.5	160	448.5
Tap									
Smelting									
SHB									
Hammerscale								16	3.6
Fuel ash									
Technical vitrif.		2.5	2.5	1				1	4.3
Ferr. conc.		3	2	1.5	1.5	1	1	6	21.8
Charcoal									
Other									
							Total	183	1701.3

Context [7012]

Slag deposit [7012] was recovered from a sunken, stone-lined feature in Structure 3, which has been interpreted as a hearth associated with ironworking (Daxböck and Milek 2008: 53). The slag assessment of this context, however, bears very little in the way of smithing residues. Whilst the undiagnostic fragments may derive from smithing, the number of flowed

slag fragments and pieces of smelting slag are more indicative of iron production than ironworking. This is supported further by the number of ferruginous concretions recovered, many of which appear to be small bodies of iron ore.

The identification of the sunken, stone-lined feature in Structure 3 as an ironworking hearth should be reviewed more critically and revised in light of the smelting slag recovered from this feature. The slag recovered from this context corresponds to finds 29, 40 and 61.

ID. [7012]	Mag.	Max. Dimensions (cm)			Min. Dimensions (cm)			Count	Weight (g)
		L	W	D	L	W	D		
Undiagnostic		3	1.5	1.5	0.5	0.5	0.5	851	1152.8
Flowed		5	4	1.5	1.5	0.5	0.5	591	1167.6
Tap									
Smelting		11	5.5	5	1.5	1	0.5	96	2515.5
SHB									
Hammerscale								-	16.8
Fuel ash									
Technical vitrif.		4	3	1.5	1.5	1	0.5	17	45.9
Ferr. conc.		5.5	3	3	1	1	1	65	366.5
Charcoal								1	0.1
Other								-	80.0
							Total	1621	5345.2

Context [7159]

This deposit contained ten ferrous lumps. On initial inspection, their plano-convex shape and red luster made them appear as SHB's. Their density and heavy weight for their size contradicted this first judgement. After removing a sample from one of the lumps, it became clear that these were lumps of iron. A sample was extracted from each iron lump for further metallographic and chemical analysis. Sectioning one of the iron lumps revealed irregular voids within the metal substrate. These iron lumps, deposited together, represent a cache of some 44kg of unused iron. The iron lumps were identified as partially refined iron blooms. The internal voids exposed upon sampling revealed that the iron had not been fully consolidated. However, all the lumps share a similar plano-convex, or flattish-oval shape, revealing that they had all been partly worked. It is not clear, yet, whether these unrefined iron blooms were produced at the site, or were transported to the site.

Other contexts

Throughout the assessment, many small sample bags containing archaeometallurgical and other residues were examined. Some of these bags relate to contexts that were excavated, although a large portion of them derive from the heavy residue fraction recovered by flotation. They have been listed in the table below. The majority of these small slag fragments exhibit no diagnostic features. Many of the small bags contained a substantial amount of stone. It is difficult to provide further interpretation concerning the nature and origins of these smaller deposits due to the lack of diagnostic examples.

ID. [...]	Finds No.	Class.	Count	Weight (g)
2018	F37	und.	2	4.3
6000	F5	smelt.	1	13.5
6001	F8	flow.	1	0.1
6001	F12	flow.	2	0.1
6006	F25	und./stones	-	190.0
6006	F19	und./stones	-	252.0
6006	F20	und.	6	52.0
6006	F18	flow.	1	69.4
6009	F22	ferr. con.	10	2.5
6010	F33	und.	23	221.0
6014	F27	und.	5	128.0
6014	F36	und.	4	28.9
6014	F35	und.	12	23.4
6015	F28	und.	16	12.2
6021	F137	smelt.	1	34.4
6026	F39	*stone*	1	1.6
6037	F43	und.	-	175.2
6049	F48	stone	-	89.0
6052	F47	und.	4	0.4
6055	F46	und.	18	80.0
6063	F51	und.	3	1.0
6075	F107	?	-	7.7
6076	F86	und.	-	57.0
6076	F97	?	-	76.2
6076	F98	?	-	142.0
6076	F101	?	-	27.2
6076	F118	?	-	39.6
6087	F104	?	-	0.7
6087	F108	?	-	4.0
6087	F109	?	-	2.4
6087	F120	?	-	14.9
6090	F87	*stone*	-	521.6
6090	F90	und./stone	-	33.0
6090	F106	?	-	14.8
6097	F91	und./stone	-	237.0
6101	F89	und.	2	16.0
6104	F79	und.	1	1.7
6129	F53	ferr. con.	1	2.5
6158	F74	ferr. con.	4	107.0
7027	F55	ferr. con.	1	0.6
7045	F60	und.	3	2.7
7052	F56	und.	9	0.0
7124	F57	und.	3	0.1
cleaning	F50	und.	16	4.5
		Total	**150**	**2692.1**

ASSESSMENT OF FAUNAL REMAINS FROM THE VIKING AGE AREA

Céline Dupont-Hébert
Université Laval

Introduction

In 2010 ongoing excavations in the Viking Age area of Vatnsfjörður (Area 14) removed the earliest phase of the wall of Structure 9, and concentrated on a small pit house, Structure 10. The present assessment will provide new data concerning faunal remains uncovered during excavation, a collection which resembles last year's assemblage found in association with Structure 9 (Dupont-Hébert 2010). While this assemblage is not as big or as well preserved as that recovered from the early modern contexts of the site, which is the focus of the author's Master's dissertation and will be reported in greater detail in a separate report, but it provides a means of examining the exploitation of faunal resources since the time of settlement.

Field and Laboratory Methodology

All Viking Age sediments were dry-sieved through a 4 mm mesh, except for bulk soil samples taken for flotation, which were wet sieved with 1 mm mesh. Faunal remains were initially sorted out at the field laboratory including remains recovered from the light and heavy fraction issued from flotation process. All faunal remains were then identified at the field lab with the available reference collection and manuals, and left with the excavation director for future radiocarbon dating.

Assessment of the Viking Age Faunal Assemblage

The assemblage is composed of 130 remains, both fragmented and whole (Table 1). Figure 1 shows the taxonomic diversity of this Viking Age assemblage for each context excavated. The majority of the faunal remains represents unidentifiable mammal or vertebrate (69%). This level of unidentified specimens is due to fragmentation or modified bone structure – erosion of the bone surface because of the soil acidity or other taphonomic processes – which renders the identification of diagnostic traits difficult. The second group in importance is the ovi-caprines (sheep/goats), represented by five identified elements including two mandibles (one left, one right) and loose molars which could possibly be attributed to a single individual. Mandibles and teeth all show attributes of a mature animal – more than 36 months – in the form of a fully exposed third molar (Grant 1982). Nonetheless, no attempt has been made to insert the loose teeth back in their belonging sockets because of the fragility of the mandible bone. One fish vertebra could not be identified to the species level as well as a bird phalanx from a small avian species. One pig molar was also identified. Invertebrates are represented by unidentified shell fragments but also by the mussel (NISP:8) and the clam (NISP: 11) which were all collected in the sample square [10024].

Table 1. *The 2010 Viking Age faunal assemblage*

Group/Name	*Scientific Name*	TNF
Domesticate species		
Ovi-caprines	*Ovis aries, Capra hircus*	6
Pig	*Sus scrofa dom.*	1
Wild species		
Blue Mussel	*Mytila edulis*	8
Clam	*Mya sp.*	11
Unidentied		
Medium terrestrial mammal		1
Large terrestrial mammal		2
Small avian species		3
Fish species		2
Mollusca species		4
Unidentified mammal		51
Unidentified vertebrate		41
Total		***130***

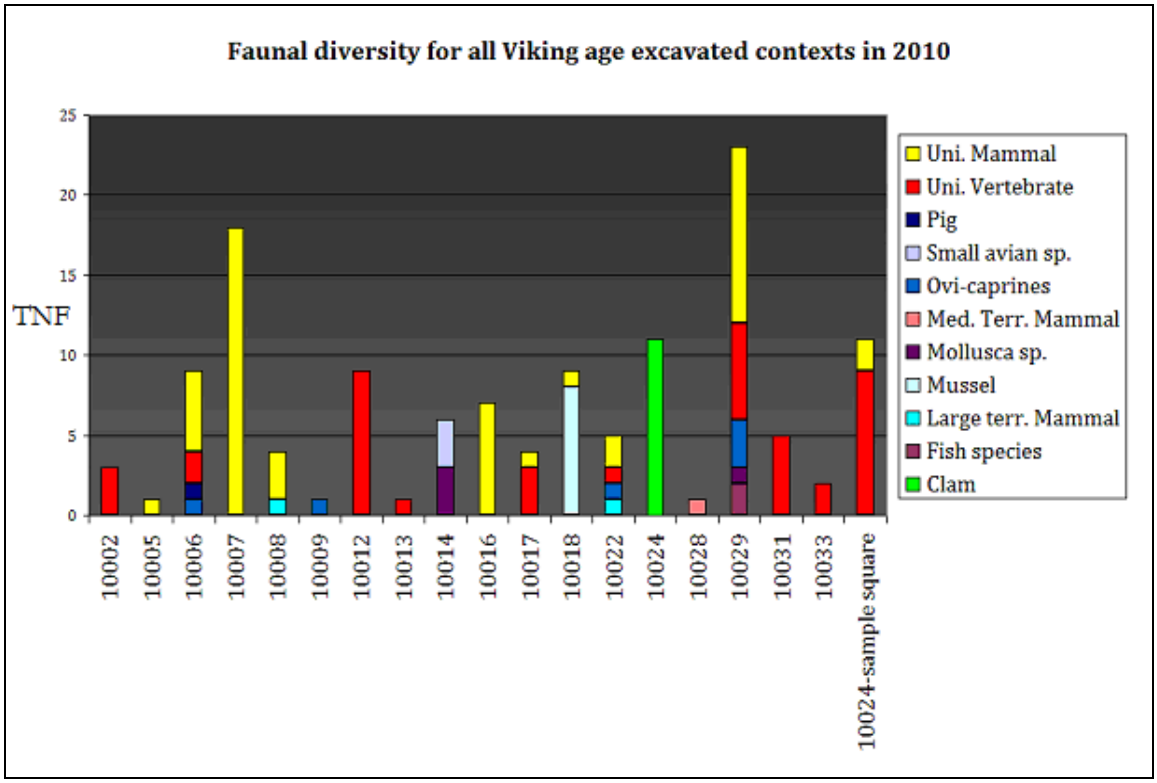


Figure 1. *Species diversity for each context excavated of structure 14.*

Taphonomy of the Faunal Assemblage

Bone Fragmentation

As is usually the case in Vatnsfjörður's Viking age deposits, bones recovered from Area 14 are highly fragmented; complete bones are present in a very low percentage (± 1%). The degree of fragmentation of this collection resembles those recovered from the Viking Age area associated to structures and are consistent with assemblages produced by domestic activities (Dupont-Hébert 2010).

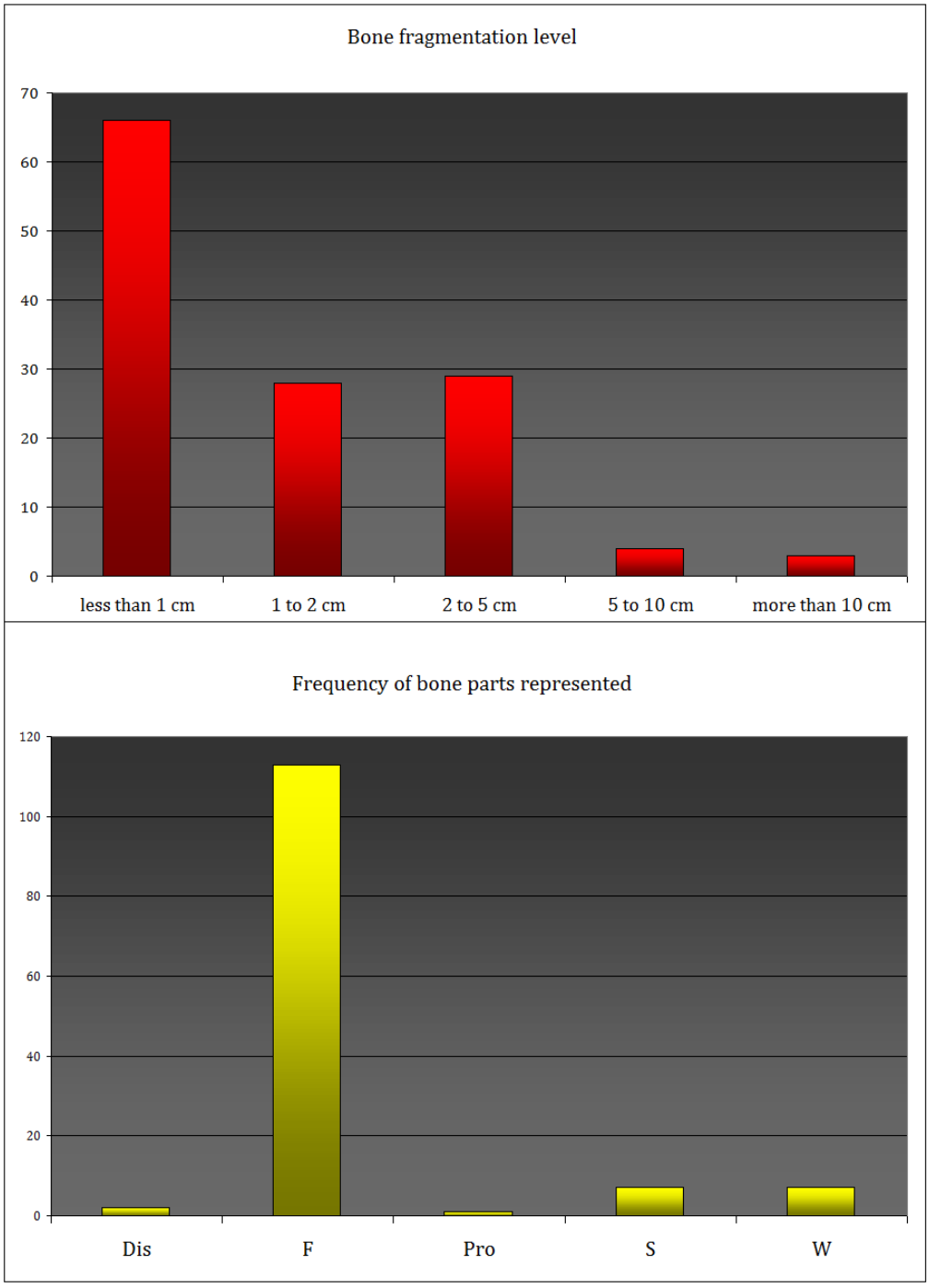


Figure 2. *Distribution of faunal remains according to their fragmentation and level of completeness.*

Combustion Traces

Where previously excavated assemblages from soils in the vicinity of the Viking Age area had a high proportion of burnt bones related to propable field fertilisation, those associated with Structures 9 and 10 are less dominated by bones showing combustion traces (Figure 2).

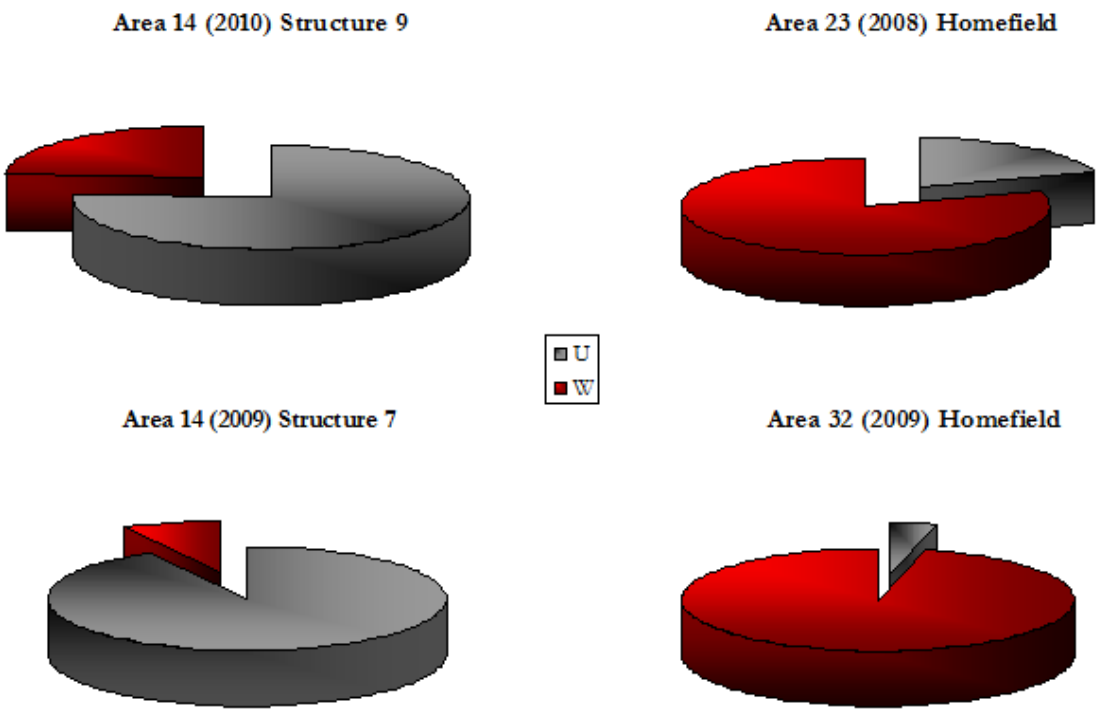


Figure 3. *Relative frequency of combustion traces in the Viking age assemblages (U = unburnt bones; W = white bones, calcined through burning)*

Other Taphonomic Factors

Other taphonomic traces, like gnawing and butchery marks, are mostly absent from this assemblage. Only one chop mark was identified on an ovi-caprine metapodial shaft. Bone cortex being affected by soil acidity might have played a role in the lack of those traces; bone surface modifications by chemical or mechanical weathering tend to cause the disappearance or misinterpretation of butchery marks. Trampling could also have occurred, resulting in bone fragmentation as shown in Figure 2. Some bone "powder" or "bone butter" was also noted in the assemblage and during the excavation. This almost total decompositin of the bone is probably related to the highly acidic (pH 4-5) and well-drained soils, which experience abundant rainfall and snowmelt, causing almost total leaching of calcium from the bone.

Discussion

The analysis of the whole Viking Age faunal assemblage should be done to optimize interpretation of the results. A better understanding of subsistence or economic strategies of

early settlement of the Westfjords would be beneficial for all researches on Icelandic landnám period and for all spatio-temporal questions regarding colonization of the country and long-term change. The Vatnsfjörður assemblage is currently spatially isolated, with no contemporaneous collection available for this region of Iceland. Further archaeological excavation in the Westfjords shall provide those lacking assemblages and are therefore recommended.

Bibliography

Dupont-Hébert, C. (2010) *Vatnsfjörður 2009 Zooarchaeological Analysis,* in Milek K. (ed) *Vatnsfjörður 2009 Framvinduskýrslur/Interim Report* FS449-03099, Reykjavík: Fornleifastofnun Íslands, pp. 82-94.

Dupont-Hébert, C. (2009) *Vatnsfjörður 2008 Preliminary Zooarchaeological Analysis,* in Milek K. (ed) *Vatnsfjörður 2008 Framvinduskýrslur/Interim Report* FS426-03098, Reykjavík: Fornleifastofnun Íslands, pp. 96-104.

Grant, A. (1982) *The Use of Tooth Wear as a Guide to the Age of Domestic Ungulates,* in Wilson B., Grigson C. and S. Payne (eds.) *Ageing and Sexing Animal Bones from Archaeological Sites,* BAR British Series 109, pp. 91-108.

Milek, K. (ed) 2010 *Vatnsfjöður 2009 Framvinduskýrslur/Interim Report* FS449-03099, Reykjavík: Fornleifastofnun Íslands.

BOTANICAL REMAINS FROM A SAMPLE COLUMN THROUGH THE FARM MOUND

Dawn Elise Mooney
University of Aberdeen and Fornleifastofnun Íslands

Introduction

During fieldwork at Vatnsfjörður in 2008, a sample column for soil micromorphological sampling was excavated on the western edge of the farm mound by a team from the University of Stirling, Scotland. This western edge was chosen for several reasons. Firstly, it is located away from the main structures situated on the farm mound, and as such excavations here were unlikely to disturb any buildings or other key archaeological features. This area behind the buildings was also a likely location for midden deposits, which would contain domestic waste from throughout the period of occupation of the farm mound. Lastly, the diverted stream course which flows to the west of the farm mound provided easy access to these deposits (Parkin *et al* 2009). The purpose of this column was to obtain samples for a soil micromorphological study of fuel resources at Vatnsfjörður from the earliest occupation of the site into the Medieval Period. 27 separate contexts were identified in the column, which reached a maximum depth of 1.5m. Three radiocarbon dates from *Betula* charcoal were obtained from the column, giving calibrated dates of AD 825±35 (24cm from base of column), AD 1035±35 (29cm from base of column) and AD 1220±35 (84cm from base of column) (Parkin *et al* 2009). This shows that the midden deposits here date from *Landnám* into the Medieval Period. The analysis of 8 micromorphological samples from throughout the column show that:

> "There appears to have been a consistent mix of a range of fuel resources utilised from *Landnám* into the early Norse period, before high-temperature peat burning became to most prevalent type of combustion on the farm mound. This situation remained the same for a considerable length of time until, sometime prior to the mid-thirteenth century, wood charcoal made a noticeable return to prominence." (Parkin *et al* 2009, p.141)

In 2010, a second column was excavated adjacent to and to the north of the 2008 column, in order to collect bulk samples for archaeobotanical remains from throughout the depth of these midden deposits. The analysis of these samples allows three separate avenues through which to understand changes which took place between the Viking Age and Medieval Period at Vatnsfjörður: changes in local environment and plant resource exploitation, changes in fuel use, and changes in the origin of wood used for fuel at the site. These results should be directly comparable to the 2008 column, and thus help build a fuller picture of the Viking Age and Medieval Period occupation of the Vatnsfjörður farm mound.

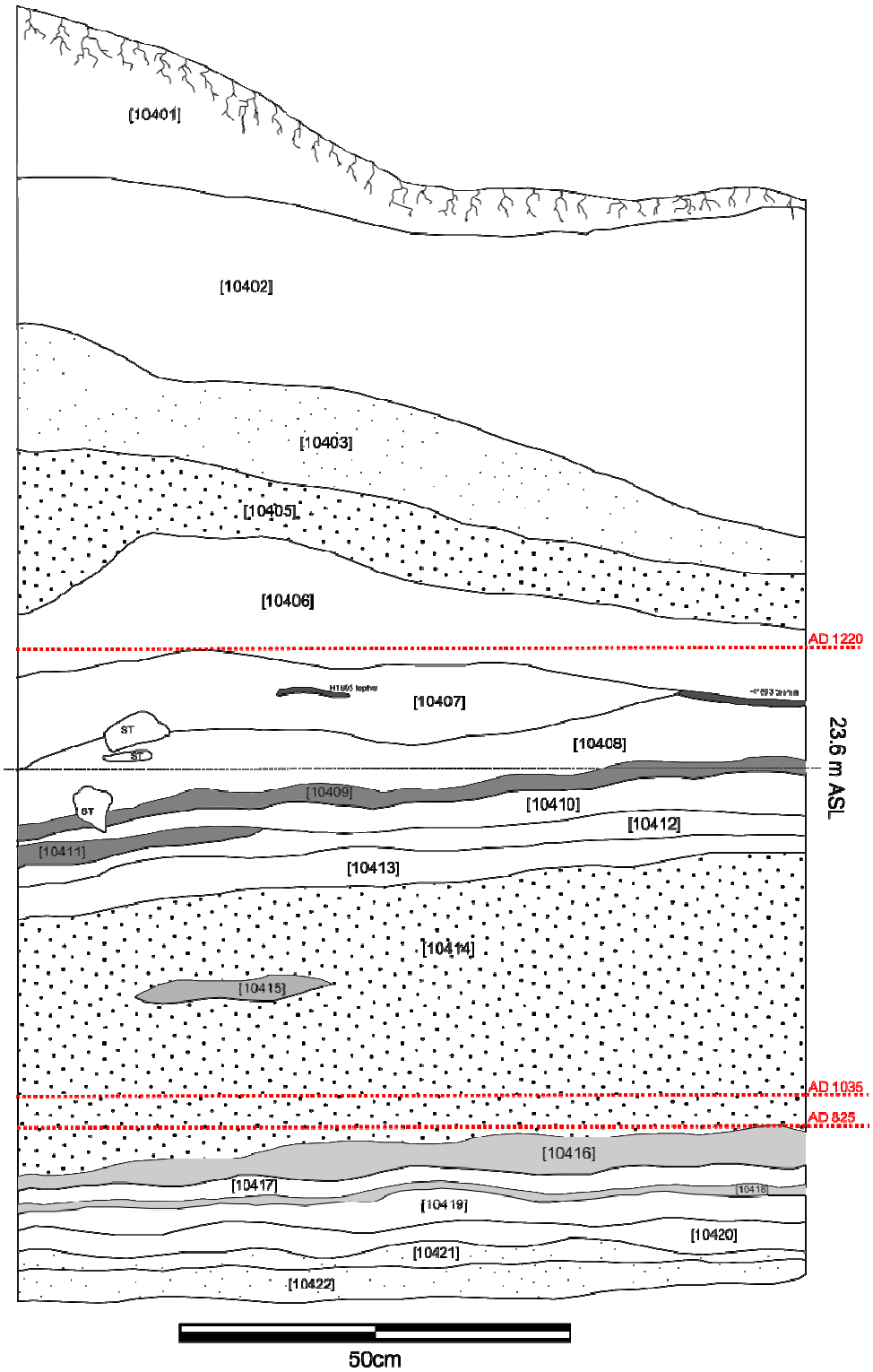
Excavation

Excavation of the sample column took place during the last week of July 2010, the first week of the VSF10 field season. Twenty-two individual contexts were identified during excavation, and it was these that were sampled for archaeobotanical remains (Figure 1 and accompanying context descriptions). A mixed layer of dark brown sandy silt was uncovered sitting on top of a recent turf mat – this was spoil from the 2008 adjacent test pit. Below this

and below the topsoil and subsoil a sequence of midden deposits were uncovered, including several burnt layers. At approximately 70 cm down, a layer of turf collapse was found, spreading from a building to the north-east of the column, on the top of the farm mound. Midden deposits accumulate below this layer, with two clear layers of burnt material visible ([10409] and [10411], see Figure 1). Below this there is a thick layer of redeposited gravel, either representing a period of disuse and slumping or spoil from the digging or a pit or other sunken feature. The layers below this again represent a series or midden deposits, down to the natural beach gravels at the base of the column. From each layer excavated two bulk samples were taken: a 5 l sample for flotation (or 100% of the context if less than 5 l), and a 0.25 l sample for soil chemistry analysis.

Sample Processing and Analysis

The 22 bulk samples taken for archaeobotanical analysis were processed on site at Vatnsfjörður during August 2010, and at Fornleifastofnun Íslands after the field season during September 2010. The samples were processed using an Ankara style flotation machine. After processing and drying, the samples were shipped to the University of Aberdeen for analysis. This analysis was conducted during March 2011. Each sample was sorted under a stereoscopic light microscope to remove seeds, charcoal fragments of ≥1 mm, and other botanical remains of interest. Seeds and seaweed fragments were identified to genus or species where possible using the same microscope, and were quantified and recorded (see Table 1). The volume of charcoal fragments ≥1 mm for each sample was recorded, and calculated as a percentage of the sample volume. The ratio of seaweed fragments to ml of charcoal was also calculated (Table 1). After these calculations, 150 charcoal fragments from each sample, or as many as were large enough, were identified under 50 x – 250 x magnification to genus or species.


[10401]
[10402]
[10403]
[10405]
[10406]
AD 1220
[10407]
[10408]
23.6 m ASL
ST
ST
ST
[10409]
[10410]
[10412]
[10411]
[10413]
[10414]
[10415]
AD 1035
AD 825
[10416]
[10417]
[10418]
[10419]
[10420]
[10421]
[10422]
50cm

the
oximate.

Context Descriptions

[10401] Loose dark brown sandy silt with frequent gravels of all sizes and occasional charcoal flecks. Spoil from 2008 test pit, overlying previous turf. *7.5YR 3/1 Very Dark Grey*

[10402] Fairly loose dark blackish brown sandy silt with frequent gravels of all sizes. Topsoil. Substantial bioturbation by roots, and disturbance both from levelling of mound and diversion of stream. Clear boundary with [10401], marked by pre-2008 turf. *5YR 3/2 Dark Reddish Brown*

[10403] Fairly loose very dark brown sandy silt with frequent charcoal flecks and small gravels. Three large flat stones. Substantial bioturbation by roots and worms. Slightly mixed boundary with [10402]. *2.5YR 2.5/1 Reddish Black*

[10404] Charcoal-rich lens in southern edge of column. Does not connect with section. 2-3 cm thick, clear boundary with [10403] above. Moderately compacted black sandy silt with very frequent charcoal flecks and fragments, and occasional small gravels. Bioturbated by roots and worms, southern edge disturbed by excavation of 2008 column. *7.5YR 2.5/1 Black*

[10405] Midden deposit. Moderately compacted mid orangey brown sandy silt with occasional charcoal flecks and frequent natural gravels of all sizes. 7-28cm thick. Clear boundary with [10404], slightly mixed with [10403], fairly clear with [10406]. Fairly homogenous. Bioturbation by roots and worms. *5YR 4/4 Reddish Brown*

[10406] Midden deposit. Moderately compacted mid to dark brown clayey silt with moderately frequent small gravels and charcoal flecks. 6-15cm thick. Slightly mixed boundary with [10405], fairly clear with [10407]. Fairly homogenous. Bioturbation by roots and worms. *7.5YR 2.5/2 Very Dark Brown*

[10407] Turf collapse layer from building to north east of sample column. Firm mid pinkish brown sandy silt mottled c. 10% with mid reddish orange, with frequent charcoal flecks and moderately frequent small natural gravels. 2-12cm thick. Clear boundary with [10406] above and [10408] below. Heterogeneous. Some bioturbation by roots and worms. H1693 tephra within turves. *2.5YR 3/3 Dark Reddish Brown*

[10408] Midden deposit. Firm mid greyish brown sandy silt with frequent charcoal flecks and occasional small natural gravels. 7-10cm thick. Clear boundary with [10407], boundary with [10406] marked by H1693 tephra, clear with [10409] below. Somewhat heterogeneous. Some bioturbation by roots and worms. *10YR 3/2 Very Dark Greyish Brown*

[10409] Burnt midden layer. Friable black sandy silt with very frequent charred plant remains and occasional small natural gravels. 2-3cm thick. Clear boundary above and below. Homogenous. Some bioturbation by roots and worms. *7.5YR 2.5/1 Black*

[10410] Midden deposit. Firm mid greyish-reddish brown sandy silt mottled c. 20% with mid brownish grey, with occasional charcoal flecks, small natural gravels and very small bone fragments. 1-6cm thick. Clear boundary with [10409] and [10411], slightly mixed with [10412]. Heterogeneous. Some bioturbation by roots and worms. *7.5YR 3/1 Very Dark Grey*

[10411] Burnt midden layer. Friable very dark brownish black sandy silt with very frequent charred plant remains and occasional small natural gravels. 2-4cm thick. Clear boundary above and below. Homogenous. Some bioturbation by roots and worms. *7.5YR 2.5/1 Black*

[10412] Midden deposit. Firm mid orangey-pinkish sandy silt mottled c. 5% with yellowish orange and c. 10% with dark brown, with occasional charcoal flecks and small natural gravels. 2-4cm thick. Clear boundary with [10411] and [10413], slightly mixed with [10410]. *2.5YR 3/1 Dark Reddish Grey*

[10413] Midden deposit. Firm mid greyish brown sandy silt, mottled c. 5% with mid yellowish orange and pale pinkish beige, with occasional charcoal flecks and small natural gravels. 3-7cm thick. Clear boundary above and below. Very heterogeneous. Some bioturbation by roots and worms. *7.5YR 4/3 Brown*

[10414] Redeposited gravel layer. Friable mid orangey greyish brown sandy silt, with occasional charcoal flecks and very frequent natural gravels of all sizes. 26-41cm thick. Clear boundary above and below. Homogenous.

Some bioturbation by roots and worms. *5YR 4/3 Reddish Brown*

[10415] Soil or turf lens within redeposited gravel layer [10414]. Moderately compacted mid pinkish brown sandy silt with occasional charcoal flecks. 1-3cm thick. Clear boundary. Homogenous. Some bioturbation by roots and worms. *7.5YR 4/6 Strong Brown*

[10416] Possible buried soil layer. Firm dark orangey greyish brown silt with occasional charcoal flecks and small natural gravels. 2-5cm thick. Clear boundary above and below. Homogenous. Some bioturbation by roots and worms. *5YR 3/3 Dark Reddish Brown*

[10417] Midden deposit. Firm mid orangey pinkish brown sandy silt mottled c. 10% with mid greyish brown, with moderately frequent charcoal flecks. 2-3cm thick. Clear boundary with [10416], slightly mixed with [10408]. Heterogeneous, some bioturbation by worms. *2.5YR 3/3 Dark Reddish Brown*

[10418] Midden deposit. Firm dark greyish brown sandy silt mottled c. 10% with mid reddish brown, with moderately frequent charcoal flecks and small natural gravels. 1cm thick. Slightly mixed boundary with [10417] and mixed with [10419]. Heterogeneous. Some bioturbation by worms. *5YR 2.5/2 Dark Reddish Brown*

[10419] Midden deposit possibly including burnt turf. Firm mid reddish brown sandy silt mottled c. 5% with mid pinkish red and yellowish orange, and c. 10% black, with frequent charcoal flecks and occasional small natural gravels. 2-5cm thick. Mixed boundary with [10418], clear with [10420]. Very heterogeneous. *5YR 4/6 Yellowish Red*

[10420] Midden deposit. Firm mid yellowish-greyish brown sandy silt with moderately frequent charcoal flecks and natural gravels. 2-4cm thick. Clear boundary with [10419], slightly mixed with [10421]. Homogenous. Some bioturbation by roots. *7.5YR 4/4 Brown*

[10421] Midden deposit. Firm mid to light pinkish brown sandy silt mottled c. 20% with mid brownish grey, with frequent charcoal flecks and fragments and occasional natural gravels.1-3cm thick. Slightly mixed boundary with [10420], clear with [10422]. Very heterogenous. Some bioturbation by roots. *5YR 3/3 Dark Reddish Brown*

[10422] Buried soil/old land surface including burnt patches. Firm very dark reddish brown sandy silt with very frequent charcoal flecks and occasional natural gravels. Clear boundary with [10421], natural below. Fairly homogenous. *7.5YR 2.5/2 Very Dark Brown*

Results of Botanical Anaysis

Wood Charcoal Identifications

For each of the nineteen samples analysed, 50 charcoal fragments were identified to genus level. Of the total of 950 charcoal fragments identified, all were of the genus *Betula*. Due to this lack of variability, these results have not been presented as a table in this report.

Wood Charcoal and Seaweed Quantification

Table 1 shows the amount of charcoal and seaweed in each of the 19 samples analysed. Charcoal is expressed as volume in ml of charcoal fragments greater than 1 mm in the sample. Seaweed is expressed as the number of fragments larger than 1 mm per sample. These values have not been expressed per litre as all the samples taken were of the same volume (5 l).

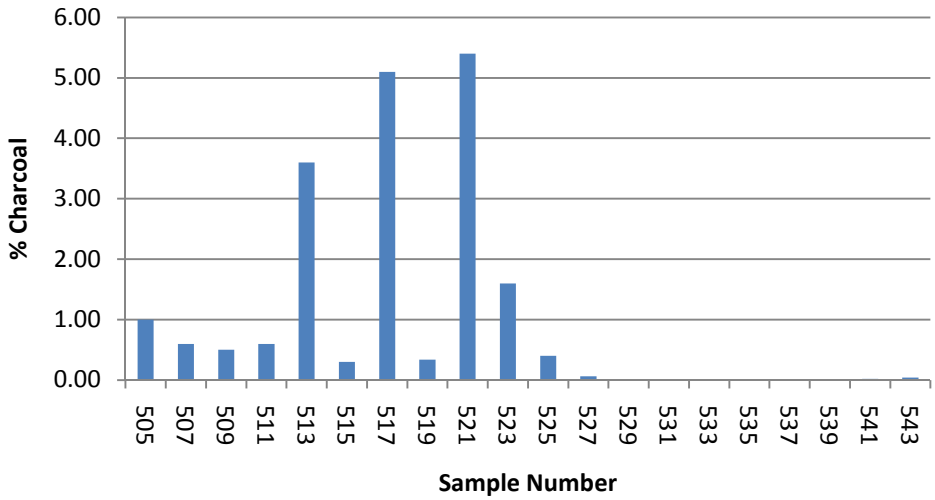


Figure 2. *Graph showing charcoal volume as a percentage of total original sample volume*

As is shown in Figure 2, there is substantial variation in the amount of charcoal in the samples, from more than 5% charcoal in the richest contexts to no charcoal at all in some layers. There are three contexts which clearly show high charcoal content: [10407], [10409], and [10411]. Contexts [10409] and [10411] were both described as burnt layers with visibly high charcoal content during excavation, while [10407] was described as a turf collapse layer with frequent charcoal flecks (see context descriptions, below). While it is obvious that there will be more charcoal in apparently 'burnt' layers, there is also a trend towards greater amounts of charcoal in the upper layers of the column, while no charcoal fragments over 1mm were recovered from any layers below [10414], apart from in the bottommost two contexts.

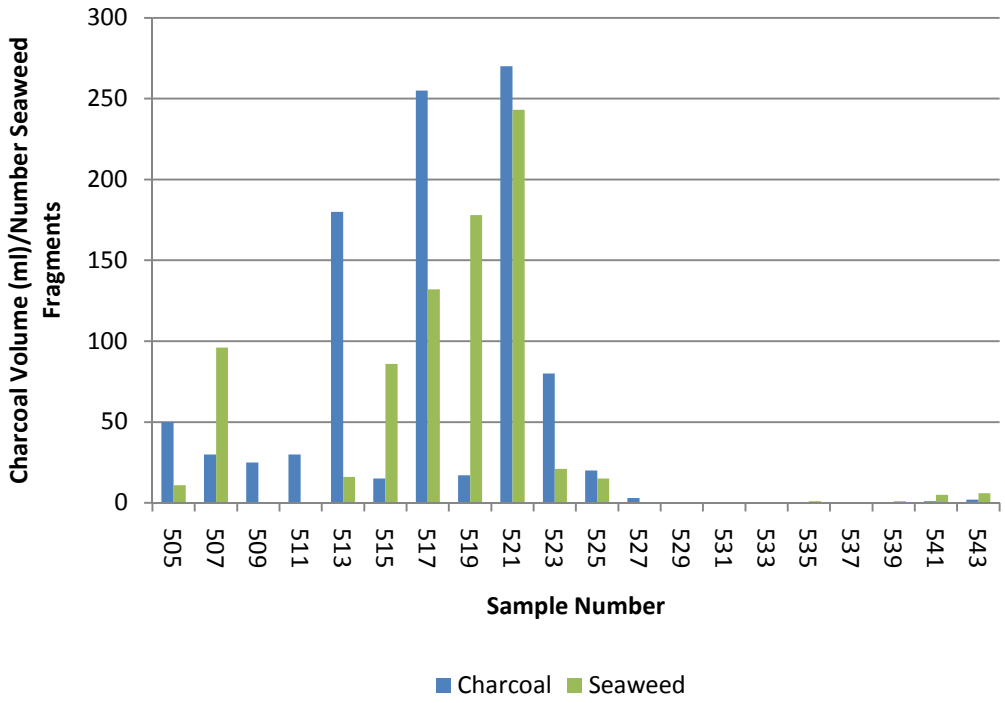


Figure 3. *Graph showing volume of charcoal >1mm and number of seaweed fragments >1mm per sample*

Figure 3 shows that as well as variation in the amount of charcoal in the samples, there is also a large amount of variation in the amount of seaweed in different contexts across the depth of the column. It is interesting to note that there is not always a correlation between large quantities of charcoal and large quantities of seaweed. The contexts [10409] and [10411], discussed above for their high charcoal content, also show contain large quantities of seaweed fragments. However, context [10407], the turf collapse layer which contained a large amount of charcoal, contained a relatively low amount of seaweed. Furthermore, contexts [10404], [10408] and [10410], which contained low amounts of charcoal, contained relatively large quantities of seaweed fragments. At least some seaweed is present in all but seven of the samples. The seaweed fragments recovered all seem to be of the *Ascophyllum nodosum* type, as in previous work at Vatnsfjörður (Mooney 2009), however this identification is not certain as it is purely based on the general morphology of the preserved fragments. Table 1 also shows the number of seaweed fragments per ml volume of charcoal. This ranged from 0.1 in context [10407], to 11 in context [10410].

Table 1. *Results of seed identifications and charcoal and seaweed quantification*

			CHARCOAL VOLUME (ML)		SEAWEED		SEAWEED PER ML CHARCOAL		CHARRED SEEDS													UNCHARRED SEEDS			
									Hordeum sativum	Poaceae indet.	*Stellaria media*	*Empetrum nigrum*	*Carex* sp	*Festuca* sp	*Bromus* sp	*Eriophorum* sp	*Rumex acetosa*	*Rumex longifolius*	*Polygonum aviculare*		*Rumex longifolius*	*Rubus idaeus*	*Vaccinium* sp	*Chenopodium album*
CONTEXT	SAMPLE																								
10403	505		50		11		0.2		1	1	3	1									1			122
10404	507		30		96		3.2			1	3	2	1		1							1		55
10405	509		25										1	1	2				1					12
10406	511		30								1		3		35	2	2	1						34
10407	513		180		16		0.1			5	11		4	5	2		3							
10408	515		15		86		5.7				3	1		1	2	1					2		2	10
10409	517		255		132		1.9			5	10	4	1	4		2	3	3						
10410	519		17		178		11				6				1		1							
10411	521		270		243		1.1				11	5	2	6	2									
10412	523		80		21		3.8			3	9	2		3	2		3	5						
10413	525		20		15		0.8				4	1		9	5									1
10414	527		3								1		1		3	2								4
10415	529		0																					
10416	531		0							1	1	1	4	1			1							1
10417	533		0																					3
10418	535		0		1																			
10419	537		0								2				1	1								1
10420	539		0		1				2		2					1								73
10421	541		1		5		0.2				5	1	4	2	1	1								7
10422	543		2		6		0.3				4	2	1											

Discussion

Origin of Charcoal

As mentioned above, identification of charcoal from the samples taken from this column revealed that all of the 950 fragments analysed were of the genus *Betula* (birch/björk). This is somewhat unsurprising as Iceland has a very limited number of tree species, as is illustrated in Table 2.

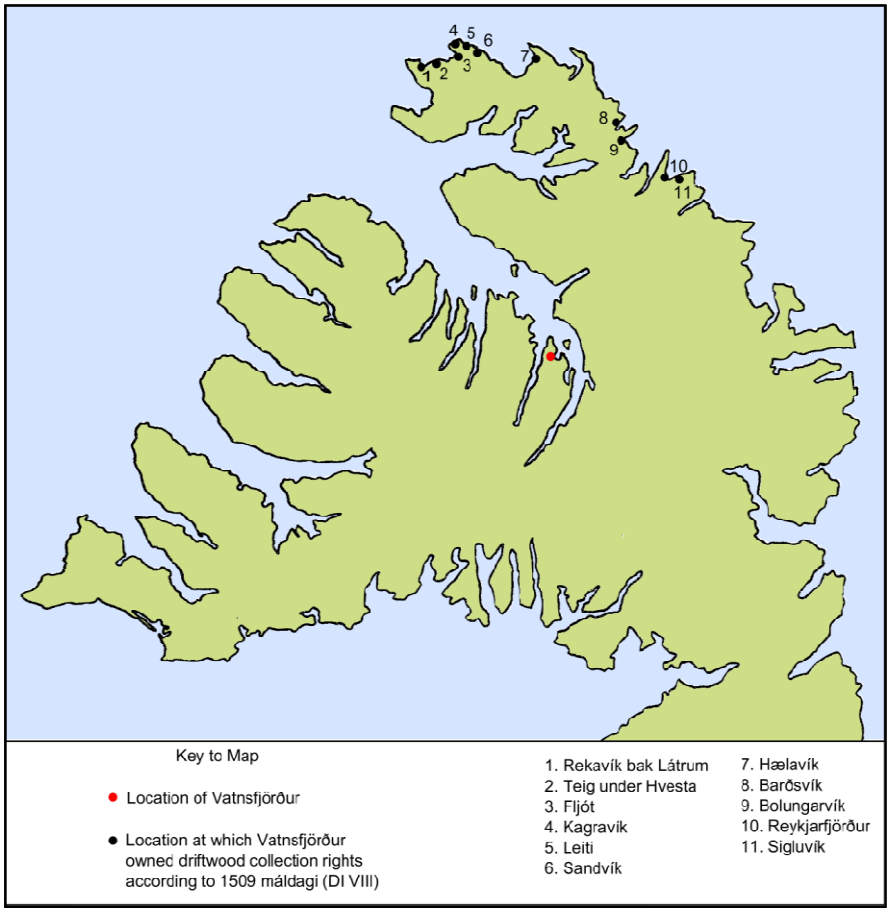
Table 2. *Tree species native to Iceland, with English and Icelandic names and habitat information. After Kristinsson 1998.*

Species Name	English	Icelandic	Habitat
Betula nana	Dwarf Birch	Fjalldrapi	Dwarf-shrub heaths and mires. Common.
Betula pubescens	Downy Birch	Birki	Moderately dry soil from lowlands to 450m a.s.l. Scrubland along coasts with taller brushwood and trees inland. Common.
Populus tremula	Aspen	Blæösp	Heaths and woodlands. Very rare, found only in parts of the Eastfjords and in Fnjóskadalur in the north.
Salix callicarpea	Bluish Willow	Grávíðir	Heathland and slopes, especially in the mountains. Common.
Salix herbacea	Dwarf Willow	Grasvíðir	Heathland, snowbeds and depressions in mountains. Common.
Salix lanata	Woolly Willow	Loðvíðir	Heathland, dry slopes and sandy banks. Common.
Salix phylicifolia	Tea-leaved Willow	Gulvíðir	Meadows, river banks, slopes and heathlands with moist soil. Forms undergrowth in damp birch woods. Common.
Sorbus aucuparia	Rowan	Reyniviður	Birch woodland and gorges. Does not form woods, but is found singly in birch woodlands.

Amongst these species, *Betula pubescens* (downy birch/birki) is the only tree which forms woodlands. It is also one of only two tree species native to Iceland which grows to a full tree form, rather than a shrub or creeping form. The other of these species is *Sorbus aucuparia* (rowan/reyniviður), however this species only grows singly within birch woodland, rather than forming woodlands on its own. It is assumed, then, that the charcoal found at Vatnsfjörður is of *Betula pubescens* wood rather than *Betula nana* (dwarf birch/fjalldrapi), however as the two species are indistinguishable by wood anatomy alone (Schweingruber 1982; Hather 2000) it is only possible to be completely certain of an identification to genus level. It is, however, somewhat unusual that 100% of the samples analysed were identified as *Betula*. Previous investigations into charcoal from Vatnsfjörður have shown that willow charcoal was also present, albeit in very small amounts (Mooney 2009), and investigations into fuel use at other Icelandic sites have also identified willow as well as birch (Zutter 1992; Simpson *et al* 2003; Vésteinnsson & Simpson 2004; Sveinbjarnardóttir *et al* 2007). Rowan has not been identified in wood charcoal from

Icelandic sites in any published material, despite being the only other large tree species in the country.

There are two main reasons which can explain the overwhelming predominance of birch as fuel both at Vatnsfjörður and at other Icelandic sites. Firstly, while birch wood is recognised as a good fuel wood with a high calorific value, both rowan and willow make poor firewood as they are generally damp woods and have a much lower calorific value (Andrew Cameron, pers.comm.). As all of these species are also present in mainland Scandinavia, the settlers of Iceland would have experience in knowing which were best for firewood, and would have chosen birch as the better burner when possible. Those sites where willow charcoal is more common, such as Sveigakot (Simpson *et al* 2003) may have had a more limited choice of firewood, due to deforestation and landscape degradation. Secondly, going back to the earlier remarks on the composition of Icelandic woodlands, it is clear that the majority of the wood available was birch. Palynological records show much higher levels of birch pollen than any other tree species throughout the history of Iceland (*c.f.* Hallsdóttir 1987; Erlendsson *et al* 2006; Lawson *et al* 2007), and any brief observation of modern Icelandic woodland demonstrates that this is still the case. Even discounting a strategy of firewood collection based upon choice, birch would therefore be very likely to make up the majority of charcoal found at a site. There has been discussion in the past as to whether driftwood, which is common on the Icelandic coasts, could have been used as fuel (*c.f.* Mooney 2009). This would show up clearly in the charcoal record as all the driftwood which arrives on the coasts of Iceland is of conifer species (Eggertsson 1993). There are no native conifers in Iceland, and therefore the two wood types could be easily distinguished by wood anatomical analysis. However, it seems unlikely that driftwood would be used as fuel when native wood was available, due to both its value as a resource for building material, and the relative effort involved in its collection, compared to the collection of firewood from local woodlands (see Figures 4 and 5).

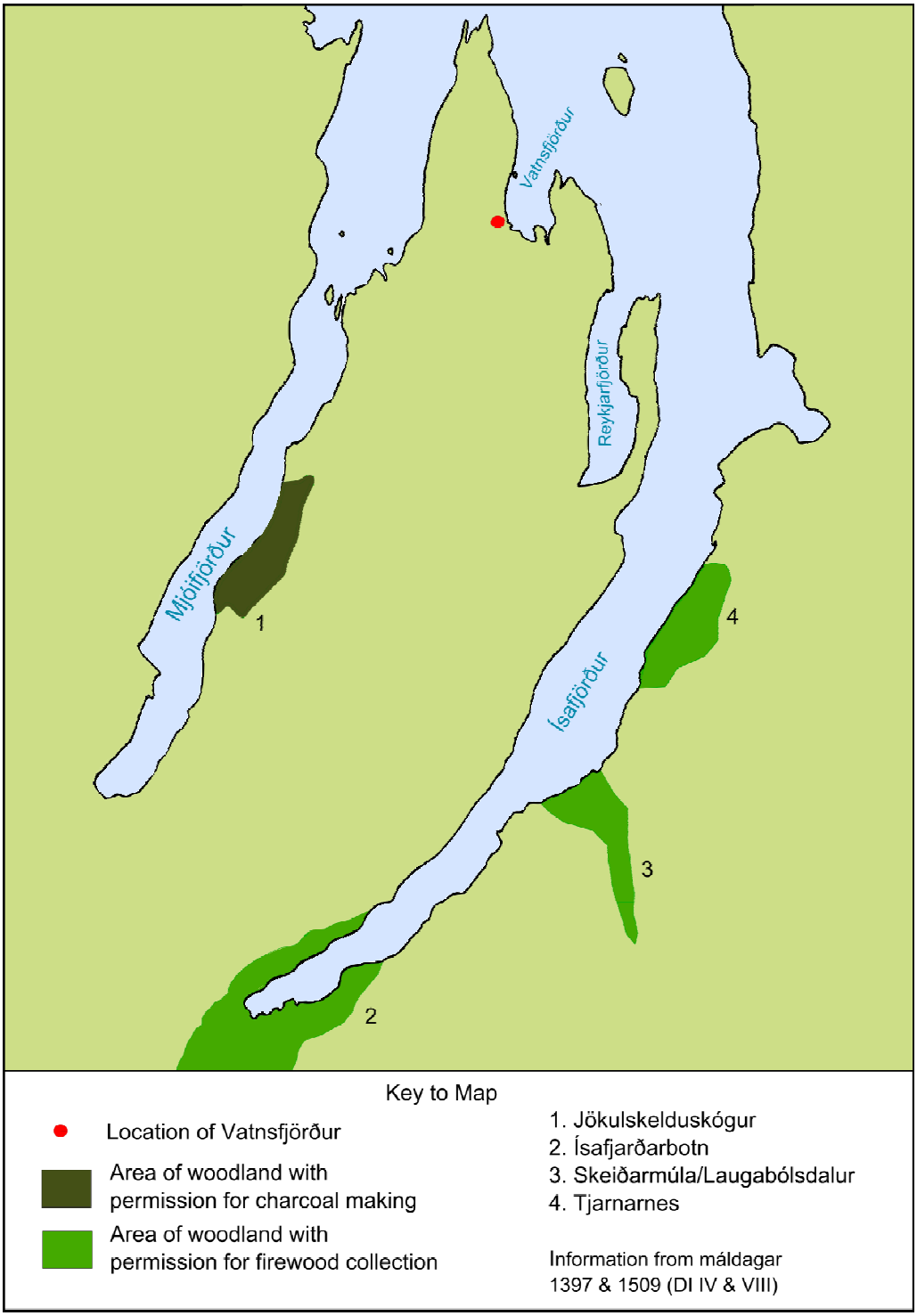


Having established that the firewood at Vatnsfjörður was being sourced from native woodlands, it is possibly to examine historical documents to determine where this wood would have been obtained. The 1509 *máldagi*/deed from Vatnsfjörður lists extensive rights to the collection of firewood and

ɔn rights. Information

driftwood. All of the driftwood collection sites listed are on the northern coast of the Hornstrandir peninsula, which contains some of the most productive driftwood beaches in Iceland. In total, 11 sites are listed where the inhabitants of Vatnsfjörður had at rights to at least a portion of the driftwood, ranging from all the driftwood at Teig under Hvesta, to one twelfth of the driftwood at Sigluvík (see Figure 4) (DI VIII). All of these locations would have been reached by lengthy boat trips, which would have been particularly treacherous during the winter months. It therefore seems very likely that while excursions to these locations would have been made in the summer to collect material for construction, artefact production and repairs to buildings and boats, too collect firewood from these locations would have been a rather risky and time-consuming expedition. Access to woodland for firewood collection was in fact much more local to the site, with collection sites focusing in around the fjords of Ísafjörður, Mjóifjörður and Reykjarfjörður (see Figure 5). It is also specifically stated that the farm had permission to carry out charcoal production in the woodland at Jökulskelda in Mjóifjörður (see Figure 5) (DI VIII). This is also mentioned in an earlier máldagi from 1397, along with the rights to firewood collection at Skeiðarmúli (DI IV). Although driftwood rights are not mentioned in this *máldagi*, going further back to the rekaskrá from Vatnsfjörður from 1327, it can clearly be seen that the same rights and permissions highlighted in the 1509 *máldagi* were already in place almost 200 years earlier (DI II). This suggests that there is a continuity of rights stretching back to at least the early Medieval Period, and these were probably established soon after *landnám*.

Although judging from the approximate dates given to levels in the sample column by Parkin *et al*'s 2009 dating of an adjacent sample column (Figure 1), it seems that at least half of the samples from the column probably pre-date any historical documents concerning wood collection rights, the continuity shown between records from 1327 and 1509 suggest that there was little long-term change in these permissions. It is therefore safe to say that the birch charcoal found in this sample column probably originates from woodlands in the fjords neighbouring Vatnsfjörður.


Vatnsfjörður
Reykjarfjörður
Mjóifjörður
Ísafjörður
1
2
3
4
Key to Map
Location of Vatnsfjörður
Area of woodland with permission for charcoal making
Area of woodland with permission for firewood collection
1. Jökulskelduskógur
2. Ísafjarðarbotn
3. Skeiðarmúla/Laugabólsdalur
4. Tjarnarnes
Information from máldagar 1397 & 1509 (DI IV & VIII)

the 1397 and

Changes in Charcoal and Seaweed Content

There was a tacit assumption made when this study began, that the amount of charcoal present in the samples was likely to decrease over time, with larger amounts present in the Viking and Early Medieval layers than in later contexts. There has been a long-running bias in Icelandic archaeology towards the idea that Birch woodland in Iceland was reduced to very low measures soon after landnám. This has been hinted at in historical sources (e.g. *Íslendingabók*, ÍF I) and backed up by palynological evidence from certain parts of the country (e.g. Hallsdóttir 1987), although numerous other studies both of historical records and of pollen cores from around the country suggest that this was not the case everywhere (e.g. Vésteinnsson & Simpson 2004; Church *et al* 2007; Lawson *et al* 2007). However, when studying the results of the charcoal quantification, both in the graphs Figures 2 and 3 and in Table 1, it is clear to see that the amount of charcoal present peaks in the middle of the column, between about 40-80 cm from the base of the column. In the absence of any clear trend, and with the knowledge that even in the early layers of this column that large amount of firewood and charcoal were being used for industrial and domestic purposes in the nearby Viking Age area of the site (Mooney 2009), it would be unwise to suggest any temporal correlation to changes in charcoal quantity found in these contexts.

The variation in charcoal quantities is much more likely to result from changing use of the area. Samples <515> to <525>, which contain by far the largest quantities of charcoal, seem likely to represent an intensification of midden activity in the area. These layers are capped by the Hekla 1693 tephra layer, and also by a layer of turf collapse [10407]. Small layers of this tephra are also present within [10407], indicating either that the building was built of turves containing the tephra, or that the tephra fall occurred during the collapse of the structure. The latter would appear to be the more convincing explanation, as the H1693 tephra is present immediately adjacent to this deposit, but not underlying or overlying it (Figure 1). In any case, this gives a clear *terminus ante quem* date of 1693 for the charcoal-rich midden deposits. If the ashfall did occur during the collapse phase of the unidentified structure, it is possible that these midden deposits were directly connected to this building. The 'burnt' deposits [10409] and [10411], which contained the greatest charcoal concentrations in the column, probably represent deposits from cleaning out hearths, while other contexts with less charcoal are most likely related to other domestic activities. Unfortunately no finds were recovered from these deposits which would give any indication of their source.

Interestingly, the quantity of charred seaweed contained in the samples does not show any correlation with the quantity of charcoal recovered (Figure 3). For example, sample <513>, from the turf collapse layer [10407], shows the third highest charcoal measurement from the column, but contains relatively little charred seaweed. On the other hand, samples <515> and <519>, from the midden deposits, contain large amounts of charred seaweed but relatively little charcoal in comparison. It has been suggested that seaweed was used as a fuel in Viking Age and Medieval Iceland (e.g. Vésteinnsson & Simpson 2004), however a brief experimental burning carried out at Vatnsfjörður during the 2009 field season by the author, Garðar Guðmundsson (FSÍ) and Nicolás Sepúlveda (University of Iceland) showed that dried *Ascophyllum nodosum* seaweed, which is most commonly found charred at Vatnsfjörður, actually served to damp a strong fire, and would not carry a flame on its own. The fact that relatively large quantities of seaweed were found outside of charcoal rich contexts lends weight to the idea that seaweed ash was used for an industrial purpose, for example as a flux in iron smelting or in making lye for dyeing wool (*c.f.* Mooney 2009; Birch, this volume). The hypothesis that seaweed was used in smelting has also recently been bolstered by the discovery of large pits full of charred

seaweed at the Viking Age and Medieval metalworking site of Alþingisreiturinn in Reykjavík (Vala Garðarsdóttir, pers.comm.). Nevertheless, further research into this topic is still required in order to better understand the use of seaweed at early Icelandic sites.

Seeds from the Sample Column

As is the case with many Icelandic sites, the plant macrofossils other than charcoal and seaweed recovered from the samples were somewhat scarce. Those plants that are represented are for the most part common and widespread, and thus can tell us little about the use of particular different types of environment by the inhabitants of the farm.

Table 3. *Plant species identified in samples, with English and Icelandic names and habitat information. After Kristinsson 1998.*

Species Name	**English**	**Icelandic**	**Habitat**
Bromus	Brome	Sandfax	Various
Carex	Sedge	Stör	Various, but many species prefer damp soils.
Chenopodium album	Fat-hen		Introduced, occurs in vegetable gardens and waste places
Empetrum nigrum	Crowberry	Krækilyng	Heathland, gravel hills, moss mats, lava fields, bogs and mires. Very common.
Eriphorum	Cottongrass	Fífa	Bogs, mires, lake banks, riversides and springs.
Festuca	Fescue	Vingull	Various
Hordeum sativum	Barley	Bygg	Cultivated cereal
Polygonum aviculare	Knotgrass	Blóðarfi	Homefields, waste places and farm sites. Common.
Rubus idaeus	Raspberry	Hindber	Cultivated plant.
Rumex acetosa	Common Sorrel	Túnsúra	Grassy plains, fertilised homefields, heathland and fertile slopes. Very common.
Rumex longifolius	Northern Dock	Njóli	Introduced, now common in waste places and abandoned homefields.
Stellaria media	Common Chickweed	Haugarfi	Fertilised and disturbed soil, gardens. Common.
Vaccinium	Bilberry	Bláberjalyng	Heathlands and slopes, and on hummocks in bogs. Common.

Table 3 shows the various plant species identified from seeds found in the samples analysed for this study. Four species were only found as uncharred seeds. Although it is possible for uncharred seeds to be preserved in some conditions on archaeological sites, it is much more likely that these are invasive to the samples. The *Rumex longifolius* and *Chenopodium album* seeds are both from plants which are modern introductions to Iceland. These plants both grow on and around the farm mound at Vatnsfjörður, and were seeding at the time of excavation, and as such are much more likely to originate from here than from archaeological events. *Vaccinium* (bilberry/bláberjalyng) plants grow on the slopes

above the farm, and the two specimens found here were probably carried in by a bird or another animal vector, such as an archaeologist. The *Rubus idaeus* (raspberry/hindber) seed is from a plant which does not grow wild in Iceland, so this seed has certainly been accidentally introduced to the context by human activity.

Amongst the charred seeds, only two food plants are represented. The first of these is *Empetrum nigrum* (crowberry/krækilyng). The heathland plant is common across Iceland, and grows on the slopes above the farm at Vatnsfjörður. The small, tart berries it produces mature in the late summer or early autumn. The presence of these seeds in samples from throughout the column represent the seasonal exploitation of this resource by the inhabitants of the site, and the seeds will have become charred by being spat or accidentally dropped into a hearth. The second food plant represented is *Hordeum sativum* (barley/bygg). Only three charred barley grains were found, two in context [10420] near the base of the column, and one in [10403], the context immediately below the topsoil. Due to the small numbers present it is impossible to tell whether these grains are from two-rowed or six-rowed barley, and the grains were in such poor condition that it is unclear whether the come from a naked or hulled variety of the cereal. There has been much debate regarding whether or not barley was cultivated in Iceland before the climatic deterioration associated with the Little Ice Age (see Guðmundsson 2010), however the low numbers of grains and lack of cereal chaff recovered from Vatnsfjörður both in this study and in previous investigations (Mooney 2008b) suggest that barley was not grown at the site, and that these instances represent imported grain.

The remainder of the charred seeds all represent plants which commonly grow in and around the homefield at Vatnsfjörður. The grasses, along with *Stellaria media* (common chickweed/haugarfi), *Rumex acetosa* (common sorrel/túnsúra), *Rumex longifolius* (northern dock/njóli) and *Polygonum aviculare* (knotgrass/blóðarfi), are all common in Icelandic homefields, and represent a local environment very similar to that of the site in modern times. The *Carex* (sedge/stör) and *Eriophorum* (cottongrass/fífa) seeds are from plants which are more common in wetland areas. Their presence in the house may represent the bedding of house floors with stems from these plants. It has also been suggested that the presence of Cyperaceae family plants such as these in domestic contexts in Iceland represents the burning of peat as fuel (Zutter 1992). While this may be the case, there is no pattern in the occurrence of these species which might suggest phases of peat burning: in fact these species are best represented in those contexts with higher charcoal levels (see Table 1). Therefore like the charcoal analysis above, the charred seeds do not show any significant change over time, either in local environment or in fuel use practices.

Conclusion

The results of this survey of 19 samples from a column through the western edge of the farm mound at Vatnsfjörður reveal a surprising continuity both in local environment and in fuel use at the site from the Viking Age through the Medieval Period. The presence of charcoal layers in the mid layers of the column agrees with Parkin *et al*'s assertion that wood was the dominant fuel source in the 13th century (2009). The lack of charcoal in some of the lower layers in the column seems to agree with the micromorphological evidence that peat was the main fuel during the early Medieval Period (Parkin *et al* 2009), however this is not backed up by other plant macrofossil evidence (*c.f.* Zutter 1992). The macrobotanical remains from the samples show that charred seaweed is also present in various amounts throughout the column. The presence of seaweed does not show a correlation with the presence of large amounts of wood charcoal, so it is proposed that

seaweed had an industrial use rather than being used as fuel, although further experimental work will be required to ascertain its purpose (*c.f.* Mooney 2008a, 2009). The wood charcoal fragments were all identified as birch, and as such are most likely to be native Icelandic wood. It is suggested that this wood is most likely to originate from woodlands in the neighbouring fjords of Mjóifjörður and Ísafjörður, as rights to wood collection in these areas are recorded in deeds for the farmstead from 1397 and 1509 (DI IV & VIII).

Acknowledgements

The author would like to thank Garðar Guðmundsson at FSÍ for advice and help both with sample processing and experimental work, Nicolás Sepúlveda for help with experimental wood and seaweed burning, Dr Andrew Cameron at the University of Aberdeen for information on burning characteristics of different woods, Vala Garðarsdóttir for information about seaweed finds at Alþingisreiturinn, and Oddgeir Isaksen at FSÍ for help with flotation in Reykjavík.

References

CHURCH, M.J., DUGMORE, A.J., MAIRS, K.A., MILLARD, A.R., COOK, G.T., SVEINBJARNARDÓTTIR, G., ASCOUGH, P.A., & ROUCOUX, K.H. 2007. 'Charcoal Production during the Norse and Early Medieval Periods in Eyjafjallahreppur, Southern Iceland'. *Radiocarbon* 49(2), pp. 659-672.

DENNIS, A., FOOTE, P. & PERKINS, R. 1980. *Laws of Early Iceland – Grágás I*. Winnipeg: University of Manitoba.

DI: *DIPLOMATARIUM ISLANDICUM OR ÍSLENZKT FORNBRÉFASAFN* I-XVI, Copenhagen and Reykjavík 1853-1976.

EDVARDSSON, R. & MCGOVERN, T.H. 2005. 'Archaeological Excavations at Vatnsfjörður 2003-04'. *Archaeologica Islandica* 4, pp. 16-30.

EDVARDSSON, R. 2003. *Fornleifarannsókn í Vatnsfirði við Ísafjarðardjúp sumarið 2003*. Reykjavík: Fornleifastofnun Íslands. Report number FS211-03091.

EDVARDSSON, R. 2004. *Fornleifarannsókn í Vatnsfirði við Ísafjarðardjúp 2004*. Reykjavík: Fornleifastofnun Íslands. Report number FS249-03093.

EGGERTSSON, Ó. 1993. 'Origin of the driftwood on the coasts of Iceland: a dendrochronological study'. *Jökull* 43, pp. 15-32.

ERLENDSSON, E., EDWARDS, K.J., LAWSON, I., & VÉSTEINSSON, O. 2006. 'Can there be a Correspondence Between Icelandic Palynological and Settlement Evidence?'. In *Dynamics of Northern Societies: Proceedings of the SILA/NABO Conference on Arctic and North Atlantic Archaeology, Copenhagen, May 10th-14th 2004* (Eds. J. Arneborg and B. Grønnow). Copenhagen: National Museum. Pp. 347-353.

FRIÐRIKSSON, A. & TULINIUS, T.H. (Eds) 2003. *Vatnsfjörður við Ísafjarðardjúp – Rannsóknir sumarið 2003*. Reykjavík: Fornleifastofnun Íslands. Report number FS213-03092.

FRIÐRIKSSON, A., TULINIUS, T.H. & GUÐMUNDSSON, G. (Eds) 2005. *Vatnsfjörður 2005: Fornleifarannsóknir/Fieldwork at Vatnsfjörður, NW-Iceland 2005*. Reykjavík: Fornleifastonfnun Íslands. Report number FS301-03095.

GRØNLIE, S. 2006. *Íslendingabók – Kristni Saga : The Book of the Icelanders – The Story of the Conversion*. Viking Society for Northern Research Text Series, Volume XVIII. London: UCL.

GUÐMUNDSSON, G. 2009. 'The Plant Remains'. In Lucas, G. (Ed.) *Hofstaðir: Excavations of a Viking Age Feasting Hall in North-Eastern Iceland*. Reykjavík: Fornleifastofnun Íslands. Pp. 322-334.

HALLSDÓTTIR, M. 1987. *Pollen Analytical Studies of Human Influence on Vegetation in Relation to the Landnám Tephra Layer in Southwest Iceland.* Lund: Lundqua Thesis 18.

HATHER, J.G. 2000. The Identification of the Northern European Woods – A guide for archaeologists and conservators. London: Archetype.

ÍF: *ÍSLENZK FORNRIT.* 1933. Volume 1-. Reykjavík.

JÁM: *JARÐABÓK ÁRNA MAGNÚSSONAR OG PÁLS VÍDALÍN* 1-11, Copenhagen 1913-43; 12-13, Reykjavík 1990.

KRISTINSSON, H. 1998. *A Guide to the Flowering Plants & Ferns of Iceland*. 2nd Edition. Reykjavík: Mál og Menning.

LÁRUSSON, B. 1967. *The Old Icelandic Land Registers*. Lund: Institute of Economic History, Lund University.

LAWSON, I. T., GATHORNE-HARDY, F. J., CHURCH, M. J., NEWTON, A. J., EDWARDS, K. J., DUGMORE, A. J., & EINARSSON, A. 2007. Environmental impacts of the Norse settlement: paleoenvironmental data from Mývatnssveit, northern Iceland. *Boreas*, Vol 36, pp. 1-19. Oslo: Taylor & Francis.

MILEK, K. (Ed) 2007. *Vatnsfjörður 2006: Framvinduskýrslur/Interim Report*. Reykjavík: Fornleifastofnun Íslands. Report number FS356-03096.

