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Efni

Fornleifarannsóknir í Vatnsfirði. Yfirlit 2003-2012

Garðar Guðmundsson

Inngangur

Árið 2012 var tíunda ár rannsókna í Vatnsfirði við Ísafjarðardjúp. Rannsóknirnar eru eitt af fjölmörgum verkefnum sem aðilar sem standa að félaginu Vestfirðir á miðöldum vinna að. Markmið félagsins er að stuðla að rannsóknum á sögu og menningu Vestfjarða á miðöldum og skjóta styrkum stoðum undir menningartengda ferðaþjónustu í héraðinu. Að félaginu standa Byggðasafn Vestfjarða, Súðavíkurhreppur, Fornleifastofnun Íslands ses, Háskólasetur Vestfjarða á Ísafirði, Háskóli Íslands, Atvinnuþróunarfélag Vestfirðinga, Oslóarháskóli, North Atlantic Biocultural Organization (NABO), International Polar Year Program, Northern Science and Education Centre, City University of New York (CUNY) og Háskólinn í Aberdeen. Félagið Vestfirðir á miðöldum stendur m.a. fyrir ráðstefnuhaldi, útgáfu á fræðiritum og fræðsluefni og umfangsmiklum fornleifarannsóknum. Í þessu stutta yfirliti er gerð grein fyrir rannsóknum á fornleifum. Sumarið 2005 barst verkefninu góður liðsauki því Fornleifaskólinn, sem Fornleifastofnun og NABO höfðu starfrækt í Mývatnssveit frá árinu 1997 til ársins 2004 flutti sig um set, kom sér upp bækistöðvum í Reykjanesi og varð þátttakandi í rannsóknunum við Ísafjarðardjúp. Verkefnið hefur verið styrkt m.a. af Alþingi og Fornleifasjóði.

Yfirlit rannsókna

Fyrsti áfangi fornleifarannsóknanna fólst í því að taka saman yfirlit yfir fornleifar á Vestfjörðum og stöðu fornleifarannsókna í þeim tilgangi að meta hvaða minjaflokka og staði væri heppilegast að hefja rannsóknir á. Hefur samantektin verið birt í Ársriti Sögufélags Ísfirðinga1, en meðal markverðustu minjastaða héraðsins er Vatnsfjörður við Ísafjarðardjúp, enda er hann með helstu sögustaða héraðsins. Var því ákveðið að leggja sérstaka áherslu á athuganir þar. Andrea S. Harðardóttir sagnfræðingur hefur

[1] Adolf Friðriksson (2003). „Fornleifar á Vestfjörðum.” *Ársrit Sögufélags Ísfirðinga* 43: 43-51.

tekið saman sögulegt yfirlit og safnað helstu heimildum um Vatnsfjörð og búsetu þar.2 Ragnar Edvardsson fornleifafræðingur skráði fornleifar í Vatnsfirði og fann 52 fornleifar á jörðinni. Er nú fengið gott yfirlit yfir þekktar og sýnilegar minjar í Vatnsfirði.3 Ragnar stjórnaði jafnframt 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 jafnframt leifar skála með langeldi fyrir 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 reyndust mannvistarlög hvergi dýpri en 20 sentimetrar. Minjarnar voru aðeins nokkra sentimetra undir yfirborði. Skálinn er um 16 m langur og 6 m breiður að innanmáli og snýr norður-suður.

Árið 2005 var uppgraftarsvæðið stækkað verulega til austurs, eða um í 310 fermetra. Suðaustast á svæðinu fundust leifar lítillar byggingar sem voru rannsakaðar 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 gjarnan 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

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[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.

[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. Fornleifastofnun Íslands. Reykjavik.

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 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 hvaða þátt jarðnytjar túnsins áttu í vexti og framgangi búsins.

Árið 2006 var opnað enn stærra svæði við skálann og þrjár nýjar byggingar komu í ljós – allar frá víkingaöld. Þá hófust einnig rannsóknir á bæjarhól Vatnsfjarðar en þangað er talið að bærinn hafi verið fluttur í öndverðu og þar stóð hann fram á 20. öld. 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; frá 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 lokið var við 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 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, gjóskulög, gróðurfar og loftlagsbreytingar.

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

Sumarið 2008. Grafið var í 4 vikur í Vatnsfirði, 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 C14 aldursgreiningar 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 rannsóknarinnar nú 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.

Fjöldi gripa fundust og mun þeir ásamt dýrabeinum (matarleifar), jurta- og skordýraleifum 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 uppgraftar-tímabilsins 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 stjórnaði Karem Milek uppgreftri auk þess að vera skólastjóri Fornleifaskólans sem nú var starfræktur

fjórða árið í röð í Vatnsfirði. Með Karenu unnu fornleifafræðingarnir Astrid Daxböck, sem einnig bar hitann og þungann af innslætti gagna frá Vatnsfirði, og Ramona Harrison, sem einnig sá um rannsókn á dýrabeinum 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 voru 2009 (sjá hér að neðan)..

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 sá fyrir endann á rannsóknum á víkingaaldarsvæði, aðeins átti eftir að klára eitt hús og kanna tvö svæði. Stefnt var að því að ljúka uppgreftri þar og hefja úrvinnslu af krafti, sem mun enda með heildarútgáfu ár rannsóknarniðurstöðum svæðisins ásamt landslags- og umhverfisrannsóknum.

Bæjarhóll: Það markmið að kanna og grafa yngsta torfbæinn í Vatnsfirði náðist að mestu. 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 í nýrri. 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 þjóðháttafræðilegan þátt 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 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 á íslensku og ensku um umhverfi, jarðfræði, náttúrufar og síðast en ekki síst sögu staðarins og helstu niðurstöður uppgraftarins. 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. *Víkingaaldarsvæðið:* Á víkingaaldasvæðinu var lokið við að grafa fram lítið jarðhús og þar með rannsókn á síðasta mannvirkinu á víkingaldarsvæðinu. Jarðhús þetta er það næstminnsta sem grafið hefur verið fram á Íslandi, aðeins 3x2 m að innanmáli. Í húsinu hefur verið bekkur og í því fannst m.a. steinn með gati úr mjúkum sandsteini, sem gæti verið kljásteinn og bent til að þar hafi verið vefstaður. Auk þessa voru grafnir allnokkrir könnunarskurðir á svæðinu í leit að víkingaldarminjum og svæðið telst nú allvel kannað.

Bæjarhóllinn: Á bæjarhólnum var haldið áfram rannsóknum á flóknum byggðaleifum bæjarhúsasamstæðu þar sem sífellt hefur takið breytingum í áranna rás.

Mikið magn gripa hefur fundist í herbergjum bæjarhúsanna og í lok sumars var komið talsvert magn af 17. aldar leirkerum, ofnum og prjónuðum efnispjötlum og viðargripum.

Markvert er að nokkrir veggir, sem kalla má stofnveggi innan bæjarhúsanna og eru gríðarlega miklir að umfangi og gerð, allt að þriggja metra breiðir, virðast vera mun eldri

en talið var. Veggir þessir eru í herbergjum sem hafa verið í notkun a.m.k. frá 17. öld og allt fram til 1900. Upp að veggjunum að utan lá þykkt gjóskulag sem er úr Heklugosi árið 1693 og virðist eina gjóskulagið sem barst vestur í Djúp í því magni að það er vel greinanlegt.

Lítið vitað um byggingargerð og endurbyggingar bæjarhúsa á vestfjörðum. Norðanlands, þar sem loftslag er þurrt og kalt er það talin þumalputtaregla að torfveggi þyrfti að endurbyggja á um 100 ára fresti en 60 ára fresti sunnanlands þar sem vætusamara er og veggir fúnuðu hraðar.[6] Vestfirskir grjót og torfveggir virðast mun lífseigari og ef dæma má útfrá veggjum í bæjarhúsum Vatnsfjarðar þá geta þeir ennst í nokkur hundruð ár með góðu viðhaldi.

Þar sem bæjarhólauppgreftir eru langtímaverkefni voru því verkefninu reistar nokkrar áfangavörður á leið aftur í tímann. Fyrsti áfangi miðaði að rannsóknum á yngstu bæjarhúsunum frá 19. og 20. öld og náðist hann að mestu 2010, utan þess að enn átti eftir að fjarlægja nokkur mannvistarlög og veggi syðst á uppgraftarsvæðinu sem tilheyrðu þessu yngsta byggingarskeiði bæjarhúsanna. Í lok uppgraftartímabilsins 2010 var því ljóst að næsti áfangi rannsóknanna var farinn að taka á sig mynd, þ.e. torfbærinn sem var í notkun frá 17. öld og fram til 1884, þegar yngsti hluti torfbæjarins var reistur. Ljóst var að veggir eldra byggingarstigsins voru notaðir sem undirstöður fyrir veggi yngri bæjarins. Landslagsrannsóknum var fram haldið í Vatnsfirði og fornleifaskráning fór fram innan túns á bæjum í Vatnsfjarðardal (Vatnsfirði, Vatnsfjarðarseli, Miðhúsum, Hálshúsum og Sveinhúsum). Fornleifarnar voru fjölbreyttar, bæði hvað varðar gerð og aldur. Skráðar voru minjar allt frá Víkingaöld fram á 20. öld, allt frá eyðibýlum og selstöðum langt inni til heiða að hjöllum og verbúðum við sjávarsíðuna. Fornleifarnar voru í mjög misjöfnu ásigkomulagi, sumar eru í hættu m.a. vegna ábúðar og uppblásturs, aðrar standa grónar á fáförnum stöðum þar sem fátt ógnar þeim. Landslagsrannsóknir og fornleifaskráning veita fjölmargar 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.

Sem fyrr var fornleifaskólinn starfræktur og hann sóttu 11 nemendur að þessu sinni.

[6] Orri Vésteinsson. 2010. ´On Farm Mounds´. *Archaeologica Islandica 8.* Reykjavík, Fornleifastofnun Íslands, 13-40, hér, 21.

Eins og undanfarið var haldinn opinn dagur í Vatnsfirði og sótti fjöldi manns staðinn heim og hefur fjöldinn farið vaxandi ár frá ári.

Sumarið 2011 Hafist var handa við lokaúrvinnslu gagna frá Víkingaaldarsvæðinu og munu niðurstöður koma út á bók, nú áætlað 2015. Á bæjarhólnum var rannsóknum haldið áfram og var markmiðið að fjarlægja mannvistarlög sem tilheyrðu yngsta torfbænum. Undir lok uppgraftartímabilsins var farin að koma skýrari mynd á eldri bæjarhús og virðist vera um að ræða dæmigerðan gangabæ.

Sumarið 2008 höfðu komið í ljós leifar íbúðarhússins frá 1907 sem var rifið um 1970, í suðvesturhorni uppgraftarsvæðisins. Grafin hafði verið djúp gryfja, niður í óhreyfð jarðlög, og leifum kjallara hússins rutt ofan í hana. Gryfjan var tæmd og kom þá í ljós ágætis snið í gegnum bæjarhólinn sem gefur góða hugmynd um þykkt mannvistarlaga. Virðast þau vera að minnsta kosti um 70 cm þykk. Í gryfjunni kom jafnframt í ljós öskuhaugur sem grafinn var upp að hluta og bendir frumgreining gripa, sem í honum fundust, til þess að hann sé frá miðöldum, en nánari aldursgreiningar munu leiða það betur í ljós.

