

# EXCAVATION REPORT

Grundskatan  
Lappsandberget  
Jungfruhamn  
Raä70  
Stora Fjäderägg  
Snöan  
Lövångers Kyrkstad  
Västerbottens län  
SWEDEN



Noel D. Broadbent



DECEMBER 2005



# EXCAVATION REPORT

RAÄ 78 (Fällan 1:13)

RAÄ 139 (Bjurön 6:1)

RAÄ 144 (Bjurön 6:1)

RAÄ 70 (Bjurön 6:1)

Stora Fjäderägg

Snöan

Lövångers Kyrkstad

Västerbottens län

SWEDEN

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National Museum of Natural History

Smithsonian Institution

Washington, D.C.



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## BACKGROUND

The site of Grundskatan (RAÄ 78) in coastal Västerbotten is well known and has been described by Hallström in the book: *Lövånger. En sockenbeskrivning* (1942-49). The site consists of as many as 50 stone features including hut floors (*tomtningar*), cairns, a labyrinth and a so-called Russian oven. Hallström was open to the possibility that the hut complexes were Saami sites and he noted their similarity to the Saami *Stalo* huts in the mountains (1949:76). He also expressed the need for more research.

The sites are designated by Central Board site registry *Riksantikvarieämbetet* (Raä) numbers. Features are also designated as *anläggningar* (Anl.).

Archaeological investigations of the site and region were undertaken by the author in the late 1980s and investigations at Grundskatan (RAÄ 78) have been previously reported (Broadbent 1987a, 1978b, 1988). These studies were part of the Humanities and Social Science Research Council (HSFR)-funded Project "Seal Hunting Cultures of the North Bothnian Region" which was published in a number of reports through the Center for Arctic Cultural Research at Umeå University (refer Broadbent 2000).

A new investigation at RAÄ 78 was initiated in 2004 in order to follow-up on the results of the Seal Hunting Cultures Project. The new project title is: "The Search for A Past. The Prehistory of the Indigenous Saami in Northern Coastal Sweden." This project is funded by the U.S. National Science Foundation (OPP 640143). The object of the investigations in 2004 was to complement excavations of a hut and cairn (Feature Anl. 4) that had rendered bear bones which have now been interpreted as a ritual bear burial (Broadbent & Storå 2002).

Britta Wennstedt Edvinger had earlier drawn attention to another type of archaeological feature of ritual significance on the Upper Bothnian coast in the article: *Kultplatser i Övre Norrlands kustland (Oknytt 3-4: 25-34* (1989). These circular features are known in Lapland and in North Norway where there is oral-historical evidence that they were Saami sacrificial sites. Wennstedt Edvinger has documented several of these sites in Byske Parish in northern coastal Västerbotten.



The object of investigating RAÄ 144 on Lappsandberget was to document a new circular site in the coastal zone. This feature was originally observed and photographed by the Seal Hunting Cultures Project in 1987 and registered in the RAÄ Survey from 1994 as “a stone circle of older character, a grave?” (VBN FR 144). The new objects of this report, a bear grave and a circular sacrificial site, help to better understand the cultural significance of this region as Saami territory.

The documentation of Features 11-15 at RAÄ 78 and RAÄ 139 and 70 in Skellefteå kommun, and investigations on the islands of Stora Fjäderägg and Snöan in Umeå kommun, are also presented. This work was undertaken in 1986 – 1988. Finally, a test trench at Lövångers Kyrkstad is described.

All the excavations were refilled and restored as far as possible to their original appearance. All radiocarbon results are given for each individual site. Calibrations are based on Oxcal.

Most of the original maps, figures and photographs have been kept at the Department of Archaeology and Saami Studies at Umeå University. These materials should now be returned to Skellefteå Museum where they can be properly archived.

The goal of publication and analysis of the archaeological material from Seal Hunting Cultures Project is being fulfilled through support of the U.S. National Science Foundation Project. Included in this project will be the full publication of osteological analyses together with Jan Storå (cf. Storå & Broadbent, manus, and Broadbent & Storå 2002) as well as other technical analyses.

Special thanks goes to all the participants in this project. Rabbe Sjöberg produced excellent drawings based on the field maps. These have been revised in the present publication, so thanks also goes to Elaine Reiter and Kimberly Consroe for their work. Skellefteå Museum, especially Annika Sander, has remained a good friend of this project. Starting in 2004, Britta Wennstedt Edvinger has been a tremendous asset. Finally, many thanks goes to Bill Fitzhugh and the SI Arctic Studies Center and Dan Rogers of the SI Department of Anthropology for their support and encouragement.



## The Region

The investigated region is situated on the Swedish coast in the County of Västerbotten , Latitude 63 - 64° N, 21° E.

The area of study is within Skellefteå Municipality (kommun) and Umeå Municipality.

## Topography

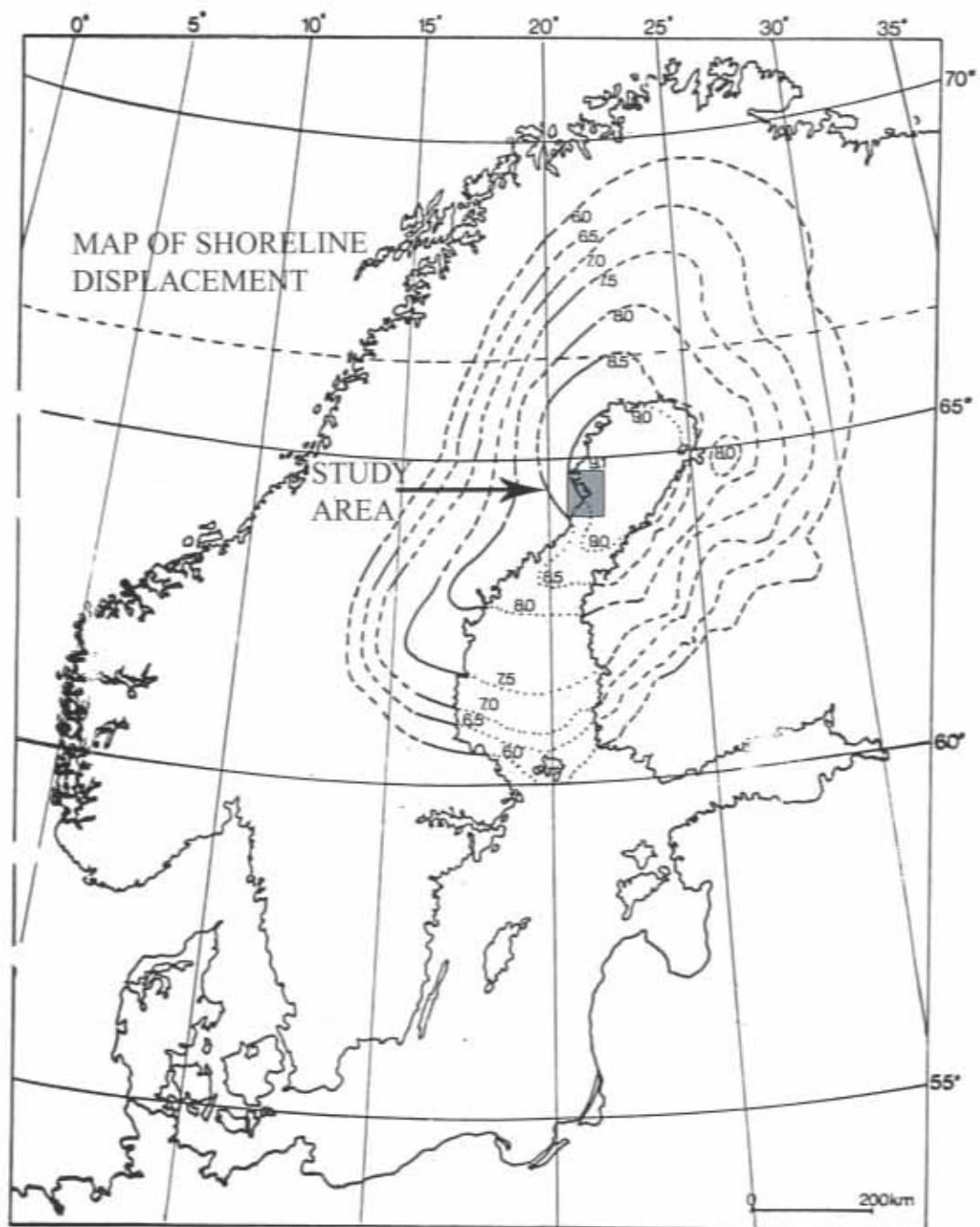
These coastal sites are located on islands and outer coastal areas up to 20 m above sea level. Moraine features, including drumlins, have all been wave-washed and consist of sandy-gravel and boulders mostly less than 1.0 m in diameter. The soils display a weak podsol profile. The exposed beaches often have distinctive terrace formations. Shoreline displacement is currently as high as 0.91 mm per year.

## Vegetation

Vegetation consists primarily of pine heaths with dry blueberry (*vaccinium*) type ground cover. Lichen vegetation is abundant (especially reindeer lichens). The areas of study are in Nature Reserves and there are a number of rare plants of mountain *fjäll* type. Birch and alder woods predominate on marshy and low-lying ground. Alder is also typical on the Bothnian shore at the 2.0 m elevation above sea level.

## Climate

The climate is continental with a local maritime influence and a positive temperature anomaly in the fall. Average June temperature is 12° C. The average December temperature is -7° C. Coastal ice forms in mid-November and ice-cover lasts until late May. Annual Precipitation: 438 mm. Snow Cover: 140 – 160 days. Growing Season: (3° C) 5.5 months. Mean Temp. of warmest month: 15° C. Mean Annual Temp: 5° C.



**Figure 1. Map of shoreline displacement (mm/year) and the study area on the coast of the Bay of Bothnia, Northern Sweden.**



# ARCHAEOLOGICAL GOALS

1986-1988, 2004

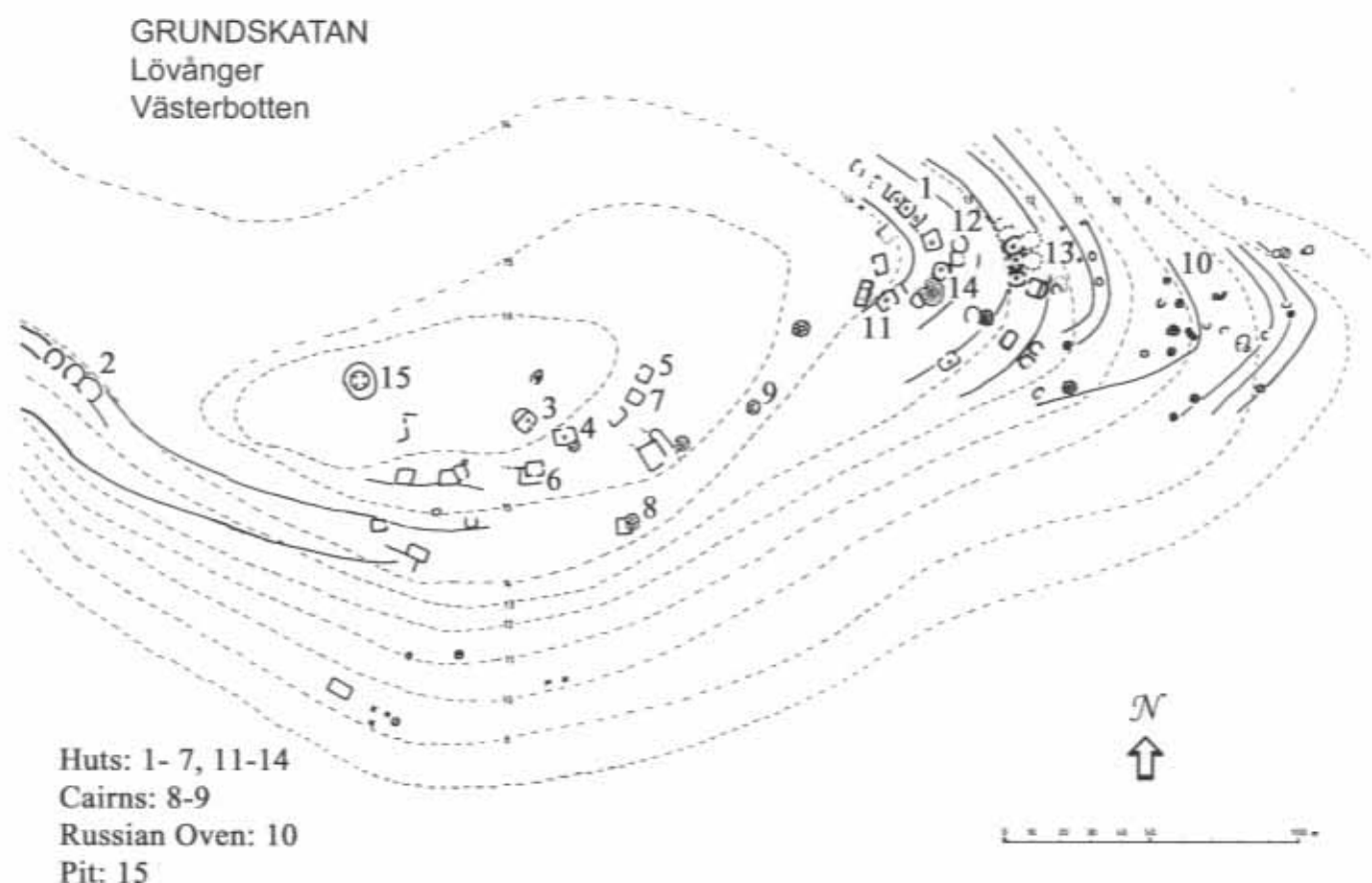
The following report presents:

- 1) The sampling of Features 11, 12, 13, 14 and 15 at Raä 78. The results of field investigations at Grundskatan, Raä 78 (Features 1 – 10), were reported in Broadbent 1987a, 1987b, 1989a.
- 2) The sampling of Raä 139.
- 3) The sampling of Raä 70.
- 4) The investigation of Feature Anl. 4 at Raä 78.
- 4) The investigation of Raä 144.
- 5) The sampling of Features A, B, C, D and Gamla Hamnen, Raä 31-33, 35 Stora Fjäderägg.
- 6) The sampling of Raä 49, 53 92, Snöan.
- 7) A test trench at Lövångers Kyrkstad.