MILEK, K. (Ed) 2008. *Vatnsfjörður 2007: Framvinduskýrslur/Interim Report*. Reykjavík: Fornleifastofnun Íslands. Report number FS383-03097.

MILEK, K. (Ed) 2009. *Vatnsfjörður 2008: Framvinduskýrslur/Interim Report*. Reykjavík: Fornleifastofnun Íslands. Report number FS426-03098.

MILEK, K. (Ed) 2010. *Vatnsfjörður 2009: Framvinduskýrslur/Interim Report*. Reykjavík: Fornleifastofnun Íslands. Report number FS449-03099.

MOONEY, D.E. 2008a. *Fuel Resources in Viking Age Iceland: An Archaeobotanical Perspective*. Unpublished MPhil Thesis. University of Cambridge.

MOONEY, D.E. 2008b. 'Assessment of Botanical Remains from Structures 1 and 3 in the Viking Age Area'. In Milek, K. (Ed). *Vatnsfjörður 2007: Framvinduskýrslur/Interim Report*. Reykjavík: Fornleifastofnun Íslands. Report number FS383-03097, pp. 111-116.

MOONEY, D.E. 2009. 'Fuel Resources at Vatnsfjörður: An Archaeobotanical Perspective'. In Milek, K. (Ed.) Vatnsfjörður 2008: Framvinduskyrslur/Interim Report. Reykjavík: Fornleifastofnun Íslands. Report Number FS426-03098, pp. 117-131.

PÁLSSON, H. & EDWARDS, P. 1972. *The Book of Settlements: Landnámabók*. Winnipeg: University of Manitoba Press.

PARKIN, S., MORISON, S. & SIMPSON, I.A. 2009. 'Preliminary Geoarchaeological Report on Fuel Resource Utilisation at Vatnsfjörður Based on Thin Section Micromorphology of Farm Mound Sediments'. In Milek, K. (Ed) *Vatnsfjörður 2008: Framvinduskýrslur/Interim Report*. Reykjavík: Fornleifastofnun Íslands. Report number FS426-03098, pp. 132-141.

SCHWEINGRUBER, F.H. 1982. *Mikroskopische Holzanatomie*. 2nd Edition. Stuttgart: Paul Haupt.

SVEINBJARNARDÓTTIR, G., ERLENDSSON, E., VICKERS, K., MCGOVERN, T.H., MILEK, K.B., EDWARDS, K.J., SIMPSON, I.A. & COOK, G. 2007. 'The palaeoecology of a high status Icelandic farm'. *Environmental Archaeology* 12(2), pp. 187-206.

ÞORSTEINSSON, H. 1923. 'Rannsókn og leiðréttingar á nokkrum bæjanöfnum á íslandi'. *Árbók Hins Íslenzka Fornleifafélags* 37, pp. 1-96.

TULINIUS, T.H. 2005. 'The Westfjords'. *Archaeologia Islandica* 4, pp. 9-15.

VÉSTEINSSON, O. & SIMPSON, I.A. 2004. 'Fuel utilisation in pre-industrial Iceland. A micro-morphological and historical analysis'. In *Current Issues in Nordic Archaeology. Proceedings of the 21st Conference of Nordic Archaeologists, 6-9 September 2001, Akureyri, Iceland* (Ed. G. Guðmundsson). Society of Icelandic Archaeologists, Reykjavik. Pp.181-187.

ZUTTER, C.M. 1992. 'Icelandic plant and land-use patterns: archaeobotanical analysis of the Svalbarð midden (6706-60), northeastern Iceland'. In *Norse and Later Settlement and Subsistence in the North Atlantic* (Eds. C.D. Morris and D.J. Rackman). University of Glasgow, Department of Archaeology. Pp. 139-48.

SOIL MICROMORPHOLOGY ASSESSMENT OF FLOOR DEPOSITS IN THREE VIKING AGE OUTBUILDINGS

Kyle Munro and Karen Milek
University of Aberdeen

Introduction

Undisturbed block samples for the micromorphological analysis of soils and sediments in thin section have been collected from numerous floor deposits, midden layers, and homefield soils at Vatnsfjörður in order to help determine their composition, origins, mode and agent of formation, and post-depositional alteration. At the Viking Age part of the site, seven samples from three outbuildings, Structures 3, 4 and 5, were analysed as a dissertation project by the first author of this report, and the results of this study are presented here (Figure 1). Micromorphological analysis of soil thin sections is particularly beneficial for the study of floor sediments because it permits the identification and quantification of the structure, texture, porosity, mineralogy and organic content of very thin archaeological sediments that cannot always be excavated or sampled separately in the field. In addition, it allows the quantification of inclusions such as bones, shells, artifacts, coprolites, phytoliths, diatoms, ash, pollen, charcoal and plant remains, and permits these to be seen in their original position, making it clear to the analyst the degree to which they have been disturbed by post-depositional processes such as bioturbation. Features that are the product of pedological or sedimentary processes observable in thin section can also provide information on ancient environmental conditions.

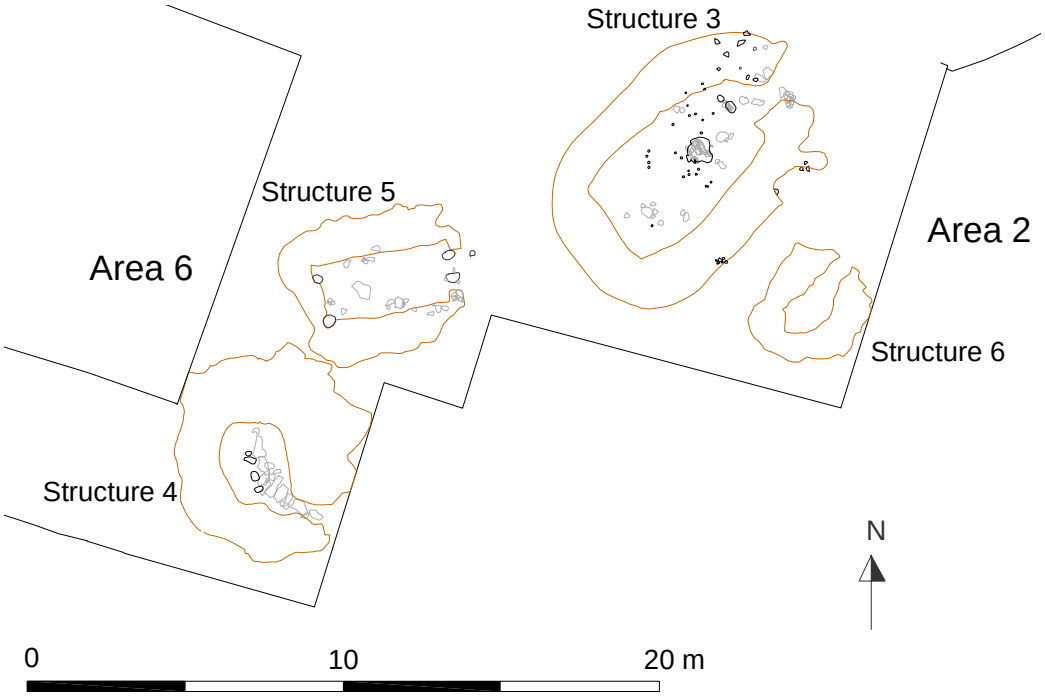


Figure 1. *Plan of Areas 2 and 6, on the Viking Age part of the site, showing the structures discussed in this report (brown lines are turf walls, grey features are flat stones, and black features are post holes).*

Summary of the Buildings Studied

Structure 3

Structure 3 (Figure 2) was a turf building, located 10 m SSE of the main dwelling house, Structure 1, and was interpreted as a smithy. It was of a rectangular shape, with internal dimensions of 6.5 x 3.2 m, and a northeast to southeast orientation (Milek 2005: 53). The only artefacts recovered from inside the structure were iron slag, nails and an iron punch (Milek 2005: 45). Surrounding the turf collapse of Structure 3 was a continuous black lens that has been interpreted as a scorch mark, strongly indicating that the building was most likely destroyed by a fire (Milek 2007: 36).

Structure 3 had a complex series of floor deposits and features that show the use of space inside this building changed over time. The earliest features in the structure were three shallow pits that were cut into the underlying podsol soil, one of which was interpreted as a hearth due to its ash content, central position, stone lining, and the presence of fire reddening and slag, which had fused the underlying pebbles together under intense heat. A second pit was circular in shape and lined with charred timbers, thus possibly being the remains of a wooden barrel that was charred *in situ* (Milek 2007: 37).

The internal deposits consisted of a dark, charcoal-rich occupation layer, underlain by a thin layer of medium-brown silt, and overlain by a thick layer of turf collapse. The dark occupation layer was rich in charred seaweed and charcoal (including charred birch branches), and was described as soft and undulating. It was up to 4 mm in thickness, and within it an iron nail, iron punch, and a large quantity of iron slag was found. The dark occupation layer completely sealed the round 'barrel pit' and the majority of the central hearth indicating either that these features went out of use during the last phase of Structure 3 (Milek 2007: 38), or that that some of the charred material included timbers and organic debris from the roof of the burnt-down structure.

The turf collapse capping this flood sediment was mottled yellow, orange and brown in colour and varied in thickness between 5-10cm. It was confined to only the interior of the structure and so was most likely the remains of the collapsed roof (Milek 2005: 56). The wall foundations consisted of gravel and pebbles, and the lower portion of the walls were built with alternating layers of turf and gravel. This building method is extremely uncommon in Viking Age Iceland, with Structures 1 and 4 being the only other known buildings of this design (Milek 2005: 45). The high quantity of slag and iron recovered in and around Structure 3 indicates a high intensity of smelting and metalworking in the building (Milek 2007: 70; Birch, this report).

Structure 4

Structure 4 was a small building of dimensions 2.8 x 2.2 m, interpreted during excavation as a storage buildigng The structure contained a stone pavement (Milek 2007: 40) on the eastern side, which had been modified throughout the lifespan of the structure. The building's floor appears to have been kept especially dry throughout its life. When it was constructed, the floor was dug down to the underlying gravel, possibly with the intent of improving drainage. A pavement was then laid on this gravel, and as sediment accumulated on this pavement over time, new paving stones were added, supporting this idea of a well-drained and well-maintained floor. It was revealed during excavation that a hole had been cut into the northeast wall. Its function is unknown but it may be related to drainage or air circulation, supporting this idea of a "dry" structure for storage. Notably, the west side of this structure was completely lacking in features and floor deposits,

suggesting that this side of the building contained furnishings (perhaps supported by the post holes in the centre of the floor) or some other type of floor covering, which have since decomposed.

Two samples were taken from layer [7027], the floor deposit from the first occupational phase of the structure (shown below in Figure 3), ranging in thickness from 2-50 mm. This sediment had accumulated around and on top of the first layer of paving stones and so may contain evidence for activities occurring in the structure during it initial phase of use. During excavation the layer was described as friable, "consisting of mottled silt with some charcoal and calcined bone mixed with natural pebbles" (Śmiarowski & Harrison 2008: 60).

Structure 5

Structure 5 is a small rectangular building of dimension 4.1 x1.9 m located to the northeast of structure 4, and has been interpreted as being a storehouse or workshop (Milek 2007: 40). The building was orientated east–west, with a wooden gable on its eastern end and two post holes indicating the probably location of the door posts in the middle of this eastern gable. Just outside this door, another posthole was found, possibly being evidence that this structure had a porch (Milek 2007: 40). The only significant artefact from Structure 5 was a small grinding wheel. This was found on the south edge of the structure and although it may be an indicator of the buildings function (i.e. cooking house/food preparation area), it may simply have been re-used as a post pad in this structure (Milek 2007: 41). There were no depositional or diagnostic features recovered from this building, making its interpretation especially problematic. Due to the thin floor layer [6021] in this structure (1-2 mm thick in most areas, with an area around a central stone slab being 1.5cm thick), and the difficulty of sampling from on top of loose gravel, only one micromorphology sample was obtained (Figure 4).

Methodology

Undisturbed blocks of soil and archaeological sediment were sampled using aluminium Kubiena tins (8x6x4cm) which were inserted into the exposed occupation deposits in the outbuildings according to the procedures of Courty et al. (1989). All samples were taken with the Kubiena tin oriented horizontally in order to capture as much floor sediment as possible, with the sample tin sometimes inserted into exposed sections, and sometimes pressed down into exposed floor sediments. The seven samples discussed in this report were taken between the 2005 and 2007 field seasons, and were from:

- Structure 3 (4 samples – VSF05-34, -35, -38, -39)
- Structure 4 (2 samples – VSF07-38, -39)
- Structure 5 (1 samples – VSF06-129)

Initially each sample was analysed at a scale of 1:1 using a light table, at which time the general sample layers were distinguished. Microscopic studies were then conducted with the use of a Leitz Laborlux 11 petrographic polarizing microscope at magnifications of x40, x100, x160, and x400. During microscopic analysis, the samples were viewed in plane-polarized light (PPL), cross-polarized light (XPL) and oblique-incident light (OIL). These differing light conditions permitted the observation of all relevant sample contents. This description of soil characteristics included a study of soil microstructure, void space,

organic content, inclusions (both natural and anthropogenic), mineral content, and pedofeatures. All analysis and descriptive terminology conforms to the international guidelines in Bullock et al. (1985) and Stoops (2003), and also greatly benefited from reference to FitzPatrick (1984) and Courty et al. (1989). Descriptions are semi-quantative, and were made with reference to visual estimation charts (see Appendix below). Only partial descriptions have been completed at this stage, and full descriptions will be provided in separate report or publication.

Results

Structure 3

An evaluation trench that had been excavated across Structure 3 in 2003 had truncated the floor deposits in this building, and in 2005 this exposed section was drawn and sampled for micromorphological analysis (Figure 2). Each sample from this building includes three layers: the underlying (natural) podzolised soil, an occupation deposit [332], and the overlying turf collapse above. Although it was clear from the amount of slag in and around the building that it had been used as a smithy, it was hoped that more detailed micromorphological analysis would reveal additional information about the types of fuels used, the temperature of buring, and any other activities that had taken place in the building.

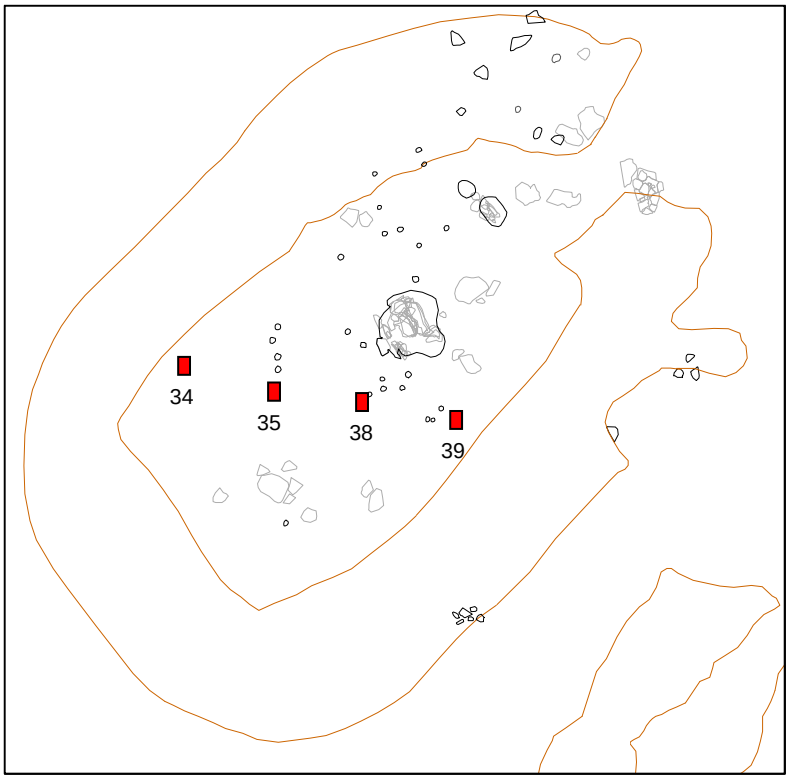


Figure 2a. *Structure 3 after excavation, showing the locations of the micromorphology samples examined in this report (red).*

Figure 2b. *Structure 3 in 2006 facing NE, with floor [332] exposed, showing the section cut by the 2003 evaluation trench, along which the micromorphology samples were taken in 2005, when the floor was still overlain by turf collapse.*

Sample 34 (Figures 5.1-5.2)

This sample was taken from the edge of the floor section near the west turf wall, and was composed of threee layers. The underlying soil layer was notably organic, containing both grass phytoliths and amorphous organic matter. This was evidence that this had formerly been the A horizon (topsoil) before the building was constructed and so showed that the underlying soil was not prepared in any way prior to building construction. There is clearer evidence of this in Sample 38, and so this building method will be discussed in further detail below. Also present in this soil layer were small groups of fungal spores, notably concentrated in areas of decomposed grass. Another interesting feature identified here were small groups of wood phytoliths (Figure 5.15), which are the remains of decomposed wood – either construction materials or fuel. This layer also contained a high number of pollen spores, which were frequently in clusters (Figure 5.16) but these require futher work to identify, since palynologists are unaccustomed to examining pollen in thin section and those consulted were not certain about the identy of the pollen present in Structure 3.

The floor layer, context [332], was dark in colour due to its high charcoal content (averaging at 44%; see Figure 5.1). The majority of this charcoal was present in the form of tiny fragments, which could not be identified to species. There was also a small presence of organic matter in this layer; however, it was in an amorphous state (no cell structure preserved) making it impossible to identify its origin.

The upper layer in Sample 34 was composed of mixed turf, with various disturbed lenses resulting from post depositional bioturbation. Worthy of note were the presence of amorphous yellow aggregates associated with small bone fragments, which are typical of carnivore/omnivore dung (Figure 5.17). These, along with the irregularly dispersed small bone fragments also found in this layer were likely to have been present in the turf prior to it being cut and used for roofing, and indicate that the turf was taken in the region of the

homefield, but cannot further our understand of the building.

Sample 35 (*Figures 5.3 and 5.4)*
This sample was taken from an area closer to the centre of the structure, and contained a thicker occupation layer since the floor deposit was thicker in the centre of the room than it was at the sides.

Like the other samples, this thin section included the underlying podzol. However, notably this particular sample included three horizons from this soil layer, including the the A horizon, the light coloured (elluviated) E horizon, and below this the reddish B horizon, where the iron leached from the horizon above had accumulated. These natural soil horizons contained a small number of bone and charcoal inclusions that had entered the layers due to bioturbation, which was also indicated by the presence of earthworm channels.

The dark occupation deposit captured in this sample had evidence of trampling in the form of horizontal planar voids that had been created by vertical compression. Like the other samples from Structure 3, this floor layer contained a high percentage of charcoal, both small fragments and larger pieces. All of the identifiable charred wood appeared to be *Betula* (birch) (Figure 5.18), the most common wood species and fuel source in the region (see Mooney, this report). The other identifiable charred organic material in this layer was seaweed, indicating that dried seaweed was burnt, either as a fuel, or to generate a smokey, oxygen-poor environment, or to generate the salts that could act as a flux in the iron smelting processes (see Birch, this report). Also present in this floor layer was a significant amount of amorphous organic matter, indicating that there had been plants and on the floor that had since decomposed. Fungal sclerotia is present in this layer due to the high organic content. The other anthropogenic inclusions located in this layer were a number of burned and unburned bone fragments (Figure 5.19).

The turf collapse layer, as in the other samples from Structure 3, was very heterogeneous with a number of irregular lenses in it. The lowermost part of this layer contained a distinct organic lens, packed with grass phytoliths, which is the former H horizon (the layer consisting of plant matter) of a piece of turf, which had been turned upside down (Figure 5.20) In the upper part of this turf layer was a clear black lens that was not present in any of the other samples (Layer 5 in Figure 5.4). This is best interpreted as the sooty remains of the underside of the roof turf, which had been blackened by the fire, supporting the view of reversed stratigraphy in the turf roof collapse. This turf layer has a lenticular structure, with silt cappings on top of the soil aggregates, which was created by post-depositional episodes of free-thaw (Figure 5.21). Freeze-thaw evidence is only present in the roof collapse layers of Structure 3, and not in any of the floor deposits or underlying soil. It is therefore likely that this freezing occurred after the abandonment of the building, when the upper, roof collapse layers were prone to wetting and freezing processes.

Sample 38 (*Figures 5.5 and 5.6)*
The underlying soil layer in this sample contained a high concentration of organic material, which was located at the top of the layer and had a dominant horizontal orientation (Figure 5.22). This thin organic layer, rich in grass phytoliths, is the remains of grass from the H horizon of the underlying podzol, and as such is definite evidence that the farmers chose not to deturf the area prior to constructing the building. The grass had died *in situ* and had been trampled/crushed into a horizontal orientation. The grass would have died shortly after the construction of the building roof (due to lack of sun and water) and would then have been trampled early in the building's use, and finally buried under the

occupation deposit.

The floor layer in this sample was the thickest of the four taken in this structure, this being expected as the sample was extracted from a central area of the floor in an area recorded as having a thicker floor deposit. This layer contained various charcoal inclusions, many of which had an internal structure visible allowing for the identification of charred wood (*Betula*), plant tissues (unidentifiable) and seaweed.

The layer of turf collapse in this sample, like all of the turf layers in this building, had been affected by post-depositional freeze-thaw processes, resulting in it having a lenticular structure. It was very mixed and had a notably large bioturbated lens protruding into the left side.

Sample 39 (*Figures 5.7 and 5.8)*

In this sample the underlying podzol still has its H and A horizons intact, indicated by a thin lens of decomposed amorphous organic matter upper part of this layer. This was rich in grass phytoliths, and was situated in a horizontal orientation, again being evidence of the 'crushed' and buried H horizon, and indicating that the building had not been de-turfed. The boundary between the underlying podzol layer occupation deposit was rather blurred and unclear in this sample. This is due to the abundant bioturbation that has blurred the boundaries. This earthworm activity has also transported charcoal into the natural soil (making up just over 7% of the total layer; see Figure 5.7).

The dark occupation deposit in this sample is less well preserved and includes earthworm channels and large vughs. However, this layer contained two inclusions of particular importance to the interpretation of the structure, these being iron hammerscale (Figure 5.23) and iron slag (Figure 5.24) – direct evidence of the metal working activities that occurred in this structure.

Structure 4

The primary floors of structure 4 were excavated and sampled in 2007. As mentioned above, the floors were limited to the eastern half of the structure, where they had accumulated over flat paving stones, with different floor units identified between different phases of paving. Samples VSF07-38 and -39 were taken from the clearest and thickest floor layer, unit [7027], which had covered the entire eastern half of the building (Figure 3a). The samples were pressed down over the exposed floor, and bottomed on a flat paving stone (Figure 3b).

Sample 38 (Figures 5.9 and 5.10)

Unfortunately the high level of bioturbation in this sample makes it impossible to determine the original microstructure of the sediment (Figure 5.25). However the sample was split into two layers on the basis that the lower half was slightly less bioturbated and contained a higher content of amorphous organic matter.

This lower layer contained c.10% amorphous organic matter, most of which had a dominant horizontal orientation. This horizontal orientation is possibly the result of organic material accumulating and being trampled into the floor. The presence of fungal sclerotia are associated with this high content of decomposed organic matter. This organic matter could either be related to material stored within the building (if it was a storage building), or to flooring materials.

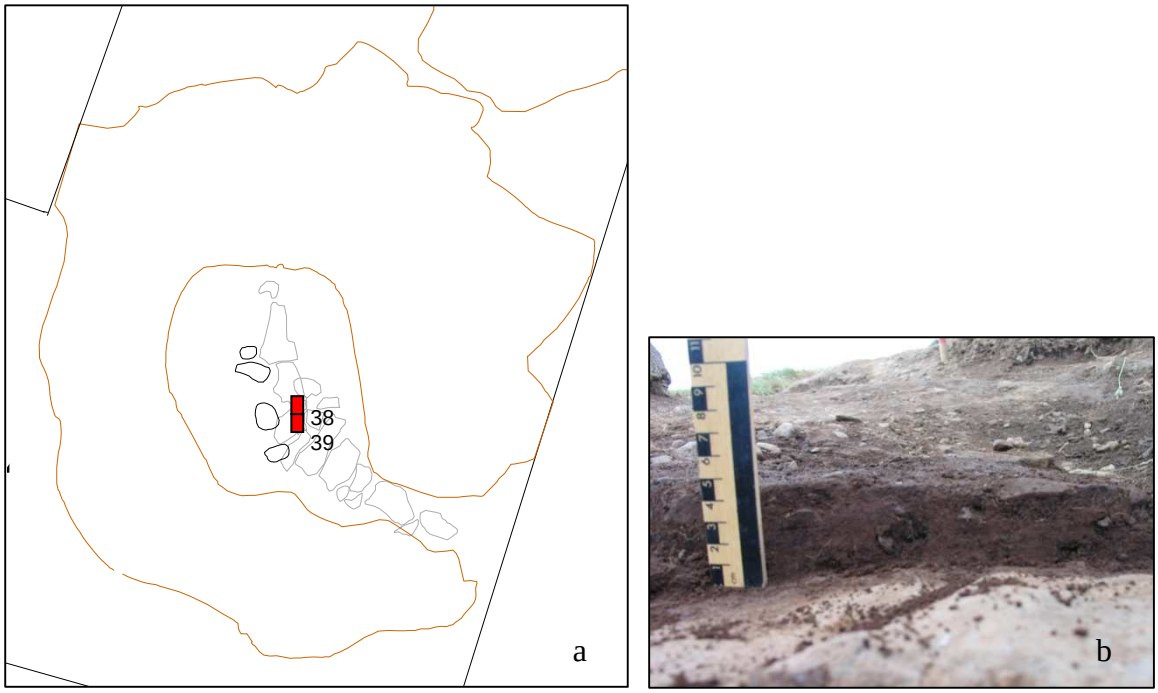


Figure 3. *(a) Structure 4, showing the locations of samples 38 and 39 (post holes outlined in black, paving stones in grey); (b) Floor [7027] , facing south, prior to taking sample 38, showing some subtle horizontal lensing, as well as disturbance from soil fauna.*

The upper layer is almost entirely composed of earthworm excrements (over 75%). This layer also contained a significant proportion of iron nodules and iron pseudomorphs (Figure 5.26), possibly as a result of iron leaching from turf collapse layers into the buried floor layer below, and so are post-depositional features.

It is worth noting that a particularly large bone fragment was located in this sample, which was rounded, with smooth edges, indicating that it had been transported – perhaps trampled into the building from elsewhere. There is unfortunately little to indicate the original use of Structure 4, except for the organic enrichment of the lowermost part of the floor.

Sample 39 (Figures 5.11 and 5.12)

This sample, like VSF07-38, had been heavily affected by post-depositional bioturbation and the original microstructure was lost. This occurred to such an extent that no layer boundaries were evident and the whole sample was described as one layer. Interestingly, in this sample there was an inclusion of an aggregate of partially humified peat, containing abundant phytoliths and diatoms, and stratified, partially decomposed plant matter (Fig. 5.28). This might indicate that peat had been stored inside the structure, although it is notable no peat ash was identified on the site, and it does not seem to have been frequently used as a source of fuel. There were a number of other anthropogenic inclusions in this sample, including a few pieces of bone, and a high number of charcoal fragments. As this structure did not contain any combustion features or any other clear indicators of function, and it probably served as a storage building, the charcoal may be the result of the spreading of ash (subsequently dissolved and leached, as it was in all other charcoal-rich deposits) as a way of maintaining the floor and keeping it dry (Milek 2006: 71-8). If indeed this was the case, it would support the idea proposed during the excavation of this structure, that an effort had been made to keep

the structure dry by digging down the floor level to the underlying, well-drained beach gravels, and by creating an air hole in the eastern wall to promote a draught.

Structure 5

The floor deposit in Structure 5, unit [6021], was excavated and sampled in 2006. This very thin floor, little more than a black stain over a thin podzol, was very difficult to extract an undistrubed block sample from due the undlerlying gravel. A Kubiena tin was pressed into the top of the exposed floor surface, and was sand was packed into the top of the tin to prevent disturbance during transport.

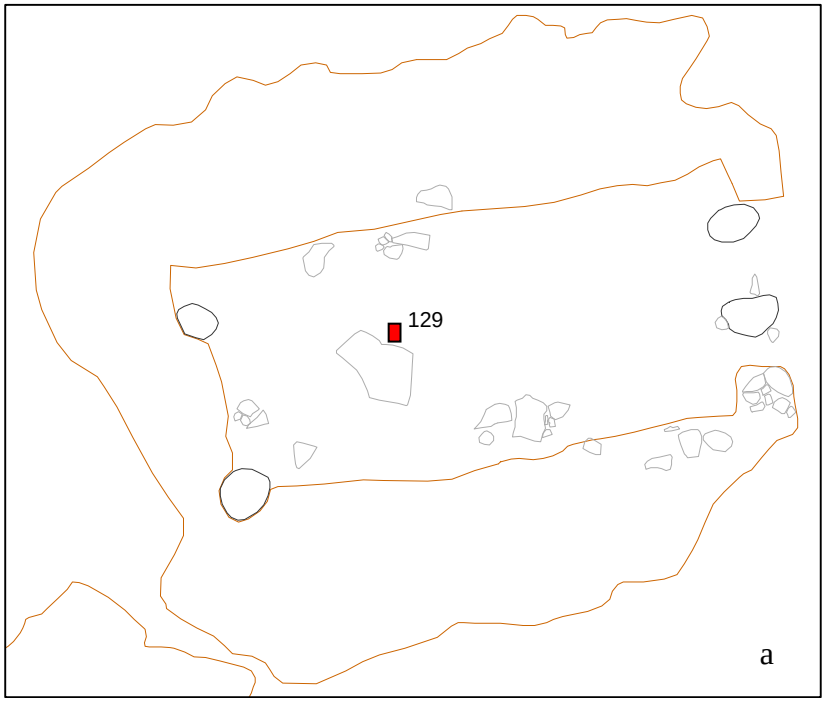


Figure 4. *(a) Structure 5 at the end of the excavation, showing the location of sample VSF06-129, next to the central flat stone, where the floor layer was thickest; (b) Structure 5 facing E, showing floor [6021] prior to sampling. The grinding stone is visible on the right (south) side of the building.*

Sample 129 (*Figures 5.13 and 5.14)*
When it was first excavated, the floor layer was thought to have rested "directly on the grey, eluviated (leached) horizon of the podzol that underlies the site" (Milek 2007: 41), but in thin section it was clear that there had also been a thin H or O horizon (the humic, grassy horizon on the soil surface) below the floor layer (Figure 5.29), which had been removed with the floor. It is clear that like Structure 3, Structure 5 had not been deturfed prior to the construction and use of the building. Instead the building was constructed directly on top of the underlying grass, which would have died soon after the building was roofed.

Present in the floor layer was an abundance of charred remains, including charred seaweed (Figure 5.30). Like Structure 4, this structure had no hearth feature, so these charred remains must have been deposited on the floor when seaweed ash was intentinally spread there, or when it was accidentally trodden in as people were walking there from the smithy, which also contained seaweed ash.

Conclusions

The preliminary micromorphology analysis presented here provided important evidence on floor composition, building construction techniques, fuel selection, and the activities that occured within the structures. The samples extracted from Structure 3 support the interpretation of the building as a smithy, particularly the fragments of metallurgical slag and hammerscale (present in sample VSF05-39). Several different materials had been burnt in the hearth of the smithy, including birch wood, seaweed, and bones, and the next stage of this study is to further explore the possible reasons why seaweed and bones may have been utilised in the fuels used for smelting and working iron. This study has also shown that Structure 3 (smithy) and Structure 5 (presumed workroom) were constructed directly on top of the original, grassy ground surface, unlike the storage buildings (Structures 4 and 6), which were dug down to the underlying gravels, presumably to enhance drainage and to help keep the floors as dry as possible.

The functions of Structures 4 and 5 remain difficult to pinpoint, even using the detailed sedimentary analysis presented here. The small fragment of partially decomposed peat, and the generally organic nature of the floor deposit in Structure 4, may indicate that the building was used to store peat and other fuels, though birch wood was certainly the most commonly used fuel (Mooney, this report). However, the bone and minute charcoal fragments on the floor of Structure 4 had been trampled in, rather than originating within the building. It still seems most likely that the building was used to store some kind of foodstuff, and that some kind of furnishing, such as a platform or shelves were present on the western side of the building, where the floors did not accumulate.

The floor deposit in structure 5 was dominated by minute fragments of charred wood and seaweed. Since there was no combustion feature within the building itself, these must have been accidentally trampled in (e.g. from the smithy), or intentionally (but lighty) sprinkled and trampled onto the floor in order to maintain a smooth, dry surface. The activities that occured in Structure 5 did not result in the accumulation of waste materials, did not require the floor to be deturfed, and may have involved the grinding stone that was found on the floor, so it remains most likely that this building was used as a workshop. The eastern gable end, where there was no turf wall, could either have had a timber wall or an open end, which would have maximized the light in the building.

Bibliography

Bullock, P., Fedoroff, N., Jongerious, A., Stoops, G., Tursina, T. & Babel, U. (1985) *Handbook For Thin Section Description*. Wolverhampton: Waine Research Publications.

Courty, M.-A., Goldberg, P. & Macphail, R. (1989) *Soils and Micromorphology in Archaeology*. Cambridge: Cambridge University Press.

FitzPatrick, E, A, 1984, *Micromorphology Of Soils*, London: Chapman And Hall.

Milek, K. (2005) Vatnsfjörður 2005: Area 2 Report. In (2005) Friðriksson, A,. Tulinius, T, H. And Guðmundsson, G. (eds), *Vatnsfjörður 2005: Fieldwork At Vatnsfjörður, NW-Iceland 2005*, Reykjavík: Forneifastofnun Íslands.

Milek, K. (2006) *Houses and Households in Early Icelandic Society: Geoarchaeology and the Interpretation of Social Space.* PhD Dissertation, University of Cambridge.

Milek, K. (2007) Vatnsfjörður 2006: Area 2 Report. In Karen Milek (ed.), *Vatnsfjörður 2006: Interim Report*. Reykjavík: Fornleifastofnun Íslands.

Śmiarowski, K. & Harrison, R. Excavations In Area 6: Structure 4. (2008) In Milek, K (ed.) *Vatnsfjordur 2007: Interim Report*, Reykjavik: Forneifastofnun Íslands.

Stoops, G. (2003) *Guidelines For Analysis And Description Of Soil And Regolith Thin Sections*. Madison, WI: Soil Science Society of America.

Appendix: Micromorphology descriptive tables and images

Figure 5.1 *Description of Sample VSF05-34, Structure 3*

Layer	Groundmass					Organic And Anthropogenic Inclusions		
	Sorting	**Microstructure**	**Porosity**	**C/F-Related Distribution**		**Amorphous Organic Matter**	**Charcoal**	**Bone**
1	Moderately – poorly sorted (40%)	Vughy with localised channel	●●●●●●	Porphyric (Open)		●●●	●●●	X
2	Poorly – moderately sorted (35%)	Spongy-vughy	●●●●●●●	Porphyric (Single-spaced)		●●●	●●●●●●●	X
3	Moderately – poorly sorted (60%)	Vughy with localised crumb	●●●●●	Porphyric (Single-spaced)		●●	●●●	●

X - 0%, ● - Trace, ●● - 2 %, ●●● - 5%, ●●●● - 10%, ●●●●● - 20%, ●●●●●- 30%, ●●●●●●● - 40%, ●●●●●●●● - 50%, ●●●●●●●●● - 60%, ●●●●●●●●●● - 70%, ●●●●●●●●●●● - 80 % (Approx. % of visible area)

Figure 5.2 *Sample VSF05-34, Structure 3*

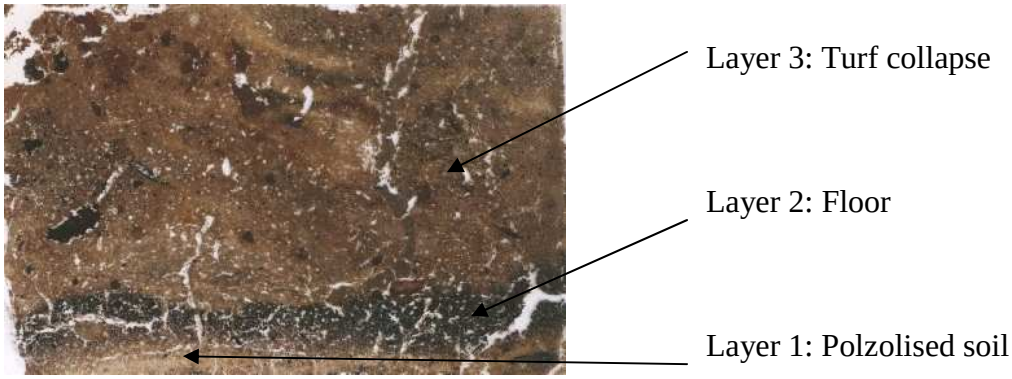


Figure 5.3 *Description of Sample VSF05-35, Structure 3*

Layer	Groundmass					Organic And Anthropogenic Inclusions		
	Sorting	**Microstructure**	**Porosity**	**C/F-Related Distribution**		**Amorphous Organic Matter**	**Charcoal**	**Bone**
1	Well sorted (90%)	Platy with localised vughy	••••••	Porphyric (Double-spaced)		•••	•	•
2	Moderately sorted (60%)	Platy with localised vughy	•••••	Porphyric (Open)		•••	•••	••
3	Unsorted (25%)	Complex granular-channel with localised planar voids	•••••••	Porphyric (Single-spaced)		••••	••••••	•••
4	Moderately – well sorted (77%)	Lenticular	••••••	Porphyric (single-spaced)		••••	•••	•
5	Moderately – poorly sorted (50%)	Granular with localised channel	••••••	Porphyric (Open)		••••	••••	•

X - 0%, • - Trace, •• - 2 %, ••• - 5%, •••• - 10%, ••••• - 20%, ••••••- 30%, ••••••• - 40%, •••••••• - 50%, ••••••••• - 60%, •••••••••• - 70%, ••••••••••• - 80 % (Approx. % of visible area)

Figure 5.4 *Sample VSF05-35, Structure 3*

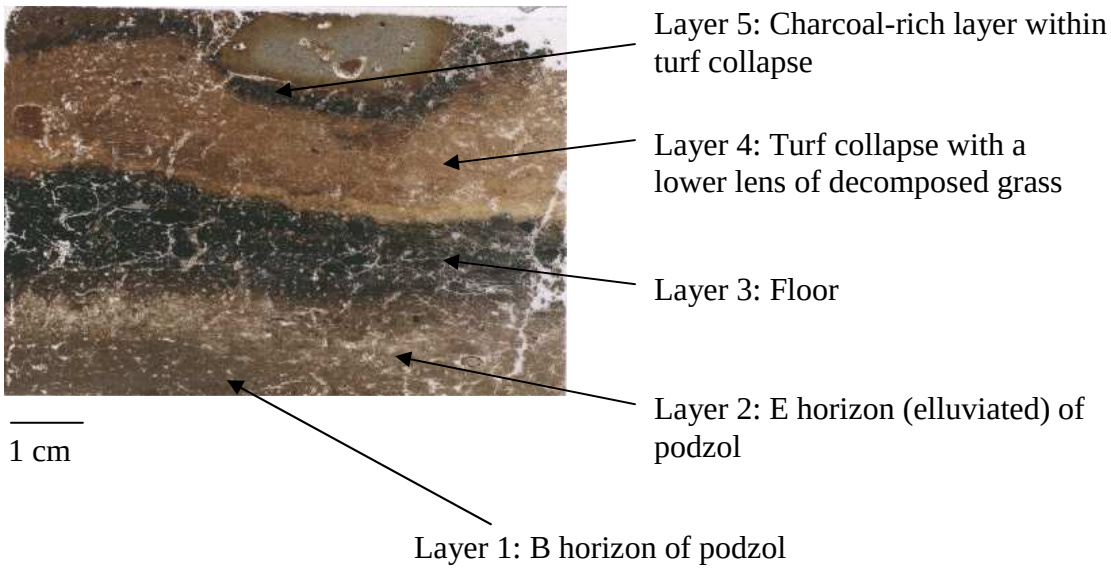


Figure 5.5 *Description of Sample VSF05-38, Structure 3*

Layer	Groundmass					Organic And Anthropogenic Inclusions		
	Sorting	Microstructure	Porosity	C/F-Related Distribution		Amorphous Organic Matter	Charcoal	Bone
1	Moderately – well sorted (80%)	Complex channel-vughy	••••••	Porphyric (Double-spaced)		••••	•••	••
2	Moderately – poorly sorted (38%)	Complex granular, vughy, channel	•••••••	Porphyric (Double-spaced)		•	•••••••••	••
3	Moderately – poorly sorted (40%)	Lenticular with localised vughy	••••••	Porphyric (Double-spaced)		•••	••••	••

X - 0%, • - Trace, •• - 2 %, ••• - 5%, •••• - 10%, ••••• - 20%, ••••••- 30%, ••••••• - 40%, •••••••• - 50%, ••••••••• - 60%, •••••••••• - 70%, ••••••••••• - 80 % (Approx. % of visible area)

Figure 5.6 *Sample VSF05-38, Structure 3*

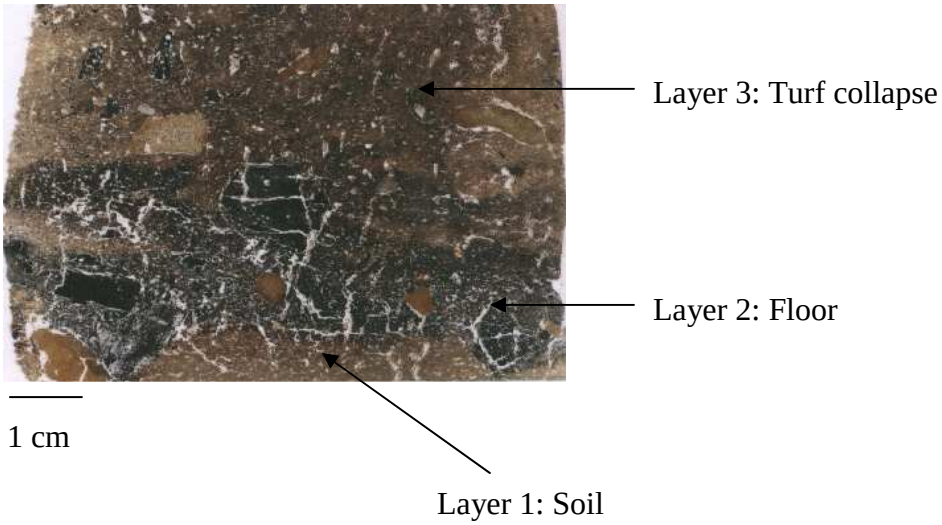


Figure 5.7 *Description of Sample VSF05-39, Structure 3*

Layer	Groundmass					Organic And Anthropogenic Inclusions		
	Sorting	Microstructure	Porosity	C/F-Related Distribution		Amorphous Organic Matter	Charcoal	Bone
1	Moderately – poorly sorted (65%)	Poorly developed vughy with localised channel	●●●●●	Porphyric (Single-spaced)		●●●●	●●●●	●
2	Poorly sorted – unsorted (25%)	Spongy-vughy with localised channel	●●●●●	Porphyric (Open)		●●●	●●●●●●●●●	●●

X - 0%, ● - Trace, ●● - 2 %, ●●● - 5%, ●●●● - 10%, ●●●●● - 20%, ●●●●●- 30%, ●●●●●●● - 40%, ●●●●●●●● - 50%, ●●●●●●●●● - 60%, ●●●●●●●●●● - 70%, ●●●●●●●●●●● - 80 % (Approx. % of visible area)

Figure 5.8 *Sample VSF05-39, Structure 3*

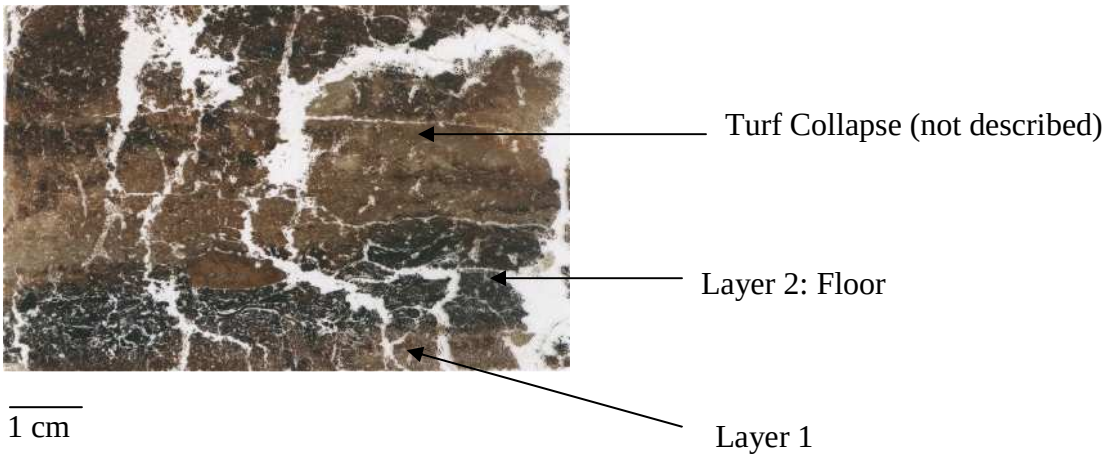


Figure 5.9 *Description of Sample VSF07-38, Structure 4*

Layer	Groundmass					Organic And Anthropogenic Inclusions		
	Sorting	**Microstructure**	**Porosity**	**C/F-Related Distribution**		**Amorphous Organic Matter**	**Charcoal**	**Bone**
1	Moderately – poorly sorted (45%)	Granular with localised spongy-vughy	●●●●●●●	Porphyric (Double-spaced)		●●●●	●●●	●
2	Poorly sorted (28%)	Granular with channels	●●●●●●	Porphyric (Double-spaced)		●●●	●●●	●

X - 0%, ● - Trace, ●● - 2 %, ●●● - 5%, ●●●● - 10%, ●●●●● - 20%, ●●●●●- 30%, ●●●●●●● - 40%, ●●●●●●●● - 50%, ●●●●●●●●● - 60%, ●●●●●●●●●● - 70%, ●●●●●●●●●●● - 80 % (Approx. % of visible area)

Figure 5.10 *Sample VSF07-38, Structure 4*

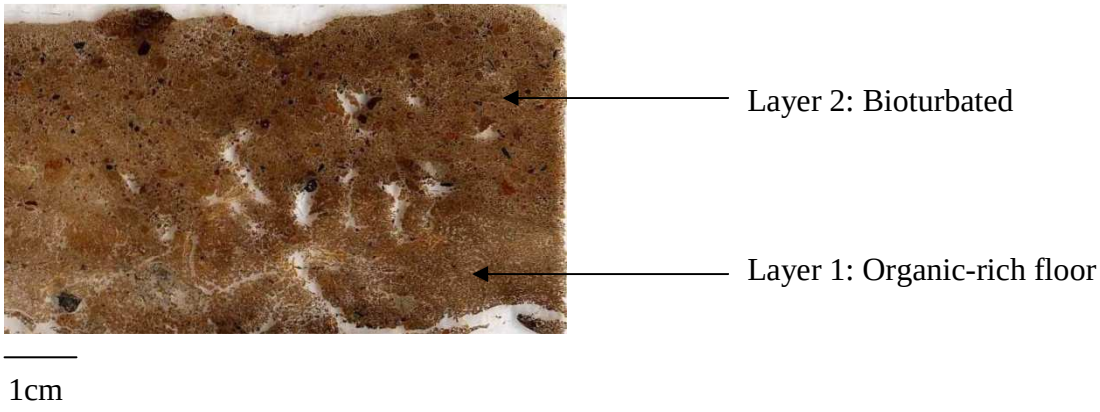


Figure 5.11 *Description of Sample VSF06-39, Structure 4*

Layer	Groundmass					Organic And Anthropogenic Inclusions		
	Sorting	Microstructure	Porosity	C/F-Related Distribution		Amorphous Organic Matter	Charcoal	Bone
1	Poorly sorted (20%)	Crumb with localised vughy	••••••	Porphyric (Open)		•••	•••	••

X - 0%, • - Trace, •• - 2 %, ••• - 5%, •••• - 10%, ••••• - 20%, ••••••- 30%, ••••••• - 40%, •••••••• - 50%, ••••••••• - 60%, •••••••••• - 70%, ••••••••••• - 80 % (Approx. % of visible area)

Figure 5.12 *Sample VSF06-39, Structure 4*

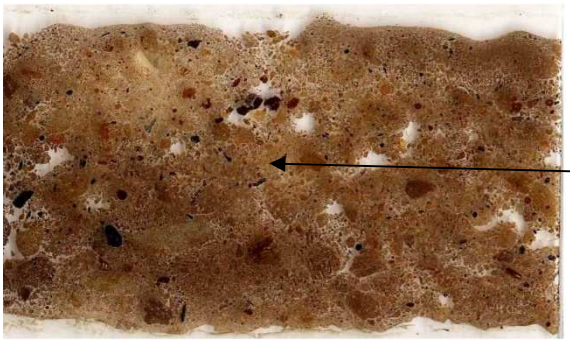
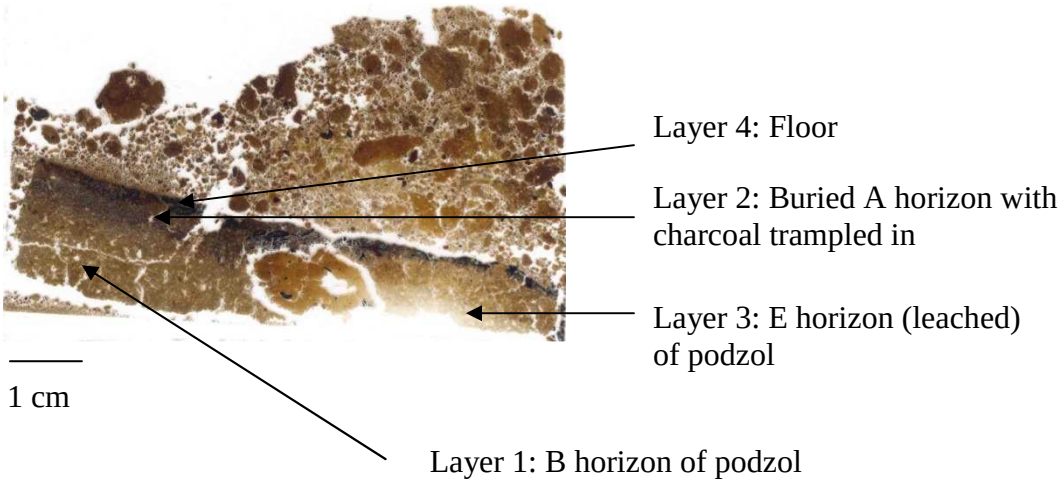


Figure 5.13 *Description of Sample VSF07-129, Structure 5*

Layer	Groundmass					Organic And Anthropogenic Inclusions		
	Sorting	**Microstructure**	**Porosity**	**C/F-Related Distribution**		**Amorphous Organic Matter**	**Charcoal**	**Bone**
1	Moderately sorted (65%)	Complex vughy-channel	●●●●●●	Porphyric (Open)		●●	●	●●
2	Moderately sorted (70%)	Poorly developed vughy	●●●●●	Porphyric (Double-spaced)		●●●●	●●●	●
3	Moderately sorted (75%)	Poorly developed vughy with localised channel	●●●●●●	Porphyric (Single-spaced)		●●●	●●●	X
4	Poorly sorted (30%)	Granular	●●●●●●	Porphyric (Open)		●●●●	●●●●●●●	●

● - Trace, ●● - 2 %, ●●● - 5%, ●●●● - 10%, ●●●●● - 20%, ●●●●●●- 30%, ●●●●●●● - 40%, ●●●●●●●● - 50%, ●●●●●●●●● - 60%, ●●●●●●●●●● - 70%, ●●●●●●●●●●● - 80 % (Approximate % of visible area)

Figure 5.14 *Sample VSF07-129, Structure 5*



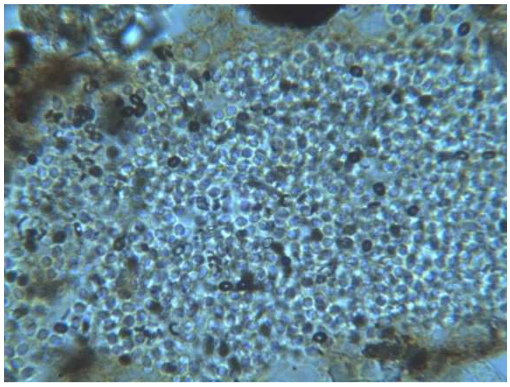


Figure 5.16 *Wood phytolith* 50 µm

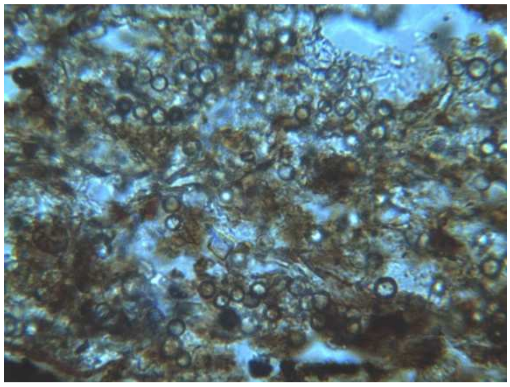


Figure 5.16 *Pollen grains* 50 µm

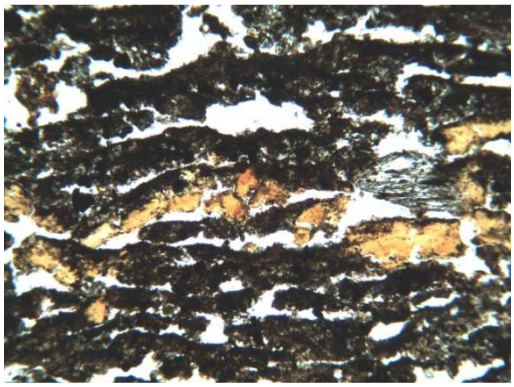


Figure 5.17 *Carnivore/ omnivore dung (yellow)* 500 µm

Figure 5.18 *Betula charcoal* 500 µm

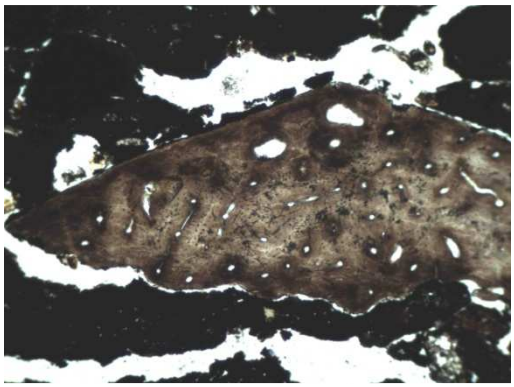


Figure 5.19 *Burnt bone fragment* 500 µm

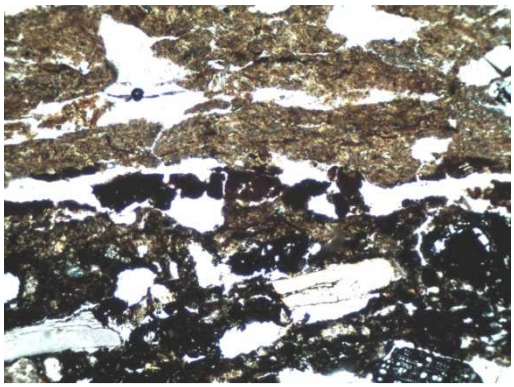


Figure 5.20 *Sharp boundary between the dark floor and the grass layer of the turf collapse in Structure 3* 500 µm

(All images were taken in PPL unless otherwise specified)

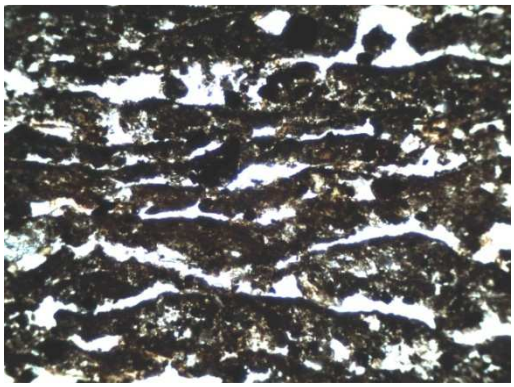


Figure 5.21 *Lenticular structure created by freeze-thaw* 500 µm

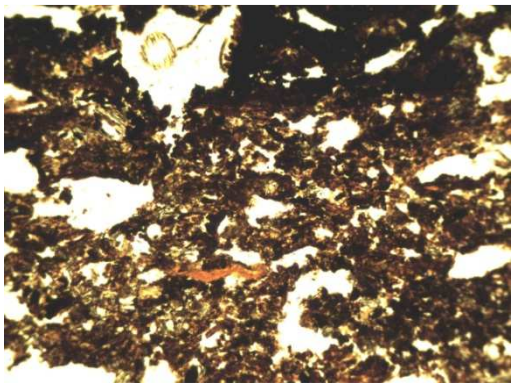


Figure 5.22 *Organic layer* 500 µm

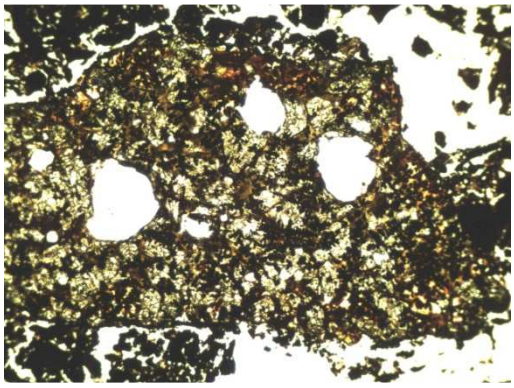


Figure 5.23 *Iron hammerscale* 500 µm

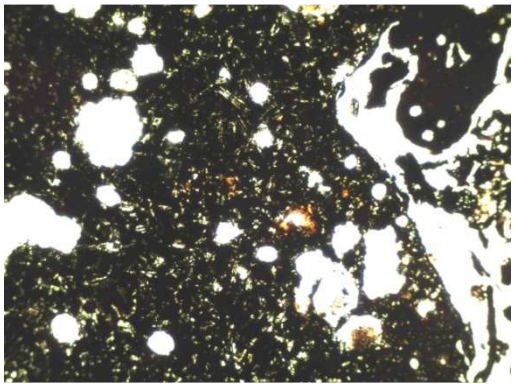


Figure 5.24 *Iron slag* 500 µm

Figure 5.25 *Excremental fabric created by earthworms* 500 µm

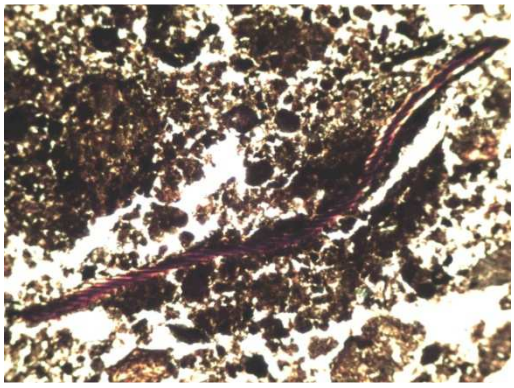


Figure 5.26 *Iron pseudomorph* 500 µm

(All images were taken in PPL unless otherwise specified)

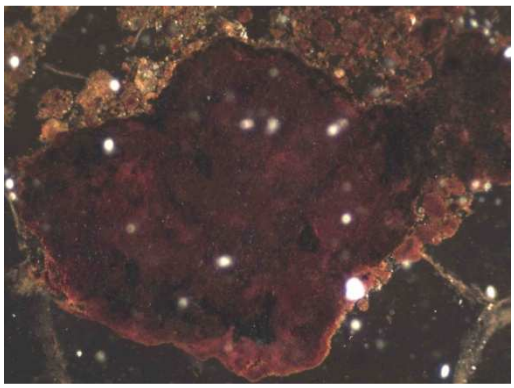


Figure 5.27 *Iron Nodule (OIL)* 100 µm

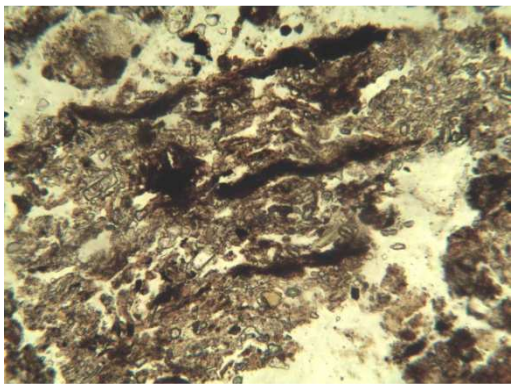


Figure 5.28 *Aggregate of peat* 500 µm

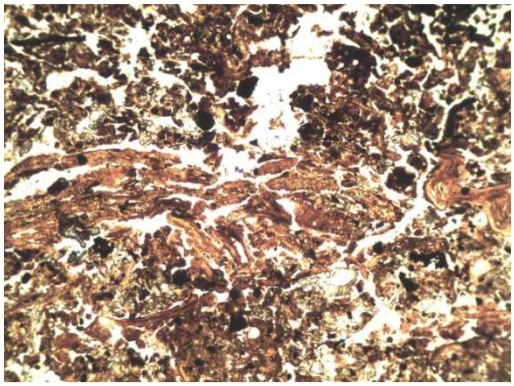


Figure 5.29 *Buried H horizon* 500 µm

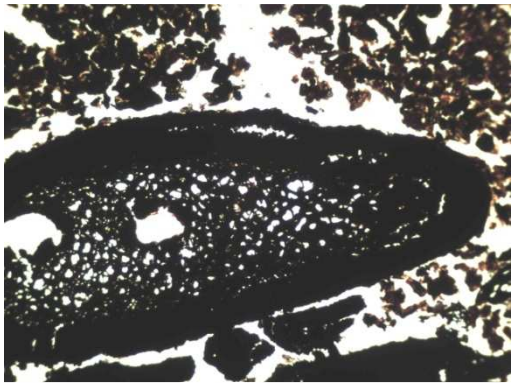


Figure 5.30 *Charred seaweed* 500 µm

(All images were taken in PPL unless otherwise specified)

ANALYSIS OF A MINERALISED WOOD FRAGMENT FROM A POST-HOLE IN STRUCTURE 10

Dawn Elise Mooney
University of Aberdeen and Fornleifastofnun Íslands

Introduction

During the excavation of Structure 10 in the Viking Age area of Vatnsfjörður during the 2010 field season, a small fragment of oxidised wood was recovered from one of the post-holes of the structure. This fragment was transported to the University of Aberdeen in Scotland, where it was analysed by the author with a view to determining what species of tree the wood fragment originated from, and this where the wood came from originally.

Oxidised wood is wood which has been preserved by mineral replacement. This occurs when wood which is in close contact with metal undergoes a chemical process by which the cell walls are either replaced by or coated with metal, most frequently iron or copper. This preserves the structure of the wood where normally it would decay relatively rapidly.

Oxidised wood can vary from being very firm, almost like metal, to being rather fragile and friable, and often the texture varies within the fragment. Mineralised wood must be fractured by hand to expose fresh sections, in order to identify the species of the wood. This can be achieved either by pressure-fracturing the charcoal using a scalpel or single-sided razor blade, or by breaking the fragment using one's fingernails. A medium must then be used to support the wood during examination. The fragment analysed in this study was mounted on a slide using modelling clay, and the sections were examined at 50x – 200x magnification, using an epi-illuminating microscope. This analysis was conducted at the University of Aberdeen in May 2010.

Results

Considering that this wood fragment was found in a post-hole, it was thought that it might be a remnant of structural wood, in which case it would most likely have been driftwood. This would be identifiable through anatomical analysis, as all driftwood which arrives in Iceland is conifer wood, and there are no native conifer trees which grow on the island (Eggertsson 1993, Kristinsson 1998). However, analysis of the wood fragment revealed that it was a hardwood. Examination of transverse sections revealed radial files of two to five vessels, uniseriate rays and tangentially-flattened cells around the growth ring boundaries which are characteristic of *Betula* (Schweingruber 1991, Hather 2000). However, due to the very fragile nature of the sample it was not possible to obtain radial or tangential sections of the wood. Without examining these sections it is not possible to give a conclusive ID, as birch is indistinguishable from other species such as alder except for a few features visible in these sections. Nonetheless, birch is by far the most common species of tree found in Iceland (Kristinsson 1998), and therefore this fragment seems most likely to be birch.

The vast majority of structural timbers found in Iceland so far which have been identified to species level have been conifer species, and as such are either driftwood or imported wood. The climate of Iceland, with its short growing seasons and low average temperatures, means that native trees rarely grow to large sizes, and the growth habit of

Betula pubescens (the native downy birch) is in general low and tortuous (Kristinsson 1998). These trees would very rarely produce trunks or branches which would be of use in construction. This raises the question of whether this fragment of oxidized wood does originate from a structural timber, or from a broken part of a household object or a piece of firewood which became mixed in with the floor material filling the post-hole. The latter explanation seems more likely considering the results of analysis of structural timbers elsewhere in Iceland (e.g. Útskálar, Alþingisreiturinn, Hrísbrú).

References

EGGERTSSON, Ó. 1993. 'Origin of the driftwood on the coasts of Iceland: a dendrochronological study'. *Jökull* 43, pp. 15-32.

HATHER, J.G. 2000. The Identification of the Northern European Woods – A guide for archaeologists and conservators. London: Archetype.

KRISTINSSON, H. 1998. *A Guide to the Flowering Plants & Ferns of Iceland*. 2nd Edition. Reykjavík: Mál og Menning.

SCHWEINGRUBER, F.H. 1991. *Anatomy of European woods. An atlas for the identification of European trees, shrubs and dwarf shrubs [Anatomie europaeischer Hoelzer. Ein Atlas zur Bestimmung europaeischer Baum-, Strauch- und Zwergstrauchhoelzer]*. Stuttgart: Paul Haupt.

ARCHAEOENTOMOLOGY SAMPLING AT VATNSFJÖRÐUR 2010

Véronique Forbes
University of Aberdeen

Introduction

Archaeoentomological analyses have been undertaken on material from Vatnsfjörður since 2006. The first year of the investigation consisted of an evaluation of the potential of the approach to contribute to the interpretation of Viking Age buildings and structures (Forbes 2007). The conditions necessary for a good preservation of insect remains (anoxic conditions mostly occurring in waterlogged or high-water content deposit) did not occur in the Viking Age part of the site. Thus, from 2007 archaeoentomological investigations mainly focused on the Farm Mound area, where there was a better potential for preservation. A detailed account of the results from the analysis of sediment samples collected during the summers of 2007 and 2008 can be found in previous reports (Forbes 2008; 2009) and the main findings have been the subject of an article recently published (Forbes *et al.* 2010). So far, the analysis of insect remains allowed the confirmation of the use of some rooms of the 19th century turf dwelling house and identified the possible functions of two other rooms as being a hay store and a cellar used for the storage/processing of eiderdown. The analysis also allowed the recovery of a single grain pest (the rice weevil, *Sitophilus oryzae*), suggesting that the inhabitants of the site were importing grain in the late 19th and early 20th century.

The 2010 Sampling Programme

The summer of 2010 saw the fourth season of archaeoentomological sampling on the farm mound at Vatnsfjörður. As the analysis of these samples still awaits, this short report only presents the sampling strategy which has been adopted and provide a list of the samples with a brief description of the archaeological contexts from which they come from (table 1).

***Table 1**. List of sediment samples collected for archaeoentomological analysis and description of their archaeological context.*

SAMPLE	GROUP	CONTEXT	DETAILS
S-547	10515 (fill in area at NW corner)	10533	Possible floor layer rich in wood ash
S-554	10662 (room by N limit)	10593	Sediment around loose stones on top of floor layer
S-555	10662 (room by N limit)	10603	Floor layer with stones inclusions
S-558	10590 (corridor)	10607	Midden deposit
S-562	10662 (room by N limit)	10613	Floor layer with turf inclusions
S-565	10590 (corridor)	10619	Floor layer with turf inclusions
S-567	10662 (room by N limit)	10627	Floor layer associated with a platform of stones
S-570	10662 (room by N limit)	10639	Floor layer with seashells, fish bones and wood inclusions
S-571	10662 (room by N limit)	10630	Black and compact floor layer

An opportunistic sampling strategy was adopted for the collection of sediment samples for archaeoentomological analyses. Samples were collected from contexts considered to have a good interpretative potential. As the aim of the analysis is to reconstruct past activity and ecological conditions inside the excavated building, most contexts sampled were floor deposits. Each sample is of a volume of approximately 5 litres and was obtained by the bulking of sediment collected in clumps from various locations in the same deposit. Figure 1 present the location of each sample in relationship to the group (room) from which it has been taken.

