

Midden Investigations at Steinbogi (SBO)  
Mývatnssveit, N Iceland  
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**Summary:** During the 2002 field season of the *Landscapes of Settlement Project* (directed by *Fornleifastofnun Islands* with collaboration by the NABO cooperative) the CUNY team was tasked to locate and excavate midden deposits associated with the small abandoned farm Steinbogi in Mývatn district (28 W 0399697, UTM 7276512, ca 280 m asl). The site is endangered by highway construction and is a disciplinary rescue regional research target of a multi-effort as part of the overall and education effort. The midden team located an extensive midden deposit up to 75-80 cm thick in front of what appears to be the main house mound. A 3 m midden unit K was begun, and carried through to subsoil in sondage. Significant amounts of well preserved animal bone were collected, along with artifacts suggesting a medieval date for the majority of the deposit (including the games piece illustrated above). The midden is not deposited upon an undisturbed natural surface, but rests on what was probably extensive turf cuttings that have been carried to the surface of the prehistoric H3 tephra. There are no other in situ tephra visible, even the thick 1477 tephra seems to have been removed by later turf cutting. However the surviving midden deposits are quite rich in well preserved bone and artifacts, including a single sided comb fragment roughly dating main context to pre-1200 AD. The deposit is well worth further investigation and should provide a welcome comparison to later phases of the other Mývatnssveit archaeofauna.



### ***Midden Location Strategy***

***Phase 1 Investigations- Coring Work*** (July 22-24) involved extensive use of an Oakfield tube-type soil corer around the presumed farm mound visible beneath a more recent sheep house (structure A ) built ca 1890 on top of an older set of structures (structure B). The team consisted of Dr. Sophia Perdikaris (Brooklyn College CUNY), CUNY Graduate Center doctoral student Matt Brown, NSF REU undergrads (Brooklyn College) Jennifer Braun & Yekaterina Krivogorskaya, and Dr. Tom McGovern (Hunter College CUNY). The soil corer allowed for relatively non-destructive probing below the thick sod covering the site, and we attempted to push all cores to the distinctive thick creamy prehistoric H3 tephra to ensure that we had penetrated all cultural layers. A total of 43 cores were taken and recorded, allowing a generalized picture of deposition around the farm mound to be built up. The coring transects ran down slope from the possible mounds visible on the surface, and were generally lines of cores ca. 5 m apart. Coring points were marked with numbered wire flags for location using the backpack Trimble GPS system.

The cores revealed that there was little or no cultural material in or around three circular depressions to the NW of the farm mound, leaving the function of these depressions unclear. Cores directly in the center of the depressions produced no floor material or any clearly cultural deposits, and no cultural material was present in any cores directly outside. The coring program around the main farm mound was initially only a little more successful. It is clear that there is no significant accumulation of cultural materials along the edge of the terrace above the Laxá, or along the edge of the small stream rising just SE of the farm mound (both possible midden dump areas based on other sites). The lower slopes of the hillside below the farm mound 10-20 m from the main structure are not entirely free of evidence of human activity, as we repeatedly found few traces of charcoal flecks visible in layers below the 50-70 cm thick natural sod and brown andisol overburden. We also found evidence of turf cutting in an area on the terrace below the farm mound, with the distinctive H3 prehistoric tephra appearing several times in a single core due to local disturbance. These cultural indications did not however have the characteristic signature of an Icelandic midden (concentrations of wood and peat ash, wood charcoal, burnt bone), and appeared to represent only diffuse evidence of human activity in the local area.