Í ár vann hluti starfsliðsins í Vatnsfirði einnig að rannsóknum á minjum meðfram strönd Vatnsfjarðar. Voru grafnir nokkrir könnunarskurðir í mannvirki þar og á grundvelli niðurstaðna úr þeim var valin ein rúst til frekari rannsókna. Rústin er talin hafa verið naust og var rannsókn hennar lokið þetta sama sumar. Fornleifaskóli var sem fyrr starfræktur í ár og sóttu hann níu nemar að þessu sinni. Þá voru til aðstoðar tveir sjálfboðaliðar sem áður höfðu sótt fornleifaskólann og voru nú að heyja sér efnivið í doktorsverkefni í fornleifafræði. Landsháttarannsóknir sem hafa verið stundaðar í Vatnsfirði undanfarin ár voru með minna móti en niðurstöður þeirra verður ein af uppistöðum doktorsritgerðar Oscars Aldred, en hann hefur að mestu séð um landsháttarannsóknir í Vatnsfirði. Nemendur fengu kennslu í þessum fræðum og nutu leiðsagnar Oscars.

Hinn árvissi opni dagur var haldinn laugardaginn 13. ágúst og komu um 100 gestir og nutu leiðsagnar fornleifafræðinga um rannsóknarsvæðið.

Sumarið 2012 var uppgraftartímabilið var 4 vikur, frá 25. júní - 20. júlí. Árið 2011 var allt uppgraftarsvæðið vestan kjallarans (sem búinn var til 1884), komið á sama tímabil, 17. öld, og heillegur gangabær frá þeim tíma farin að taka á sig mynd. Því var ákveðið að

kúvenda gömlum verkáætlunum um að varðveita leifar yngsta hluta torfbæjarins (sem reistur var 1884). Eftir því sem verkinu vatt fram var ljóst að til að ná heillegri mynd af 17. aldar bæjarhúsum í Vatnsfirði yrði 1884 húsaleifarnar að víkja. Var ráðist í það verk og gekk vel. Gríðarmiklir veggir voru byggðir ofan á eldri veggi árið 1884 og auk þess var það sem látið var standa eftir stytt til suðurs. Þessu verkefni fylgir gríðarmikill grjótburður úr veggjum hússins auk umfangsmikilla laga sem fylgja tímabilinu 1884-~1950, þegar þetta torfhús var rifið og sléttað yfir. Við sjóinn fór fram uppgröftur á stóru nausti sem er eldra en gjóskulagið úr Heklu 1693. Ummerki um svolitla járnvinnslu fundust við rannsóknina. Árið 2011 höfðu tæplega 11000 gripir fundist við rannsóknina en verið er að vinna úr gripum sl. árs.

Framvinduáætlun fyrir sumarið 2013

- Áframhald á vinnu við úrvinnslu og undirbúningi útgáfu á niðurstöðum rannsókna á Víkingaaldarsvæði.
- Áframhaldandi rannsóknir á bæjarhól.
- Áframhaldandi rannsóknir á sjávarminjum.
- Áframhald verður á rannsóknum á landslagi, umhverfi og samfélagi.

Verkefni sem þetta er ekki eyland, styrkur þess liggur í því að vera þverfaglegt rannsóknarverkefni. Stefnt er að því að niðurstöður úr rannsóknum á höfuðbólinu Vatnsfirði við Ísafjarðardjúp verði notaðar til að draga fram hinar afdrifaríku breytingar sem urðu á félags- og hagkerfi Vestfjarðakjálkans sem og á menningu landsvæðisins. Með niðurstöðum úr fornleifarannsóknum, landsháttarannsóknum og umhverfisrannsóknum í samvinnu fornleifafræðinga, sagnfræðinga og umhverfisfræðinga frá mörgum löndum eykst verulega þekking okkar á umhverfis- og menningararfi Vestfjarða og jafnframt skapast grundvöllur til samanburðar við gagnvirkni náttúru og menningar í öðrum landshlutum og annars staðar á Norður-Atlantshafssvæðinu.

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Excavations on the Vatnsfjörður Farm Mound in 2012

Oddgeir Isaksen

Introduction

The seventh field season on the Vatnsfjörður farm mound lasted from the 25th of June to the 20th of July 2012. The excavation was supervised by Oddgeir Isaksen, Guðrún Alda Gísladóttir and Garðar Guðmundsson, assisted by Céline Dupont-Hérbert, Dawn Elise Mooney, Howell Magnús Roberts, Natasha Roy and Solveig Lecouturier. The excavation was aided by ten students of the 2012 Field School in North Atlantic Archaeology: Alan D´Zurilla, Allison Barker, Brett Miller, Colin McKinstry, Dani Sparks, Dorian Knight, Kathryn Adams, Lara Hogg, Leigh-Anne Williams and Louise Biscarrat.

Background - Previous Seasons

In 2007 the emphasis had been on excavating the remains of a farmhouse complex built in 1884. It is on the east side of the excavation area and was originally identified in the 2006 field season. It includes a building (gr. 7500), roughly 20 x 7 m in size with two cellars (gr. (6528) and (7503), see figure 1). The building was not fully excavated in 2006-2007 and it was decided to preserve the remains as they had been exposed at the end of the 2007 field season. In 2008-2011, the focus moved to the west of building 7500 where a number of buildings and corridors were revealed. Most had a 17th century origin although they had been reused in one way or another as a part of the 1884 farm complex (see Gísladóttir in Milek 2010, Isaksen in Milek 2011, and Isaksen 2012).

In 2011, while removing a fill from a foundation cut, part of the remains of a farmhouse built in 1907, in the southwest corner of the excavation area, a midden (gr. 1145) was discovered, believed to date at least back to the 13th century (see Isaksen 2012). The midden was only partially excavated in 2011 but produced a substantial collection of bones indicating good potential for further study.

By the end of the 2011 season it was becoming clear that, apart from building 7500, the 1884 farm complex was less well preserved then originally hoped. This was due primarily to a late 20th century levelling of the farm mound as well as a vegetable plot built in the ruins at the beginning of the century (see Isaksen 2012). Judging from the remains exposed so far, the 17th century farm complex appears, on the other hand, to be in rather good condition. It seems to form a typical Icelandic passage-farm house, a building form common from the 14th century, where individual rooms radiate from a central passageway (see figure 2 and 3, see also Isaksen

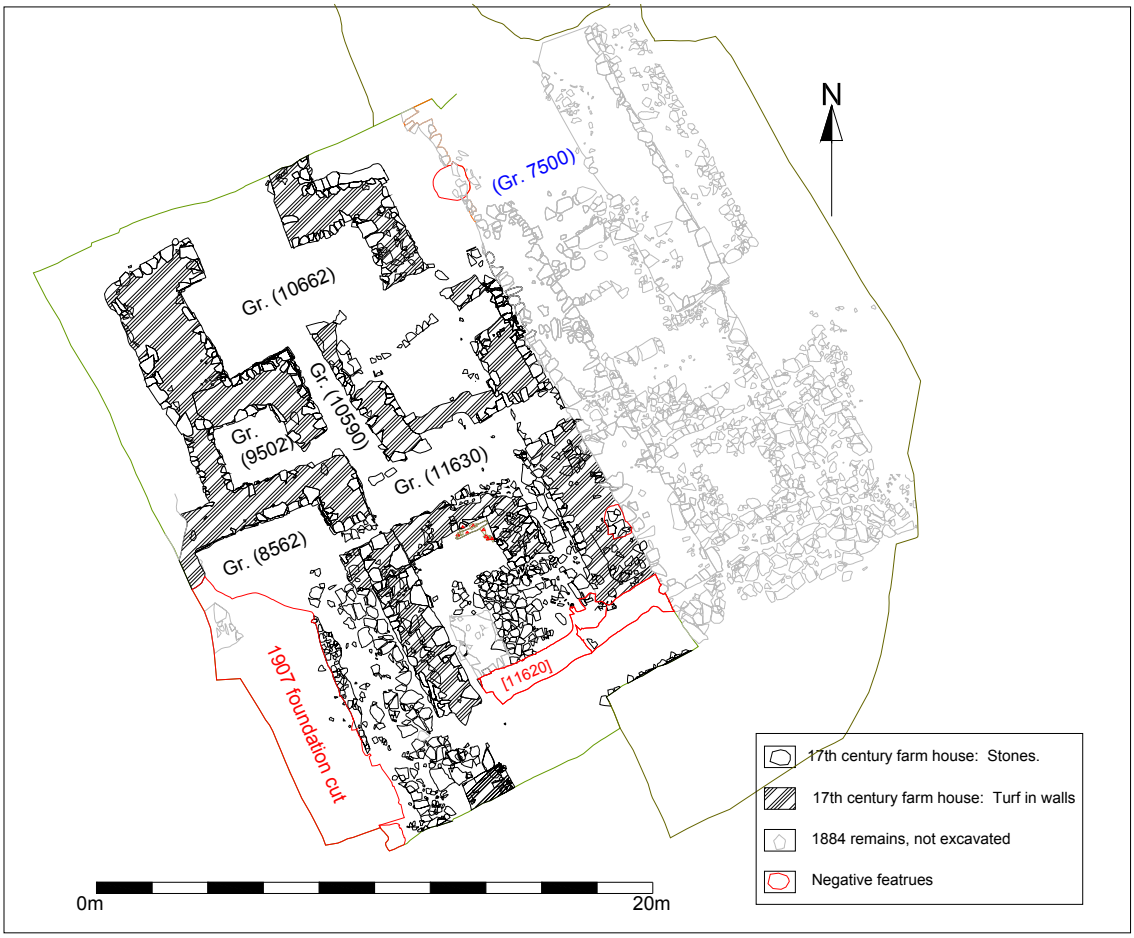

Figure 1: A simplified drawing showing the remains of the 17th century farmhouse in relations to building (7500).

2012). However, it underlies the 1884 building (7500) on the east side of the excavation area, and its full size and condition is therefore unknown.

The 2012 season.

In 2012 it was decided to abandon previous plans to preserve building 7500 and focus instead on fully excavating and removing it, in the hope of revealing the full extent of the 17th century farm below.

The midden, found in 2011, in the south-west corner of the excavation area was also fully excavated.

Excavation Methods

The excavation methods followed standard FSÍ protocol, using a "single context planning" approach. This method entails that each deposit (feature or layer) is considered an individual event (unit) in the creation of the 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. There is therefore a single numbering system for all deposits excavated in the Farm Mound and Viking age areas in Vatnsfjörður. A Harris Matrix was established on site, and refined during the post-excavation phase. Deposits which are found within the same area, structure or feature and 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).

Finds were categorized and labelled on site, washed, dried, packed and registered in the excavation database. Finds were given basic conservation attention where 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 archaeo-entomological and botanical analyses, and undisturbed blocks were taken for micro-morphological analysis. These await further analyses.