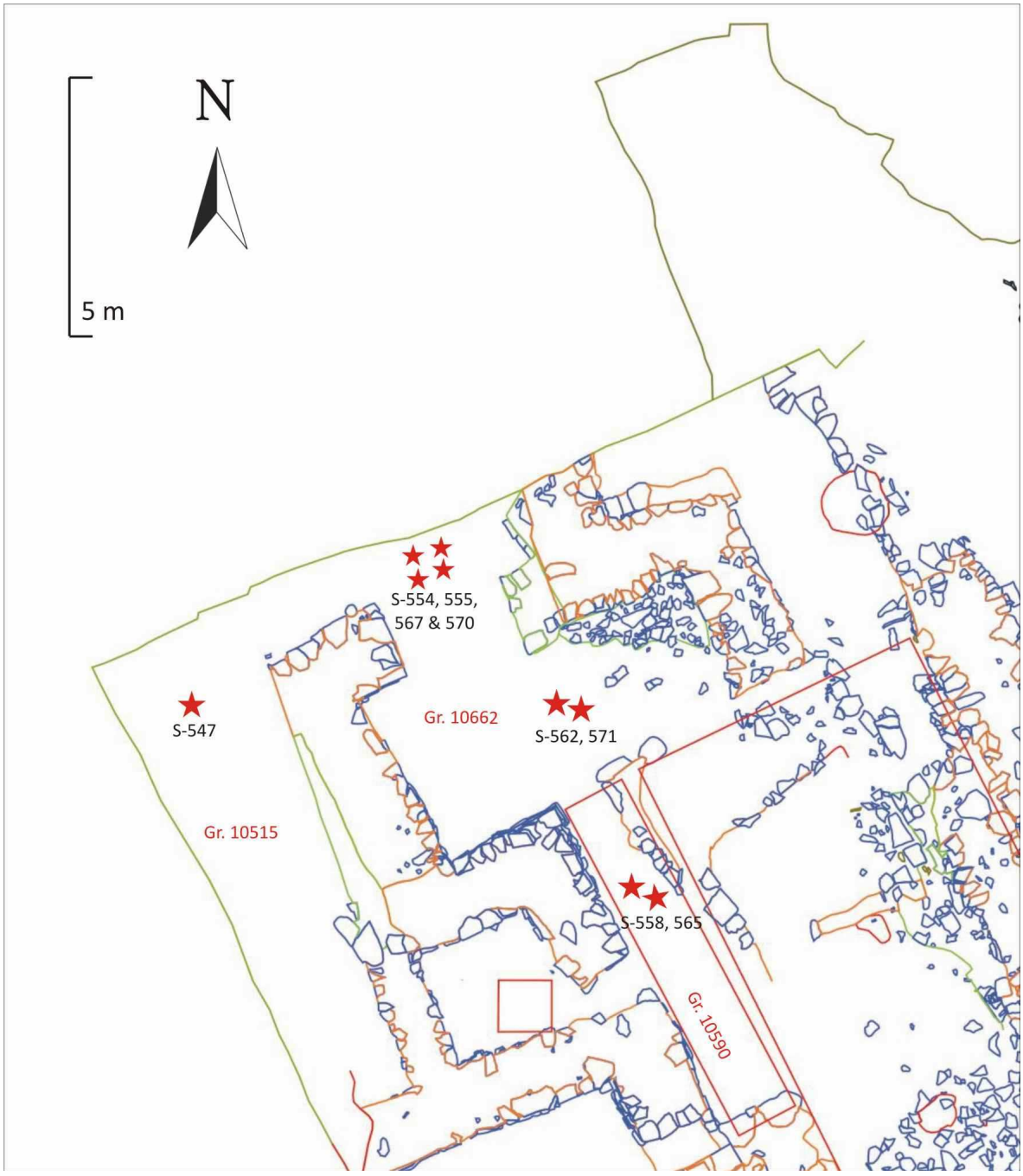


Figure 1. *Plan of the NW part of the excavation area on the farm mound showing the location of sediment samples collected for archaeoentomological analysis in 2010.*

All sediment samples collected for the retrieval of insect remains in 2010 are now stored in refrigerators in the laboratory of the Department of Archaeology at the University of Aberdeen (UK). Their analysis will be done during the following year and the results will hopefully add further insights into the past daily life of Vatnsfjörður's occupants during the late Early Modern Period.

References

Forbes, V. (2009) 'Assessement of insect remains from the farm mound area'. In Milek K.B. (ed.), *Vatnsfjörður 2008 Framvinduskýrslur/Interim Report.* Reykjavík: Fornleifastofnun Íslands. Pp. 105-116.

Forbes, V. (2008) 'Assessement of insect remains from Vatnsfjörður'. In Milek K.B. (ed.), *Vatnsfjörður 2007 Framvinduskýrslur/Interim Report.* Reykjavík: Fornleifastofnun Íslands. Pp. 117-145.

Forbes, V. (2007) 'Preliminary report on insect remains from Vatnsfjörður 2005-2006'. In Milek K.B. (ed.), *Vatnsfjörður 2006 Framvinduskýrslur/Interim Report.* Reykjavík: Fornleifastofnun Íslands. Pp. 85-97.

Forbes, V., Bain, A., Gísladóttir, G.A. & Milek, K.B. (2010) 'Reconstructing Aspects of the Daily Life in Late 19th and Early 20th-Century Iceland: Archaeoentomological Analysis of the Vatnsfjörður Farm, NW Iceland', *Archaeologia Islandica* 8: 77-110.

POLLEN ANALYSIS OF THE WET MEADOW AT VATNSFJÖRÐUR

Rebecca Barclay, Eileen Tisdall, Robert McCulloch and Ian Simpson
University of Stirling

Introduction

The Homefield is commonly understood to be one of the most important parts of Viking settlements, where its correct management can directly determine a settlement's longevity and survival (Adderley *et al* 2008). The area typically consists of a combination of grazing for domestic livestock, hay meadows and cereal plots, and due to the demands placed on the land is intensively managed and improved through manuring practices (Adderley and Simpson 2005). Peculiarly, given the harsh climate and challenging physical environment of North-western Iceland no such improvements have been identified by the authors within the homefield at Vatnsfjörður.

An auger survey by the authors revealed a slope-related sequence of soils within the Vatnsfjörður homefield. Upper steeper slopes are characterised by shallow organic soils, with the main body of the homefield soils recorded as relatively shallow underlain by beach sands and gravels, giving rise to leaching, podzolic development and concurrent nutrient deficiency, resulting in each of these areas to be of poor agricultural potential. Given the site's wealth and high power status such limitations to production are somewhat unexpected, particularly in an economy where cattle husbandry was presumed to be of upmost importance.

In sharp contrast to the rest of the homefield a deep (approx 45 cm) peat accumulation was found to have developed behind a raised beach deposit in the lower homefield (Figures 1 and 2); this is particularly unusual given the underlying gravelly substrate, similar to that in the main body of the homefield, which should therefore create free draining conditions, unfavourable to peat development. This 'wet meadow' is enclosed by the Viking Age eastern boundary wall, and is underlain by a thin band of charcoal. This charcoal was AMS radiocarbon dated to AD 890-1020 and AD 890-1030 (See Table 1) (Barclay 2008), indicating that peat accumulation was initiated after settlement and further supporting the proposal of early Norse settlement and land management within the Northwest peninsula.

It is hypothesised that peat developed as a result of hydrological alterations associated with early woodland removal onsite and or the artificial creation of wetland conditions through utilising the natural damming effects of the raised beach surface. Wet meadow creation would be a means of coping with the farm site's inherent infertility. This suggestion is supported by the observation in thin section of microhorizons of cultural materials (bones, charcoal and other midden materials) within the meadow, suggestive of manuring practices and the management of this area of homefield for fodder production (Barclay 2008) and/or grazing.

Pollen analysis represents the most powerful scientific technique employed in reconstructing past environments. Change in the vegetation cover, as determined by pollen analysis would provide a further strand of evidence to allow for the interpretation of land use and any potential management of the site. Here we present the vegetation history of the wet meadow site at Vatnsfjörður as determined by pollen analysis.

Methodology

Site Selection and Sampling

Given the depth of peat and therefore suitability for pollen preservation the wet meadow was selected for analysis. Preliminary investigations were carried out within the meadow to locate an appropriate peat deposit for extraction of a representative core; a 2.5cm internal diameter Eijkelkamp gouge was used to survey peat depths and stratigraphy across two transects of the meadow, sampling at 20 m intervals. Due to the modern addition of drainage ditches on the farm peat preservation was variable and the sample site (Figure 1) was selected based upon its good preservation status and representative peat depth.

A vertical peat core (6-43 cm) was directly extracted using plastic guttering, wrapped in polythene to prevent water loss and contamination and labelled accordingly before shipment to the cold stores at the University of Stirling, where it was kept at a temperature of 4^{o}C until required for sub-sampling.

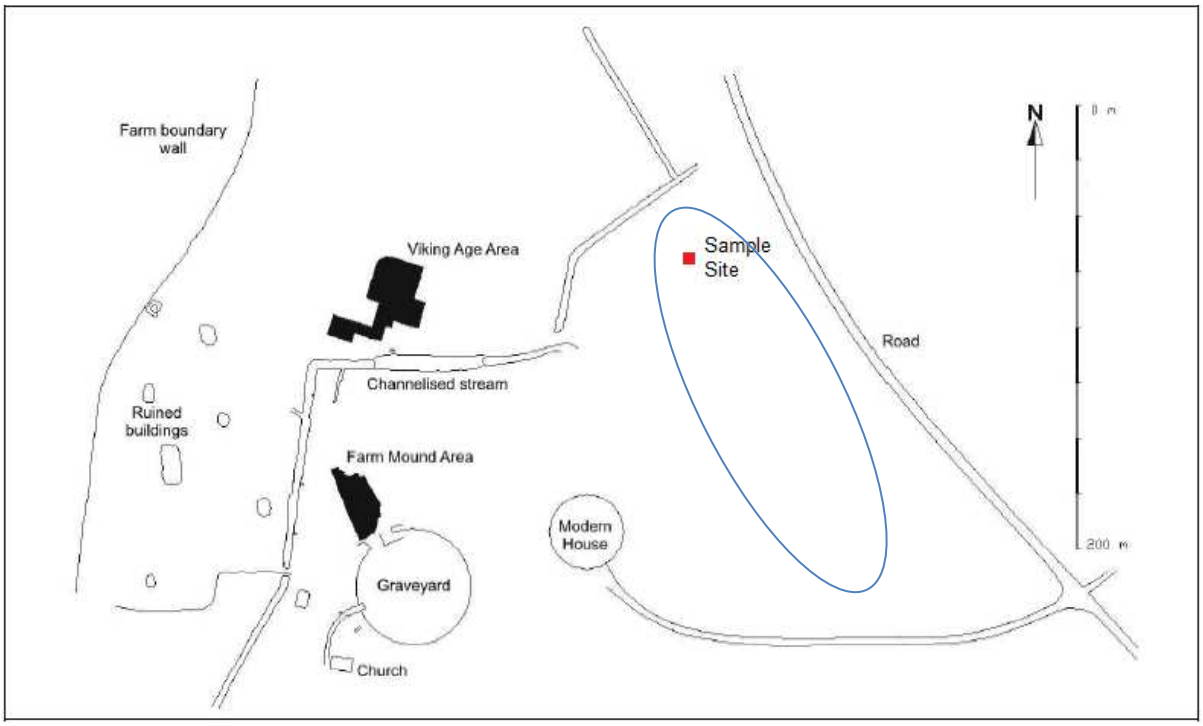


Figure 1. *Homefield map detailing the pollen sample site (red) and showing approximate extent of the peat accumulation (blue oval).*

Figure 2. *Site photograph detailing wet meadow location (approximate extent is shown as the blue oval) in relation to the archaeological sites. The recent drainage ditches put into the wet meadow area can clearly be seen.*

Pollen Analytical Techniques

Peat samples of approximately 1cm^3 were extracted from the core in preparation for pollen analysis with a known concentration of exotic *Lycopodium* grains added to each sample as a means of calculating pollen and charcoal concentration. Extraction of fossil pollen was carried out following the standardised processing techniques outlined in Faegri and Iversen (1992) and Moore *et al.* (1991). Concentrated samples were then stained with 0.2% aqueous safranin to aid pollen identification, before dehydration and mounting in silicon oil.

Slides were analysed using a transmitted light microscope at 400x magnification, counting a minimum of 300 identifiable land pollen grains (TLP) excluding *Cyperaceae*, alongside counts for additional spores, aquatics, charcoal fragments and exotic pollen markers through systematic scanning of the slides at regularly spaced intervals. Cyperaceae was not included in the TLP count as it was hoped that by excluding this group of species which can dominate this wetland habitat type, the floristic diversity of the site could be determined. Pollen was identified with reference to the Pollen and Spore key and glossary produced by Moore *et al.* (1991) and the pollen type slide collection at the University of Stirling. Pollen nomenclature follows Stace (2011), where taxonomic precision is not to species level, or there is any degree of uncertainty, nomenclature follows the system of convention presented by Birks and Birks (1980).

Frequency and concentration diagrams were prepared using TILIA and TILIA.GRAPH (Grimm 1991). For ease of description of vegetation communities and changes within them diagrams were manually split into local pollen assemblage zones (LPAZ).

Chronology

Chronology for the pollen data was provided by AMS radiocarbon dating and a micro-tephra layer. Two radiocarbon dates were available (Table 1). However SUREC-8391, determined on charcoal fragments identified as *Pinus sylvestris*, was rejected as given the absence of *Pinus sylvestris* in Iceland this is likely to have been sourced from driftwood or imported material. Radiocarbon assay SUREC-8386 was determined from *Betula* charcoal. Birch is native to Iceland and therefore its charcoal is likely to be of local origin and is considered to provide a more reliable date for the start of peat accumulation, 890-1020 AD, with a mid point of 910 AD. In addition to this is a micro-tephra date (recorded 21-23 cm) provided by Anderson (this report), Katla 1721 AD, was used to provide further chronological control.

Table 1. *Radiocarbon dates from base of the wet meadow (Barclay 2008).*

Lab Code	Material	^{14}C Age	Error ±	cal BC/AD 68.2% Probability	cal BC/AD 95.4% Probability	δ^{13}C
SUREC-8386	Charcoal – *Betula*	1090	35	895AD (23.6%)925AD 940AD (44.6%) 995AD	890AD (95.4%) 1020AD	-26.7
SUREC-8391	Charcoal – *Pinus sylvestris*	1060	35	900AD (1.5%) 910AD 970AD (66.7%) 1030AD	890AD (95.4%) 1030AD	-24.5

Results

Figure 3 depicts the pollen and spore percentage data for the wet meadow at Vatnsfjörður, alongside charcoal concentrations. Pollen concentrations of the more dominant land pollen types are presented in Figure 4. Five local pollen assemblage zones (LPAZ) were constructed based on local similarities between the communities Vat-1 to Vat-5, providing a means by which vegetation communities and changes will be described.

The pollen assemblage data suggest that the wet meadow site is predominately a herb and sedge rich grassland and remains so for the time recorded in this diagram. Throughout the peat core Poaceae (grasses) dominate each assemblage, dwarf shrubs and herb species dominate over tree and shrub species, and species diversity would appear to be low. Herb species are present in much smaller percentages and concentrations. The majority of species show limited fluctuations between zones.

Fluctuations in charcoal concentrations reflect variations in the smaller sized fragments (<50 μm). Concentrations of larger charcoal fragments (>50 μm) are relatively consistent over time.

LPAZ Vat-1 (c. 910 – 1300 AD)

Poaceae (grasses), although relatively consistent and dominant in percentage values (70-90%) throughout the zone, demonstrates 2 peaks in concentration firstly at the base of the core *c.* 910 AD (85%), and then again (90%) at *c*.1150 AD.

Betula (birch) dominates the tree and shrub classification (10%), with *Salix (willow),* appearing in low percentages (<2%) throughout. *Betula* percentages values rise initially and remain at around 10% with peak values reached at around *c*. 1250 AD there is a sharp decline

to low percentages (<1%) at the upper zone boundary.

Dwarf shrubs are present throughout the zone, in very low percentages (<5%). *Empetrum (crowberry)* is present in all levels, with occasional *Calluna vulgaris (ling heather)*. This zone is relatively diverse with a range of herb species associated with wet heath and grassland habitat and proximity to the ocean, common species recorded at > 5% are Lactuaceae (large family includes dandelions), *Silene (catchfly, campions)*, *Potentilla (cinquefoils)*, and Ranunculaceae (buttercups).

Cyperaceae (sedges), although excluded from the TLP count, is prominent in the zone with frequencies fluctuating around 10-20%.

Polypodiaceae (fern) spores are present throughout the zone fluctuating around 5%, and peaking *c*. 1100 AD. Other aquatic and spore species present include *Typha latifolia* (bulrush), *Myriophyllum spicatum* (water milfoil) *Equisetum* (horsetail), Lycopodiaceae (clubmoss), *Selaginella* (spikemoss) and *Pteridium* (bracken).

Charcoal concentrations vary within the zone. A pronounced peak in concentration is evident at the base of the core, dropping to a lower concentration around 950 AD, before increasing and peaking around 1150 AD; levels then fall towards the top of the zone. The charcoal peak at around 1150 AD coincides with rising *Betula* pollen values and both *Betula* pollen and charcoal concentrations then fall towards the top of the zone.

LPAZ Vat-2 (c. 1300 – 1420 AD)

This short zone (~120 years) is characterised by the absence or exceptionally low percentage values for *Betula*. The pollen assemblage is dominated by Poaceae with Lactuaceae and *Silene* are present at low percentages (<5%) throughout the zone. *Potentilla* is present (<5%) around *c*. 1390, and is associated with a peak in Cyperaceae values (30%). Other herb species are present but at very low levels around 1% of the TLP sum. Charcoal concentrations are exceptionally low in this zone.

LPAZ Vat-3 (c. 1420 – 1775 AD)

This zone is marked by the reappearance and rise in *Betula* pollen values (~5-10%). Peak values for *Betula* (~10%) are recorded at *c.* 1720 AD and are coincident with minor increases in Lactuaceae and Ranunculaceae, and a pronounced peak in *Empetrum*. Within this zone there are slight variations in the herbaceous taxa in particular *Silene*, Ranunculaceae and Lactuaceae but these taxa are present at < 10% throughout the zone.

Throughout this zone there is an overall decline in floristic diversity with many of the herb species recorded in LPAZ Vat 1 now absent in LPAZ Vat 3.

This zone also records a sharp, well defined peak in charcoal concentration with the maximum concentration occurring at *c*. 1640 AD. Charcoal concentration values then decline until the end of the zone at around 1775 AD. Increases in percentage values for *Betula* and the rise in charcoal concentration values are near synchronous with the peak in *Betula* percentage values occurring just after the peak in charcoal concentration.

The micro-tephra layer recorded at 21-23 cm, is thought to be Katla 1721 AD (Anderson, this volume), is in this zone.

LPAZ Vat-4 (c. 1775 – 1890 AD)

With the exception of Poaceae (80-95%), this zone is characterised by relatively low percentage pollen values for species (< 5%) and in terms of species present this zone marks a further reduction in overall species diversity. *Betula* remains constant at <5 % throughout the

zone but values decline towards the top of the zone. Cyperaceae values remain constant throughout the zone at around 20%. Charcoal concentration values are exceptionally low in this zone.

LPAZ Vat-5 (C. 1890 – 2008)

Percentage pollen values for this upper zone are marked by increases in pollen concentration values (Figure 4) which reflect changes in the peat composition with peat beginning to dry out. *Betula*, Poaceae and *Equisetum* increase throughout the zone, in contrast to reduced values in Lactuaceae, *Potentilla* and Cyperaceae. Charcoal concentration values also show an increase towards the top of the zone.

Discussion

The formation of the wet meadow dated to 890-1020 AD lies within the traditional *landnám* timeframe, and is considered to post-date the settlement of Vatnsfjörður. The pollen evidence presented here suggests that since the early developmental stages of the wet meadow species composition has not varied considerably. Poaceae (grasses) has dominated the species assemblage, remaining at a relatively stable and high percentage value until the present day. Various herb species have grown alongside Poaceae, although in much smaller quantities and never dominate the species assemblage. It is suggested that the habitat type of a wet, grass rich meadow once established persisted until the present day. Here it is proposed that to maintain this grass rich meadow would have required some form of management to prevent the encroachment or dominance of other species such as Cyperaceae (sedges). Management could have been either through removal of the vegetation for fodder or through grazing. The herb species diversity would also indicate that there has been some form of management again to maintain this modest level of diversity. Additional evidence of management on site is from micromorphological analysis of soil from the meadow which showed micro-horizons of midden type material spread over the meadow, likely as a manuring strategy to cope with the inherently infertile land (Barclay 2008); this practice might have aided the maintenance of enhanced levels of Poaceae throughout the period of occupation. The pollen evidence would suggest that after *c.* 1420 AD there is slight reduction in diversity perhaps indicating a change in management but that after *c.* 1775 AD there is a marked reduction in diversity. It is proposed that this marked reduction in diversity at *c.* 1775 AD is in response to a change in management or land use with perhaps a move to greater intensity of the meadow area for grazing rather than for fodder use.

The timing of the establishment of the wet meadow and the above evidence for management of the meadow would suggest that this meadow is anthropogenic in origin, created just after settlement of the Vatnsfjörður site. The creation of this meadow would have been through the extension of a naturally occurring wetland area on the site (Figure 1) and would have exploited the raised beach ridge to effectively create a larger wetland area. What is less clear from the pollen analysis is if the water table at the site was maintained in terms of irrigation or if once peat began to accumulate and drainage was impeded that the wet meadow was self sustaining. Aquatic taxa (Figure 3) are present in low values throughout the profile and would suggest that wet conditions persist. In addition the continued accumulation of peat also requires wet anaerobic conditions to allow for the preservation of organic material.

Concentration values of larger charcoal fragments (>50 μm) remain constant throughout the profile. This would indicate that the overall changes in charcoal concentration

values were not a result of processes such as *in situ* or very localised burning, which generate larger charcoal fragments. Thus the variations in charcoal concentrations noted in Figure 3 are in response to changes in the smaller fraction size (<50 μm) suggesting changes in inputs from windblown sources, likely industrial and/or domestic activity elsewhere in the farm.

The results presented above highlight changes in charcoal concentration values and percentage values for birch pollen, the synchroneity of these changes could suggest a link to fuel resources. After settlement (*c.* 910 AD) charcoal concentration values indicate domestic activity and fuel combustion, birch pollen values indicate a local presence of birch. Between *c.* 1300 – 1420 AD charcoal concentrations are very low and birch pollen is virtually absent. This could suggest that there may have been a switch away from the use of wood as a fuel resource and so less charcoal is produced and that this switch may have been in response to reduced amounts of wood (birch) available to burn as fuel. A reduction in charcoal concentration may also reflect less activity on the site at this time.

A short-lived peak in charcoal concentration values at *c.*1640 AD suggests an increase in activity on the site either through increased domestic activity or perhaps industrial activity such as smelting. The pollen evidence for the same time period suggests that there has been a recovery in the amount of birch but that the percentage values are still low. Post-1640 AD charcoal concentration values fall and a second phase of very low values is recorded between *c.*1775 and *c.*1890 , again suggestive of either low levels of activity on site or a switch in fuel resource use. During this phase birch pollen values are declining but percentage values suggest that birch is still present.

The decline in charcoal concentration values recorded post 1640 AD and links to fuel use is supported by the 1710 extracts from *Jarðabók*, referring to a period of marginality suffered at Vatnsfjörður, describing the scarcity of fuel materials including inadequate supplies of birch and the use of roots to supplement fuels (Magnússon and Vídalín 1990). Given the lack of fuel materials, charcoal production from domestic and industrial activities are likely to have decreased.

Within the pollen record there will be a climate signal and thus variations in birch pollen values may also be in response to climate change, with peak values in birch pollen associated with drier climatic phases. However, the response of the wet meadow to these drier climate phases is less clear and could be muted by any management of the site, in particular if the site is being maintained through irrigation.

Soil micromorphological evidence indicates that charcoal was added to the meadow as part of midden materials, thus variations in charcoal concentrations should be carefully interpreted. Although larger fractions were visible in thin section and would have been filtered out though the pollen preparation process, midden material would contain a mix of fragment sizes, thus creating peaks in charcoal concentrations. However, here it is suggested that much of the variation in charcoal concentration values is driven by windblown charcoal.
The complexity of the relationships described above requires further work, in particular to explore further the role of fuel resource availability at Vatnsfjörður. In addition, further research into the links between the archaeological evidence for phases of activity and the different types of activity on the site needs to be conducted. Documentary evidence of fuel use, land management practices and changes in economic status at the site also need to be considered. However, the pollen analysis of the wet meadow at Vatnsfjörður has provided further insight into land use at the site and provides more evidence for resource use and management.

Conclusions

Pollen analysis of the wet meadow at Vatnsfjörður suggests that the vegetation cover

consisted of a wet grassy herb rich meadow. The pollen record indicates that this vegetation was maintained from *c.* 910 AD up until the present day. The consistently high percentage values of grass and the relatively constant input from herb species types such as Lactuaceae (a large family that includes dandelions), *Silene* (catchfly, campions), *Potentilla* (cinquefoils), and Ranunculaceae (buttercups) suggests that the maintanance of this vegetation would have been through grazing or through regular removal of the grasses such as cutting for fodder. The pollen record indicates that there are two phases of a reduction in species diversity: a minor reduction at *c.*1420 and further much more severe reduction at *c.*1775. These reductions in diversity may reflect changes in land management at the site. Charcoal concentration values are driven by change in the amount of windblown charcoal and so are thought to reflect phases in domestic/industrial activity at the site. Two phases of reduced charcoal concentration are noted between *c.* 1300 – 1420 AD and *c.* 1775 – 1890 AD, and may be in response to reduced industrial/domestic activity at the site or a switch in fuel use. A peak in charcoal concentration values recorded at *c.* 1640 AD is thought to reflect a short phase of increased industrial/domestic activity at the farm. Low charcoal concentration values are associated with the low amounts of birch pollen and here it is tentatively suggested that this may reflect a fuel resource issue; however, this is a complex relationship and requires further research.

References

Adderley, W.P. and Simpson, I.A. 2005. Early-Norse Homefield Productivity in the Faeroe Islands. *Human Ecology* 33 (5), pp. 771-736.

Adderley, W.P., Simpson, I.A., and Vésteinsson, O. 2008. Local-Scale Adaption's: A Modelled Assessment of Soil, landscape, Microclimatic, and Management Factors in Norse Home-Field Productivities. *Geoarchaeology* 23 (4), pp. 500-527.

Barclay, R. 2008. *Homefield Formation and Management at Vatnsfjörður, NW Iceland – A Geoarchaeological Interpretation.* BSc Thesis, University of Stirling, Scotland, UK.

Behre, K.E. 1981. The interpretation of Anthropogenic Indicators in Pollen Diagrams. *Pollen et Spores* 23, pp. 225-245.

Birks, H.J.B. and Birks, H.H. 1980. *Quaternary Palaeoecology*. Cambridge University Press, Cambridge.

Faegri, F. and Iversen, J. 1992. *Textbook of Pollen Analysis* (4th ed). John Wiley & Sons, Chichester.

Grimm, E.C. 1991. *TILIA and TILIA.GRAPH*. Illinois State Museum, Springfield.

Magnússon, Á. and Vídalín, P., 1913-1990. *Jarðabók. Vol. 1-13*. Hið Íslenzka Fræðafélag, Copenhagen.

Moore, P.D., Webb, J.A. and Collinson, M.E. 1991. *Pollen Analysis*. Blackwell, Oxford.

Stace, C. 2011. *New flora of the British Isles* (3rd ed). Cambridge University Press, Cambridge.

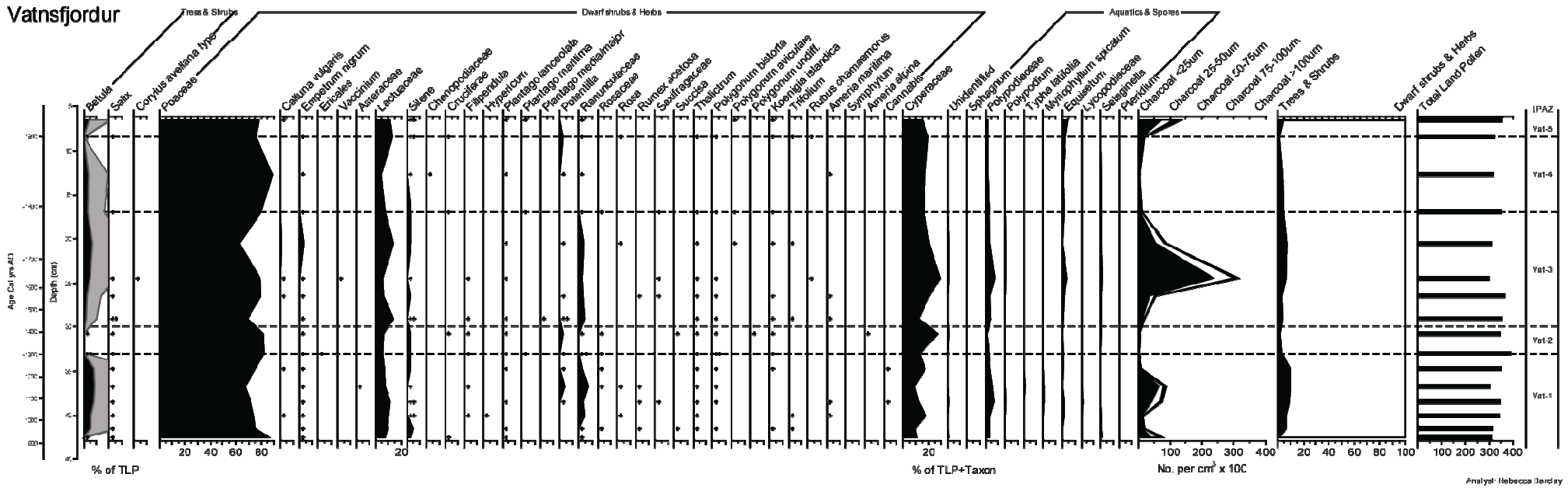


Figure 3. *Pollen and spore percentage data for the wet meadow at Vatnsfjörður, alongside charcoal concentrations. Cyperaceae is not included within the TLP sum.*

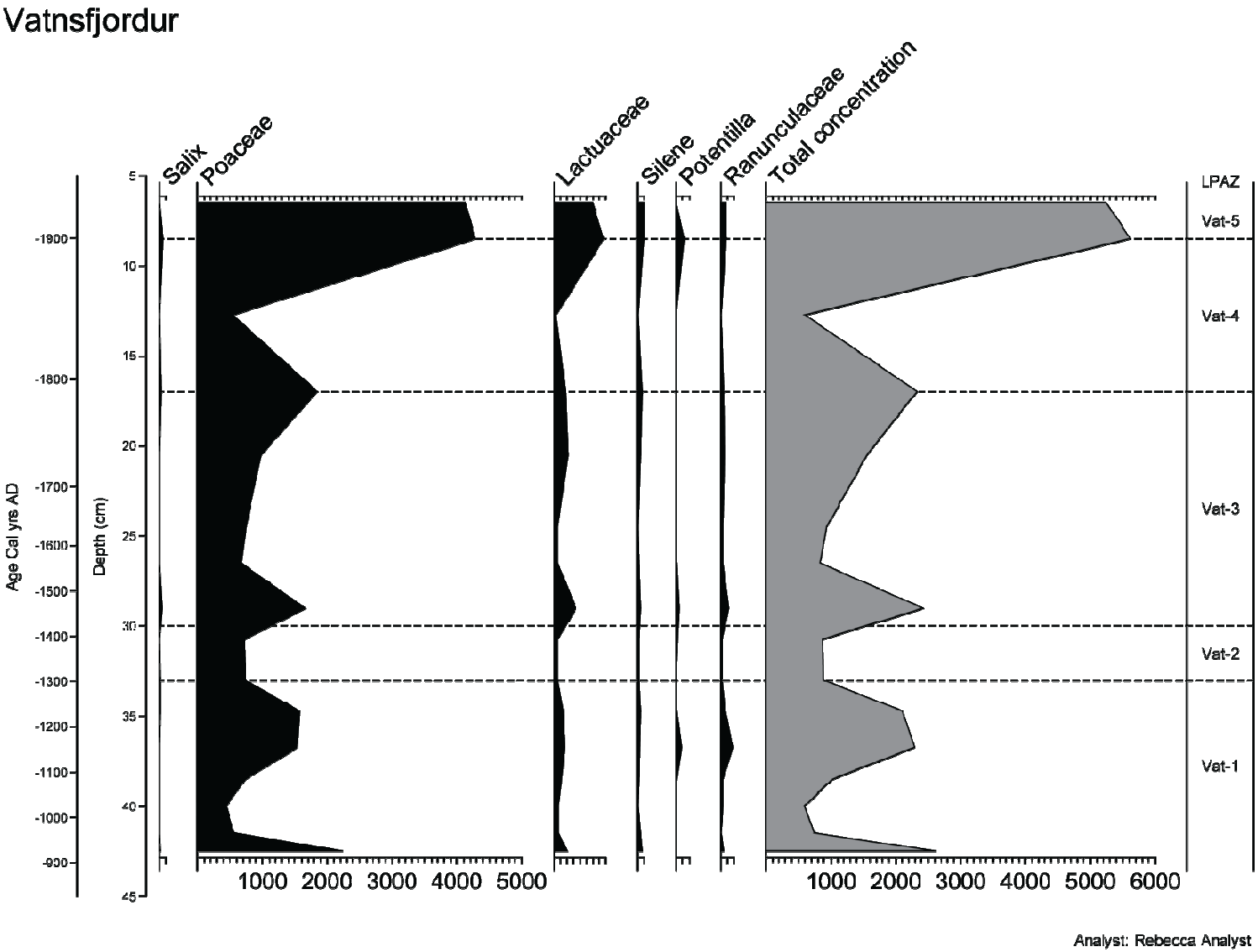


Figure 4. *Pollen concentrations of the more dominant land pollen types for the wet meadow at Vatnsfjörður.*

CORRELATION OF TEPHRA LAYERS FROM VATNSFJÖRÐUR WITH THE ERUPTION OF HEKLA 1693

Jamie K. Anderson
University of Oxford

Research aims

The Vatnsfjörður archaeological site has had limited chronological evidence available to it throughout the project, and as a result it is important to correlate the site's visible tephra layers with known eruptions to provide stratigraphic chronological markers and link the site to wider regional chronologies, both archaeologically and environmentally. The aim of the research presented here was to identify the visible tephra layers at the site and correlate them with known eruptions. Although a similar layer had previously been sampled and possibly identified from the site (Sigurgeirsson, 2006), the research presented here describes the geochemistry and correlations of layers from within the archaeological site itself.

Introduction to Tephrochronology

Tephrochronology is a chronological technique widely used in archaeological and environmental studies which uses volcanic ash horizons to date and correlate stratigraphic sequences. Tephra is the volcanic ash and larger fragments that have been ejected into the atmosphere during an explosive eruption. Individual ash layers can be correlated to eruptions using the chemistry of the vitreous glass component of the volcanic ash. Tephrochronology relies upon the notion that the span of a tephra-producing volcanic event is short enough and discrete enough that it appears to be instantaneous in the stratigraphic record (Thorarinsson, 1955b). Tephra is dispersed hundreds of miles from the volcano, depositing isochronous stratigraphic markers in a variety of environments. Tephra, either visible or microscopic, can be extracted from the sedimentary record with field and laboratory techniques. In theory, each volcanic eruption produces a unique geochemical signature and distal layers can be matched by their geochemistry to particular eruptions that are characterised at proximal locations where the stratigraphy is well constrained. Often these proximal deposits have been dated via radiocarbon methods or have been documented in historical records and the tephra can then provide absolute chronology for the sequences in which they are preserved.

Holocene Icelandic volcanism is characterized by explosive basaltic eruptions, and only a few silicic eruptions. These eruptions are explosive due to interaction between the hot molten rock and water from the ice caps covering volcanic zones. 75% of known Icelandic eruptions during the Holocene were explosive and generated tephra; of these, 80% are basaltic (Larsen & Eiriksson, 2008). However, the frequent volcanic activity means that the tephrostratigraphy for the region is complex, with over 900 eruptions in the past 9000 years (*ibid.*: 110, 111). A detailed tephrochronology for the last c. 900 years on Iceland can be constructed with historical documents that date Icelandic eruptions (e.g., Larsen, Dugmore, & Newton, 1999; Larsen & Eiriksson, 2008; Wastegard, 2002).

Previous tephra studies in Vestfirðir and at Vatnsfjörður

There has been a limited amount of research into the tephrostratigraphy of the Vestfirðir region. A few visible tephra layers have been identified in soils in the region; the majority of those described relate to the early Holocene (for example, Andrews et al., 2002). Late Holocene tephra layers originating from the Snæfellsjökull volcanic system have been found in soils in the southern part of Vestfirðir, but these date to before the historical settlement of Iceland (Sigurgeirsson, 2006). Written sources document three tephra fallout events in northwest Iceland: the Hekla eruptions of 1693 and 1766 and the Katla eruption of 1721 (Thorarinsson, 1955a; Thorarinsson, 1967). Contemporary descriptions record that, at one farm in the Vatnsfjörður region during the Hekla 1693 eruption, so much ash fell that "in the time needed to write a short letter", traceable footprints were left on the ground. Like many Icelandic eruptions, the events often went on for months, e.g., the Hekla 1693 eruption began on 13 February and ended sometime in the autumn (Thorarinsson, 1967). Sigurgeirsson suggests that 90% of the tephra fell within the first few hours of the eruption (2006: 79).

At the Vatnsfjörður site, the stratigraphy throughout the Farm Mound, as well as above the Viking Age area's human occupation layers and in several test trenches, contains a number of visible tephra layers. However, it was unknown until this study if they represented ash fall from the same or multiple eruptions. Many of these layers have a very similar appearance in the stratigraphy: a layer that is ~1-3cm thick, grey-green in colour, and composed uniformly of fine grains. During the 2006 field season similar tephra was sampled near the site and geochemically identified to be from the Hekla system, and most likely from the 1693 eruption (Sigurgeirsson, 2006). The SiO_2 content of the glass shards varied from 58.5-61.2%, meaning they came from a volcano with an intermediate composition.

Methodology

Sample Collection

Four possible tephra samples were collected for geochemical study from open stratigraphic sections by various excavators during the 2009 field season:

1. Sample labelled VSF09 Viking Age (OxT-5163) is of the tephra layer visible in the section exposed on the edge of excavation area 14.
2. Sample labelled VSF09 Area 32 (OxT-5164) was taken from the section exposed on the edge of excavation area 32, which is next to the Viking Age house (the *skáli*).
3. Sample labelled VSF09 Farm Mound (OxT-5166) was taken from within a section of turf in a turf collapse layer in the Farm Mound.
4. It was thought that the sample labelled VSF09 7157 (OxT-5165) may have represented a different ash fall event from the others. It was from a black sand that was part of the turf that formed the walls of structure 7 (context 7157). The turf was reddish and may have been from a bog off-site, so there was some question about whether it was in fact tephra, or a black sand.

Laboratory Methods

The samples from Vatnsfjörður were treated as microtephra, despite being from a visible tephra layer. This was for two reasons: first, because the grain size of the ash was so small,

and second, to ensure the most accurate geochemical data, as microtephra pretreatment would lead to the widest sample range (rather than sampling from only larger shards which might fall into a particular chemical composition). The samples were extracted according to the procedures outlined in Blockley et al. (2005), which uses stepped heavy liquid flotation to separate microtephra from other elements within the sediment. During each extraction, a blank was also prepared in order to test against cross-contamination of samples. Once floated, a proportion of each sample fraction less dense than the heavy flotation liquid is mounted in a welled slide with distilled water. From this, individual microtephra were extracted using a syringe. Where possible, approximately sixty shards were extracted per sample to ensure at least thirty shards large enough for geochemical analysis. These shards were mounted on 25mm diameter stubs of polished heat-setting epoxy resin, ground, and then polished before they are probed for geochemistry.

All analysis documented here was carried out on a wavelength-dispersive JEOL8600 electron microprobe (WDS-EPMA) at the Research Lab for Archaeology and the History of Art, University of Oxford. The instrument was calibrated using a suite of mineral standards, and accuracy and precision during each analytica run was assessed using MPI-DING glass standards (see Jochum et al., 2000; Jochum et al., 2006).

Geochemical correlation

During the initial extraction, the sample VSF09 Area 32 did not yield any tephra; however, the other three samples contained large quantities of tephra, and these samples were probed for their geochemistry. In total, there were over 150 data points from these three samples. Figures 1 and 2 show the results of WDS-EPMA after the data had been filtered for quality (i.e., removing mineral analyses and those with totals < 95%). As shown in Figure 1, the majority of the tephra falls into the intermediate andesitic and trachy-andesitic range, similar to the results from Sigurgeirsson (2006). Data from OxT-5165 (n=60) indicates it was from an evolved eruption. The distinct outliers may represent the product of a mixed eruption, or contamination from soil movement during deposition.

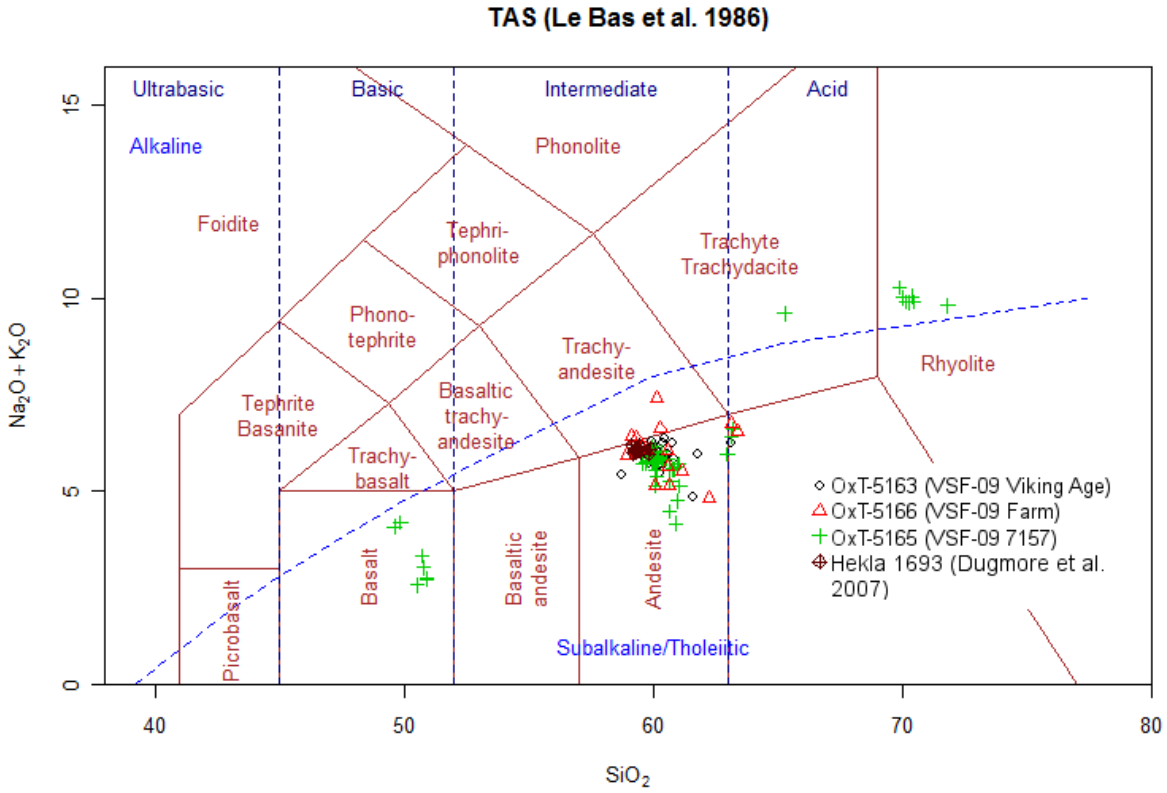


Figure 1. *Total Alkali-Silica (TAS) plot of Vatnsfjörður data and Hekla 1693.*

The composition of the tephra layers found at the archaeological site were compared to proximal geochemistry from known eruptions. The eruptions that the tephra was compared to was based on prior information about placement of the layers within the stratigraphy of the site as well as information about which eruptions carried ash material over the Vestfirðir region. Therefore the possible eruptions were narrowed down to a particular age range based on position in the stratigraphy relative to the archaeology (roughly AD 1200 – 1800). Likely eruptions from those dates that would have dispersed ash across the area were determined using isopach maps to the eruptions of Hekla 1693, 1766, and Katla 1721. Hekla 1104 was also included in the analysis as it occurred close to the time period and the ash fall was widely dispersed (Haflidason, Eiriksson, & van Kreveld, 2000). By geochemical bi-plots, Figure 2 shows that the Hekla 1693 eruption has the same glass chemistry as these distal tephra and suggests these layers were associated with the eruption. Dugmore *et al.* published the geochemistry of Hekla 1693 after collecting proximal tephra samples during an investigation of Þjórsárdalur (Dugmore *et al.* 2007: 6). These results agree with Sigurgeirsson's findings for similar visible tephra layers at the Vatnsfjörður site (2006).

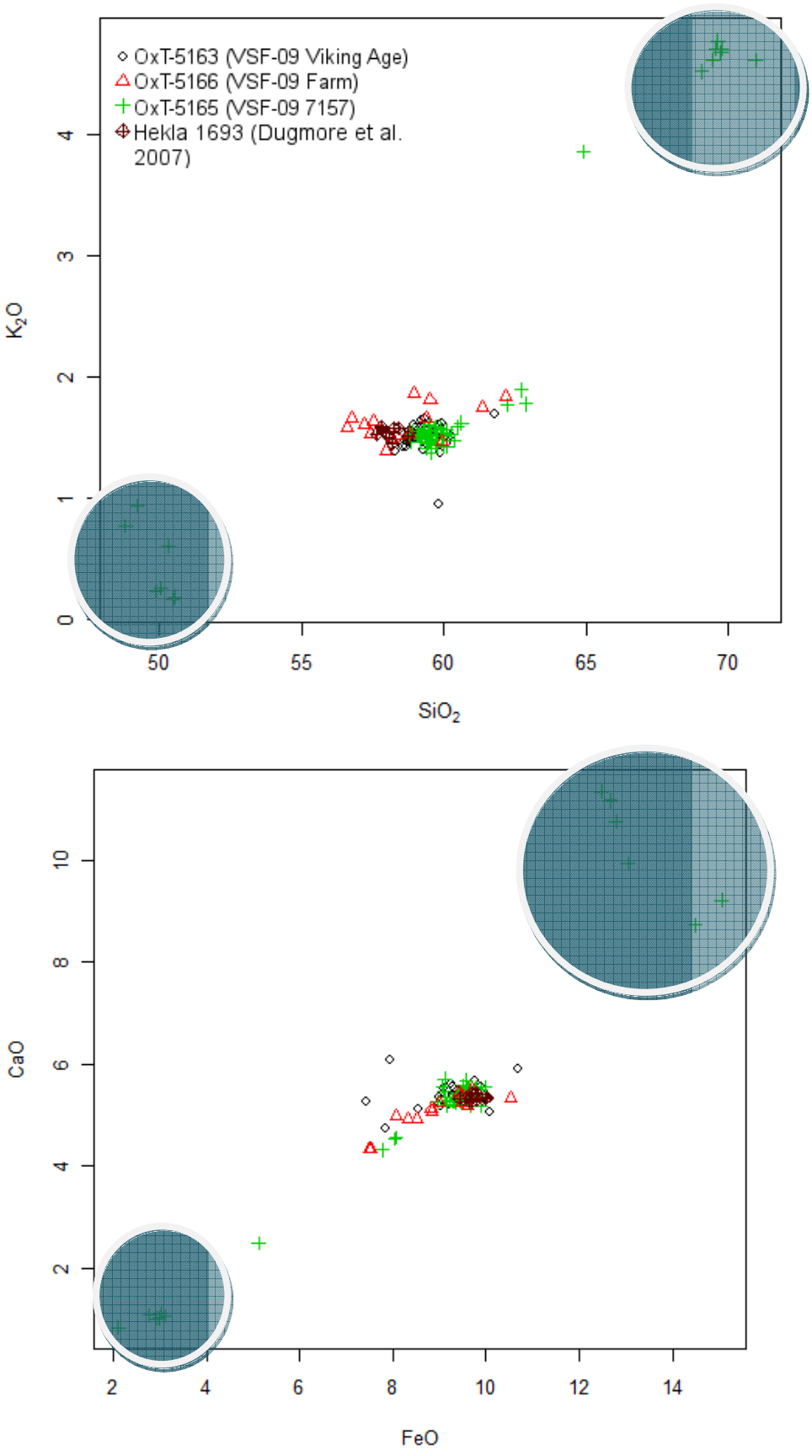


Figure 2 . *Geochemistry of Vatnsfjörður samples compared to published data on Hekla 1693. Encircled areas are likely depositional contamination.*

The results presented here – that the visible tephra layers OxT-5163, -5165, and -5166 correlate to the Hekla 1693 eruption – provide further chronological information about the Vatnsfjörður site. Further integration of tephrochronogical analysis with archaeological interpretation, will aid in reconstructing the sequence at the site as well as its position within the wider region over time.

Acknowledgements

The author thanks Hertford College, Oxford, for providing partial funding for this research.

References

Andrews, J. T., Geirsdóttir, A., Hardardóttir, J., Principato, S., Grönvold, K., Kristjansdóttir, G. B., et al. (2002). Distribution, sediment magnetism and geochemistry of the Saksunarvatn (10 180 +/- 60 cal. yr BP) tephra in marine, lake, and terrestrial sediments, northwest Iceland. *Journal of Quaternary Science*, 17(8), 731-745.

Blockley, S. P. E., & S.D.F., P.-O., Lowe J.J. & Matthews I.P. & Stone A. & Pollard A.M. & Turney C.S.M. (2005). A new and less destructive laboratory procedure for the physical separation of of distal glass tephra shards from sediments. *Quaternary Science Reviews*, 24, 1952-1960.

Haflidason, Haflidi, Jon Eiriksson, and Shirley van Kreveld. 2000. The tephrochronology of Iceland and the North Atlantic region during the Middle and Late Quaternary: a review. *Journal of Quaternary Science*, 15: 3-22.

Jochum, K. P., Dingwell, D. B., Rocholl, A., Stoll, B., Hofmann, A. W., Becker, S., et al. (2000). The Preparation and Preliminary Characterisation of Eight Geological MPI-DING Reference Glasses for In-Situ Microanalysis. *Geostandards and Geoanalytical Research*, 24(1), 87-133.

Jochum, K. P., Stoll, B., Herwig, K., Willbold, M., Hofmann, A. W., Amini, M., et al. (2006). MPI-DING reference glasses for in situ microanalysis: New reference values for element concentrations and isotope ratios. *Geochemistry Geophysics Geosystems*, 7(2).

Larsen, G., Dugmore, A., & Newton, A. (1999). Geochemistry of historical age silicic tephras in Iceland. *The Holocene*, 9, 463-471.

Larsen, G., & Eiriksson, J. (2008). Late Quaternary terrestrial tephrochronology of Iceland -- frequency of explosive eruptions, type and volume of tephra deposits. *Journal of Quaternary Science*, 23, 109-120.

Sigurgeirsson, M. Á. (2006). Discovery of the Hekla-1693 tephra at Vatnsfjördur. *Vatnsfjördur Interim Field Report 2006* (pp. 78-79).

Thorarinsson, S. (1955a). Öskufall svo sporraekt var og Kötlugosid. *Náttúrufraedingurinn*, 25, 87-98.

Thorarinsson, S. (1955b). Nákuðungslögin við Húnaflóa í ljósi nýrra aldursákvarðana. *Náttúrufraeðingurinn*, 172-186.

Thorarinsson, S. (1967). The eruption of Hekla in historic times. *The eruption of Hekla 1947-48*, 1, 1-183.

Wastegard, S. (2002). Early to middle Holocene silicic tephra horizons from the Katla volcanic system, Iceland: new results from the Faroe Islands. *Journal of Quaternary Science*, 17, 723-730.

APPENDIX 1
REGISTER OF EXCAVATED UNITS

Units Excavated in the Viking Age Area

Unit	Unit Type	Group	Description
10001	D		Flat stones on E side of Structure 9
10002	D		Dark brown occupation layer with charcoal on E side of Structure 9
10003	D		Mixed grey turf and charcoal, occupation layer on E side of Structure 9
10004	D		Flat stones, either pavement or post pads on S side of Structure 9
10005	D		Floor layer on S side of Structure 9
10006	D	10015	Homogenous brown soil with charcoal flecks under E wall ok [9045]
10007	D		Charcoal spread under [9045] on S wall of Structure 9
10008	D	10015	Brown soil with charcoal under [9045] on S wall of Structure 9
10009	D	10010	Reddish organic spread on W side of Structure 10
10010	G		Structure 10
10011	D	10010	Mixed pale brown and brown spread with charcoal on W side of Structure 10
10012	D	10010	Stones embedded in mixed red and brown silt in SW corner of Structure 10
10013	D		Organic soil spread with flat stones under [10007]
10014	D	10010	Stones embedded in dark brown gravel in SW corner of Structure 10
10015	G		Organic soil with charcoal flecks
10016	D	10015	Organic soil with charcoal, between entrance and drain of Structure 9
10017	D	10015	Organic soil with yellow staining and charcoal on W side of Structure 10
10018	D	10010	Stones embedded in ash in SW corner of Structure 10
10020	D	10010	Dark brown, compost floor layer in middle of Structure 10
10021	D		Small charcoal spread
10022	D	10010	Gravel mixed with dark brown soil in Structure 10
10023	D	10010	Flat stone, on floor of Structure 10
10024	D	10010	Black floor layer in Structure 10
10025	D	10010	Fill of post-hole [10026] in Structure 10
10026	C	10010	Cut of post-hole on W side of Structure 10
10027	D	10010	Ashy fill of corner hearth in Structure 10
10028	D	10010	Stones of corner hearth in Structure 10
10029	D	10010	Gravel spread on E, N and S sides of Structure 10
10030	D	10010	Flat stones within [10029]
10031	D	10010	Patch of black floor on E side of Structure 10
10032	D	10010	Patch of black floor on N side of Structure 10
10033	D	10010	Very dark brown silty gravel on the floor of Structure 10
10035	D	10010	Light brown gravel spread in NE corner of Structure 10
10036	D	10010	Fill of post-hole [10037] in Structure 10
10037	C	10010	Cut of post-hole on E side of Structure 10

10038	D	10010	Fill of post-hole [10039] in Structure 10
10039	C	10010	Cut of post-hole on NE part of Structure 10
10042	D	10010	Compacted post-base in N end of Structure 10, infilling [10045]
10043	D	10010	Very dark brown organic gravel, infilling depression in Structure 10
10044	C	10010	Cut of Structure 10
10045	C	10010	Cut of post-base on N edge of Structure 10

Units Excavated in the Farm Mound Area

Unit	Unit Type	Group	Description
10501	D	10515	Overburden. Mixed post abandonment deposits in extension area along western limits of excavation
10502	D	10590	A Gray-black midden deposit
10503	D	8563	A mixed deposit of ash and stone, possibly collapse from east wall of corridor (10671)
10504	D	9650	A mix of orange brown turf and charcoal. Possible levelling deposit
10505	D	9650	A brown turf deposit. Possibly a part of foundations for a manger with deposit [10507]
10506	D	9650	A firm turf deposit mixed with charcoal and with flat stones. A levelling deposit.
10507	D	9650	A firm deposit composed of sand and big stones. Possibly a part of foundations for a manger along with deposit [10505]
10508	D	8590	Dark brown turf collapse. Possibly deposited during the late 20th century flattening of the farm mound
10509	D	9650	A turf and stone blocking. Partially blocking in the north doorway (west side) of building (9650)
10510	D	10663	A floor deposit covering most of the interior of building (10663)
10511	D	10590	A collapse deposit of turf and stone in corridor (10590)
10512	D	9650	A floor deposit associated with turf blocking [10509], that belongs to building phase (9650)
10514	D	10515	A turf collapse in extension area along the western limits of excavation.
10515	G	10515	A group for deposits excavated in extension area along the western limits of excavation.
10517	D	10515	A peace of structural timber in extension area along the western limits of excavation.
10518	D	8562	A midden deposit
10520	D	10582	A turf deposit. A part of a badly disturbed northern wall of room (10676)
10521	D	10515	A turf collapse in extension area along the western limits of excavation.
10522	D	10582	A turf deposit. A part of a badly disturbed northern wall of room (10676)
10523	D	10515	A turf collapse in extension area along the western limits of excavation.
10524	D	10582	A row of stones. Part of a badly disturbed northern wall of room (10676)
10525	D	10625	A part of a coarsely made pavement of turf and stone in the front room of phase (10663) of building (10662)
10526	D	10590	A floor deposit in corridor (10590)
10527	D	10515	A turf collapse in extension area along the western limits of excavation.
10528	D	10676	A part of the northern wall of room (10676)

10529	D	10515	A turf collapse in extension area along the western limits of excavation, with two wooden beams.
10530	D	10676	A part of the northern wall of room (10676)
10531	D	10663	A pile of turf and rocks. A possible post pad.
10532	D	10674	A part of a platform made of turf and stone. A possible base of a manger, belonging to phase (10663) of building (10662). South west corner
10533	D	10515	A soft deposit of wood ash, spilling out of hearth (10540)
10534	D	10540	The later fill of hearth (10540)
10535	D	10540	A cut for hearth (10540)
10536	D	10671	A part of a sequence of deposits of turf and stone, under phase (10676) of area (10671)
10537	D	10676	A levelling deposits made of turf and stone
10538	D	10673	A part of a platform made of turf and stone. A possible base of a manger, belonging to phase (10663) of building (10662). Eastern end.
10539	D	10674	A part of a platform made of turf and stone. A possible base of a manger, belonging to phase (10663) of building (10662). South west corner
10540	D	10515	A heart in the north-west corner of extension area (10515)
10541	D	8562	A part of a platform of turf and stone along the northern wall of room (8562). A possible base of an internal structure
10542	D	10540	A turf barrier around hearth (10540)
10543	D	10671	A part of a sequence of deposits of turf and stone, under phase (10676) of area (10671)
10544	D	10540	Fill of post hole [10545]
10545	C	10540	Posthole in hearth (10540) in area (10515)
10546	D	10671	A part of a sequence of deposits of turf and stone, under phase (10676) of area (10671)
10547	D	10549	The stone facing of wall (10549) in area (10515)
10548	D	10549	The turf core (strengur?) of wall (10549) in area (10515)
10549	G	10515	Turf and stone wall in area (10515)
10552	D	10540	Fill of post hole [10553] in hearth (10540)
10553	C	10540	Post hole in hearth (10540) in area (10515)
10554	D	10540	Fill of post hole [10555] in hearth (10540)
10555	C	10540	Post hole in hearth (10540) in area (10515)
10556	D	10540	Fill of post hole [10557] in hearth (10540)
10557	C	10540	Post hole in hearth (10540) in area (10515)
10558	D	10540	Fill of post hole [10559] in hearth (10540)
10559	C	10540	Post hole in hearth (10540) in area (10515)
10560	D	10540	Fill of post hole [10561] in hearth (10540)
10561	C	10540	Post hole in hearth (10540) in area (10515)
10562	D	10540	Earlier fill of hearth (10540)
10563	D	10671	Turf and stone collapse under phase (10676) of area (10671)
10564	D	10540	Fill of post hole [10565] in hearth (10540)
10565	C	10540	Post hole in hearth (10540) in area (10515)
10566	D	10540	Fill of post hole [10567] in hearth (10540)
10567	C	10540	Post hole in hearth (10540) in area (10515)
10568	D	10540	Fill of post hole [10569] in hearth (10540)

10569	C	10540	Post hole in hearth (10540) in area (10515)
10570	D	10540	Fill of post hole [10571] in hearth (10540)
10571	C	10540	Post hole in hearth (10540) in area (10515)
10572	D	10540	Fill of post hole [10573] in hearth (10540)
10573	C	10540	Post hole in hearth (10540) in area (10515)
10574	D	10540	Fill of post hole [10575] in hearth (10540)
10575	C	10540	Post hole in hearth (10540) in area (10515)
10576	D	10672	A part of a coarsely made pavement of turf and stone in the front room of phase (10663) of building (10662)
10577	D	10671	A part of a sequence of deposits of turf and stone, under phase (10676) of area (10671)
10578	D	10673	A part of a platform made of turf and stone. A possible base of a manger, belonging to phase (10663) of building (10662). Eastern end.
10579	D	8562	A part of a platform of turf and stone along the northern wall of room (8562). A possible base of an internal structure
10580	D	10515	Turf collapse. A part of a sequence of collapse deposits under wall (10549)
10581	D	10590	A floor deposit in corridor (10590)
10582	G	10676	A group for deposits making up the northern wall of room (10676)
10583	D	10582	Turf deposit. A part of a badly disturbed north wall, gr. (10582), of room (10676)
10584	D	10673	A part of a platform made of turf and stone. A possible base of a manger, belonging to phase (10663) of building (10662). Eastern end.
10585	D	10590	Turf collapse. A post abandonment deposit in corridor (10590)
10586	D	10582	A turf and stone deposit. A part of a badly disturbed northern wall of room (10676)
10587	D	8562	A part of a platform of turf and stone along the northern wall of room (8562). A possible base of an internal structure
10588	D	10673	A part of a platform made of turf and stone. A possible base of a manger, belonging to phase (10663) of building (10662). Eastern end.
10589	D	10582	A turf and stone deposit. A part of a badly disturbed northern wall of room (10676)
10590	G	10590	A corridor associated with buildings (9502) and (10662)
10591	D	10679	Turf and stone deposit. A part of pavement (10679) in corridor (10590)
10592	D	8562	A stone deposit. A part of a platform of turf and stone along the northern wall of room (8562). A possible base of an internal structure
10593	D	10672	A part of a coarsely made pavement of turf and stone in the front room of phase (10663) of building (10662)
10594	D	10673	A part of a platform made of turf and stone. A possible base of a manger, belonging to phase (10663) of building (10662). Eastern end.
10595	D	8562	A midden deposit in room (8562). Probably same as deposit [9632] in sampling sequence <9627> from 2009.
10596	D	8562	A part of a platform of turf and stone along the northern wall of room (8562). A possible base of an internal structure
10597	D	10663	Fill of post hole [10598]. Belongs to phase (10663) of building (10662). South-east corner
10598	C	10663	A post hole. Belongs to phase (10663) of building (10662). South-east corner
10599	D	10673	A part of a platform made of turf and stone. A possible base of a manger, belonging to phase (10663) of building (10662). Eastern end.
10600	D	8562	A mixed deposit of clay silt turf debris and charcoal. Filling up a cut,

			unit [10615], at the eastern end of building (8562)
10601	D	10673	A part of a platform made of turf and stone. A possible base of a manger, belonging to phase (10663) of building (10662). Eastern end.
10602	D	8562	A part of a platform of turf and stone along the northern wall of room (8562). A possible base of an internal structure
10603	D	10672	A part of a coarsely made pavement of turf and stone in the front room of phase (10663) of building (10662)
10604	D	10515	Turf collapse. A part of a sequence of collapse deposits under wall (10549)
10606	D	10663	A turf and stone block. Partially blocking in the north doorway (east-side) of building (9650). Built up against eastern wall of building (10662) belongs to phase (10663)
10607	D	10590	A floor deposit in corridor (10590)
10608	D	10515	A sheet midden, rich in fish bones. Directly under wall (10549)
10609	D	8562	A midden deposit in room (8562). Probably same as deposit [9636] in sampling sequence <9627> from 2009.
10610	D	10590	A row of stones embedded in turf. Possibly foundations for an internal structure in corridor (10590)
10611	D	10675	A part of a platform of turf and stone (a base for an internals structure? A pavement?) on the east side of the north extension of building (10662). Phase 10664
10612	D	10590	A floor deposit in corridor (10590)
10613	D	10664	A floor deposit belonging to phase (10664) of building (10662)
10614	D	10672	A part of a coarsely made pavement of turf and stone in the front room of phase (10663) of building (10662)
10615	D	8562	A shallow pit at the west end of room (8562)
10616	D	10590	A floor deposit in corridor (10590)
10617	D	8562	A midden deposit. Probably same as deposit [9641] in sampling sequence <9627> from 2009.
10618	D	10515	A sheet midden composed of wood ash and peat ash in north-west corner of extension area (10515)
10619	D	10590	A floor deposit in corridor (10590)
10620	D	10540	Fill of post hole [10621] in hearth (10540)
10621	C	10540	Post hole in hearth (10540) in area (10515)
10622	D	10675	A part of a platform of turf and stone (a base for an internals structure? A pavement?) on the east side of the north extension of building (10662). Phase 10664
10623	D	9560	Turf and stone collapse in area (9560)
10624	D	10664	A small lens of clean turf, separating floor deposits [10613] and [10630] in phase (10664) of building (10662)
10625	D	8562	A midden deposit in room (8562). Probably same as deposit [9643] in sampling sequence <9627> from 2009.
10626	D	9560	Turf and stone collapse in area (9560)
10627	D	10675	A part of a platform of turf and stone (a base for an internals structure? A pavement?) on the east side of the north extension of building (10662). Phase 10664
10628	D	10515	Turf collapse. A part of a sequence of collapse deposits under wall (10549)
10629	D	9560	Turf and stone collapse in area (9560)
10630	D	10664	A floor deposit belonging to phase (10664) of building (10662)
10631	D	9560	A possible entrance patio made of soil and gravel in area (9560)

10632	D	8562	A midden deposit in room (8562). Probably same as deposit [9643] in sampling sequence <9627> from 2009.
10633	D	10590	A floor deposit in corridor (10590)
10634	D	9502	A stone platform along the northern wall of room (9502). A possible base for an internal structure, such as a manger.
10635	D	10675	A part of a platform of turf and stone (a base for an internals structure? A pavement?) on the east side of the north extension of building (10662). Phase 10664
10636	D	9560	Turf and stone collapse in area (9560)
10637	D	9560	Turf and stone collapse in area (9560)
10638	D	10671	A part of a sequence of deposits of turf and stone, under phase (10676) of area (10671)
10639	D	10675	A part of a platform of turf and stone (a base for an internals structure? A pavement?) on the east side of the north extension of building (10662). Phase 10664
10640	D	9502	A small lens of turf collapse sitting directly under stone platform [10634] in room (9502)
10641	D	10515	An extensive deposit of turf collapse in area (10515) sitting directly on top of in situ tephra H~1693, unit [10661].
10642	D	9560	Turf and stone collapse in area (9560)
10643	D	10590	A floor deposit in corridor (10590)
10644	D	10678	A part of turf and stone wall (10678) in area (9560)
10645	D	10675	A part of a platform of turf and stone (a base for an internals structure? A pavement?) on the east side of the north extension of building (10662). Phase 10664
10646	D	10671	A part of a sequence of deposits of turf and stone, under phase (10676) of area (10671)
10647	D	9560	Turf and stone collapse in area (9560)
10648	D	10679	Turf and stone deposit. A part of a pavement in corridor (10590)
10649	D	10675	A part of a platform of turf and stone (a base for an internals structure? A pavement?) on the east side of the north extension of building (10662). Phase 10664
10650	D	10582	A row of stones. A part of a badly disturbed northern wall of room (10676)
10651	D	8590	A demolition deposit of turf and stone at the north- end of area (8590), "Middle area".
10652	D	8590	A demolition deposit of turf and stone at the north- end of area (8590), "Middle area".
10653	D	10675	A part of a platform of turf and stone (a base for an internals structure? A pavement?) on the east side of the north extension of building (10662). Phase 10664
10654	D	10582	A turf and stone deposit. A part of a badly disturbed northern wall of room (10676)
10656	D	10678	A part of turf and stone wall (10678) in area (9560)
10657	D	9560	A lens of wood- and peat ash sitting under wall (10678)
10658	D	9560	Turf and stone collapse in area (9560)
10659	D	8590	A made of stone at the north- end of area (8590), "Middle area".
10660	D	10582	A turf and stone deposit. A part of a badly disturbed northern wall of room (10676)
10661	D	10515	H~1693 tephra in situ. Not excavated in 2010
10662	G	10662	A building at the north- end of the excavation area with different phases

			of use, in chronological order, (9650), (10663) and (10664).
10663	G	10662	The second latest phase of building (10662).
10664	G	10662	The earliest phase of building (10662)
10665	D	10663	A post pad made of one flat stone. Belongs to phase (10663) of building (10662)
10666	D	10663	Fill of post hole [10667].
10667	C	10663	A post hole. Belongs to phase (10663) of building (10662).
10668	D	10663	Fill of post hole [10669]
10669	C	10663	A post hole. Belongs to phase (10663) of building (10662).
10670	D	10663	A post pad made of one flat stone. Belongs to phase (10663) of building (10662)
10671	G	10671	Area south from room (8562). Contains room (10676)
10672	G	10663	A coarsely made pavement of turf and stone in the front room of phase (10663) of building (10662). Units, [10525], [10576], [10593], [10603]
10673	G	10663	A platform made of turf and stone. (units 10599, 10538, 10584, 10588, 10578, 10594, 10611) A possible base of a manger, belonging to phase (10663) of building (10662)
10674	G	10663	A platform made of turf and stone. (units 10532 and 10539) A possible base of a manger, belonging to phase (10663) of building (10662)
10675	G	10664	A platform made of turf and stone. Units, [10611], [10622], [10627], [10635], [10639], [10645], [10649] and [10653]. East side of north extension of building (10662). Phase (10664)
10676	G	10671	A group containing deposits belonging to a room in area (10671)
10677	G	8562	A possible base for a manger in room 8562, made of turf and stone. Units, [10541], [10579], [10587], [10596] and [10602].
10678	G	9560	A wall made of turf and stone with concrete in between stones (10678) in area (9560). Excavated in two deposits units [10644] and [10656].
10679	G	10590	A pavement made of dark turf material and stones. Two units, [10591] and [10648].