# PERMITS

Fieldwork was based on permits issued in 1985 (11.391-1279-85), 1986 (11.391.1107-86), 1987 (11.391-1210-87), 1988 (11.391-1342-88), and 2004 (431-3100-2004).

# GRUNDSKATAN, RAÄ. 78



**Figure 3. Map showing archaeological features at Grundskatan site (Raä 78) mapped by the Center for Arctic Cultural Research Seal Hunting Cultures Project. The features (*anläggningar*) are shown by numbers which correspond to the order in which they were investigated.**

## METHODS

A soil auger was used to locate hearths in features. All excavation was performed using hand tools. All soil was screened using a 4 mm mesh. A metal detector was used to scan for any potential metal objects and evidence of iron technology. Soil samples were collected and analyzed for phosphate enrichment



## FEATURE 11 (Anl. 11)

Feature Anl. 11 is a rectangular hut foundation measuring 7 x 5 m in size. The elevation above sea level is 14.0 m. The walls of the hut consist of beach cobbles and average c. 1.0 m in width and 0.3 m in height. The floor of the hut measures 5.0 x 3.5 m. A third cobble wall forms a small open addition to the hut. This feature is 4.5 m long and 3.0 m wide. A 2.0 m wide entrance to the hut opens towards the southeast. A hearth was located near the rear wall, and a 2.0 x 1.5 m pit was excavated to expose the hearth. The hearth deposits were found just beneath the humus and extended 10 – 20 cm b.s. A tree stump was located in the hearth area and several large roots penetrated the deposits. Two profiles were drawn (A, B). No animal bones were found in the hearth, but 300 g of iron slag were recovered. A radiocarbon date of charcoal from the hearth gave in an age of  $1175 \pm 100$  BP (A.D cal. 720 – 980).

This hut appears to be more of a workshop than a dwelling and a narrower rectangular foundation was found several meters behind it.

Feature Anl. 11  
Grundskatan

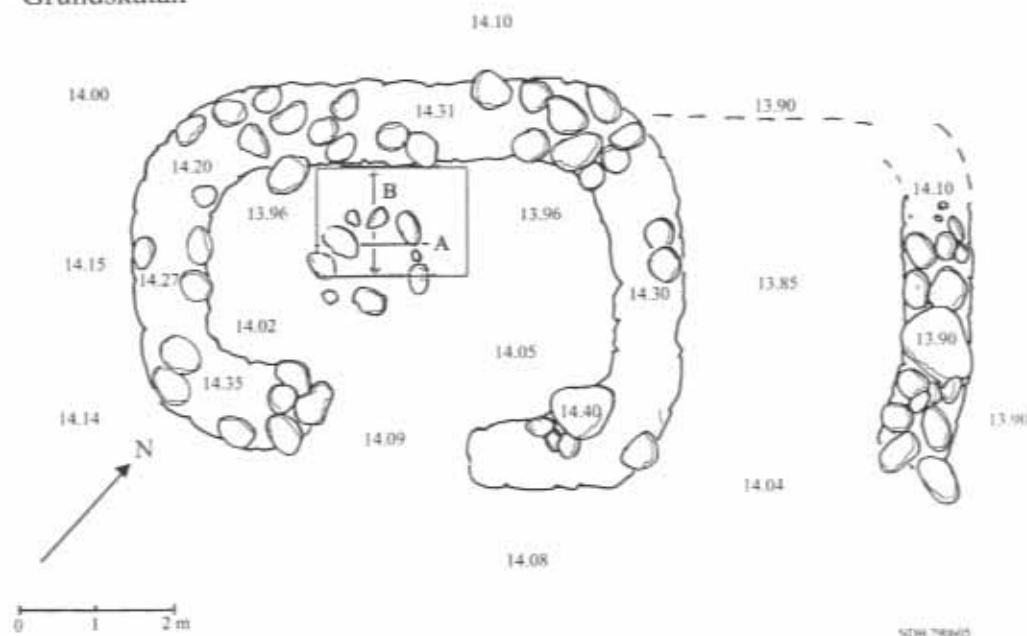
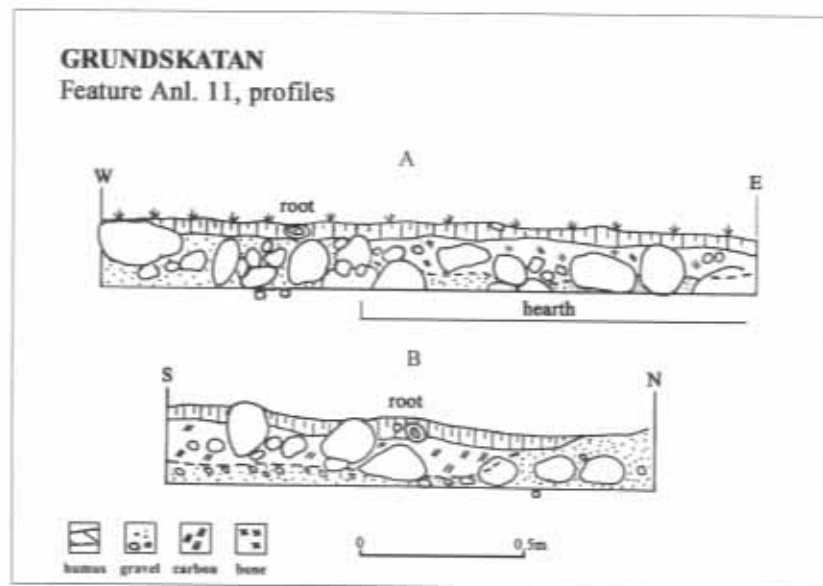


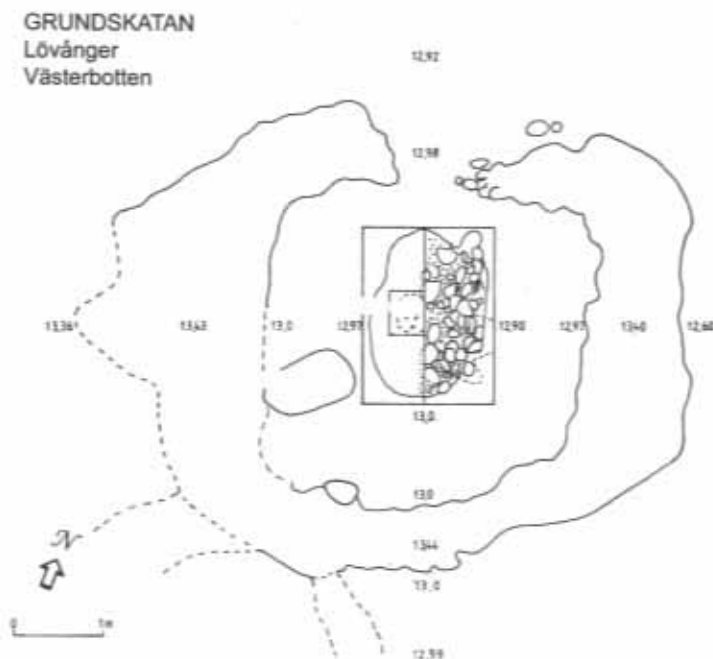
Figure 4. Map of Feature Anl. 11 and area of excavation.



**Figure 5. Profiles of Feature Anl. 11. This hut and wall feature rendered finds of iron slag indicating the manufacture of iron tools on the site.**

## FEATURE 12 (Anl. 12)

Feature Anl. 12 is a horseshoe-shaped hut foundation measuring 8 x 6.5 m. The elevation above sea level is 13 m. The floor area measures 3.5 x 3.5 m. A single 1.0 m wide entrance faces north.





Grundskatan  
Feature anl. 12  
Profile

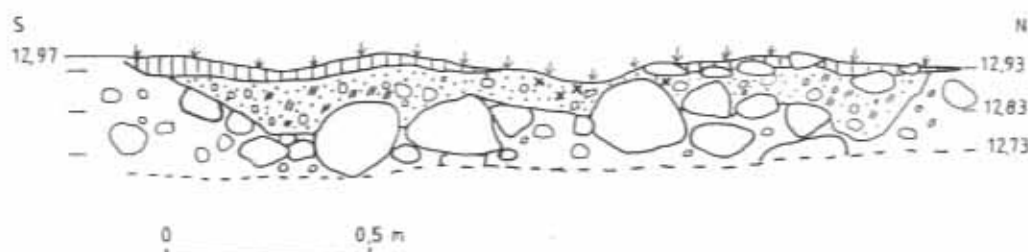
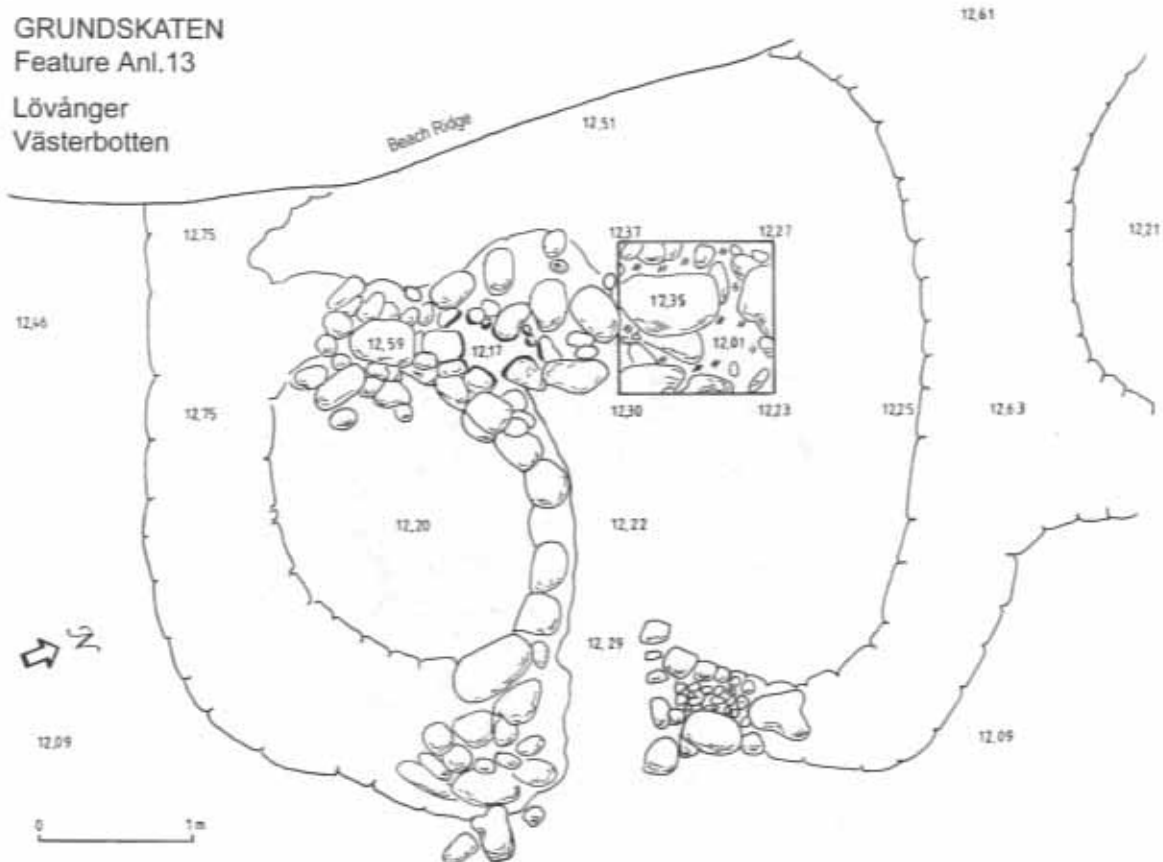


Figure 6. Map (pg. 11) and Profile of Feature Anl. 12.

A central hearth was visible on the moraine surface through vegetation growth. The hearth had been partially disturbed on the surface. One half of the hearth was excavated in a 2.0 x 1.0 m pit which rendered animal bone (17.06 g) and charcoal. A radiocarbon dating (St. 11171) of  $1430 \pm 110$  BP (A.D cal. 430 -- 770) was obtained.

## FEATURE 13 (Anl. 13)

Feature Anl. 13 is a hut construction built into a beach ridge. It is abutted by two additional hut constructions. The hut is located at approximately 12 m above sea level. The investigated hut measures 4.5 x 6.5 m and has a floor area of approximately 4.0 by 4.0 m. The walls are approximately 1 m wide and 30 to 50 cm high. A 50 cm wide entrance faces east. The floor area can be divided into two sections: one of which is a floor with a hearth and the second a 2.0 x 1.5 oval construction. This small chamber within the hut can be a storage unit. A 1 m<sup>2</sup> pit was excavated in the floor area. Charcoal deposits were encountered down to c. 20 cm b.s. This charcoal (St. 11908) rendered to date of  $1045 \pm 110$  BP (A.D cal. 880- 1160). One find was made, a quartz chip measuring 14 mm in length. Five small slag pieces were floated from a soil sample.

