

## Midden Investigations at Holt, S Iceland

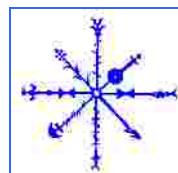
### July 2003



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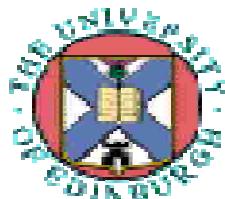
**CUNY Northern Science  
and Education Center**



NORSEC

Field Report 2003-02

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A product of the Leverhulme Trust Project "Landscapes Circum Landnám" and North Atlantic Biocultural Organization (NABO) Research Cooperative.

## Introduction:

During July 14<sup>th</sup>-17<sup>th</sup> the CUNY Northern Science & Education Center (NORSEC) collaborated with the **National Museum of Iceland** and the Leverhulme Trust Project “**L**andscapes **C**ircum **L**andnám” in the investigation of possible midden deposits around the farm of *Holt* in S Iceland. The investigations were supervised by Dr. Guðrun Sveinbjarnardóttir for the National Museum of Iceland and by Drs. Sophia Perdikaris and Thomas McGovern of the City University of New York (CUNY) and Drs. Andrew Dugmore and Mike Church for the University of Edinburgh. The project was greatly aided by the work of the CUNY students participating in the 2003 Research Experience for Undergraduates (REU) program supported by a major grant (US National Science Foundation, Arctic Social Sciences Program) to Dr. Perdikaris. All artifacts, finds, photos and site records are archived at the Icelandic National Museum, and a CD with a full digital archive accompanies this report.

## Objectives

The objectives of the 2003 investigations were to:

- Relocate geological sections taken along drainage ditches near the farm of Holt first excavated in 1980 by teams led by Dr. Paul Buckland.
- Determine relationship of possible midden materials to those in 1980's to the farm site nearby.
- Locate midden deposits with intact stratification and conditions of organic preservation.
- Sample midden deposits for artifacts, animal bone, wood, and soil micromorphology.
- Train students in stratigraphic excavation and recording of complex midden deposits.

## Excavations

The 2003 season was rapidly successful in relocating and clearing the most important of the 1980 test cuts (HO 1 near the modern cess road, see Buckland et al 1991 for full description). We did note the presence of midden material in the upper portions of the section (as drawn originally), but the deposits did not seem particularly bone rich and appeared to be fairly recent in date. The director of the County Museum at Skógar Mr. Tómasson and the owner of the farm (and resident minister of Holar church) Sr. Halldor Gunnarsson suggested that we shift investigations from the HO 1 area near the road to a position about 100 m to the N along the same drainage ditch. Mr. Tómasson had collected some artifacts from this area when the ditch was cut, and all our Icelandic informants agreed that the more northern area (closer to the modern farm and churchyard) was more likely to produce the deep midden accumulations we were seeking. They proved correct.

Four days of excavation allowed us to open three excavation units in the same general area (GPS N 63 deg 33.057', W 19 deg 47.467", 22 m). On the 14<sup>th</sup> of July Unit 1 was opened as a 2 x 2 meter excavation at the edge of a depression along the side of the ca 2.5 m deep drainage ditch, Unit 2 (2 m x 2.4 m) was opened in the W side of the ditch the same day. Unit 3 (2 m x 1.75 m) was opened the following day (15<sup>th</sup> July) on the E side of the drainage ditch to better understand the connection between the ditch and the cultural layers it cut. All in situ cultural layers were sieved through 4 mm mesh (dry) to ensure consistent recovery of small bones and finds. A general GPS aided tape and compass sketch site plan (figure 1) was prepared to show the spatial relationship of these excavation units and to establish their connection to the earlier geological profiles to the south. Note that figure 1 is only a digital photo of the central portion of this plan, which exists as a much larger ms map on drawing film in the site archive.