Units Excavated in the Evaluation Trenches

Area 36

10034	D		Mid reddish brown silt with charcoal patches

Area 37

10040	D		Eastern wall of 17th-19th Century building
10041	D		Turf collapse at western side of TT37

Area 38

10046	D		Root mat and topsoil
10047	D		Turf collapse from 17th – 19th Century wall
10048	D		Stones from 17th-19th Century wall
10049	D		Mid brown silty deposit
10050	D		Thick root mat
10051	D		Topsoil, possibly same as [10046]
10052	D		Silty deposit, possibly same as [10049]
10053	D		Podzolised old land surface in section of area 38

10054	D		Lower horizon of land surface in section of area 38
10055	D		Natural beach gravel in section of area 38

Area 39

10056	D		Modern ashy midden

Area 40

10057	D		Yellow wall turf
10058	D		Brown and orange wall turf with H-1693 tephra
10059	D		Patch of collapse turf with H-1693 tephra
10060	D		Layer of stones and brownish turf collapse

Area 41

10061	D		Bluish/greenish grey coarse sand – old sea bed?
10062	D		Dark brown silty gravel
10063	D		Mid reddish brown and dark brown turf collapse

Area 42

10064	D		Topsoil over S side of homefield boundary
10065	D		Red and black turf

APPENDIX 2
SKRÁNING FORNLEIFA Í VATNSFJARÐARDAL
ARCHAEOLOGICAL SURVEY IN VATNSFJARÐARDALUR

Ásta Hermannsdóttir
Fornleifastofnun Íslands

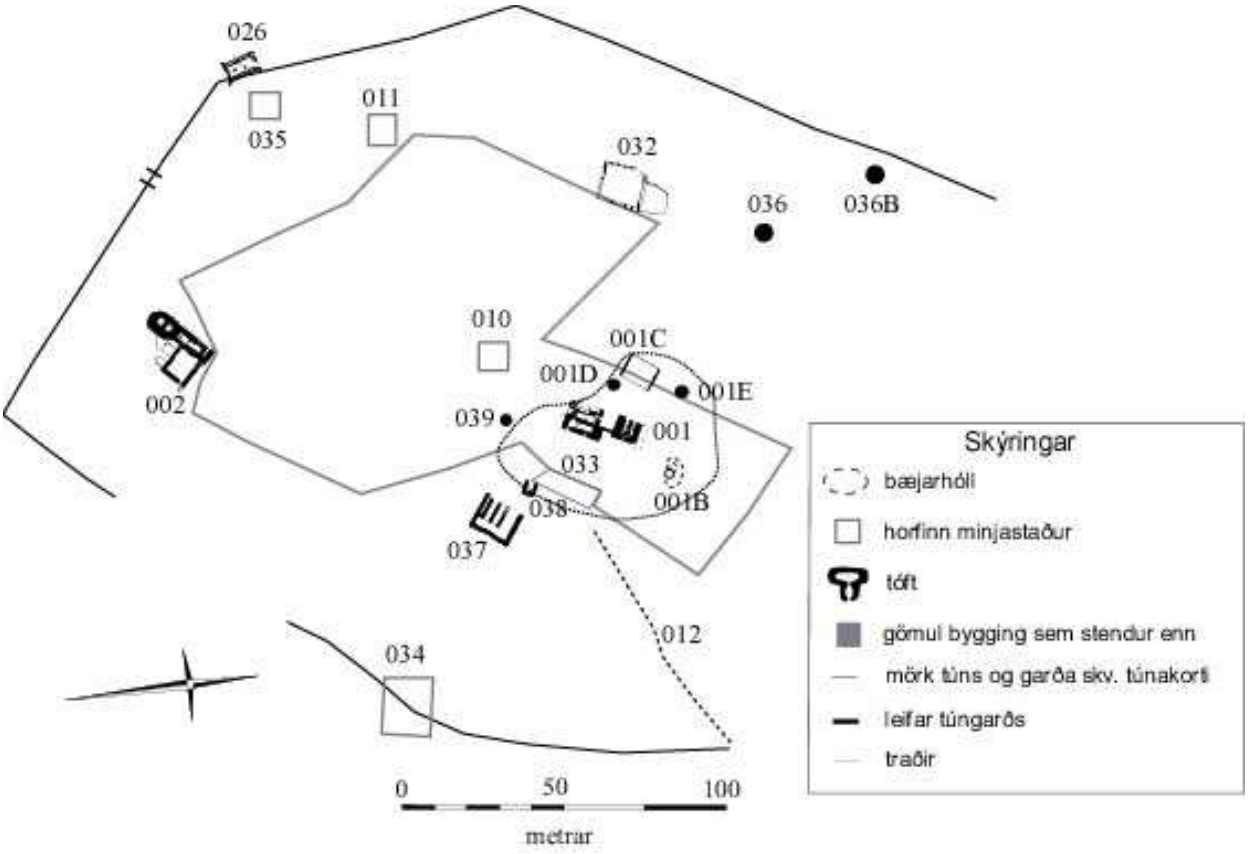
Sumarið 2010 voru skráðar fornleifar á fimm jörðum í Vatnsfjarðardal: Vatnsfirði (ÍS-205), Vatnsfjarðarseli (ÍS-204), Sveinhúsum (ÍS-206), Miðhúsum (ÍS-207) og Hálshúsum (ÍS-208). Ein jörð er til viðbótar í Vatnsfjarðardal, Þúfur (ÍS-209), en ekki gafst tími til að skrá fornleifar á henni í þetta sinn. Um fornleifaskráninguna sá Ásta Hermannsdóttir, fornleifafræðinemi, undir handleiðslu hinna ýmsu fornleifafræðinga, s.s. Guðrúnar Öldu Gísladóttur, Oscars Aldred og Elínar Óskar Hreiðarsdóttur, bæði við skráningu á vettvangi og úrvinnslu.

Fornleifaskráning sumarsins var ekki með sama móti á öllum jörðunum, en Vatnsfjarðarland var skráð í heild sinni á meðan einungis voru skráðar fornleifar innan túns á hinum fjórum bæjunum. Í Vatnsfjarðarlandi voru skráðar 82 fornleifar en innan túns í: Vatnsfjarðarseli 15 fornleifar, Sveinhúsum 18 fornleifar, Miðhúsum 10 fornleifar og Hálshúsum 7 fornleifar. Samtals voru því skráðar 132 fornleifar á Vatnsfjarðardal. Fornleifarnar eru af ýmsum toga og öllum aldri, allt frá víkingaöld fram á miðja 20. öld, frá fjöru til fjalls.

Hér á eftir er fornleifaskrá sumarsins en efninu mun verða gerð frekari skil á öðrum vettvangi síðar.

ÍS-204 Vatnsfjarðarsel/Seljaland/Sel

„Þessa jörð hafði Vatnsfjarðarprestur með frá Vatnsfirði og lét nytja þar kvíaær sínar á sumrum lengi vel. En um þessar mundir hafði hann byggt jörðina, og voru búendur Jón Jónsson, Jónssonar fyrrverandi bónda á keldu og kona hans Guðbjörg Sveinsdóttir“. (PP, bls. 61) - líklega frá tíma sr. Páls Ólafssonar í Vatnsfirði, 1901-1928. Jörðin fór í eyði 1950 skv. örnefnaskrá frá 1989.
Túnastærð 1,37 ha, matjurtagarðar 392 m2.

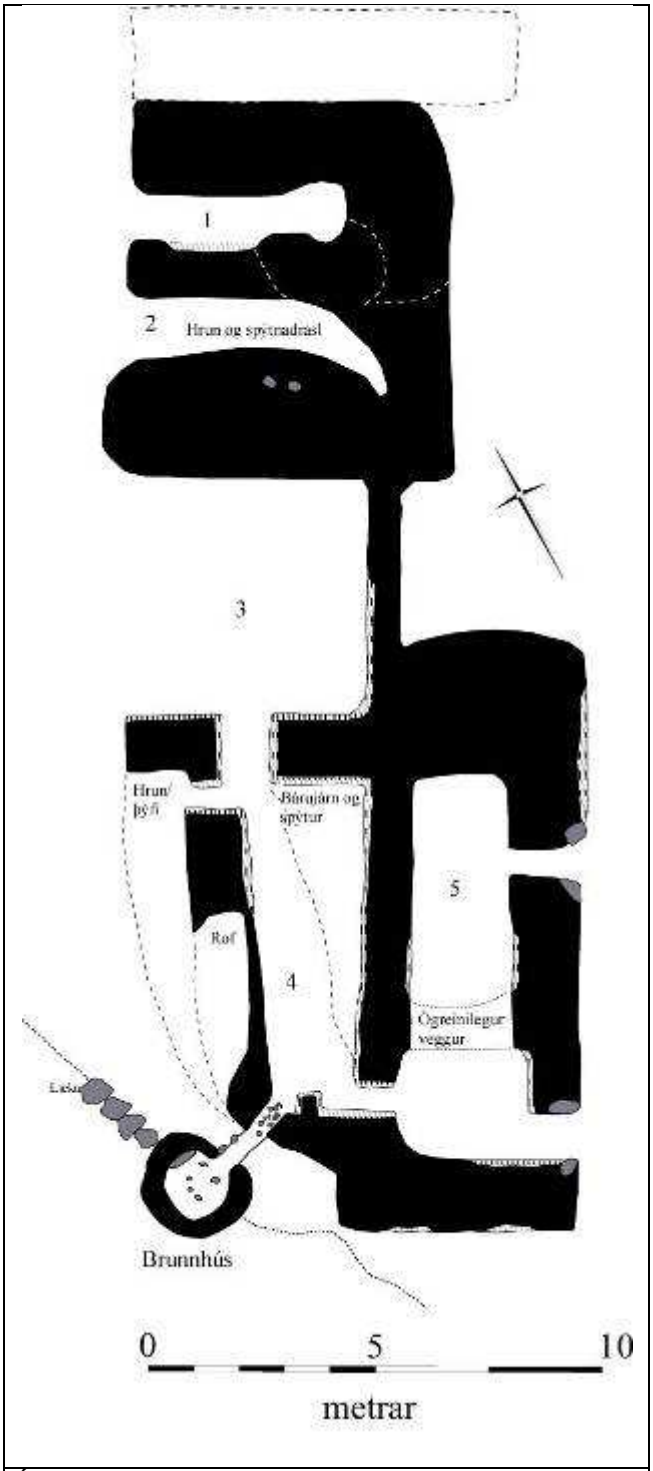


ÍS-204:001 *Seljaland (Sel)* bæjarhóll bústaður 6552.360N 2232.872V

Í Jarðabók Árna Magnússonar og Páls Vídalíns frá árinu 1710 segir: „Tóftarústir tvennar sjást hjer fram á fjallinu, lángt fram frá bygðinni, báðar hjá fremra Staðarvatninu, aðrar nærri heimra vatnshorninu, hinar við það fremra. Þar halda sumir að bygð hafi verið í fyrndinni, eftir sem líklegt sýnist á þessum tóftarústum, en enginn veit sá sem hjer er nálægur að undirrjetta hvað þessi býli hafi heitið, en löndin, sem þar liggja alla vega um kríng, eru nú almennilega kölluð Heiðarlönd, eignuð Vatnsfjarðarstað, en þó af öngvum sjerlega brúkuð, nema hvað hestar úr bygðinni kunna þángað gánga. Ekki má hjer bygð setja fyrir óbærilegu vetrarríki og fannlögnum, er þetta og fram á öræfis fjalli“. Í örnefnaskrá segir: „Í fjallinu fram af Þúfnadal og í vestur frá botni Reykjarfjarðardals, er stór lægð í fjallgarðinn og í henni tvö stór stöðuvötn. [...] Umhverfis vötnin er graslendi mikið og er bærinn Vatnsfjarðarsel í hlíðinni austan þeirra. Varla er vafi á því, að þarna hafa hinir fornu Vatnsfirðingar haft í seli, eins og sést í Grettissögu. En lengi fram eftir öldum hefur trúlega ekki verið búið þar fastri byggð. [...] Landamerki Vatnsfjarðarsels og Þúfna eru Kistulágar“. Bæjarhóllin er aflangur hóll í miðju túni Vatnsfjarðarsels sem er á milli Neðra- og Fremra- Selvatns. Á honum eru nokkrar rústir auk stafla af spýtum og bárujárni sem líklegast eru frá því að bærinn var rifinn.

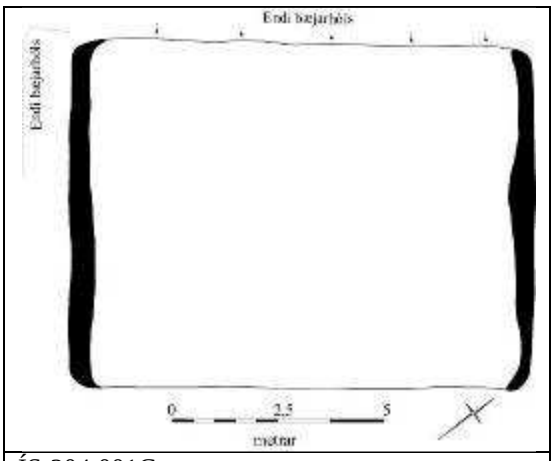
Bæjarhóllinn er í miðju túni. Norður og norðvestur af honum er mýrarflæmi bæði innan og utan túns. Á aðrar hliðar eru holt, þýfi og óslegið tún.

Í örnefnaskrá segir: „Þó að nú hafi verið föst byggð í Vatnsfjarðarseli í 150-200 ár [engin byggð er í Vatnsfjarðarseli þegar Jarðabók Árna Manússonar og Páls Vídalíns er skrifuð 1710 eins og kom fram hér að ofan], þá höfðu sumir Vatnsfjarðarprestar þar jafnframt selför. Í tíð séra Stefáns Stephensens, 1880-1900, var sá háttur hafður á, að málnytan var sótt frameftir á hverjum degi. Hafði einhver vinnukonan það starf á hendi og mjólkaði þá um leið kvöldmjöltina með selráðskonunni. Fór hún venjulega af stað frá Vatnsfirði um miðaftansleytið, ríðandi með trússahest í taumi. Vegurinn er langur og ógreiðfær, um tveggja tíma lestagangur hvora leið. Stúlka þessi kom því oft seint heim, en þá var yfirleitt minna sofið á sumrum en nú tíðkast“. Í



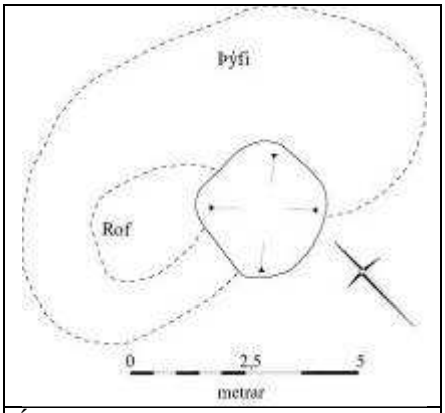
ÍS-204:001, teikning af bæjarrústum á bæjarhól.

örnefnasöfnun, sem skráð hefur Hróflur Valdimarsson, f. 1917, kemur það fram að afi og amma Hrólfs hafi flutt í Vatnsfjarðarsel 1878 og fimm árum seinna í Hálshús í sömu sveit þar sem þau bjuggur í 25 ár. Þá flytja þau aftur í Selið og búa þar til 1916, er faðir Hrólfs tekur við jörðinni og kaupir hana þremur árum seinna. Bjó hann þar til ársins 1945. Hrólfur ólst upp í Vatnsfjarðarseli til 21 aldurs, var í 6 ár vinnumaður í Vatnsfirði en flutti aftur í Selið að því loknu. Árið 1945 fór Hrólfur að búa í Vatnsfjarðarseli ásamt Gunnari bróður sínum og bjuggum þeir þar í 4 ár. Einnig segir Hrólfur: „Túnið í Vatnsfjarðarseli var lítið og þýft og sein slegið, töðufengur lítill og heyskapur mest af engjum. Faðir minn sléttaði þó nokkuð af túninu og árið 1929 byggði hann upp bæinn, og seinna fjárhús fyrir 120 fjár og 6 hesta. Fráfærum var hætt þar árið 1943. Síðast var þar tekinn upp mór árið 1948. [...] Búið var í Seli í eitt ár nokkrum árum eftir að við fluttum þaðan, síðan hefur það verið í eyði og nú ekkert eftir nema tóttirnar“. Vatnsfjarðarsel fór þar af leiðandi í eyði 1950. Hrólfur segir jafnframt: „...Bæjarhóll á honum stóð bærinn og fleiri byggingar. Innangengt var úr bænum í hlöðu, fjós og brunnhús“. Bæjarhóllinn er um 50x60 m stór og snýr norðaustur-suðvestur. Framhlið hans (norðnorðvestur) er skýr og og há eða um 10-15 m há. Norðnorðvestan í hólnum eru gerðisleifar, líklega kálgarður, C. Garðurinn er um 8x10 m að innanmáli. Veggir hans mjókka til suðvesturs og norðausturs, og því er utanmál garðsins aðeins 11x8 m. Vesturhorn garðsins og norðvesturhlið hans marka nokkurn vegin endamörk bæjarhólsins. Á sjálfum bæjarhólnum er tóft, um 26x10 m stór. Samkvæmt örnefnaskrá var innangengt á milli bæjarhúsa, fjóss, hlöðu og brunnhúss. Líklegast voru íveruhúsin til norðausturs og síðan fjós og hlaða og brunnhúsið suðvestast. Lýsing tófta hefst norðaustast þar sem e.k. pallur eða grunnur, um 8 m langur og um 2 m breiður upp að enda norðaustasta rýmisins (I). Fyrsta og annað rýmið virðast vera svipuð að stærð og lögun. Bæði eru þau illa farin af hruni, sérstaklega hólf II. Þar inni er fullt af byggingarefni o.s.frv. Bæði hólfin eru nú aðeins um 1x4,5 m að stærð en hólf II hefur þó verið örlítið lengra en hólf I. Bæði hólfin eru alveg opin til norðvesturs og hefur líklega verið timburþil fyrir. Suðvestan hólf I og II er stórt hólf (III) sem er um 5x5 m að innanmáli. Það er mun betur farið en hólfin norðaustar (I og II). Norðausturveggurinn er verst farinn og gróinn, en í öðrum veggjunum sjást greinilegar grjóthleðslur. Hólfið er opið til norðvesturs og líklegast hefur þar verið timburgafl. Suðvestur af hólfi III eru tvö hólf sem liggja þvert á shólf III. Annað (hólf IV) snýr frá því til norðvesturs en hitt til suðausturs (hólf V). Innangengt er á milli hólfa III og IV, um 1 m breiðar vel greinilegar dyr. Innangengt hefur síðan verið á milli rýma IV og V við suðurvegg, en þar er nú hrunið fyrir það. Hólf V virðist skiptast í tvennt. Nyrðri helmingurinn um 4,5x2 m að innanmáli, en syðri hlutinn um 2,5x2,5 m. Á milli þeirra er mögulega um 1 m breiður veggur, en einnig gæti verið um hrun að ræða, þess vegna verður talað um hólf V sem tvískipt hólf en ekki tvö sérstæð hólf. Tvö op eru á hólfi V til suðsuðausturs, bæði í norðurhluta og suðurhluta. Hólf IV er um 7x1,5 m að innanmáli nyrst en mjókkar til suðurs. Hleðslur sjást víða í því og hefur rusli, s.s. timbri og bárujárni verið safnað þangað inn. Úr suðvesturhorni þessa hólfs liggja um 2 m



ÍS-204:001C

löng göng að brunnhúsi sem er sérstakt hús, einungis tengt bæjarhúsunum með áðurnefndum göngum. Brunnhúsið er aðeins neðar en
bæjarhúsatóftin, og hefur verið byggt yfir bæjarlækinn sem er fremur lítill. Tóftin er um 2x2 m að utanmáli og er illa farið af hruni. Enn sést aðeins í grjóthleðslurnar innan í því. Eins og áður sagði er mikið af timburrusli og bárujárni í tóftunum, sem og í hrúgum framan við bæjarhúsarústina. Einnig eru heillegir hlutir eins og hlóðapottur o.þ.h. á staðnum. Ekkert af bæjarrústunum er lengur undir þaki, allt er hrunið eða hefur verið rifið. Veggjahæð er mest um 1,5 m og er þykkt greinilegra veggja mest um 2 m. Veggir eru hlaðnir úr grjóti eða torfi og grjóti. Bæjarhóllinn fjarar út við bæjarlækinn til suðvesturs. Neðan við brunnhúsið er á nokkurra metra kafla búið að leggja steinhellur yfir lækinn, líklegast til að hægt væri að ganga yfir hann örugglega og þurrum fótum. Við hinn enda bæjarhólsins er undarleg hola (B), um 3 m í þvermál og út frá henni er þýfi, allt upp í 4 m frá holunni sem gæti tengst henni. Holan er mest um 1,5 m djúp frá botni og upp á jafnsléttu. Mögulegt er að holan gæti markað staðsetningu byggingar en engar hleðslur eða önnur ummerki sjást. Holan er um 13 m norðaustur af norðurhorni „pallsins“ sem er við hólf I. Tvær aðrar þústir, D og E, eru greinanlegar á bæjarhólnum og eru þær líklega leifar mannvirkja eða öskuhauga. Þúst D er sunnar en þúst E. Báðar eru þústirnar grænar en falla saman við umhverfið og



ÍS-204:001B

Hættumat: engin hætta

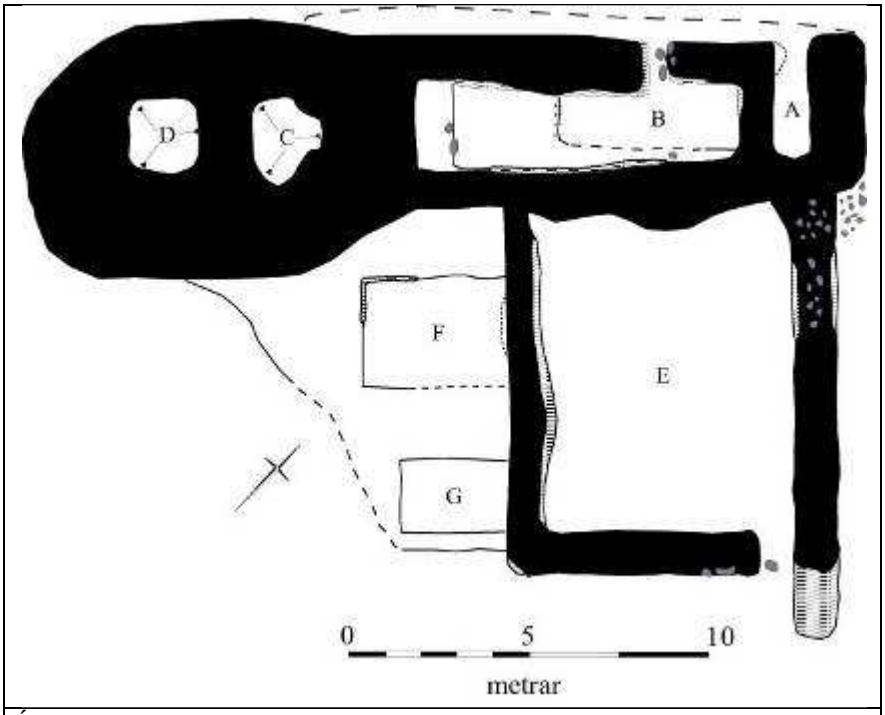
Heimildir:Túnakort (ártal vantar); JÁM VII, 218; Ö-Vatnsfjarðarsel (1935), 1, 3; Ö-Vatnsfjarðarsel (1989), 1, 3.


ÍS-204:001 – Bæjarhóllinn, horft til suðausturs.

ÍS-204:002 *Hesthúsflöt* tóft hesthús 6552.287N 2232.888V

Í örnefnaskrá frá 1935 segir: „Fram af bænum heitir Smiðjuhóll [010] og fram af honum Steinaflöt, en fram og niður frá henni er Hólhúsótt [011] og Hesthúsflöt upp af henni“. Í örnefnaskrá frá 1989 segir: „Á Hólnum efst og fremst í túninu eru gamlar húsatóttir, síðast var þar hesthús, neðan til við þær er Hesthúsflöt og þar fyrir

neðan er



ÍS-204:002

Rani“. Umrætt hús er merkt inn á túnakort frá því um 1920. Tóftin er um 130 m suðsuðvestur af bæjarhól 001. Tóftin er í þýfðu túni á litlum hól í syðra túngarðshorninu. Nokkru suðsuðaustan við hana er lækur og túngarðurinn á milli þeirra. Vel er gróið í kring.

Tóftin er um 23,5x16,5 m að stærð og skiptist í sjö hólf. Líklega eru þau ekki öll frá sama byggingarstiginu. Tóftin snýr norðaustur-suðvestur. Hólf A er nyrst í tóftinni. Það er um 1x3 m að innanmáli og snýr norðvestur-suðaustur. Op er á því á norðvesturvegg. Hólf B er um 8x2 m að innanmáli. Líkt er og einhverskonar mjór stallur hafi verið innan í rýminu við suðausturvegginn. Þegar komið er 5 m inn í rýmið hækkar það um 1 m og er þannig öftustu 3 metrana, s.s um einhverskonar pall virðist vera að ræða. Inngangur er á hólfið til norðarlega. Veggir eru stæðilegir þó þeir farnir að tapa lögun sinni á köflum en í hólfi B á veggir mest 2 m hæð, mælt innanfrá. Grjóthleðslur eru víða greinilegar. Aftan (suðvestan) við hólf B rými eru tvö hólf (C og D) sem virðast eldri, enda vart meira en dældir að sjá nú. Bæði hólfin eru um 2/2,5x2 m að stærð og mest um 1,5 m djúp. Mögulegt er að þær hafi einungis verið heygryfjur. Hólf E er nokkurn vegin í línu við útvegg rýmis A , s.s. á norðausturvegg. Það er um 8,5x7 m að innanmáli og gæti verið einhverskonar gerði. Það er afmarkað með grjótgarði. Op er við norðausturhorn til suðausturs. Aftan (suðvestan) við hólf E eru tvö hólf (F og G) sem gætu verið eldri en A, B og E. Hólf F er um 3x4 m að innanmáli og G um 2x3 m. Hvorugt þeirra hefur mikla veggi eða hleðslur og virðist sem, allavega F, hafi að hluta til verið grafið inn í hólinn, þó er eitthvað af grjóthleðslum í því hólfi. Þessi tvö hólf eru bæði ferköntuð og frekar ógreinileg. F og G eru lægri en önnur hólf vegna þess að þau hafa eiginlega enga veggi. Mesta veggjahæð er um 1 m í suðvesturhorni F. Þar er tóftin grafin niður og hlaðið upp með henni. Tóftin er hlaðin úr grjóti og mögulega torfi. Greinilegir veggir í tóftinni eru mest um 2 m breiðir. Veggir eru farnir að láta nokkuð á sjá en standa þó enn vel. Mjög líklegt er að eldri leifar leynist undir þessari tóft þar sem hún stendur á hól sem er um 1,5 m hár og nær sums staðar út fyrir tóftina.


ÍS-204:002 – Hesthúsflöt, horft í vestnorðvestur.

Hættumat: engin hætta

Heimildir:Ö-Vatnsfjarðarsel (1935), 3; Ö-Vatnsfjarðarsel (1989), 3. Túnakort (ártal vantar).

ÍS-204:010 *Smiðjuhóll* þúst smiðja 6552.344N 2232.893V

Í örnefnaskrá frá 1935 segir: „Fram af bænum heitir Smiðjuhóll og fram af honum Steinaflöt, en fram og niður

frá henni er Hólhúsótt [011] og Hesthúsflöt [002] upp af henni“. Í örnefnaskrá frá 1989 segir: „Á miðju túninu, innantil við bæjarlækinn, er Smiðjuhóll, búið er að slétta yfir tóttir sem voru þar, en hinum megin við lækinn er aflangur hóll Bæjarhóll [001]“. Smiðjuhóll er fast suðvestur af bæjarhól 001, hólarnir myndu í raun mætast ef bæjarlækurinn rynni ekki á milli þeirra.

Smiðjuhóll er innan túns og hefur verið sléttaður. Norðan við hann eru blautir mýrarflákar innan túns, en sunnan hans eru nokkuð sléttar flatir og síðan holt, í halla upp á við til suðurs.


ÍS-204:010 – Smiðjuhóll, horft í suðsuðvestur.

Hóllinn er 10-15 m og er grænn blettur á honum framarlega (norðvestarlega) fyrir miðju líklega þar sem yngstu húsin stóðu fyrir sléttun. Hóllinn er um 20x10 m og snýr norðaustur-suðvestur. Erfitt er þó raunar að ákvarða hvar honum sleppir til suðausturs þar sem hann fjarar þar út í landslagið. Að framan, norðvestan, er bratt niður af honum að blautu túni, en að suðaustan er fjarar hann út í landslagið. Neðan svarðar eru án efa gamlar minjar, en þó eitthvað af hæð hans gefi til kynna mannvistaruppsöfnun er hluti af honum líklega náttúrulegur.

Hættumat: engin hætta

Heimildir:Ö-Vatnsfjarðarsel (1935), 3; Ö-Vatnsfjarðarsel (1989), 3.

ÍS-204:011 *Hólhústótt* þúst óþekkt 6552.324N 2232.983V

Í örnefnaskrá frá 1935 segir: „Fram af bænum heitir Smiðjuhóll [010] og fram af honum Steinaflöt, en fram og niður frá henni er Hólhústótt og Hesthúsflöt [002] upp af henni“.

Í örnefnaskrá frá 1989 segir: „Hólhúsflöt þar voru gamlar húsatóttir en búið er að slétta þar“. Hóllinn er um 100 m vestur af bæjarhól 001, rétt austan túngarðs 025.


ÍS-204:011 – Hólhúsflöt, horft í vestsuðvestur.

Hóllinn er í túni og er túngarður vestan við hann. Þar inn (suðvestur) af er holt. Austan við hólinn er þýfi og að sunnan er flöt. Að norðan er þýft deiglendi innan túns.

Hóllinn er rúmlega 20 m á hvorn veg en erfitt er að segja til um nákvæma stærð þar sem hann fellur saman við umhverfið að sunnan og er aflíðandi á aðra kanta. Hóllinn er grænn að ofan og er mjög líklegt að mannvistarleifar leynist í honum undir sverði. Hann er álíka hár og Smiðjuhóll 010, eða 10-15 m hár. Sléttað hefur verið yfir hólinn og ekki sér móta fyrir neinum tóftum á honum.

Hættumat: engin hætta

Heimildir:Ö-Vatnsfjarðarsel (1935), 3; Ö-Vatnsfjarðarsel (1989), 3.

ÍS-204:012 vegur leið 6552.359N 2232.828V

Um 20 m austur af bæjarhól 001 má greina upphleðslu á leið sem liggur austur frá bæjarhól 001, út túnið.

Upphleðslan liggur í gegnum smáþýft, grösugt tún og yfir eina lækjarsprænu.

Upphleðslan er mest um 2 m breið og er um 85 m á lengd innan túns. Utan túns heldur leiðin áfram, þó ekki upphlaðin, upp í hlíðina, líklega áfram yfir til Reykjafjarðar (019, hefur ekki verið skráð á vettvangi). Upphleðslan er nokkuð greinileg enn þó hún sé mjög gróin og farin að síga ofan í mýrina. Hún er þó frekar lá, mest um 0,5 m yfir jafnsléttu. Ekkert grjót sést í henni.

Hættumat: engin hætta


ÍS-204:012 – Upphlaðinn vegur, horft í austnorðaustur.

ÍS-204:025 garðlag túngarður 6552.279N 2232.834V

Í örnefnaskrá frá 1989 segir: „Ytri kantur túnsins var girtur með gaddavírsgirðingu, nokkuð fram með túninu að ofanverðu og neðanverðu voru grafnir skurðir og uppgreftinum hlaðið í vegg á bakkana, en fram að túnhornum voru veggir hlaðnir úr grjóti og einnig fremri kantur túnsins, á alla veggina var girt með 2 gaddavírssnúrum“. Túnið í Vatnsfjarðarseli snýr nálega norður-suður og er það um 310x230 m að stærð, afmarkað af túngarði. Túngarðurinn afmarkar túnið að mestu leyti að austan, sunnan og vestan.

Túngarðurinn liggur nú bæði um mýrlendi, grasigróið svæði og grýtt svæði með holtagróðri.

Túngarðurinn er að hluta hlaðinn úr grjóti og að hluta mótaður með uppkasti úr skurðum. Hluti túnsins var einungis girtur af með vírgirðingu. Þar sem túngarðurinn var hlaðinn úr grjóti, að sunnan, suðaustan, suðvestan og vestan til er hann um 1 m breiður og mest um 1,3 m hár og girt ofan á hann. Þar sem hann er mótaður úr uppkasti úr skurði, að austan, og aðeins að norðvestan, er hann um 1 m breiður og mest tæplega 2 m hár, frá skurðbotni og upp úr, mest tæplega 1 m hár frá túni. Að norðvestan, norðan og norðaustan var túnið aðeins girt með vírgirðingu. Garðurinn er í heild sinni, þ.e. grjóthlaðinn garður og uppkast, um 620 m á lengd. Suðvestarlega er hlið á túngarðinum þar sem hann er hlaðinn úr grjóti, það er um 1m breitt. Þar hefur verið viðarhleri fyrir opinu, en hann liggur nú á jörðinni.

ÍS-204:025 – Túngarðurinn, horft í norðnorðaustur.

Hættumat: engin hætta

Heimildir:Ö-Vatnsfjarðarsel (1989), 3.

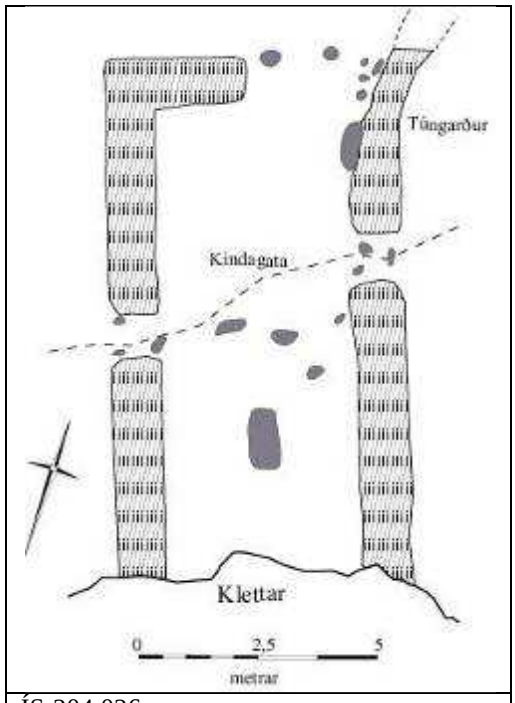
ÍS-204:026 *Réttarhjalli* tóft rétt 6552.304N 2233.003V

Í örnefnaskrá frá 1989 segir: „Upp með túngarðinum [025] eru klettar, fyrir neðan þá og fram af Hólhúsflötinni [011] er fjárrétt hlaðin úr grjóti, og þar fram af er Réttarhjallinn. Á meðan fært var frá voru ærnar mjólkaðar í réttinni nema síðustu árin í færikvíum“. Um 150 m vestsuðvestur af bæjarhól 001, við túngarð 025 vestan Hólhúsflatar er rétt.

Réttin er á sléttum fleti í örlitlum halla við klettabelti, rétt utan við tún. Í kring er smáþýft og grasi vaxið.

Réttin er alfarið hlaðin úr grjóti, heilleg og 10,5x6 m að utanmáli. Hún er 9,5x4 m að innanmáli og er við túngarðinn, þar sem hann er hlaðinn, undir litlu klettabelti. Klettarnir mynda einn vegg réttarinnar og réttin liggur norðnorðvestur frá þeim. Op eru á réttinni, bæði inn í túnið (til austurs) og út á holtið (til vesturs), um 1 m breið hvort. Til norðnorðvesturs er gat í vegginn um 3 m langt þar sem veggur ætti að mæta túngarði. Nokkrir steinar sjást á þessum stað og líklegt upprunalega hafi verið hlaðið alla leið. Veggir réttarinnar eru um 1 m breiðir og mest um 1,4 m háir.

ÍS-204:026 – Réttin við túngarðinn, horft í norður.

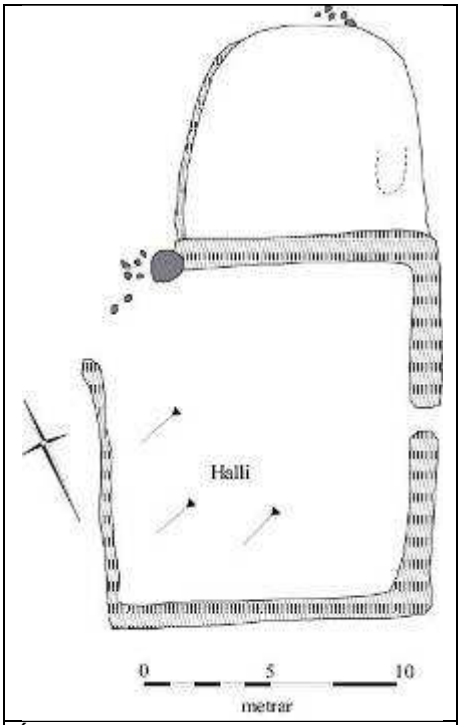


ÍS-204:026

Hættumat: engin hætta

Heimildir:Ö-Vatnsfjarðarsel (1989), 3.

ÍS-204:032 *Kálgarðsflöt* gerði kálgarður 6552.355N 2232.984V



ÍS-204:032

Um 80 m vestur af bæjarhól 001 er hlaðinn kálgarður. Hans er getið í örnefnaskrá frá 1989: „Hólhúsflöt [011] þar voru gamlar húsatóttir en búið að slétta þar. Kálgarðsflöt og garður, ofan við flötina er lítill blettur Mjallhvít...“.
Kálgarðurinn er á litlum hól norðan við Hólhúsflöt 011. Í kringum garðinn er smáþýft tún, blautt að norðan og vestan.
Garðurinn er hlaðinn úr grjóti og virðast leifar eldri garðs vera norðan við hann. Sameiginleg lengd og breidd garðanna tveggja er um 23x13 m. Yngri og greinilegri kálgarðurinn er 15x13 m stór og snýr norðnorðaustur-suðsuðvestur. Op er á honum til austsuðausturs. Grjóthleðslan í garðinum er um 1 m breið til norðurs, austurs og suðurs. Til vesturs er landslagið lægra en garðurinn og er yfirborð garðsins þar um 1,2 m hærra en túnið vestan við. Þar hefur því verið hlaðinn veggur úr grjóti (1,2 m hár), frá túni og upp að kálgarðsbrún, sem garðurinn endar ofan á. Kálgarðurinn sjálfur er mest um 1m hár yfir jafnsléttu séð austan frá, en yfirleitt mun lægri. Eldri garðurinn er norðan við þann yngri, áfastur honum á norður-hleðslu. Hann er um 10 m breiður, norðan við sameiginlega hleðslu garðanna, og hann liggur um 8 m frá henni. Ekki sést greinleg grjóthleðsla í kringum þennan garð en líklega hefur þó verið hlaðið í kringum hann, svipað og vesturhleðslur í hinum garðinum. Kantar gamla garðsins, sem að hluta eru hlaðnir úr grjóti, eru mest um 1 m á hæð. Báðir eru garðarnir í miklum halla, sá yngri til vestur og sá eldri sérstaklega til norðvesturs.


ÍS-204:032 – Yngri kálgarðurinn, sá eldri hinum megin á hólnum, horft í norður.

Hættumat: engin hætta
Heimildir:Túnakort (ártal vantar); Ö- Vatnsfjarðarsel (1989), 3.

ÍS-204:033 heimild um kálgarð 6552.358N 2232.856V
Fast aftan (austan) við bæjarhúsin á bæjarhól 001 var kálgarður samkvæmt túnakorti.
Svæðið er smáþýft og gróið grænu grasi, í halla.
Ekkert sést móta fyrir garðinum lengur. Túnakort var nær örugglega teiknað fyrir uppbyggingu bæjarins (1929) og getur því verið að hann hafi verið aflagður við þær framkvæmdir.
Hættumat: engin hætta
Heimildir:Túnakort (ártal vantar).

ÍS-204:034 heimild um kálgarð
Á túnakorti er merktur kálgarður utan túns, um 80 m suðsuðaustan bæjarhóls. Ekki er öruggt að kálgarðar sem merktir eru inn á túnakort á þessu landsvæði (sbr. villu í Sveinhúsum, 206-021 og 032) séu rétt staðsettir og því var ekki hægt að staðsetja kálgarðinn nákvæmlega fyrst engin merki eru um hann í dag
Svæðið einkennist af holtum, grónum lyngi og öðrum holtagróðri, utan túns, og er það mjög óslétt.
Kálgarðurinn fannst ekki. Ef marka má fjarlægðir á túnakorti þá er hann horfinn. Kálgarðurinn gæti jafnvel hafa verið innan túns eins og það er nú. Hann hefur líklegast gróið upp eftir notkun eða sléttað verið úr honum. Gengið var um svæðið ofan túns þar sem garðurinn á að hafa verið samkvæmt túnakortinu en engar leifar kálgarðsins fundust.
Hættumat: engin hætta
Heimildir:Túnakort (ártal vantar).

ÍS-204:035 álagablettur 6552.304N 2232.990V

ÍS-204:035 – Svæðið sem álagbletturinn hefur að öllum líkindum verið á, horft í suðvestur.

Álagablettur er í túni rétt innan (norðan) við rétt 026 samkvæmt Hrólfi Aðalsteini Valdimarssyni. Bletturinn hafði þau álög á sér að ef hann væri sleginn myndi eitthvað slæmt henda kindurnar á bænum.

Á þessu svæði í túninu verður nokkur breyting á gróðurfari þar sem það breytist úr grasi í lyng. Enginn sérstakur blettur sker sig úr umhverfinu á þessu svæði með því að bera þess merki að hafa ekki verið sleginn. Líklegt er að bletturinn hafi verið á grasivöxnu svæði þegar túnið var enn slegið, fyrst ekki mátti slá hann, en mögulegt er að í seinni tíð hafi lyng breitt úr sér og m.a. hulið blettinn.

Hættumat: engin hætta

ÍS-204:036 náma mógrafir 6552.388N 2232.944V

ÍS-204:036 – Mógrafir, horft í norður.

Mógrafir eru um 70 m norðvestur af bæjarhól 001, í túnjaðri. Grafirnar eru nefndar í örnefnaskrá frá 1989, þó einungis með einu orði: „mógrafir“ en síðan merktar inn á örnefnakort sem fylgir örnefnaskránni.

Mógrafirnar eru í mýri innan túns og rennur lækur í gegnum svæðið.

Grafirnar eru merktar inn á örnefnakorti Hrólfs Valdimarssonar og það sést enn móta fyrir þeim þó erfitt sé að skilgreina mörk þeirra þar sem þær eru nú grónar og ógreinilegar. Mest er um 1 m niður á botn grafanna af jafnsléttu á túninu. Gróflega áætlað eru mógrafirnar um 20x30 m á stærð. Um 5 m neðar (vestar) í túninu, við túngarðinn er um 20x7 m stór mógröf, næstum ferhyrnd. Hún teygir sig út fyrir túngarðinn. Þessi mógröf er aðeins dýpri en sú fyrrnefnda. Báðar mógrafirnar snúa norðnorðaustur-suðsuðvestur, en saman snúa þær nær vestnorðvestri-austsuðaustri.

Hættumat: engin hætta

Heimildir:Ö-Vatnsfjarðarsel (1989), 3; Örnefnakort Hrólfs Valdimarssonar.

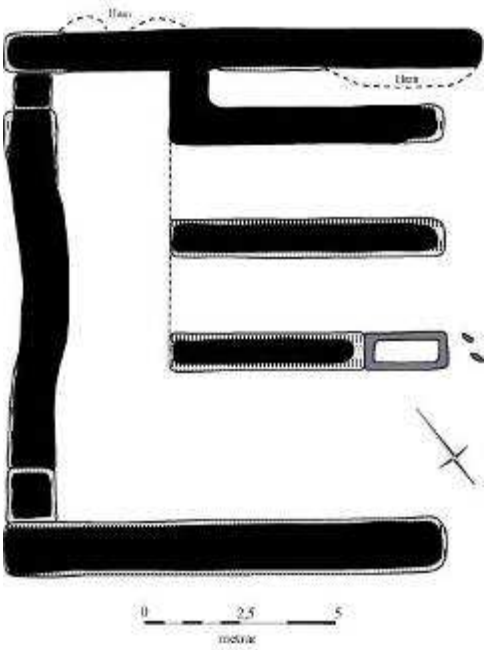
ÍS-204:037 tóft fjárhús 6552.346N 2232.827V

ÍS-204:037 – Fjárhústóft (tóft 038 framan við hana), horft í suðaustur.

Um 40 m aftan (austan) við bæjarhól 001, eru fjárhústóftir.

Fjárhúsin eru á tiltölulega sléttum bletti í túninu, grónum grasi. Nokkru suðvestar er bæjarlækurinn og annar lækur nokkru austan við þau.

Húsin virðast nú eitt stórt hólf en hafa mögulega skipst upp í hólfá meðan þau voru í notkun. Þrír garðar skipta húsunum upp. Húsin eru um 14,5x12 m að stærð. Að innanmáli er þau um 10x12 m og eru veggir mest um 1,5 m breiðir og um 1,7 m háir. Húsin snúa norðaustur-suðvestur og eru opin til norðvesturs þar sem líklega hefur verið timburþil. Veggir tóftarinnar eru heilir nema að á bakhliðinni (suðaustur) þar sem 1 m háir pallar eru hvor í sínu horninu. Sá syðri um 1 m breiður og sá nyrðri um 1,5 m breiður, báðir um 1 m á dýpt. Mögulegt er að þetta hafi verið inngangar eða lúgur eða eitthvað þess háttar. Veggurinn til suðausturs hefur

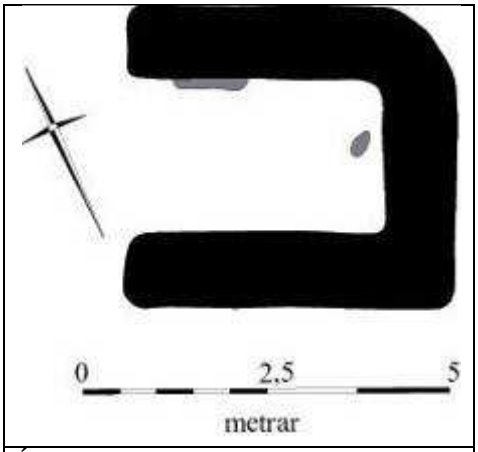


ÍS-204:037

sigið nokkuð inn í rústina fyrir miðju en annars standa veggir vel. Yfirleitt sjást grjóthleðslur í veggjum. Garðarnir eru allir um 1 m á breidd en um 7 m á lengd. Þeir liggja frá norðvesturenda tóftarinnar (þar sem enginn veggur er) og enda um 3 m frá suðausturvegg innanverðum. Örlítill þröskuldur er við enda garðanna að sunnan og getur það bent til að suðurhlutinn hafi verið stúkaður af, mögulega hefur þar verið hlaða. Nyrsti hluti tóftarinnar er stærstur og er líklegt að þar hafi hestar verið en samkvæmt örnefnaskrá var húsið byggt fyrir 120 fjár og 6 hesta. Nokkuð er af timbri og drasli í hrúgum í húsinu, líklegast síðan þak og tréverk var rifið. Kindabað er við vestari enda nyrsta garðsins, steypt, um 2 m á lengd. Veggir eru hlaðnir úr torfi og grjóti og einungis steypa í kindabaðinu og í þunnu lagi ofan á garðanum sem það stendur við. Syðsti garðinn er mun grónari en hinir tveir.
Hættumat: engin hætta
Heimildir:Ö-vatnsfjarðarsel (1989), 1.

ÍS-204:038 tóft útihús 6552.349N 2232.841V
Lítil tóft er um 30 m aftan (austan) við bæjarhól 001, á milli hans og fjárhúsa 037.
Tóftin er í svolitlum halla í þýfðu, grasi grónu túni, rétt við enda bæjarhóls.
Tóftin er aðeins grafin inn í hallann og er suðausturendi hennar dýpstur. Tóftin er 3,5x2 m að innanmáli og snýr norðvestur-suðaustur. Eitthvað er af steinum við niðurgröftinn en líklegt er að tréverk hafi verið í mannvirkinu. Niðurgröfturinn er mest um 1 m djúpur innst. Að framan (norðvestan) er hvorki að sjá niðurgröft eða vegg og hefur líklega verið timburþil fyrir þeirri hlið. Timbur- og bárujárnsdrasl er við austurhorn tóftarinnar, líklegast frá því að mannvirkið var rifið.
Hættumat: engin hætta


ÍS-204:038 – Tóft með óþekkt hlutverk, horft í suðaustur (fjárhús 037 í bakgrunni).



ÍS-204:038

ÍS-204:039 hleðsla brú 6552.345N 2232.868V

Rétt við suðurhorn bæjarhóls 001, yfir bæjarlæknum á milli bæjarhóls 001 og Smiðjuhóls 010, er hlaðin brú.

Túnið er á þessu svæði þýft og blautt en vel gróið.

Brúin hefur líklega verið hlaðin til að auðvelda yfirferð yfir bæjarlækinn rétt sunnan við bæjarhólinn (001), til að komast yfir á Smiðjuhól (010) og suðvesturhluta túnsins. Á þessum stað hefur verið hlaðið upp einhverju af grjóti og þrjár stórar hellur lagðar ofan á sem mynda um 1 m breiða brú yfir þessa litlu sprænu. Um 1 m er frá efri brún brúarinnar niður í lækjarfarveginn.

Hættumat: engin hætta

ÍS-204:039 – Brú yfir bæjarlækinn, horft í suðsuðaustur.

ÍS-205 Vatnsfjörður

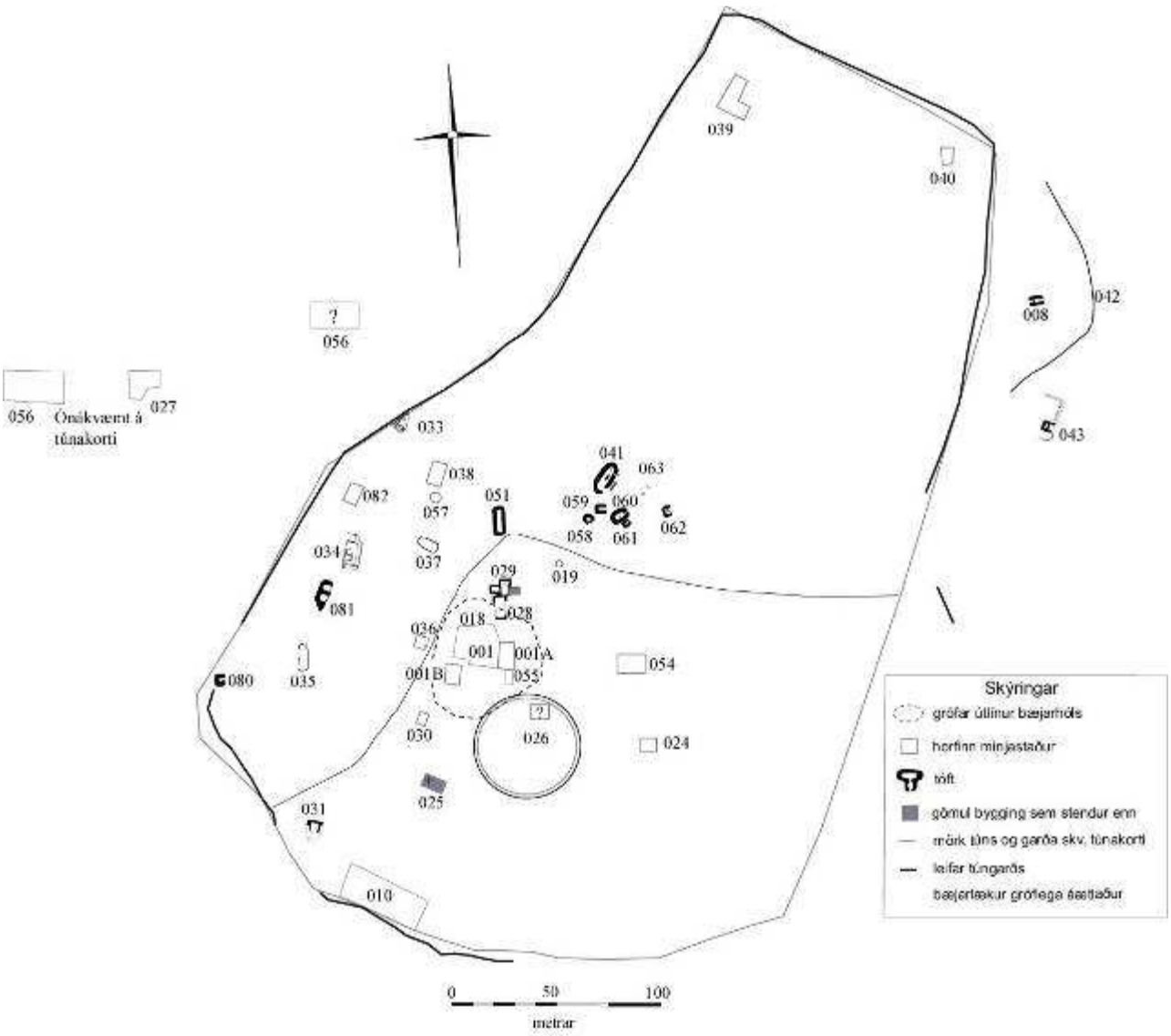
Jarðadýrleiki 24 hundruð. 1805 er jörðin talin 48 hundruð að dýrleika með Borgarey og eyðihjáleigan Vatnsfjarðarkot talin með jörðinni. „Snæbjörn, sonr Eyvindar Austmanns, bróðir Helga magra, nam land milli Mjóvafjarðar og Langadalsá ok bjó í Vatnsfirði“ (ÍF, I. Landnáma, bls. 112).

„Önnur var Guðrún, er átti Kjartan Ásgeirsson ór Vatnsfirði. Þeira börn Þorvaldr og Ingiríðr, er Guðlaugr prestur átti“ (ÍF I. Landnáma, bls. 140). „Þá er Gizurr byskup andaðist, váru þessir mestir höfðingjar á Íslandi: Hafliði Másson, norðr ok synir Ásbjarnar Arnórssonar í Skagafirði, Þeirgeirr Hallsson ok Ketill prestr Þorsteinsson, en austr Gizurr Einarsson, Sigmundr Þorgilsson, - hann andaðist á því ári í Rómför, - en suðr Hallr Teitsson, Skúli Egilsson, en vestr Styrmir Hreinsson, Halldórr Egilsson, Þorgils Oddason, Þórðr Egilsson, Þórðr Þorvaldsson í Vatnsfirði“ (ÍF I. Kristnisaga, bls. 279).

„Það sama vár fór Snorri goði suðr til Borgarfjarðar í málatilbúnað eftir víg Styrs við fjögur hundruð manna. Þar var í ferð með honum Vermundr inn mjóvi, bróðir Styrs. Hann bjó þá í Vatnsfirði“ (ÍF III, Eyrbyggja, bls. 152). „Þar var Þorfinna, kona hans, með honum. Hon var dottir Vermundar ór Vatnsfirði“ (ÍF III. Bjarnar saga Hítdælakappa, bls. 261). „Hon var kölluð Þorbjörg digra ok var gift vestr í Vatnsfjörð Ásgeiri Knattarsyni“ (ÍF IV. Laxdæla saga, bls. 84). „Á þeim tíma var höfðingi ágætr á Íslandi í Ísafirði, er Vermundr hét. Hann var Þorgrímsson, bróðir Víga-Styr. Vermundr hafði bústað í Vatnsfirði. Hann var vitr ok vinsæll. Hann átti konu þá er Þorbjörg hét. Hon var kölluð Þorbjörg digra, dóttir Ólafs pá“ (ÍF V. Fóstbræðra saga, bls. 202). „Nú er frá því sagt, at á einu sumri kom til Nóregs útan af Íslandi Brandr, sonr Vermundar í Vatnsfirði. Hann var kallaðr Brandr inn örvi“ (ÍF V. Brands þáttur örva, bls. 401). „Þá sá þeir ríða þrjá menn neðan eftir dalnum. Var einn í litklæðum. Þeir gátu, at þar myndi fara Þorbjörg húsfreyja ór Vatnsfirði, ok svá var. Ætlaði hún til sels“ (ÍF VI. Grettis saga, bls. 168). „Þess er getit eitthvert sinn er hann fór sunnan ok kom við Nóreg, þá var með Ólafi konungi Brandr inn örvi, sonr Vermundar ór Vatnsfirði“ (ÍF XII. Ísleifs þáttur byskups, bls. 85). „Þorvaldur Snorrason bjó þá í Vatnsfirði. Hann var þá kallaðr sáttr við alla menn ok hafði þá heldr mannfátt“ (Sturl. saga. II., Íslendinga saga, bls. 110). „Sturlu Sighvatsson sendi menn um haustit til Vatnsfjarðar ok lét bjóða Þorvaldssonum sætt fyrir Hrafnssonu ok brennu“ (Sturl. saga. II., Íslendinga saga, bls. 163). [1273] „Á tilsettum degi, þat ár er virðuligr herra Jón erkibyskup hafði til sín kallat þá menn, sem honum líkaði við þetta mál at hafa, var fyrstr af þeim herra Árni byskup af Skálaholti, er hann skipaði at vera sóknarmann á Sighvat Hálfdánarson ok á annan mann, Einar Vatnsfirðing. Sighvatr helt Oddakirkju ok átti at svara fyrir bræðr sína, Loft ok Sturlu. Einarr helt Vatnsfjarðarkirkju ok átti fyrir hana svörum at halda. ... Ok af því at þetta mál er til várs dóms komit, þá gerum vér þenna órskurð í nafni föður ok sonar ok heilags anda, at vald ok skipan, forræði ok varðveisla Oddastaðar ok Ólafskirkju í Vatnsfirði með öllu því, sem þar liggr til, hvárt sem þat er tekit eða ótekit, neytt eða óneytt, nema þat eitt, sem til kirkju þarfenda hefir haft verit, dæmum vér undir Árna byskup í Skálaholti ok hans lögliga eftirkomendur honum ok þeim eilíflega fyrir at ráða ok fyrirbjóðum Sighvati ok bræðrum hans ok svá þeira örfum, Einari og hans örfum nökkurt tilkall um þetta“ (Byskupa sögur I., Árna saga byskups, bls. 308-310). [1273] „Úrskurðr Jóns erkibiskups í Niðarósi, þar sem hann dæmir Odda og Vatnsfjörð undir forræði Skálholtsbiskups“ (D.I., II., bls. 94-100). [1327] „Rekaskrá Vatnsfjarðarkirkju“ (D.I., II., bls. 618-20). [1312] „Fjarðatal á Íslandi“ (D.I.III., bls. 16). „Biskupstíundareikningr í Stranda- og Norður-Ísafjarðarsýslu

... J vatzfirde fiorar merkur“ (D.I. III., bls. 96). [1360] „Snorri prestr Kyngir Þorleifsson commissarius generalis et specialis in spiritualibus Skálholtskirkju úrskurðar Vatnsfjarðarkirkju samkvæmt máldaga hennar árlegt ærgjald úr Æðey“ (D.I. III., bls. 146). [1366] „Úrskurðr Snorra kyngis Þorleifssonar officialis Skálholtskirkju um að allir búfastir menn, þeir er af landi hafa milli Ísafjarðarár og Kleifa í Seyðisfirði, sé samkvæmt máldaga kirkjunnar í Vatnsfirði skyldir að all henni lamb eða gefa ella“ (D.I. III., bls. 211). [1367] Hítardalsbók. „cxli. Kirkia j vatzfirde a heimaland halftt. Borgarey halfa“ (D.I.III., bls. 211). [1377] „Úrskurður Jóns ábóta í Viðey officialis í Vestfjörðum um hvalreka Vatnsfjarðarkirkju á almenningum“ (D.I.III., bls. 329).
[1383] „Testamentisbréf Einar Eiríkssonar í Vatnsfirði í transskripti tveggja presta pg tveggja leikmanna“ (D.I. III., bls. 365). [1387] „Jón Nikulásson selr Birni Einarssyni hálfan Vatnsfjörð fyrir fimmtán tigi hundraða“ (D.I. III., bls. 399). [1392] „Nikulás Jónsson selur Birni Einarssyni tvo hluti af fiskatollinum í Bolungarvík, er hann hafði eignast eptir Einar Eiríksson andaðan“ (D.I. III., bls. 476). [1405] „Sálugjafarbréf Bjarnar Einarssonar Jórsalafara“ (D.I.III., bls. 702). [1397] Vilchinsbók. „Kirkia i Wattzfirdi a heimaland halftt. Borgarey halfa. Þwfnaland. Eyri j Miofafirdi halfa. Hestland allt. Heidarlond bædi“ (D.I. IV., bls. 133-135). [1433] „Hústrú Sólveig Þorsteinsdóttir gefr Birni Þorleifssyni dóttursyni sínum hálfan Vatnsfjörð í Ísafirði með gögnum og gæðum, og skipar á jörðina ómagaskyldu um fimtán ár, og samþykti Kristín móðir hans þenna gjörning, en Björn má ekki lóga jörðinni“ (D.I. VI., bls. 529). [1452] „Gottskálk biskup á Hólum og adiministrator heilagarar Skálholtskirkju veitir hverjum þeim fjörutíu daga aflát, er mað góðfýsi sækja til kirkju heilags Ólafs kongs í Vatnsfirði á tilgreindum helgidögum eða leggi kirkjunni lið, og svo fyrir ýmsa aðra guðrækni“ (D.I. V., bls. 94). [1460] „Ólafr Ísleiksson prófastr milli Geirólfs(gnúps] og Langaness úrskurður jörðina í Vogum Vatnsfjarðarkirkju til æfinlegrar eignar samkvæmt testamentisbréfi Einars Eiríkssonar, er Björn bóndi Þoleifsson bar fram“ (D.I. V., bls. 207). [1469] Vitnisburður Jóns Alexíussonar um Bolungarvíkurtolla Vatnsfjarðarkirkju. „Þat giore ek jon alexiusson godum monnum kunnigt med þessu minv opnu brefe ad ek medkennunzt ad ek hefe afuent birne bonda þorleifssyne ad skipan hustru kristinar biornsdottr suo latanda bref annara orda j mille ad aller þeir menn sem j bolungarvik vilia roa skulu ad frialsu koma þar ad grogoriusmesso ok fara j burt ad michaelsmesso enn heimil vertid þar a mille ok syllde huer hlutarmadur giallda kirkiunne j vassfirde halfa vætt fiska ok huer hlafhlytingr tuo fiordunga“ (D.I. V., bls. 535). [1474] „Jón Alexíusson vottar, að Björn Þorleifsson hafi handlagt Kristínu Björnsdóttur móður sinni, að Sólveig dóttir Björns skyldi eiga Vatnsfjörð, sem Sólveig Þorsteinsdóttir móður-móðir hans gaf honum“ (D.I.V., bls. 745). [1475] „Oddr Bjarnason vottar, að Björn Þorleifsson hafi lýst því, að hann ætlaði Solveigu dóttur sinni Vatnsfjörð eptir sinn dag og skyldi hann fylgja nafni“ (D.I. V., bls. 775). [1475] „Vitnisnurður Guðrúnar Egilsdóttur, að Björn Þorleifsson hefði lýst því við barnsölið í Breiðastofunni í Vatnsfirði, er Solveig dóttir hans var nýfædd og þangað borin, að hún skyldi eiga Vatnsfjörð eptir sinn dag, og vildi hann unna því nafninu hans af óskiptu, eins og Solveig Þorsteinsdóttir móðir hans hefði sér unt“ (D.I. V., bls. 777). [1503] „Skrá um eignir Vatnsfjarðarkirkju, þegar Björn Guðnason tók við (1499) og afhenti, og um þá muni, er hann hafði burt úr Vatnsfirði, enn fremr um eignir Kirkjubólskirkju í Langadal“ (D.I. VII., bls. 636-637). [1507] „Björn Þorleifsson fær af sínum parti Stepháni biskupi í Skálholti í vald alla bóndaeignina í heimalandinu í Vatnsfirði og hálfa Borgarey, guði, jungfrú Marie, Ólafe kongi og öllum helgu til æfinlegrar eignar, ásamt öllum peningum í Vatnsfirði, kvikum og dauðum og ánefndum jörðum, ...“ (D.I. VIII., bls. 140-141). [1507] „Gauti erkisbiskup í Niðarósi staðfestir dóm og úrskurð Stepháns biskups í Skálholti, að Vatnsfjörður í Ísafirði skuli vera staðr (beneficium) æfinlega“ (D.I. VIII., bls. 161-162). [1514] „Tylftardómur, útnefndur af Jóni lögmanni Sigmundssyni eptir konungsboði, um aðtöku Vatnsfjarðar og annara óðala fyrir Birni Guðnasyni, og hverju þeir sé sekir, sem ekki vilja konungsbréf halda“ (D.I. VIII., bls. 496-97). [1514] „Kristján konungr hinn II. staðfestir dóm Jóns Sigmundssonar um Vatnsfjörð frá 31. júlí 1514“ (D.I. VIII., bls. 520-521). [1518] „Kristján konungr hinn II. staðfestir dóma Jóns lögmanns Sigmyndssonar, þar sem Birni Guðnasyni og samörfum hans eru dæmd til æfinlegrar eignar -öll fé föst og laus, sem fallið hafa eptir Þorleif Björnsson, Einar Björnsson og Solveigu Björnsdóttir“ (D.I. VIII., bls. 650). 1847: Kirkjustaður, 24 hdr. JJ, 200; Neðanmáls: „1805 er jörð þessi með Borgarey talin 48 h. að dýrleika, en Borgarey taldi A.M. sér líka 24 h.; hann taldi líka Sveinshús, með leigumála þeim, sem stendur við þá jörð (en frá dýrleikanum þar er aðeins sagt 1805 og nú hjá sýslumanni), hjáleigu frá Vatnsfirði, en 1805 er aðeins Vatnsfjarðarkot talið hjáleiga frá staðnum; ...“ (JJ, bls. 200-201).
„Nokkrir bæir eru í dalnum undir vesturhlíð og auk þess er prestsetrið Vatnsfjörður í dalsmynni, ... Bærinn stendur suðvestan (suðaustan í frumtexta) við lítinn fjörð samnefndan, sem er ekki miklu stærri en venjuleg vík, fremur grunnur. Kirkjan er fyrir norðan bæinn, ...“ (KK, bls. 191); „Á Sturlungaöld sat í Vatnsfirði þekkt, en illa ræmd höfðingjaætt. Þekktasti maður hennar var Þorvaldur Snorrason, hinn vanþakkláti banamaður Hrafns Sveinbjarnarsonar. Oft var staðurinn blátt árfram ræningjabæli, og var þá lifað á kostnað héraðsmanna eftir því sem við varð komið. Einnig á síðari miðöldum var Vatnsfjörður einn virðulegasti staður á Íslandi. Meðal búenda þar á þessum tíma má einkum nefna Björn Einarsson Jórsalafara (d. 1415), frægður af mörgum og löngum ferðum. Kom hann þá til flestra landa í Vestur-Evrópu, til Rómar (þrisvar), Jerúsalem; hann fór jafnvel til Grænlands, þar sem hann dvaldist tvö ár. Dóttursonur hans var hinn alkunni Björn Þorleifsson, sem var kvæntur Ólöfu ríku, en sonarsonur hans og alnafni átti í mikilli erðadaeilu, við frænda sinn, Björn Guðnason í lok 15. aldar. Var henni fyrst lokið 1530, og var Vatnsfjörður þá dæmdur kirkjunni, og hafði kirkjan þá deilt við

leikmenn um staðinn í 257 ár“ (KK, bls. 191-192).
1887: „Vatnsfjörður er, eins og allir vita, eitt hið helzta prestsetur á landinu. Þar hefir lengi verið höfðingjasetur. Þar bjó Þorvaldur Snorrason, níðingurinn alræmdi, og ættmenn hans, og var bærinn illa ræmdur á Sturlungatíð, því þar bjuggu illmenni og ribbaldar. Seinna voru þar merkir höfðingjar, eins og t.d. Björn Einarsson Jórsalafari. 1530 eignaðist kirkjan Vatnsfjörð, eftir langt þras og málaferli. Landið í kringum Vatnsfjörð er mjög hrjóstrugt og gróðurlítið, en fram á fjalli upp af dalnum er ágætur sauðgróður, og er þar haft í seli. Borgarey út af firðinum er aðalhlunnindi staðarins. Séra Stefán Stephensen var nýbúinn að láta reisa þar mikinn bæ, svo þar var nú eitt af hinum bezt húsuðu prestsetrum á landinu“ (ÞT, bls. 139).
Sr. Stefán P. Stephensen fluttist í Vatnsfjörð árið 1884. „Séra Stefán var búhöldur mikill og sat Vatnsfjarðarstað myndarlega að þeirrar tíðar hætti, hafði margt hjúa og stór bú. Nytkaði hann þessa kostamiklu jörð til hlítar, við mikil efni. Hann byggði skótt nýjan og stóran bæ, en ekki entist sá bær þó jafn vel og ætla hefði mátt“ (PP, bls. 57); Sr. Páll Ólafsson fluttist í Vatnsfjörð árið 1901. „Hann hélt Vatnsfjarðarstað til 1928, og bjó þar jafnan stóru búi og mannmörgu. Vann hann mikið að húsabótum á staðnum. Byggði stórt íbúðarhús 1907, vandað að þeirrar tíðar hætti, kirkju staðarins 1911, og önnur bæjarhús, að meira og mina leyti“ (PP, bls. 59).
1901-1928: Sr. Páll Ólafsson prestur í Vatnsfirði : „Gerði æði mikið af jarðabótum, girti túnið og sléttaði nokkuð, ...“ (PP, bls. 59).
Öll tún hafa verið sléttuð og voru sléttuð af núverandi ábúanda (2001).



ÍS-205:001 *Vatnsfjörður* bæjarhóll bústaður 6556.408N 2229.854V

ÍS-205:001 – Hluti af bæjarhólnum, uppgröftur í gangi, horft í suðvestur.

Í ferðasögu sinni frá 1709 segir Jón Eyjólfsson: „Ein tópt þar í bænum er 24 faðmar á lengd, það var skálinn og skálahúsið. Nú hefur það tvígang stytt verið og eru 10 rúm hvorn veg í skála og 6 álnir millum stokka, en 40 manns gátu sofið í loptsængunum millum bita; tvígang hefur hann nú mjókkaður verið. Stóra stofan þar á móti er eins breið og stór með tveim klefum. Þessi hús eru við brandadyr. Portdyrnar eru vel með stórum glugg og borði. Þilport er þaðan að ganga til kirkju með pílárum; aðar laundyr eru úr forkirkjunni og garði þar að brandadyrum gömlum. Loptabær er nú mjög minnkaður og breiða baðstofa. Hann var þríhúsahár, allþilaður, með glergluggum. Nú er það sem væn loptstofa, nýhýst af séra Hjalta Þorsteinssyni. Loptabæjardyr horfa þvert við portdyrnar, en brandadyr horfa á sjó austur. Í þvergöngum yfir miðjan staðinn frá brandadyrum eru 19 bitar á lopto, og mjög sýndust þar viðir fúnir, en veggir hrundir og skakkir“. Fornleifaskráning Ragnars Edvardssonar 2003: „Nýtt íbúðarhús hefur verið reist í Vatnsfirði og stendur það í u.þ.b. 84 metra frá gamla bæjarstæðinu sem er svo til beint í vestur frá íbúðarhúsinu. Grösugur hóll rétt norðan við kirkjugarðinn. Ekki sést til fornleifa“. Bæjarhóllinn er um 80 m vestur af því íbúðarhúsi sem nú stendur í Vatnsfirði.