The 2011 Excavation Results

Building 7500

The main aim of the 2012 field season was to continue excavations on building (7500) in order to reveal the 17th century remains that were believed to underlie it. This building, abandoned as a dwelling in 1907 when a new farmhouse was built, was partially demolished and reused as a store room and a smithy for some years, in

all likelihood until the mid-20th century. It was covered with series of post abandonment deposits (units, [6501/7501], [6502], [6503], [6504], [6512], [7502], [7505], [7506], [7507], [7508], [7509], [7511], [7512], [7514], [7516/12503], [7517], [7518], [7519], [7520], [7521/7532], [7522], [7530], [7534], [7543], [7545] and [12516]) many of which were demolition deposits, derived from the levelling of the farm mound in the late 20th century, Most of these deposits, containing a large collection of finds dating mostly to the late 18th to early 20th centuries, were

Figure 2: An overview over building (7500) at the end of the 2007 field season

excavated during the 2006 and 2007 seasons although a few were remved in 2012. The 2006-2007 seasons had focused mostly on the removal of these post abandonment deposits as well as excavating the building's later phase

(subgr.12618). Many of the main features of the earlier phase (subgr.12619) such as the outer walls and a large stone built cellar at the south end (see bellow gr. 7503) were also revealed (for further details on the 2006 and 2007 excavations (see Gísladóttir and Ævarsson in Milek 2007 and 2008). In 2012, the aim was to finish removing what remained of group (12618) and continue the excavation of group (12619).

Group (12618), the later phase of building (7500)

Gr. 12618 was defined by a wall, about 3 m long and 0,5 m high, (gr. 12620) running east west across building (7500) about 8 m north from the south end of the main room, shortening it of about 6 m. The wall was made of turf and stones (two-three courses), facing south (units [6579], [12550], [12566], [12593], [12596]) and on its north side were several turf rich deposits (units [12528], [12545], [12562], [12564], [12568], [12570], [12574], [12577] [12580], [12581] and [12586], filling up the abandoned part of building (7500).

Figure 3: Wall (12620). Camera facing north

Alongside the western wall (not excavated yet) of the building and wall (12620) two timber beams were found (unit [6514]), believed to be the remains of a timber frame, supporting the roof of the house as it was during its later phase (gr.12618).

About 1 m south from wall (12620) was a spread of large flag-stones (gr. 12520) excavated in three units, [12519], [12521] and [12534]), embedded in turf. They are believed to have formed a base or a frame for a stone built hearth or furnace that was removed when the house fell out of use. A shallow irregularly shaped depression (unit [12530]), was surrounded by the flagstones on three sides. It was filled with a mixed deposit of wood-ash and peat-ash (unit [12526]) in all likelihood a cavity left by the stones removed from the hearth.

Figure 4: Flag stones (12520) camera facing east

A small cellar (gr. 6528,), about 2 x 2 m in size and 1 m deep, that belongs to group (12618), was about 3 m south of wall (12620), up against the western wall of the building. It had stone-linings along its northern and southern edge (units [7524] and [7537/12525]), but no stone-facing on the inside. It was clearly dug through earlier

remains and had a stone pavement composed of several deposits (units in chronological order, [6529], [6545], [6546], [12512] and [12523]). It was filled up with peat ash (unit [6510]] that contained a substantial amount of modern rubbish
(For further detail, see Gísladóttir and Ævarsson in Milek 2007).
Running south from the south-west corner of the cellar was a double coursed row of

Figure 5: Cellar (6528). Camera facing west.

stones (unit ([12617]) sitting up against the western wall. Behind it was a corridor (gr.12623), filled with turf and stones (units [7510], [12502] and [12563]). It belongs to the earlier phase of the building (gr.12619) but was blocked during the later phase (gr.12618)

Four post-pads (units [12511]/12536, [12514], [12537] and [12582]) came to light in 2012. All, (gr. 12532), except for [12582], were originally a part of the later phase (gr.12618) of the building but probably reused during the final phase (gr.12618). Post-pad [12537] was in the northwest corner of the main room as it looked during the final phase of its use (gr.12518). It was composed of two large flat stones and in all likelihood served also as a base for timber beams [6514]. Post pad [12514] was in the northeast corner of the main room. It was made of five stones piled up in the corner and probably also served as a base for timber beams [6514]. Post-pad 12511/12536, which was about 1 m south of post-pad [12537], was

Figure 6: An overview of the main room in building (7500). Note cellar (6528) in the fourground to the left, and wall12620 in the background. Camera facing north.

excavated in two parts and therefore has two unit numbers. It was made of five flat stones and probably also served as a base or footstones for timber frame [6514]. Post-pad [12582] was close to the south wall of the main room, about 0,7 m east of a stone platform (gr.12621), that belongs to group (12619), the earliest phase of the building. The post-pad was made of one flat stone and was set on top of a post-hole (unit [12584]). No other distinguishable post-pads or post holes were found in the main room. However, it is likely that that the western ends of stone linings [7524] and [7537/12525] and stone platform (12621), supported posts along the western wall. As for the east-side of the room, a series of rock deposits (see bellow gr. 12622) excavated along the eastern wall, belonging to the earlier phase (gr.12619) of the building, are believed to have supported posts as well as serving as a base of an internal structure of an unknown nature.

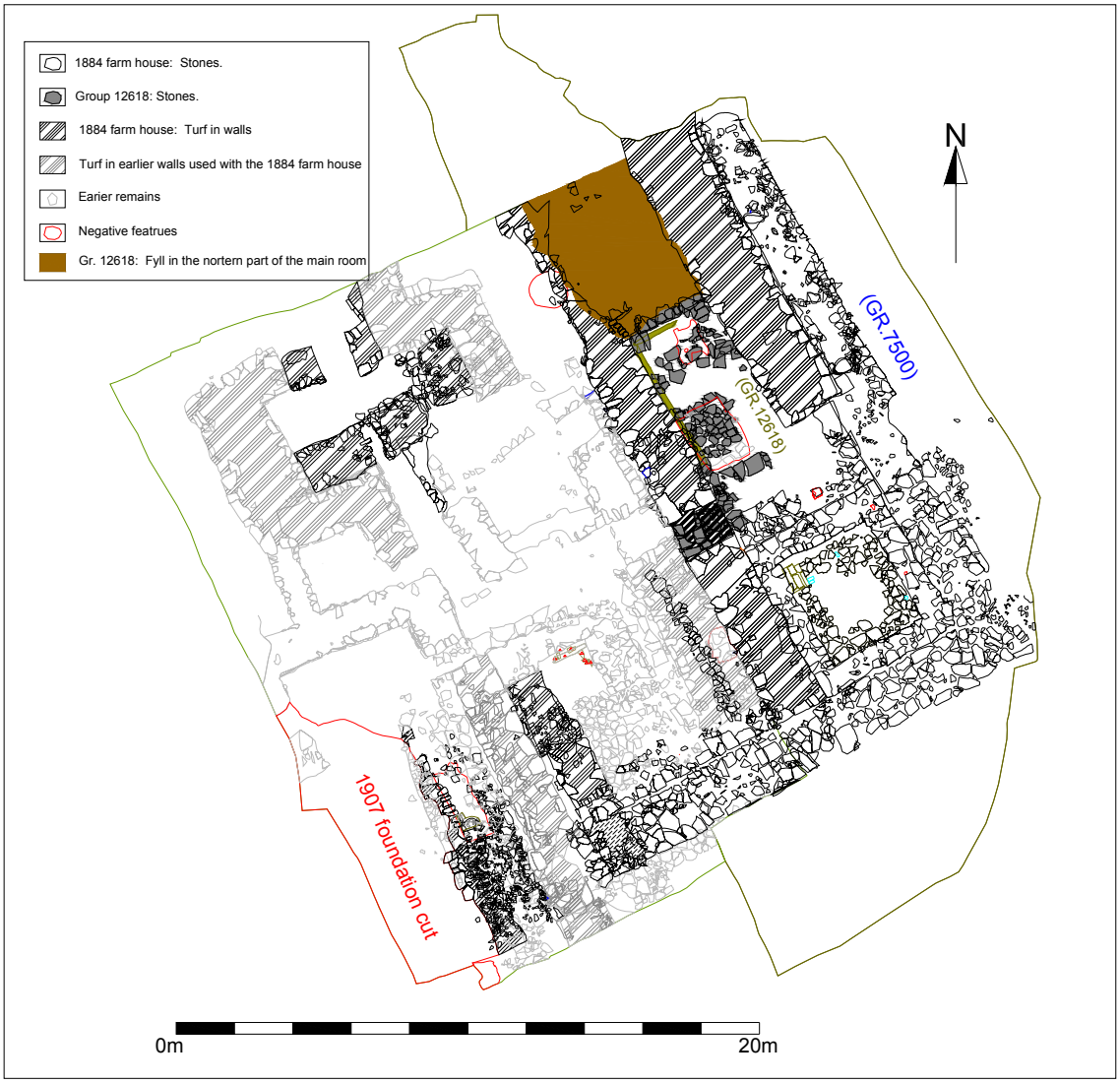

Figure 7: A simplified drawing, showing building (7500) during its latest phase (gr.12618), in relation to other remains uncovered so far on the farm mound.

Group (12619), the earliest phase of building (7500)

By the end of the 2007 excavations the basic layout of structure (7500) was becoming quite clear and with deposits belonging to the later phase (gr.12618) out of the way, its original form was finally revealed in 2012.

The building was about 7 m wide (east-west) and at least 20 m long (north-south), although its northern limits are not quite clear since it runs beyond the northern limits of the excavation area. The walls (not yet excavated) were about 2 m wide standing at least 0.6 m tall. Their full height is not known, at this point in time

since not all, occupational deposits, belonging to group (12619), have been removed. It is however clear that they are based on earlier walls. The walls seemed to be mostly in good condition although parts are missing from the western wall, in the section of the building that was filled up during its final phase (gr. 12618). It is possible that building material for wall (12620), was taken from the western wall when the building was reduced in the early 20th century after it was no longer used as a dwelling house.

Figure 8: An overview over building (7500) at the end of the 2012 field season.

The length of the main room (internally) was at least 14 m (north-south) and its width about 3 m (east-west) except in the last 3 m in the southern end where it was about 5 m wide due to a corridor running east-west giving the room an L-shape. A smaller corridor (gr.12623), about 2 m long (east-west) and 1 m wide (north-south) runs through the western wall, which was blocked during the later phase (gr. 12618). In the southwest corner of the main room, there was a stone built platform (gr.12621 not yet fully excavated) excavated so far in seven parts (units [6505], [6506], [6508], [7513], [12548], [12552] and [12556]) about 1 m (north-south) x 2 m (east-west) in size. It can have served as a foundation for an internal structure of an unknown nature or possibly as a pavement in front of an entrance into cellar (7503) discovered at the south end of the building (see below). The platform however clearly belonged to the earliest phase of building (7500), but was probably reused during the final phase (gr.12618).

South from the main room, a c.a 1,7 m deep stone-built cellar (gr.7503), was discovered, with external measurements of about 6 m (north-south) x 5 m (east-west) and internal measurements of about 4 m (north south) x 3,5 m (east-west) (for a more detailed discussion of the cellar, see Gísladóttir, and Ævarsson, in Milek 2007).

Figure 9: An overview over cellar (7503) from 2007. Picture taken from its east side

In the 2007 field season an external pavement was discovered on the east and south side of the structures belonging to the 1884 farmhouse complex. The better preserved part of it, (about 2 m wide) was excavated in part in 2011. This was mostly along the south side of the 1884 structures but also partially on the east side of cellar 7503 (see figure 13), referred to as unit [7541] in previous reports (see Isaksen, 2012). The part on the east side (1,6 m wide) (gr.12624) was left more or less untouched until the 2012 season. In 2012 the pavement along the east-side of building (7500), except the better preserved part along cellar (7503), was excavated fully, but given its poor condition it had to be done in several parts (units [7529], [7540], [12515], [12517], [12522], [12527] and [12585]) and will hereafter be referred to by its group number (gr. 12624). Pavement (12624), which was quite coarsely made, was on top of a deposit mostly made of turf (unit 12575/12591) that probably served as a levelling layer.