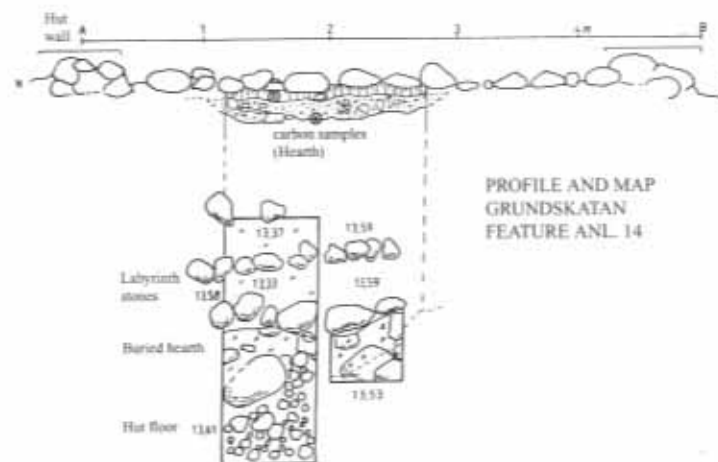
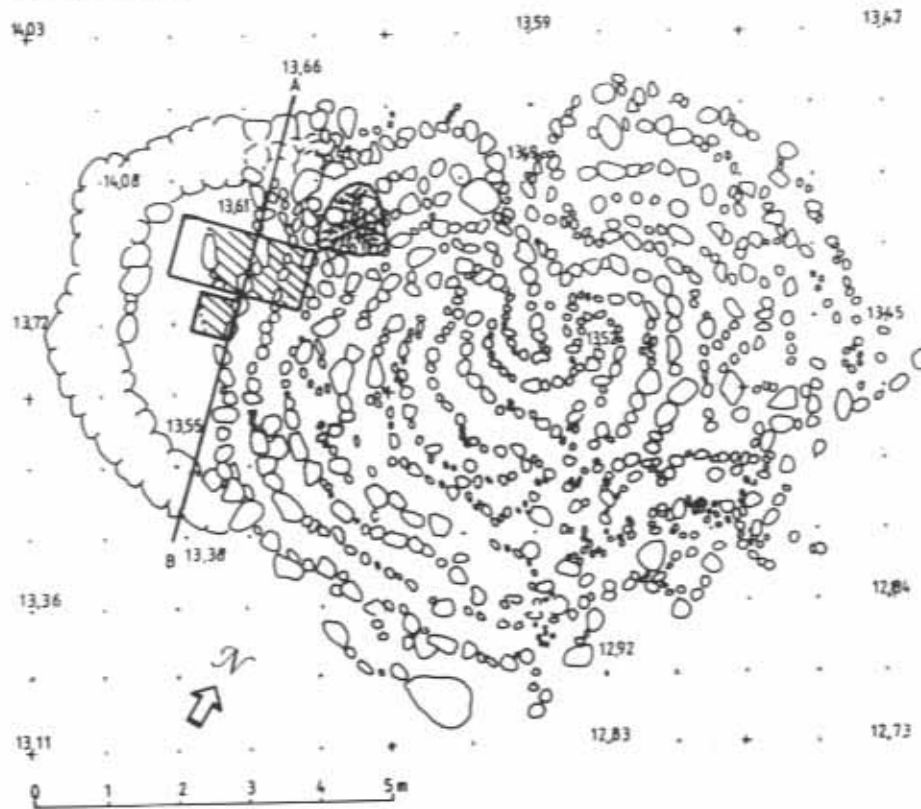


**Figure 7. Feature Anl. 13 consists of a room with a smaller oval construction, probably a storage area.**

## FEATURE 14 (Anl. 14)

Feature Anl. 14 is a labyrinth measuring 8 x 9 m. The labyrinth has 10-11 rows of stones and is situated at approximately 13 m above sea level. The entrance to the labyrinth faces north/northwest. The labyrinth overlies a hut wall measuring 6 m across. The exposed interior of the floor area is 4 m across. A 2 x 1 m trench and 50 x 50 cm square were excavated across the labyrinth stones in order to expose the hearth in the hut. This excavation was successful, and rendered animal bones (16 .04 g) and two radiocarbon dates: (St.11173) 1145±100 BP (AD cal. 770 -- 990), and (St. 11174) 1000±180 BP (A.D cal. 860 --1230). The hearth deposits extended to 20 cm b.s.

GRUNDSKATAN  
Lövånger  
Västerbotten



**Figure 8. Map of labyrinth and hut Grundskatan Feature Anl. 14. The labyrinth had been deliberately built on top of the hut and wall stones used for construction.**



**Figure 9. Photograph from excavation of Feature Anl. 14 in 1986. The labyrinth stones, floor and hut wall are exposed. View towards W.**

## CONCLUSIONS

This feature established the chronological relationship between the huts and the labyrinth. It is likely that the stones from the hut walls were used to construct the labyrinth. The hut dates to the same period as the majority of huts at Grundskatan, the Late Iron Age. The labyrinth has lichen sizes giving the feature a minimum age of A.D. 1472 to 1525.

## FEATURE 15 (Anl. 15)

Feature Anl. 15 is a large pit measuring 10 m by 12 m across and 2.0 m in depth. The pit was dug into the moraine at the highest level of the drumlin



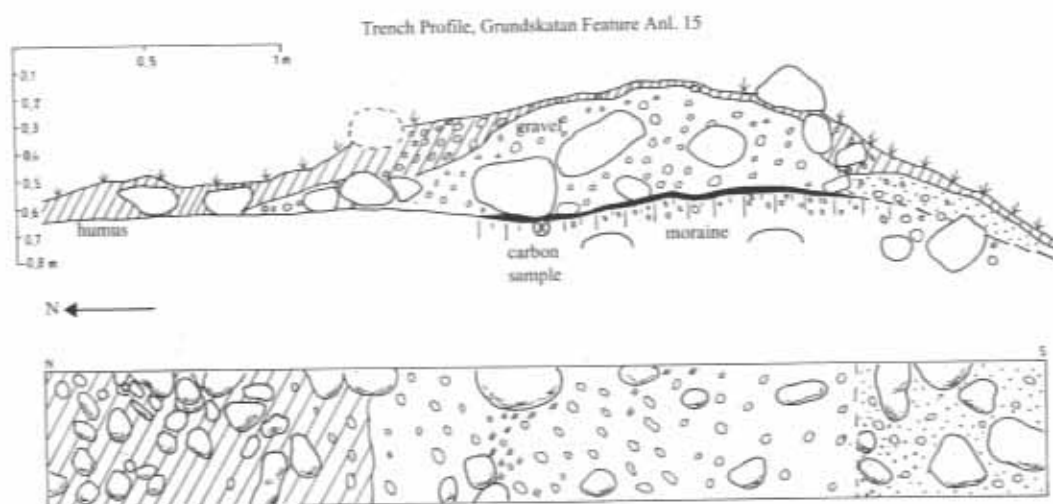
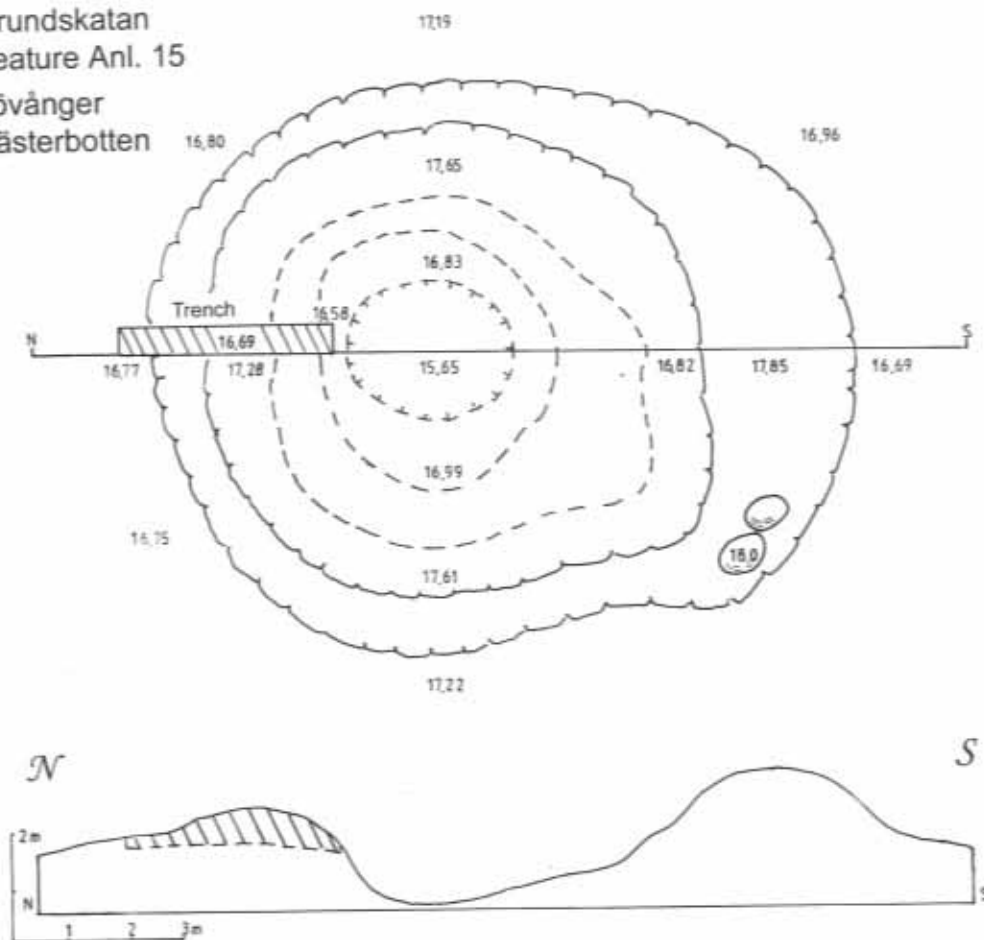
at 17 m above sea level. A surrounding gravel wall was created and measures approximately 50 cm in height.

A 4 m long and 50 cm wide trench was excavated through the north wall of the pit. The trench extended down to the former ground level where a thin charcoal layer was found.



**Figure 10. Greg Lavallee standing in Feature Anl. 15 holding a 2 m measuring rod. The ridge can be seen at the c. 1.0 m level and the wall rises above his head. Photo: Noel Broadbent 2004.**

Grundskatan  
Feature Anl. 15  
Lövånger  
Västerbotten



**Figure 11. Feature Anl. 15 rendered a radiocarbon date of  $670 \pm 250$  (AD cal. 1030 – 1470).**

## CONCLUSIONS

A small carbon sample was collected and submitted for analysis. The radiocarbon date (St. 11175) is  $670 \pm 250$ BP (A.D. cal. 1030 -- 1470). Although this date has a broad range, it does show that the pit can be contemporary with the huts. Approximately half way down the inside of the pit is a narrow ledge or offset. This suggests there could have been a construction at that level. There is no side access to this pit. It is interpreted as a blubber rendering pit and seal oil could have been collected at its base.

## JUNGFRUHAMN, RAÄ 139

### HUTS A & B

This locale was mapped and sampled within the framework of the project in 1987. Two huts were sampled, designated Hut A and Hut B. The elevation above sea level for the huts is 15 m.

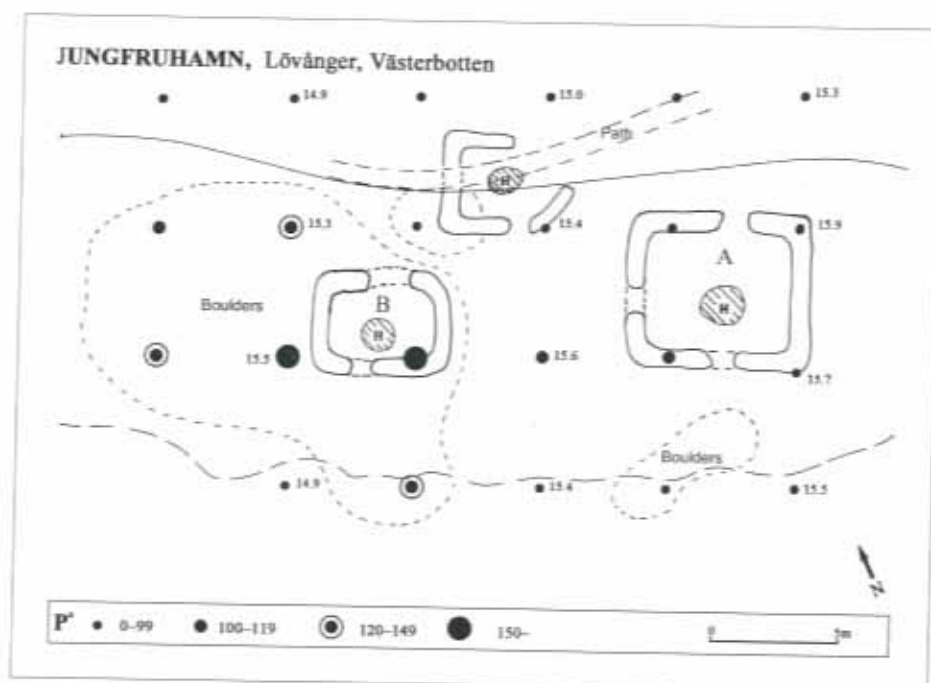
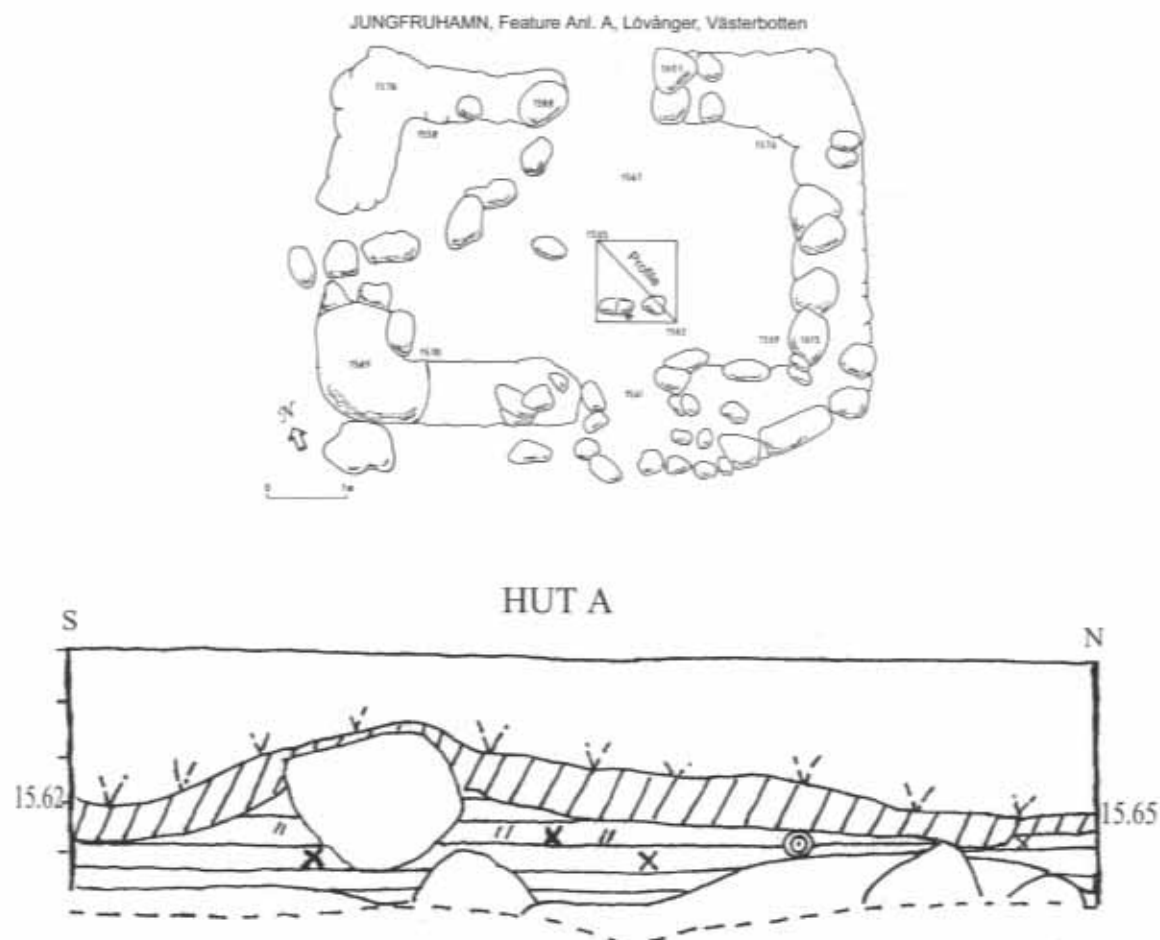


Figure 12. Phosphate sampling was conducted by Johan Linderholm. Values above 120 P° were obtained around Hut B.