Svæðið hefur verið sléttað og þar fer nú fram fornleifauppgröftur sem hófst árið 2007.

Bæjarhóllinn er um 90x60 m að stærð og snýr norður-suður. Dýpt mannvistarlaga í hólnum er um 1,5 m samkvæmt prufuskurðum sem teknir voru árið 2006. Frá árinu 2007 hefur fornleifauppgröftur farið fram á hólnum, eins og áður sagði, og er búið að opna stóran hluta bæjarhólsins og grafa niður að hluta. Bæjarhóllinn hefur verið sléttaður og veldur það, auk fornleifauppgraftarins og alls sem honum fylgir, því að ásýnd bæjarhólsins er mjög mikið breytt frá því sem var. Á bæjarhólnum eru tvær staðsetningar húsa þekktar: torfhúsin og íbúðarhús frá upphafi 20. aldar sem var að hluta steinsteypt. Torfhúsin (001) stóðu að hluta fram á miðja 20. öld á miðjum bæjarhólnum en síðasta torfhúsið var byggt þar árið 1884. Það var byggt á eldri grunni og nýtti nokkuð af eldri herbergjum, en var að nokkru leyti austan við eldri húsin. Þetta hús hafði kjallara, sem var hlaðinn en styrktur með steypu inn á milli, og var að miklu leyti byggt úr timbri og er það kallað Gamla hús eða Gamli bærinn (001A). Hluti hússins var rifinn árið 1906 en hluti þess, sá austasti og yngsti, féll ekki fyrr en um miðja 20. öld og var notaður í millitíðinni sem geymsluhús og þess háttar, kjallarinn var notaður eftir fall hússins sem ruslaþró. Þar sem elstu torfhúsin á bæjarhólnum stóðu áður fyrr var um árið 1920 kálgarður 018 samkvæmt túnakorti. Árið 1906 var byggt nýtt íbúðarhús (001B) í suðvesturhluta bæjarhólsins. Það hús var með kjallara, steinsteypt neðst en ofan á tvær bárujárnsklæddar timburhæðir og ris. Þetta síðasta íbúðarhús á bæjarhólnum var síðan rifið í lok sjöunda áratugs 20. aldar og var árið 1965 byggt nýtt íbúðarhús um 80 m austur af bæjarhólnum, það hús er núverandi íbúðarhús. Ekki sést til annarra fornleifa á hólnum en þeirra sem verið er að grafa upp, eða búið er að grafa upp, þ.e. Gamla hús

ÍS-205:001 – Kjallari Gamla húss og stétt við það eftir uppgröft, horft í norður.

(001A), norðausturhorn yngra íbúðarhúss (001B) og efstu (yngstu) lög torfhúsa (001). Hvort búið sé að grafa upp eitt eða fleiri hús af torfhúsunum er ekki hægt að segja vegna þess að íslenski torfbærinn var aldrei ein samtíða bygging og herbergi og veggir geta haft mismunandi líftíma þannig að ekki er hægt að álykta um „hve mörg hús“ sé búið að grafa upp, fyrir utan Gamla hús, heldur einungis hægt að segja að búið sé að grafa yngstu lög torfhúsanna í heild sinni. Ragnar Edvardsson skráir í fornleifaskráningu sinni árið 2003 Gamla hús 001B sem sérstakt hús, útihús 205-027. Í skráningu hans segir: „Á túnakorti er teiknað hús austan megin í bæjarhólnum við kálgarð [018] sem var á milli bæjarhúss og þessa húss. Í 70 metra fjarlægð í vnv frá núverandi íbúðarhúsi. Í túnjaðri. Öll hús sem áður stóðu á bæjarhól og í túni hafa verið rifin og sléttað yfir“. Húsið var á þeim tíma sem túnakortið er teiknað notað sem einskonar úti hús, en vegna þess að upphaflegt hlutverk þess var íbúðarhús er það skráð hér með öðrum íbúðarhúsum á bæjarhólnum en ekki sem sérstakt hús. Gamla hús stóð um 20 m norðan við kirkjugarðinn eins og hann er í dag. **Hættumat:** engin hætta
Heimildir:Túnakort (ártal vantar); RE, 9; JE, bls. 236-236; Framvinduskýrslur - Vatnsfjörður: FS 356-03096 (2006), bls. 60-61, FS449-03099 (2009); Tryggvi Þorsteinsson, 2006, bls.34-42; kirkjan.is.

ÍS-205:002 *Gönguvegur* gata leið 6555.930N 2231.263V

Í örnefnaskrá Þorkels Guðmundssonar segir: „Gönguvegur er yfir nesið beinustu leið frá Vatnsfirði yfir til Skálavíkur. Er þar slóði og nokkur gömul vörðubrot, en þó illfært með hesta, enda eingöngu notaður af gangandi fólki. Reiðvegurinn er allmiklu framar“. Fornleifaskráning Ragnars Edvardssonar 2003: „Farið er svo til beint í suður frá kirkjugarðinum. Sunnan garðsins var gamli vegslóðinn að bænum. Síðan er farið beint í norður og svo vestur yfir hæðina til Skálavíkur. Mýri fyrir neðan hæðina Vatnsfjarðarmegin en eftir því sem ofar dregur breytist landslagið í klappir og kletta“. Farið er upp Nónlág miðað við lýsingu Ólavíu Salvarsdóttir í Vatnsfirði (þó hún þekkti ekki örnefnið Nónlág), og svo upp og vestur yfir hálsinn, þó ekki þar sem hæst er heldur innan (suðsuðvestan) við það.


ÍS-205:002 – Hluti af gönguleiðinni, vörðubrot B ofan við miðju, horft í austur.

Leiðin liggur yfir hjalla, grýtt holt og lyngivaxnar breiður. Þó nokkur upphækkun er fyrst upp frá Vatnsfirði, en sléttara þegar ofar dregur. Leiðin er grýtt á köflum en gróður eykst þegar ofar dregur.
Gatan er nokkuð óljós eða alveg horfin fyrsta spölinn upp frá Vatnsfirði. Vestan við Bræðravörður 013 verður leiðin hins vegar greinilegri og hægt er að fylgja henni þaðan með hjálp vörðubrota. Vörðubrotin sem sjást eru fjögur og eru á um 300 m löngum kafla, vestarlega á leiðinni. Vestasta greinilega vörðubrotið (002B) er um 920 m suðvestur af bæjarhól 001. Vörðubrotið er hlaðið upp á lága, en stóra grjótklöpp og er þrjú til fjögur umför að hæð, en ekki vel hlaðið. Eitthvað getur hafa hrunið úr því en þó virðist það ekki mikið. Frá neðri brún grjótklappar og upp á efri brún vörðubrotsins er rúmlega 1 m. Grunnflötur vörðubrotsins er um 1,5 x 1,2 m að meðtöldum hluta grjótklapparinnar. Ekki sést til bæjar frá þessu vörðubroti. Það er staðsett á breiðum hjalla þar sem mikið er um grjót og er umhverfið lyngivaxið. Hjallinn er frekar sléttur, en þó smáhæðóttur. Næsta vörðubrot (002C) er um 60 m vestur af vörðubroti B. Það er um 0,3 m á hæð og í raun fremur hrúga en hleðsla. Þrjú umför af hleðslu eru sjáanleg í því en þó gætu þau hafa verið fleiri en eru þá nú yfirgróin. Vörðubrotið er um 1x1 að stærð. Meðalstórir steinar eru í því og er það gróin fléttum eins og hin vörðubrotin. Umhverfið í kring er gróið lyngi. Um 100 m suðvestur af vörðubroti C er vörðubrot D. Það er líkt og vörðubrot C, fremur grjóthrúga en hleðsla. Það er um 1x1,2 m að stærð og um 0,7 m að hæð. Það er hlaðið úr meðalstórum steinum sem grónir eru fléttum. Vörðubrotið er á lítt grónu, lágu


ÍS-205:002 – Varða E við gönguleiðina, horft í vestur.

grjótholti á breiðum hjalla. Varða E er stæðilegri en vörðubrotin norðaustan hennar, en hún er um 140 m suðvestan vörðubrots D. Hún er um 1x1,3 m að stærð og sjást um sjö umför af hleðslu í henni. Varðan er um 1 m á hæð og er gróin fléttum. Varðan stendur á grjótholti þar sem mikið er af hellum. Gatan er greinileg þegar upp er komið alveg að landamerkjum Vantsfjarðar og Skálavíkur. Þar er farið að sjá yfir í Mjóafjörð en þó ekki að Skálavík. Gatan er á heildina litið yfirleitt ógreinileg en verður greinilegri þegar vestar dregur og gróður fer að aukast. Þar sem hún er greinileg er hún eins og sæmileg kindagata. Leiðin er um 2,3 km löng innan Vatnsfjarðarlands.

Hættumat: engin hætta

Heimildir:Ö-Vatnsfjörður (ÞG) bls. 2.

ÍS-205:003 gata leið 6555.735N 2231.199V

ÍS-205:003 – Hluti reiðvegarins, núverandi þjóðvegur efst á myndinni, horft í austur.

Í örnefnaskrá Þorkels Guðmundssonar segir: „Gönguvegur [002] er yfir nesið beinustu leið frá Vatnsfirði yfir til Skálavíkur. Er þar slóði og nokkur gömul vörðubrot, en þó illfært með hesta, enda eingöngu notaður af gangandi fólki. Reiðvegurinn er allmiklu framar.“ Reiðvegurinn erum 350 m suðvestar (innar/framar) en gönguvegur 002. Rétt innan við landamerki Skálavíkur er stæðileg varða og er reiðvegurinn þar rétt við.

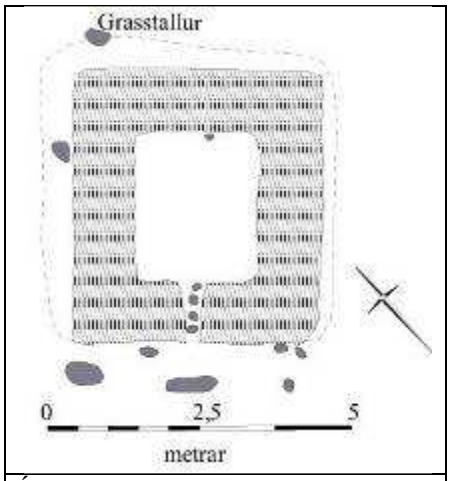
Reiðvegurinn liggur í gegnum gróin svæði, holt og smá mýrar. Á nokkrum stöðum liggur hann í grjóti en það er aldrei langur spotti i einu.

Reiðvegurinn frá Vatnsfirði að Skálavík er mjög greinilegur. Víða er hann djúpur skorningur, eða allt að 40 cm á dýpt. Yfirleitt er gatan einbreið en þegar nálgast fer Vatnsfjörð er víða tvær samsíða rásir og er önnur líklega eldri en hefur verið orðin svo djúp að hún hefur verið farin að safna í sig vatni og þess vegna hefur götunni verið hliðrað örlítið. Gatan virðist einnig hafa hafa blásið upp á köflum, sérstaklega efst á hálsinum og myndast þá moldarflög með smágrjóti, allt upp í 3 m breið. Ef gatan er gengin frá merkjum Skálavíkur og Vatnsfjarðar, til norðausturs í átt að Vatnsfirði, er uppi á hálsinum gengið fram á rás með steinum í. Svo virðist sem hellur hafi verið settar ofan í, og jafnvel að hluta ofan á, rás sem nær í gegnum götuna (B). Mest er rásin um 80 cm breið og um 3 m löng. Rásin er á svæði þar sem gatan virðist hafa blásið upp og gæti hún hafa gegnt hlutverki ræsis til þess að halda veginum þurrum á þessum stað. Líklegast er því um einhverskonar vegabót að ræða. Um 280 m austnorðaustur af rásinni er upphleðsla á götunni (C-D). Hún er um 20 m löng og liggur yfir litla mýri. Upphleðslan er mest um 3 m breið og um 1,2 m há upp frá jörðu. Um 300 m austar er vörðubrot, E. Það er á stórum steini, nálægt reiðveginum og hefur það líklegast verið til þess að leiða fólk af götunni að mannvirki sem er nú tóftir 064. Vörðubrotið er um 0,6 m hátt en að meðtöldum steininum sem það stendur á nær það 1,2 m hæð. Þrjú umför hleðslu sjást í vörðunni og er hún vel grjóin fléttum. Grunnflötur hleðslunnar er um 1x1,7 m. Eitthvað getur hafa hrunið úr vörðunni, en þó ekki mikið. Um 70 m austnorðaustan við vörðubrotið er hleðsla (F) á götunni yfir læk. Þar hafa stórar hellur verið lagðar yfir litla lælјarsprænu sem sker veginn. Um 370 m norðnorðaustan við hleðslu F er önnur upphleðsla á götunni (G-H). Hún er umfangsmeiri en sú fyrri (C-D), eða um 3 m breið, 50 m löng og um 1,2 m há. Þegar farið er að nálgast Vatnsfjarðarbæinn mikið eða um 350 m suðsuðaustan hans, er vörðubrot (I). Það er um 1 m í þvermál og um 80 cm hátt. Varðan stendur á litlum grjótbletti í annars grónu sléttlendi. Um fimm umför af hleðslu sjást í vörðunni og er hún hlaðin úr hellum og smágrýti. Varðan er vel gróin fléttum og frá henni sést vel til bæjar enda ekki langt í stóran skurð sem er við suðurenda núverandi túna, suðvestur af bænum. Gatan hverfur sunnan megin við áðurnefndan skurð en sést aftur um 30 m norðaustan við hann. Þar liggur hún í stefnu

ÍS-205:003 – Reiðvegurinn yfir þá upphleðslu á veginum sem nær er Vatnsfirði (G-H), horft til austnorðausturs.

norðnorðaustur að bæjarhúsunum en hverfur áður en komið er að steyptu fjárhúsi því er suðaustast stendur í túni. Samtals er leiðin, þar sem hún er greinileg innan Vatnsfjarðarlands, um 2,4 km.
Hættumat: hætta, vegna rofs
Heimildir:Ö-Vatnsfjörður (ÞG) bls. 2.

ÍS-205:004 *Stekkjarnes* tóft hjallur 6556.402N 2228.781V



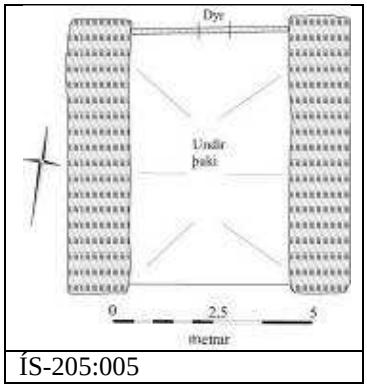
ÍS-205:004

Í örnefnaskrá Þorkels Guðmundssonar segir: „Þá förum við aftur niður að sjó, að víkurbotninum við Hópið. Nes eitt lítið er heiman við það, sem kallast Stekkjarnes, þar eru fornar hjall- og stekkjartóftir“. Í Fornleifaskráningu Ragnars Edvardssonar frá 2003 segir: „Ekki sást til fornleifa“. Leifar eins mannvirkis eru þó mjög greinilegar á Stekkjarnesinu. Rústin er grjóthlaðin og er um 800 m austsuðaustur frá bæ 001, á litlu holt niðri við sjóinn.
Rústin er á litlum tanga á Stekkjarnesinu vestanverðu. Þaðan eru einungis nokkrir metrar niður í fjöru að vestan- og norðanverðu en sunnan og austan við er mjór mýrarfláki. Tanginn er gróið klettaholt og hann er svo mjór að hann er aðeins lítil landræma sem liggur til norðausturs frá rústinni. Undirlag rústarinnar er slétt.
Rústin er ferköntuð, einföld og hlaðin úr grjóthellum. Hún er mjög stæðileg, um 4x4,5 að utanmáli og um 2x2,5 m að innanmáli, veggir því mest um 1 m breiðir. Veggjarhæð er um 1,5 m. Rústin snýr suðvestur-norðaustur og er op á henni til suðausturs á miðjum vegg. Það er um hálfs metra breitt innst en mjókkar út vegna þess að grjótið í opinu slúttar inn á við. Þessi veggur, suðausturveggurinn, virðist vera hlaðinn öðruvísi en hinir, þ.e. það virðast vera þunnar torflinsur inn á milli í hleðslunni, sem er ekki að finna í hinum veggjunum. Á köflum vex gróður ofan á veggjum og vex hann líklega á leifum torfs sem sett hefur verið ofan á grjóthleðsluna. Að innan er tóftin algróin, fyrir utan er einn stein við norðausturvegginn. Í gólfi er hægt að finna fyir hellum. Líklegast er ekki um hrun að ræða þar þar sem hellunum virðist hafa verið raðað í gólfið eftir því sem best er hægt að finna. Meðfram rústinni að utanverðu er kantur líklega úr torfi, þó eitthvað grjót sé í honum. Um 5 m aftan (norðaustan við) rústina er grjót og hellur og þar virðist mega greina óljósar hleðslur á einum stað. Þetta tvennt gæti bent til þess að undir rústinni og aftan við hana séu eldri leifar og mögulegt er að grjót hafi verið tekið úr þessum eldri byggingum og notað í hleðslu rústarinnar.Lítið sem ekkert virðist hafa hrunið úr veggjum að utanverðu. Sé tekið mark á heimildum og örnefni er líklega um stekk eða hjall að ræða, en þó bendir lögun og gerð rústarinnar ekki endilega til þess, sérstaklega ólíklegt er að um stekk sé að ræða. Líklega getur ástæða þess verið að rústin sem sést í dag sé yngsta byggingastig á þessum stað og hlutverk hafi eitthvað breyst í tímans rás. Mögulegt er að grjótið aftan við rústina séu leifar annað hvort stekks eða hjalls, en það er svo ógreinilegt að ekkert verður sagt um það með vissu.


ÍS-205:004 – Hjallur, horft í norðaustur.

Hættumat: engin hætta
Heimildir:Ö-Vatnsfjörður (ÞG) bls. 3; RE, 9.

ÍS-205:005 *Hjalltangi* hús hjallur 6556.443N 2229.285V



ÍS-205:005

Í örnefnaskrá Þorkels Guðmundssonar segir: „Að heimanverðu við Stekkjarnes [004] er Bólvík kölluð, en Hjalltangi heiman við hana. Á Hjalltanganum er stór hjallur, sem sr. Stefán Stephensen lét byggja á sínum tíma“. Í Fornleifaskráningu Ragnars Edvardssonar frá 2003 segir: „Þegar komið er að Vatnsfirði frá Reykjarfirði er afleggarinn að bænum vestanmegin en austanmegin er afleggjari sem liggur niður að sjó. Yst á tanganum sem skagar þar út í sjó stendur timburhjallur. Hjallurinn er byggður á tanga sem [sic.] Hjallurinn er byggður úr timbri og með torfþaki. Hjallurinn er í eigu Þjóðminjasafns“. Hjallurinn er um 420 m austur af bæjarhól 001 og er nyrsta húsið á tanganum en tvö önnur standa á honum.
Hjallurinn stendur á tangaendanum á sléttum fleti grónum grasi.
Hjallurinn stendur enn undir þaki og er haldið vel við. Hann snýr

norðnorðvestur-suðsuðaustur. Hann er um 7x7 m að grunnfleti og þykkt veggja er um 1,5 m. Innanmál hans er um 7x4 m. Tjargaðar trégrindur eru til beggja enda og til norðurs eru dyr. Hjallurinn er þó nokkuð hár og í honum er geymsluloft, vel rúmgott. Lofthæð er rúmlega 2 m og ná hleðslur hærra en það (um 2,2 m). Hjallurinn er enn í notkun. Hann er haganlega hlaðinn úr fremur stóru grjóti sem minnkar þegar ofar dregur. Timburverk heldur timburloftinu (geymsluloftinu) uppi. Hjallurinn var byggður um 1880 og er eins og áður sagði í húsasafni Þjóðminjasafnsins. Hann er með stærstu húsum sinar tegundar á Íslandi og var settur á friðlýsingarskrá fornleifa árið 1976.

ÍS-205:005 – Hjallur í eigu Þjóðminjasafnsins, horft í suðvestur.

Hættumat: engin hætta

Heimildir:Ö-Vatnsfjörður (ÞG) bls. 3; RE, 9-10; Þjóðminjasafn Íslands.

ÍS-205:006 heimild um lendingu 6556.457N 2229.275V

Í örnefnaskrá Þorkels Guðmundssonar segir: „Að heimanverðu við Stekkjarnes [004] er Bólvík kölluð, en Hjalltangi heiman við hana. Á Hjalltanganum er stór hjallur, sem sr. Stefán Stephensen lét byggja á sínum tíma [005]. Fremst í tanganum austanverðum er núverandi bátalending“. Í Fornleifaskráningu Ragnars Edvardssonar frá 2003 segir: „Yst á tanganum er steinsteypt bryggja og er bátalendingin við hana. Ekki sést hvort að lending hafi verið rudd eða ekki því að bryggja hefur verið byggð á sama stað“. Austan við hjall 005 er steinsteypt bryggja. Sunnan við hana, er óvenju mikið smágrjót í hvilft í fjörunni. Alveg upp við bryggjuna er fjaran hreinni af grjóti en annars staðar er. Bryggjan líklega á svipuðum slóðum og lendingin var en sunnan við bryggjuna gætu mögulega verið leifar af gömlu lendingunni. Fjaran er á þessum stað lág og smágrýtt með einstaka stærri klettum.

ÍS-205:006 – Núverandi bryggja og mögulegur eldri lendingarstaður, horft í austur.

Hættumat: stórhætta, vegna framkvæmda

Heimildir:Ö-Vatnsfjörður (ÞG) bls. 3; RE, 10.

ÍS-205:007 heimild um óþekkt

Í örnefnaskrá Þorkels Guðmundssonar segir: „Upp af bæjarvíkinni er allhár, gamall og gróinn malarkambur. Þar sést allvíða fyrir lágum rústum garða og tótta, sem enginn kann lengur af að segja hverskonar mannvirki verið hafa“. Fornleifaskráning Ragnars Edvardssonar 2003: „Bæjarvíkin er svo til í norðaustur frá bæjarstæðinu og liggur þjóðvegurinn eftir henni. Ekki sést til neinna rústa í víkinni sjálfri en nyrst er rúst af verbúð [043, er í raun fjárhús]. Bæjarvíkin er á milli tangans þar sem hjallurinn stendur og annars tanga norðanmegin hans. Rústin er í fjöruborðinu, u.þ.b. 5 metra frá yfirborði sjávar“. Ekki reyndist gerlegt að staðsetja rústirnar þar sem malarkamburinn sem þær stóðu á er horfinn.

Lágur malarkambur rétt ofan við fjöruna er sjáanlegur, en hái kamburinn, sem getið er í örnefnaskrá, sést ekki. Lági kamburinn er vaxinn mjög háum punti.

Rústirnar eru horfnar og einu mannvistarleifarnar sem sjást á malarkambinum nú, næst bæjarvíkinni, eru vegaslóði og gamli reiðvegurinn út í Reykjarfjörð 065. Ólafía Salvarsdóttir segir að malarkambinum sem getið er í örnefnaskrá hafi verið rutt út við vegagerð og við það hafi rústirnar að öllum líkindum fylgt með.

Hættumat: stórhætta, vegna framkvæmda

Heimildir:Ö-Vatnsfjörður (ÞG) bls. 3; RE, 10.

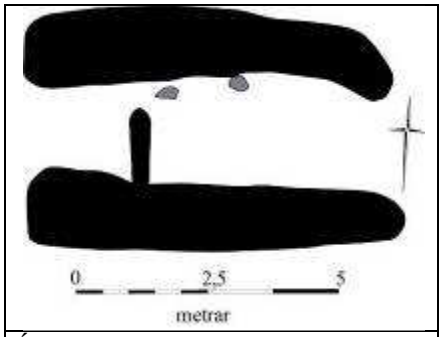
ÍS-205:008 *Barðaeyri* tóft uppsátur 6556.558N 2229.641V

Í örnefnaskrá Þorkels Guðmundssonar segir: „Fyrir utan Bæjarvíkina er Barðaeyri, sem dregur nafn af sexæringnum Barða, er þar var settur upp á vetrum“. Í Fornleifaskráningu Ragnars Edvardssonar frá 2003 segir: „Norður af bæjarstæðinu [001] stendur lítill tangi út í sjó og er tanginn austan þjóðvegarins. Á þessum tanga sést móta fyrir túngarðinum [042, ekki túngarður] og nokkrum rústum [043]. Svo til á miðjum tanganum er rúst.

Grösugur en þýfðir tangi. Rústin er svo til ferhyrnd og er inngangur austan megin. Veggir vestan megin eru nokkurn veginn horfnir“. Umrædd tóft er um 315 m norðaustur af bæjarhól 001 og um 55 m norðvestur af fjárhústóft 043. Tóftin er á Barðaeyri (Barðasjó), á henni miðri, vestarlega (þ.e. nálægt veginum).


ÍS-205:008 – Uppsáturstóft á Barðaeyri, horft í vestur.

Tóftin er á Barðaeyri, eyri sem er norðnorðvestan við Bæjarvík. Tóftin er ofarlega (vestarlega) á eyrinni og er þar slétt, en smáþýft, og grasigróið. Rétt vestan við tóftina er rof sem komið hefur þegar vegurinn yfir Vatnsfjarðarnes var lagður, en hann er skammt undan. Rofið virðist ekki hafa blásið mikið upp á síðkastið en gæti stofnað tóftinni í hættu ef það tæki sig upp.
Tóftin snýr austur-vestur og er utanmál hennar um 7x4,5 m. Tóftin virðist opin í báða enda, austur að sjó annars vegar og vestur að landi hins vegar. Lítill veggur er inni í tóftinni, um 2 m vestan við vesturenda og liggur hann frá suðurvegg. Tóftin er vel gróin grasi og sjást einungis tveir steinar innan í henni, ekki í veggjum, þannig að líkegt er að hún sé hlaðin úr torfi eða torfi og grjóti sem gróið er þá yfir. Veggir tóftarinnar eru mest um 1 m háir mælt utanfrá og veggjabreidd er mest um 1,5 m en yfirleitt um 1m. Tekinn var prufuskurður í tóftina sumarið 2010.



ÍS-205:008

Hættumat: hætta, vegna rofs
Heimildir:RE, 10; Ö-Vatnsfjörður (ÞG) bls. 3.

ÍS-205:009 *Björnsnaust* heimild um naust
Í örnefnaskrá Þorkels Guðmundssonar segir: „Efst og innst á eyrinni [Barðaeyri] heita Björnsnaust. Þar eru tvær tóttir mjög lágkúrulegar og samanfallnar, en þó líkar því sem þar hafi skipahróf verið, enda segja munnmæli að þetta séu naust Björns Einarssonar, Jórsalafara. Hin meiri tóttin er um 21 m á lengd og 5 m á breidd en hin minni, sem er við hlið hinnar, er um 13 m á lengd og jafn breið hinni stærri“. Í *Á æskuslóðum við Djúp* segir: „...naustir Björns Jórsalafara [...] voru eiðilagðar þegar þjóðvegur var lagður neðan við túngarðinn [032], út sjávargrundirnar og yfir Vatnfsjarðarnesið innn í Mjóafjörð“. Barðaeyri er um 290 m norðaustur af bæjarhól 001. Ekki er hægt að staðsetja naustin með nokkurri nákvæmni þar sem landslagið á svæðinu hefur að öllum breyst mikið við lagningu vegarins og því erfitt að nota lýsingu eins og „efst og innst á eyrinni“ sem viðmiðun.
Barðaeyrin er slétt og grasi vaxin. Innst á henni hefur verið lagður vegur, á milli fjöru og túns.
Ekki sést til fornleifa enda eru þær horfnar eins og sést á einni heimildinni hér að ofan. Þrjár fornleifar voru skráðar á eyrinni, uppsátur 008, fjárhús 043 og garðlag 042, og engar aðrar minjar voru sýnilegar.
Hættumat: stórhætta, vegna framkvæmda
Heimildir:Ö-Vatnsfjörður (ÞG) bls. 3; Tryggvi Þorsteinsson, 2006, bls. 35.

ÍS-205:010 heimild um kálgarð 6556.337N 2229.854V
Kálgarður er merktur inn á túnakort frá því um 1920, við túngarð 032, um 130 m suðsuðvestur af bæjarhól 001, um 40 m suðaustan við fjárhús 031 (Geithús).
Þar sem kálgarðurinn var er nú sléttað tún.
Kálgarðurinn er algerlega horfinn vegna sléttunar og engin ummerki sjást eftir hann.
Hættumat: hætta, vegna ábúðar
Heimildir:Túnakort (án ártals).

ÍS-205:011 *Nónvarða* varða eyktamark 6556.215N 2230.141V

ÍS-205:011 – Nónvarða, Vatnsfjörður í bakgrunni, horft í norðaustur.

Í örnefnaskrá Þorkels Guðmundssonar segir: „Upp af mýrinni gengur Nónlág, sem fyrr er nefnd og grjótvarða er þar á holti einu kölluð Nónvarða“. Nónvarða er um 420 m suðvestur af bæjarhól 001 og sést af bæjarstæðinu bera við himinn austan við Nónlág.

Varðan er á klettaholti sem gróið er grasi og lyngi. Til norðvesturs frá henni er fremur bratt niður en til suðausturs er meira aflíðandi.

Varðan er um 1,3x1 m að grunnfleti. Í henni eru fremur stórir steinar með smærri steinum inn á milli. Í vörðunni má greina þrjú umför af hleðslu. Varðan er nú rúmlega 1 m á hæð en vegna þess hve mikið grjót er í kringum hana er líklegt að talsvert hafi hrunið úr henni. Frá Nónvörðu sést vel heim að bæ.

Hættumat: engin hætta

Heimildir:Ö-Vatnsfjörður (ÞG) bls. 4

ÍS-205:012 *Grettisvarða* varða óþekkt 6556.484N 2230.280V

ÍS-205:012 – Grettisvarða, horft í austur.

Í örnefnaskrá Þorkels Guðmundssonar segir: „Upp af túninu og næst því er Torfahjalli, þá Mjóihjalli og upp af honum Grettishjalli og Grettisvarða. Munnmæli segja að Grettir Ásmundarson hafi hlaðið vörðuna, þegar hann var um stund með Þorbjörgu digru, eftir að hún bjargaði honum úr snöru bændanna við Selvatnið, eins og segir í sögu hans. Varðan stendur á sléttri hallandi klömp, fremst á hjallabrúninni. Er hún allmikil ummáls og hátt í 4 alnir á hæð, en hol að innan fyrir ofan miðju. Víða í hleðslunni eru mjög stórir steinar, en þó hvergi svo að með ólíkindum sé“. Í Fornleifaskráningu Ragnars Edvardssonar frá 2003 segir: „Varðan stendur í hjalla í VNV átt frá bæjarstæðinu og sést hún vel frá bænum. Fyrir ofan bæjarstæðið eru klettahjallar sem liggja í norður/suður átt eftir Vatnsfjarðarnesinu. Varðan er hlaðin úr grjóti og eru mjög stórir steinar í henni“. Árið 1709 segir Jón Eyjólfsson Grettisvörðuna vera tvær mannhæðir en þó mjög hrunin og á herforingjaráðskorti frá byrjun 20. aldar er hún merkt mun sunnar en sú varða sem nú stendur og ber nafnið Grettisvarða. Varðan er um 360 m norðvestur af bæjarhól 001, uppi á hjöllunum fyrir ofan bæinn, á Grettishjalla. Grettisvarða er á skrá yfir friðlýstar fornminjar og hefur verið það frá því 1929.

Varðan er fremst á klettahjalla. Austan við hana er bratt klettabelti niður, en ofar (vestar) er grjóthjalli, dálítið gróinn, sem hallar örlítið upp í mót að næsta klettabelti. Mikið er um grjót og stórar jarðfastar klappir (hvalbök) á hjallanum.

Grettisvarðan er gríðarstór, um 2,5 m í þvermál og er hún kringlótt en grunnflöturinn eilítið kantaður. Varðan er mjög há, næstum í 3 m. Í vörðunni er meðalstórt og stórt grjót. Sérstakt er að stóra grjótið er að finna alls staðar í vörðunni, ofarlega sem neðarlega. Varðan er hol að innan frá toppi og aðeins niður, tilgangur gatsins er óljós. Varðan er gróin fléttum. Ekki er ljóst í hvaða tilgangi varðan var hlaðin.

Hættumat: engin hætta

Heimildir:Ö-Vatnsfjörður (ÞG) bls. 4; RE, 10-11; JE bls. 236; Friðlýsingaskrá, bls. 28.

ÍS-205:013 *Bræðravörður* varða óþekkt 6556.145N 2230.419V

Í örnefnaskrá Þorkels Guðmundssonar segir: „Fremst á Grettishjalla, rétt við gönguveginn [002], eru vörður tvær, nefndar Bræðravörður, en önnur þeirra er nú nýlega hrunin. Vörður þessar voru hlaðnar í tíð sr. Þórarins Kristjánssonar, af Jóni nokkrum Þórðarsyni, kallaður var dýralæknir. Hlóð hann þær upp úr tveimur gömlum dysum, er þar voru fyrir“. Vörðurnar eru tvær, sú sem framar (austar) er á hjallanum verður hér nefnd varða A og sú sem innar er varða B. Varða A er um 650 m suðvestur af bæjarhól 001. Varða B er um 20 m vestur af vörðu A.


ÍS-205:014 – Bræðravarða A, horft í suður.

Vörðurnar eru á lyngivöxnum klettahjalla. Víða sést í grjót, bæði klappir og smærra grjót á hjallanum. Skammt neðan (suðaustan) við vörðurnar er bratt klettabelti og annað ofan (norðvestan) við þær, aðeins fjær.
Stærð minjasvæðis er um 25x13 m og snýr austur-vestur. Varða A er um 1,5 m á hæð og um 1,5 í þvermál. Norðan, vestan og sunnan við hana er mikið grjót (líklegast dysin sem nefnd er í örnefnaskrá). Varðan er ágætlega hlaðin, og virðist um tíu umför. Varðan er að mestu hlaðin úr meðalstórum steinum. Frá vörðunni sést vel heim að bæ til norð-austurs. Hliðar vörð-unnar snúa nokkurn veginn í höfuðáttirnar fjórar. Varða B er um 1,5x2 m að stærð en er mikið til hrunin. Hrunið er aðallega til vesturs og norðurs. Hrunið fellur svo saman við dysina sem nefnd er í örnefnaskrá. Af ummerkjum að dæma gæti dysinhafa verið um 3x2 m að stærð. Varðan er nú um 0,5 m á hæð og sjást í henni fjögur til fimm umför. Hún er hlaðin úr meðalstórum steinum. Ekki eru vísbendingar um að dysjarnar sem vörðurnar eiga að standa á séu legstaðir.


ÍS-205:014 – Bræðravarða B, horft í vestur.

Hættumat: engin hætta
Heimildir:Ö-Vatnsfjörður (ÞG) bls. 4.

ÍS-205:014 áletrun óþekkt
Í örnefnaskrá Þorkels Guðmundssonar segir: „Skammt frá vörðunum [013] er hella með einhverju letri á, sem menn hafa ekki getað ráðið til þessa, og þyrfti það að athugast nánar af kunnáttumönnum“. Engin hella með letri fannst þrátt fyrir nokkra leit og staðkunnugir könnuðust ekki við hana.
Svæðið er gróið lyngi en steinar og klappir eru mjög víða.
Þrátt fyrir nokkra leit fannst hellan eins og áður sagði ekki. Hellur geta verið misjafnar, stórar og jarðfastar, litlar og lausar og allt þar á milli. Það er því næstum ógjörningur að staðsetja umrædda hellu án betri leiðbeininga.
Hættumat: engin hætta
Heimildir:Ö-Vatnsfjörður (ÞG) bls. 4

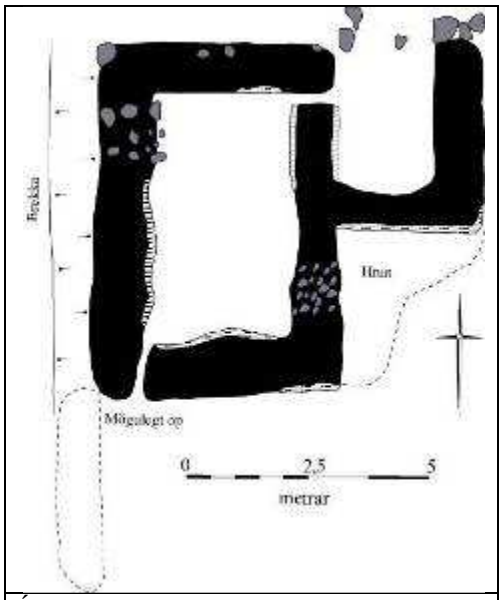
ÍS-205:015 garðlag óþekkt
Í örnefnaskrá Þorkels Guðmundssonar segir: „Á hjallendanum, frammi við Seilina, eru grjóthleðslur nokkrar og garðabrot, allt frekar ógreinilegt og því ekki getað segja hvað verið hafi“. Umræddar fornleifar fundust ekki við leit og staðkunnugir gátu ekki gefið upplýsingar um þær. Mögulegt er að þær séu hreinlega horfnar, enda sagðar óljósar 1933-34, en erfitt er að leita af sér allann grun enda margir hjallar á svæðinu og margar graslautir sem liggja upp í gegnum þá.
Heimildir:Ö-Vatnsfjörður (ÞG) bls. 4-5.

ÍS-205:016 tóft stekkur 6556.843N 2229.878V


ÍS-205:016 – Stekkurinn, vegurinn fyrir Vatnsfjarðarnes efst á mynd, horft í austur.

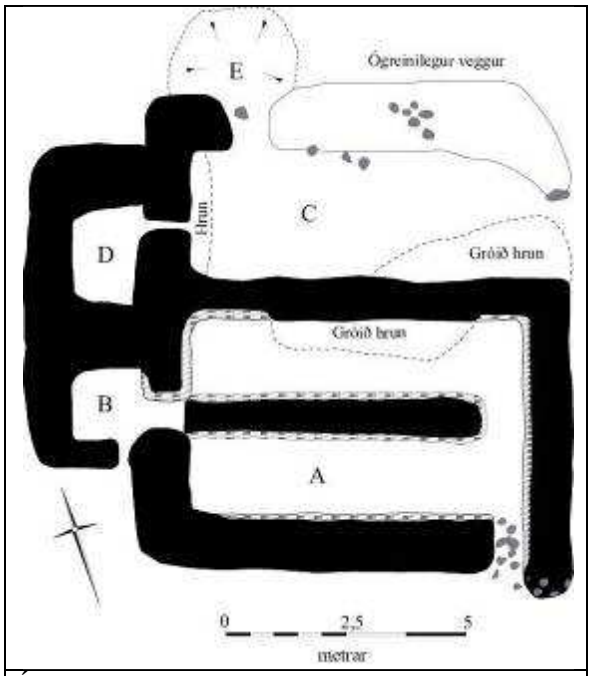
Í örnefnaskrá Þorkels Guðmundssonar segir: „Undir miðjum Sjóarhjalla á sjávargrundinni, nokkurn spöl fyrir utan túnið er gamall Stekkur hlaðinn úr grjóti“. Í Fornleifaskráningu Ragnars Edvardssonar frá 2003 segir: „Í u.þ.b. 67 metra fjarlægð frá nr. 46 í norðurátt. Rústin stendur vestan þjóðvegarins í um 8 metra fjarlægð. Klettabelti vestan og fjaran austanmegin. Rústin er ferhyrnd“. Tóftin er um 800 m norður af bæjarhól 001, rétt vestan vegar, undir Sjóarhjalla.
Tóftin er í halla í brekku á milli Sjóarhalla og vegar. Rétt austan vegarins er fjara. Ofan (vestan) við tóftina eru stórir steinar sem hafa hrunið úr hjallanum. Umhverfið er gróið grasi og ljónslappa nema að austan þar sem uppblástur hefur farið af stað við veginn og á stutt eftir áður en hann fer að narta í veggi rústarinnar.
Tóftin, sem hlaðin er úr grjóti, samanstendur af tveimur

hólfum. Samtals er tóftin 8x7 m og snýr austur-vestur.
Veggir hennar eru víða um 1 m á breidd en fara upp í 1,5 m þar sem mest en hæð veggja er mest um 1,2 m. Sunnan við tóftina er mögulegt garð- eða veggjarbrot frá suðvesturhorni og um 3 m í suður. Um 7 m í suður frá húsinu er annað mögulegt garðbrot, um 4 m langt og um 1 m á breidd. Þetta garðlag liggur vestur-austur. Vestan við tóftina er brekka upp að klettunum í Sjórarhjalla, en frá veggjum og um 1 m út er lægð á milli brekkunnar og veggjanna. Stærra hólfið í tóftinni er að vestanverðu, er um 5x3 m að innanmáli og snýr norður-suður. Á því virðast tvö op, annars vegar vestast á suðurvegg og hins vegar nyrst á austurvegg, yfir í minna hólfið. Það er um 3x2 að innanmáli og er alveg opið til norðurs. Aftan (sunnan) við þetta hólf, við syðrihluta austurveggjar stærra hólfsins er mikið hrun. Þar virðist veggur stæra hólfsins hafa fallið niður hallann. Veggir eru eins illa farnir og eru veggir stærra hólfsins sérstaklega illa farnir nyrst á vesturvegg og syðst á austurvegg. Grjóthleðslur eru víða greinilegar innan í tóftinni en yfirleitt ekki að utan. Tóftin er hlaðin úr stóru og meðalstóru grjóti.
Hættumat: stórhætta, vegna rofs
Heimildir:RE, 16; Ö-Vatnsfjörður (ÞG) bls. 5.



ÍS-205:016

ÍS-205:017 *Sauðhúshvammur* tóft fjárhús 6557.671N 2229.914V
Í örnefnaskrá Þorkels Guðmundssonar segir: „Fyrir utan Eyrina, við sjóinn er Sauðhúshvammur, en síðan Höfði og Skollaurð. Út af hvamminum, skammt frá landi er Sauðhúshólmi“. Í Fornleifaskráningu Ragnars Edvardssonar frá 2003 segir: „Farið er eftir þjóðveginum frá Vatnsfirði. Í u.þ.b. 500 metra fjarlægð frá nr. 48 er rúst af fjárhúsi, vestan þjóðvegarins. Rústin er 6 hólfa og sést greinilega grjóthlaðin jata í einu hólfinu“. Fjárhústóftirnar eru um 2,3 km norður af bæjarhól 001 og um 375 m suðsuðvestur af fjárborg 050, um 15 m vestan vegar.
Tóftin er á milli vegar (austan megin við) og kletta (vestan megin við). Í kring er grasi gróið sléttlendi. Ekki er ólíklegt að uppblástur gæti ógnað austurhlið tóftarinnar þar sem svæðið á milli hennar og vegarins er að mestu uppblásið.
Tóftin er um 11,5x11, 5 m að stærð. Hún er breiðari til austurs en til vesturs. Tóftin skiptist í fjögur hólf auk lægðar norðan við hana sem að öllum líkindum er einhverskonar gryfja. Syðst eru fjárhús, A, mjög greinileg. Ofan (vestan) við hana er hlaða, hólf B.



ÍS-205:017


ÍS-205:017 – Fjárhúsið í Sauðhúshvammi, horft í austur.

Norðan við A er annað hólf, líklega annað fjárhús, C. Ofan (vestan) við C er önnur hlöðutóft, D. Norðan við C er lægð, E. Hólf A er lang greinilegast. Það er um 4x7 að innanmáli með 1 m breiðum og rúmlega 6 m löngum garða í miðjunni. Garðinn er um 70 cm hár þar sem hann er hæstur fyrir miðju. Hann er hlaðinn úr grjóti eins og veggir fjárhússins. Í hólfi A eru hleðslur greinilegar nema til norðurs þar sem mikið af veggnum hefur hrunið inn í rústina og gróið upp. Veggjahæð í tóftinni er mest í A eða um 1,5 m. Op er á suðurvegg hólfs A, austast og er það enn greinilegt þó mikið hafi hrunið ofan í það. Hólf B er um 1,5x1,5 m að innanmáli og er gengið inn í það ofan af garðanum og í gegnum vesturvegg fjárhússins. Mögulegt er að einnig hafi verið opið úr B til suðurs við

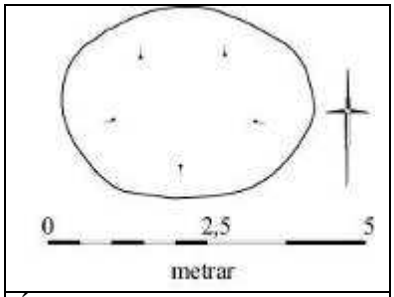
austast. Hlaðan er mun grónari en fjárhúsið. Hólf C er ógreinilegt á köflum og er líklegast eldra hús en A. Mögulega gæti verið um aðhald að ræða en ekki fjárhús, en ekki verður skorið úr um það, enginn garði sést hins vegar í tóftinni. Hólf C er um 7x2,7 að innanmáli. Aðeins sést í grjóthleðslur á stöku stað. Hólf D er um 2x1,5 m að innanmáli. Það er jafn gróið og hólf B og C. Gengið er á mili þess og C að því er virðist á sameiginlegum vegg norðarlega. Lægðin E er um 2x2,5 m að stærð og um 70 cm djúp þar sem mest er. Hún er algróin og ekki sést móta fyrir hleðslum í henni. Líklegt er að hún tengist fjárhúsinu þar sem mögulegt er að op sé á milli hennar og C.
Hættumat: hætta, vegna rofs
Heimildir:Ö-Vatnsfjörður (ÞG) bls. 5; RE, 11.

ÍS-205:018 heimild um kálgarð 6556.407N 2229.851V
Inn á túnakort frá því um 1920 er merktur kálgarður við norðausturhorn bæjarhúss 001B, á milli þess og Gamla húss 001A.
Þar sem kálgarðurinn var er nú fornleifauppgröftur á bæjarhólnum.
Engin ummerki um kálgarðinn sjást lengur. Kálgarðurinn var með öllu horfinn þegar fornleifarannsóknir hófust á bæjarhólnum 2006 og hefur að öllum horfið þegar bæjarhóllinn var sléttaður á seinni hluta 20. aldar. Vegna fornleifauppgraftarins er ljóst að engar leifar eru eftir af garðinum.
Heimildir:Túnakort (ártal vantar).

ÍS-205:019 þúst útihús 6556.441N 2229.842V


ÍS-205:019 – Þúst, horft í suðsuðvestur.

Þúst er um 65 m norður af bæ 001, í jaðri sléttaðs túns austan fjóss 029, fast sunnan við skurð sem bæjarlækurinn rennur í.
Þústin er í sléttuðu, slegnu túni rétt við áðurnefndan skurð.
Þústin er um 4x3 m að utanmáli, snýr austur-vestur og um 0,5 m há. Skurður var tekinn í þústina sumarið 2009 og sýndi hann að undir sverði leynist mannvirki. Mannvirkið er undir Heklu 1693 gjóskulaginu, en litur torfsins bendir til þess að byggingin sé frá miðöldum eða síðmiðöldum.



ÍS-205:019

Hættumat: engin hætta
Heimildir: Vatnsfjörður- framvinduskýrsla 2009: FS449-03099, bls. 63-64.

ÍS-205:020 *Vatnsfjarðarkot* heimild um bústað
Heimildir eru um hjáleigu frá Vatnsfirði, Vatnsfjarðarkot, en staðsetning þess er ekki þekkt. Í Jarðatali Johnsens frá 1847 segir að árið 1805 hafi Vatnsfjarðarkot verið talið sem hjáleiga undir Vatnsfirði. Í manntali 1801 eru hjón með tvö börn, gömul ekkja og þjónustukona (tienestepige) sögð til heimilis í Vatnsfjarðarkoti. Í manntali 1845 er ekki minnst á Vatnsfjarðarkot og virðast engar heimildir um búsetu þar eftir það. 1805 er vatnsfjarðarkot talið sem hjáleiga með jörðinni (JJ). Ólafía Salvarsdóttir þekkti ekki til örnefnanna Kothústún eða Kothús (sjá 039), en velti því fyrir sér hvort þau væru til komin vegna þess að Vatnsfjarðarkot hefði verið á því svæði á túninu, en hún gat út frá öðrum örnefnum ákvarðað gróflega staðsetningu Kothústúns, sem passar við staðsetningu fjárhúsanna Kothúsa (039). Vegna örnefnanna, Kothús, Kothústún og Vatnsfjarðarkot, er vert að velta upp þeirri spurningu hvort það geti verið að Kothúsin 039 hafi áður fyrr til heyrt Vatnsfjarðarkoti en síðan, þegar það fór í eyði, verið tekin í notkun af Vatnsfirði. Ekkert er vitað um þetta í raun, en vert er að hafa þennan möguleika á bak við eyrað. Það gæti þá verið að leifar Vatnsfjarðarkots leyndust einhversstaðar í norðurhorni túnsins ef þetta reyndist rétt.
Hættumat: engin hætta
Heimildir:JJ bls. 200-201; Manntal 1801, bls. 334; Manntal 1845.

ÍS-205:021 hleðsla refagildra 6556.092N 2230.467V

ÍS-205:021 – Refagildra, horft í austur.

Refagildra er rúma 100 m suðvestur af Bræðravörðum 013.
Gildran er á grjótholti á Grettishjalla sem gróið er lyngi og mosa.
Hleðslan virðist í fyrstu vera varða en þegar betur er að gáð er gat í gegnum hana miðja, neðst. Gatið er um 15-20 cm breitt og nær alveg í gegnum hleðsluna. Annað gat er einnig í henni ofar, en einungis í suðurenda. Hleðslan er um 1,5x1,5 m að grunnfleti og um 1 m á hæð. Fjögur til fimm umför af hleðslu sjást. Nokkuð er hrunið úr gildrunni og er grunnflötur hennar því líklega stærri í dag en hann var upphaflega.
Hættumat: engin hætta

ÍS-205:022 varða óþekkt 6555.798N 2229.869V

Varða er rúmlega 1 km suður af bæjarhól 001, um 70 m vestan við núverandi veg.
Varðan er á miðju grjótholti sem vaxið er lyngi og mosa. Austan við vörðuna er þjóðvegurinn en vestan hennar holt og hæðir.
Varðan er um 1 m í þvermál og um 1,4 m á hæð. Hún er farin að skekkjast og eitthvað virðist nú þegar hafa hrunið úr henni. Varðan er að mestu hlaðin úr hellum og er gróin fléttum. Stór steinn er efst ofan á henni. Ekki er vitað í hvaða tilgangi varðan var hlaðin.
Hættumat: engin hætta

ÍS-205:022 – Varða, núverandi þjóðvegur í baksýn, horft í austur.

ÍS-205:023 tóftaþyrping verbúð 6557.922N 2231.479V

Í Jarðabók Árna Magnússonar og Páls Vídalín frá 1702-1714 segir: „Heimræði er ekkert á sjálfum staðnum í margt ár, því fiskur gengur allsjaldan so lángt inn á fjörðinn að hjeðan verði róið að heiman, og brúkast hjeðan verstaða í Vatnsfjarðarnesi á haust og stundum á vor þegar fiskur hefur gengið, og er þar lendíng góð“. Tóftir verstöðvar eru í Selvík á landamerkjum Vatnsfjarðar og Skálavíkur, að mestu Skálavíkurmegin, um 100 m norðan vegarins gamla á Vatnsfjarðarnesi, um 3,1 km norðnorðvestur af bæjarhól 001.

ÍS-205:023 – Minjasvæðið í Selvík, þúst A greinanleg nær, rústir B og C greinanlegar ofan við miðja mynd, horft í suðsuðvestur.

Tóftirnar eru í Selvík, skammt ofan við fjöru. Þar sem tóftirnar eru í Selvík er víkin frekar lá, í aflíðandi halla. Þar er lítið af stóru grjóti, en það eykst eftir því sem utar (norðar/norðaustar) dregur. Fjaran er smágrýtt en vestar eru

ÍS-204:023 – Rústir B og C í Selvík, horft til norðurs.

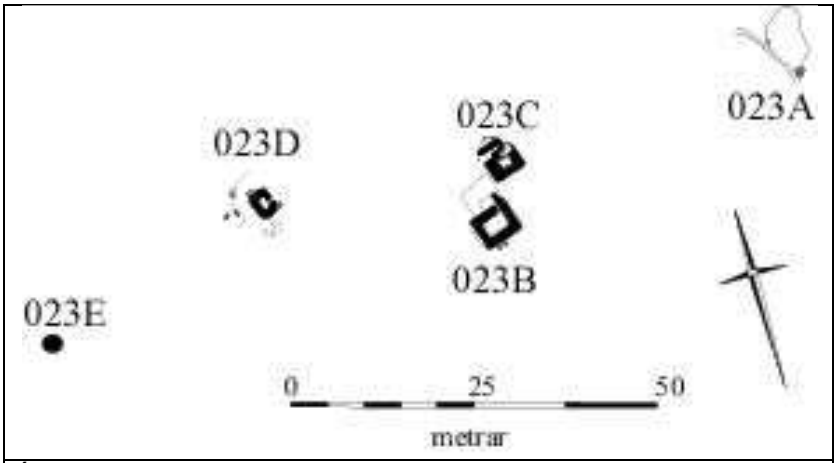
klappir. Svæðið er gróið grasi og eru, auk Selvíkurlækjarins, tveir lækjarfarvegir (næst 023A) sem eru uppþornaðir lækjarfarvegir eða fyllast í miklum vatnsveðrum. Frá Selvík er gott útsýni út á Djúpið.

Tóftasvæðið er langt og mjótt, um 110x20 m og snýr vestsuðvestur-austnorðaustur. Tóftirnar í tóftaþyrpingunni eru þrjár (B, C og D) auk einnar greinilegrar þústar (A) og gróið svæði (E) þar sem mannvistarleifar gætu leynst undir sverði. A er þúst, um 7x6 m að stærð. Þústin snýr norðaustur-suðvestur.

Hún er um 2 m suðaustan við fjöru og fast norðan og norðaustan við lækjarfarveg. Þústin er of ógreinileg til að hægt sé að greina innri lögun. Þessi þúst er sú eina af tóftunum sem er innan lands Vatnsfjarðar, allar hinar eru í landi Skálavíkur, þ.e. suðvestan Selvíkurlækjar. Tóft C er um 40 m suðsuðvestur af þúst A. Tóftir B og C eru stærstu og greinilegustu tóftirnar í víkinni. Þær eru næstum samfastar og ná yfir um 13x12 m svæði. Þær snúa norðnorðvestur-suðsuðaustur og eru báðar ferkantaðar. Tóft B er greinilegri en C og er hún einföld, um 5x6 m að utanmáli en um 2,5x3,5 m að innanmáli. Veggir eru mest um 1,2 m breiðir (án hruns) og veggjahæð er mest um 1 m en yfirleitt lægri. Op er til norðurs við austurvegg, mjög mjótt. Fyrir aftan (suðsuðaustan) tóftina eru tveir steinar, sem gætu hafa tengst tóftinni. Neðan (norðvestan) við hana er um 4x5 m stórt svæði sem er nokkuð þýft og hefur að öllum líkindum að geyma einhverskonar mannvist eða mannvirkaleifar. Það svæði tengir tóftir B og C saman. Norðnorðaustan við tóft B er tóft C og eru bara 2 m á milli norðurhorns B og suðurhorns C. Tóft C er ferköntuð, um 5,5x5 m að utanmáli og snýr norðvestur-suðaustur, en hólfaskipting er óljósari en í B. Tóftin skiptist í tvö hólf. Austanmegin er hólf sem er um 1,5x1,5 m að stærð, mjög þýft og fullt af grónu hruni. Norðvestast í tóftinni er langt og mjótt hólf, sem er 3x1 m að stærð en mjókkar þegar innar dregur, líklega vegna hruns. Op er á því vesturs. Þessi tóft er verr farin af hruni en tóft B og líklegt að hún hafi upphaflega skipst í fleiri hólf sem nú hafa horfið í hrun. Grjóthrun er í báðum tóftum, þó meira í B, og hafa þær líklega að mestu verið hlaðnar úr grjóti. Nokkrum metrum austan við tóftirnar rennur Sellækurinn, ágætlega vatnsmikill. Tóftirnar eru vel grónar grasi og þýfðar að innan. Tóft B snýr austur-vestur en tóft C norðnorðvestur-suðsuðaustur. Tóft D er um 30 m vestur af tóft C. Tóftin er ferhyrnd og snýr norðnorðvestur-suðsuðaustur. Hún er um 3x4 m að utanmáli en um 2x1 m að innanmáli. Veggir eru um 1 m á þykkt og mesta hæð þeirra er um 1 m. Op er á tóftinni til austurs, tæplega 1 m á breidd. Grjóthleðslur sjást víða í veggjum. Óljósar leifar, mögulega garðbrot er sunnan við tóftina. Það liggur um 2 m út frá tóftinni til suðurs en beygir þar til vesturs og rennur saman við umhverfið. Mögulega hefur áþekkt mannvirki legið til austurs en það er nú alveg ógreinanlegt. Vestan og norðvestan við tóftina er lítil fjara, með klettum og þar ofan á er steinn sem stendur upp á rönd og gnæfir yfir svæðið. Mögulegt er að steinninn hafi verið reistur við í ákveðnum tilgangi en ekkert er nú hægt að segja um mögulegt hlutverk hans. Svæði D er lítill og ræktarlegur, grænn blettur þar sem mannvistarleifar kunna að leynast undir sverði. Stærð blettarins er ógreinileg en hann er um 4-5 m í þvermál og er örlítið hærri en landslagið í kring, mest um 15-20 cm.

Hættumat: engin hætta

Heimildir:JÁM VII., 215.



ÍS-205:023

ÍS-205:024 *Mylluhóll* heimild um myllu 6556.408N 2229.744V

Í örnefnaskrá Ásgeirs Svanbergssonar segir: "Fyrir utan Kirkjugarð [026] er Sveinaflöt [054]. Á henni miðri Mylluhóll." Hóllinn var þar sem nú er húsagarður við núverandi íbúðarhús í Vatnsfirði, um 80 m austur af bæjarhól 001.

Húsagarðurinn við húsið er sléttur blettur gróin grasi, runnum, rabarbara og blómum.

Mylluhóll er nú horfinn en hann fór undir húsagarð við íbúðarhúsið í Vatnsfirði og jafnvel að hluta undir suðvesturhorn íbúðarhússins þegar húsið var byggt. Myllan var að öllum líkindum vindmylla eða handsnúin því enginn lækur rennur við hólinn. Þegar íbúðarhúsið er byggt á sjöunda áratug 20. aldar voru engar rústir á hólnum.

ÍS-205:024 – Svæðið þar sem Mylluhóll var áður, horft í suðaustur.

Hættumat: hætta, vegna ábúðar

Heimildir:Ö-Vatnsfjörður (ÁS) bls. 1.

ÍS-205:025 hús kirkja 6556.370N 2229.863V

Kirkjan í Vatnsfirði sem nú stendur er steinsteypt og stendur um 20 m suður af kirkjugarði 026, um 65 m suður af bæjarhól 001. Hún var byggð á árunum 1911-12 og var þá byggð á öðrum stað en kirkja hafði staðið þar á undan (sjá 026). Vatnsfjörður er ekki lengur prestssetur en síðasti presturinn þar, Baldur Vilhelmsson, býr þar enn í dag.

Kirkjan stendur í sléttuðu, slegnu túni en vestan við hana er óslegið tún.

Kirkjan er máluð (hvít 2010) að utan og er klukkuturn á henni vestanverðri, þeim megin sem inngangurinn er, en kirkjan snýr austur-vestur eins og reglan er með kirkjur.

Hættumat: engin hætta

Heimildir:Túnakort (ártal vantar).

ÍS-205:026 kirkjugarður legstaður 6556.392N 2229.812V

Vatnsfjörður hefur verið kirkjustaður frá ómuna tíð og virðist kirkjusagan vera samfelld. Fyrst er getið um kirkju í Vatnsfirði í Íslensku Fornbréfasafni árið 1273 en þá reynir Einar Þorvaldsson að halda eignarhaldi sínu á kirkjunni, en hann segir að föðurfaðir hans hafi látið byggja kirkjuna og hún hafi verið vígð með þeim skilmála að afkomendur hans ættu að eiga forræði yfir kirkjunni. Kirkjunnar menn eru ekki sammála því og segja að leikmenn og ólærðir eigi ekki að hafa forráð yfir kirkjum. Oft er getið um Vatnsfjarðarkirkju eftir þetta (Íslenskt Fornbréfasafn). Til að nefna dæmi um yngri færslur er þess getið árið 1514 að erkibiskupinn í Niðarósi hafi staðfest dóm þess efnis að Vatnsfjörður “skuli vera staðr (beneficium) æfinlega”. Árið 1709 skrifar Jón Eyjólfsson í ferðasögu: „Um kirkjuna. Hún var sögð 300 ára gömul af B.G.S. gerð, flutt út frá heil, sett niður af þýzkum snikka og Sivalda langalíf; hans hæð á forkirkjustaf að spri nær 5 álnir, hins 4 álnir á neðrastaf. Laufverk er á henni allri með kór og forkirkju með sínu munstri hvorn veg. Klukkur fjórar hanga í forkirkju, þær allar forstórar; tjöld eru um alla kirkju og kór og fordúkar fagrir með myndum og bílætum, samt töflum og bréfum. Millum kórs og kirkju er fagurt, skínandi snikkverk með fjórföldum pílárum og sex höfðingjasætum eður stúkum þar, hurð á járnum, stór lektari nær mannshæð. Kórinn er 8 álnir undir bita, nær eins langur (að prédikunarstólnum) sem kirkjan; allt er eins hátt og breitt, kór, kirkja, og forkirkja. Útbrot eru svo stórmikil, að 40 manns má þar vera, og sjást ei úr kór né kirkju einn þeirra. Svo fögur bílæti voru millum kórs og kirkju sem lifandi menn. Ei studdi kirkja þessa steinn né moldir, alleina 12 stórtré, 6 á hvora síðu, undir

ÍS-205:026 – Kirkjugarðurinn, svæðið þar sem kirkja á að hafa staðið fyrir 1911, horft í suður.

bitahöfuð, en það er hæð hennar, að þau gengu sum út fyrir kirkjugarðinn norður á túnið. Upp á henni voru þrír vindhanar og virku fram undan, en þær stóru kapellur á kórbaki yfir próföstunum og legsteinar gamlir víða um garðinn. Nú fékk séra Hjalti Þorsteinsson leyfi á alþingi að stytta kirkju um 5 álnir, en lækka um 1 1/2 alin. Sá nýi viður var í stóru stofu innlagður. Hann sýndi mér hann, og sagði danska gefið hafa 14 stöpla, og kaupmann þar fimmtíu borð; voru þessir harla grannir hjá hinum. Svo er nú og komið annað smíði á þá kirkju, sem von er og má þó allvænt hús vera, en ei til líka við hitt fyrra". Jóhann Hjaltason segir 1949: „Kirkjan í Vatnsfirði, sem nú er, er lítil steinkirkja. Stendur hún á lágum hól, skammt fyrir suðvestan og ofan kirkjugarðinn. Fátt er þar fornra kirkjugripa, því að þeir eru nú flestir komnir í Þjóðminjasafnið". Í Fornleifaskráningu Ragnars Edvardssonar frá 2003 segir: „Suðvestur af núverandi íbúðarhúsi í u.þ.b. 30 metra fjarlægð er hringlaga kirkjugarður hlaðinn úr grjóti. Suðvestan hans er timburkirkja [í raun steinsteypt kirkja] sem byggð var árið 1913. Samkvæmt heimildamanni var eldri kirkja í miðjum kirkjugarðinum" og seinna í sömu fornleifaskráningu: „Suðvestur af núverandi íbúðarhúsi í u.þ.b. 30 metra fjarlægð er hringlaga kirkjugarður hlaðinn úr grjóti. Gert var við grjóthleðsluna fyrir u.þ.b. áratug. Garðurinn er alveg hringlaga og er þvermál hans 52 metrar". Af ofantöldum heimildum er ljóst að gamla kirkjan, sú sem stóð fyrir 1912, stóð ekki á sama stað og kirkjan stendur í dag. Núverandi kirkja, 025, er steinsteypt og var byggð á árunum 1911-12. Gamla kirkjan var þá rifin og var viðunum úr henni ekki hent heldur voru þeir nýttir til bygginga, m.a. til að byggja íbúðarhús á bænum Keldu í Mjóafirði, hús sem stendur enn í dag. Allt bendir til þess að gamla kirkjan hafi staðið inni í kirkjugarðinum eins og hann er núna. Kirkjugarðurinn er á milli núverandi íbúðarhúss og kirkju 025, um 50 m vestur af íbúðarhúsinu og um 20 m norðaustur af kirkjunni, fast sunnan við bæjarhól 001. Nákvæm staðsetning gömlu kirkjunnar innan kirkjugarðsins er ekki þekkt en Ólafía Salvarsdóttir taldi að hún hlyti að hafa verið norðan til í kirkjugarðinum eins og hann er nú (2010). Ólafía benti á að þegar teknar voru grafir á þessu svæði fyrir nokkrum árum kom upp mikið af hleðslugrjóti. Á þessum stað eru hærri þúfur en annars staðar í garðinum og er það einnig vísbending um staðsetningu kirkjunnar. Ef þessi staðsetning er rétt virðist það hafa verið svo að kirkjan hafi upphaflega staðið rétt norðan við kirkjugarðinn en þegar hann var stækkaður á seinni tímum (sjá frekari umfjöllun neðar) hafi hún færst inn í garðinn.

ÍS-205:026 – Kirkjugarðurinn, hluti af því svæði sem ekki var rutt út við endurbætur sést til vinstri, horft í suðsuðaustur.

Sunnan og austan við kirkjuarðinn eru sléttuð tún, vestan við hann er brekka og órækt og norðan við hann er gamli bæjarhóllinn þar sem nú (2010) fara fram fornleifarannsóknir. Í miðjum garðinum er ljósastaur og víða í honum, þó sérstaklega næst ytri mörkum hans, eru krossar og legsteinar.

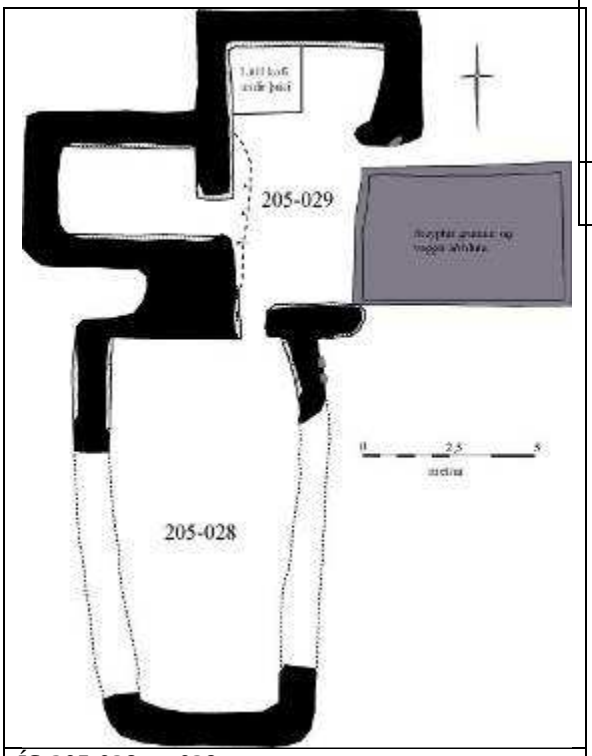
Kirkjugarðurinn er í dag hringlaga, en þannig er hann einnig á túnakorti frá því um 1920, og tæpir 50 m í þvermál. Þrjú bygginarstig kirkjugarða virðast vera greinanleg í kirkjugarðinum. Það yngsta tilheyrir framkvæmdum sem unnar voru í lok 20. aldar þegar grafið var meðfram kirkjugarðinum, en hann var áður í jafnri hæð við túnið að vestanverðu en örlítið hærri en það að austanverðu. Við þær framkvæmdir var túnið lækkað, þannig að nú stendur kirkjugarðurinn um 1,3 m upp úr túninu, og hlaðin var grjóthleðsla, jafn há kirkjugarðinum, meðfram kanti hans. Áður en ráðist var í þessar framkvæmdir var kirkjugarðurinn afgirtur (sjá m.a. mynd frá 1985 í ljósmyndabókinni Gluggasteini bls. 169 og aðra frá 1972 í sömu bók á bls. 167). Bygginarstigið í miðið er líklega stækkun sem var gerð af sr. Stefáni Stephansen rétt fyrir aldamótin 1900 þar sem hann felldi hlaðinn garð sem afmarkað hafði elsta byggingarstig garðsins og stækkaði kirkjugarðinn við það í allar áttir að því er virðist. Elsta bygginarstigið er sá garður sem afmarkaður var með þeirri hleðslu. Þessi elsti hluti garðsins er nokkuð greinilegur og er lægri en stækkanirnar tvær. Innst í þessum garði er lægri flöt, um 35 m í þvermál, sem að öllum líkindum er elsti greinanlegi hluti kirkjugarðsins í Vatnsfirði. Samanlagt er garðurinn nú (2010) því um 49 m í þvermál en stækkanirnar virðast hafa verið um 3 m allan hringinn í annað skiptið og um 4 m allan hringinn í hitt skiptið, samtals um 14 m í þvermál. Flestir legsteinanna í kirkjugarðinum eru út við jaðra hans, ofan á stækkununum, en fáir legsteinar eru inni í miðjum garðinum þótt víða sjáist móta fyrir gröfum þar. Engin greinileg ummerki sjást í kirkjugarðinum um það hvar gamla kirkjan stóð en líklegast er að hún hafi staðið norðan til í garðinum en þar er jarðvegurinn hærri á kafla og getur það verið vísbending um staðsetningu gömlu kirkjunnar. Annað sem styður þá staðsetningu er það að þegar framkvæmdirnar við kirkjugarðinn í lok 20. aldar fóru fram kom upp gríðarlegt magn af grjóti á þessum slóðum, við norðurhluta varðsins, svo mikið að framkvæmdum var hætt. Þá var eftir um 11 m langur bútur meðfram norðurhlið kirkjugarðsins sem ekki hafði

verið rutt út. Talið er líklegast að grjótið sem kom upp hafi annað hvort tilheyrt kirkjunni sjálfri eða göngum á milli bæjar og kirkju (sjá 055). Með framkvæmdunum við kirkjugarðinn í lok 20. aldar var útliti garðsins breytt mikið, þó hann haldi enn lögun sinni. Kirkjugarðurinn er í dag vel hirtur og sleginn en virðist ekki hafa verið sléttaður þar sem enn sést móta fyrir gröfum í elsta hluta garðsins þó að engir legsteinar eða krossar séu þar.
Hættumat: hætta, vegna líkagraftar
Heimildir:Túnakort (ártal vantar); RE, 13; Ljósmyndabókin Gluggasteinn; JH, bls. 97; JE, bls. 237-238; DI. II, bls. 96; DI. VIII, bls. 161-163; Vestfjarðarvefur.