A total of seven floor deposits (units [7531/7535], [7542/12540], [12544/12547], [12561], [12567], [12607], [12608]), belonging to group (12619) were excavated in building (7500) during the 2007 and 2012 seasons. They contained a moderate collection of pottery and glass fragments as well as a few clay pipes, all dated to the middle or late 19th century. Although group (12619) represents the earliest form of building (7500), some minor chances were done to its structure during this phase, which split the aforementioned floor deposits into two groups, gr. (12625) and (12626). Group (12625), truncated by cellar (6528) (see gr.12618 above), comprised of deposits [7531/7535], [7542/12540], [12544/12547] (in chronological order) that spread across most of the interior of the building. All of these were quite firm and composed of turf rich material, slightly mixed with charcoal and small stones, only distinguishable from one another by difference in colour.

The floor deposits in group (12625) overlying a 0,6 m wide and about 0,3 m high, stone built bench (gr.12622) or platform along the eastern wall of building (7500) that was excavated as three units ([12506], [12533] and [12554]). The role of this platform is unknown, although it likely it served as a foundation for an internal structure.

The floor deposits in group (12625) were on top of a stone blocking (unit [12553]) or a threshold in a doorway on the eastern wall of the corridor running east-west at the south end of the main room.

Figure 10: Platform 12622 along the eastern wall of building 7500. Camera facing south.

Group (12626) was composed of deposits [12561], [12567], [12607] and [12608] (in chronological order). Deposits [12561], [12567] and [12607] were mostly rather firm although [12561] had occasional soft parts. They all consisted of turf-rich material, including a few small rocks and occasional bits of charcoal, and were in all likelihood deposited deliberately to level the surface of the room. Floor deposit [12608], the earliest one in group (12626) was however quite different in nature. It also consisted of turf material but was much richer in organic remains than [1261], [12567] and [12607]. Its principal distinguishing feature was however the number of small rocks it contained, some of which were fire-cracked, indicating proximity to a hearth.

The removal of the deposits in group (12626) revealed a small mound (gr.12627), up against the western wall, close to the centre of the main room, that

Figure 11: Mound (12627) just before unit [12614] was removed. Camera facing west.

seemed to be consisting entirely of wood- and peat-ash rich deposits as well as a large quantity of fire-cracked rocks of various shapes and sizes. The mound was not fully excavated in 2012 (excavated units in 2012: [12611], [12613] and [12614]), but at the end of the 2012 field season, a possible hearth was starting to take shape at the centre of the mound. This hearth seems to be among the earliest features belonging to group (12619), the earlier phase of building 7500, since around it, remains that are believed to belong to the 17th century farmhouse, were starting to appear.

A hearth (gr. 12571), with a cut unit [12572]), about 0,2 m deep, filled with charcoal-rich peat-ash and rocks (unit [12542]), was discovered at the northern end of the main room. Its full dimensions and shape are not fully known since it extends beyond the northern limits of the excavation area. However, based on what was visible, it seems to be semi circular and at least 1 m in diameter, with irregular sides. Among the aims for the 2013 season is to extend the excavation area to the north in order to fully expose the northern end of building (7500), and therefore reveal what remains of hearth [12571].

Two post pads (units [12538] and [12582]), which belong to group (12519), were found during the 2012 excavations. One of them, post pad [12582], has

Figure 12: Hearth 12571. Camera facing north

already been described with group (12518), since it was reused during that phase. The other one (unit [12538]) was not, on the other hand, discovered until the deposits belonging to group (12518) had been removed. Post pad [12538], a single flat stone, was situated up against the western wall right by the north-east corner of corridor (12623). Apart from the two mentioned here, no other post- pads or postholes have been found but hopefully the 2013 excavations will shed some light on the matter.

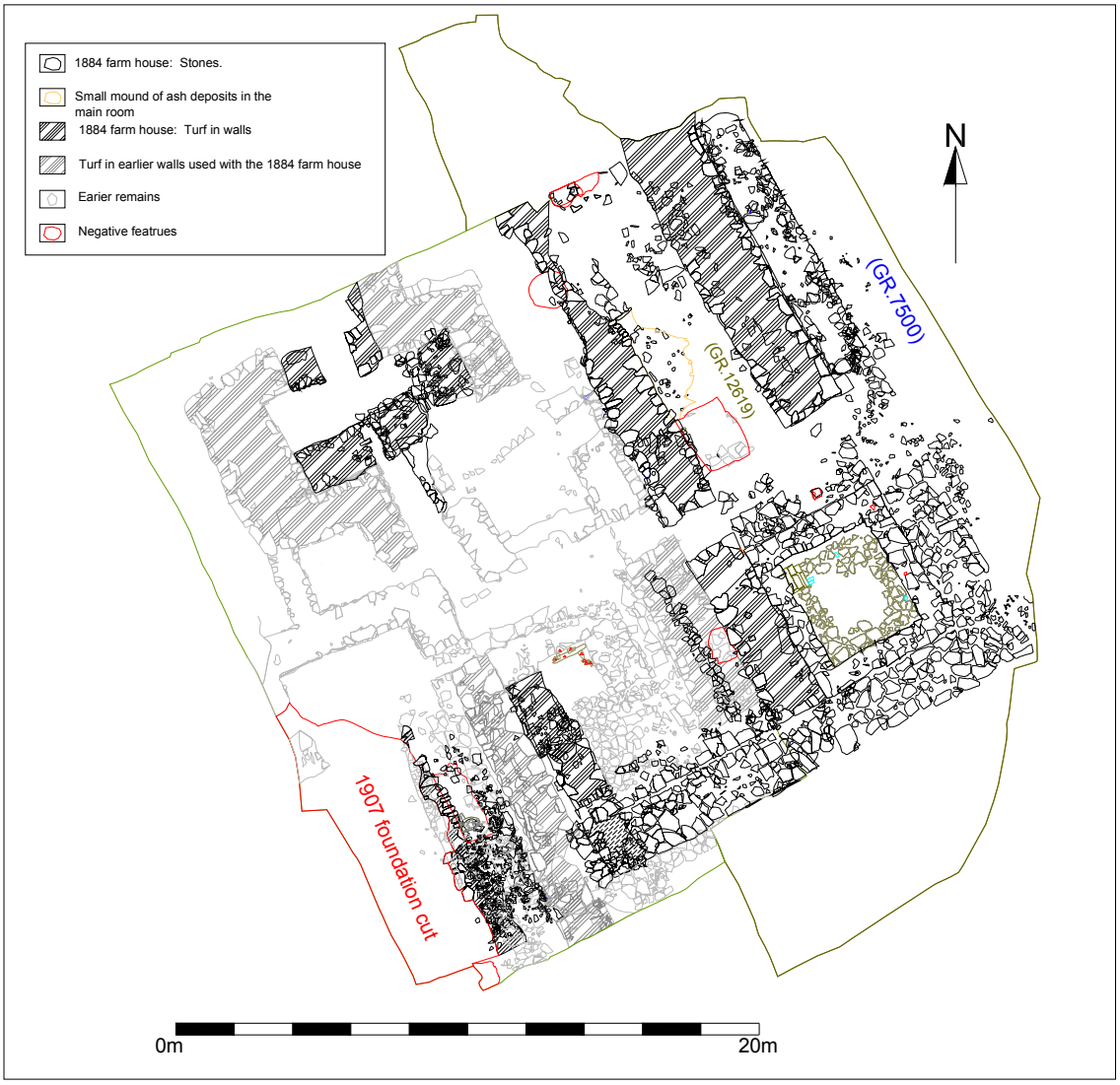

Figure 13: A simplified drawing, showing building 7500 in its earliesd form (gr. 1519), in relation to other remains.

Group 11545: A Medieval Midden

Excavations continued in 2012 on midden (11545), which was discovered and partially excavated in 2011. This year the goal was complete its excavation, but in order to do so, a pavement (unit 12518/12509); one event of turf-collapse (unit 12504) and remains of a wall (12508), all believed to be associated with the 17th century farm-house, had to be removed.

Figure 14. An overview over midden 11545, early in the 2012 field season.

As was seen in 2011 the midden was composed of series of peat- and wood-ash deposits, mixed with charcoal, along with occasional clean charcoal deposits, separated by layers of turf. In total the midden was made up of 30 deposits, covering an area of about 4 x 3.5 m, with a combined thickness of about 0,5 m. It produced a large collection of bones (pending analysis) but very few finds although one datable artefact was found, a 12th-13th century gaming piece.

A detailed discussion of midden (11545) will be given when analysis of the bone collection is completed.

Conclusion

At the end of the 2011 season, the remains of well preserved 17th century buildings and corridors, that seemed to form a typical Icelandic passageway farmhouse, were starting to appear. These were however superimposed by building (7500) on the east side of the excavation area. This was the remaining part of the 1884 farm complex, which was uncovered in seasons 2006-2007, and had been intended for preservation. In 2012 the decision was made to abandon earlier plans to preserve building (7500) and continue excavating it in order to reveal the full extent of the 17th century farm complex.

Based on data from the 2006-2007 seasons, combined with the data from 2012, the building can be divided into two phases of occupation, group (12618) that represents a post-1907 use of the building and group (12619) that represents the building in its original form.

In the post-1907 period (gr.12618) the building was abandoned as a dwelling house, and reused as a smithy and a storage room. In that phase it was reduced considerably and a small cellar constructed in the south-west part of the main room, dug into earlier remains. A stone-built furnace or hearth was also constructed in the northern end of the main room, which was removed when the building was finally abandoned in the middle of the 20th century. No clear floor deposits were found that belong to this phase.

In its original form (gr.12619) building (7500) was at least 20 m long (north-south) and about 7 m wide (east-west) with a large stone built cellar (gr.7503), about 6 m long (north-south) and 5 m wide (east-west), at the south end and a coarsely made external pavement, about 1,6 m wide, along the eastern wall.

The main room of the building was about 14 m long (north-south) and about 3 m wide, with a 3 m wide corridor running east at the south end, giving the room an L-shaped plan. Another smaller corridor (gr.12623), blocked during the building's last phase, ran through the western wall at the south-west corner of the main room.

At the south-west corner of the main room a stone-built platform was discovered, considered to be either a foundation for an internal structure or a pavement in front of an entrance into cellar (7503). The external walls of building (7500) were about 2 m wide but their full height is yet to be determined since not all of the deposits belonging to group (12619) have been excavated. At the end of the 2012 season it was however becoming clear that the walls of building (7500) were based on earlier walls.

A total of seven floor deposits, belonging to group (12619) were excavated in 2012. Although group (12619) is thought to represent the earliest form of the building the floor deposits can be split into two subgroups (gr.12625), and (gr.12626). They are defined by minor changes to its structure during this phase, a stone built platform along the eastern wall, possibly a foundation for an internal structure, and a stone blocking in a doorway on the eastern wall. The removal of the earlier floor deposits, group (12626), revealed a small mound (gr.12627) which had accumulated up

against the western wall of the building. The mound was entirely of peat- and wood-ash rich deposits mixed with fire cracked rocks. The mound was not fully excavated in 2012 but at the end of the season a possible hearth was starting to appear at its centre. This hearth is believed to be among the earliest features belonging to gr. (12619) since around it, earlier remains were starting to appear, thought to be associated with the 17th century farm-buildings.

Two post pads were found, one along the western wall and another by the southern wall that was sitting on top of a post hole, but none along the eastern wall. It is hoped that the 2013 excavations will shed some light on this matter.