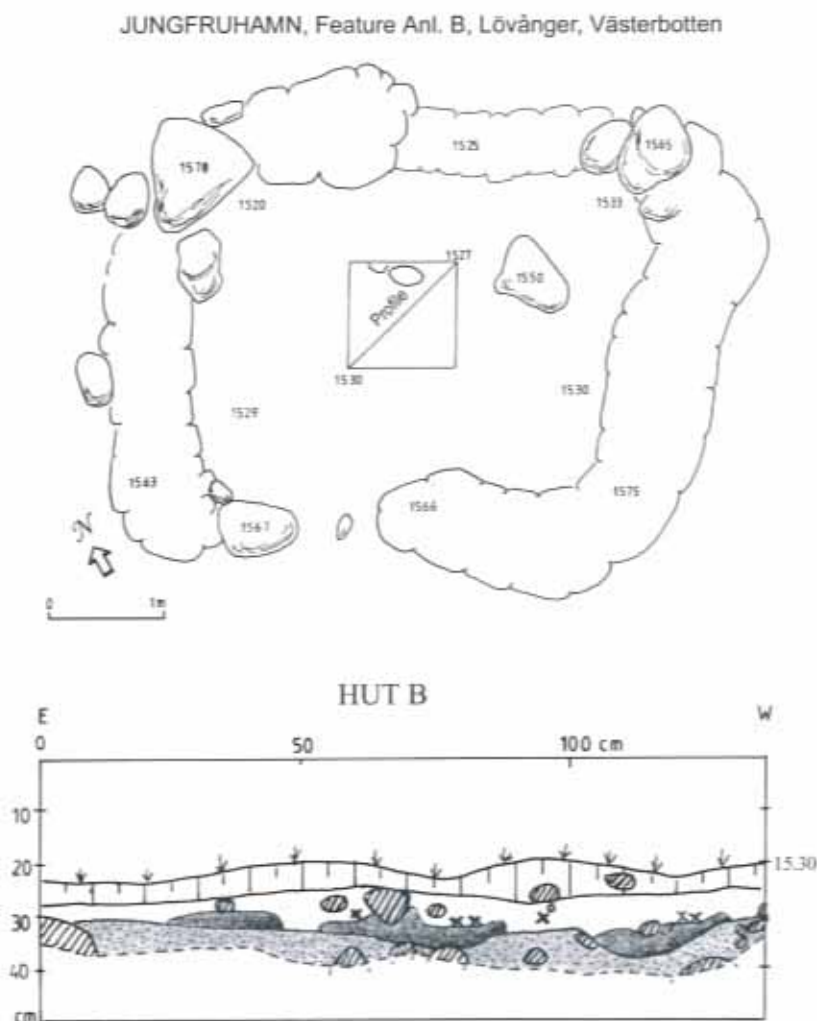


**Figure 13. Above: Map of Hut A and excavation unit. Below: Profile drawn diagonally across the square and through the hearth.**

Hut A is rectangular and measures 7.5 x 5.5 m. The hut has two entrances on the opposite walls facing northeast and southwest. The floor area measures 5 x 3 m. A 1m<sup>2</sup> test pit was opened up in order to sample the hearth. A diagonal profile was drawn through the pit showing a layer of 10 – 20 cm burned soil with bone and charcoal. A radiocarbon date was obtained (St. 11176) 985±70 BP (AD cal. 980-1160). Burned bone was found, 58.8g, identified as seal and sheep/goat (Storå & Broadbent, manuscript).

## Hut B

Hut B is rectangular and measures 4 x 5.5 m. The floor area measures c. 3 x 3.5 m. A 75 cm wide entrance opens to the southwest and faces the inlet. A 1 m<sup>2</sup> pit was excavated to sample the hearth. A radiocarbon date was obtained (St. 11177) 1300±130 BP (AD cal. 630-890). Burned bone was recovered: 136.71 g, identified as ringed seal, a large ungulate and a bird (Storå & Broadbent, manuscript)



**Figure 14. Above: Map of Hut B and excavation unit. Below: Profile drawn diagonally across the square and through the hearth. Sooty deposits shown by gray and stippled areas. Fire-cracked rocks hatched.**

## Artifacts

white (burned) flint chip (15mm)  
gray flint chip (10mm)  
red brown flint chip (10mm)  
2 soapstone/asbestos (?) slivers (45 mm)

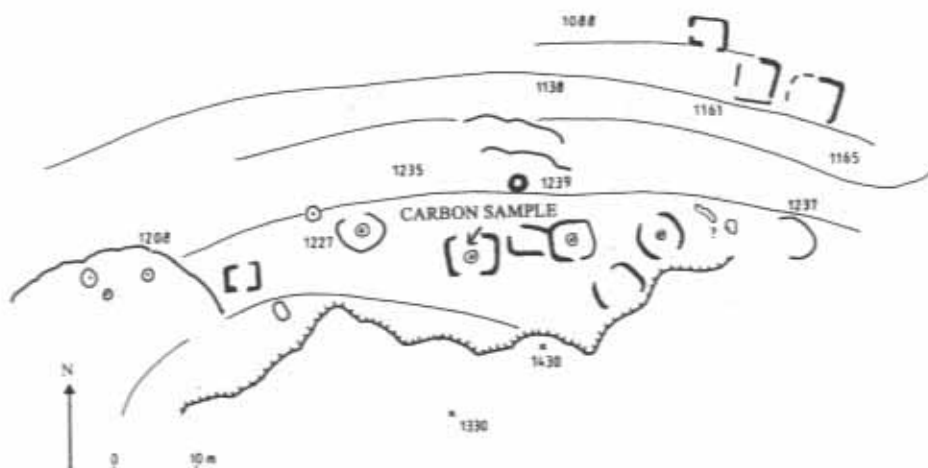
## CONCLUSIONS

This complex of huts along the Jungfruhamn inlet corresponds to Grundskatan by type. Hut B is older than Hut A and had more finds, including several types of flint and possibly some asbestos or soapstone. The animal bones from Hut A added a new species: sheep/goats. This suggests that husbandry was part of the economy and finds of ungulate bone can be reindeer or moose. Seal bone was found in both huts.

## RAÄ 70

This site consists of a group of hut floors and cairns near Jungfruhamn between 11 – 13 m above sea level (refer figure 2). A charcoal sample was obtained from a hearth on August 6-7, 1987, as well as 4.6 g of bone (seal). The charcoal was recently dated (Beta 196485) to  $1020 \pm 60$  BP (AD cal. 900 – 1150).

Fornl. 70, Bjuröklubb, Lövånger.



**Figure 15. Map of site complex (Raä 70) showing hearth sampled in 1987. A radiocarbon date is consistent with the Viking Period shoreline**

# THE 2004 INVESTIGATION

## ARCHAEOLOGICAL GOALS

1) The goals of fieldwork at RAÄ 78 in 2004 were to complete excavation of the cairn in Feature Anl 4. The goal was, besides complementing previous documentation, to better determine the stratigraphy at the site; additionally, to obtain any additional bone, carbon or artifacts associated with this feature. Soil sampling and testing of the cairn was also carried out. Maps from previous years were integrated with maps from 2004.

2) The goal of investigating RAÄ 144 was to document a circular stone feature of potential Saami origin on Lappsandberget. Excavation was undertaken both inside of the circle and outside of one half of the circle. Soil samples were collected for analysis.

## METHODS

All excavation was performed using hand tools. All soil was screened using a 4 mm mesh. A La Motte Soil N-P-K kit was used for the testing of relative amounts phosphorus in site soils. A metal detector was also employed.

## ADMINISTRATIVE INFORMATION

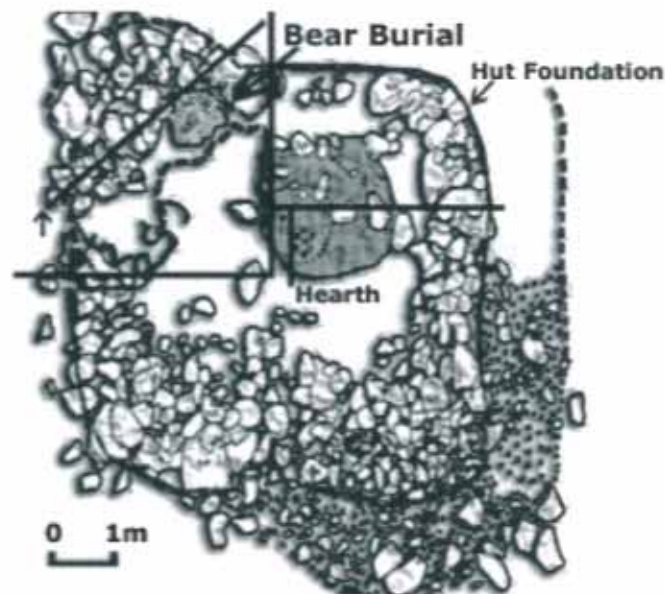
Date of Investigation: August 5-8, 2004.

Participants: Noel Broadbent, Elaine Broadbent, Rosanna Broadbent, Greg Lavalley, Britta Wennstend Edvinger.

Investigated Area: 12 m<sup>2</sup>.

## FEATURE 4 (Anl. 4)

Feature 4 (Anl. 4) is a hut situated at ca. 16 m.a.s.l. It lies together with numerous other huts and features at this site and elevation (Raä 78). The outside measurements of the hut are c. 5.5 x 5.0 m and the floor area measures 4.5 x 3.5 m. The cobble walls average 1.0 m wide and 0.30 – 0.50 cm high. A ca. 1 m wide entranceway is observable in the north wall of the structure. A second opening is on the opposite south wall but is more irregular and was probably disturbed when a cairn was constructed in the SE corner of the hut.



**Figure 16. Feature Anl. 4 with profiles (based on Broadbent 1987a).**

Elevations were determined using a laser level. The Datum point (15.97 m) was taken from a previously determined point on a boulder in the north wall of the hut.

In 1986 a 1 m wide and ca 10 cm deep trench was run across the middle of the hut floor and a centrally located hearth, which was c. 1 m in diameter not counting a surrounding ashy deposit. The hearth deposits were dry screened in the laboratory. Burned bone, 281 grams, and 34 grams of carbon were obtained. The carbon sample was radiocarbon dated (St. 10785) and rendered a date of  $1110 \pm 110$  BP.



An irregular cairn measuring c. 2.5 m across and c.0.4 m high was also partially exposed in the corner of the hut and revealed a deposit of chopped and broken bones, as well as three leg bones and burned teeth from a large mammal (Total 950 grams). At that time the appearance of these bones was so dissimilar to the bones from the hearth, these bones were judged as being more recent.

The bear bones were subsequently AMS- dated to  $1080 \pm 45$  BP (Ua-18930), showing that this feature was contemporary with the hearth. An osteological analysis of the bones by Jan Storå showed them to emanate from an adult bear and the circumstances of their burial parallels that of Saami bear burials (Broadbent and Storå 2003). These results are therefore of significance for understanding the identity of the people who built and used these coastal huts.