Three localities presented a different picture. The first of these was on the middle terrace just uphill from the source of the stream to the SE of the farm mound. Here cores 10 & 11 indicated deeply stratified banded mounds extending down to 150 cm below surface. This area was sampled by test pit 3 (TP3) and revealed a deeply buried turf structural wall overlain by a small ashy midden deposit (ca 5 cm thick). The second was at the edge of the terrace supporting the apparent main farm ruin, where deep cultural deposits turned out

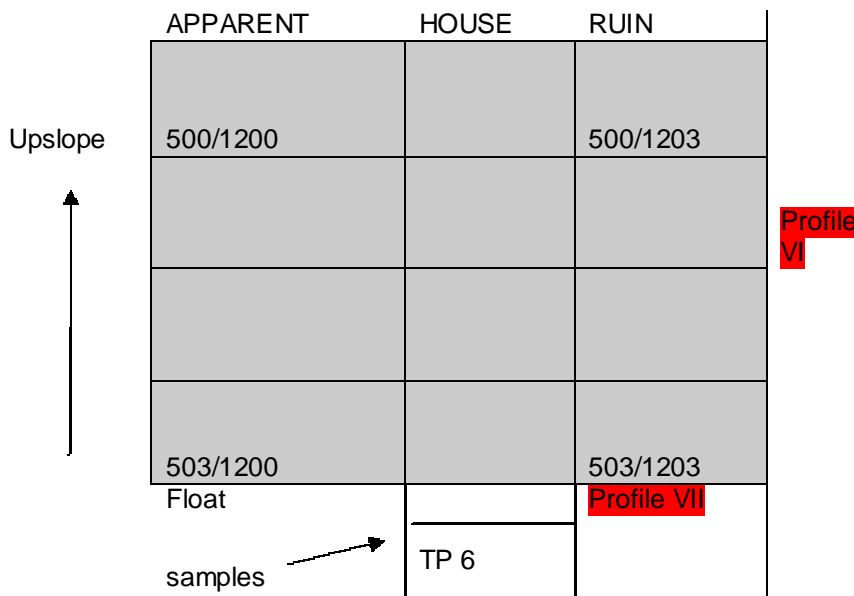
to be mainly structural . The third was directly in front of the main ruin area, and did produce a stratified midden deposit (GPS 28 W 0399697, UTM 7276512).

**Phase 2 Test Pits:** In the three areas where cores indicated deep stratified cultural material below the brown andisol sterile overburden we dug 1 x 2 m test pits to investigate the nature of the deep deposits indicated (July 23-25). Given the depth of deposit (up to 2.2 m) a smaller test pit size would be unproductive (the “telephone booth” problem). The first midden test pit (test pit TP# 3 for the site as a whole) encountered a small amount of grey ash and bone, but it quickly became apparent that this was only a small lens overlying a turf wall construction. We turned the test pit over to the structures team at this point, see their profile drawings and report.

A second set of cores located at the edge of the farm mound about 10 m uphill from test pit #3 indicated deep stratified deposits extending for nearly 2 meters below surface. We opened a second test pit (TP # 5) and quickly encountered a thick construction of layers of turf, grass horizons, and only a very limited amount of bone and charcoal. This deposit remains unexplained, but it appears to be associated with a sustained effort to level the area immediately around the farm by piling up turf cut nearby. It is not a midden deposit in the sense of a stratified refuse pile, and we again turned the further investigations of this unit over to the structures team.

Cores 42-43 directly in front of (NE of) the main structure wall also turned up layers of cultural materials, and these looked more like normal midden deposits. Test pit #6 (2x1 m) revealed dense concentrations of bone, charcoal, and a few artifacts from clearly stratified deposits. These findings appeared to justify a larger unit to better understand the deposits and to make collections. We thus laid out a larger 3x3 m midden excavation unit (Unit K) roughly parallel to the main axis of the house mound, incorporating the SW half of the TP 6 unit.