ÍS-205:027 heimild um kálgarð
Inn á túnakort frá því um 1920 eru merktir tveir kálgarðar vestan við tún, þessi og kálgarður 056. Samkvæmt túnakortinu eru þeir um 200 m norðvestur af bæjarhól 001, en staðsetning kálgarða utan túns virðist vera ónákvæm (sbr. ónákvæmni á túnakorti í Sveinhúsum (206)) og því er ekki hægt að treysta staðsetningu þeirra.
Ólafía Salvarsdóttir, heimildamaður, kannaðist ekki við garðana og líklegt er að þeir séu fyrir löngu fallnir úr notkun og horfnir. Gengið var um svæðið þar em kálgarðarnir hafa mögulega verið samkvæmt túnakortinu, á holtinu upp af túngarði 032. Svæðið er mjög blautt og stórþýft og engar leifar þessa kálgarðs sáust.
Hættumat: engin hætta
Heimildir:Túnakort (ártal vantar).

ÍS-205:028 tóft útihús 6556.423N 2229.863V
Í Fornleifaskráningu Ragnars Edvardssonar frá 2003 segir: „Norðan við bæjarhólinn gamla [001] stóðu áður 3 útihús, í 100 metra í nv frá núverandi íbúðarhúsi. Ekki sést móta fyrir þessum húsum fyrir utan það nyrsta sem er rúst af fjárhúsi [029, í raun fjós]. Nr. 28 er það syðsta. Þýft svæði“. Á túnakorti frá því um 1920 eru sýnd þrjú stakstæð útihús norður af Gamla húsi 001A. Þetta hús er það syðsta, á milli Gamla húss 001A og fjóss 029 (sem er útihúsið í miðjunni). Tóft hússins sést enn norðan við bæjarhólinn.


ÍS-205:028 – Horft á tóft 028 úr tóft 029, hlaðnir veggir tilheyra tóft 029, horft í suður.



ÍS-205:028 og 029

Svæðið er óslegið og er mikill gróður þar.
Tóftir 028 og 029 eru samfastar (sjá líka 029) eins og þær eru í dag en eru greinilega tvö stakstæð hús á túnakorti. Tóftin er einföld, aflöng og snýr norður-suður. Hún er um 12x7 m að stærð. Tóftin er fremur ógreinileg en um 11x4-5 m að innanmáli. Hún er illa farin til suðurs og virðist þar um 4 m breið en norðar (nær 029) er hún um 5 m á breidd að innanmáli, tóftin s.s. breikkar til norðurs. Veggir eru um 1 m breiðir og mest um 1,5 m háir. Veggir eru hlaðnir úr grjóti en hleðslur eru á kafi í gróðri nema þær sem eru næstar tóft 029. Op er á milli 028 og 029 á sameiginlegum vegg, rúmlega hálfur meter á breidd. Samkvæmt bæjarteikningu danskra landmælingamanna frá 1913 var húsið geymsluhús.
Hættumat: engin hætta
Heimildir:Túnakort (ártal vantar); RE, 13; Bæjarteikning 1913.

ÍS-205:029 *Fjósatunga* tóft fjós 6556.428N 2229.867V
Í örnefnaskrá Þorkels Guðmundssonar segir: „Ofan við lækinn heitir einu nafni Hólar, en utan við hann er Fjósatunga og fyrir utan eru Andrésarflatir“. Fjósatunga tekur að öllum líkindum nafn sitt af fjósinu sem var um 30 m frá bæjarhól 001. Í Fornleifaskráningu Ragnars Edvardssonar frá 2003 segir um fjósið: „Norðan við

bæjarhólinn gamla stóðu áður 3 útihús, í 100 metra í nv frá núverandi íbúðarhúsi. Ekki sést móta fyrir þessum húsum fyrir utan það nyrsta sem er rúst af fjárhúsi. Nr. 29 er nyrst. Hleðslur standa enn sums staðar og hefur húsið einnig einhvertímann verið að hluta til steypt". Samkvæmt bæjarteikningu danskra landmælingamanna frá 1913 og Ólafíu Salvarsdóttur var húsið fjós. Það var í miðið af þeim þremur útihúsum sem teiknuð eru á túnakorti frá því um 1920 norðan við Gamla hús 001A. Tóft 028 er sunnan við, en norðan við það, hinum megin við læknin sem nú liggur í skurði er sjást enn tóftir af þriðja húsinu (sjá 051). Tóft fjóssins er um 30 m norður af bæjarhól 001, við norðurenda tóftar 028.


ÍS-205:029 – Vestara hólfið í tóft 029, horft í vestur.

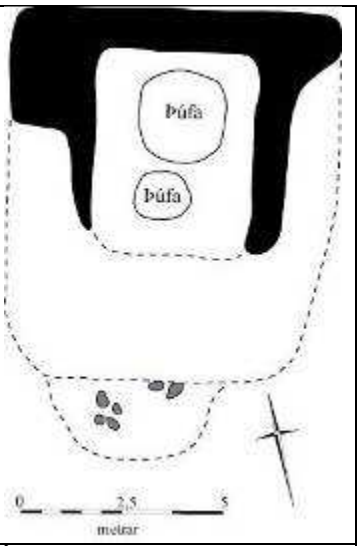
Tóftin er í jaðri þess hluta túnsins sem sleginn er norður af bæjarhólnum. Svæið er mjög gróið, rétt austan við skurðinn sem bæjarlækurinn rennur í.
Tóftin er 11,5x9,5 m stór, snýr norður-suður og eru veggir hennar mest um 2 m háir. Við austurhluta tóftarinnar, sunnarlega, var steypt hús, um 4x7 m að stærð (sem ekki er talið með í stærð tóftar). Veggir þess húss standa enn að hluta, sérstaklega til vesturs þar sem veggir eru enn um 2 m háir. Tóftin sjálf skiptist í tvö hólf. Það eystra er stærra og snýr norður-suður en það vestara snýr austur-vestur. Vestara hólfið var hlaða. Það er um 2,5x4 m að innanmáli og standa veggir þess nokkuð vel þó farið sé að hrynja úr þeim á stöku stað. Eystra hólfið var fjósið sjálft og er það um7,5x3,5 m að innanmáli. Í norðvesturhorn þess er lítill kofi, um 2x2 m að stærð, sem börn hafa notað sem bú á seinni hluta 20. aldar. Veggir kofans standa veggir enn vel og sést að hlaðið hefur verið steinum og torfþökum til skiptis. Steypta viðbyggingin er sunnarlega á austurlangvegg fjóssins. Innan í fjósinu eru steypuleifar og bárujárnsdrasl við steypta vegginn. Op er á milli tófta 028 og 029 er á sameiginlegum vegg en einnig dyr verið norðan við steypta vegginn. Op hefur verið á milli fjóss og hlöðuna á sameiginlegum vegg.
Hættumat: engin hætta
Heimildir:Ö-Vatnsfjörður (ÞG) bls. 6; Túnakort (ártal vantar); RE, 13; Bæjarteikning frá 1913.

ÍS-205:030 heimild um hjall 6556.388N 2229.881V
Í Fornleifaskráningu Ragnars Edvardssonar frá 2003 segir : „Á túnakorti er teiknað lítið útihús sunnan við bæjarhólinn. Grösugur hóll í u.þ.b. 25 metra beint vestur af kirkjugarðinum, 40 metra nv af kirkjunni. Lítill grösugur hóll". Húsið sem merkt er inn á túnakortið frá því um 1920 var um 35 m norðnorðvestur af núverandi kirkju. Húsið var hjallur samkvæmt Ólafíu Salvarsdóttur en geymsluhús samkvæmt bæjarteikningu danskra landmælingamanna frá 1913.
Líklega hefur hjallurinn verið þar sem nú er ósleginn blettur í túninu, vestan kirkjugarðs. Vestan við blettinn er skurður sem bæjarlækurinn rennurr í. Bletturinn er aðeins hærri en umhverfið en þó frekar sléttur.
Engar leifar hússins sjást lengur en gróðurfar og spýtnarusl gæti gefið vísbendingu um staðsetningu þess, sem og staðsetning á túnakorti. Hjallurinn var rifinn á seinni hluta 20. aldar.
Hættumat: hætta, vegna ábúðar
Heimildir:Túnakort (ártal vantar); Bæjarteikning 1913: RE, 13.

ÍS-205:031 *Geithús* tóft fjárhús 6556.348N 2229.902V
Í Fornleifaskráning Ragnars Edvardssonar frá 2003 segir: „Á túnakorti er teiknað útihús syðst alveg við túngarðinn. Húsið stóð á grösugum hól í u.þ.b. 60 metra frá timburkirkjunni [s.s. núverandi kirkju]. Hár grösugur hóll". Í örnefnaskrá Þorkels Guðmundssonar segir: „Upp af mýrinni Fríðu heitir Ból, en nokkru ofar er kölluð Geithúsmýri, örskammt framan við túngarðinn, út undan fjárhúsi því innangarðs, sem nefnt er Geithús". Tóft Geithúsa, er merkt voru inn á túnakort frá um 1920, er um 120 m suðsuðvestur af bæjarhól 001 og um 50 m vestur af núverandi kirkju 025.
Tóftin er á háum, mjög grónum hól. Hún er á kafi í grasi, puntur og sóleyjum sem gerir það að verkum að


ÍS-205:031 – Tekið ofan á Geithúshól, horft í suður.

erfitt að greina lag hennar. Austan við hólinn er sléttað og slegið tún en vestan við hann er órækt. Túngarður 032 liggur utan í hólnum að vestan.



ÍS-205:031

Tóftin er greinileg að því leyti að augljóst er að á hólnum hefur staðið hús en lag þess og innri skipan er á köflum mjög óljóst sérstaklega að sunnanverðu. Tóftin virðist vera um 9x8 m að utanmáli og um 5x4 m að innanmáli. Hún snýr norðnorðaustur-suðsuðvestur. Hæð veggja er um 80 cm þar sem mest er, en þó yfirleitt lægri. Tvær stórar þúfur eru framarlega (norðarlega) fyrir miðju innan í húsinu. Sú nyrðri er hærri og stærri, allt að 1,3 m há og um 2x2 m að grunnfleti. Lægri þúfan er minni eða um 1,1 m há og um 1x1,5 að grunnfleti. Mögulegt er að þúfurnar séu leifar af hruni. Ekkert op er greinanlegt á tóftinni sem virðist hlaðin úr torfi þó ekki sé óhugsandi að grjóthleðslur leynist undir gróðrinum. Aftan (sunnan) við tóftina er þúst, allt að 2 m útfrá tóftinni, sem gæti tilheyrt henni eða verið leifar eldar byggingarstigs, og þar er mögulega hleðslugrjót í sverði. Sjálfur hóllinn sem tóftin er á er um 4 m hár og er án efa að talsverður leyti uppsöfnuð mannvistarlög. Húsið skemmdist mikið í óveðri árið 1936 og var aldrei notað eftirð það heldur jafnað við jörðu. Eftir að húsið var rifið var gerður kálgarður á staðnum og hefur það mögulega aflagað það litla sem eftir getur hafa verið af tóftinni. Ef húsið dregur nafn sitt af því að þar hafi verið hafðar geitur er næsta víst að það nafn sé nokkuð gamalt þar sem hvorki heimildir né heimildamenn minnast á að þar hafi verið hafðar geitur.

Hættumat: engin hætta
Heimildir:Túnakort (ártal vantar); RE, 14; Ö-Vatnsfjörður (ÞG) bls. 3-4; Tryggvi Þorsteinsson, 2006, bls. 41.

ÍS-205:032 garðlag túngarður 6556.342N 2229.930V

Í Fornleifaskráningu Ragnars Edvardssonar frá 2003 segir: „Á túnakorti er teiknaður túngarður sem umlykur svo til allt bæjarstæðið fyrir utan túnið sjávarmegin. Túngarðurinn er að mestu leyti horfinn fyrir utan nokkra staði vestan og norðan megin og svo við sjóinn. Túngarðurinn er grjóthlaðinn“. Túngarðurinn umlykur stóran hluta þess túns sem merkt er sem tún á túnakorti og er víðast vel greinilegur, þó sérstaklega til vesturs og norðurs.

Túngarðurinn liggur í grasi grónum hólum upp af (vestur og norður) af sléttuðum túnum. Síðan áfram í grónu landslagi og mýrum. Þegar komið er fyrir túnendann norðanmegin og að austanverðu liggur garðurinn í þýfi og litlum mýrum fram undir íbúðarhúsið þar sem hann hverfur.


ÍS-205:032 – Túngarðurinn ofan túns, horft í norðaustur.

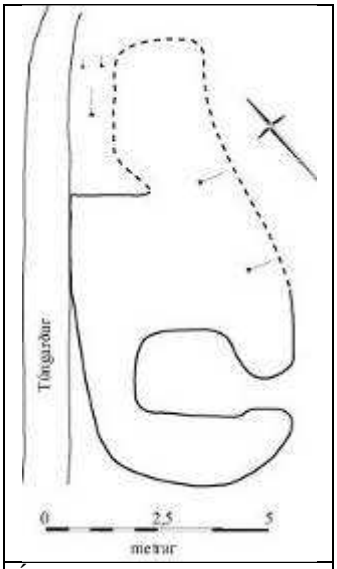

ÍS-205:032 – Túngarðurinn norðan túns, horft í suðaustur.

Túngarðurinn er mjög greinilegur á köflum í kringum túnið, sérstaklega að vestan og norðan. Um 1920 hefur hann markað af tún sem var um 470x250 m að stærð og snéri nálega norður-suður. Túnið er nú (2010) stærra en það var þegar túnakortið var teiknað, en það hefur verið stækkað til suðurs. Að suðaustan er túngarðurinn horfinn en á öðrum stöðum má rekja hann. Túnið hefur að mestu verið sléttað og er það enn slegið að miklu leyti og aðeins órækt í því nema nyrst og vestast. Túngarðurinn er víða gróinn grasi og eltingu og er gróðurfar á honum ljósara en umhverfið þannig að hann er vel greinanlegur. Stór skurður hefur verið grafinn í gegnum túngarð að suðvestanverðu þar sem bæjarlækurinn rennur nú (2010). Að vestsuðvestanverðu eru tvö vik í garðinn, annað mjótt þar sem gönguleið 002 virðist liggja í gegn og annað þar sem fjárhús 035 voru. Þar sést grjót í garðinum. Þegar norðar dregur er lítil vantsrás meðfram garðinum vestanvið. Þar er einnig eyða í garðinum, um 20 m löng. Norðan við mýri, um 220 m frá bæ verður garðurinn aftur greinilegur og markar þar af norðurenda túnsins og hluta af austurhliðinni. Um 175 m frá norðausturhorni hverfur garðurinn aftur á mýrlendu, þýfðu svæði.. Hann birtist aftur um 45 m sunnar en sést þá bara á um 19 m löngum

kafla og hverfur svo endanlega, en þá er komið langleiðina að núverandi íbúðarhúsi. Túngarðurinn var hlaðinn úr grjóti, og á köflum mjög stóru grjóti en líklega hefur torf einnig verið notað í hleðsluna. Hann er nú alveg gróinn þannig víðast sést ekkert í hleðslur. Þó að hluti garðsins hafi horfið í túnasléttun má enn sjá greina óljósar leifar garðsins sunnan við núverandi kirkju í sléttuðu túninu. Þar er lægð í túnið sem í er nokkuð af steinum og grjótmulningi. Garðurinn er mest um 1,5 m hár og um 2 m breiður, en yfirleitt aðeins lægri og mjórri. Garðurinn er samtals um 1110 m langur þar sem hann er greinilegur en hefur áður verið nokkuð lengri.
Hættumat: hætta, vegna ábúðar
Heimildir:Túnakort (ártal vantar); RE, 14.

ÍS-205:033 tóft útihús 6556.456N 2229.974V

Í Fornleifaskráningu Ragnars Edvardssonar frá 2003 segir: „Lítil gróin, ógreinileg rúst er í u.þ.b. 130 metra frá bæjarhólnum. Stendur alveg við túngarðinn. Þýft og blautt svæði. Rústin er vel gróin og erfitt að greina útlínur. Þessi rúst er ekki á túnakorti“.



ÍS-205:033

Umrædd tóft er um 125 m norðnorðvestur af bæjarhól 001 og um 35 m norður af hesthúsi 034.

Tóftin er á háum hól upp við túngarðinn 032 austanverðan. Mýrarspræna er suðvestan við hana þar sem er þýft og blautt en þurrara og sléttara er norðaustan við. Frá tóftinni er brekka til suðausturs.


ÍS-205:033 – Tóftin og túngarðurinn nest á myndinni og til vinstri, horft til norðausturs.

Tóftin er ógreinileg en er um 10x5 m að stærð og snýr norðaustur-suðvestur. Hún virðist skiptast í tvö hólf og er það suðvestara mun skýrara. Það er um 2x2 m að innanmáli en veggir þess eru óskýrir. Minna hólfið er í raun aðeins dæld og virðist túngarðurinn notaður sem vesturveggur þess. Veggir eru mest um 1,5 m breiðir þar sem þeir eru greinilegir en allt upp í 3 m þar sem þeir renna út og erfitt er að greina endimörk þeirra. Veggjahæð er mest um 1 m, að suðvestan. Húsið hefur án efa verið e.k. útihús en ekki er vitað um nákvæmt hlutverk þess.
Hættumat: engin hætta
Heimildir:RE, 14.

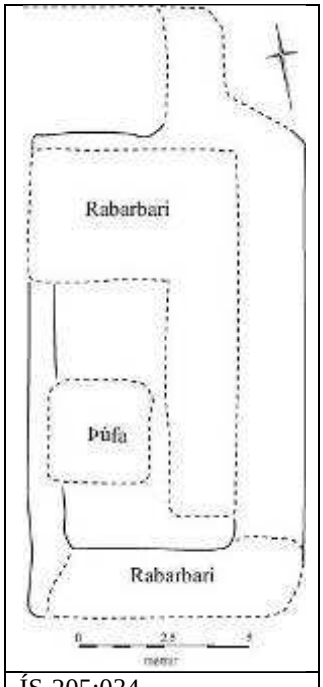
ÍS-205:034 *Hólhús* tóft fjárhús 6556.420N 2229.966V

Í Fornleifaskráningu Ragnars Edvardssonar frá 2003 segir: „Á túnakorti eru 3 útihús teiknuð vestast í túninu, nr 34 er sú í miðjunni. Á svæðinu vestan við bæjarhólinn [001] eru nokkuð stórir hólar. Á þeim stóðu áður útihús sem nú hafa verið rifin. Nr. 34 stóð í u.þ.b. 80 metra nv af bæjarhólnum. Hár grösugur hóll rétt austan túngarðsins [032]“. Tóft er merkt inn á túnakort frá því um 1920, hún er sú syðsta af þremur vestarlega í túninu, ekki sú í miðjunni eins og Ragnar skrifar hér á undan. Tóftin er um 85 m vestnorðvestur af bæjarhól 001, á hæð vestan við bæjarlæk. Samkvæmt bæjarteikningu danskra landmælingamanna frá 1913 voru húsin þá fjárhús og samkvæmt Tryggva Þorsteinssyni hétu þau Hólhús .


ÍS-205:034 – Fjárhústóftin, horft til suðausturs.

Umhverfið er óslegið tún. Talsvert er um hæðir í túninu er tóftin á einni þeirra. Norðan við hana er lág þar sem lítil lækjarspræna rennur.

Tóftin er nú (2010) notuð sem rabarbarabeð og er þess vegna óskýr á köflum. Tóftin er um 18x8 m stór og snýr norður-suður. Hún virðist skiptast í tvö hólf. Syðra hólfið er stærra (og þar er rabarbari) og það virðist

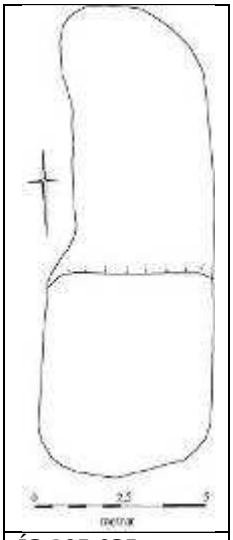


ÍS-205:034

ver um 11,5x5 m að innanmáli, þó oft sé erfitt að greina veggi vegna rabarbarans. Minna hólfið er um 3,5x5 m að innanmáli og snýr það hólf nálega austur-vestur. Veggir eru mest um 2 m breiðir og um 1 m á hæð. Ekkert op virðist vera á milli hólfanna. Stór púfa er í stóra hólfinu um það bil fyrir miðju vestan til. Líklega hefur tóftin verið hlaðin úr torfi og grjóti.
Hættumat: engin hætta
Heimildir:Túnakort (ártal vantar); Bæjarteikning 1913; RE, 14; Tryggvi Þorsteinsson, 2006, bls. 36.

ÍS-205:035 þúst útihús 6556.390N 2229.963V

Í Fornleifaskráningu Ragnars Edvardssonar frá 2003 segir: „Á túnakorti frá 1918-1920 er teiknað útihús svo til beint í vestur frá kirkjugarðinum [026] rétt austan við túngarðinn [032]. Í u.þ.b. 80 metra í vestur frá kirkjugarðinum. Grösugur hóll“. Staðsetning miðað við túnakort er röng og er þessi rúst ekki á túnakorti (sbr. GPS hnit Ragnars). Þúst er ofarlega (vestarlega) í túni, um 35 m austan túngarðs 032. Hún er um 10-15 m norðan göngustígs sem liggur upp að Grettisvörðu 012, og um 90 m vestur af bæjarhól 001.



ÍS-205:035


ÍS-205:035 – Þústin, horft til vesturs.

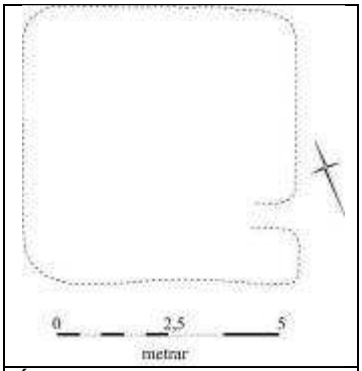
Þústin er í þýfðu, óslegnu túni, á frekar sléttu undirlendi. Lítil mýri er norðaustan við þústina.
Þústin er lítið annað en hóll í túninu, vel grasi gróinn. Þar sem þústin er innan túns er líklegt að mannvistarleifar, líklega útihúsleifar leynist undir sverði. Þústin er um 14x5 m að stærð og snýr nálega norður-suður. Suðurhluti tóftar er hærri en sá nyrðri. Engin hólfaskipting er greinanleg í þústinni. Þústin er mest um 1,5 m á hæð.
Hættumat: engin hætta
Heimildir:RE, 14.

ÍS-205:036 tóft útihús 6556.407N 2229.900V

Í Fornleifaskráningu Ragnars Edvardssonar frá 2003 segir: „Vestan bæjarstæðisins er lítil rúst, í u.þ.b. 30 metra beint vestur af bæjarhólnum“. Tóftin sem Ragnar getur er um 30 m vestur af bæjarhól 001, um 3 m ofan (vestan) við skurðinn sem bæjarlækurinn rennur í.


ÍS-205:036 – Tóftin, fornleifauppgröfturinn á bæjarhólnum í baksýn, horft í austur.

Tóftin er í óslegnu, smáþýfðu túni. Það er mjög gróið grasi og eltingu.
Tóftin er um 6x6 m að stærð og ferhyrnd. Hún er mjög ógreinileg og á kafi í grasi og eltingu og því er ógjörningur að greina hólfaskipan í henni. Mögulegt er að op hafi verið syðst á austurvegg hennar til suðausturs. Veggir eru mest rúmlega 1 m á hæð. Húsið hefur líklegast verið e.k. útihús en ekki er vitað hvaða hlutverki það gegndi nákvæmlega.



ÍS-205:036

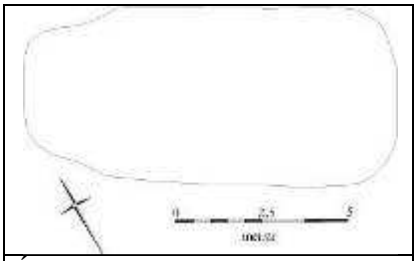
Hættumat: engin hætta
Heimildir:Túnakort (ártal vantar); RE, 14.

ÍS-205:037 tóft óþekkt 6556.431N 2229.924V

Í Fornleifaskráningu Ragnars Edvardssonar frá 2003 segir: „Á túnakorti er teiknað útihús svo til beint í vestur frá bæjarhólnum [001]. Í u.þ.b. 50 metra í vestur frá bæjarhólnum“. Staðsetning sakvæmt túnakorti er röng (sbr. GPS hnit Ragnars) og er þessi tóft því ekki á túnakorti. Tóft er um 65 m norðnorðvestur af bæjarhól 001, um 35

ÍS-205:037 – Tóftin fyrir miðri mynd, víkingaaldarsvæðið uppi í vinstra horninu, bæjarhúsið uppi í hægra horninu, horft í austsuðaustur.

m austur af tóft 034.
Tóftin er á lítilli hæð vestan lækjar (skurðar), neðan (austan) við háan hól, þann sem tóft 037 er á. Norðan við tóftina er bratti niður að lækjarsprænu sem liggur úr lítilli mýri fyrir ofan. Umhverfis er gróið grasi og eltingu.
Tóftin er ógreinileg og sést helst vegna þess hvernig eltingin vex og markar gróðurinn því útlínur hennar. Tóftin virðist vera um 10x5 m að stærð, en aðeins mjórri, eða um 4 m breið, til vesturs. Tóftin snýr austsuðaustur-vestnorðvestur. Ekki er hægt að greina hólfaskiptingu í tóftinni og ekkert op er greinilegt. Veggjahæð er mest um 0,7 m. Sunnan við tóftina, um 5-10 m frá, er dálítið lægðardrag sem í vex arfi. Vestsuðvestan við það er lítill grænn hóll sem er utan í hólnum sem tóft 037 er á. Þessi hóll gæti tengst tóftinni á einhvern hátt, verið haugur af einhverju tagi eða þess háttar.



ÍS-205:037

Hættumat: engin hætta
Heimildir:RE, 14.

ÍS-205:038 *Hrútakofinn* heimild um hesthús 6556.451N 2229.940V

Í Fornleifaskráningu Ragnars Edvardssonar frá 2003 segir: „Á túnakorti er teiknað útihús í u.þ.b. 80 metra fjarlægð frá bæjarhól [001]. Sléttað tún“. Húsið sem merkt er inn á túnakortið frá því um 1920 var þar sem nú er hóll í sléttuðu túninu um 95 m norður af bæjarhól 001 og um 55 m norðaustur af tóft 034.
Hóllinn er í óslegnum túni, mjög grónu. Sunnan og suðvestan við hann er örlítil mýri og lækur sem rennur um hana. Hóllinn er gróinn grasi og eltingu.
Hesthús stóðu á þessum hól samkvæmt bæjarteikningu frá 1913. Samkvæmt Ólafíu Salvarsdóttur, heimildamanni, var húsið orðið að reykkofa þegar hún hóf búskap 1956. Engin merki sjást lengur um byggingu á hólnum og hafa leifar reykkofans verið sléttaðar algjörlega út. Tryggvi Þorsteinsson kallar húsið Hrútakofann, en segir að þar hafi hrútar aldrei verið geymdir því engin hlaða var við húsið, hins vega hafi það verið notað sem reykhús. Neðan vð hólinn, utan í honum að suðaustanverðu, er lítill hóll þar sem mögulega leynist mannvirki tengd hesthúsinu, e.t.v. e.k. haugur. Litli hóllinn er um 5-10 m í þvermál.

ÍS-205:038 – Hóllinn sem hesthúsið stóð, horft til norðurs.

Hættumat: engin hætta
Heimildir:Túnakort (ártal vantar); Bæjarteikning 1913; RE, 14; Tryggvi Þorsteinsson, 2006, bls. 36-7.

ÍS-205:039 *Kothús* heimild um fjárhús 6556.573N 2229.887V

Í Fornleifaskráningu Ragnars Edvardssonar frá 2003 segir: „Á túnakorti eru teiknuð tvö útihús [sjá einnig 040] nyrst í túninu alveg við túngarð [032]. Þessi er sú vestri. Allt túnið hefur verið sléttað og sléttað hefur verið yfir báðar rústirnar“. Í örnefnaskrá Þorkels Guðmundssonar segir: „Út af Andrésarflötum er Kothústún, en niður frá þeim er svo nefnd Nýjaslétta“. Í örnefnaskrá Ásgeirs Svanbergssonar segir: „Yzt á Vatnsfjarðartúni heitir Kothúsvöllur. Fjárhús sem þar voru, hétu Kothús“. Tryggvi Þorsteinsson segir svipaða sögu: „Yst á túninu voru Kothúsin, tvö aðskilin hús með sameiginlegri hlöðu“. Engin ummerki sjást um húsið sem merkt er inn á túnakort frá því um 1920 en það hefur verið um 300 m norðan við bæjarhól 001, í norðurhorni túngarðsins.
Svæðið er slétt en óslegið tún, vaxið grasi, eltingu og

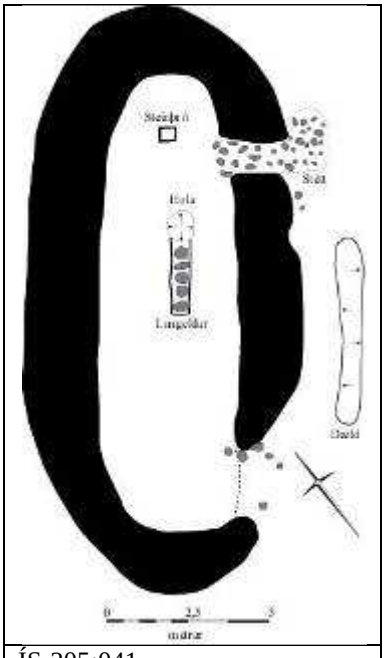
ÍS-205:039 – Upphækkunin þar sem húsin hafa mögulega staðið.

sóleyjum.
Búið að slétta yfir tóftina og hún horfin með öllu. Örlítil upphækkun er á þeim slóðum sem húsin hafa líklegast staðið.
Hættumat: engin hætta
Heimildir:Ö-Vatnsfjörður (ÞG) bls. 6; Túnakort (ártal vantar); Bæjarteikning 1913; RE, 15; Ö-Vatnsfjörður (ÁS) bls. 2; Tryggvi Þorsteinsson, 2006, bls. 36.

ÍS-205:040 heimild um hesthús 6556.586N 2229.757V
Í Fornleifaskráningu Ragnars Edvardssonar frá 2003 segir: "Á túnakorti eru teiknuð tvö útihús [sjá einnig 039] nyrst í túninu alveg við túngarð [032]. Þessi er sú eystri. Allt túnið hefur verið sléttað og sléttað hefur verið yfir báðar rústirnar". Engin ummerki sjást um húsið sem merkt var inn á túnakort frá því um 1920 en það hefur verið um 340 m norðnorðaustan við bæjarhól 001, um 100 m austur af fjárhúsi 039. Samkvæmt bæjarteikningu danskra landmælingamanna frá 1913 voru húsin hesthús.
Svæðið er sléttað, óslegið tún með nokkrum stórum steinum sem mögulega hefur verið safnað saman þangað.
Búið er að slétta yfir tóftina og hún horfin með öllu.
Hættumat: engin hætta
Heimildir:Túnakort (ártal vantar); Bæjarteikning 1913; RE, 15.

ÍS-205:041 tóft bústaður 6556.466N 2229.837V
Í Fornleifaskráningu Ragnars Edvardssonar frá 2003 segir: „Í 100 metra frá bæjarhól í sléttuðu túni. Sporöskjulaga rúst. Allt túnið hefur verið sléttað og stendur rústin svo til við suður jaðar túnsins. Rústin er sporöskjulaga og er nokkuð greinileg. Sennilega er hér um að ræða skála frá 10.öld. Sumarið 2003 var grafinn prufuskurður í gegnum rústina“. Skálinn er um 95 m norðnorðaustur af bæjarhól 001. Fullur uppgröftur á árunum 2003-2005 leiddi í ljós að um víkingaaldarskála frá 10. öld er að ræða.
Skálatóftin er í sléttuðu túni, um 100 m norður af bæjarhól 001. Túnið umhverfis er grasigróið. Tóftin sjálf er gróin mosa og grasi. Túnið er í smá halla, enda landslagið í kring byggt upp á gömlum sjávar-/malarkömbum.


ÍS-205:041 – Víkingaaldarskálinn, horft til suðsuðvesturs.


ÍS-205:041

Tóftin er að utanmáli um 18 m á lengd en um 8,5 m á breidd þar sem hún er breiðust. Hún snýr norðaustur-suðvestur og op á henni norðanverðri, til austurs. Opið er um 1 m breitt og í gegnum það liggur stétt út og 1-1,5 m frá húsinu. Veggir tóftarinnar eru mest um 2 m breiðir og um 60 cm háir þar sem þeir eru hæstir, að vestanverðu. Suðausturhorn tóftarinnar er illa farið, mögulega vegna sléttunar. Þar, að austanverðu, er eyða í veggnum á um 2 m löngu svæði. Langeldur er í tóftinni miðri, eða um 6,5 m frá suðurenda og er hann hátt í 2 m langur. Við norðurenda hans hefur verið grafin hola (yngri en langeldurinn) sem hefur skorið í burtu norðurenda hans. Langeldurinn er steinilagður, bæði til hliðanna og í botninn, en þó ekki til endana (mögulega einugis raskað þar). Í norðurenda skála er lítil hola (um 50x40 cm) sem er steinilögð, bæði í hliðum og botni. Dýpt holunnar/steinþrónnar er um 40 cm. Hún er um 1,5 m frá veggjum á þrjá vegu. Rétt austan við tóftina er lítil lægð, um 6 m á lengd og um 1 m á breidd þar sem hún er breiðust. Skálatóftin er hlaðin úr torfi og er um 14x4 að innanmáli. Fullur fornleifauppgröftur á tóftinni á árunum 2003-2005 leiddi í ljós að hún er frá 10. öld. Að loknum uppgreftri var skálinn tyrfður og undir torfið sett auka torflag ofan á veggi til að hækka þá. Frekari upplýsingar um skálann og uppgröft hans er að finna í skýrslum Fornleifastofnunar Íslands frá 2003-2005: FS211-03091 (2003), FS249-03093 (2004) og FS301-03095 (2005).
Hættumat: engin hætta
Heimildir:RE, 15; Framvinduskýrslur- Vatnsfjörður: FS211-03091 (2003), FS249-03093 (2004) og FS301-03095 (2005).

ÍS-205:042 garðlag óþekkt 6556.560N 2229.610V

Garðlag er á eyri neðan (norðan) við núverandi íbúðarhús í Vatnsfirði, sem kölluð er Barðaeyri, eða Barðasjór.

Eyrin er slétt og lág og út frá henni, að sjónum, liggur lág, smágrýtt fjara. Eyrin er vaxin grasi.

Garðlagið er samtals um 130 m langt og liggur í sveig yfir eyrina og fylgir útlínum hennar vel. Garðlagið er mest um 2 m breitt og um 0,7 m hátt og er vel gróið. Í fyrri skráningu (2003) var það skráð sem hluti af túngarði en það kemur ekki heim og saman við túnakort og virðist ekki vera hluti af túngarði. Sumarið 2010 var tekinn prufuskurður í garðlagið og kom þá í ljós að það er samsett úr möl. Að stærstum hluta er garðlagið úr grófri möl, en einnig að hluta úr rúnnaðiri sjávarmöl. Því virðist sem garðlagið hafi verið fremur óvandað að gerð og gert með því að stinga upp möl öðrum megin og moka upp í hrúgu. Ólíklegt er að um náttúrulegan sjávarkamb sé að ræða þar sem umhverfið er eilítið lægra fyrir innan garðinn en fyrir utan hann. Ekki er ólíklegt að um einhverskonar varnargarð vegna ágangs sjávar sé að ræða. Aldur garðlagsins er óljós en engar vísbendingar um það komu fram við prufurannsókn.

Hættumat: engin hætta

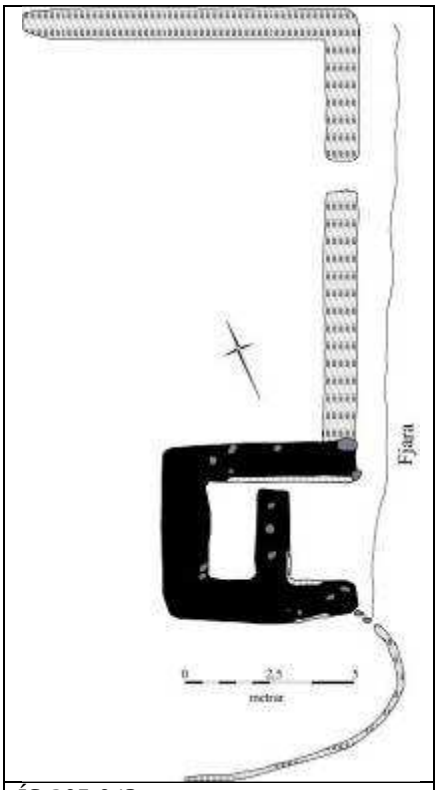
Heimildir:RE, 15.

ÍS-205:042 – Garðlagið með prufuskurðinum sem tekinn var, horft til suðausturs.

ÍS-205:043 tóft fjárhús 6556.529N 2229.601V

Fornleifaskráning Ragnars Edvardssonar 2003: „Norður af bæjarstæðinu stendur lítill tangi út í sjó og er tanginn austan þjóðvegarins. Á þessum tanga sést móta fyrir túngarðinum og nokkrum rústum [008]. Rústin er sunnan megin í tanganum alveg við sjóinn. Grösugur en þýfður tangi. Aðal rústin er ferhyrnd og norðan megin hennar er garðlag sem er byggt utan í rústina. Sömuleiðis er hlaðinn garður sunnan megin við hana“. Tóftin sem um ræðir og merkt er inn á túnakort frá því um 1920 er um 300 m norðaustur frá bæjarhól 001, um 55 m suðaustur af tóft 008, rétt við fjöruna. Samkvæmt bæjarteikningu danskra landmælingamanna frá því 1913 var húsið fjárhús.

ÍS-205:043 – Fjárhústóftin, horft til vestnorðvestur.



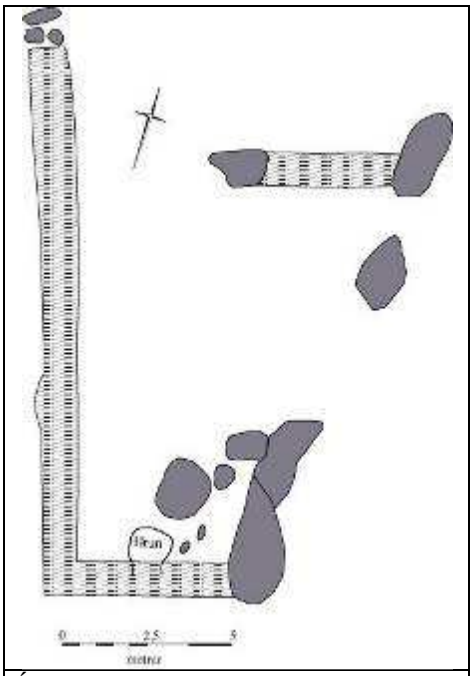
ÍS-205:043

Tóftin er á brún eyrarinnar, Barðeyrar, á horni hennar við Bæjarvíkina. Til suðausturs er s.s. fjara en í aðrar áttir er eyrin, gróin grasi. Spöl norðvestur af tóftinni er vegur. Aðeins er um hálfur metri þar sem styst er á milli tóftar og fjöru. Fjaran er í með ávölum steinum, en þegar utar (austar) dregur er meira um meðalstóra steina og þang.

Minjasvæðið er um 24x11 m að stærð og snýr norðaustur-suðvestur. Tóftin er 6x5,5 m að stærð og snýr vestnorðvestur-austsuðaustur. Hún er tvískipt. Fremra hólfið (það austara, sem er nær fjörunni), er um 3x2 m að stærð og virðist það alveg opið í austurendann. Um 1 m breiður veggur skilur á milli hólfanna. Vestara hólfið er um 1,5x3 m að innanmáli. Op milli hólfa er við nyrðri vegginn. Veggir tóftarinnar eru eilítið óljósir, sérstaklega til vesturs, vegna hruns gróðurs en grjóthleðslur sjást þó víða í veggjum. Hleðsluhæð er mest um 1,2 m en veggjaþykkt mest um 1,5 m. Tóftin virðist hlaðin úr stóru og meðalstóru grjóti. Frá tóftinni liggur garður að norðanverðu og að sunnanverðu. Garðurinn sem liggur til norðurs liggur í um 13 m til norðurs áður en hann tekur vinkilbeygju og liggur svo áfram í um 9 m

til vesturs. Op er á þeim hluta hans sem liggur til norðurs um 7,5 m frá tóftinni. Garðurinn er um 1 m breiður og mjög lágur, einungis eru 1-2 umför af hleðslum sjáanlegar. Garðurinn sem er sunnan tóftina við er hlaðinn upp meðfram fjörunni, líklega til að varna ágangi sjávar. Hann er mjög hruninn og gróinn nú en kann að hafa verið allt að 1 m á hæð.
Hættumat: hætta, vegna landbrots
Heimildir:RE, 15; Bæjarteikning 1913.

ÍS-205:044 *Gamla réttin* hleðsla rétt 6556.405N 2229.247V



ÍS-205:044

Í Fornleifaskráningu Ragnars Edvardssonar frá 2003 segir: „Farið er að Hjallanum sem er í eigu Þjóðminjasafns. Sunnan megin í tanganum sem hjallurinn stendur á er grjóthlaðinn garður og er hann byggður utan í kletta. Brekka fyrir ofan fjöruborð. Garðurinn er hlaðinn úr grjóti og stendur að mestu leyti“. Hleðslurnar á Hjallatanga eru á tanganum norðaustanverðum, um 85 m suður af hjalli 005 og um 450 austsuðaustur af bæjarhól 001. Þær mynduðu rétt sem nefnd var Gamla réttin samkvæmt Ólafíu Salvarsdóttur, heimildamanni.
Hleðslurnar eru á sléttri flöt í svolitlum halla vestur af fjörunni. Nokkuð stórgrýtt er á þessum slóðum og hefur grjótið að hluta verið nýtt í hleðsluna. Svæðið er grasi gróið.
Gamla réttin samanstendur af tveimur hleðslum, einni langri sem beygir í vinkil og annarri styttri sem er bein. Svæðið er um 16x12 m að stærð og snýr norðnorðvestur-suðsuðaustur. Hleðslurnar eru úr fjörugrjóti, steinum og hellum. Stórir vatnssvorfnir klettar sem eru á svæðinu eru nýttir sem hluti af aðhaldinu. Grjóthleðslurnar eru um 1 m breiðar og um 1,4 m háar. Lengri hleðslan snýr norður-suður og beygir svo vinkilbeygju til austurs. Til austurs endar hleðslan við stóran klett. Þar eru þrír aðrir klettar sem eru hluti af réttinni og ofan á tvo þeirra hefur verið hlaðin lítil hleðsla, líklega til að varna kindum uppgöngu. Hin hleðsla réttarinnar gengur frá vestri til austurs, um 4 m suður af norðurenda lengri hleðsunnar og um 4 m austur af henni. Sú hleðsla liggur frá stórum steinum og er lengd hennar, með steinunum, um 7 m . Annar stór steinn er rétt sunnan við austurenda hennar. Á réttinni eru tvö op, líklega hefur verið girt fyrir þau eða þau byrgð á einhvern hátt þegar verið var að nota réttina.

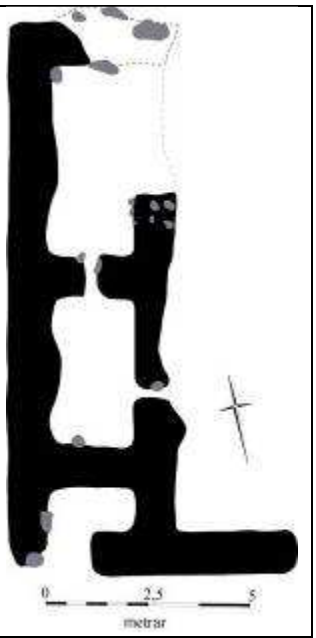
ÍS-205:044 – Réttin, horft til suðurs.

Hættumat: engin hætta
Heimildir:RE, 15; Bæjarteikning 1913.

ÍS-205:045 tóft óþekkt 6556.746N 2229.839V

Í Fornleifaskráningu Ragnars Edvardssonar frá 2003 segir: „Farið er í norður frá bæjarstæði Vatnsfjarðar og í u.þ.b. 700 metra fjarlægð frá afleggjaranum að Vatnsfirði er rúst. Rústin er í u.þ.b. 8 metra fjarlægð vestan þjóðvegarins. Klettar vestanmegin og fjaran austanmegin. Rústin er ógreinileg og ekki hægt að greina herbergjaskipan“. Umrædd tóft er rúmum 100 m sunnan við tóft 046 og um 620 m norður af bæjarhól 001, um 7 m vestan vegar.
Tóftin er í lítilli brekku á milli Sjóarhjalla og vegar. Sjóarhjalli snarminkar á þessum slóðum og eru einungis litlir klettar ofan (vestan) við tóftina. Austan við tóftina, um 7 metra frá henni, er vegur og fjara austan hans. Umhverfið er gróið grasi og eltingu en lítil mýri er á milli vegarins og rústarinnar, nær veginum.
Tóftin er 13x4 m að stærð, er löng og mjó og skiptist í þrjú

ÍS-205:045 – Tóftin, vegurinn fyrir Vatnsfjarðarnes í baksýn, horft til norðausturs.



ÍS-205:045

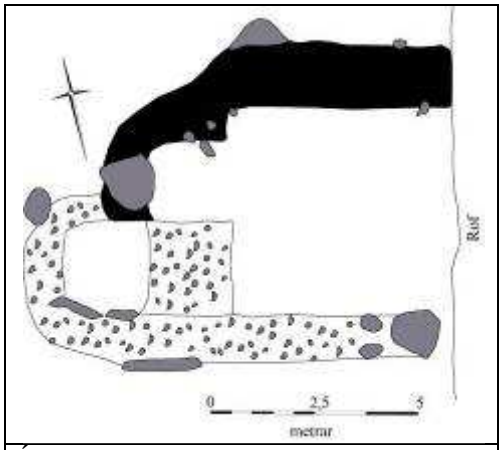
hólf. Tvö hólfanna eru svipuð að stærð og eitt minna. Frá tóftinni gengur um 3 m langur garður syðst til austurs. Tóftin snýr nokkurn vegin norður-suður. Nyrsta hólfið er stærst, um 4,5x3 m að innanmáli, en ekki er hægt að greina vegg til austurs nyrst á um 3 m kafla. Op er á milli nyrsta hólfsins og miðjuhólfsins á miðjum sameiginlegum vegg. Miðjuhólfið er um 3,5x2 m að innanmáli. Op virðist hafa verið á það sunnarlega til austurs en ekki er hægt að greina op á milli þess og syðsta hólfsins. Áðurnefnd hólf tvö snúa bæði norður-suður eins og tóftin í heild. Syðsta hólfið er það minnsta, það er um 2x1 m og snýr austur-vestur, og virðist opið við suðvesturhorn. Við suðausturhornið hólfsins gengur garður til austurs. Hann er um 1 m breiður og 3 m langur. Veggir tóftarinnar eru allir mjög grónir en á stöku stað sér í grjóthleðslur í veggjum. Veggirnir eru sumstaðar óljósir vegna hruns og virðist tóftin þess vegna eilítið skökk og skæld. Veggir eru yfirleitt um 1m breiðir en mest um 1,3 m breiðir. Hæð veggja er mest um 1 m en yfirleitt lægri. Ekkert er vitað um hvaða hlutverki tóftin hefur gegnt.

Hættumat: hætta, vegna vegagerðar

Heimildir:RE, 15.

ÍS-205:046 tóft óþekkt 6556.804N 2229.860V

Í Fornleifaskráningu Ragnars Edvardssonar frá 2003 segir: „Í u.þ.b. 115 metra fjarlægð frá rúst nr. 45 er önnur rúst 6 metra vestan þjóðvegarins. Klettabelti vestan og fjaran austanmegin. Rústin er tvíhólfa hlaðin úr grjóti“. Umrædd tóft er um 740 m norður af bæjarhól 001, um 70 m suður af tóft 016.



ÍS-205:046

Tóftin er um 13 m vestan við veginn, sömuleiðis fast neðan (austan) við kletta sem tilheyra Sjóarhjalla. Tóftin er í svolitlum halla, en vestan við hana er stórgrýti og klettar. Austan við tóftina er vegurinn og fjara. Umhverfið er gróið grasi, lyngi og ljónslappa. Uppblástur vegna rasks sem orðið hefur þegar vegurinn var gerður er farinn að ógna tóftinni.

Tóftin er 10,5x7,5 m stór og snýr nálega norðnorðvestur-suðsuðaustur. Hún virðist skiptast í tvö hólf og er hlaðin úr grjóti en mjög gróin og sigin. Austara hólfið er stórt en minna hólf við suðvesturhorn þess. Minna hólfið er að hluta inn í stóra hólfinu en teygir sig svo út fyrir það til vesturs. Austasti hluti stóra hólfsins hefur orðið uppblæstri að bráð og hafi verið veggur þar er hann nú horfinn. Norðurveggur tóftarinnar er mjög vel gróinn og lítið sést móta fyrir grjóti í honum. Suðurveggur er á milli hólfa og er hann hlaðinn í bland úr stóru grjóti og smásteinum. Allir veggir minna hólfsins virðast hlaðnir úr smásteinum. Minna hólfið er um 2x2,2 m að innanmáli en mikið hefur hrunið úr veggjunum svo úr sér að erfitt er að sjá hvar mörk veggja hafa upphaflega verið. Stóra hólfið er um 5,5x5 m að innanmáli, en við það bætist lítið svæði, um 2x2 m að innanmáli, sem er norðan við minna hólfið. Veggjabreidd er mest um 1,5 m og veggjahæð mest um 60 cm. Ekkert er vitað um hlutverk tóftarinnar.


ÍS-205:046 – Tóftin, horft til austurs.

Hættumat: hætta, vegna rofs

Heimildir:RE, 15-16.

ÍS-205:047 varða óþekkt 6556.195N 2229.282V

Varða er um 590 m suðsuðaustur af bæjarhól 001, við bílveg sem liggur að Vatnsfirði og fallinn er út notkun.
Varðan stendur á grjótholti grónu mosa og lyngi. Austan við hana er gamall vegur og vestan við hana er lítið klettabelti og mýrarfláki.
Varðan er um 1x0,7 m að stærð og um 1,2 m há. Hún er að mestu hlaðin úr hellugrjóti sumu hverju frekar stóru. Varðan er gróin fléttum og getur verið að hlaðið hafi verið ofan á hana í seinni tíð eða efri partur hennar verið endurhlaðinn þar neðri hluti vörðu er mun betur hlaðinn en sá efri. Varðan gæti tengst bílveginum sem hún stendur við en það er þó ekki öruggt.
Hættumat: engin hætta

ÍS-205:047 – Varðan, Vatnsfjörður uppi í hægra horninu, horft til norðurs.

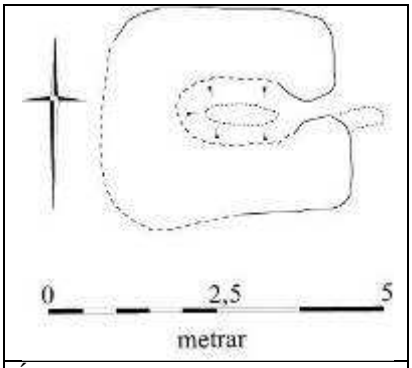
ÍS-205:048 náma mógrafir 6557.244N 2229.400V

Í Fornleifaskráningu Ragnars Edvardssonar frá 2003 segir: „Farið er í norðurátt frá Vatnsfirði eftir þjóðveginum. Í u.þ.b. 1 km fjarlægð frá rúst nr. 47. Austan við þjóðveginn er lítill tangi. Á honum er greinileg merki um torfrisu. Lítill tangi og er mýri á honum“. Á tanganum eru nokkrar mýrartjarnir, nokkuð stórar sumar, hringlaga eða sporöskjulaga. Tjarnirnar eru rétt við fjörubarminn og er líklegt að sjór gangi upp í þær í vondum veðrum. Allt eins líklegt er að hér sé um náttúrulegar tjarnir að ræða en ekki mógrafir.
Hættumat: engin hætta
Heimildir:RE, 16.

ÍS-205:049 þúst óþekkt 6557.547N 2229.750V

Lítil þúst er um 265 m suðaustur af fjárhúsi 017 og um 2,1 km norður af bæjarhól 001, um 17 m austan vegarins sem liggur yfir Vatnsfjarðarnes, niður undir fjöru.
Þústin er í aflíðandi brekku sem liggur frá vegi og til austurs, niður að fjöru. Þústin er neðarlega í brekkunni. Umhverfið er gróið grasi og lyngi.

ÍS-205:049 – Þústin, horft í suður.

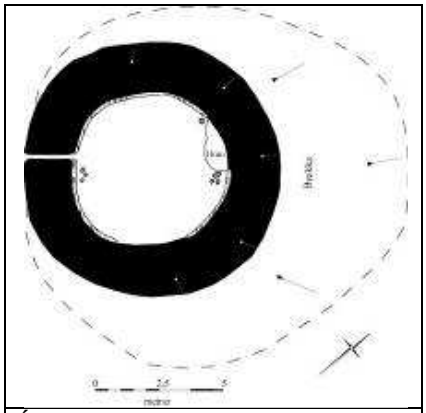


ÍS-205:049

Þústin er 3,5x 3 m að stærð og snýr nálega austur-vestur. Hún er mjög gróin og ógreinileg en þó sést móta fyrir veggjum, sérstaklega norðan til. Hún er 2x1 m að innanmáli og op hefur líklega verið á henni til austurs, niður að sjó. Í þústinni miðri er rás sem er rúmlega 1 m á lengd og um 25 cm á breidd. Veggir virðast yfirleitt um 1m breiðir og mest um 1 m á hæð, en yfirleitt lægri. Ekkert er vitað um hlutverk tóftarinnar en vegna nálægðar hennar við sjóinn er hægt að áætla að hún tengist honum á einhvern hátt.
Hættumat: engin hætta

ÍS-205:050 tóft Fjárborg 6557.869N 2229.969V

Í Fornleifaskráningu Ragnars Edvardssonar frá 2003 segir: "Farið er norður eftir þjóðveginum frá Vatnsfirði. Í u.þ.b. 370 metra fjarlægð frá nr. 40 er hringlaga tóft, austan megin við þjóðveginn. Tóftin er alveg hringlaga og er hún um 10 metrar að þvermáli. Hlaðin úr torfi og grjóti." Umrædd tóft er um 2,7 km norður af bæjarhól 001 og um 330 m austnorðaustur af vörðu 072, um 45 m austan við veginn sem liggur yfir Vatnsfjarðarnes.
Tóftin er á litlu nesi sem gengur út í sjó norðan við víkina sem Sauðhúshólmi er í. Tóftin er á nesinu miðju og er halli bæði norðan og sunnan við hana, en sléttara að austan og vestan. Tóftin sker sig úr umhverfinu þar sem hún er gróin grænu grasi en umhverfið er gróið stráum og lyngi.
Tóftin er alveg kringlótt og er um 10 m í þvermál að utanmáli og um 6 m í þvermál að innanmáli. Veggir eru hlaðnir úr grjóti en ekki sést hvort þak hefur verið á tóftinni. Tóftin er líklega fjárborg/byrgi. Veggir eru um



ÍS-205:050

ÍS-205:050 – Fjárborgin/byrgið, horft til austurs.

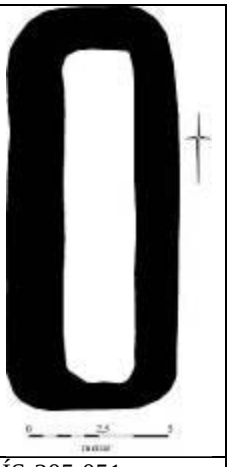
2 m breiðir allan hringinn og um 1,1 m háir þar sem mest er að innan, yfirleitt þó um 1 m. Að utan eru veggirnir hallandi, breiðastir neðst og mjókka upp, og neðst falla þeir inn í brekkuna í kring sem er mest til norðurs en nær engin til suðurs. Mörk veggjanna eru þó frekar skýr. Op var líklega til suðurs, örlítið vestarlega á veggnum. Tóftin er grjóthlaðin úr meðalstórum og stórum steinum. Að utan eru hleðslurnar alveg yfirgrónar en að innan eru þær greinilegar að einhverju leyti eiginlega allan hringinn. Dálítið er um hrun næst veggjum inni í tóftinni. Tóftin er þýfð að innan og vel gróin grasi.

Hættumat: engin hætta

Heimildir:RE, 16.

ÍS-205:051 tóft útihús 6556.443N 2229.888V

Á túnakort frá því um 1920 eru merkt þrjú útihús sem liggja í norður frá bæjarhól 001, norður af Gamla húsi 001A. Það syðsta er 028, miðhúsið er 029 en þetta hús, þriðja húsið, er norðan við bæjarlækinn. Tóft húsins er um 65 m norður af bæjarhól 001, fast vestan við skurðinn sem bæjarlækurinn rennur í.



ÍS-205:051

Skurðurinn liggur að suðausturhorni tóftarinnar. Á aðra kanta er tóftin í frekar sléttu, en röku og smáþýfðu umhverfi, í svolitlum halla. Umhverfið er vel gróið grasi, eltingu og hvönn.

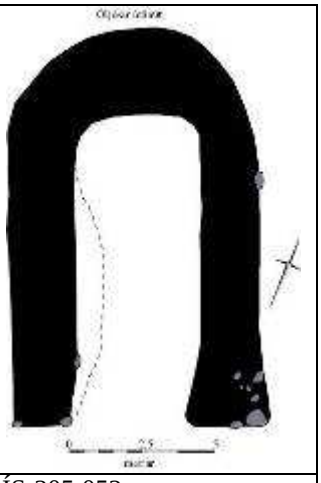
Tóftin er um 14,5x7 m stór og snýr norður-suður. Hún virðist einföld en er þó frekar ógreinileg. Veggjahæð er mest um 0,7 m, en þar sem vesturhluti tóftarinnar vísar upp í brekku virðist sá veggur hærri en hinir. Veggir eru mest um 2 m breiðir. Innanmál tóftarinnar er um 12x2,5 m. Prufuskurður var tekinn í vegg rústarinnar sumarið 2010.

ÍS-205:051 – Tóftin, bæjarhóllinn og kirkjan í baksýn, horft til suðurs.

Hættumat: hætta, vegna rofs

Heimildir:Túnakort (ártal vantar).

ÍS-205:052 tóft naust 6556.347N 2229.180V



ÍS-205:052

Í Fornleifaskráningu Ragnars Edvardssonar frá 2003 segir: „Áður en komið er að afleggjaranum sem liggur upp að Vatnsfirði er lítill tangi og á honum stendur hjallur í eigu Þjóðminjasafnsins [005]. Sunnan megin við tangann er lítil vík og nyrst í henni stendur gróið naust. Grasi gróin brekka við fjöruborð. Sporöskjulaga rúst opin í annan endann“. Tóftin er um 200 m suðsuðaustan við hjall 005 á Hjallatanga, um 515 m suðaustur af bæjarhól 001.

ÍS-205:052 – Bólvík, naustið vinstra megin á myndinni, horft til austurs.

Tóftin er á sléttri flöt í svolitlum halla um 40 m austan við veginn að

Vatnsfirði. Nokkrum metrum austan við tóftina, er fjara. Hún er smágrýtt en víkin við hana (Bólvík) er greinilega mjög grunn og nokkuð er um stóra steina í henni hér og hvar.
Tóftin er sporöskjulaga og nokkuð fornleg. Tóftin er um 14x8,5 að utanmáli, um 11x4,5 m að innanmáli og snýr norðnorðvestur-suðsuðaustur. Tóftin er opin í annan endann, til suðsuðausturs. Tóftin er alveg gróin nema á örfáum stöðum glittir í steina, sérstaklega að suðaustan. Líklega hefur hún þó verið hlaðin úr grjóti. Veggjahæð tóftarinnar er mest um 0,7 m en þó yfirleitt lægri. Breidd veggja er mest um 3 m að norðnorðvestanverðu en veggir eru annars um 2 m breiðir. Vegna staðsetningarinnar, þ.e. fast við sjóinn, er helst að giska á að tóftin sé naust. Tóftin er gróin grasi og lyngi. Leiðin á milli Vatnsfjarðar og Reykjafjarðar 065 liggur fast við tóftina að vestan og austan.
Hættumat: engin hætta
Heimildir:RE, 16.

ÍS-205:053 heimild um mógrafir 6556.312N 2229.913V
Ólafía Salvarsdóttir, heimildamaður, man eftir mógröfum suðvestan við túnið eins og það er á túnakorti, en hún gat ekki gefið nákvæmari staðsetningu en það, en þær hafa gróflega verið um 180-220 m suðvestur af bæjarhól 001.
Á svæðinu eru nú að mestu leyti sléttuð tún og órækt vestan við þau.
Grafirnar voru sýnilegar í upphafi búskapartíðar Ólafíu (1956) en í hennar tíð var svæðið ræst fram og þurrkað og nú eru sléttuð tún þar. Grafirnar eru því þornaðar og grónar upp og engin merki þeirra sjást lengur.
Hættumat: hætta, vegna ábúðar

ÍS-205:054 *Sveinaflöt* sögustaður 6556.425N 2229.773V
Jóhann Hjaltason segir í Árbók Ferðafélags Íslands 1949: „Í túninu er örnefnið Sveinaflöt. Segja munnmæli, að þar hafi hinir fornu Vatnsfjarðarsveinar þreytt fang og leiki“. Sveinaflöt er stór flöt norðvestan við núverandi íbúðarhús, austur og norðaustur af bæjarhól 001.
Flötin er nú (2010) sléttað, slegið tún, og á því stendur núverandi íbúðarhús Vatnsfjarðarjarðarinnar og lítið steypt hús vestur af því. Halli er af túninu niður að sjó enda umhverfið byggt upp á gömlum sjávar/malarkömbum.
Engar minjar eru á sléttunni enda ekki mikilla mannvistaleifa að vænta.
Hættumat: hætta, vegna ábúðar
Heimildir:JH, bls. 94.


ÍS-205:054 – Sveinaflöt, íbúðarhúsið efst á myndinni, horft til suðsuðausturs.

ÍS-205:055 heimild um óþekkt 6556.408N 2229.841V


ÍS-205:055 – Horft til suðurs á svæðið þar sem meint göng hafa verið, kjallari Gamla húss 001ofan til.

Jóhann Hjaltason segir 1949 í Árbók Ferðafélags Íslands: „Á fyrstu árum séra Stefáns Stephensens í Vatnsfirði, laust eftir 1880, var gamli bærinn [001] rifinn grafið fyrir undirstöðum nýrra bæjarhúsa. Komu menn þá niður á allmiklar grjóthleðslur, er lágu í átt til kirkjugarðsins [026] og kirkjunnar [025], sem þá stóð í kirkjugarðinum. Uppeldissonur séra Stefáns, Þorkell Guðmundsson, fyrrum bóndi í Þúfum, segir menn hafa talið hleðslur þessar leifar af fornum jarðgöngum milli bæjar og kirkju“. Fornleifarnar eru að miklu leyti á, eða frekar í, gamla bæjarhólnum 001 þar sem nú (2010) fer fram fornleifauppgröftur. Bæjarhóllinn nær allt að því alveg að kirkjugarðinum 026. Ef um göng á milli kirkju 025 og bæjar 001 er að ræða hafa þau náð um 30 m leið.
Grafið var fyrir kjallara í áðurnefndum nýjum bæjarhúsum, sem nú eru nefnd Gamla hús, um 15 m norður af þáverandi ytri mörkum kirkjugarðs. Engar leifar sjást nú af þeim hleðslum sem komu upp við framkvæmdirnar um 1880 enda standa leifar hússins enn. Kenningin um göng milli bæjar og kirkjugarð var styrkt frekar þegar grjót kom upp við stækkun og hleðslu kirkjugarðs á seinni hluta 20. aldar. Kjallarinn er svo að segja í sömu stefnu frá kirkjugarði og sá hluti kirkjugarðsins þar sem hleðslur komu upp. Grjótið gæti í báðum tilfellum tilheyrt sama mannvirki, s.s. göngum á milli kirkju og bæjar.
Hættumat: engin hætta
Heimildir:JH, bls. 94-95.

ÍS-205:056 heimild um kálgarð 6556.475N 2230.036V

Inn á túnakort frá því um 1920 eru merktir tveir kálgarðar vestan við tún, þessi og kálgarður 027. Samkvæmt túnakortinu eru þeir um 200 m norðvestur af bæjarhól 001, en staðsetning kálgarða utan túns virðist vera ónákvæm (sbr. ónákvæmni á túnakorti í Sveinhúsum (206)) og því er ekki hægt að treysta staðsetningu þeirra.
Ólafía Salvarsdóttir, heimildamaður, kannaðist ekki við garðana og líklegt er að þeir séu fyrir löngu fallnir úr notkun og horfnir. Gengið var um svæðið þar em kálgarðarnir hafa mögulega verið samkvæmt túnakortinu, á holtinu upp af túngarði 032. Svæðið er mjög blautt og stórþýft en á einum stað virðist svæðið örlítið sléttara og er mögulegt að þar leynist leifar kálgarðsins þó að erfitt sé um það að fullyrða.
Hættumat: engin hætta
Heimildir:Túnakort (ártal vantar).

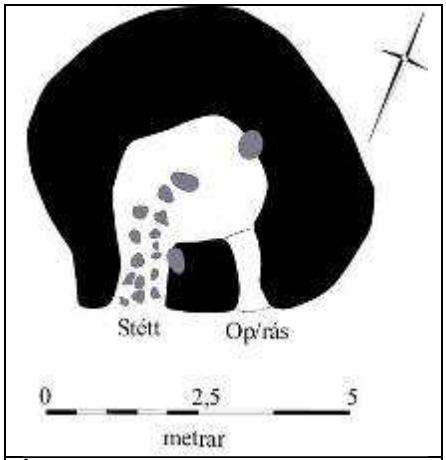
ÍS-205:057 heimild um heygryfja 6556.440N 2229.935V

Inn á túnakort frá því um 1920 er merkt votheysgryfja rétt sunnan við hesthús 038, norðvestarlega í túni, um 85 m norðnorðvestur af bæjarhól 001.
Túnið er á þessu svæði þýft og mjög gróið.
Ekkert sést til gryfjunnar sunnan við tóft 038. Ólafía Salvarsdóttir, heimildamaður, man ekki heldur eftir henni og líklegast er fyrir löngu búið að fylla upp í hana þegar hún fór að muna eftir sér.
Hættumat: engin hætta
Heimildir:Túnakort (ártal vantar).

ÍS-205:058 tóft skemma 6556.454N 2229.837V


ÍS-205:058 – Skemmutóftin, horft til norðurs.