A coarsely made external pavement (gr.12624) was also excavated along the eastern wall.

Excavations on a medieval midden (gr.11545), originally discovered in 2011, were also completed. A detailed discussion will be given, on those remains, when analysis of the bone collection is completed.

The Aims of the 2013 Field Season.

The aim of the 2013 field season is to continue and hopefully finish the excavations of building (7500) in order to reveal the full extent of the 17th century farm complex. This will involve extending the excavation area to the north as well as removing the walls of building (7500).

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Excavationsons of Costal structues at Vatnsfjörður: Areas 45 & 46

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Introduction

The 2012 excavation season at Vatnsfjörður was the fourth year during which investigations have been carried out into the use of coastal areas surrounding the site. Although the structures being investigated by this project are outside of the homefield, they are still on land which is owned by the farm and are also within view of both the 10th century farmstead and the farm mound. Previous assessments of the artefacts, animal bones and botanical remains from all phases of occupation at Vatnsfjörður have demonstrated that marine resources comprised an important part of the subsistence strategy of the inhabitants of the farm (Dupont-Hébert, 2009; 2010; 2011; Gísladóttir, 2009; 2010; 2011; 2012; Mooney, 2009; 2011b) and the ongoing investigations into coastal structures in the area will help to

Figure 1: Area 45 at the beginning of the 2012 excavation season, looking south-east with the rear wall of structure S5 in the foreground

shed light on how the use of the Vatnsfjörður shoreline changed and developed throughout the occupation of the site. Investigations in this area began in 2009 when a survey of coastal structures visible from the 10th century farmstead was carried out with a goal of pinpointing the most likely location of the Viking Age boathouse associated with the farm. This survey identified 10 structures within the viewshed of the farm including potential nausts, sheephouses and boundary walls, representing the diverse use of the coastal area over time. One building, identified as structure S2, was suggested as the most likely candidate for the Viking Age boathouse due to its position close to the shore but further above sea level than other more recent structures in the area (Mikołajczyk&Gardeła, 2010). An evaluation trench through the south wall of this structure in 2010 indicated both a pre-modern and an earlier phase of use of this structure (Mooney, 2011a). Excavations conducted in the 2011 season yielded a large number of nails. Although these could have originated from the repair of boats in the structure, as the nails are not broken or cut they are equally likely to be linked to the roof construction of the structure.Structure S2 may have originally been used as a naust, however the chronology of the structure was unclear with earlier construction phases, at least one before AD 1693, being preserved only in the southern wall. In later periods, the structure was modified with an internal division and used as a sheep shelter (Mooney *et al*, 2012).

The 2012 excavations focused on a large, horseshoe shaped structure identified in the original survey of the area as structure S5. It lies in the southernmost bay of the fjord of Vatnsfjörður, known as Bólvík due to the presence of a large sheepfold on its western side. The structure was assumed to be a boathouse, with its shape and size being similar to those from the Viking Age found across the North Atlantic region (Stylegar& Grimm, 2005), and although its alignment parallel to the shore might seem counterintuitive, numerous boathouses and nausts in the local area share a similar position (Mooney *et al*, 2012). An evaluation trench across the northern wall of this structure excavated in 2011 showed that the H-1693 tephra was present in situ over the collapse layers of the structure, giving a late medieval or earlier date to the ruin. This, in combination with finds of nails and slag fragments and charcoal deposits inside the building, prompted the commencement of excavations in this area in 2012. The excavation of this structure was conducted by the author and

ŁukaszMikołajczyk, with the assistance of Karen Milek, Céline Dupont-Hébert, SolveigLecouturier, and students from the FieldSchool in North Atlantic Archaeology.

Excavation Strategy

The structure chosen for excavation is the largest structure of those currently identified on the Vatnsfjörður shoreline, measuring 15.71 m long by 8.65 m at its widest (Mikołajczyk&Gardeła, 2010). In order to encompass the collapse of the structure and any external occupation or dumping deposits, an initial excavation area of 20 m x 12 m was proposed. However, given the limited timeframe of the excavation season, it was decided that the structure should be divided into sextants, and two of these sextants would be opened in 2012. This strategy allowed the excavators to assess the potential of the structure and determine its function, giving scope to return and investigate the remaining four sextants in a future season. The areas opened during the 2012 season are illustrated in Figure 2. The northern square encompassed the evaluation trench excavated across the northern wall in 2011 (Mooney *et al*, 2012), and included deposits both in the interior and to the exterior of the structure. The southern square was chosen to access the end of the southern wall of the structure, along with deposits and features related to the entrance to the building. This excavation strategy, as well as allowing the excavators to assess the structure within a short timeframe, also has the benefit of providing a section through the interior deposits running almost the entire length of the structure, as well as a complete section across the structure towards its south-eastern end.

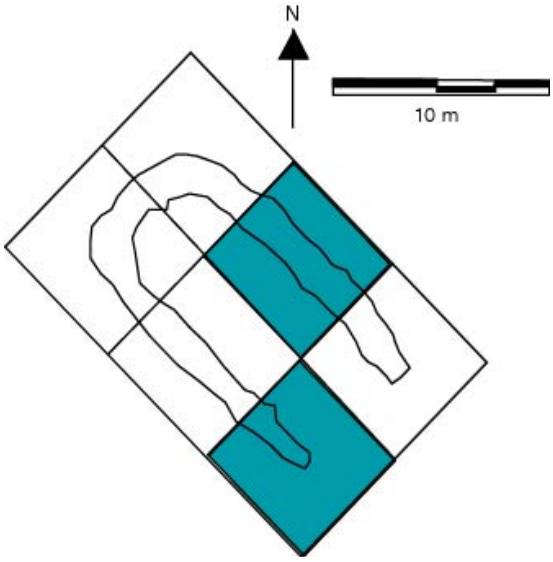

Figure 2: Structure S5 divided into sextants, with opened areas coloured turquoise.

The structure was excavated using a single-context approach, by which each individual layer or feature is considered as an individual event in the formation process of the archaeological site. As each new unit was defined, it was given a number from a sequential numbering sequence which, when combined with the site

code (VSF12) gave a unique code for each deposit. After each unit was defined, it was recorded, planned and photographed and levels were taken before the layer was excavated. A Harris matrix of these events was created during the excavation season and refined during post-excavation analysis. Deposits in the same area and relating to the same phase were given group numbers from the same sequential numbering sequence as the unit numbers, allowing for easy identification of sequences of depositional events. All finds were given individual numbers and categorised on site, and then washed, dried and packed and given basic conservation if necessary. Bones were treated in the same way, and were sent to Université Laval, Québéc for analysis. Archaeoentomological samples and samples for geochemical and soil micromorphological analysis were sent for analysis at the University of Aberdeen, Scotland, while archaeobotanical samples were processed on site and returned to FSÍ for analysis, along with samples of slag.

Excavation Results

Area 45

Post-Abandonment Deposits

Figure 3: Collapse deposits in the northern sextant after the removal of the turf and topsoil. The depth of these deposits against the walls of the structure can be observed in the emptied 2011 evaluation trench in the centre of the picture.

During the excavation of the 2011 evaluation trench, the H-1693 tephra was observed in situ over the northern wall of the structure (Mooney *et al*, 2012), however no large coherent spread of this tephra was observed over the entire structure during the 2012 season. Rather, after deturfing and removing the topsoil and root mat [12001] a patch of in situ H-1693 tephra was observed overlying the collapse deposits in the south-eastern corner of the excavation area, south of the south wall. As the collapse deposits were excavated, small traces of tephra were also observed in the upper collapse layers. As no tephra was found in the turves composing the walls of the structure, the presence of tephra in the collapse indicates that the structure was substantially decayed by the time that the tephra fall occurred, suggesting that the structure was in use some time during the later medieval period.

The collapse deposits observed were generally rather thin as might be expected in an exposed area so near to the coast, and considering that the shape of the walls of the structure was clearly visible before excavation (Mikołajczyk&Gardeła, 2010). As Figure 3 demonstrates, the only place where substantial turf collapse remained was in sheltered areas up against the walls, where they reached up to 30 cm in total

depth. In addition to uniform collapse layers such as [12003] which were present over almost all of the excavation area, wall slide and collapse deposits containing wall stones were also identified, as well as deposits such as [12009] and [12010] which were confined to the interior of the structure and are likely to represent the collapse of the roof of the structure before major deterioration of the walls occurred.

In addition to the inclusion of small amounts of tephra in the uppermost collapse layers, in the upper layers of the collapse deposits to the north of the northern wall a fragment of knitted wool was found (F-003). Knitting was not introduced to Iceland until around AD 1500, indicating that these final collapse deposits must date from some time after this date. The only other finds in the collapse layers were unspun wool, and bones of sheep and seal, which were most likely to have been introduced into the site through natural processes.

Occupation deposits

Beneath the collapse deposits inside the structure, a compacted mid to dark greyish brown organic layer[12026] was observed, confined to the area within the walls of the structure and ending at the line of the eastern edges of the horseshoe-shaped walls. This deposit was interpreted as a floor layer, and its organic content suggests that the floor was composed of vegetal material such as turf or hay. In order to establish any identifiable activity areas in this occupation deposit, soil samples for geochemical analysis were taken on a 0.5 m grid across the deposit (see Mikołajczyk 2013, this volume), and bulk soil samples for retrieval of macrobotanical remains were taken on a 1.0 m grid. Soil micromorphological samples were also taken from the floor at the end of the excavation season, in the south-east facing section of the southern sextant and the south-east and north-west facing sections of the northern sextant, and samples were

Figure 4: Iron pan, slag and charcoal deposit [12028] before excavation.

also taken for archaeoentomological analysis. Against the northern wall of the structure, the floor deposit [12026] was interrupted by a shallow linear cut feature [12019], behind which the deposits observed were substantially less compacted than in the centre of the structure. This is thought to be the former line of a bench or similar internal feature which would have sat against the northern wall.

The floor deposit contained within it a large quantity of slag fragments, which were primarily found in the central area of the structure, and towards the upper boundary of the deposit with the collapse layers above. Additionally, in the central part of the structure, at the southern edge of the northern sextant, a hard area of substantial iron pan [12028] was discovered, with frequent inclusions of charcoal and fine particulate slag granules (see figure 4). Also in this area, almost at the intersection of the two excavated sextants, a highly corroded metal object, possibly a tool, was uncovered. The extent of this deposit and its relationship to the function of the structure remain unclear, as it extended into two of the unexcavated sextants, however the excavated material from the 2012 excavations was retained in its entirety for metallurgical analysis.

After the thin floor layer and associated deposits were removed, natural beach gravel was observed in some parts of the structure, however most of the internal area was covered by a moderately compacted mid brown gravel deposit [12034], with other organic and charcoal-rich deposits visible beneath this. A 1 m wide sondage across the southern edge of the northern sextant revealed a thin organic deposit [12036] beneath the brown gravel [12034]. These are likely to represent an earlier phase of use of the structure, with the brown gravel having been introduced to level the interior surface.

No external occupation deposits were observed in the southern excavated sextant, however a series of midden deposits were uncovered up against the northern edge of the northern wall. These were mostly charcoal rich, with some (e.g. [12037]) composed almost entirely of charcoal, although a deposit at the eastern edge of the northern sextant [12039] comprised mostly particulate slag granules similar to those observed in deposit [12028] in the interior of the structure. The only find recovered from these deposits was a single iron nail from layer [12015]. At the close of the excavation season, these deposits had been removed to reveal a mixed brown gravelly layer [12043] similar to that observed on the inside of the building ([12034]).