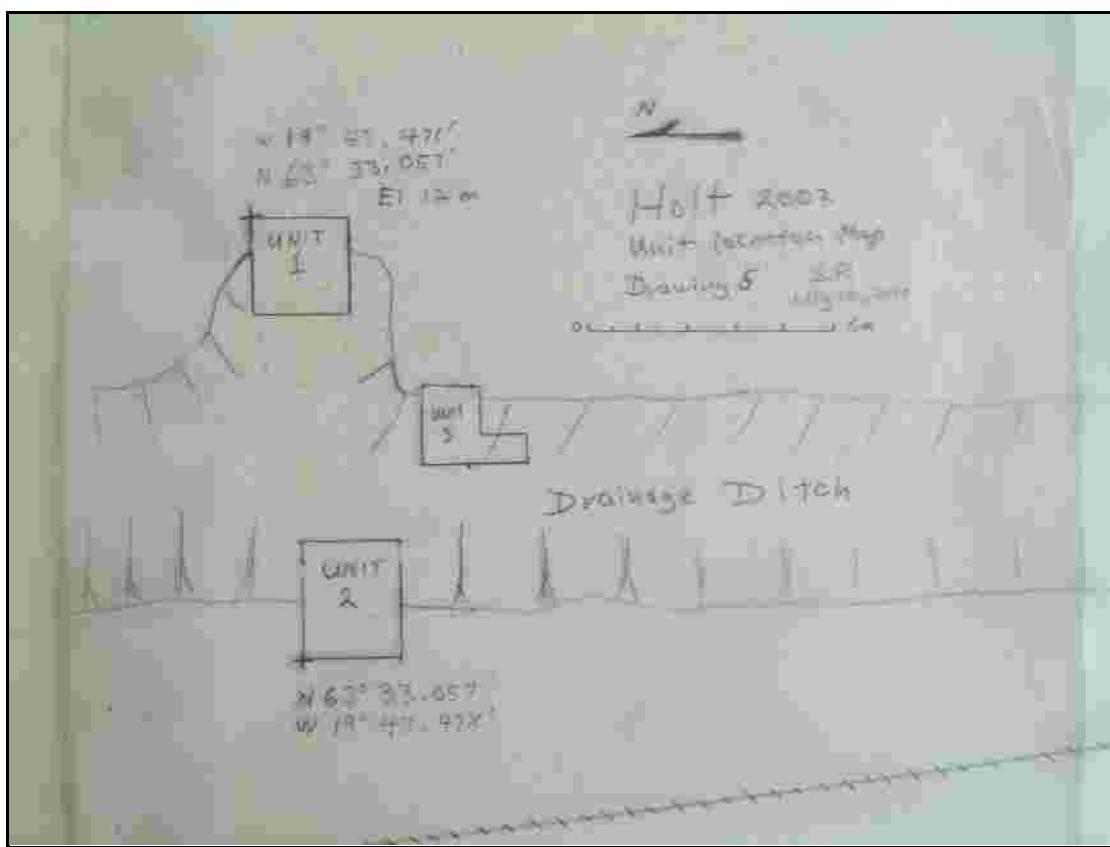


Figure 1 Excavation Unit location Map.

Figures 2 and 3 present photos of the excavation in locating the working area relative to the modern farm buildings and the N-S drainage ditch itself.

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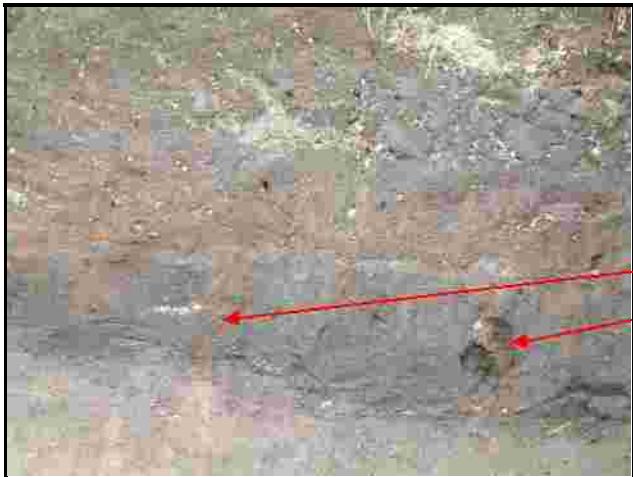


Figure 2 View of working area from the South



Figure 3 View of working area from the East

**Unit 1** (about 4 m E from the eastern side of the drainage ditch) revealed some widespread deposits of ash, charcoal and burnt animal



despite a pH of ca 6.5 there was little or no unburnt bone material in this area. The Eastern end of the unit encountered a strange deposit of near-clay like highly compacted silt that had apparently dried and fractured (much like patterned ground polygons on a small scale, allowing iron rich water to later penetrate and deposit some interesting (but non-cultural) vertical reddish stripes and horizontal linear features in this area (see figure 4 at left).

cultural deposits appear to rapidly thin and disappear on this eastern side of the drainage ditch, but we did encounter a well defined se circular pit dug into this portion of the site. It was filled with rather acid (pH 5.0) mixed ash, charcoal, bone, and what appears to be modern window glass. When emptied, this pit (context 030) showed the clear impression of a shovel cut in its base (figures 5 & 6, original horizontal plan is in site archive). Unit 1 appeared to be providing limited information on earlier contexts, and it was backfilled on July 16<sup>th</sup>.