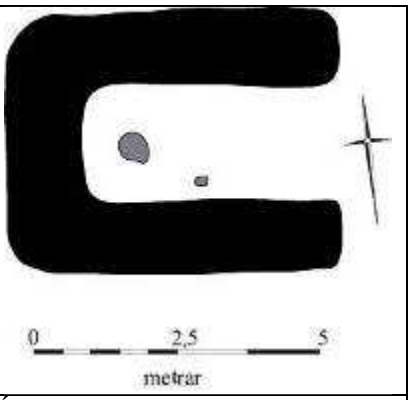
Tóft er um 80 m norðnorðaustur af bæjarhól 001 og um 13 m suður af víkingaaldarskála 041, sem grafinn hefur verið upp. Rétt norðvestan við hana eru nú (2010) lágir útsýnispallar.
Tóftin er í sléttuðu túni rétt norðaustur af bæjarhólnum 001 og norður af núverandi (2010) íbúðarhúsi. Túnið er gróið grasi og er í svolitlum halla. Tóftin er gróin grasi og mosa.
Tóftin er hringlaga, en þó fremur óregluleg. Hún er um 5,5 x 5 m að stærð. Veggir tóftarinnar eru mest um 2 m breiðir (þó yfirleitt aðeins mjórri) og veggjahæð er mest um 0,5 m. Að innanmáli er tóftin um 2,5x2 m. Dyr eru á tóftinni til suðausturs, rétt tæplega 1 m á breidd.
Hellulögð stétt er í dyrunum og nær hún rúmlega 1 m inn fyrir þær, inn í húsið, nokkurn vegin inn á mitt gólf. Einn stór steinn er í vegg að norðanverðu að innan og annar á horni. Einhvers konar rás eða vik er í veggnum mót austri, um 1 m norðan við dyrnar. Það nær alveg í gegnum veggin en tilgangur er óljós. Tóftin er hlaðin úr torfi. Uppgröftur fór fram á tóftinni á árunum 2006-2007 og leiddi hann í ljós að tóftin er að öllum líkindum frá víkingaöld og að líklegast er um einhverskonar skemmu eða þess háttar. Að loknum uppgreftri var tóftin tyrfð og undir torfið sett auka torflag ofan á veggi til að hækka þá. Frekari upplýsingar um tóftina og uppgröft hennar er að finna í skýrslum Fornleifastofnunar Íslands frá 2006-2007: FS356-03096 (2006) og FS383-03097 (2007).
Hættumat: engin hætta
Heimildir: Framvinduskýrslur- Vatnsfjörður: FS356-03096 (2006) og FS383-03097 (2007).



ÍS-205:058

ÍS-205:059 tóft skemma 6556.458N 2229.835V

Tóft er um 90 m norðnorðaustur af bæjarhól 001 og um 1,5 m norður af tóft 058.
Tóftin er í sléttuðu, grasivöxnu túni í aflíðandi halla. Tóftin er gróin grasi og mosa.
Tóftin er um 4,5x5,5 m að utanmáli og um 4,5x2 m að innanmáli. Hún er ferköntuð og snýr austur-vestur. Tóftin



ÍS-205:059

er alveg opin til austurs og eru veggir mest um 1,5 m breiðir en yfirleitt aðeins mjórri. Veggjahæð er mest um 40 cm. Tóftin er hlaðin úr torfi en tveir steinar, eða frekar hellur, eru greinanlegar inni í henni. Uppgröftur fór fram á tóftinni árið 2006 og leiddi hann í ljós að tóftin er að öllum líkindum frá víkingaöld og að líklegast er um einhverskonar skemmu eða vinnustofu að ræða. Að loknum uppgreftri var tóftin tyrfð og undir torfið sett auka torflag ofan á veggi til að hækka þá. Frekari upplýsingar um tóftina og uppgröft hennar er að finna í skýrslu Fornleifastofnunar Íslands frá 2006: FS356-03096.

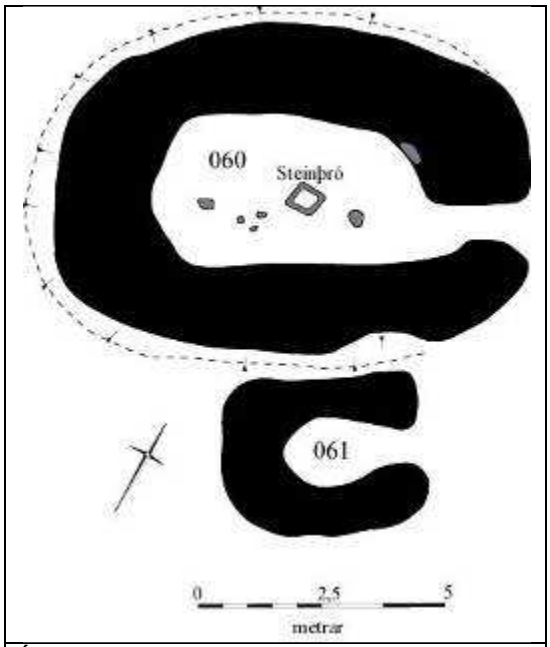

ÍS-205:059 – Tóftin, horft til vestsuðvesturs, skemmutóft 058 uppi í vinstra horninu.

Hættumat: engin hætta
Heimildir: Framvinduskýrsla- Vatnsfjörður 2006: FS356-03096.

ÍS-205:060 tóft smiðja 6556.460N 2229.822V


ÍS-205:060 – Smiðjutóftin, horft til suðvesturs.

Sporöskjulaga tóft er um 95 m norðaustur af bæjarhól 001. Hún er um 3 m austur af tóft 059, upp við vesturhlið tóftar 061.
Tóftin er í sléttuðu, grasivöxnu túni í aflíðandi halla. Tóftin er gróin grasi og mosa.
Tóftin er mest um 9x6,5 m að utanmáli og um 5x3 m að innanmáli. Veggir tóftarinnar eru mest um 2 m breiðir og um 70 cm háir. Tóftin snýr nálega austnorðaustur-vestsuðvestur og eru dyr á henni til austurs. Dyrnar eru um 1 m á breidd og um 1,5 m á lengd. Tóftin er hlaðin úr torfi en grjót sést í henni á nokkrum stöðum í gólfi. Um 2 m innan við dyrnar er grjóti klædd hola. Holan er um 50x50 cm að stærð og um 25 cm djúp. Hún er klædd með grjóthellum að innan en smástreinar eru í botni. Í kringum tóftina, alls staðar nema að framan (norðaustan) er lítil dæld upp við húsið. Hún er mest um 0,5 m að breidd og er grunn. Uppgröftur fór fram á tóftinni á árunum 2005-2007 og leiddi hann í ljós að tóftin er að öllum líkindum frá víkingaöld og að um smiðju er að ræða. Að loknum uppgreftri var tóftin tyrfð og undir torfið sett auka torflag ofan á veggi til að hækka þá. Frekari upplýsingar um tóftina og uppgröft hennar er að finna í skýrslum Fornleifastofnunar Íslands frá 2005-2007: FS301-03095 (2005), FS356-03096 (2006) og FS383-03097 (2007).



ÍS-205:060 og 061

Hættumat: engin hætta
Heimildir: Framvinduskýrslur- Vatnsfjörður: FS301-03095 (2005), FS356-03096 (2006) og FS383-03097 (2007).

ÍS-205:061 tóft Eldiv. Geymsla 6556.458N 2229.815V

Lítil tóft er um 95 m norðaustur af bæjarhól 001. Hún er upp við austurhlið tóftar 060 og minna en 1 m á milli. Tóftin er í sléttuðu, grasivöxnu túni í aflíðandi halla. Hún er gróin grasi og mosa.
Tóftin er um 4x3 m að utanmáli og 2x1 m að innanmáli. Hún er sporöskjulaga og eru veggir hennar mest rúmlega 1 m á breidd en eru fremur útflattir, sérstaklega til suðurs. Veggjahæð er mest um 0,5 m.Tóftin er

ÍS-205:061 – Eldiviðargeymslan, horft til suðsuðvesturs.

hlaðin úr torfi og ekki sjást neinar grjóthleðslur í henni. Uppgröftur fór fram á tóftinni árið 2006 og leiddi hann í ljós að tóftin er að öllum líkindum frá víkingaöld og að líklegast er um eldiviðargeymslu að ræða. Að loknum uppgreftri var tóftin tyrfð og undir torfið sett auka torflag ofan á veggi til að hækka þá. Frekari upplýsingar um tóftina og uppgröft hennar er að finna í skýrslu Fornleifastofnunar Íslands frá 2006: FS356-03096.

Hættumat: engin hætta

Heimildir: Framvinduskýrsla- Vatnsfjörður 2006: FS356-03096.

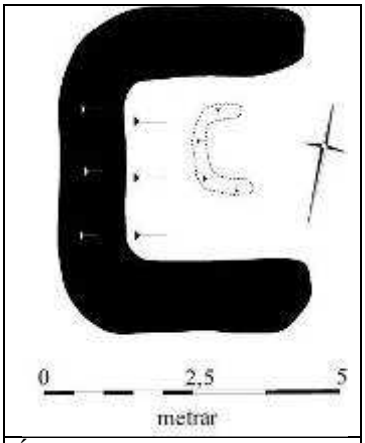
ÍS-205:062 tóft óþekkt 6556.466N 2229.795V

ÍS-205:062 – Tóftin, horft til vesturs.

Tóft er um 110 m norðaustur af bæjarhól 001. Hún er um 20 m austur af víkingaraldarskála 041.

Tóftin er í sléttuðu, grasivöxnu túni í aflíðandi halla. Hún er gróin grasi og mosa og í kring eru sléttuð tún.

Tóftin er um 4 x 5,5 að utanmáli og um 3x3 m að innanmáli. Hún er ferköntuð og snýr nálega austur-vestur. Tóftin er alveg opin til austurs. Veggir eu mest um tæplega 1,5 m breiðir og um 0,5 m háir. Tóftin er hlaðin úr torfi og ekkert grjót sést í henni. Lægð er inni í tóftinni, um 1,5x1 m þar sem hún er lengst og breiðust, og fylgir lögun hennar lögun tóftarinnar. Lægðin er mest um 30 cm breið og um 20 cm djúp. Tóftin er í talsverðum halla. Uppgröftur fór fram á tóftinni árið 2008 og leiddi hann í ljós að tóftin er að öllum líkindum frá víkingaöld, en hlutverk tóftarinnar er óljóst þrátt fyrir uppgröftinn. Að loknum uppgreftri var tóftin tyrfð og undir torfið sett auka torflag ofan á veggi til að hækka þá. Frekari upplýsingar um tóftina og uppgröft hennar er að finna í skýrslu Fornleifastofnunar Íslands frá 2008: FS426-03098.

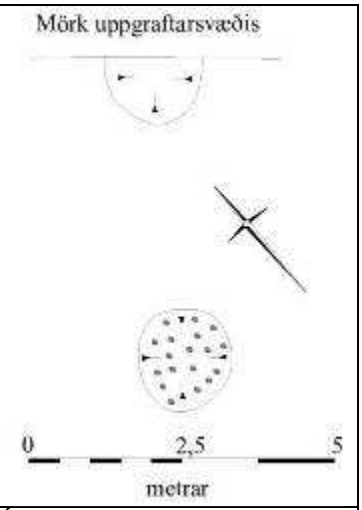


ÍS-205:062

Hættumat: engin hætta

Heimildir: Framvinduskýrsla- Vatnsfjörður 2008: FS426-03098.

ÍS-205:063 gryfja óþekkt 6556.466N 2229.812V



ÍS-205:063 A (neðar) og B (ofar)

Tvær holur eru um 115 m norðaustur af bæjarhól 001 og um 15 m austur af skálatóft 041.

Holurnar eru í sléttuðu, grasigrónu túni í smá halla.

Holurnar tvær eru á svæði sem er 6,5x2,5 m stórt og snýr norðaustur-suðvestur. Hola A er sunnar. Hún opin og greinileg. Hún er um 1,5 m í þvermál og um 1 m djúp. Hún er fóðruð að innan með smáu grjóti. Nyrðri holan, B, er ógreinilegri og búið að tyrfa yfir hana, en þó sést móta fyrir henni. Hún er einungis sýnileg til hálfs og er þvermál hennar á heilu hliðarnar um 1,5 m. Uppgraftarsvæði sker hana til hálfs en uppgröftur fór fram á holunum árið 2008. Uppgröfturinn leiddi í ljós að holurnar eru að öllum líkindum frá víkingaöld og að mögulega

ÍS-205:063 – Holurnar, A nær og B fjær við grasbrúnina, horft til norðnorðausturs.

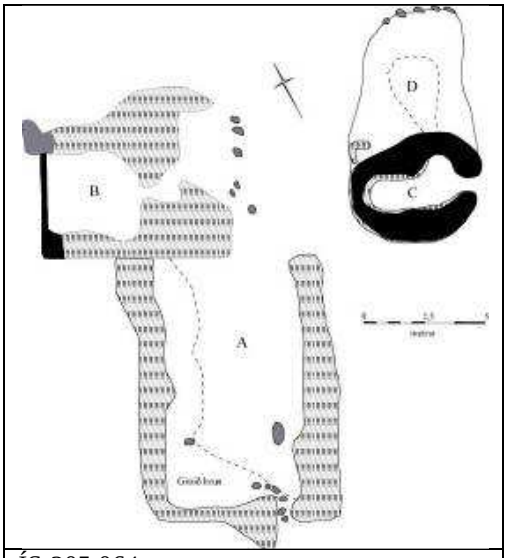
gæti verið um holur til að elda í eða kolagerðarholur að ræða, en mikið var af eldsummerkum og kolum í þeim. Að loknum uppgreftri var tyrft í kringum holurnar. Frekari upplýsingar um holurnar og uppgröft þeirra er að finna í skýrslu Fornleifastofnunar Íslands frá 2008: FS426-03098.
Hættumat: engin hætta
Heimildir: Framvinduskýrsla- Vatnsfjörður 2008: FS426-03098.

ÍS-205:064 tóftaþyrping óþekkt 6555.928N 2230.282V


ÍS-205:064 – Tóftaþyrpingin, A hægra megin, B vinstra megin, C og D ógreinilegar vinstramegin ofan við miðju, horft til austurs.

Tóftaþyrping er um 940 m suðvestur af bæjarhól 001, um 40 m vestur af reiðgötu 003.
Þyrpingin er neðan við grýttan klettahjalla í svolitlum halla rétt ofan (vestan) við götur 003. Svæðið er grýtt ofan (vestan) við tóftirnar og gróið lyngi að hluta en neðan (austan) við eru hólar og þúfur, vaxin lyngi og grasi.
Tóftirnar eru á er um 20x20 m stóru svæði. Á svæðinu eru fjórar tóftir sem í lýsingunni fá bókstafi til aðgreiningar. Tóftir A og B tengjast saman og sömuleiðis tóftir C og D. Tóft A er ofarlega/vestarlega á svæðinu. Hún er ferköntuð og grjóthlaðin og gæti verið e.k. aðhald. Tóftin er 12x8,5 m að stærð en 10,5x4,5 að innanmáli þar sem mest er. Hún snýr norðnorðaustur-suðsuðvestur og er einföld. Veggir eru mest um 2 m breiðir þar sem mest er. Í veggjum sjást mest um sex umför af hleðslu og eru veggir mest um 1m háir. Grjótið í veggjunum er meðalstórir og mjög stórir steinar. Vesturveggur tóftarinnar er nokkuð gróinn en aðrir veggir fremur ógrónir en eitthvað hefur hrunið úr þeim, mest inn í tóftina. Op er á tóftinni til norðausturs, austast á norðurvegg, það er um 2 m breitt. Tóft B er áföst tóft A á suðurhorni (s.s. norðan við A). Tóft B er mun minni en tóft A en er einnig ferköntuð, einföld og grjóthlaðin. Hún er 5x5,5 m stór en 3,5x3,5 m að innanmáli. Mikið hrun er í kringum hana og innan í henni. Hæsti veggur tóftarinnar er til suðurs en í honum sjást um sjö umför af hleðslu og er hann um 1 m hár. Stór klettur er við norðurhorn tóftarinnar og hefur hann verið notaður sem hluti af hleðslunni. Tóftin snýr norðnorðaustur-suðsuðvestur. Miklar grjóthrúgur eru við suður- og austurhorn tóftarinnar. Vesturveggur er gróinn lyngi og er mjög mjór. Tóftin er vel gróin að innan og er í meiri halla en tóft A. Veggir tóftarinnar eru mest um 1,5 m breiðir og líklega var op á tóftinni til suðausturs. Tóft C er sporöskjulaga grjóthlaðin tóft, og er hún um 2 m austnorðaustur af tóft A þar sem styst er á milli þeirra. Hún er einföld, um 5,5x4,5 m stór en 3,5x2 m að innanmáli. Veggir virðast talsvert hafa fallið inn í tóftina en eru mest um 1,5 m breiðir og um 50 cm háir. Op er á tóftinni til austsuðausturs. Tóftin snýr austur-vestur og er í svolitlum halla. Hún er gróin lyngi, grasi og ljónslappa. Tóft D er áföst tóft C, norðan við hana, og snýr norðvestur-suðaustur. Hún er um 5x4,5 m að stærð en um 3x2 m að innanmáli. Tóftin er grasivaxin og því mun grónari en hinar tóftirnar. Einungis finnst móta fyrir grjóti en það sést ekki nema á örfáum stöðum. Tóftin er sporöskjulaga en veggir hennar eru óræðir, þó mest um 2 m breiðir og eru um 50 cm háir. Mögulega er op á milli tófta C og D austarlega á sameiginlegum vegg á milli þeirra, annað op er ekki greinanlegt á tóft D. Tóft D


ÍS-205:064 – Tóft C, horft til austurs.



ÍS-205:064

gæti verið eldra byggingarstig en aðrar tóftir á svæðinu. Ekkert er vitað um hlutverk tóftanna en mögulega gæti verið um stekk, kvíar eða einvherskonar mannvirki af því tagi að ræða.
Hættumat: engin hætta

ÍS-205:065 gata leið 6556.448N 2229.529V

ÍS-205:065 – Gatan, Vatnsfjarðarbærinn efst fyrir miðri mynd og Bólvík ofarlega til hægri, horft til norðvesturs.

Leið liggur innan Vatnsfjarðarlands á milli Hóps (rétt norðan við núverandi brú yfir það) og að veginum fyrir neðan núverandi íbúðarhús í Vatnsfirði.
Leiðin (frá suðaustri til norðvesturs) liggur yfir lyngivaxin holt og sléttar flatir niðri við sjó. Hún liggur framhjá nausti 052 og Gömlu réttinni 044, ofarlega á Hjallatanga, yfir malarkamb fyrir ofan fjöru og að veginum.
Leiðin er líklegast hluti af leiðinni á milli Vatnsfjarðar og Reykjafjarðar. Leiðin er yfirleitt einföld og sæmilega djúp, líkt og vel greinileg kindagata. Hún greinist sumsstaðar, sérstaklega á og við Hjallatangann en er víðast aðeins einn slóði. Leiðin er um 950 m löng og er gatan mest um 30 cm breið og um 20 cm djúp.
Hættumat: engin hætta

ÍS-205:066 varða óþekkt 6556.362N 2230.507V

ÍS-205:066 – Varðan, horft til norðausturs.

Hrunin varða er um 500 m vestur af bæjarhól 001 og um 280 m suðvestur af Grettsvörðu 012.
Varðan er fremst á Leynihjalla (næsta ofan við Grettishjalla). Austan við hana er þverhnípt klettabelti og ofan (vestan) við hana er Leynihjalli. Hjallinn er grýttur en gróinn lyngi. Hann er grýttastur fremst, en á þess háttar svæði stendur varðan.
Varðan er illa farin af hruni en hefur verið nokkuð stór. Hún er nú um 3 m á lengdina auk 1 m af grjóti (til norðurs) sem gæti verið hrun. Varðan nær yfir svæðið sem er um 2 m á breidd en við það bætist við um 1 m (að vestan) sem er líklega hrun úr henni. Hleðslurnar í vörðunni eru heillegastar að austan en það sjást um níu umför af hleðslu. Þeim megin er varðan um 1,7 m há. Varðan er gróin fléttum og virðist gömul. Hún minnir eilítið á Grettisvörðu 012 og er í línu við hana (suðvestur af Grettisvörðunni) og mögulegt að þær hafi verið hlaðnar á svipuðum tíma/í svipuðum tilgangi. Í vörðunni eru meðalstórir og stórir steinar, en einnig er eitthvað af smærri steinum.
Hættumat: engin hætta

ÍS-205:067 varða óþekkt 6557.393N 2229.885V

ÍS-205:067 – Varðan, horft til suðurs.

Varða er um 1,8 km norður af bæjarhól 001, um 300 m suðsuðvestur af þúst 049, um 120 m vestan vegarins sem liggur yfir Vatnsfjarðarnes.
Varðan er á klettaholti við mýri í línu við Sjóarhjalla, norðan við hann. Holtið er grýtt en gróið mosa, fléttum og lyngi.
Varðan er um 1x0,8 m stór og um 1,2 m á hæð. Hún er gróin fléttum og virðist geta verið gömul. Hún er hlaðin úr meðalstórum steinum og hellum og eru um átta umför eru sjáanleg í vörðunni. Hlutverk vörðunnar er óljóst.
Hættumat: engin hætta

ÍS-205:068 varða óþekkt 6556.449N 2230.759V

ÍS-205:068 – Varðan, horft til austurs.

Varða er um 250 m norðnorðvestur af vörðu 066 og um 360 m vestur að Grettisvörðu 012, uppi á efsta hjalla, svonefndri Töflu, um 680 m vestnorðvestur af bæjarhól 001.
Varðan er Vatnsfjarðarmegin á Töflu (hæsta punkti fyrir ofan bæ), framarlega á brúninni. Taflan er á þessu svæði nær eingöngu grjót með lyngbreiðum hér og þar.
Varðan er um 1x1,5 m stór og er reist á litlum kletti. Hún stendur um 1 m upp af klettinum þar sem mest er og er hlaðin úr stóru og meðalstóru grjóti. Varðan er ekki vandlega hlaðin en hún er fremur gróin fléttum og virðist ekki nýleg. Hlutverk vörðunnar er óljóst en engar aðrar vörður eru í nánd við hana sem virðast vera svipað gamlar. Einu vörðurnar, fyrir utan þessa, uppi á Töflunni eru vörður og vörðubrot sem virðast mjög nýleg, ekki gróin og illa hlaðin.
Hættumat: engin hætta

ÍS-205:069 hleðsla refagildra 6556.970N 2230.343V

Refagildra er um 900 m norður af Grettisvörðu 012, austarlega á Breiðahjalla, um 1,05 m norður af bæjarhól 001.
Gildran er austast á Breiðahjalla, nokkra metra frá brún hjallans. Þessi hluti hjallans er grýttur og þar vex lyng og mosi.
Gildran er um 1,5x1 m stór og snýr norður-suður. Hún er um 1 m há en nokkuð virðist hafa hrunið úr henni. Gat er niðri við jörð, á gildrunni miðri, og snýr það austur-vestur. Gatið er um 20 cm breitt og opið til vesturs. Það kemur upp úr gildrunni rétt austan við miðju, þannig að hægt er að fara ofan í gildruna miðja ofan frá og grípa það sem í henni er. Gildran er hlaðin úr stórum og meðalstórum steinum.
Hættumat: engin hætta

ÍS-205:069 – Refagildran, vegurin fyrir Vatns-fjarðarnes uppi í vinstra horninu, horft til austurs.

ÍS-205:070 varða óþekkt 6557.506N 2230.422V

ÍS-205:070- Varðan, horft til norðausturs.

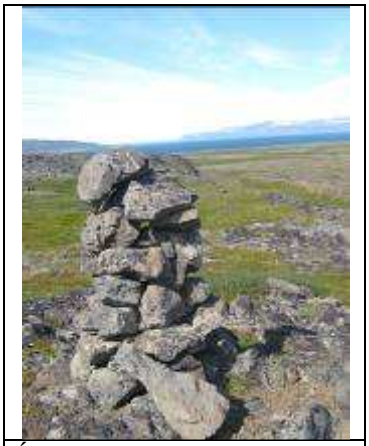
Varða er um 1 km norðan við refagildru 069, norðaustan við tjörn (án nafns í örnefnaskrá) sem er á leiðinni ofan af háhjöllunum út á Vatnsfjarðarnes, um 2 km norður af bæjarhól 001.
Varðan er á grjóthól við áðurnefnda tjörn. Hóllinn er lítt gróinn en þó helstí kringum vörðuna.
Varðan er um 1x0,7 m stór og um 60 cm há. Hún er hlaðin úr meðalstóru grjóti og eru sýnileg þrjú umför af hleðslu. Varðan er ekki haglega hlaðin en hún virðist fremur gömul og eitthvað virðist hafa hrunið úr henni. Hún er gróin fléttum og grasi. Hlutverk vörðunnar er óljóst en hún hefur að öllum líkindum aldrei verið mjög stæðileg og hefur því líklegast ekki átt að sjást langt að.
Hættumat: engin hætta

ÍS-205:071 varða óþekkt 6557.561N 2230.396V

Hrunin varða er um 100 m norðaustur af vörðu 070, vel sést á milli þeirra, um 2,1 km norður af bæ 001.
Varðan er á grjóthól sem er gróinn mosa en gras og lyng vex í kringum vörðuna. Hóllinn er nokkuð hár austan frá.
Varðan er að mestu leyti hrunin. Hún er um 1x1,5 m að stærð ef hrun er talið með. Hún er hlaðin úr meðalstórum og er um 50 cm há. Hlutverk vörðunnar er óljóst en hún hefur að öllum líkindum aldrei verið mjög stæðileg og hefur því líklegast ekki átt að sjást langt að.
Hættumat: engin hætta

ÍS-205:071 – Varðan, holtið sem varða 070 er á rétt ofan við miðja mynd, horft til norðvesturs.

ÍS-205:072 varða óþekkt 6557.770N 2230.332V



ÍS-205:072 – Varðan, horft í norðnorðvestur.

Há varða er um 390 m norðaustur af vörðu 071 og um 2,5 km norður ar bæjarhól 001.
Varðan er á holti rétt ofan (norðvestan) við klettabelti sem nær niður á láglendi. Holtið er mjög grýtt en gróið lyngi og mosa inn á milli.
Varðan er um 1x1 að stærð en er um 1,4 m há. Hún er mjög stæðileg og lítið hefur hrunið úr henni. Í um 1,1 m hæð er lítið gat í vörðunni miðri sem vísar norðnorðvestur-suðsuðaustur og sé kíkt í gegnum það til norðurs sést önnur stæðileg varða, 073, skammt frá. Ekki sést varða til suðurs og varðan virðist ekki tengjast vörðum 071 og 071 þar sem hún er allt öðruvísi að stærð og gerð. Varðan er hlaðin úr meðalstóru grjóti og er gróin fléttum. Hlutverk hennar er óljóst.
Hættumat: engin hætta

ÍS-205:073 varða óþekkt 6557.823N 2230.445V

Stæðileg varða er um 500 m norðnorðvestur af vörðu 072, og um 2,6 km norður af bæjarhól 001.
Varðan er á enda klettaholts sem gróið er lyngi og fléttum. Í kringum vörðuna grónara en í næsta nágrenni. Austan við vörðuna er bratt niður en aflíðandi á aðrar hliðar.
Varðan er um 1,5x1 m stærð og um 1,3 m há. Hún snýr nokkurnvegin norðvestur-suðaustur. Varðan er mjög stæðileg en óvenjuleg í laginu, löng og mjó með flatar langhliðar. Hún er gróin fléttum og virðist eldri en varða 072. Undir henni er grasi gróið svæði þar sem nokkuð er um steina í grassverðinum. Möguleiki er því að varðan standi á eldri grunni en hlutverk hennar er óljóst.
Hættumat: engin hætta

ÍS-205:073 – Varðan, vegurinn fyrir Vatnsfjarðarnes í bakgrunni fyrir miðri mynd, horft til norðausturs.

ÍS-205:074 varða óþekkt 6557.911N 2230.476V

ÍS-205:074 – Varðan, horft til norðurs.

Lítil varða er um 170 m norður af vörðu 073, um 2,8 km norður af bæjarhól 001.
Varðan er yst (norðaustast) á klettaholti sem er lítt gróið, aðeins eru fléttur og mosi á stöku stað.
Varðan er um 1x0,5 m stór og um 0,6 m á hæð. Hún er hlaðin úr litlum steinum. Við fyrstu sýn virðist varðan mjög nýleg en þegar betur er að gáð þá eru neðstu steinarnir í henni yfirgrónir af fléttum. Mögulegt er að hlaðið hafi verið ofan á neðstu steinana í seinni tíð og því sé varðan ung að hluta. Hlutverk vörðunnar er óljóst, sérstaklega í ljósi þess að hún gæti verið nokkuð ung, allavega að hluta, og því að gerð hennar er svo ólík vörðum 073 og 072 að líklegt er að hún tengist þeim ekki.
Hættumat: engin hætta

ÍS-205:075 varða óþekkt 6557.396N 2229.826V

Hrunin varða er um 45 m suðsuðaustur af vörðu 067, um 1,8 km norður af bæjarhól 001, um 70 m vestan vegarins sem liggur yfir Vatnsfjarðarnes.
Varðan er á klettaholti grónu mosa, grasi og lyngi.
Varðan er hlaðin upp á stóran stein en er nú hrunin að mestu. Hún er um 1x1 m stór með stóra steininum að hluta. Varðan og steinninn erum samtals um 70 cm há og þar af nær hleðslan um 40 cm upp af steininum. Í vörðunni eru fjögur illa farin umför af hleðslu og er mikið hrun til suðsuðausturs frá henni. Hlutverk vörðunnar er óljóst.
Hættumat: engin hætta

ÍS-205:075 – Varðan, horft til suðurs.

ÍS-205:076 *Selsker* varða óþekkt

ÍS-205:076 – Varðan á Selskeri, horft til austurs.

Í örnefnaskrá Þorkels Guðmundssonar segir: „Allnokkru utar en stekkurinn [016] er svonefnt Selsker. Skerið er mjög skammt undan landi og fer aldrei alveg undir sjó, enda er varða á því, sem ekki ber neitt sérstakt nafn“. Varðan sést vel frá landi og er um 1,5 km norðnorðaustur af bæjarhól 001. Líklega var varðan gerð til þess að vara sjófarendur við skerinu þegar hátt var í og það næstum á kafi.
Skrásetjari komst ekki út í skerið til að taka mál eða GPS hnit af vörðunni vegna sjávarstöðu.
Hættumat: hætta, vegna rofs
Heimildir:Ö-Vatnsfjörður (ÞG) bls. 5.

ÍS-205:077 varða óþekkt 6556.094N 2230.031V

Há varða er rétt austan við gamla reiðveginn til Skálavíkur, 003 þar, sem hann kemur ofan úr holtunum að Vatnsfirði, um 600 m suðvestur af bæjarhól 001.
Varðan er á brún klettaholts. Austan og norðan við hana er bratt klettabelti og vestan og sunnan við heldur klettaholtið áfram, gróið lyngi, grasi og mosa.
Varðan er mjög stæðileg og haglega hlaðin. Hún er þrístrend og er eitt horn hennar í hánorður. Allar hliðar vörðunnar eru um 1 m á breidd. Varðan er er að mestu leyti hlaðin úr hellum og er hún upp á steini. Hæð vörðunnar er um 1,7 m þar sem hæst er. Frá vörðunni sjást tvær aðrar vörður til suðurs, 078 og 079. Þessi varða er s.s. sú nyrsta af þremur vörðum á holtinu. Hlutverk varðanna þriggja er óljóst og sú staðreynd að allar eru þær mjög mismunandi að gerð (sjá 078 og 079) gerir það að verkum að ekki er auðvelt að gera sér í hugarlund að þær hafi verið byggðar til að gegna sama hlutverki, s.s. samgöngubót eða þess háttar, þó að vel sjáist á milli þeirra.
Hættumat: engin hætta

ÍS-205:077 – Varðan, Vatnsfjarðarbærinn í baksýn vinstra megin við vörðuna, horft til norðausturs.

ÍS-205:078 varða óþekkt 6556.023N 2230.002V

ÍS-205:078 – Varðan, núverandi þjóðvegur í baksýn, horft til suðausturs.

Varða er um 725 m suðvestur af bæjarhól 001, um 135 m suður af vörðu 077 á klettaholti, um 340 m vestan við núverandi þjóðveg. Varðan er í miðju af þremur stæðilegum vörðum á holtinu.
Varðan er utarlega (suðaustarlega) á klettaholti í aflíðandi halla. Holtið er grýtt en gróið lyngi í kringum vörðuna en einnig grasi þegar ofar dregur.
Varðan er hlaðin í kúpul. Talsvert hefur hrunið úr henni til suðurs. Hún er hringlaga og um 2 m í þvermál. Varðan er nú um 1,4 m há. Hún er hlaðin úr hellum og flötum steinum og er gróin fléttum. Frá vörðunni eru tvær aðrar vörður sýnilegar, til suðurs 079 og norðurs 077. Brúnu postulínsstykki, líklegast ofan af símastaur, hefur verið stillt ofan á vörðuna. Hlutverk varðanna þriggja er óljóst og sú staðreynd að allar eru þær mjög mismunandi að gerð (sjá 077 og 079) gerir það að verkum að ekki er auðvelt að gera sér í hugarlund að þær hafi verið byggðar til að gegna sama hlutverki, s.s. samgöngubót eða þess háttar, þó að vel sjáist á milli þeirra.
Hættumat: engin hætta

ÍS-205:079 varða óþekkt 6555.974N 2229.955V

ÍS-205:079 – Varðan, horft til suðausturs.

Varða er um 815 m suðsuðvestur af bæjarhól 001 og rúmlega 100 m suður af vörðu 078. Hún er uppi á klettaholti, um 270 m vestan núverandi þjóðvegar. Varðan er sú syðsta af þremur á klettaholtinu.

Varðan er á grýttu klettaholti sem einkum er gróið lyngi og mosa en þó einnig grasi í kringum vörðuna. Sunnan og austan við hana er brekka niður á jafnsléttu en norðan og vestan við hana er bratti upp, klettaholt og hjallar.

Varðan er nokkuð stæðileg og hlaðin upp á stóran stein. Hún er um 1x1 m að stærð og um 1,8 m á hæð ef steinninn undir er meðtalinn. Hún er hlaðin úr hellum og grjóti sem þó er aðallega er neðst í henni. Varðan er gróin fléttum. Hlutverk vörðunnar, sem og varða 077 og 078, er óljóst og sú staðreynd að allar eru þær mjög mismunandi að gerð gerir það að verkum að ekki er auðvelt að gera sér í hugarlund að þær hafi verið byggðar til að gegna sama hlutverki, s.s. samgöngubót eða þess háttar, þó að vel sjáist á milli þeirra.

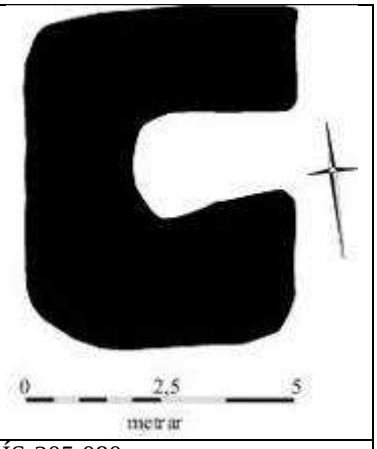
Hættumat: engin hætta

ÍS-205:080 *Stórhús* tóft fjárhús 6556.374N 2230.011V

Óljós tóft eða þúst er um 140 m vestur af bæjarhól 001, undir Torfahjalla, við túngarðinn. Tóftin er merkt inn á túnakort frá því um 1920 og samkvæmt bæjarteikningu danskra landmælingamanna frá 1913 og Ólafíu Salvarsdóttur voru húsin fjárhús. Samkvæmt Tryggva Þorsteinssyni hétu fjárhúsin Stórhús og samanstóðu af fjárhúsi (Stórhúsi), stórri hlöðu norðan við það og Þorlákshúsi (líklegast öðru fjárhúsi) við norðurenda hennar.

Tóftin er í lítilli brekku sem upp á Torfahjalla. Svæðið er gróið grasi og er ekki slegið.

Þar sem fjárhúsin voru samkvæmt túnakorti er vik í túngarðinn. Nú er tóftin vart greinanleg. Þó sjást leifar lítillar tóftar og steypt kindabað sem liggur á hliðinni og þar norðan við. Tóftin er mjög óljóst, um 7,5x5 m stór og snýr norður-suður. Hún virðist einföld en er fremur óskýr að innan. Þó má sjá að op hefur líklega verið til austurs. Veggir eru um 2,5 m breiðir þar sem mest er og mjög útflattir og hlaupnir í þýfi. Húsið hefur án efa áður verið mun stærra og hefur líklega bæði náð lengra til suðurs og norðurs. Grjót er í veggjum, yfirgróið þó og veggir mest um 70 cm háir að vestan.



ÍS-205:080

ÍS-205:080 – Stórhús, steypt kindabað lengst til hægri fyrir miðju, horft til vesturs.

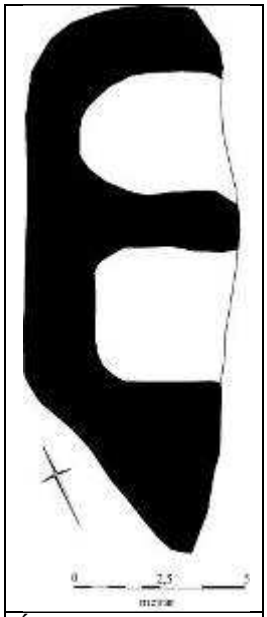
Hættumat: engin hætta

Heimildir:Túnakort (ártal vantar); Bæjarteikning 1913; Tryggvi Þorsteinsson, 2006, bls. 36

ÍS-205:081 tóft útihús 6556.407N 2229.969V

ÍS-205:081 – Tóftin, horft til vesturs.

Ógreinileg tóft er um 25 m norður af þúst 035 og um 85 m vestur af bæjarhól 001.
Tóftin er í sléttu, óslegnu og smáþýfðu túni. Vestan við hana er lítil mýri.
Tóftin er um 14x6 m stór og snýr norður-suður. Hún er ógreinileg og rennur saman við umhverfið til beggja enda. Líklegast hefur tóftin skipst í tvö hólf sem eru ólík að lögun. Nyrðra hólfið er íhvolft í vesturendann, um 4x3,5 m að innanmáli en hið syðra er um 3,5x3,5 m að innanmáli. Austurveggur sést í hvorugu hólfinu. Tóftin er algrjóin og engar grjóthleðslur sjást. Breidd veggja er mest um 2 m, og veggjahæð mest um 1 m, þó yfirleitt mun minni.
Hættumat: engin hætta



ÍS-205:081

ÍS-205:082 heimild um hesthús 6556.439N 2229.995V

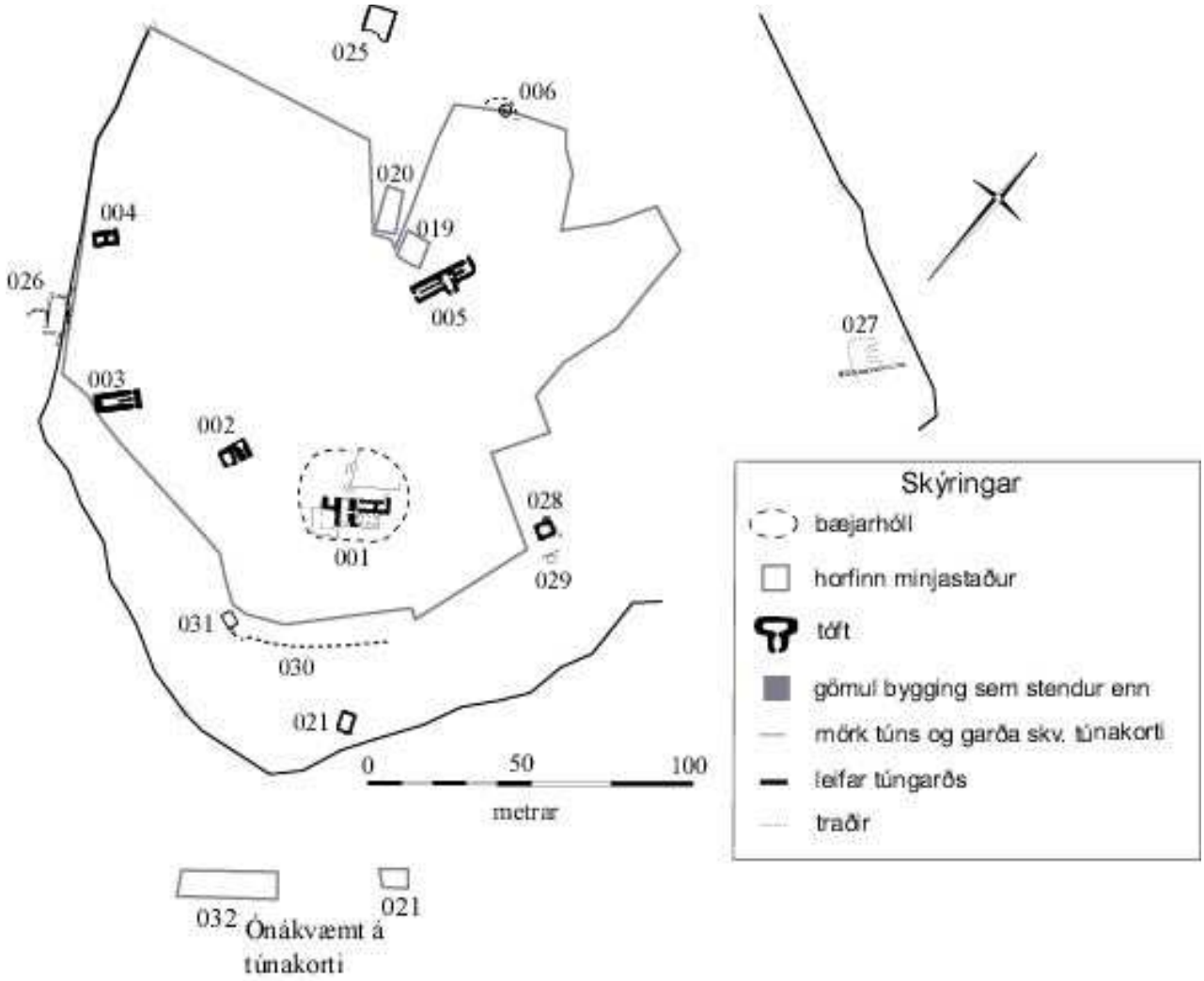
Hús var samkvæmt túnakorti vestarlega í túni, um 100 m norðvestur af bæjarhól 001. Umrætt hús stóð á hól sem er rétt austan túngarðs, um 40 m norðvestur af tóft 034. Húsin voru hesthús samkvæmt Ólafíu Salvarsdóttur og bæjarteikningu danskra landmælingarmanna.
Hóllinn er í óslegnu túni. Mýrarsprænur renna allt í kring um hólinn, nema að vestan og vex hvönn í þeim.
Hóllinn rís hátt upp úr lægðum sem liggja beggja vegna við hann. Hann er hæstur austast en jafnast út í landslagið vestast, þar sem land hækkar. Innst á hólnum, næst túngarðinum, er lítil lægð, gróin eltingu og grasi og má vera að hún sé vísbending um staðsetningu hússins. Engin greinileg merki eru um mannvistarsöfnun á hólnum, hann virðist frekar náttúrulegur, en á bæ sem þessum er þó aldrei hægt að útiloka að mannvistarsöfnun sé á hólum innan túns.
Hættumat: engin hætta
Heimildir:Túnakort (ártal vantar); Bæjarteikning 1913.

ÍS-205:082 – Hóllinn sem hesthúsin hafa staðið á, horft til norðvesturs.

ÍS-206 Sveinshús

1495: Testamentisbréf Solveigar Björnsdóttur. „Jtem j þridiu grein gef ec solueig bionsdottir sonvm minum þolleifi og joni fyrr nefndum j þetta mitt testamentum alla jordina uazfiord er ligur j isafirdi med þeim jordum sem þar vnder liggia er so heita. gioruidalur. eyr. biarnastader. vogur. suansuik. halshus. sueinhus. þufa skalauic. horshlid. botn eyr og hualatur“ (DI VII, bls. 244).
1507: Björn Þorleifsson fær af sínum parti Stepháni biskupi í Skálholti í vald alla bóndaeignina í heimalandinu í Vatnsfirði og hálfa Borgarey, ... „Enn aullum audrum peningum kyrum og ohrærdum. voru þessar stadarins jarder aa nefndar kirkiunni til æfinligrar eignar. fyrst sueinshus. midhus. halshus. þufna land. halfa skalauik. eyri j miofafirdi. giorfudalur j isafirdi. [hest land]“ (DI VIII, bls. 141).
1710: „Hjáleiga,bygð fyrir manna minni í staðarins heimalandi. Dýrleikinn óviss so sem á heimastaðnum, því hjáleigan tíundast ekki“ (JÁM VII, bls. 215); „Borgarey. Þessi jörð hefur jafnan verið brúkuð frá staðnum hálf eður öll, eftir því sem staðarhaldaranum hefur þótt sjer haganlegast, en nú er bygður fjórðúngur jarðarinnar. Þetta er þó lögbýlis jörð. Jarðardýrleiki 24 hdr. Eigandi beneficium Vatnsfjörður“ (JÁM VII, bls. 215-216).
1847: Eign Vatnsfjarðarkirkju, 6 hdr. (JJ, bls. 201).

„Jörðin var ein af kirkjujörðunum frá Vatnsfirði, lítil jörð, ...“ (PP, bls. 63).
Jörðin fór í eyði 1964 en ábúendur höfðu þó sumardvöl í allavega eitt sumar til viðbótar.
Túnastærð 2,47 ha, húsagrunnar 368 m2, matjurtagarðar 472 m2.
„... Rýr til slægna en gott útbeitarkot og hæg til aðdrátta. ... Talið var að á tímabili hefðu verið dálítil búdrýgindi af beitutekju á skeri, er liggur undir jörðina, sakmmt undan landi á svonefndri Laufskálaeyri, skammt frá landamerkjunum milli Reykjarfjarðar og Sveinshúsa á austanverðu Sveinshúsnesi“ (PP, bls. 63).



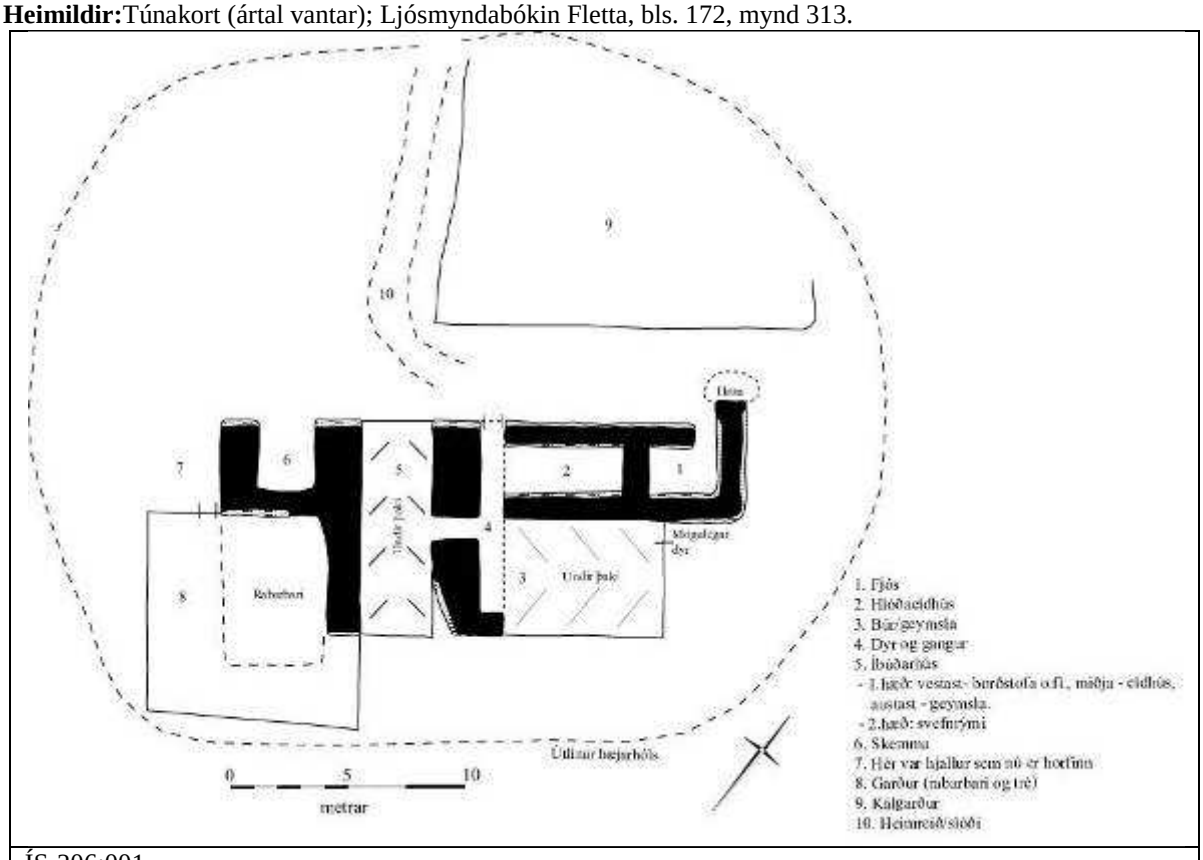
ÍS-206:001 *Sveinhús* bæjarhóll bústaður 6555.683N 2228.296V
Bæjarhóllinn í Sveinhúsum er suðaustarlega í túni, skammt undan Bæjarhjalla. Ábúð í Sveinhúsum var hætt árið 1964 en ábúendur höfðu þó sumardvöl allavega eitt sumar í viðbót í Sveinhúsum.
Bæjarhóllinn er í sléttu, óslegnu túni. Sunnan og austan hans er tún og Bæjarhjalli upp af því. Skammt vestan við bæjarhólinn rennur lítil lækjarspræna í gegnum túnið frá suðri til vesturs og norðan til við hann eru tún. Umhverfið er grasi gróið.
Bæjarhóllinn sjálfur er í raun ekki mjög greinilegur og fellur saman við landslagið að sunnan. Hóllinn er á að giska um 35x30 m að stærð og snýr norðaustur-suðvestur. Bæjarhúsin og kálgarðurinn framan við bæ þekja stærstan hluta hans. Bæjarhóllinn er ekki hár, mest um 2 m á hæð. Bæjarhúsin snúa norðaustur-suðvestur og standa enn nokkuð vel. Íbúðarhúsið (V), sem er með trégöflum og bárujárnsþaki, er enn standandi undir þaki þó það sé farið að skekkjast og að innan sé það orðið mjög illa farið. Íbúðarhúsið er um 3x9 m að stærð mælt utanfrá og miðað við trégaflana, ekki torfvegina, og snýr norðvestur-suðaustur. Sunnan við það er afgirtur garður (VIII) með rabarbara og trjám, um 9x9 m að stærð við suðurhorn hússins, og skemma (VI) vestan við hann, upp við húsið, um 3x2,5 m að innanmáli, sem gengið er inn í að norðvestan. Samtals eru bæjarhúsin (fyrir utan afgirta kálgarðinn) um 22x10 m að utanmáli. Suðvestan við skemmuna, fast við hana, var áður hjallur (VII) samkvæmt Rafni Kristjánssyni og gömlum ljósmyndum (frá 1963) en öll ummerki um hann eru nú horfin.

ÍS-206:001 – Bærinn, horft til suðausturs, Bæjarhjalli í baksýn.

Norðaustan við íbúðarhúsið voru dyr til norðvesturs og göng (IV) suðaustur af þeim sem tengdu saman bæjarhúsin. Norðaustan við þau voru langsum tvö hólf hlið við hlið, það eystra var búr/geymsla (III) þar sem m.a. voru tveir sáir sem nú eru á Þjóðminjasafninu. Mögulega var inngangur í það hólf einnig til norðausturs, við sameiginlegan vegg þess hólfs og þess vestan við það (fjóss). Vestara hólfið var hlóðaeldhús (II) nær íbúðarhúsinu (um 5m langt), og fjós (I) norður af því (um 3 m langt), sem hægt var að ganga inn í til norðvesturs við norðurhorn tóftarinnar. Búrið/geymslan er enn undir þaki svo að segja, þar sem þakið hefur hrunið ofan í tóftina í heilu lagi og þess vegna ekki hægt að mæla stærð hólfsins að innan. Hin hólfin tvö, hlóðaeldhúsið og fjósið, eru um 2 m að breidd að innanmáli. Þar er einnig mikið hrun en þó þannig að hægt er að greina innri skipan þeirra. Um 4 m framan (norðvestan) við bæinn er kálgarður (IX), sem var í notkun um miðja 20. öld. Hann er um 16x10 m að stærð en einungis suðaustur- og suðvesturhliðar hans eru nú greinilegar, þar sem grafinn hefur verið kantur ofan í bæjarhólinn, mest um 0,5 m hár. Hinar hliðarnar renna út í túnið og er því ekki hægt að sjá nákvæmlega hve stór garðurinn hefur verið. Fast suðvestan við hann liggur slóði heim að bæ (X). Bæjarhúsin eru öll hlaðin úr torfi og grjóti nema íbúðarhúsið sem hefur áðurnefnda trégafla. Það hefur verið tréklætt (panell) að innan að miklu leyti og verið á tveimur hæðum. Vestast niðri var rými þar sem borðað var og ýmislegt fleira, í miðjunni var eldhús og úr því stigi upp á aðra hæð og austast á neðri hæðinni var geymsla. Uppi voru tvö svefnrými og millirými þar sem stiginn kom upp og skorsteinninn liggur í gegnum. Mikið er enn af munum, húsgögnum og hlutum, inni í íbúðarhúsinu. Þegar ábúendurnir fluttu burt, til Reykjavíkur nánar tiltekið, tóku þeir lítið sem ekkert með sér og skildu allt eftir á sínum stað. Mesta veggjahæð í bæjarhúsunum, af hlöðnum veggjum þ.e., er um 2 m, veggir eru mest um 2 m breiðir.

Hættumat: engin hætta

Heimildir:Túnakort (ártal vantar); Ljósmyndabókin Fletta, bls. 172, mynd 313.



ÍS-206:001

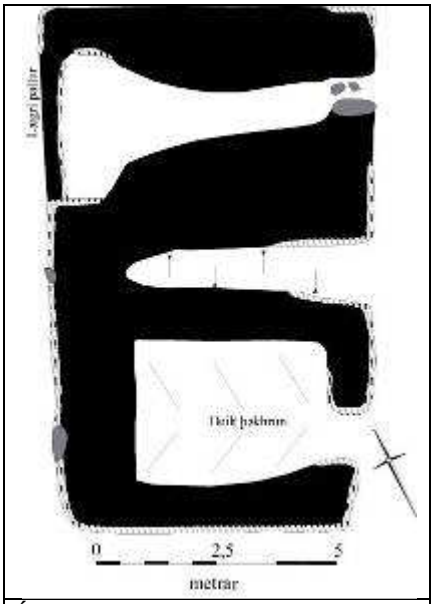
ÍS-206:002 tóft skemma 6555.678N 2228.347V

ÍS-206:002 – Skemmutóftin, horft til vestnorðvesturs.

Um 35 m vestur af bæ 001 er tóft, á sama stað og hús er merkt inn á túnakort frá um 1920.

Tóftin er í óslegnu, smáþýfðu túni. Fast austan við hana rennurlækjarspræna. Umhverfið er gróið grasi. Aðeins sunnan við tóftina er klettabelti og þar ofan á er túngarður.

Tóftin er um 7x11 m þar sem hún er stærst. Mesta veggjahæð er um 1,6 m og mesta breidd veggja er um 1,5 m. Tóftin er þrískipt en vegna þess að þak hennar hefur ekki verið rifið þegar húsið var tekið úr notkun eru öll hólfin ógreinileg vegna hruns, hvert á sinn hátt. Tóftin snýr norðnorðaustur-suðsuðvestur en öll hólfin snúa þvert á það, s.s. vestnorðvestur-austsuðaustur, gengið inn í þau mót austsuðaustri.



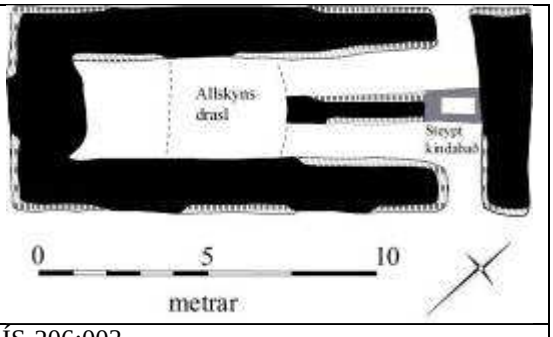
ÍS-206:002

Nyrsta hólfið er greinilegast. Þar er mikið af þakhruni en aftast (vestnorðvestast) er lítið sem ekkert hrun og sést þar í grjóthleðslur í veggjum. Þar er hólfið um 3 m breitt og er um 5,5 m langt. Aftast (vestnorðvestast) í þessu hólfi er útveggur mjög mjór, aðeins um hálfur metri á breidd og er hann lægri en aðrir veggir, aðeins um 60 cm hár. Mögulegt er að steinar hafi veið teknir þarna úr hleðslunni í seinni tíð en einnig gæti verið að þarna hafi verið einhverskonar gat eða op. Miðhólfið er allt að því fullt af hruni sem hefur gróið upp. Það er mest um 1 m breitt en mjókkar þegar innar dregur, það er um 5 m langt. Syðsta rýmið er hulið þaki sem fallið hefur niður í heilu lagi. Þetta rými var líklega hænsnakofi á miðri 20. öld, en hin tvö rýmin geymslur/skemmur. Helst er að giska á að þetta hólf hafi verið um 3x4 m að stærð. Tóftin er hlaðin úr torfi og grjóti en aðallega sést í grjóthleðslur að utanverðu og í nyrsta hólfinu. Bárujárnsplötur eru í nyrsta hólfinu þannig að líklegt er að ekki hafi allt þakið eingöngu verið úr torfi.

Hættumat: engin hætta

Heimildir:Túnakort (ártal vantar).

ÍS-206:003 tóft fjárhús 6555.677N 2228.393V



ÍS-206:003

Um 70 m vestur af bæ 001, á milli tófta 002 og 004 eru fjárhústóftir sem merktar eru inn á túnakort frá því um 1920.

Fjárhúsið er í sléttu, óslegnu túni, rétt undir klettabelti því er túngarðurinn liggur ofan á rétt. Umhverfið er gróið grasi og nokkurt stórgrýti er undir klettabeltinu suðvestan við tóftina.

ÍS-206:003 – Fjárhústóftin, horft til norðnorð-austurs.

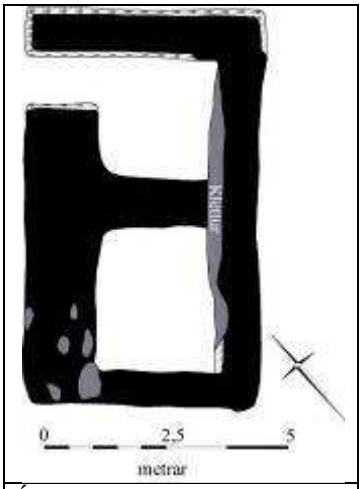
Tóftin er aflöng og snýr norðaustur-suðvestur. Hún er 15x6 m stór og er tvískipt (fjárhús og hlöðu inn af því). Veggir eru mest um 1,5 m breiðir þar sem þeir eru greinilegir. Tóftin er nokkuð illa farin að innan, sérstaklega innst, í hlöðunni. Fjárhúsið er um 9x3 m að innanmáli, en erfitt er að greina það víða vegna hruns úr þaki og veggjum og einnig vegna timbur- og bárujárnsrusls sem sett hefur verið inn í hana. Hlaðan er nú um 2x2,5 m að stærð en hefur að öllum líkindum verið stærri vegna þess að nú er hún aflöguð vegna hruns úr veggjum. Veggir í hlöðunni eru hæstir um 2 m og er

hún að hluta grafin niður. Garði er í miðju fjárhúsinu, hlaðinn úr grjóti, og steypt kindabað við enda hans, nyrst. Gengið er inn á tveimur stöðum á langhliðum, við norður- og austurhorn fjárhústóftarinnar. Tóftin er hlaðin úr torfi og grjóti og eru hleðslur sums staðar greinilegar, en annars staðar yfirgrónar eða hrundar.
Hættumat: engin hætta
Heimildir:Túnakort (ártal vantar).

ÍS-206:004 tóft hesthús 6555.697N 2228.436V


ÍS-206:004 – Hesthústóftin, horft til norðausturs.

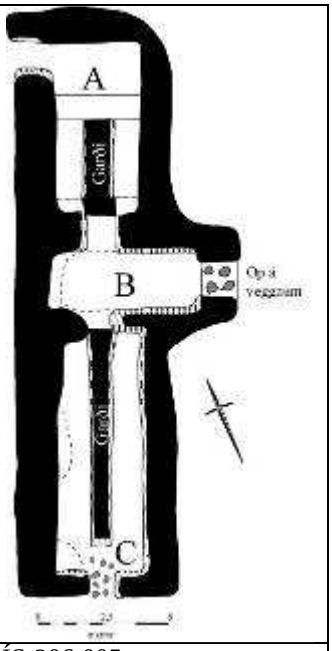
Hesthústóft, sem merkt er inn á túnakort frá því um 1920, er um 110 m norðvestur af bæ 001, rétt ofan (suðvestan) við slóða heim að bæ og rétt austan túngarðs 013.
Tóftin er utarlega í túni og er þýft við hana, sérstaklega að suðvestan. Umhverfið er gróið grasi. Tóftin er í örlitlum halla.
Tóftin er um 8x5 m að stærð. Hún er tvískipt og skiptist í hesthús og hlöðu þar fyrir innan (í suðvesturenda). Tóftin snýr suðvestur-norðaustur og er gengt inn í hana við norðurhorn, mót norðvestri. Fremra hólfið (hesthúsið) er um 2,5x2,5 m að innanmáli. 1 m breiður veggur skilur að hólfin og innra rýmið (hlaðan) er um 3x2,5 m að innanmáli. Það sem er sérstakt við þessa tóft er það að þegar húsið var hlaðið hefur náttúrulegur klettaveggur verið notaður sem veggur (suðausturveggur) og einungis hlaðið örlítið ofan á hann þar sem þurfti. Með þessu móti náðist veggur sem er um 1,6 m hár með mest um 50 cm hleðslu. Aðrir veggir eru lægri og hrunið hefur úr einhverjum þeirra. Einnig hefur þakið hrunið ofan í tóftina og gróið upp. Byggingarefni tóftarinnar er því torf og grjót, sem og náttúrulegir klettar. Eitthvað hefur líklegast verið átt við klettana til þess að gera þá almennilega nothæfa til þessa brúks, en ekki sjást mikil merki þess á þeim, þó einhver. Tóftin er í örlitlum halla sem kemur þvert á hana og orsakast af því að hún hefur verið grafin að hluta inn í og ofan í hólinn sem klettarnir tilheyra.



ÍS-206:004

Hættumat: engin hætta
Heimildir:Túnakort (ártal vantar).

ÍS-206:005 tóft fjárhús 6555.721N 2228.322V



ÍS-206:005

Um 70 m norður af bæ 001 er fjárhústóft sem merkt er inn á túnakort frá því um 1920.
Tóftin er á hól sem er í framhaldi af bæjarhólnum, norður af honum. Vestan við hólinn er lægð þar sem lítil lækjarspræna rennur. Austan við tóftina eru nokkuð slétt, smáþýfð, óslegin tún. Umhverfið er gróið grasi.
Tóftin snýr norðnorðaustur-suðsuðvestur og skiptist í þrjú hólf. Fjárhús eru til beggja enda og hlaða í miðjunni. Tóftin er samtals um 22x8,5 m að stærð og hæstu hleðslur eru um 1,7 m háar, í hlöðunni. Nyrsta hólfið er fjárhús. Það er um 6,5x3 m að innanmáli. Nyrst í því er opið svæði en um 2 m innan (sunnan) við norðurgafl er lítill milliveggur, um 1


ÍS-206:005 – Fjárhústóftin, horft til vestnorðvesturs.

m breiður og 70 cm hár, og fyrir innan (sunnan) hann tekur við fjárhús með garða. Miðjuhólfið er eins og áður sagði hlaðan. Hún er um rúmlega 5x2 m að innanmáli og hefur verið grafin niður að hluta. Hleðslur í henni eru mjög stæðilegar. Á austsuðausturhlið hennar eru hleðslur ekki jafn háar, einungis um 1,4 m innanfrá. Þar er gat sem er um 1,5 m breitt og um 1,5 m djúpt, eins og þykkt veggjarins. Líklega hefur verið þarna gat eða hleri til að setja heyið inn um. Syðsta rýmið er einnig fjárhús, stærra en hið nyrðra. Það er um 9x3 m stórt að innanmáli. Um 8 m langur garði gengur eftir húsinu miðju. Í hólfinu er nokkuð af þakhruni, sem og í nyðra fjárhúsinu, og er greinilegt að þakið hefur verið úr torfi með járnplötum undir og trégrind til þess að halda því uppi. Húsið sjálft er hlaðið úr torfi og grjóti. Mögulegt er að það sem virðist vera milliveggur í nyrðra fjárhúsinu sé í raun einungis tilkomið vegna þakhruns. Opið er á milli fjárhúsanna í gegnum hlöðuna, s.s. gengt úr hvoru fjárhúsi fyrir sig inn í hlöðuna. Útgangur er á syðra fjárhúsinu til suðsuðvesturs á skammhlið og því nyrðra til vestnorðvesturs á langhlið við norðurhorn. Grjóthleðslur eru greinilegar víða inni í tóftinni en yfirleitt grónar að utan.

Hættumat: engin hætta

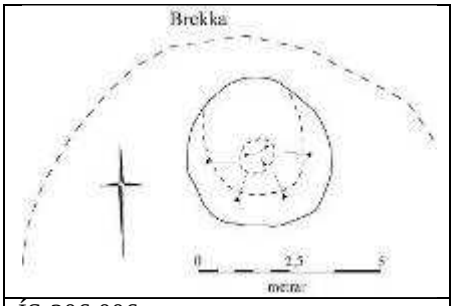
Heimildir:Túnakort (ártal vantar).

ÍS-206:006 gryfja heygryfja 6555.752N 2228.342V

ÍS-206:006 – Heygryfjan í hólnum fyrir miðri mynd, horft til austsuðausturs.

Um 130 m norður af bæ 001, utan í brekkubrún, er heygryfja sem merkt er inn á túnakort frá því um 1920. Gryfjan er grafin inn í brekkubrún norður af fjárhúsi 005. Neðan (norðan) við hana er mýri og rennur lítill lækur í henni. Umhverfið er grasi gróið.

Gryfjan er um 4x4 m að stærð og mest um 2,5 m djúp frá efstu brún (syðst) en þegar norðar dregur minnkar hæðin því brekkan lækkar. Eitt lítið rofabarð er syðst í gryfjunni. Gryfjan er dýpst fyrir miðju en grynnri meðfram bökkunum, engar hleðslur eða þess háttar eru sjáanlegar.



ÍS-206:006

Hættumat: hætta, vegna rofs

Heimildir:Túnakort (ártal vantar).

ÍS-206:013 *Bæjarhjalli* garðlag túngarður 6555.719N 2228.469V

ÍS-206:013 – Túngarðurinn við vestanvert túnið, horft ti norðurs.

Í örnefnaskrá Ásgeirs Svanbergssonar segir:" Hjallarnir fyrir ofan bæinn: Bæjarhjalli, sá sem er fyrir ofan bæinn [001] og túngarðurinn stendur. Þar næst Miðhjalli, svo Hádegishjalli." Túnið í Sveinhúsum er smáþýft, mjög gróið og hæðótt, sérstaklega að norðan. Túngarðurinn afmarkar vestur, austur og suðurhliðar túnsins að mestu leyti en að norðan hefur lækur að öllum líkindum verið látinn gegna því hlutverki.

Túngarðurinn liggur í graslendi og hins vegar uppi á Bæjarhjalla, nokkuð háum hjalla ofan bæjar. Hann endar að norðaustan þar sem mýrar taka við neðan túns og að vestnorðvestan nær hann rétt norður fyrir heimreið bæjarins. Umhverfið er gróið grasi og lyngi.

ÍS-206:013 – Túngarðurinn við sunnanvert túnið, horft til suðausturs.

Garðurinn er hlaðinn úr grjóti og er mest um 1,5 m breiður og um 1,5 m hár. Hann afmarkar meirihluta túnsins eða túnin alveg til vesturs, suðurs og austurs ef frá er talinn lítill blettur á Bæjarhjalla þar sem klettar hafa verið látnir vinna verkið. Að norðan og norðaustan eru mýrar og bleyta og hefur þar verið girt ofan í mýrinni en lítil lækjarspræna, sem hugsanlega hefur verið mokað eitthvað upp úr, afmarkar

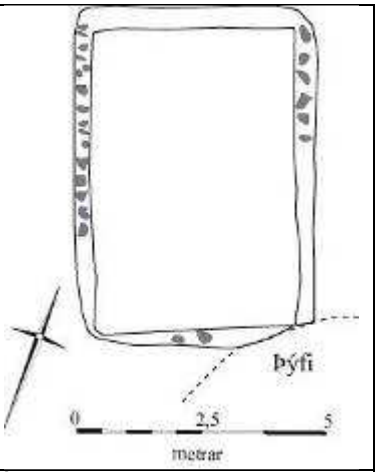
túnið til norðvesturs. Túngarðurinn er yfirleitt stæðilegur og girt hefur verið ofan á hann með vír og gaddavír. Nokkur op eru á honum. Eitt er þar sem heimreiðin kemur inn í túnið annað þar sem gönguleiðin fer liggur yfir í Reykjarfjörð og tvö eru að norðaustanverðu, líklegast á þeim slóðum þar sem hestaleiðin sem yfir Sveinhúsanes (016, hefur ekki verið skráð á vettvangi) liggur frá bænum. Garðurinn er um 675 m á lengd, við austur, vestur og suðurhlið túnsins, og er stærð afmarkaðs túns innan hans um 270x240 m að stærð og snýr gróflega norður-suður.
Hættumat: engin hætta
Heimildir:Ö-Sveinshús (ÁS), 1.

ÍS-206:019 heimild um kálgarð 6555.719N 2228.348V
Samkvæmt túnakorti frá því um 1920 var kálgarður um 10 m norðvestan við fjárhús 005.
Talsverður halli er á svæðinu norðvestur af fjárhúsi 005, en þar kemur lítil dæld í túnið. Svæðið er smáþýft en slétt og mjög gróið.
Ekki sést móta fyrir garðinum á neinn hátt. Líklega er langt síðan garðurinn féll úr notkun og því er hann algerlega yfirgróinn og horfinn í dag.
Hættumat: engin hætta
Heimildir:Túnakort (ártal vantar).