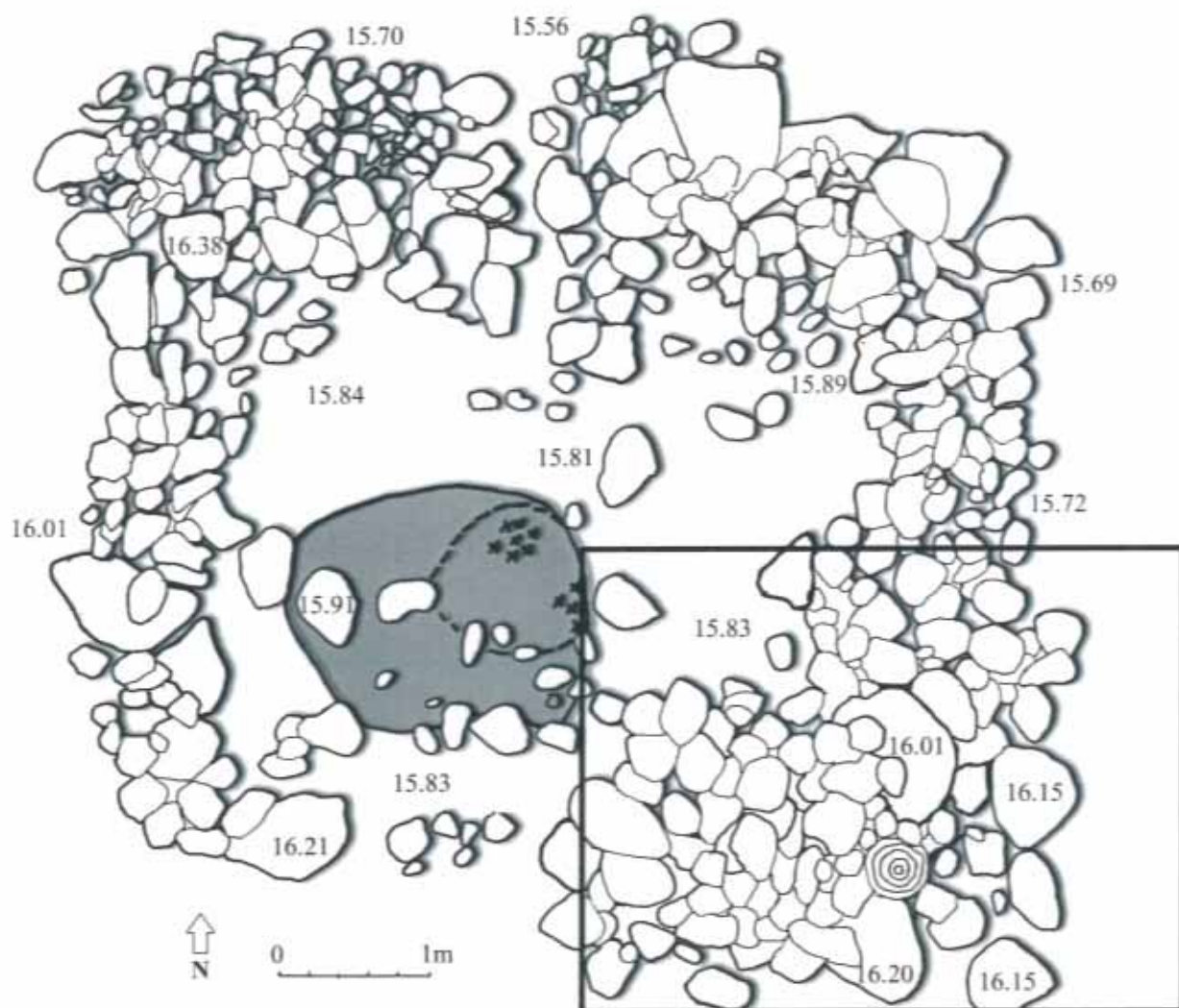


**Figure 17. Photograph facing east showing trench, position of the hearth, and the cairn in Feature Anl. 4 (Noel Broadbent 1986).**



**Figure 18. Above: View of Feature Anl. 4 facing SE. Below: View of partially removed cairn in Feature Anl. 4 (1986).**





**Figure 19. Map of Feature Anl. 4 and area investigated in 2004 (rectangle). Elevations show surface measurements above sea level. Hearth area shown in gray.**

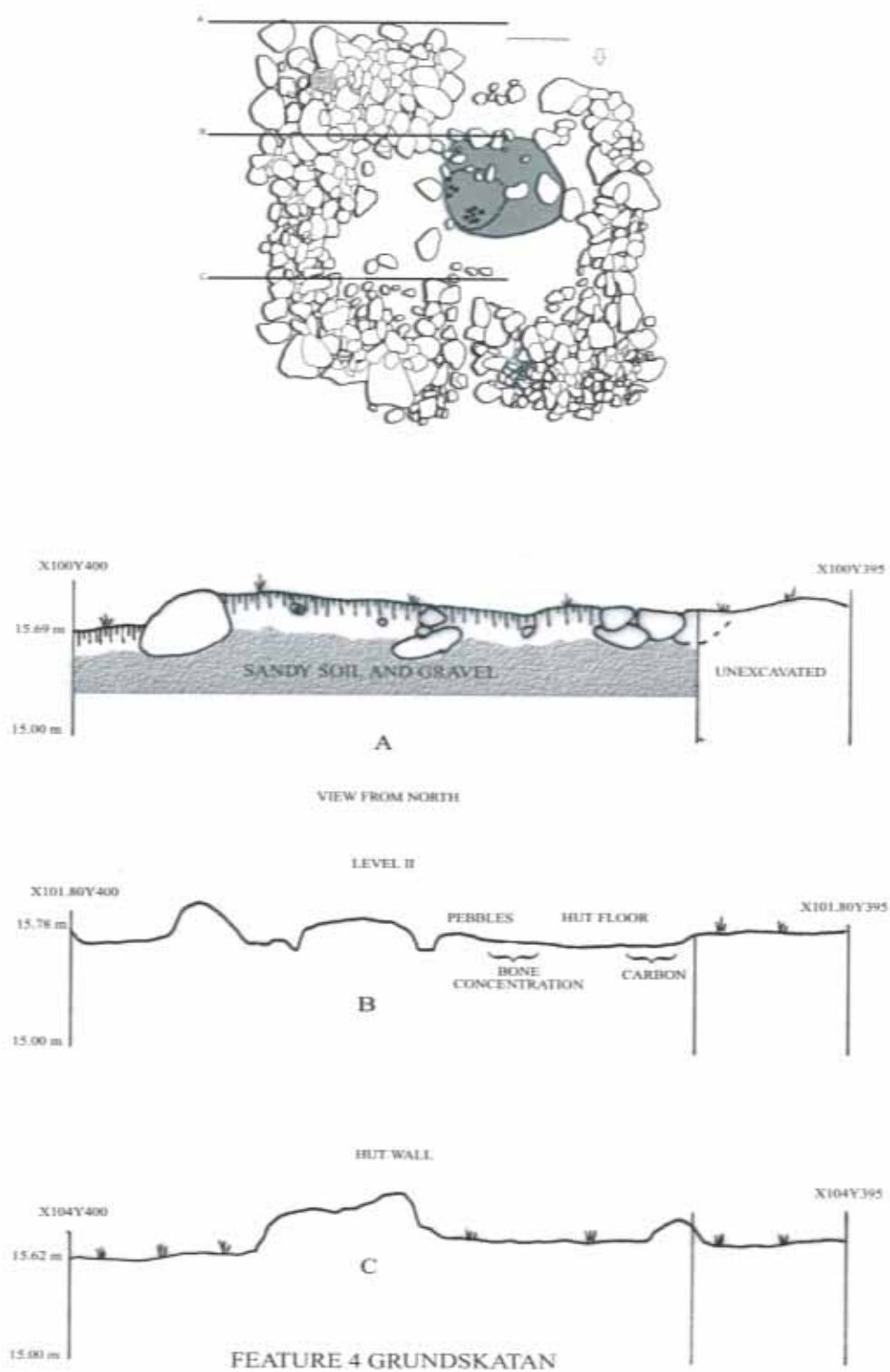
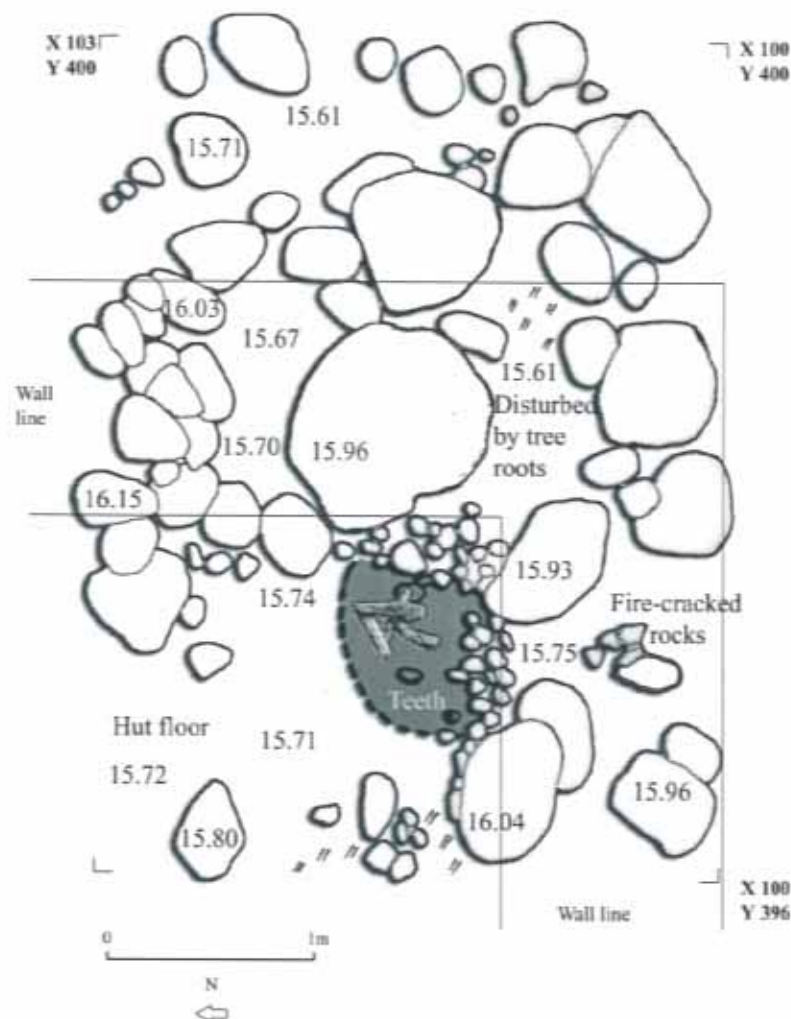


Figure 20. Three profiles through Feature Anl. 4 (facing S).



**Figure 21. Above: View towards S of exposed floor surface and area in corner where bear bones were found. Below: Close-up of pebbles found in corner of floor area (2004).**



**Figure 22. Map showing excavation area from 2004. Wall alignments indicated by lines. Pebbles found in corner of floor shown together with area where bear bones and teeth were found (dark gray).**

## PHOSPHATE SAMPLING

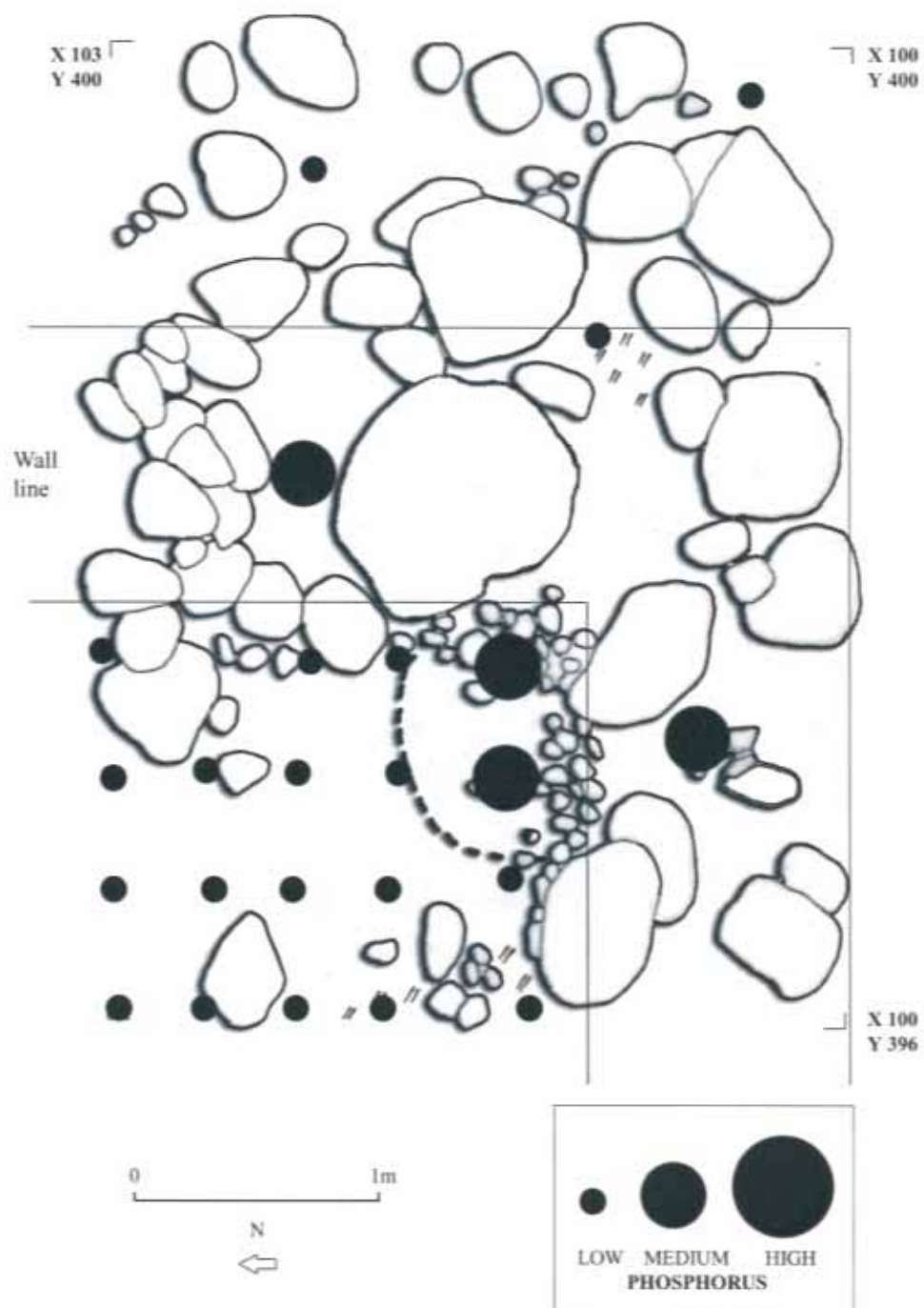
The La Motte system is based on a colorimetric scale indicating Low, Medium or High levels of soil enrichment. Based on comparisons with

previously analyzed soils samples on this site and hut area by Johan Linderholm (Broadbent 1987:57), Low phosphate levels correspond to 0 – 90 P°, Medium to 100 – 150 P° and High to >150 P°. The highest measured enrichment on the site was 209 P° and the average for the Huts was 108 P°. A sample from the southwest corner of Hut 4 measured 119 P°.