Figure 5



Figure 6

**Unit 3** was opened at the edge of the E side of the drainage ditch in attempt to



get a longer profile extending back into medieval times (fig 7 left). A series of well stratified layers were observed in both E and N faces of the unit, and a clear sequence of ditch cutting, re-cutting, and filling was visible in the N face (see profiles figures 7 and 8 also originals in site archive). The cultural layers were not very bone or artifact rich, but did contain charcoal, ash, and some burnt bone. At the base of the deposit a layer of densely packed stones was encountered,

and several well preserved bones were recovered from this context, including a harbor seal (*Phoca vitulina* L.) humerus. A small rim shard of brown glazed earthen ware was recovered from this basal context (see artifact photos, find HLT 21). The layer of stones and well preserved bone lay directly upon a densely packed wet natural silt deposit. No in situ tephra were observed in the archaeological layers, but a small portion of the 1947 tephra was observed in the edge of the exposed ditch cut. In the unit 3 area, it would appear that the oldest cultural deposits are late medieval or post-medieval period and do not extend to the settlement period in this area.



**Unit 2** (below) was the most productive excavation unit, and was expanded from a  $2 \times 1$  m to a  $2 \times 2.4$  m unit to allow for a better connection of the deep profile with the drainage ditch edge. This set of profiles (see profiles in site archive and appendix to this report) allowed better observation of the relationships between the deeply stratified cultural deposits and

the natural stratigraphy revealed by the ditch cut. The excavation was narrowed to 60 m wide to allow for completion of the unit to sterile soil in the time

available. This sondage allowed a better understanding of the deposit, and in fact allowed us to reach what proved to be extremely rich and productive midden layers near the base of the deposit (contexts 110-112). These contexts produced



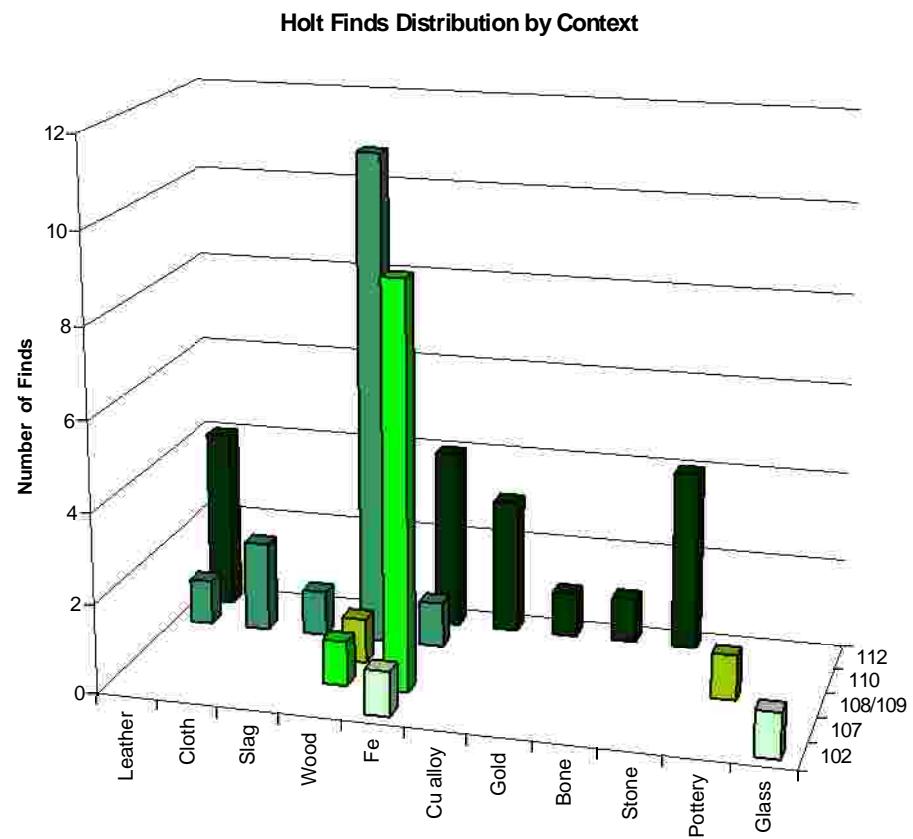
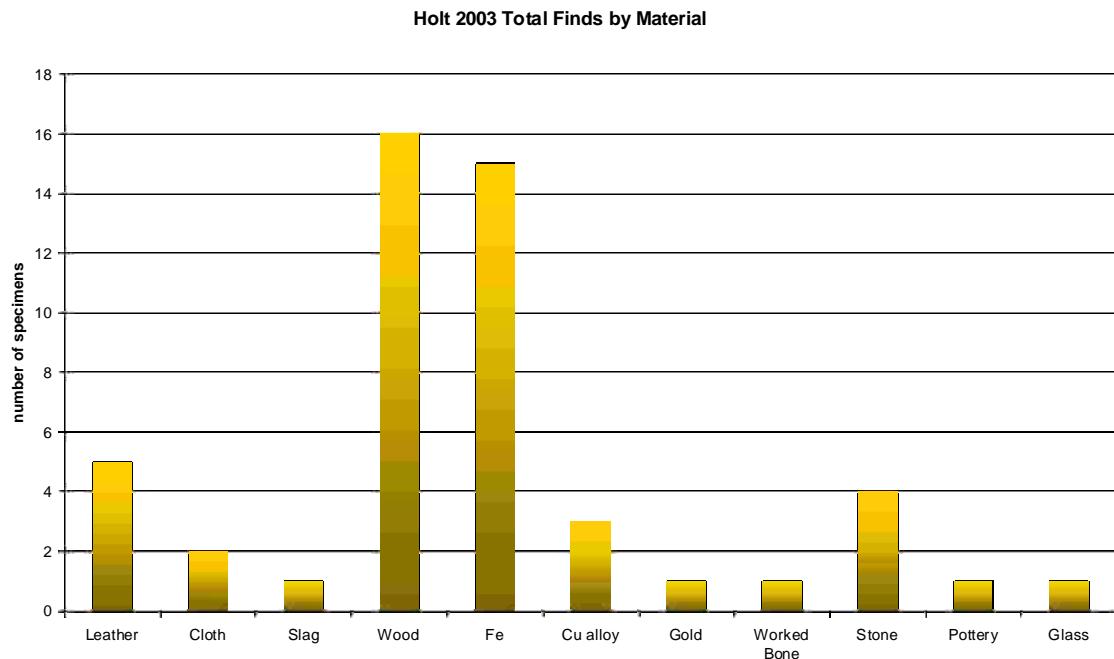
the bulk of the finds (see finds register attached and in CD archive), but a few finds were made higher in the profile, including the turned wooden gamesman (frontispiece, find HLT 18). Many pieces of well preserved wood, woolen cloth, and leather were present throughout the profile, but preservation became noticeably better towards the base. The lowest layers showed many signs of prolonged water logging- black stained bones, bright copper alloy