Structural deposits

Figure 5: The northern wall of structure S5, viewed from the interior of the building and demontsrating the placement of large, flat-edged stones to line the wall.

As has been mentioned previously, survey of the structure before excavations commenced identified a continuous, horseshoe-shaped wall, open to the south-eastern end, comprising a structure measuring15.71 m x 8.65 m. Excavations in 2012 revealed that the walls themselves [G-12038] were very substantial, measuring between 1.6 m to 2.0 m in width, and remained standing to a height of approximately 0.5 m (see figure 5). The walls were composed of mottled reddish-brown turf, lined with large natural basalt stones likely to have originated from the adjacent rocky coastline. Although these stones have not been worked, they were carefully placed with flat edges facing outwards, particularly on the interior edge of the walls. This placement was more noticeable on the wall in the northern sextant than in the southern square, in which the exposed section of wall was much less well-preserved and its stones were much more affected by collapse processes. However, in this sextant the edge of the southern wall as delineated by a course of flat-edged stones giving a square end to the terminus of the wall.

Aside from the walls, very few other structural features were observed in the structure. Throughout the excavation of the internal deposits, several flat stones which could have acted as post pads were observed, however these did not form any consistent pattern in their placing. A single small post hole [12023] measuring approximately 0.15 m in width was recorded in the northern excavated sextant, just to the south of the northern wall, but no similar features were observed elsewhere. In the southern sextant, two large post settings [12031] and [12033] were recorded.

These features were only partially visible as they were found at the northern edge of the sextant, bisected by the central edge of excavation. The two post holes were approximately 2.5 m apart, and were each at least 0.35 m in width. Their position at the centre of the structure suggests that they may have been part of a line of posts supporting a pitched roof over the structure.

Area 46

During excavations in area 45, four large wooden logs were observed lying approximately parallel to the shoreline, in the beach gravel in the intertidal zone of the beach at Bólvík. These logs were planned *in situ* (figure 6), excavated and individually recorded by ŁukaszMikołajczyk and Louise Biscarrat, before being returned to the beach. The logs were identified by wood anatomical analysis as larch (*Larix decidua* Mill.), and were approximately 0.2 m in diameter, ranging from 2 m to 4 m in length. Attached to one log was an iron fitting consisting of a large bolt and a flat piece of metal. All of the logs were worked, with joints and bolt holes consistent with their having been part of a structure such as a pier or jetty. However, interviews with the current occupants of the farm at Vatnsfjörður established that the logs were likely to have been part of a runway constructed for the launch of a flat-bottomed boat from the beach in the mid-20th century. Most of the logs comprising this structure were removed, however it seems that these four were too far into the bay to be retrieved and so were abandoned.

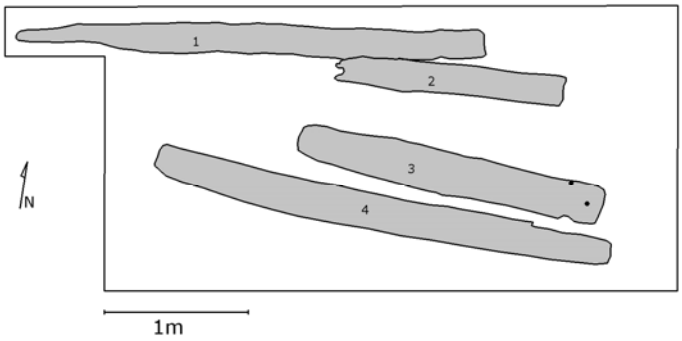

Figure 6: Exposed wooden logs in Area 46. Illustration by Lucsz Mikolajczyk.

Discussion

The excavations in area 45 on the shore of Bólvík conducted during the 2012 excavation season at Vatnsfjörður have confirmed the presence of a large structure enclosed by horseshoe-shaped walls, open at the south-eastern end and aligned approximately parallel to the shore of the bay. However, despite the similarity of the

form of the structure to boathouses in the North Atlantic region (Stylegar& Grimm, 2005), several features observed indicate that this structure had a different use. Firstly, although the shape of the walls of the structure is similar to that of a boathouse, the presence of the two large post holes in the centre of the building at the entrance would effectively block the entrance of a boat to the structure. Furthermore, the presence of occupation deposits such as the floor and middens, and well as the potential bench feature against the northern wall, indicate that the internal space of the building was more likely to have been used as a workshop or industrial space than simply as a storage and repair space for a vessel. The results of the soil chemistry analysis of deposit [12026] do not appear to support its interpretation as an internal occupation deposit, and it has been suggested that this deposit may represent a compacted primary collapse layer across the interior of the structure (Mikołajczyk 2013, this volume). However, both the discontinuation of this deposit north of the cut of possible bench feature [12019] and the location of the majority of finds within or at the upper boundary of the deposit appear to indicate an occupation surface, and this discrepancy will be examined during the excavation of the remaining sextants of the structure during future fieldwork seasons.

The large quantities of slag recovered both from the internal deposits and the dump layers north of the north wall, and the charcoal deposits observed both inside and outside of the structure, indicate that iron smelting and metalworking activities may have been conducted in the structure. However, no hearth or other burning area was identified within the building, although the area of iron pan and slag [12028] at the eastern edge of the northern excavated sextant may represent a focus of industrial activity. The linear cut of a possible bench identified in this sextant may also represent a working area.

At the close of the 2012 excavation season, anthropogenic deposits had not yet been fully excavated in area 45. The brown mixed gravel deposit observed across the interior of the structure, into which the post settings [12031] and [12033] were cut, may represent a boundary between phases of use of the structure and/or a levelling deposit to re-floor the building. This possibility of an earlier phase of use, and the still uncertain function of the structure, will be further investigated during the 2013 excavation season.

Conclusions

A substantial amount of work remains to be conducted in area 45 during future investigations. During the next excavation season, the remaining four sextants overstructure S5 will be opened, in order to determine both the function of the structure and the extent of the deposits excavated in 2012. The possible levelling deposit will be removed along with any underlying deposits, to determine the existence or otherwise of an earlier phase of use of the structure. The construction of the walls will also be examined in section at one or more points in the course of the structure. Further to this, excavations will also be conducted on a small structure to the northwest of the structure excavated in 2012, previously identified during survey in 2009 (Mikołajczyk&Gardeła, 2010) and test trenched in 2011 (Mooney *et al*, 2012). These excavations will continue to expand the understanding of the use and exploitation of the shore and coastal area by the inhabitants of Vatnsfjörður throughout the history of the farm.

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Units Excavated in Area 45

Number	Area	Type	Group	Description	Date	ID
12001	45	D		Midd reddish-brown aeolian topsoil	28/06/2012	DEM
12002	45	D		H-1693 tephra in situ	29/06/2012	KA/ASD
12003	45	D		Turf collapse against northern wall	29/06/2012	DK/AB
12004	45	D		Turf slide to southern edge of northern wall	03/07/2012	KA/AB
12005	45	D		Turf collapse and slide to north of north wall	03/07/2012	DEM
12006	45	D		Gravelly deposit compacted by sheep track	03/07/2012	DEM
12007	45	D		Turf slide/collapse to north edge of southern wall	03/07/2012	LM
12008	45	D		Turf collapse to north of southern wall	04/07/2012	LM
12009	45	D		Thick turf collapse on inside of structure	04/07/2012	AB/DEM
12010	45	D		Same as 12009, in south-eastern square	04/07/2012	LM
12011	45	D		Dark brown organic turf deposit north of north wall	05/07/2012	LW
12012	45	D		Stones against north of north wall	06/07/2012	LW
12013	45	D		Mixed compacted grey turf north of south wall	06/07/2012	LM
12014	45	D	12016	Turf dump north of south wall	06/07/2012	BOM
12015	45	D	12016	Dark brown mottled organic layer north of north wall	09/07/2012	DS/DEM
12016	45	G		Dump deposits north of north wall	09/07/2012	DEM
12017	45	D		Compacted turf layer in south eastern corner	10/07/2012	CM
12018	45	D		Turfy fill of bench edge channel south of north wall	11/07/2012	DEM
12019	45	C		Cut of bench edge channel south of north wall	11/07/2012	DEM
12020	45	D		Stones next to south edge of north wall	11/07/2012	DK/CM

Number	Area	Type	Group	Description	Date	ID
12021	45	D		Mixed turf and stones against south wall	11/07/2012	LB
12022	45	D		Fill of small post hole next to north wall	11/07/2012	DEM
12023	45	C		Cut of small post hole next to north wall	11/07/2012	DEM
12024	VOID	VOID	VOID	VOID	VOID	VOID
12025	VOID	VOID	VOID	VOID	VOID	VOID
12026	45	D		Compacted grey turfy floor	11/07/2012	DS/DEM
12027	45	D		Organic peaty layer above floor in north western corner	12/07/2012	DEM
12028	45	D		Slag and iron pan deposit in centre of building	14/07/2012	CM
12029	45	D		Loose-ishcharcoaly deposit behind bench feature	14/07/2012	DEM
12030	45	D	12042	Fill of post setting - inner	16/07/2012	LB
12031	45	C	12042	Cut of post setting - inner	16/07/2012	DEM
12032	45	D	12042	Fill of post setting - outer	16/07/2012	DEM
12033	45	C	12042	Cut of post setting - outer	16/07/2012	DEM
12034	45	D		Brown gravel layer over inside of structure	16/07/2012	CM
12035	45	D	12016	Charcoal dump deposit north of north wall	16/07/2012	LB
12036	45	D		Thin organic layer below brown gravel in sondage section	16/07/2012	CM
12037	45	D	12016	Charcoal dump deposit north of north wall	16/07/2012	LB
12038	45	G		Walls of structure	16/07/2012	CM
12039	45	D	12016	Fine particulate slag/iron dump north of north wall	16/07/2012	DEM
12040	45	D		Dark organic deposit below 12034	17/07/2012	LB
12041	45	D		Charcoaly deposit showing through 12034	17/07/2012	DEM
12042	45	G		Post settings associated with turf/gravel floor	17/07/2012	DEM
12043	45	D		Borwn gravelly deposit north of north wall	18/07/2012	LB

Chemical properties of possible floor deposit [12026] from structure 5 (Area 45, VSF12)

Lukasz Mikolajczyk (University of Aberdeen)

Introduction

Layer [12026] was chosen during the course of excavation to be sampled for testing the soil chemical properties as there was a presumption that it may constitute a floor deposit of Structure 5 (see Mooney 2013, this volume).

Methods:

The layer was divided into 50x50cm squares and samples were taken from each grid square in order to test the magnetic properties, pH, electrical conductivity and organic content of the deposit. Bulk samples were air dried, gently powdered with a mortar andpestle, and sieved to remove inclusions larger than 2 mm. Magnetic susceptibility measurementswere made on 10 ml samples at low (470 Hz) and high(4700 Hz) frequencies ona Bartington Instruments dual frequencyMS2B sensor and calculated to express mass-specific magneticsusceptibility (χ_{LF})and percentage frequency-dependent susceptibility(χ_{FD}%).Electrical conductivity and pH were tested using a Jennway 4330 meter on soil suspension in distilled, deionised water with a 2:5 sediment:water ratio. Organic content was tested by the weight loss on ignition at 550˚C for 5 hours (following Heiri et al. 2001).Spearman's rank correlation coefficient (ρ) was calculated for all variables in order to illuminate potential interdependencies.