ÍS-206:020 heimild um kálgarð 6555.716N 2228.357V
Samkvæmt túnakorti frá því um 1920 var kálgarður um 2 m norðnorðvestur af kálgarði 019, um 20 m norðvestur af fjárhúsi 005.
Dæld hefur myndast í túninu á þessu svæði og er það því í nokkrum halla. Túnið er smáþýft en slétt og vel gróið á þessum stað.
Ekki sést móta fyrir garðinum á neinn hátt. Líklega er langt síðan garðurinn féll úr notkun og því er hann algerlega yfirgróinn og horfinn í dag.
Hættumat: engin hætta
Heimildir:Túnakort (ártal vantar).

ÍS-206:021 gerði kálgarður 6555.657N 2228.247V
Um 60 m suðsuðaustan við bæ 001, uppi á Bæjarhjalla, um 4 m vestan túngarðs 013, er uppgróinn kálgarður. Garðurinn er merktur, utan túns, inn á túnakort frá því um 1920.
Gerðið er uppi á fyrsta hjalla fyrir ofan bæ, Bæjarhjalla, innan túngarðs 013. Umhverfis gerðið er að mestu lyngivaxið en sjálft gerðið er grasivaxinn. Fast norðan gerðisins er klettabelti Bæjarhjallans, nokkuð bratt. Aflíðandi brekka upp að næsta hjalla er sunnan og austan við gerðið.


ÍS-206:021 – Kálgarðurinn uppi á Bæjarhjallanum, bærinn í baksýn, horft í norðnorðvestur.

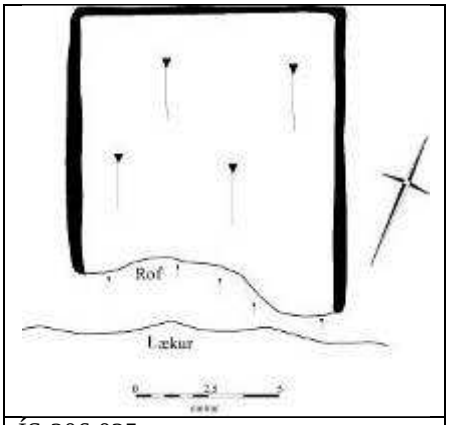


ÍS-206:021

Gerðið snýr norðnorðvestur-suðsuðaustur og er um 7x5 m að stærð. Það er afmarkað með mjóum garði, grjóthlöðnu en yfirgrónu og er innanmál um 4x6 m og hleðsluhæð er einungis um 30 cm. Gerðið er gróið grasi og sker sig úr umhverfinu.
Hættumat: engin hætta
Heimildir:Túnakort (ártal vantar).

ÍS-206:025 gerði kálgarður 6555.751N 2228.402V
Kálgarður er um 150 m norðan við bæ 001. Hann er innan túns í dag (þess túns sem afmarkað er með girðingu)

en hefur að öllum líkindum verið utan túns á meðan búið var í Sveinhúsum.



ÍS-206:025

Gerðið er í miklum halla sem endar í litlum læk. Inni í því og í umhverfis er sina, elting, blóðberg og strá. Sunnan við lækinn er tún. Norðan við gerðið er girðing og norður af henni malarslétta.
Gerðið er um 11, 5x10 m að stærð og snýr norðnorðvestur-suðsuðaustur. Það er 11x9 m að innanmáli þar sem mest er. Mjóir kantar eru á gerðinu, mest um 0,5 m breiðir og 0,5 m háir, en engin grjóthleðsla virðist vera í köntunum. Suðsuðausturendi gerðisins endar í litlum læk sem hefur markað af túnið. Gerðið er í mjög brattri brekku. Örlítið rof af völdum lækjarins er neðst (suðsuðaustast) í gerðinu.

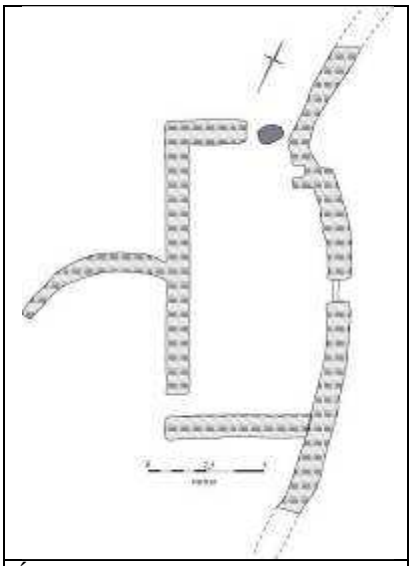

ÍS-206:025 – Kálgarðurinn, horft til norðurs.

Hættumat: hætta, vegna rofs

ÍS-206:026 tóft rétt 6555.676N 2228.432V

Grjóthlaðin rétt er um 100 vestur af bæ 001, utanvert við túngarð 013.
Réttin er byggð við túngarðinn utanverðan. Sunnan við réttina er lítið klettabelti. Umhverfið er gróið grasi og lyngi utan túngarðs.
Réttin er einföld, hlaðin úr grjóti og er um 14x8 m að stærð. Veggir eru um 1 m á breidd og mest um 1,2 m á hæð. Að innanmáli er réttin um 12x6 m. Hún snýr norðnorðvestur-suðsuðaustur. Á vestsuðvesturvegg hennar utanverðum, nokkurn vegin fyrir miðju er mjótt og lágt garðlag sem nær frá réttar-veggnum og um 6 m vestsuðvestur frá því. Á réttinni eru tveir inngangar, einn til vestsuðvesturs við suðurhorn réttarinnar, hinn á austnorðausturlangvegg (þeim sem túngarðurinn myndar), nokkurn vegin fyrir miðju og vísar sá inngangur inn í tún. Vestan við norðurhorn réttarinnar er svo einnig op en það er nokkuð stærra, um 1,5 m á breidd, og ekki er greinilegt að þar hafi sérstaklega verið hlaðið upp fyrir opi. Mögulegt er að það op hafi verið gert síðar með því að taka steina úr hleðslunni eða hleðslan hafi hrunið að hluta og verið fjarlægð. Við norðurhornið innanvert, til austurs, eru tvær litlar hleðslur sem mynda lítið afdrep, tæplega 1x1 m stórt, einungis er hleðsla á þrjá kanta. Túngarðurinn myndar austnorðausturhlið réttarinnar og er þar ofan á gaddavír á staurum. Hleðslur eru sums staðar farnar að skekkjast og jafnvel hrynja, en eru þó enn víða stæðilegar. Bæði hellur og steinar eru í hleðslum réttarinnar.


ÍS-206:026 – Réttin við túngarðinn, horft til norðurs.

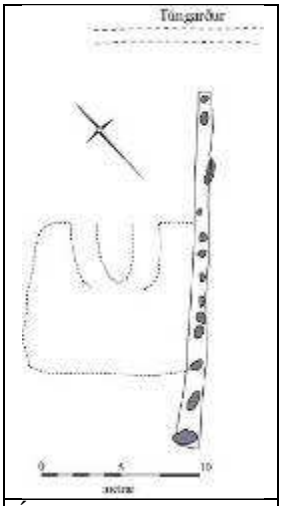

ÍS-206:026

Hættumat: engin hætta

ÍS-206:027 þúst útihús 6555.753N 2228.172V

Þúst er um 150 m norðaustur af bæ 001, rétt innan við túngarð 013.
Þústin er við klettabelti undir Bæjarhjalla (þ.e.beltið er suðaustan við hana). Norðvestan við hana er lítil brekka í túninu. Umhverfið er grasi gróið en svæðið á milli klettabeltisins og þústarinnar er mjög grænt og slétt þó smáþýft sé.

Þústin samanstendur af grasþúst og steinaraðir frá henni. Steinarnir eru suðaustan við þústina og ná út fyrir hana bæði til norðausturs og suðvesturs. Þústin er 9x5 m stór og snýr norðaustur-suðvestur. Þústin virðist einföld en



ÍS-206:027

mögulegt er þó að hún hafi skipst í tvennt og að lítið rými hafi verið stúkað af fremst (norðaustast) í þústinni, um 1x1,5 m að innanmáli. Steinaröðin er um 22 m á lengd og hefst um 3 m suðvestan við túngarð. Steinaröðin er mest um 1 m á breidd þar sem meint hleðsla er og um 40 cm há.

Hættumat: engin hætta


ÍS-206:027 – Þústin, horft til suðvesturs.

ÍS-206:028 tóft fjós 6555.703N 2228.231V

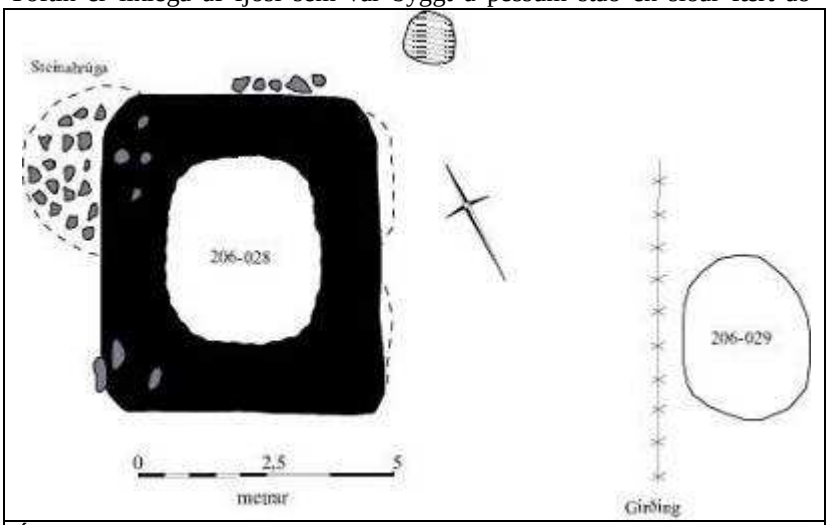

ÍS-206:028 – Fjóstóftin, horft til norðausturs.

Einföld tóft er innan túns, um 60 m austnorðaustur af bæ 001 og um 6 m norðnorðvestur af öskuhaug 029.

Tóftin er í nokkuð sléttu smáþýfðu túni, óslegnu. Norður af henni er halli til norðurs. Skammt austur og suður af henni er Bæjarhjalli, fyrsti hjalli ofan við bæ. Umhverfi tóftarinnar er gróið grasi.

Tóftin er greinileg þar sem hún stendur hærra en umhverfið og einnig vegna þess að vegna þess að gróðurinn á henni er örðuvísi en umhverfið, mikið vex af eltingu á henni auk grass. Hins vegar eru veggir ekki mjög greinilegir, þeir eru farnir að hlaupa í þúfur. Líklegast hefur tóftin upphaflega verið hlaðin úr grjóti því nokkuð er af grjóti í henni og við norðurhorn. Tóftin snýr norðaustur-suðvestur. Hún er um 6x5,5 m að utanmáli og um 3,5x3 m að innanmáli. Veggjahæð er mest um 80 cm og breidd veggja mest um 1,5 m. Ekkert op er greinanlegt á tóftinni. Tóftin er líklega af fjósi sem var byggt á þessum stað en síðar fært að íbúðarhúsinu þar sem það er nú (sjá 001, I). Um 1,5 m frá austurhorni tóftar er lítil hleðsla sem líkist vörðu en í henni miðri er girðingarstaur og hefur hún líklegast verið hlaðin til þess að halda honum uppi. Hleðslan er um 1x1 m að grunnfleti og um tæplega 1 m há.

Hættumat: engin hætta



ÍS-206:028 og 029

ÍS-206:029 öskuhaugur öskuhaugur 6555.698N 2228.221V

Gróinn öskuhaugur er um 65 m austnorðaustur af bæ 001og um 6 m suðsuðaustur af tóft 028.

Haugurinn er í sléttu en þó smáþýfðu túni rétt undir Bæjarhjalla. Umhverfið er gróið grasi en lyngigróður verður

ÍS-206:029 – Öskuhaugurinn, bærinn í baksýn, horft til vestsuðvesturs.

meira áberandi þegar ofar (austar og sunnar) dregur. Haugurinn er um 2x2,5 m að stærð og um 1 m hár. Hann er gróinn miklu grasi, sem er eilítið ljósara en grasið í kring. Í norðvesturhlið haugsins er rauðleitt mannvistarlag með brenndum og óbrenndum beinum o.fl. Haugurinn er rétt utan við girðingu þá er nú afmarkar túnið. Líklegast er haugurinn sá síðasti sem notaður var á bænum, enda virðist það sem sést í honum ekki vera mjög gamalt, en þó er ekki hægt að útiloka að eldri mannvistarleifar geti leynst í honum.

Hættumat: engin hætta

ÍS-206:029 – Mynd tekin í norðvesturhluta öskuhaugsins.

ÍS-206:030 garðlag óþekkt 6555.659N 2228.291V

ÍS-206:030 – Garðlagið, horft til austnorðausturs.

Óljóst garðlag er um 45 m suður af bæ 001.

Garðlagið liggur í óslegnu túni, rétt neðan við Bæjarhjalla.

Ekki er hægt að útiloka að meint garðlag sé í raun ekki eiginlegt mannvirki heldur hafi aðeins orðið til þegar verið var að grjóthreinsa tún. Þó virðist líklegast að um garð sé að ræða vegna þess hve breidd þess er jöfn og vegna þess hversu löng steinaröðin er og þess að hún myndar boga. Garðlagið er um 55 m langt og mest um 1m á breidd og 0,7 m á hæð þar sem það er greinilegast. Annar endi garðlagsins vísar í vestnorðvestur en hinn í norðaustur. Tilgangur garðlagsins er óljós, en það tengist líklega túninu á einhvern hátt.

Hættumat: engin hætta

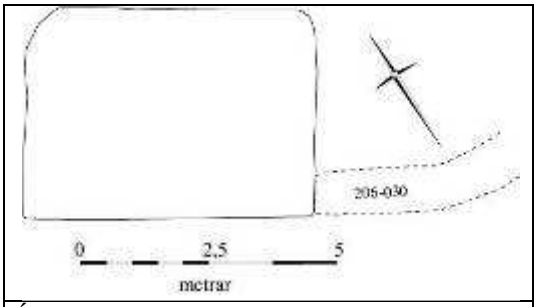
ÍS-206:031 þúst útihús 6555.658N 2228.308V

ÍS-206:031 – Þústin, horft í vestur.

Þúst er við vestnorðvesturenda garðlags 030. Hún er um 45 m suðsuðvestur af bæ 001.

Þústin er í óslegnu túni skammt undan Bæjarhjalla. Fast suðvestan og vestan við hana rennur lítil lækjarspræna og til norðausturs er bæjarhóllinn 001. Umhverfi þústarinnar er gróið grasi.

Þústin er um 4x5,5 m að utanmáli og snýr vestnorðvestur-austsuðaustur. Hún er mest um 1 m á hæð og virðist einföld. Hún er í raun aðeins hækkun á yfirborði túnsins en líklega leynast þar einhverjar mannvistarleifar undir sverði. Grænna gras vex á þústinni en í kringum hana og ekkert grjót er sjáanlegt í henni.



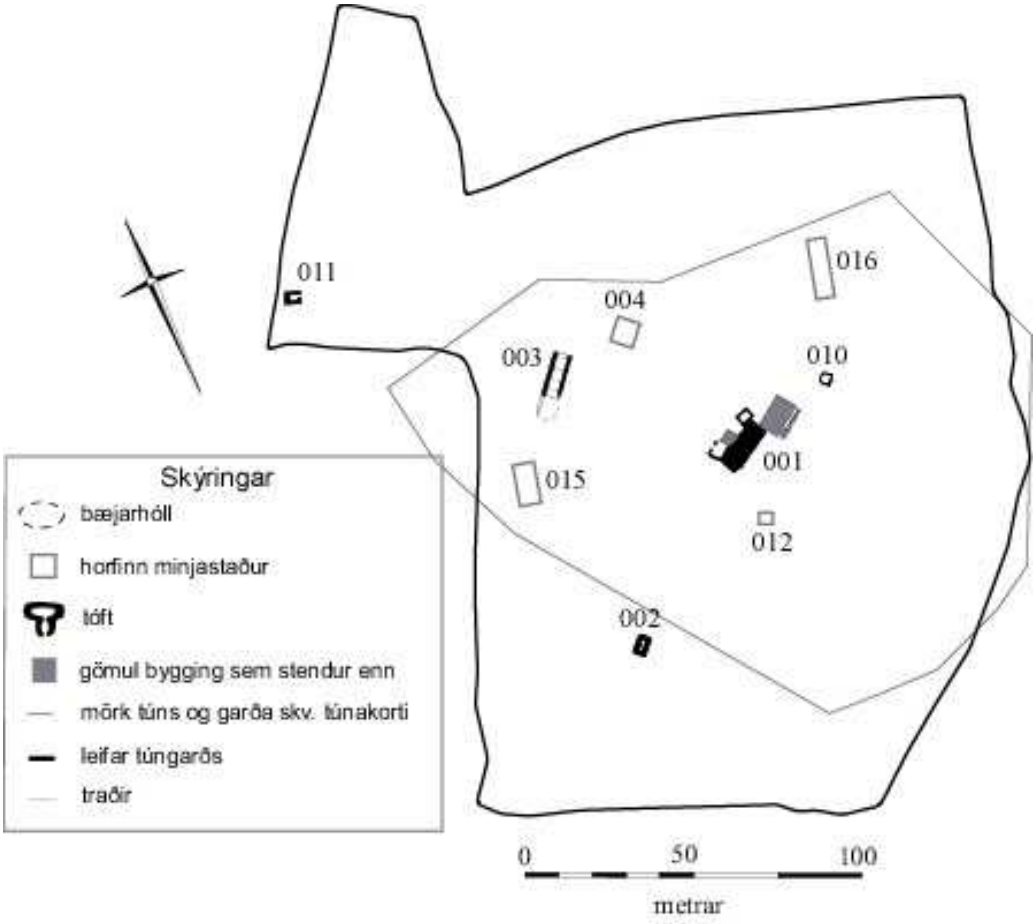
ÍS-206:031 (og 030)

Hættumat: engin hætta

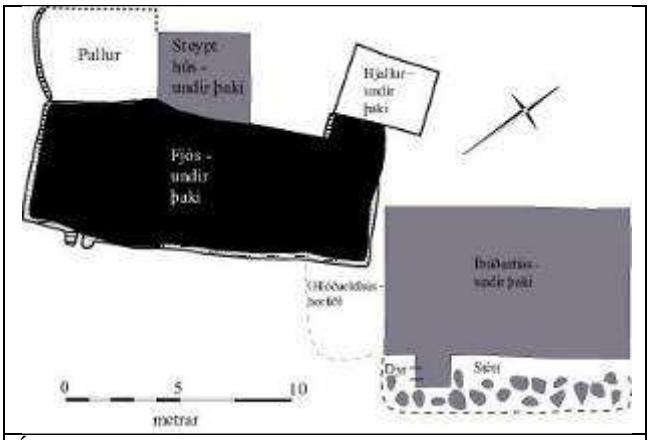
ÍS206:032 heimild um kálgarð
Um 60 m suðsuðaustan við bæ 001, uppi á Bæjarhjalla, um 4 m vestan túngarðs 013, er uppgróinn kálgarður 021, um 30 m suðvestur af honum var samkvæmt túnakorti annar stærri kálgarður, en til hans sést ekki. Greinilegt er að kálgarðar þessir (021 og 032), sem merktir eru inn á túnakort utan túns, eru ekki nákvæmlega staðsettir á túnakortinu og er því ekki hægt að ákvarða staðsetningu þessa kálgarðs, þó hinn (021) hafi fundist, með neinni nákvæmni.
Kálgarðurinn var uppi á fyrsta hjalla fyrir ofan bæ, Bæjarhjalla. Þar sem túngarðurinn (013) er ekki merktur inn á túnakortið eins og hann er í dag er erfitt að segja hvort kálgarðurinn sé í dag innan eða utan túngarðs. Umhverfið uppi á Bæjarhjalla er að mestu lyngivaxið. Klettabelti Bæjarhjallans er nokkuð bratt en aflíðandi brekka er upp að næsta hjalla suðaustan við Bæjarhjallann.
Kálgarðurinn var samkvæmt túnakorti mun stærri en kálgarður 021. Engin merki um kálgarð voru á þeim slóðum sem hann á að hafa verið á samkvæmt túnakorti. Líklega er hann löngu fallinn úr notkun og upp gróinn. Hleðslur í kringum kálgarða 021 og 025 voru mjög litlar og lágar og ef það hefur verið hefð í Sveinhúsum að hlaða ekki hærri garða en svo í kringum kálgarðana þarf ekki mikið til þess að það grói yfir hleðslurnar og þær hverfi.
Hættumat: engin hætta
Heimildir:Túnakort (ártal vantar).

ÍS-207 Miðhús

1383: Testamentisbréf Einars Eiríkssonar: „Ek Einar Eiriksson gerir sua fellt testamentum sem her seger. kiosandi líkam minum legstad at kirkiu heilaghs Olafs j Watzfirde. gefande þar til jord aa Haalshusum. ok j Waagum. Miþhusum ok Eyre halfua j Miouafirdi“ (DI. XII, bls. 25).
1460: „nefndr einar eireksson gaf j sitt testamentum kirkiune j uatznfirde þessar jardir er suo heita halshus ok uogar ok midhus ok halfa eyre j miofafirde er liggia i vatnzfiardar kirkiusokn“ (DI. V, bls. 208).
1507: Björn Þorleifsson fær af sínum parti Stepháni biskupi í Skálholti í vald alla bóndaeignina í heimalandinu í Vatnsfirði og hálfa Borgarey, ... „Enn aullum audrum peningum kyrum og ohrærdum. voru þessar stadarins jarder aa nefndar kirkiunni til æfinligrar eignar. fyrst sueinshus. midhus. halshus. þufna land. halfa skalauik. eyri j miofafirdi. giorfudalur j isafirdi. [hest land] „ (DI. VIII, bls. 141).
1710: Beneficium Vatnsfjörður. Jarðardýrleiki 12 hdr. „Þessi jörð hefur í eyði legið næstu 8 ár og so stundum áður“ (JÁM VII, bls. 217).
1710: „Engjar öngvar nema í svarðleysu brokflóum. Túnið er fordjarfað af lángvarandi órækt, hart og snögt og kann því valla að ræktast. Vatnsból bregðst bæði sumar og vetur“ (JÁM VII, bls. 217).
Túnastærð 1,88 ha, húsagrunnar 397 □m.
1847: Eign Vatnsfjarðarkirkju, 12 hdr. (JJ, bls. 201); „A.M., en eigi jb. 1760, segir hér frá dýrleika og leigumála. Sýslumaður einn telur dýrleikann aðeins 9 h.“ (JJ, bls. 201).
„Þessa jörð höfðu til afnota presturinn í Vatnsfirði og Halldór hreppstjóri í Skálavík, og heyjuðu þar sumar hvert og höfðu þar jafnan lömb sín á fóðrum að vetri. Allt að einu var jafnan þar húsfólk á jörðinni“ (PP, bls. 61).
Jörðin fór í eyði 1994.
1935: „Bærinn stendur nokkuð hátt, á grýttum og gróðurlitlum hjalla, þar sem túnstæði er bæði illt og lítið, en engjar eru miklar og allgóðar, bæði frammi í dalnum og uppi á hálsinum.Sakir slægnanna notuðu Vatnsfjarðaprestar jörðina lengi með staðnum, enda upphaflega hjáleiga þaðan og byggð af Vatnsfjarðarlandi“ (Ö-Miðhús, bls. 1).



ÍS-207:001 *Miðhús* bæjarhóll bústaður 6555.141N 2230.491V



ÍS-207:001

Bæjarhóllinn í Miðhúsum er austan til í túninu og stendur núverandi íbúðarhús á honum. Búskap var hætt í Miðhúsum 1994 og er í dag sumarbústaður eigendanna.

Hóllin er inni í túni, umhverfið er grasi gróið og slétt til norðvesturs en brekkur og meiri órækt til suðausturs.

Bæjarhólinn sjálfur hefur verið að hluta sléttaður og jafnvel virðist hafa verið rutt fram af honum (til suðurs). Bæjarhús eru á hólnum, öll undir þaki og eru þau að miklu leyti samföst, nema íðúðarhúsið sem er ekki áfast hinum húsunum. Bæjarhóllinn snýr norðnorðaustur-suðsuðvestur og er um 32x30 m að stærð. Hann er ekki mjög greinilegur aftan (norðvestan) við bæjarhúsin og eru mörk hans því líklega við norðvesturvegg þeirra húsa. Til suðausturs er hann greinilegri, þ.e. greinileg brekka er þeim megin, og er hann mest um 6 m hár. Bæjarhóllinn nær um 20 m suðaustur af fjósi og um 5 m suðvestur af því. Hann er mun knappari við íbúðarhúsið þar sem hann rétt nær út fyrir stéttina framan við húsið áður en það hallar niður af honum niður á jafnsléttu. Einungis eitt hús á bæjarhólnum er hlaðið úr torfi og grjóti og er það fjósið og hlaða. Önnur hús eru: íbúðarhús byggt 1922, bárujárnsklætt, steypt viðbygging við fjós, vestantil, og

ÍS-207:001 – Bæjarhúsin, íbúðarhúsið lengst til vinstri, horft til suðurs.

hjallur norðvestan við fjós. Við vesturenda fjóssins er einnig einskonar pallur eða upphækkun í horninu á milli vesturveggjar fjóss og suðurveggjar steyptu viðbyggingarinnar. Grjót virðist vera í köntum og gætu þetta verið leifar mannvirkis tengdu bæjarhúsunum. Mjór stígur er á milli íbúðarhúss og fjóss en áður voru húsin samföst. Fjósið er um 16x6 m að utanmáli og veggir standa allt að 1,6 m háir. Ofan á þeim er bárujárn og þar ofan á þak. Þegar skráningin var gerð var húsið lokað og innanmál því ekki tekin. Íbúðarhúsið er um 11x6,5 m að grunnfleti, hjallur um 4x3 m og steypt viðbygging um 3x4 m. Í horninu á milli íbúðarhúss og fjóss að sunnanverðu var áður hlaðið hús sem var hlóðaeldhús og þar var einnig aðstaða fyrir húsmennskufólk. Það hefur nú verið rifið og sléttað yfir þannig að ekki sést móta fyrir því. Utan í bæjarhólnum, austan til er brunnhús (sjá 010).

ÍS-207:001 – Fjósið, hluti íbúðarhússins lengst til hægri, horft til norðurs.

Heimildir:Túnakort (ártal vantar).

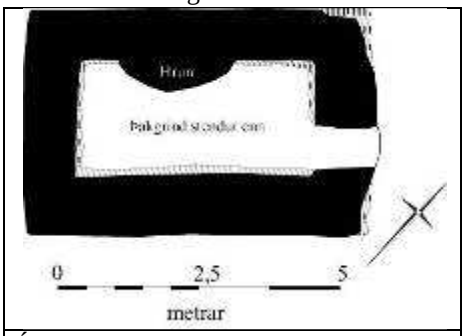
ÍS-207:002 tóft reykhús 6555.106N 2230.538V

Reykhús sem er að hruni komið er um 75 m suðvestur af bæjarhól 001, austan við slóða sem liggur inn að Neðra-Selvatni. Húsið er innan túns en utan þeirrar girðingar sem nú er á svæðinu.

Húsið er á sléttri grasflöt rétt austan við jeppaslóða sem liggur inn að Neðra-Selvatni, en hann var lagður ofan í gamla reiðveginn inn í Vatnsfjarðarsel (008, hefur ekki verið skráð á vettvangi). Umhverfi hússins er gróið grasi.

Húsið stendur enn að hluta og var reykhús. Bárujárn hefur verið rifið af þaki en timburgrind þaksins stendur ennþá. Húsið er um 4x6 m að utanmáli og um 4x2 að innanmáli þar sem mest er. Húsið snýr norðaustur-suðvestur og hefur verið gengið inn í það austarlega á norðausturvegg, en sú hlið er mjög illa farin. Veggir eru rúmlega 1 m þykkir þar sem mest er og standa hleðslur ágætlega, þó farið sé að sjá á þeim á stöku stað. Hleðslur eru mest 1,2 m háar en bárujárn hefur verið sett upp á rönd ofan á hleðsluna til að hafa veggina hærri. Greinilegt er á innviðum hússins og lyktinni af því að um reykhús að ræða. Veggir eru hlaðnir úr torfi og grjóti.

ÍS-207:002 – Reykhúsið, horft til suðsuðvesturs.



ÍS-207:002

Hættumat: hætta, vegna framkvæmda

Heimildir:Túnakort (ártal vantar).

ÍS-207:003 *Steinahús* tóft fjárhús 6555.148N 2230.576V

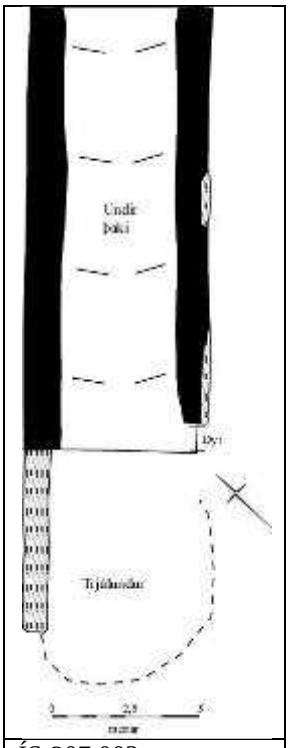
Gamalt fjárhús, nefnt Steinahús, er um 65 m norðvestur af bæjarhól 001. Húsið er merkt inn á túnakort frá því um 1920.

Húsið er á sléttu, grasigrónu svæði innan túns, á örlitlum hól. Vestur af húsinu er girðing og fyrir utan hana er gamalt tún sem gróið hefur upp og hlaupið í þúfur.

Húsið er enn undir þaki og er notað sem geymsla. Það er um 15 m langt og um 6 m breitt utanfrá. Innri mál voru ekki tekin vegna þess að húsið er í notkun. Hæstar eru grjóthleðslur um 1,5 m en á þeim er bárujárnsþak á timburgrind. Dyr eru á húsinu á suðausturhorni (austurvegg), til suðausturs. Húsið snýr norðaustur-suðvestur. Veggir eru hlaðnir úr torfi og grjóti og virðast vera rúmlega 1 m þykkir. Bárujárn er á báðum

ÍS-207:003 – Steinahús, horft til norðvesturs.

skammhliðum en grjóthleðslur á langhliðum. Viðarumbúnaður er um dyr. Út frá suðvesturhorni hússins gengur um 6 m langur garður, um 70 cm breiður til suðvesturs. Hann er mest um rúmlega 1 m hár og lækkar eftir því sem fjær dregur húsinu. Við þennan garð og í skjóli við hann og húsið er lítill trjálundur með barr- og lauftrjám. Eldra hús er undir uppistandandi húsi samkvæmt Hans Aðalsteini Valdimarssyni, þ.e. húsið sem nú stendur var byggt ofan á elda hús.
Hættumat: engin hætta
Heimildir:Túnakort (ártal vantar).



ÍS-207:003

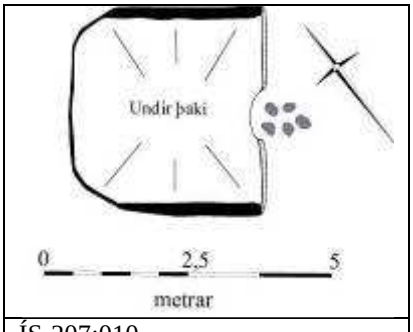
ÍS-207:004 heimild um fjárhús 6555.155N 2230.543V
Hans Aðalsteinn Valdimarsson nefnir að fjárhús hafi staðið innan túns þar sem nú stendur gesta- eða samkomuhús (hvítt 2010), um 50 m norðnorðvestur af bæjarhúsum 001. Fjárhústóftirnar voru fyrir tveimur árum rifnar og nústandandi hús byggt ofan á grunninn.
Í kring er slétt grasflöt innan túns, grasflötin er afgirt.
Ekki sést til fjárhússins þar sem það er horfið. Tóftirnar voru rifnar fyrir tveimur árum og hús byggt beint ofan á grunn þeirra. Möguleiki er þó á að einhverjar leifar fjárhússins leynist undir nýja húsinu.
Hættumat: stórhætta, vegna framkvæmda
Heimildir:Túnakort (ártal vantar).


ÍS-207:004 – Húsið sem stendur nú á grunni fjárhúsanna, horft til norðvesturs.

ÍS-207:010 hús Brunnhús 6555.150N 2230.466V
Neðan (austnorðaustan) við bæjarhól 001 stendur enn brunnhús. Það er um 15 m austur af íbúðarhúsinu.
Brunnhúsið stendur undir bæjarhólnum austanverðum. Til norðausturs er blettur þar sem hrossum hefur líklega verið beitt, en óslegið tún er annars í kring. Lítil lækjarspræna rennur á þessum slóðum í gegnum húsið, frá norðnorðvestri til suðsuðausturs.


ÍS-208:010 – Brunnhúsið, horft til vesturs.

Húsið snýr norðvestur-suðaustur og er um 3,5x3,5 m að utanmáli. Að innanmáli er það einungis um rúmlega 1 x 1,5 m. Lofthæð inni er mest um 1,8 m en veggjahæð er einungis um 1,2 m. Þak hvílir beint á veggjunum sem eru hlaðnir úr torfi og grjóti. Inni eru hellur í gólfi þeim megin sem gengið er inn, að sunnanverðu, en dyr eru til suðausturs. Í hinum hluta gólfsins er vatnsrásin. Nokkuð vatn er í henni en engin eða lítil hreyfing er á því.



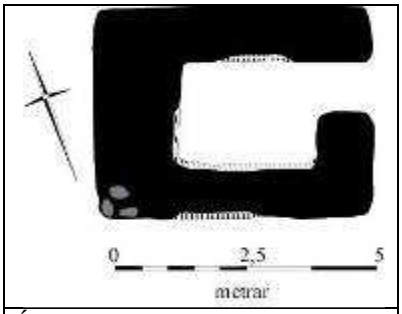
ÍS-207:010

Vatnið kemur úr litlu lækjarsprænunni sem liggur í gegn, eða a.m.k. frá húsinu til suðsuðausturs. Lágar dyr eru á húsinu og er það að hluta grafið inn í bæjarhólinn. Hleðslur sjást vel við inngang en eru grónari annars staðar. Bárujárn, torf og hellur eru á þakinu. Tröppur úr hellum liggja frá efri brún bæjarhóls við íbúðarhúsið og niður að brunnhúsinu. Erfitt var með vatn á jörðinni alla tíð og var þessi brunnur eina vatnsból hennar. Vatnið var borið úr brunninum og upp í íbúðarhús í fötum.
Hættumat: engin hætta

ÍS-207:011 tóft hesthús 6555.162N 2230.680V


ÍS-207:011 – Hesthústóftin, horft til norðvesturs.

Hesthústóft er um 80 m norðvestur af Steinahúsi 003. Tóftin er af hesthúsi sem byggt var eftir 1954 og telst því ekki til fornleifa í skilningi laganna. Hins vegar er hún skráð hér vegna þess að húsið var byggt í gamalli byggingarhefð og úr hefðbundnu efni.
Tóftin er í útjaðri túnsins á sléttum bletti, grónum grasi. Austur af tóftinni er halli niður í túninu og vestan við hana eru endimörk túnsins og lítið, grýtt holti, gróið lyngi.
Tóftin er um 4x5 m að utanmáli og um 2x2,5 m að innanmáli. Tóftin snýr norðaustur-suðvestur.



ÍS-207:011

Veggir eru mest um 1,5 m þykkir og um 1,1 m á hæð og eru hlaðnir úr grjóti. Á stöku stað sést í grjóthleðslurnar en annars staðar er gróið yfir þær. Tóftin var hesthús en var að öllum líkindum notuð sem bú barna eftir að húsið féll úr notkun sem slíkt. Op er á tóftinni til suðausturs, um 1 m breitt.
Hættumat: engin hætta

ÍS-207:012 heimild um heygryfja 6555.127N 2230.487V
Heygryfja var rétt sunnan við bæjarhúsin á bæjarhól 001 í girðingarhorni, rétt suður af suðurhorni fjóss.
Á svæðinu er lítill hóll sem líklegast hefur myndast við sléttun bæjarhólsins og er brekka niður af honum til suðurs. Til norðurs er sléttur bæjarhóllinn með bæjarhúsum, og tún.
Gryfjan sést ekki lengur enda var fyllt upp í hana og hún gróin upp.
Hættumat: engin hætta

ÍS-207:013 garðlag túngarður 6555.078N 2230.565V


ÍS-207:013- Hluti túngarðsins við suðaustanvert túnið, horft til suðurs.

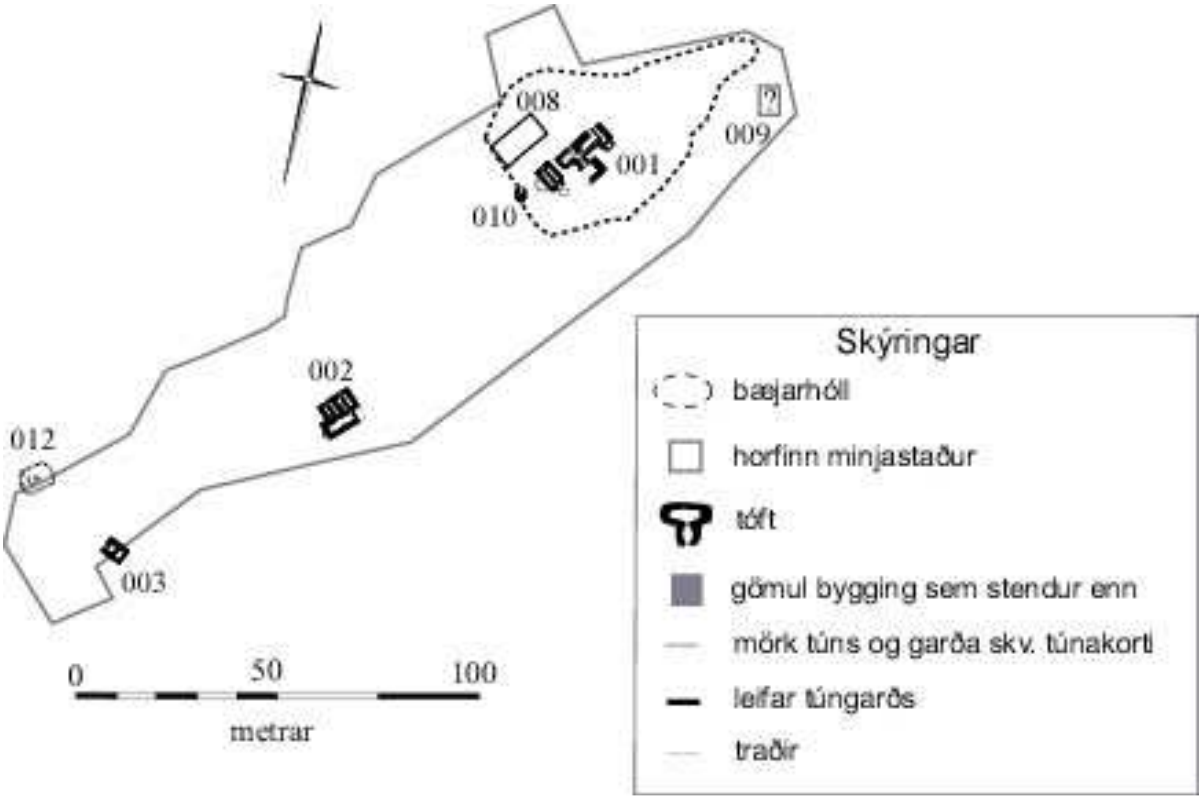
Túngarður er merktur inn á túnakort og hefu hannr girt af túnin í Miðhúsum. Leifar hans sjást nærri því allan hringinn í kringum túnið, þó hann sé óljós á köflum.
Garðurinn liggur á sléttu graslendi, blautum svæðum, um holtabrekku og holt. Allt er svæðið gróið nema í kringum heimreiðina að Miðhúsum þar er svolítið sár eftir vegagerðina.
Garðurinn, eins og hann sést nú (2010) er lítið annað en undirhleðsla undir girðingu. Hann er mest um 1 m breiður og 1 m hár (til suðausturs) en annars er hann yfirleitt um 0,5 m á breidd og aðeins eitt umfar af hleðslu, enda lítið annað en röð af steinum. Að neðan við bæinn (suðaustur) er hann þó aðeins viðameiri. Garðurinn er úr grjóti og sums staðar er gróið yfir hann og annars staðar er hann sokkinn. Hann er ógreinilegastur vestnorðvestast, en þó er enn hægt að rekja hann. Garðurinn er samtals um 910 m á lengd og hefur markað af túnstæði sem er um 210x215 m að stærð og er op á honum á tveimur stöðum, þar sem komið er inn í túnið frá þjóðveginum (norður) og þar sem slóði liggur niður að Neðra-Selvatni (suðvestur).
Hættumat: hætta, vegna framkvæmda
Heimildir:Túnakort (ártal vantar).

ÍS-207:015 heimild um útihús
Útihús er merkt inn á túnakort frá því um 1920, um 60 m vestur af bæjarhól 001.
Húsið hefur staðið þar sem nú er sléttað tún.
Útihúsið sést ekki í dag og eru orsakir þess óljósar. Líklegt er að langt sé síðan húsið féll úr notkun þar sem Hans Aðalsteinn Valdimarsson minntist ekki á hús á þessum stað.
Hættumat: hætta, vegna framkvæmda
Heimildir:Túnakort (ártal vantar).

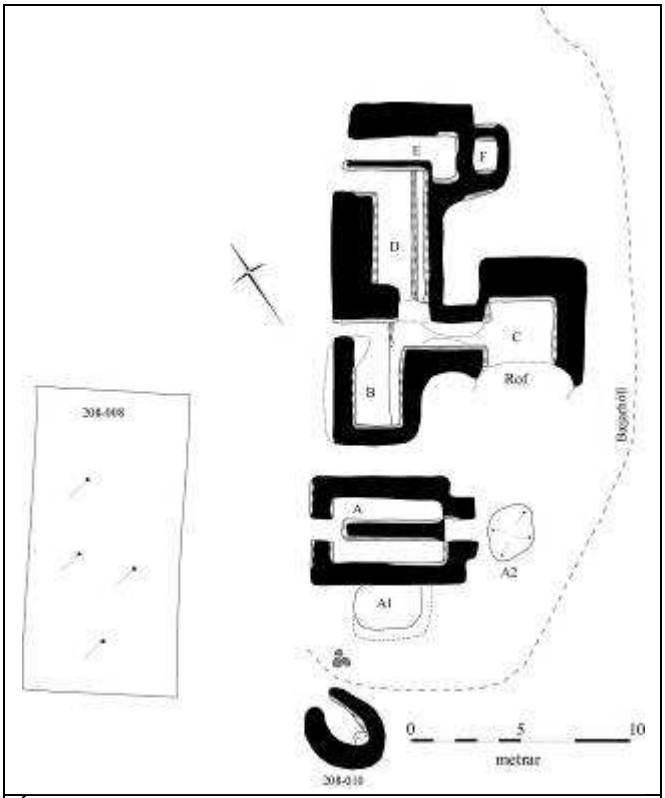
ÍS-207:016 heimild um útihús
Útihús er merkt inn á túnakort frá því um 1920 um 40 m norðnorðaustur af bæjarhól 001.
Húsið hefur staðið þar sem nú er sléttað tún.
Útihúsið sést ekki í dag og eru orsakir þess óljósar. Líklegt er að langt sé síðan húsið féll úr notkun þar sem Hans Aðalsteinn Valdimarsson minntist ekki á hús á þessum stað.
Hættumat: hætta, vegna framkvæmda
Heimildir:Túnakort (ártal vantar).

ÍS-208 Hálshús

1327: Rekaskrá Vatnsfjarðarkirkju. „torfskurdr j hals husa land sem uill“ (DI. II, bls. 620).
1383: Testamentisbréf Einars Eiríkssonar í Vatnsfirði í transskripti tveggja presta og tveggja leikmanna. „gefande þar til jord aa haalshusum“ (DI. III, bls. 366).
1382: Testamentisbréf Einars Eiríkssonar... . „Ek Einar EiRiksson gerir sua fellt testamentum sem her eger. kiosandi likam minum legstad at kirkiu heilaghs Olafs j Watzfirde. gefande þar til jord aa Haalshusum. ok j Waagum“ (DI. XII, bls. 25).
1460: „nefndr einar eireksson gaf j sitt testamentum kirkiune j uatznfirde þessar jardir er suo heita halshus ok uogar ok midhus ok halfa eyre j miofafirde er liggia i vatnzfiardar kirkiusokn“ (DI. V, bls. 208).
1507: Björn Þorleifsson fær af sínum parti Stepháni biskupi í Skálholti í vald alla bóndaeignina í heimalandinu í Vatnsfirði og hálfa Borgarey, ... „Enn aullum audrum peningum kyrum og ohrærdum. voru þessar stadarins jarder aa nefndar kirkiunni til æfinligrar eignar. fyrst sueinshus. midhus. halshus. þufna land. halfa skalauik. eyri j miofafirdi. giorfudalur j isafirdi. [hest land]„ (DI. VIII, bls. 141).
1509: Máldagi kirkjunnar í Vatnsfirði, er Stephán Jónsson biskup í Skálholti setti. „Marivkirkia i vatzfirde og ens heilaga olafs konvngs aa heimaland allt. borgarey alla og þessar iarder halshus og þvfur. heidar lavnd bæde. svansvik og voga. giorfedal og eyrarland allt j mjoffafirde“ (DI. VIII, bls. 286).
1710: Beneficium Vatnsfjörður. Jarðardýrleiki 12 hdr. (JÁM VII, bls. 217).
1710: „Enginu grandar vatn, sem jetur úr rótina, og smálækir með leirs og sands áburði. Landþröngt er og því leyfir staðarhaldarinn ábúandanum beit á eyðijörðinni Miðhúsum, og geldur ábúandi þar þó ei toll fyrir“ (JÁM VII, bls. 218).
1847: Eign Vatnsfjarðarkirkju, 12 hdr. JJ, 201; „Sýslumaður einn telur hér 8 h. Dýrleika“ (JJ, bls. 201).
„Hálshús er næsti bær fyrir framan Sveinshús, einnig kirkjujörð frá Vatnsfirði. Lítil jörð og landþröng“ (PP, bls. 64).
Jörðin fór í eyði stuttu fyrir 1940 og síðasta vetrarbúseta var þar fljótlega eftir 1940.
Túnastærð 9,98 ha, húsagrunnar og hlað 348 fm, matjurtagarðar 101 □m.
1935: „Landlítið er þar og aðkreppt, enda er jörðin kot eitt og nú í eyði, en nytjuð frá Þúfum. Beitarsælt þykir þó þar á vetrum, en tún grasgefið þó að lítið sé“ (Ö-Hálshús, bls. 1).



ÍS-208:001 *Hálshús* bæjarhóll bústaður 6555.051N 2228.748V



ÍS-208:001

Bæjarhóllinn er norðaustarlega í túni; hár, grænn hóll með stóru rofabarði að vestnorðvestan. Hálshús fóru í eyði ekki löngu fyrir 1940 og síðasta vetrarbúseta þar var fljótelga eftir 1940. Húsið í Hálshúsum brann einhverntíma um 1900 en nýtt hús var reist þar og búskapur hélt áfram nokkra áratugi enn. Menn af næsta bæ, Þúfum, rifu endanlega húsin í Hálshúsum einhverntíma eftir 1940, eftir að byggð lagðist af.

Hóllinn er í túni. Vestan og norðvestan við túnið er mýri og ofan (austan og suðaustan) við bæjarhólinn er holt og háls.

ÍS-208:001 – Bæjarhóllinn, horft til austurs.

Bæjarhóllinn snýr norðaustur-suðvestur og um 70x40 m að stærð. Hæð bæjarhólsins er þó nokkur, um 15-20 m frá jafnsléttu. Efst á hólnum eru bæjarhúsin sem enn standa nokkuð vel, þó búið sé að rífa þök þeirra og annað. Gengið er inn í húsin að norðvestan. Fremst (norðvestast) á bæjarhólnum er öskuhaugur bæjarins , en ruslinu hefur einfaldlega verið fleygt yfir brúnina á hólnum. Í brún hólsins, og þar með í öskuhauginn, hefur myndast stórt rofabarð þvert yfir

alla brún hólsins og var tekinn prufuskurður í rofabarðið til að athuga dýpt mannvistarlaga þar sumarið 2010 og kom í ljós að dýpt þeirra er yfir 1,5 m (ekki var farið dýpra en það). Við vestsuðvesturhorn bæjarhólsins er kálgarður 008 og að suðvestan, um 2 m frá bæjarhúsunum er lítið brunnhús 010 við lækjarsprænu sem þar rennur. Bæjarhúsin eru öll grafin ofan í hólinn að einhverju leyti og því renna veggir oft saman og út í bæjarhólinn. Á teikningu eru húsin sýnd aðskilin hús en í raun falla þau öll saman og verða eins og að einni heild. Í bæjarþyrpingunni eru sex hólf auk tveggja mannvirkja sem sem líklegast tilheyra hólfi A (A1 og A2). Hólf A er suðvestast og hefur líklega verið fjárhús því þar inni er garði. Hólfið snýr norðvestur-suðaustur og eru dyr á því til norðvesturs. Hólfið er um 5x3 m að innanmáli og er garðinn í miðjunni langsum. Við enda hans er op út í gegnum bakvegginn. Þar fyrir aftan er hólf A2 sem líklega var heygryfja. Hólfið er 2x2,5 m að stærð og um 1,5 m djúpt. Það er illa farin af uppblæstri. Hólf A1 er suðaustur af hólfi A (s.s við hliðina á því) og samnýtir suðvesturvegg A. Óljóst er hvaða tilgangi það hólfið hefur gegnt, en


ÍS-208:001 – Bæjarhóllinn aftanfrá, horft til norðvesturs, Miðhús ofarlega fyrir miðri mynd.

það er um 3x2 m að innanmáli og snýr norðvestur-suðaustur. Veggir þess eru frekar ógreinilegir með mjóum veggjum. Hólf B er norðaustur af A. Það er um 4,5x2 m að innanmáli og snýr suðvestur-norðaustur og mjór stallur, um 30 cm breiður, er í því við suðausturvegg allan. Áþekkt hólf, D, er norðaustur af hólfi B. Það er um 2x5,5 m að innanmáli og snýr einnig norðaustur-suðvestur og er með svipaðan stall, um 30 cm breiðan, við suðausturvegg allan. Stallar þessir hafa óljósan tilgang, en ólíklegt er að um leifar af jötum sé að ræða þar sem Ari Sigurjónsson taldi þessi rými hafa gegnt hlutverkum skemmu og þess háttar. Ekki er þó hægt að útiloka að um jötuleifar sé að ræða. Aftan (suðaustan) við þessi hólf (B og D) er hólf C, sem samkvæmt Ara Sigurjónssyni var fjósbaðstofa þar sem beljurnar voru hafðar í undir baðstofugólfi. Hólfið er djúpt og nokkuð niðurgrafið. Það er 3x3 m að stærð og þar er greinilegur veggur mest um 2 m breiður. Nokkurt rof hefur myndast ofanvert við suðvesturvegg hólfs C. Göng hafa verið á milli hólfa B/D og C, en þau eru að miklu leyti fallin saman. Norðaustan við hólf D er hólf E. Það er um 1x5 m að innanmáli og snýr norðvestur-suðaustur. Aftan (austan) við það er hólf F sem er lítið, um 1x1 m að stærð og ógreinilegt. Veggir í tóftinni eru mest um 2 m breiðir og 2 m háir. Húsin eru hlaðin úr torfi og grjóti en steypt hefur verið þunnt lag ofan á garða í rými A. Hleðslur í veggjum eru víða heillegar er sums staðar farnar að láta á sjá.


ÍS-208:001 – Fjárhúsið (A) við bæjarhúsin, horft til suðausturs.

Hættumat: engin hætta
Heimildir:Túnakort (ártal vantar).

ÍS-208:002 tóft fjárhús 6555.004N 2228.752V

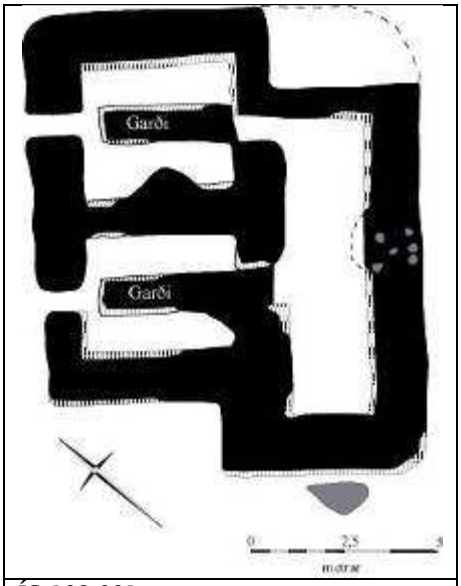
Fjárhústóft er um 85 m suður af bæjarhól 001, á milli hans og hesthúss 003. Húsið er merkt inn á túnakort frá því um 1920. Eitt sinn var húsið aðeins eitt fjárhús og heygarður auk lítils kofa, Knútskofa, sem var áfastur heygarðinum. Seinna var fjárhús 009 flutt að þessu fjárhúsi og hlaða byggð við, beint ofan á heygarðinn og kofann, og úr varð húsið sem tóftirnar standa af í dag.

Tóftin eru í sléttu, smáþýfðu, óslegnu túni, grónu grasi. Sunnan og austan við hana er klettahjalli en vestur af er aflíðandi halli til vesturs. Tún er allt í kring um tóftina og bæjarhóllinn er til norðurs frá henni.

Fjárhústóftin er samtals um 12,5x10,5 m að stærð og snýr norðaustur-suðvestur. Tóftin skiptist í þrjú hólf: tvö fjárhús og hlöðu að baki sem snýr þvert á húsin. Fjárhúsin eru hlið við hlið og snúa bæði norðvestur-suðaustur. Dyr


ÍS-208:002 – Fjárhúsið, horft til norðvesturs.

eru á þeim báðum í miðju, til norðvesturs. Hlaðan er suðaustan við fjárhúsin. Bæði eru fjárhúsin um 3x4 m að innanmáli með um 1 m breiðan garða í miðju. Samkvæmt heimildarmanni var annað fjárhúsið flutt norðaustan af túninu og bætt við það sem fyrir var. Hlaðan er um 8x2 m að innanmáli og snýr suðvestur-norðaustur. Hún nær aðeins út fyrir syðra fjárhúsið og dregst eilítið inn (til suðurs) við það nyrðra þannig að hún er ekki nákvæmlega beint aftan við húsin heldur myndast kantar við hana, út að sunnan og inn að norðan (sjá teikningu). Í innskotinu að norðan er afar grösugt og grænt svæði og gæti það tengst eldri byggingu eða annarri nýtingu. Hæstar eru hleðslur í tóftinni um 1,6 m en húsið er hlaðið úr torfi og grjóti og garðar eru hlaðnir úr grjóti. Veggir eru mest um 2 m breiðir en yfirleitt 1-1,5 m breiðir. Húsið er fremur stæðilegt en veggir eru þó sums staðar farnir að halla og sveigjast og hrunið hefur úr þeim á nokkrum stöðum. Hleðslur eru úr steinum og hellum. Framan við nyrðra fjárhúsið er græn þúfa (líkt og sú sem er framan við hesthústóft 003). Hún gæti verið tengd húsinu t.d. að útmokstur hafi verið settur þarna. Ari Sigurjónsson, heimildamaður gat þess að heygarður og kofi hefu verið á sama stað áður en húsið var byggt en engar leifar þess sjást nú enda á hlaðan að hafa verið byggð ofan á þeim.

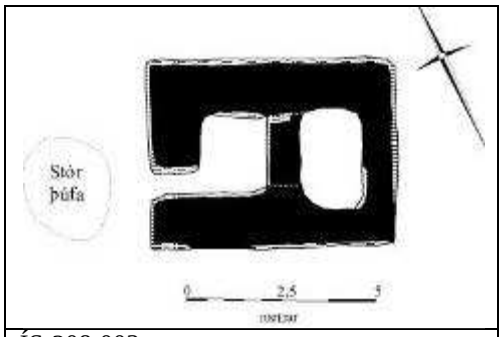


ÍS-208:002

Hættumat: engin hætta
Heimildir:Túnakort (ártal vantar).

ÍS-208:003 *Hesthústeigur* tóft hesthús 655

Í örnefnaskrá segir:" Upp með Bæjarlæknum, heitir Fremstiteigur og fram af honum Landamerkjateigur, en Hesthústeigur á milli þeirra." Hesthústóft er um 150 m suðsuðvestur af bæjarhól 001, fast austan við garðlag 012. Húsið er merkt inn á túnakort frá því um 1920 og dregur teigurinn nafn sitt af hesthúsinu.



ÍS-208:003

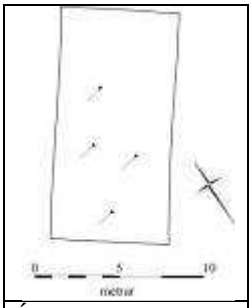
Tóftin er í sléttu, en smáþýfðu, óslegnu túni. Umhverfið er gróið grasi og fast austan og sunnan við tóftina er klettahjalli.

Tóftin er um 6,5x5 m að utanmáli og er tvískipt. Hún snýr norðvestur-suðaustur og er gengið inn í hana að norðvestanverðu, nær syðri langhlið. Norðvestar er hólf sem er um 2x1,5 m að innanmáli og snýr norðaustur-suðvestur, suðvestan við það er um 1 m breiður, 70 cm hár milliveggur. Suðvestan við hann er annað hólf, um 2,5x1,5 m að innanmáli og snýr það einnig norðaustur-suðvestur. Það er líklegast hlaða. Veggir standa hæst um 1,3 m og breiðastir eru þeir um 1,5 m. Húsið er hlaðið úr torfi og grjóti og eru enn nokkurt timbur í rústinni sem virðast hafa verið í þakinu. Hleðslur eru víða sjáanlegar í veggjum, sérstaklega að innan og á nyrðri langhlið, þeirri sem snýr heim að bæ. Veggir eru farnir að aflagast og hrynja víða. Rúmlega 1 m út frá dyrunum er græn þúfa um 2x2 m að stærð, hún gæti tengst húsinu, t.d. verið eftir útmokstur eða þess háttar.


ÍS-208:003 – Hesthústóftin, horft til vestnorðvesturs.

Hættumat: engin hætta
Heimildir:Túnakort (ártal vantar); Ö-Hálshús, 1.

ÍS-208:008 gerði kálgarður 6555.047N 2228.773V



ÍS-208:008

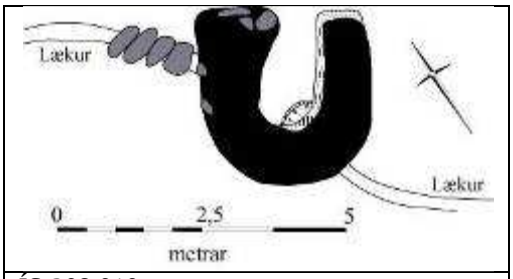
Óljós kálgarður er um 3 m vestur af bæjarhúsunum 001, við suðvesturhorn bæjarhólsins. Kálgarðurinn er merktur inn á túnakort frá því um 1920.
Kálgarðurinn liggur utan í suðvesturhlíð bæjarhólsins í talsverðum halla. Garðurinn og hóllin eru vaxnir grænu grasi. Suðvestan við garðinn er lækjarspræna, sú sama og rennur í gegnum brunnhúsið 010 og afmarkar bæjarhólinn að suðvestan.
Gerðið er um 14x7 m að stærð og snýr norðaustur-suðvestur, eins og bæjarhúsin (örlítið meira með norðausturendann í austur þó). Engin hleðsla er greinileg í því en greinilegur kantur (mest um 1 m hár), sérstaklega að suðaustan, gefur lögun gerðisins til kynna. Garðurinn er vel upp gróinn.
Hættumat: engin hætta

Heimildir:Túnakort (ártal vantar).


ÍS-208:008 – Kálgarðurinn, horft til suðvesturs.

ÍS-208:009 heimild um fjárhús
Norðaustan til í túninu, út við jaðar þess, var fjárhús sem síðar var tekið og flutt að fjárhúsi 002 samkvæmt Ara Sigurjónssyni. Nákvæm staðsetning á húsinu er ekki þekkt.
Húsið var neðan (norðaustan) við bæjarhól eða við enda hans. Svæðið er mýrlent, og er þar m.a. stór skurður sem afmarkar túnið. Ofan við svæðið er holt.
Ekki sést móta fyrir neinum húsgrunni eða eldri byggingum á þessum slóðum. Líklegast hefur svæðið verið hreinsað af grjóti o.þ.h. þegar húsið var flutt.
Hættumat: engin hætta

ÍS-208:010 tóft Brunnhús 6555.042N 2228.762V
Lítið brunnhús er um 2 m suðvestan við suðvesturenda bæjarhúsanna í jaðri bæjarhóls 001.
Brunnhúsið er yfir lítilli lækjarsprænu sem rennur í gegnum það. Norðaustan við tóftina eru bæjarhúsin á bæjarhólnum 001 en suðvestan og sunnan við hana er óslegið, smáþýft tún, mjög grösugt.



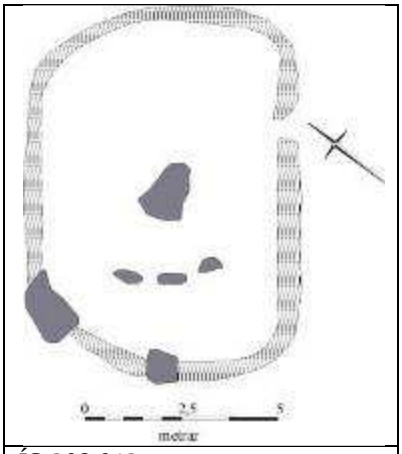
ÍS-208:010


ÍS-208:010 – Brunnhúsið, horft til suðurs.

Tóftin er um 3x3 m að utanmáli og er op á henni til norðnorðausturs. Hún er hlaðin úr torfi og grjóti og sjást grjóthleðslur vel í suðausturvegg hennar. Í suðurhorni er lítil brunnhleðsla sem nær um 0,5 m ofan í lækjarsprænu sem rennur þar undir, gatið er mjög lítið, rétt um 30x40 cm að stærð. Innanmál tóftarinnar er um 1x2 m og snýr norðnorðaustur-suðsuðvestur. Veggir eru mest um 1 m þykkir og standa hæstir um 1 m.
Hættumat: engin hætta

ÍS-208:012 gerði óþekkt 6554.970N 2228.811V

ÍS-208:012 – Gerðið fyrir miðri mynd, horft til suðurs.



ÍS-208:012

Lítið gerði er um 155 m suðsuðvestur af bæjarhól 001.
Gerðið er í talsverðum halla niður af hesthúsi 003, í smáþýfðu, óslegnu túni.
Gerðið er um 10x7 m stórt. Veggir þess eru mjög mjóir og lágir, yfirleitt 50-60 cm á breidd og mest um 0,7 m á hæð. Gerðið umlykur lítinn túnblett sem snýr norðaustur-suðvestur. Óljóst er tilhvers gerðið var hlaðið en mögulegt að þar hafi verið kálgarður eða geymt hey. Af ummerkjunum að dæma hefur hann líklegast ekki átt að hafa taumhald skepnum, til þess er hann ekki nógu hár nema girt hafi verið ofan á hann og ummerki þess svo afmáð. Stórir steinar eru bæði í garðlaginu, sem og inni á blettinum. Garðlagið er hlaðið úr stórum og meðalstórum steinum og eru þeir nokkuð vel vaxnir fléttum og farið að vaxa yfir þá gras sums staðar.
Hættumat: engin hætta

Heimildaskrá

Byskupa sögur (bindi I). 1981. Reykjavík: Íslendingasagnaútgáfan.

DI: *Diplomatarium Islandicum* eða *Íslenskt fornbréfasafn* I-XVI. 1857-1972.

Framvinduskýrslur- Vatnsfjörður: FS211-03091 (2003), FS249-03093 (2004) og FS301-03095 (2005), FS 356-03096 (2006), FS383-03097 (2007), FS426-03098 (2008), FS449-03099 (2009). Reykjavík: Fornleifastofnun Íslands.

Friðlýsingaskrá: *Fornleifaskrá: skrá um friðlýstar fornleifar*. 1990. Reykjavík: Þjóðminjasafn Íslands, Fornleifanefnd.

JÁM VII: *Jarðabók Árna Magnússonar og Páls Vídalíns. Ísafjarðar- og Strandasýsla.* VII. bindi. 1940. Kaupmannahöfn: Hið íslenska fræðafélag.

JE: Jón Eyjólfsson. 1921-1923. „Ferðasaga úr Borgarfirði vestur að Ísafjarðardjúpi sumarið 1709, ásamt lýsingu á Vatnsfjarðarstað og kirkju“. Í *Blanda: Fróðleikur gamall og nýr*, II. bindi, bls. 234-239. Reykjavík: Sögufélag.

JH: Jóhann Hjaltason. 1949. *Árbók Ferðafélags Íslands 1949: Norður Ísafjarðarsýsla*. Reykjavík: Ferðafélag Íslands.

JJ: Jón Johnsen. 1847. *Jarðatal á Íslandi: með brauðlýsingum, fólkstölu í hreppum og prestaköllum, ágripi úr búnaðartöflum 1835-1845, og skýrslu um sölu þjóðjarða í landinu*. Kaupmannahöfn.

KK: Kristian Kålund, P.E. 1984. *Íslenzkir sögustaðir. Vestfirðingafjórðungur*. II. bindi. Reykjavík: Örn og Örlygur

Ljósmyndabókin Fletta: Sverrir Gíslason. 2006. *Ljósmyndabókin Fletta: 370 ljósmyndir sem sýna mannlífið í gamla Reykjarfjarðarhreppi við Ísafjarðardjúp.* Þykkvibær: Sverrir Gíslason.

Ljósmyndabókin Gluggasteinn: Sverrir Gíslason. 2007. *Ljósmyndabókin Gluggasteinn: 430 ljósmyndir sem sýna mannlífið í gamla Reykjarfjarðar- og Ögurgreppi við Ísafjarðardjúp 1930-2006.* Þykkvibær: Bókaútgafan Gýgjarsteinn.

Manntal 1801: *Manntal á Íslandi 1801: II. bindi: Vesturamt*. 1979. Reykjavík: Ættfræðifélagið.

Manntal 1845: *Manntal á Íslandi 1845: II. bindi: Vesturamt.* 1983. Reykjavík: Ættfræðifélagið.

PP: Páll Pálsson. 1961. „Búendur í innri hluta Reykjafjarðarhrepps um aldamótin 1900“. *Ársrit Sögufélags Ísfirðinga*. 6. árg. bls. 57-70.

RE: Ragnar Edvardsson. 2003. *Fornleifarannsókn í Vatnsfirði við Ísafjarðardjúp sumarið 2003* (FS211-03091). Reykjavík: Fornleifastofnun Íslands.

Sturlunga saga (bindi I-II). 1988.Örnólfur Thorsson ritstýrði. Reykjavík: Svart á hvítu.

Tryggvi Þorsteinsson. 2006. *Á æskuslóðum við Djúp*. Brekka í Dýrafirði: Vestfirska forlagið.

Túnakort: Uppdrættir af túnum í Reykjafjarðarhreppi, ártöl vantar. Þjóðskjalasafn Íslands

ÞT: Þorvaldur Thoroddsen. 1959. *Ferðabók: Skýrslur um rannsóknir á Íslandi 1882-1898*. II. bindi. Reykjavík: Snæbjörn Jónsson.

Ö-Hálshús: Örnefnaskrá Hálshúsa rituð eftir sögn Jóhannesar Dósótheussonar. Skráð af J. Hj. Árið 1935.

Örnefnakort Hrólfs Valdimarssonar. Fylgiblað Örnefnaskrár Vatnsfjarðarsels frá 1989.

Ö-Sveinhús (ÁS): Örnefnaskrá Sveinhúsa skráð af Ásgeiri Svanbergssyni (ártal vantar).

Ö-Vatnsfjarðarsel (1935): Örnefnaskrá Vatnsfjarðarsels rituð eftir sögn Hrólfs Valdimarssonar. Skráð af J. Hj. Árið 1935.

Ö-Vatnsfjarðarsel (1989): Örnefnaskrá Vatnsfjarðarsels. Rituð af Hrólfi Valdimarssyni, dagsett 20. apríl 1989.

Ö-Vatnsfjörður (ÁS): Örnefnaskrá Vatnsfjarðar. Skráð af Ásgeiri Svanbergssyni, ártal vantar.

Ö-Vatnsfjörður (ÞG): Örnefnaskrá Vatnsfjarðar rituð eftir sögn Þorkels Guðmundssonar. Skráð af J. Hj. árin 1933-34.

Vefheimildir:

Bæjarteikning 1913: Bæjarteikningar danskra landmælingamanna, Vatnsfjörður, 1913. Aðgengilegt á: http://atlas.lmi.is/baejarteikningar/index.php?mynd=B22L015.jpg

Kirkjan.is. Prestssetrin. http://www.kirkjan.is/prestssetrasjodur/projects_houses.html (sótt 29.09.2010).

Vestfjarðarvefur: *Vestfirðir*. 2004. Vatnsfjarðarkirkja við Ísafjarðardjúp. http://vestfirdir.is/index.php?page=vatnsfjardarkirkja (sótt 29.09.2010).

Þjóðminjasafn Íslands. Hjallur í Vatnsfirði. http://www.natmus.is/minjar-og-rannsoknir/husasafn/husin-i-stafrofsrod/nr/372 (sótt 29.09.2010).

Munnlegar heimildir:

Ari Sigurjónsson (f. 28.10.1945). Viðtal tekið 11.08.2010.

Hans Aðalsteinn Valdimarsson (f. 18.03.1918). Viðtal tekið 05.08.2010.

Ólafía Salvarsdóttir (f. 12.08.1931). Viðtal tekið 04.08.2010.

Rafn Kristjánsson (f. 06.02.1948). Viðtal tekið 08.08.2010.