objects, patinated iron, and excellent organic preservation including most of a leather shoe sole (left side, find HLT 54). The base of the culture deposit was a thick pavement of stones, some flat, others angular, and many rounded pebbles and cobbles (below left). Bones and artifacts were wedged deeply into the cracks around these stones, and it is not clear from the small area opened if this is a natural or a cultural feature. Three fragmentary cod hammers (left) were



incorporated into this stone layer, probably intentionally. The same deposit produced a dense concentration of well preserved bones and artifacts packed in and around the stones. In any case this stony layer is deposited directly upon the dense, clay-like silt subsoil which apparently impedes drainage significantly.

**Finds & Samples:** As the finds register (CD archive) and the summary graph of finds by material (below) indicates the majority of finds from all contexts were made of iron and wood, though a wide range of organic artifacts (wood, leather, woolen cloth, bone) were present in the basal (112 & 110) contexts. A small collection of well preserved bones (including fish, seal, cattle, horse, and sheep) was recovered (almost entirely from the basal layers) a set of 5 Kubiena tins were collected from the Unit 2 profile for laboratory samples register in attached project CD archive for a listing of samples and finds by context.





Copper strip with rivets in bright condition, Unit 2 context 112 (basal). A loose copper rivet and a smaller strip fragment were also recovered in similar condition.



Gold covered iron nail, Unit 2 context 112 (basal)

Other iron finds were mainly lumps and undecorated hand forged nails



Leather shoe sole (left) from Unit 2 context 112). Several small pieces of leather strips (cut off scrap or thongs?) were also recovered from the waterlogged basal deposits.

**Recommendations for Further Research**

While the 2003 season clearly did not reach the Viking age, it did uncover deposits that may well date to the 16<sup>th</sup> century, and appear to span most of the early modern period. The excellent conditions of organic preservation suggest that major collections of well preserved artifacts and bones can be made from this area, and a larger program of work cutting back the face of Unit 2 would be extremely productive archaeologically, while the water logged conditions may allow significant paleoenvironmental sampling at the same time. Finally, the site is an excellent location for a training dig for both Icelandic and overseas students. We strongly recommend further work at Holt in the near future.

**Acknowledgements and Thanks**

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**Attachments:**

- 1) Selected Artifact photos
- 2) Environmental sample register
- 3) Context register
- 4) Finds register
- 5) Original plans and drawings
- 6) CD archive of all digital records