Results:

The spatial distribution of soil property variations in the [12026] deposit is not displaying easily recognisable patterns and can be considered as fairly random (fig1). Results of mass-specific magnetic susceptibility are showing low values - comparableto the lowest value rank reported from other sites on Iceland by the Milek and Roberts (2013)and

Milek (2012) and together with low readings of frequency dependent susceptibility (Dearing 1996) are pointing towards the average values of unburnt, undisturbed soils. pH results are low, what can possibly be linked with organic acids accumulationcreating an environmentnot favourable for bone material preservation. The concentration of soluble salts (electrical conductivity)is lowwith some exceptions in the northernmost corner of the sampled layer. Without an elemental analysis the origin of the salt concentration remains unknown. Overall organic content of the deposit is very high and the readings are showing a negative correlation with the magnetic susceptibility values, but as the susceptibility readings are not significantlyvariable the correlation is not bearing a big interpretational value.

Discussion:

Results of preliminary study of the [12026] layer soil properties seem to support my observations during the excavation that the sampled layer, although more densethan the deposits overlaying it and containing odd ferric inclusions, in fact was a bottom, highly compressed turf layer of the post-occupational collapse of the structure. This conclusion is indirectly suggesting the lack of a distinct floor layer in the structure giving, at the end of 2012 season, more credit to the thebuilding interpretation as a boat shelter. Hopefully analysis of the micromorphological samples from the structure's sections and excavation of remaining brown mixed gravel deposit observed across the interior of the structure will provide more data to strengthen or reject the this hypothesis.

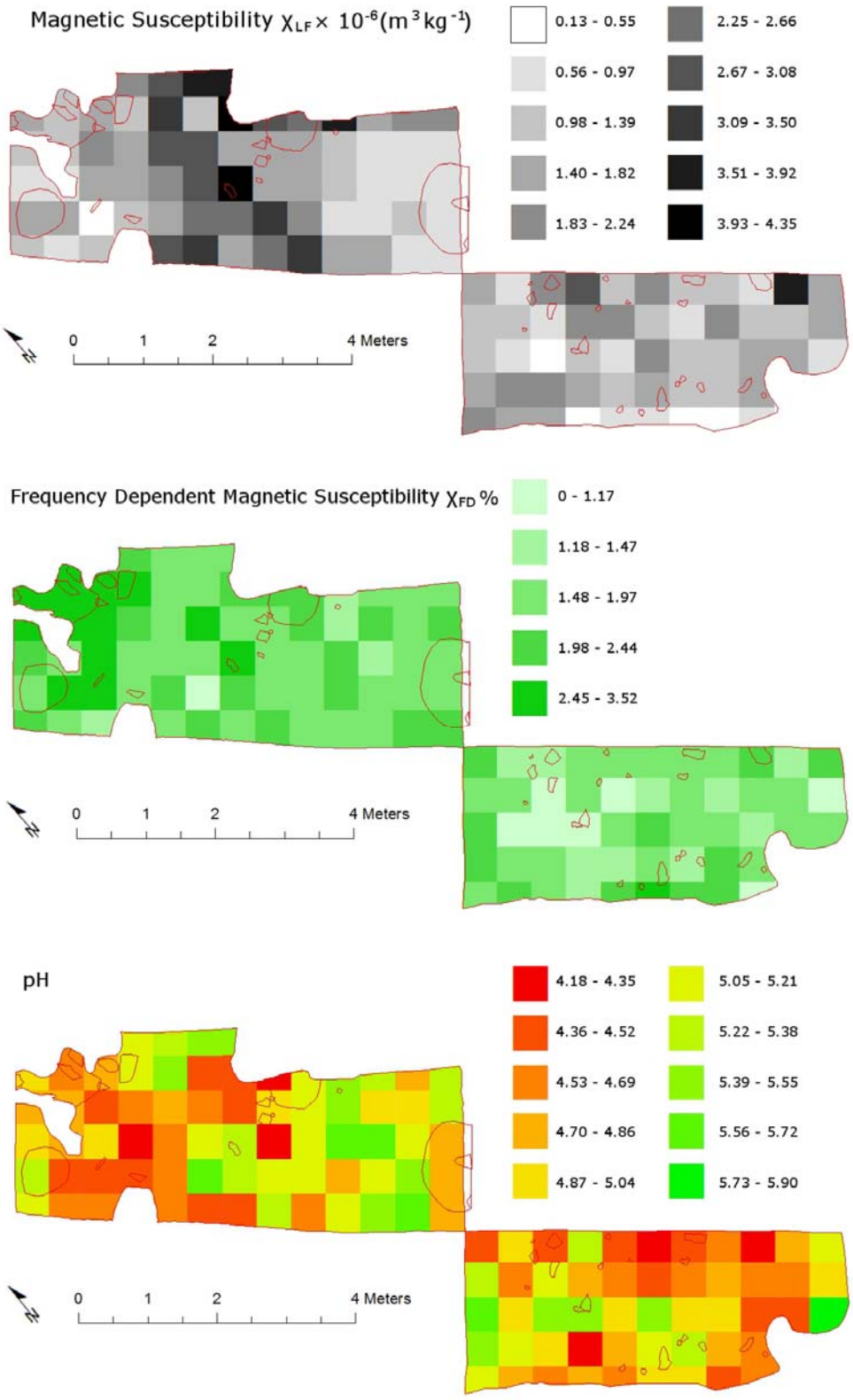

Figure 1: Spatial distribution of tested soil chemical properties of the [12026] deposit: Mass-specific magnetic susceptibility (top). Percetnage frequency-dependent susceptibility (middle). Ph value (bottom.

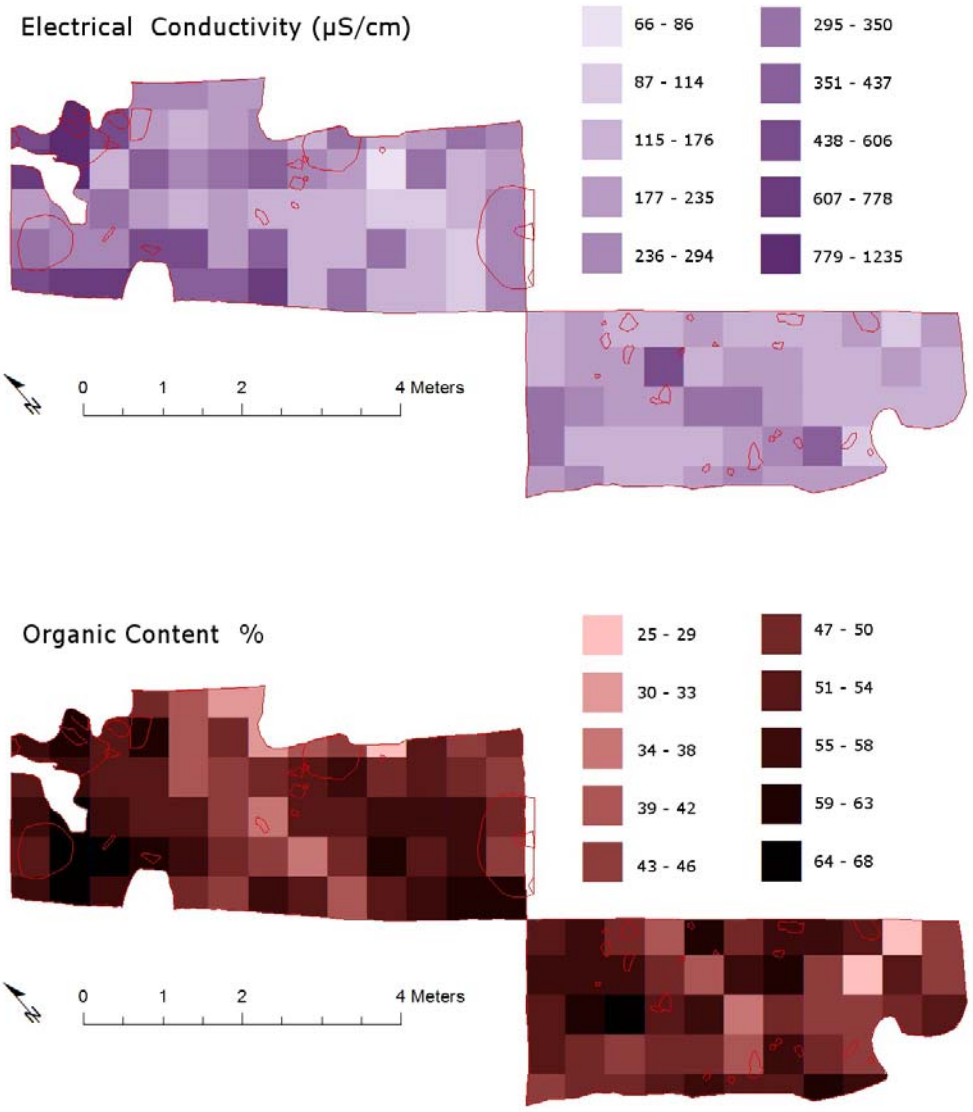

Figure 2: Spatial distribution of tested soil chamical properties of the [12026] deposit: Electrical conductivity (top). Organic content (bottom).

ρ	Org. cont.	E.c.	pH	χ_{FD}%
χ_{LF}	**-0.697**	-0.082	0.06	-0.006
χ_{FD} %	0.123	0.309	-0.052	
pH	-0.081	-0.174		
E.c.	0.209			

Figure 3: Spearmans rank correlation coefficient.

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Appendices: Registers 2012

Appendix 1: Excavated Units on the Farm Mound

Number	Area	Type	Group	Description
12500	FM	D		Cleaning
12501	FM	D	11545	Mottled dark brown deposit with wood ash peat ash bones and shells
12502	FM	D	12618	A part of a turf and stone blocking in corridor (12623)
12503	FM	D		A demolition deposit of turf and stone. Post abandonment
12504	FM	D	10671	Turf collapse
12505	FM	D	11545	A charcoal dump
12506	FM	D	12622	A part of a bench up against eastern wall of (7500). Same as 12533 and 12554
12507	FM	D		A leveling deposit of turf and stone east of pavement (12624).
12508	FM	D	10671	Wall remains (stones) on top of midden (11545)
12509	FM	D	10671	A deposit of stones. Possible remains of a pavement on top of midden (11545)
12511	FM	D	12532	A possible post pad, composed of five flat stones
12512	FM	D	6528	A part of a stone pavement in cellar (6528)
12514	FM	D	12532	A possible post pad, composed of five stones
12515	FM	D	12624	A stone deposit. A part of pavement (12624)
12516	FM	D		A demolition deposit of turf and stone. Post abandonment
12517	FM	D	12624	A deposit of turf and stones. A part of pavement (12624)
12518	FM	D	10671	A pavement on top of midden (11545)
12519	FM	D	12520	A spread of large flag stones. Possible foundations for a hearth. Same as 12521 and 12534
12520	FM	G	12618	A spread of flag stones. Possible foundations for a hearht. Untits 12519, 12521 and 12534
12521	FM	D	12520	A spread of large flag stones. Possible foundations for a hearth. Same as 12519 and 12534
12522	FM	D	12624	A spread of stones of various shapes and sizes. Part of pavement (12624)
12523	FM	D	6528	A part of a pavement in cellar (6528)