**Phase 3 Midden Excavation:** Between July 26<sup>th</sup> - August 1<sup>st</sup> we began stratigraphic excavation of the midden deposits revealed by cores 42 and 43 and by test pit 6. Using test pit 6 as center, we set out a 3 x 3 m open area excavation unit, unit K. Unit K has a numeric grid system following FSI conventions, with origin point (1200/500) at the SW corner of the unit. The grid takes in the W square of TP6 but not the eastern, which was left as an access point and sampling square for whole soil samples (collected from contexts 02, 03, 05 Aug 1<sup>st</sup>). The effect of the layout is to move the excavation unit W (upslope, closer to the structure), in an attempt to include more of the earlier phases of the midden deposit. The Unit K layout is as below:



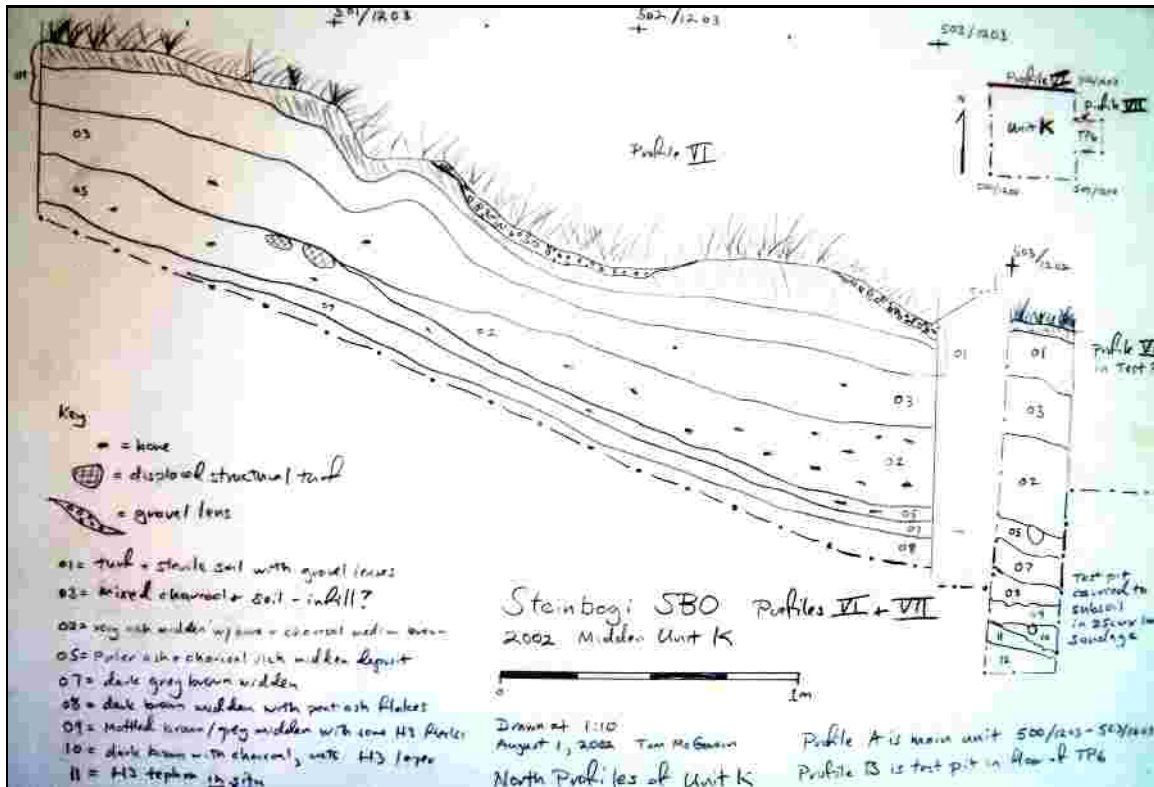
**Description of Midden Deposits at Steinbogji**

**Stratigraphic Truncation:** The unit K excavations uncovered extensive layers of midden deposit in clearly undisturbed stratigraphic position (contexts 02, 05, 07, 08, 09, 10, see context sheets) which were locally very rich in well preserved mammal, bird, and fish bone and which generated a number of artifacts of broadly medieval date (see illustrations attached, database record and digital photos in CDR archive). In these respects the SBO deposit is very similar to other middens investigated in the Mývatn region (HST, SLH, HRH, SVK).