### Soil Samples

<u>Samples</u>	<u>P</u>
1	L
2	L
3	L
4	L
5	L
6	L
7	L
8	L
9	L
10	L
11	L
12	L
13	L
14	L
15	L
16	L
17	L
18	L
19	<b>M</b>
20	<b>M</b>
21	<b>M</b>
22	L
23	L
24	L
25	<b>M</b>
OFF- SITE:	
26	L
27	L
28	L
29	L
30	L





**Figure 23. Map of excavated area in southeast corner of hut in Feature Anl. 4 with phosphate sampling.**

The La Motte P samples from Hut 4 are low except for two samples from the exact area where the bear bones had been lying when excavated in 1986, and in two samples from adjacent areas within the walls of the hut. This simple field laboratory method has thus rendered consistent information regarding the location of the bear grave in the hut and its distinctive character.

## Bone

Hearth: 60.74 g (385 frags.)

Bear grave: 949.08 g

AMS-dating of bear bone: (Ua-19830):  $1080 \pm 45$  BP (AD cal. 890-1020)



**Figure 24.** Close-up photograph taken during excavation of the bear bones in 1986.

## Carbon Samples

Sample 1 2.9 g 860722.

Sample 2 0.7 g soil sample from hearth, 860711.

Sample 3 1.4 g from soil sample, 860710.

Sample 4 0.5 g from edge of cairn, 860710.

Sample 5 0.9 g from soil sample near bear grave, 860709.

Sample 6 8.9 g by wall, 860722.



Sample 7 11.5 g by wall, 860722  
Sample 8 33.8 g (from hearth) 860711

Radiocarbon date from Hearth: (St. 10785):1110±110 BP (AD cal. 770 - 1020)



**Figure 25. Exposed pine stump showing cuts made in an attempt by forestry personnel to remove it in the 1960s. The stump had been left and cairn stones replaced.**

## CONCLUSIONS

The completion of excavation of the cairn did not produce any new bones, artifacts or usable charcoal samples. It did reveal that attempts had been made in the 1960s to remove the tree trunk in the cairn. The roots had been cut but the stump left in place. The cairn stones appear to have been put back into their original positions.

The location of the bear bones (bear grave) was verified using the La Motte soil test. Exposure of the find area revealed an alignment of pebbles that formed a corner where the two hut walls had met. This indicates that the bear bones had been placed on the floor in the corner of the hut. Once covered with large stones, probably partly taken from the back wall, the hut

was no longer usable as a dwelling. The bones were found in a c. 10 cm thick layer between 15.71 and 15.81 m above sea level. The floor of the hut in this area was situated at 15.71 – 15.74 m.

### Digital Images (2004)

Raã 78.1 View of Feature Anl. 4 from N, August 5, 2004

Raã 78.2 View of Feature Anl. 4 cairn from N, August 5, 2004

Raã 78.3 View of Feature Anl. 4 cairn from W, August 5, 2004

Raã 78.4 View of Feature Anl. 4 cairn from W, August 5, 2004

Raã 78.5 Use of metal detector, August 5, 2004

Raã 78.6 Exposed hut floor surface, from N, August 5, 2004

Raã 78.7 Exposed hut floor surface, from N, August 5, 2004

Raã 78.8 Exposed find area for bear bones, from N, August 5, 2004

Raã 78.9 Exposed find area for bear bones, from W, August 5, 2004

Raã 78.10 Exposed find area for bear bones and cairn, from W, August 5, 2004

Raã 78.11 Exposed find area for bear bones and cairn, from W, August 5, 2004

Raã 78.12 Exposed find area and hut corner, August 7, 2004

Raã 78.13 Exposed find area and hut corner, August 7, 2004

Raã 78.14 Exposed find area and hut corner, August 7, 2004

Raã 78.15 Site documentation, August 8, 2004

Raã 78.16 Exposed roots in carin, from E, August 6, 2004

Raã 78.15 Site documentation, August 8, 2004

Raã 78.16 Exposed tree stump and roots, August 6, 2004

Raã 78.17. Raa 78.15 Site documentation, August 8, 2004

Raä 78.18 Removal of tree stump, August 6, 2004

Raä 78.19 Site documentation, August 6, 2004

Raä 78.20 View of east wall of hut, from N, August 6, 2004

# LAPPSANDBERGET, RAÄ 144

## ARCHAEOLOGICAL GOALS

The goal of investigating RAÄ 144 was to map and document a circular stone feature of potential Saami origin on Lappsandberget (Fig 2). The site is situated in a moraine area at c. 20 - 25 m a.s.l. and below the highest elevation of the mountain. Excavation was undertaken both inside of the circle and outside of one half of the circle.

## METHODS

All excavation was performed using hand tools. All soil was screened using a 4 mm mesh. A La Motte Soil N-P-K kit was used for the testing of relative amounts of phosphorus in site soils. A metal detector was used on the site.

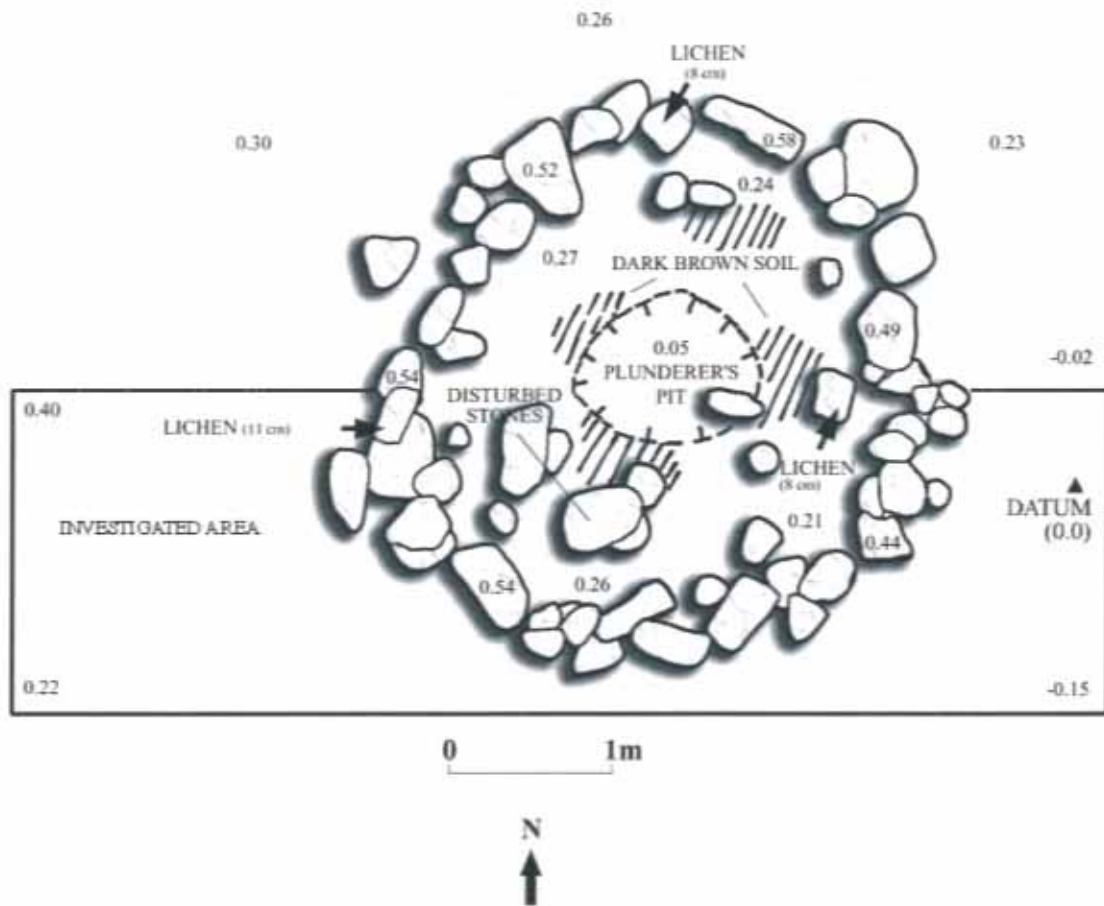
## ADMINISTRATIVE INFORMATION:

**Date of Investigation:** August 8 - 10, 2004.

**Participants:** Noel Broadbent, Elaine Broadbent, Rosanna Broadbent, Greg Lavallee, Britta Wennstedt Edvinger.

**Investigated Area:** 20 m<sup>2</sup>.

# LAPPSANDBERGET







**Figure 26. Map of Raä 144 (opposite). Above: Image of circular feature prior to excavation, August 8, 2004. (Facing S).**



**Figure 27. Image of exposed surface within stone circle. Note depression and disturbed stones in circle due to plundering (Facing SE).**

The investigation involved removal of vegetation and soil from inside the stone circle and within a 13 m<sup>2</sup> area outside of the circle.

The stone circle measures c 3.45 m in diameter. The inside measures c. 2.70 m across. The circle consists of c. 50 stones 0.20 – 0.45 m in size. Fourteen stones were found within the circle. A 1.2 – 0.95 m wide and c. 0.15 m deep depression was observed in the center of the circle.

The soil is sandy and forms a shallow surface, 0 to 10 cm deep, on the bedrock and moraine. Darker brown soil was observed in four patches within this circle.

Twenty-one soil samples were taken, 15 from inside the circle and 6 from outside the circle. Four additional samples were taken off-site.



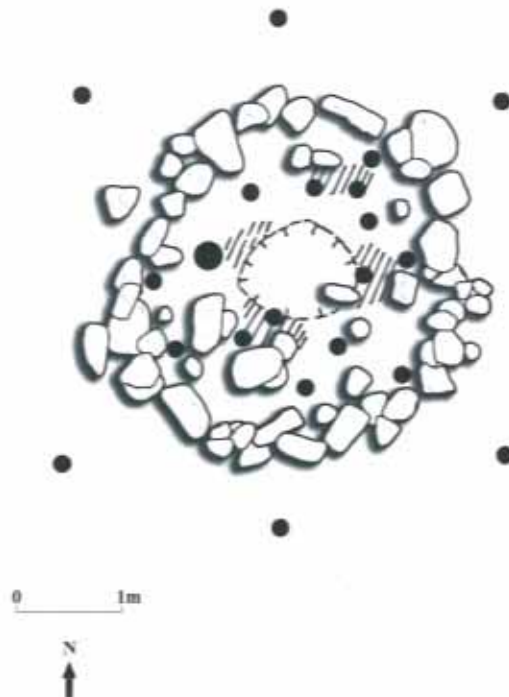
**Figure 28. Close-up of one of three lichens growing on the stone circle measuring 80 – 110 mm in diameter.**



## Soil Samples

Sample	P
1	L
2	L
3	L
4	M
5	L
6	L
7	L
8	L
9	L <sup>+</sup>
10	L
11	L
12	L
13	L
14	L
15	L
16	L
17	L
18	L
19	L
20	L
21	L
Off-Site	
22 --25	L

# LAPPSANDBERGET



**Figure 29. Map of stone circle showing darker soil deposits within circle and relative amounts of phosphate enrichment.**

## CONCLUSIONS.

The stone circle on Lappsandberget was heavily overgrown. Three large lichens of *Rhizocarpon geographicum* were growing on the stones: 80 – 110 mm. These lichens date to AD 1480 – 1583 and this can represent a minimum date for the feature.

The angular form of the pit in the center of the circle suggests plundering using a shovel. The 14 stones in the ring were probably pushed aside from a central cairn. There were no finds of charcoal or bone. The patchy brown soil deposits represent some kind of organic enrichment and the phosphate

samples, although low, support this conclusion. The surrounding soil is low in phosphate.

These archaeological results support the interpretation of the stone circle on Lappsandberget as a ritual site. The place-name suggests a Saami context, as does oral-historical accounts of Saami living on Bjurön. The age of the feature is most probably within the period AD 1000 – 1600.