Number	Area	Type	Group	Description
12524	FM	D	11545	A wood ash deposit in midden (11545)
12525	FM	D	6528	A stone lining on the southern edge of cellar (6528)
12526	FM	D	12520	A peat ash fyll in depression (12530)
12527	FM	D	12624	A spread of stones of various shapes and sizes. Part of pavement (12624)
12528	FM	D	12618	A part of a fill in the northern part of the main room of building (7500). Turf and stones
12529	FM	D	11545	A mottled lump of turf in midden (11545)
12530	FM	C	12520	A depression filled with peat ash. Possibly a cavity left by stones removed from hearth 12520
12531	FM	D	11545	A charcoal deposit in midden (11545)
12532	FM	D	12518	Post pads belonging to gr. (12518). Units: 12511,12514
12533	FM		12622	A part of a bench up against eastern wall of (7500). Same as 12506 and 12554
12534	FM	D	12520	A spread of large flag stones. Possible foundations for a hearth. Same as 12519 and 12521
12535	FM	D	11545	A mix of charcoal and turf debris in midden (11545)
12536	FM	D	12532	Same as 12511
12537	FM	D	12532	A possible post pad, composed of two stones. NW corner of building
12538	FM	D	12619	A post pad. A single flat stone.
12539	FM	D	11545	A deposit of turf depris in midden (11545)
12540	FM	D	12625	A floor deposits. Part of the later group of floors in gr.12619. Turf rich with birch twigs, slag, and charcoal
12541	FM	D	11545	A deposit of turf depris and birch twigs in midden (11545)
12542	FM	D	12571	A fill in hearth 12571. Peat ash w. Charcoal and stones
12543	FM	D	11545	A medium brown midden deposit rich in charcoal and bones
12544	FM	D	12625	A floor deposits. Part of the later group of floors in gr.12619. Made of rooty turf. Firm
12545	FM	D	12618	A part of a fill in the northern part of the main room of building (7500). Turf and stones
12546	FM	D	11545	A clay silt deposit in midden 11545. Rich in charcoal
12547	FM	D	12625	Stones in a floor deposit. Same as 12544
12548	FM	D	12621	Part of a stone built platform ore pavement in the south-west corner of the main room
12550	FM	D	12620	A row of stones. Part of wall shorthening building(7500) of about 6 m.
12551	FM	D	11545	A charcoal, wood ash and peat ash dump in midden (11545)
12552	FM	D	12621	Part of a stone built platform ore pavement in the south-west corner of the main room

Number	Area	Type	Group	Description
12553	FM	D	12619	A stone blocking in eastern doorway of building (7500)
12554	FM	D	12622	A part of a bench up against eastern wall of (7500). Same as 12506 and 12533
12555	FM	D	11545	A mix of charcoal and turf debris in midden (11545)
12556	FM	D	12621	Part of a stone built platform ore pavement in the south-west corner of the main room
12557	FM	D	11545	A mottled deposit with charcoal and bones
12558	FM	D	11545	A silty clay deposit in midden 11545. Rich in charcoal and pebles.
12560	FM	D	11545	A turf deposit between layers in midden 11545.
12561	FM	D	12626	A part of a group of floor deposits. Earlier phase of gr.(12619). Friable. Composed of turf w. Charcoal and rocks
12562	FM	D	12618	A part of a fill in the northern part of the main room of building (7500). Turf and stones
12563	FM	D	12618	A part of a turf and stone blocking in corridor (12623)
12564	FM	D	12618	A part of a fill in the northern part of the main room of building (7500). Turf and stones
12565	FM	D	11545	A peat ash deposit in midden 11545.
12566	FM	D	12620	A row of stones with turf Part of wall shorthening building (7500) of about 6 m.
12567	FM	D	12626	A part of a group of floor deposits. Earlier phase of gr.(12619). Friable. Composed of turf w. rocks
12568	FM	D	12618	A part of a fill in the northern part of the main room of building (7500). Turf and stones
12569	FM	D	11545	A brown turf deposit between layers in midden (11545)
12570	FM	D	12618	A part of a fill in the northern part of the main room of building (7500). Turf and stones
12571	FM	G	12619	A hearth at the north end of building (7500)
12572	FM	C	12619	A cut for hearth (12571)
12573	FM	D	11545	Wood ash deposit w. Shells, bones, charcoal and stones.
12574	FM	D	12618	A part of a fill in the northern part of the main room of building (7500). Turf and stones
12575	FM	D	12624	A yeallow brown turf deposit (with few stones). Leveling deposit under pavement 12624
12576	FM	D	11545	A peat ash deposit in midden 11545. Contains shells, bones, charcoal and paches of wood ash
12577	FM	D	12618	A part of a fill in the northern part of the main room of building (7500). Turf and stones
12578	FM	D	12619	A smal stone structure under floor 12567. Possibly belonging to an earlier phase
12579	FM	D	11545	A dark brown midden deposit. Rich in shells, stones, charcoal and bones.
12580	FM	D	12618	A part of a fill in the northern part of the main room of building (7500). Turf and stones
12581	FM	D	12618	A part of a fill in the northern part of the main room of building (7500). Turf

Number	Area	Type	Group	Description
12582	FM	D	12619	A post pad on top of posthole 12584
12583	FM	D	11545	A shell deposit tin midden (11545)
12584	FM	D	12619	A post hole at the south end of the main room of (7500). Under post pad 12582
12585	FM	D	12624	A part of the stone facing of external pavement (12624)
12586	FM	D	12618	A part of a fill in the northern part of the main room of building (7500). Turf and stones
12587	FM	D	12618	A part of a fill in the northern part of the main room of building (7500). Turf and stones
12588	FM	D	11545	A turf deposit between layers in midden (11545). Mixed wit birch, charcoal pebles
12589	FM	D	11545	A medium brown midden deposit rich in charcoal and bones and peat ash as well as small stones
12590	FM	D	11545	A deposit in midden (11545). Turf mixed with peat ash, wood ash, charcoal, shells and bones.
12591	FM	D	12619	Same as 12575
12592	FM	D	11545	Deposit in midden (11545). Clay silt, rich in bones, small bits of charcoal and small stones.
12593	FM	D	12620	A row of stones. Part of wall shorthening building(7500) of about 6 m.
12594	FM	D	11545	A peat ash lense in midden (11545).
12595	FM	D	11545	A mottled deposit with bone, shell, wood ash and charcoal. In midden 11545
12596	FM	D	12620	Turf between stones in wall (12620)
12599	FM	D	11545	A peat ash fill in cut 12603, in midden (11545)
12600	FM	D	11545	A mixed turf layer between deposits in midden 11545. Includes birch twigs, wood and charcoal
12601	FM	D	12619	A part of the western wall of building (7500). Stone facing at south end. Will be discused in the report for 2013 season
12603	FM	D	11545	A cut in midden 11545. Filled with 12599
12604	FM	D	11545	A deposit of clay silt in midden 11545. Contains bones, gravel and shell.
12605	FM	D	12619	A part of the western wall of building (7500). Stone facing at south end (bottom). Will be discused in the report for 2013 season
12606	FM	D	11545	A deposit of peat ash mixed with turf inn midden 11545. Contains bones and gravel.
12607	FM	D	12626	A part of a group of floor deposits. Earlier phase of gr.(12619). Firm. Composed of turf w. charcoal and gravel.
12608	FM	D	12626	A firm deposit of stones an turf. Part of a group of floor deposits. Earlier phase of gr.(12619). Contains also wood and bricks.
12609	FM	D	11545	A compacted deposit of clay silt in midden 11545. Contains bones, wood and rocks.

Number	Area	Type	Group	Description
12610	FM	D	11545	A peat ash deposit in midden 11545.
12611	FM	D	12627	A dark gray deposit of wood ash and peat ash. Top layer in mound (12627). Contains charcoal and fire cracked rocks.
12612	FM	D	11545	A peat ash and shell deposit in midden 11545. Contains bones, charcoal and pebbles.
12613	FM	D	12627	A turf deposit mixed with wood ash with charcoal and fire crakced rocks. In mound (12627).
12614	FM	D	12627	A mixed deposit of turf and wood ash with charcoal. Contains also frequent fire cracked rocks. Last deposit in mound 12627, excavated in the 2012 season.
12617	FM	D	12618	A row of stones abuting fill in corridor 12623.
12618	FM	G	7500	The latest phase of building (7500)
12619	FM	G	7500	The earliest phase of building (7500)
12620	FM	G	12618	A stone wall. Part of a post 1907 reduction of building (7500)
12621	FM	G	12619	A Stone built platform in the south-west corner of the main room
12622	FM	G	12619	A rock platform w. Turf up against the eastern wall. Coposed of dep 12506, 12533 and 12554.
12623	FM	G	12619	A corridor fylled with turf and stones [7510, 12502, 12563]
12624	FM	G	12619	An external pavement on the east side of building (7500)
12625	FM	G	12619	A group of floor deposits. Later phase of gr.(12619)
12626	FM	G	12619	A group of floor deposits. Earlier phase of gr.(12619)
12627	FM	G	12619	A mound of wood ash and peat ash deposits seperrated by lenses of turf, on the west side of the main room in (7500). Contains also fire cracked rocks.
12628	FM	D	11545	A peat ash deposit in midden 11545.

Appendix 2. Farm Mound Sample Register.

Number	Area	Unit	Grid	Vol	Weight	Quant. Bags/buckets	Description/information
1	FM	12524				1 small bag	Entomology
2	FM	12551		10 L		1 bucket	Floatation
3	FM	12560		10 L		1 bucket	Floatation
4	FM	12565				1 small bag	Wood for identification
5	FM	12565				1 small bag	Egg shell for identification
6	FM	12573		10 L		1 bucket	Floatation
7	FM	12576		10 L		1 bucket	Floatation
8	FM	12579		10 L		1 bucket	Floatation
9	FM	12583		20 L		2 buckets	Floatation
10	FM	12589		10 L		1 bucket	Floatation
11	FM	12590		10 L		1 bucket	Floatation
12	FM	12592		10 L		1 bucket	Floatation
13	FM	12594		20 L		2 buckets	Floatation
14	FM	12595		10 L		1 bucket	Floatation
15	FM	12599		10 L		1 bucket	Floatation
16	FM	12600		10 L		1 bucket	Floatation
17	FM	12604		10 L		1 bucket	Floatation
18	FM	12606		10 L		1 bucket	Floatation
19	FM	12609		10 L		1 bucket	Floatation
21	FM	12543				1 small bag	A PH- sample. Unprocessed
23	FM	12599				1 small bag	A PH- sample. Unprocessed
24	FM	12599				1 small bag	Charcoal and wood for indentification
25	FM	12600				1 small bag	A PH- sample. Unprocessed
26	FM	12604				1 small bag	A PH- sample. Unprocessed
27	FM	12606				1 small bag	A PH- sample. Unprocessed

Number	Area	Unit	Grid	Vol	Weight	Quant. Bags/buckets	Description/information
28	FM	12609				1 small bag	A PH- sample. Unprocessed
29	FM	12610				2 small bags	A PH- sample. Unprocessed
30	FM	12628		10 L		1 bucket	Floatation. (Renumbered. Used to be 12618)
31	FM	12558				1 small bag	Pieces of textile for identification.
32	FM	12567				1 small bag	Pieces of textile for identification.
33	FM	12579				1 small bag	Pieces of textile for identification.
34	FM	12597				1 small bag	Pieces of textile for identification.
35	FM	12597				1 small bag	Pieces of textile for identification.