However the SBO midden deposit does appear to be different in character from any of the other Mývatnssveit midden deposits in that it appears to have no *in situ* tephra dating to the historic period either above or below the stratified midden material. The only *in situ* tephra appears to be the distinctive thick creamy H3 prehistoric tephra below the cultural deposit, and this is now in direct contact with the lowest midden layers. We are thus missing substantial natural (and possibly cultural) deposits between H3 and the lowest observed midden layer (context 10). Not only is the bottom of the deposit missing, but we appear to be missing natural and probably cultural deposits above the stratified midden as well. No sign of the thick and widespread 1477 tephra was apparent in any of the long profiles of the K unit, nor were any of the other local post – Landnám tephra immediately apparent. Instead, there is a wide spread band of 10-15 cm thick brown deposit (context 03) between the modern turf layer (context 01) the first clearly *in situ* midden layer (02) . This context does contain a few scattered bones in fair to poor condition and a lens of ash, charcoal and bone (context 06), but does not seem to be *in situ* midden. Something very similar to

03 appears in most of the cores taken around the structure area, and it appears to underlie the modern turf over much of this area. We suspect that this is in fact a mixed deposit infilling turf cuttings that have removed both the later tephra and (probably) the uppermost portions of the midden deposit. We thus seem to have a truncated deposit that may be difficult to date through tephra. the band of midden that remains intact appears productive the site has considerable importance for further investigation.

Profiles VI and VII SBO Midden Unit K



Profiles of the N sections of the K unit (profile VI) and of a 25 cm wide sondage in the NW corner of Test Pit 6 taken to subsoil (profile VII). Note the steep slope and the change in bedding angle at context 002. This context has been richest in bone concentration and has also produced a single sided composite comb fragment (artifact #SBO 43) and also the haddock bone chess man (artifact #SBO 47). More bone was recovered from the base of the slope (502/1200-03 area) than from higher up the slope, but some bone and artifacts were present all across the unit. A neonatal cattle innominate fragment was collected for radiocarbon analysis for context 002, and other K samples should be selected from the bone bags.



Test pit 6 is opened around core 42. Laxá river valley and the site of Hofstaðir are visible in background.



The test pit 6 rapidly reveals well stratified midden materials, requiring a larger excavation unit for effective observation and recovery.

- 01 modern turf
- 03 mixed infill
- 02 in situ midden layer
- 04 in situ midden layer (NB: this is a small context and does NOT appear in profiles)



Following standard NABO/FSI practice, all midden material is sieved through 4mm mesh, with a sub-sample retained for floatation. Most artifacts as well as small bones are in fact recovered in the sieves.



NW corner (uphill) of the Unit K at the level of context 07. Note the thick modern turf and the broad band of mixed infill (03) below.

- 01= turf
- 03= infill w/charcoal flecks
- 05= upper midden, has some structural turf and flecks of displaced H3 tephra.
- 07= Midden layer. (scale 30 cm)



**Summary and Recommendations:** While the midden deposit at Steinbogi is somewhat truncated by extensive turf cutting, and probably does not extend far into the early settlement period, it is nevertheless an important archaeological resource. The deposits appear to date to the period before 1200 (based on single sided comb and lack of biperforated metapodials, and thus are broadly contemporary with the final phases at Sveigakot. The deposits also provide a view of the economy of a small and ultimately unsuccessful farm in the Laxá drainage within site of Hofstaðir, adding an important dimension to our understanding of regional patterns. The midden deposits in the area around unit K seem rich in bone and artifacts (53 registered finds from the brief 2002 work) and it will be a straightforward project to expand the present unit to N, S, and E. Work at Steinbogi could be easily integrated into ongoing work at Hofstaðir and could provide useful student training as well as expanding bone and artifact collections and improving our understanding of the deposit as a whole.

#### Attachments:

- 1) Profile Drawing (drawing film)
- 2) Completed context forms with context plans (paper)
- 3) Contact sheet print of artifacts (photos in digital archive)
- 4) Finds register (database in digital archive)
- 5) Zooarchaeological Sample register (excel spreadsheet in digital archive)
- 6) CDR digital archive.