### **Digital images (2004)**

144.1 View of Raä 144 from north. August 8, 2004

144.2 View of Raä 144 from south. August 8, 2004

144.3 View of Raä 144 from north. August 8, 2004

144.4 View of Raä 144 from west. August 8, 2004

144.5 View of Raä 144 from west. August 8, 2004

144.6 View of Raä 144 from north. August 8, 2004

144.7 Use of metal detector, August 8, 2004

144.8 Excavation of stone circle, August 8, 2004

144.9 Close-up of stone circle with looter's pit, August 8, 2004

144.10 Excavation outside of circle, August 9, 2004

144.11 Excavation outside of circle, August 9, 2004

144.12 Excavation outside of circle, August 9, 2004

144.13 Close-up of lichen on stone circle, August 9, 2004

144.14 Close-up of lichen on stone circle, August 9, 2004

144.15 Close-up of lichen on stone circle, August 9, 2004

# STORA FJÄDERÄGG, RAÄ 31 – 33, 35

Lantmäteriets Terrängkarta 20 K NO Umeå: x 70880 y 17560  
(63°N 21° E)

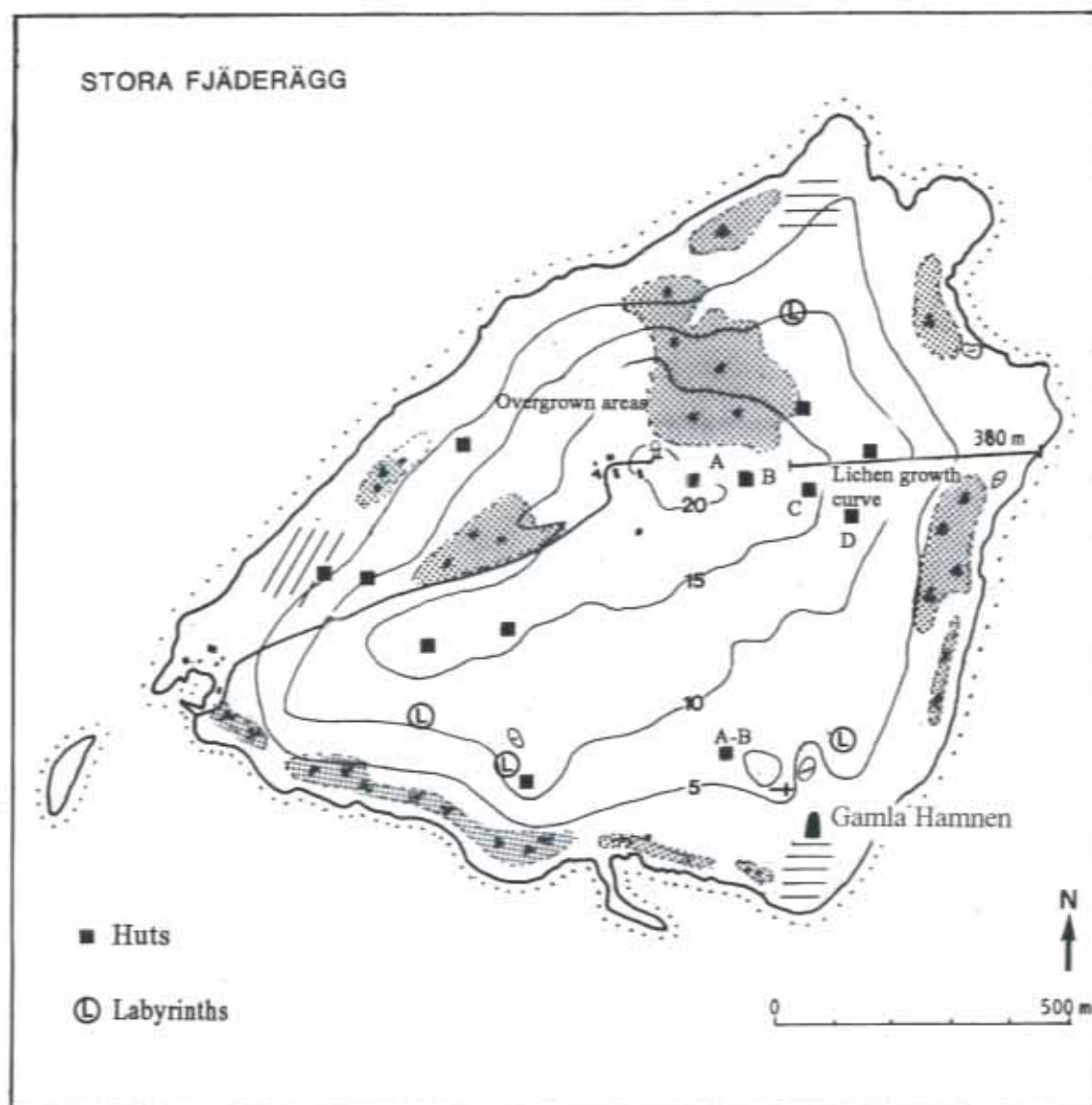


Figure 30. Map of island showing locations of major archaeological features.

## Goals of Investigation:

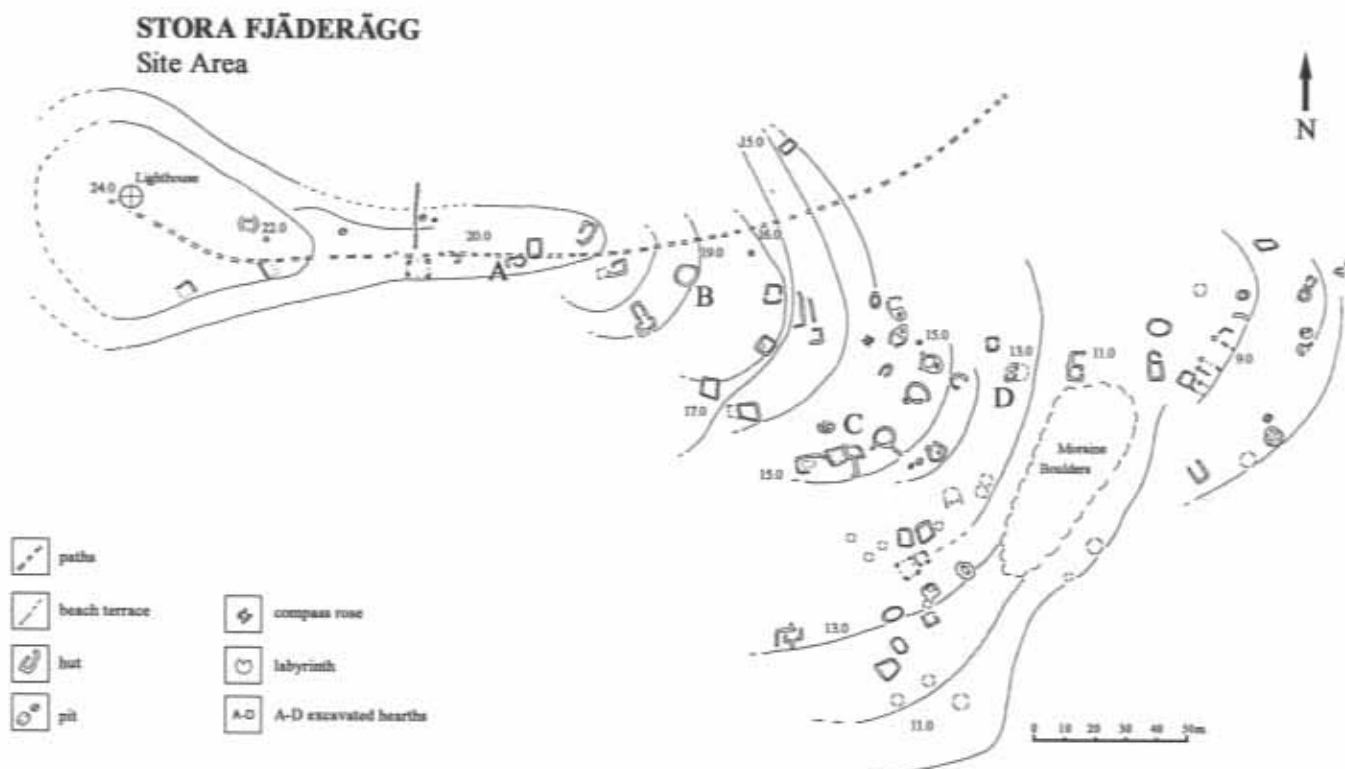
The goal was to obtain charcoal for radiocarbon datings, animal bone and artifacts from different elevations ranging from 8 m to 20 m above sea level. Extensive mapping was undertaken of the major site area of which RAÄ 31 – 33 and 35 are a part. The old harbor area (Gamla Hamnen) was also mapped in detail.

**Date of Investigation:** August 8 – 15, 1987

## Participants:

Noel Broadbent, Elaine Broadbent, Rosanna Broadbent, Erik Sandén, Berit Andersson, Ann Wastesson, Ann-Christin Nilsson, Innocent Pikirayi, Edward Matenga (and others).

**Investigated Area:** 23 m<sup>2</sup>



**Figure 31.** Map of site area produced by Center for Arctic Cultural Research (1987).



## HUT A

Hut A is located at c. 20.5 m above sea level. It has an inverted "G" form with an extended entranceway facing S. The feature measures 8 x 5 meters and has a floor area measuring c. 3 x 4 m. The walls are c. 1 m wide and 0.30 – 0.50 m high. The entranceway is 1.5 m wide. Macrofossils were identified by K. Viklund (crowberries and juniper berries).

A 1 m<sup>2</sup> pit was excavated over the hearth area, which was located using an auger. Bone was recovered (12.1 g) and 13.8 g of charcoal. This rendered a radiocarbon date of 1015±100 (AD cal 890 –1160) (St. 11181).

STORA FJÄDERÄGG.

### HUT A

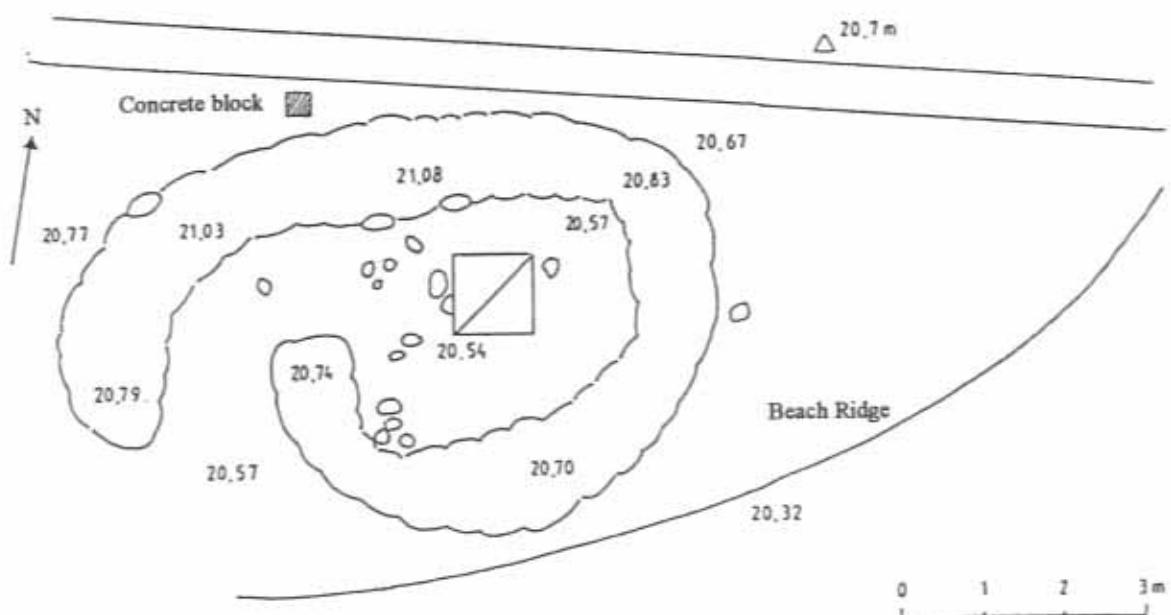


Figure 32. Map of Hut A.

## Hut B

Hut B (cover photo) is situated at 19 m above sea level. It has a floor area of 7 x 6 m. The walls are c. 1.0 m wide and there is no obvious entrance. The hut appears to have been built up with thick deposits. It was heavily overgrown with juniper bushes growing within the walls. Flotation by K. Viklund rendered carbonized crowberries and juniper berries.



**Figure 33. Photo of stratigraphy and juniper growth on Hut B (1987)**

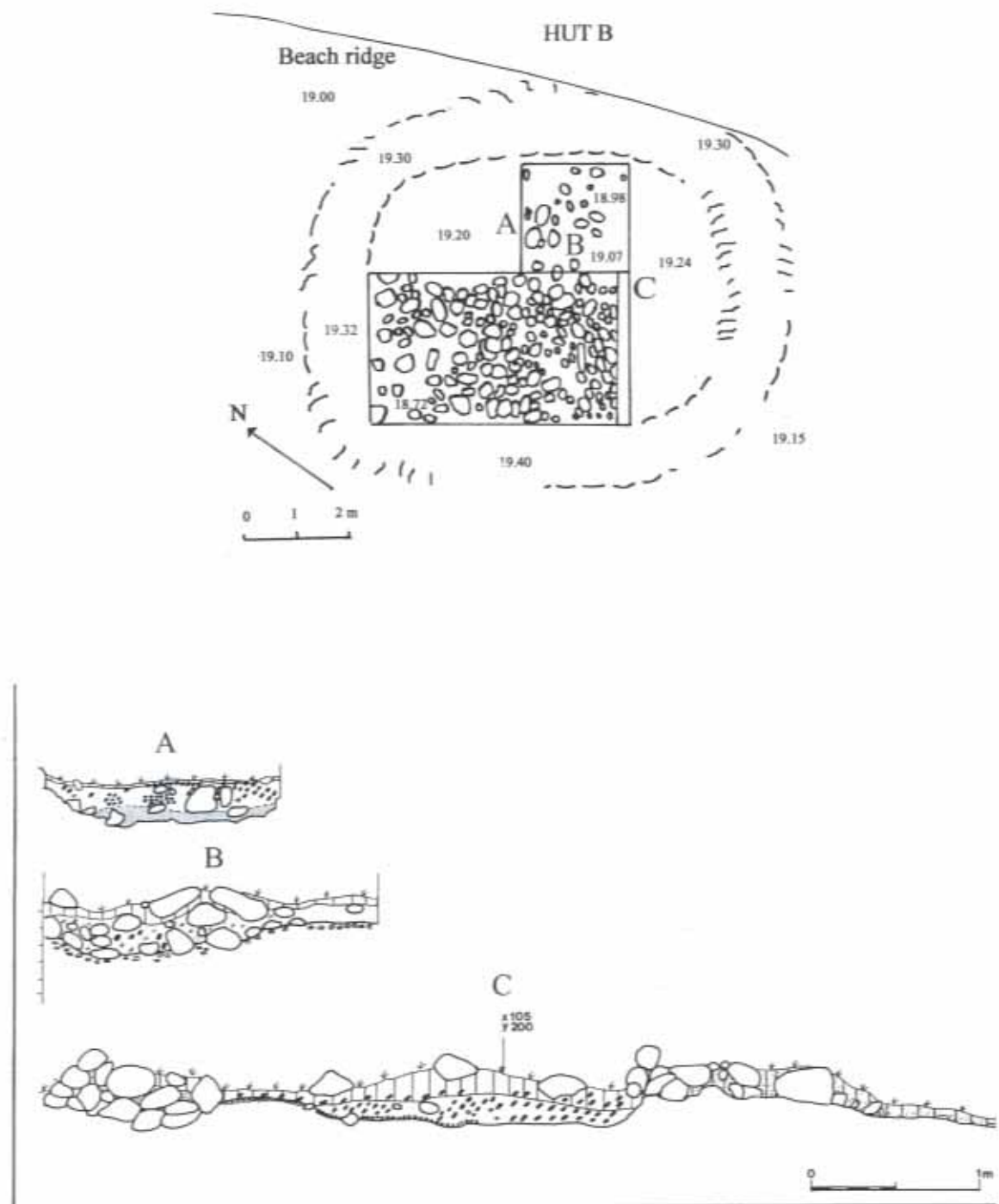


Figure 34. Map and profiles of Hut B.

The hut rendered a large amount of bone (1284.7 g). For this reason the original sampling area was expanded to cover 19 m<sup>2</sup>. Three profiles were drawn. A: hearth; B and C: cultural deposits.

Charcoal was recovered (18.7 g) and two radiocarbon dates were obtained: (St. 11900), 1660±70 BP (AD cal. 250 -- 530) and (St. 11182), 1235±315 (AD 500 -- 1200). These figures show the early and continued use of the island by seal hunters.

## Artifacts

Clay Pieces (red unglazed)  
Gray flint chip (11 mm)  
Gray flint chip (less than 1 cm)  
Gray flint chip (less than 1 cm)  
Slag (21 x 23 mm)  
Slag (34 x 23 mm)  
Fragment whetstone/soapstone (36 x 13 x 15 mm)

## Hut C

Hut C is located at 15.5 m above sea level. It measures 5.5 x 5.5 m and the floor area is c. 3 x 3 m. The walls are heavily overgrown and measure c. 1.0 m in width. A single entranceway, measuring 1.0 m in width, faces SE.

A 1 m<sup>2</sup> pit was excavated in the hearth and 15.7 grams of charcoal were obtained and rendered at radiocarbon date of 955±75 BP (AD cal. 1010 -- 1170) (St. 11183). No bone was recovered. One chip of gray flint was found and measures 15 mm in length. Flotation rendered carbonized crowberries and juniper berries.

STORA FJÄDERÄGG

HUT C

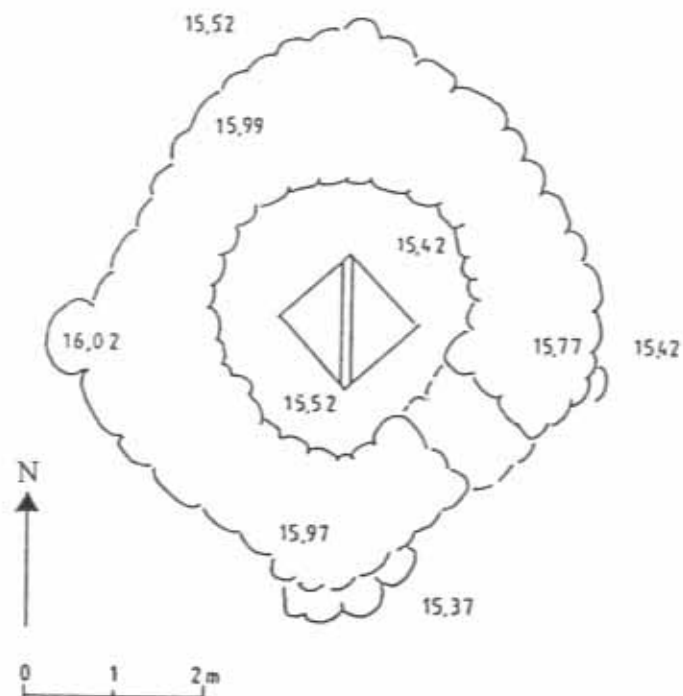


Figure 35. Ann-Christin Nilsson excavating Hut C and showing cross-section of hearth (1987).



## Hut D

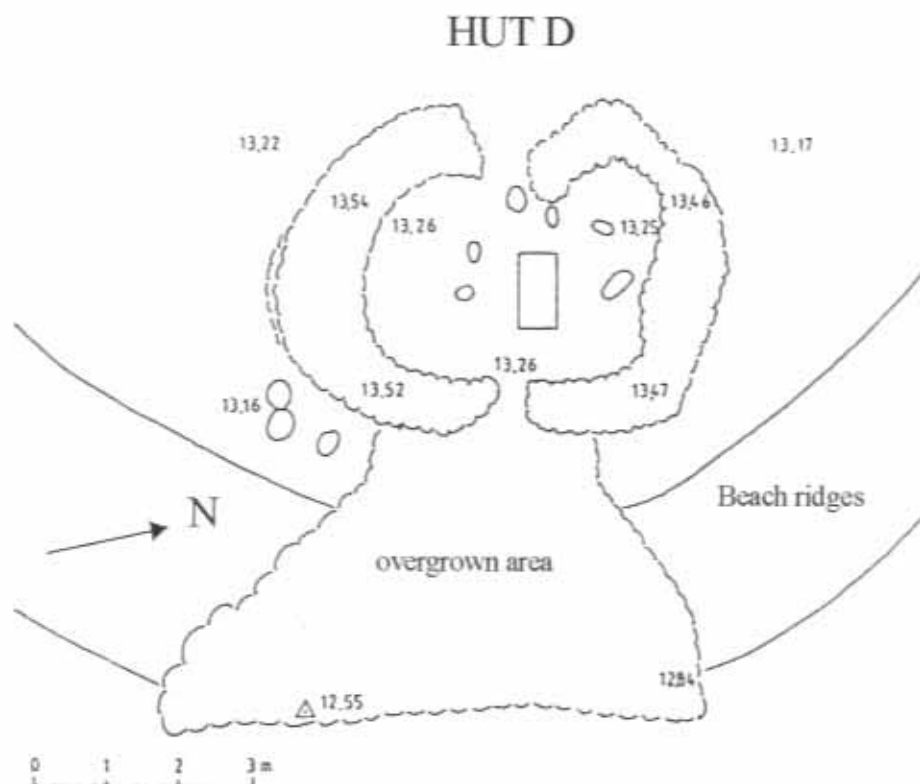
Hut D is situated at the 13 m elevation. It is roughly oval in shape and has two opposite lying entrances facing east and west. The feature measures 6 x 4.5 m. The floor area measures c. 4 x 3 m. The entrances are c. 0.75 m wide.

A 1.0 x 0.50 cm pit was excavated in the hearth. This rendered 205.8 g. Charcoal was found (10.6 g) and radiocarbon dated to  $1110 \pm 145$  BP (AD cal. 710 – 1040) (St. 11184).

## Artifacts

Gray flint chip.

Possible red brown clay shard (1.5 cm)





**Figure 36. Map of Hut D and excavation unit (pg. 51). Above: Photo of Hut D facing E. (1987).**

## CONCLUSIONS

The test pits in four huts at different levels above sea level provided charcoal for 5 radiocarbon dates. The oldest hut (Hut B) dates to as early as AD 250 – 500. Huts A, C and D date to the Viking Period, AD 800 – 1150. Even with the wide range of a second date from Hut B, none of the huts postdate AD 1200. In this respect the sites show correspondence with Grundskatan, Jungfruhamn and Bjuröklubb. The stray finds from the island (a silver ring and bells) date to the Viking Period and have close parallels with finds from the Saami sacrificial site of Gråträsk.

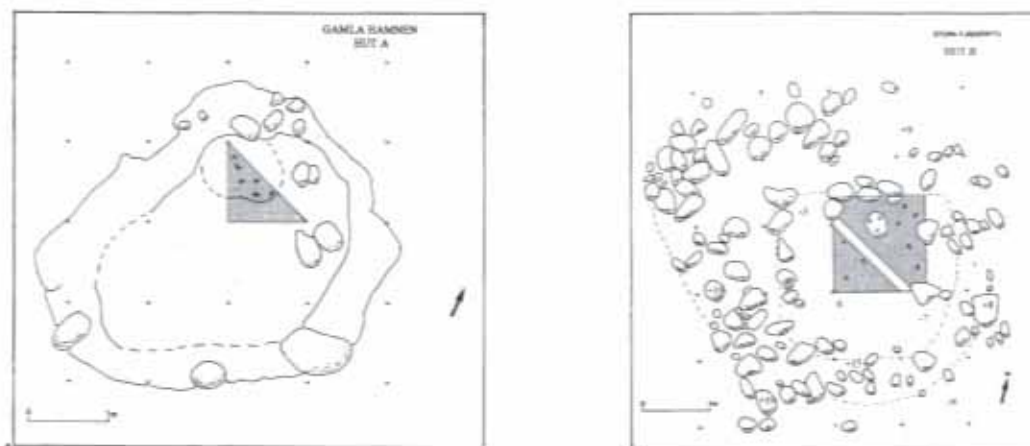
## Huts A – B, Gamla Hamnen

Two small overgrown huts lying at the c. 8 m level above the Gamla Hamnen area were found to contain charcoal.

Hut A is an irregular oval hut measuring c. 4 x 3.5 m. The low walls measure c. 0.50 m in width. A small hearth was found in the northwest corner of the hut. Hut B is also irregular and measures c. 4 x 4.5 m. A hearth was found in the approximate center of the floor. A radiocarbon date was obtained from Hut B (St. 11901)  $310 \pm 70$  BP (AD cal. 1480 – 1650).

### Artifacts

Kapellet: Misc. iron fragments, nails, glass.



**Figure 37. Maps of hut-like floors (A-B) by Gamla Hamnen.**

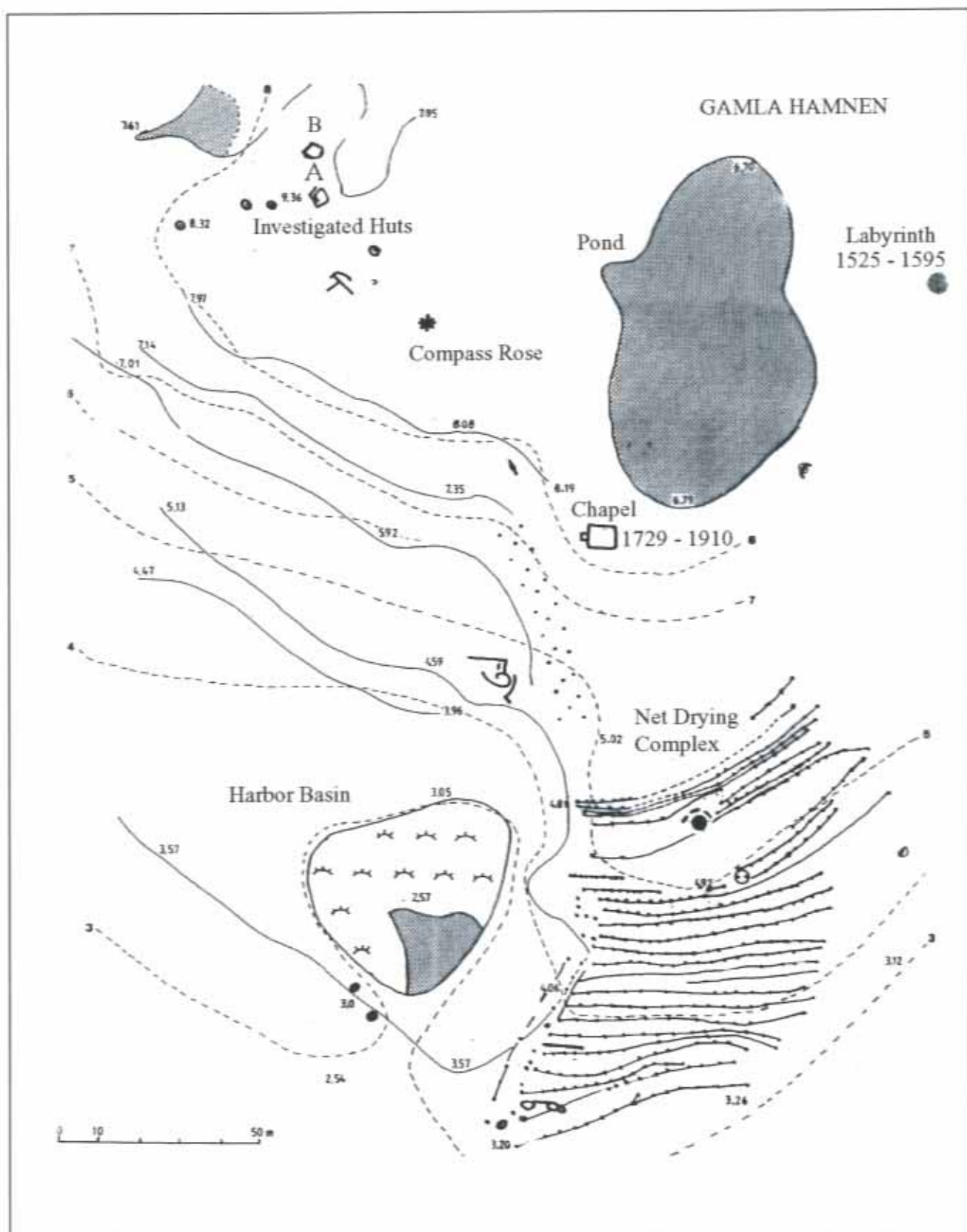


Figure 38. Map of Gamla Hamnen.

## CONCLUSIONS

Huts A – B at Gamla Hamnen correspond in time with the lichen dating of a labyrinth located 150 m to the east, the 16<sup>th</sup> century. The basin has a threshold with an elevation of 2.54 m above present sea level, estimated to date to c. 1600. The Chapel dates to 1729 and the site was used later by fisherman from Gamla Karleby in Finland.

## SNÖAN, RAÄ 49, 53, 92

**Lantmäteriets Terrängkarta 20 K SV Umeå: x 70480 y 17035**  
(63°N 29' N 19° 53' E)

## ARCHAEOLOGICAL GOALS:

The goal was to obtain charcoal for radiocarbon datings, animal bone and artifacts from different elevations ranging from 15 m to 3 m above sea level. Extensive mapping was undertaken at RAÄ 53 and 92, which are late Medieval fishing harbors at c. 3 – 6 m above present sea level.

## ADMINISTRATIVE INFORMATION

**Date of Investigation:** July 27 – August 3, 1988

**Participants:** Noel Broadbent, Elaine Broadbent, Rabbe Sjöberg, Christer Westman, Torbjörn Jakobsson.

**Excavated areas:** 5m<sup>2</sup>



# SNOAN VÄSTERBOTTEN

Researched areas

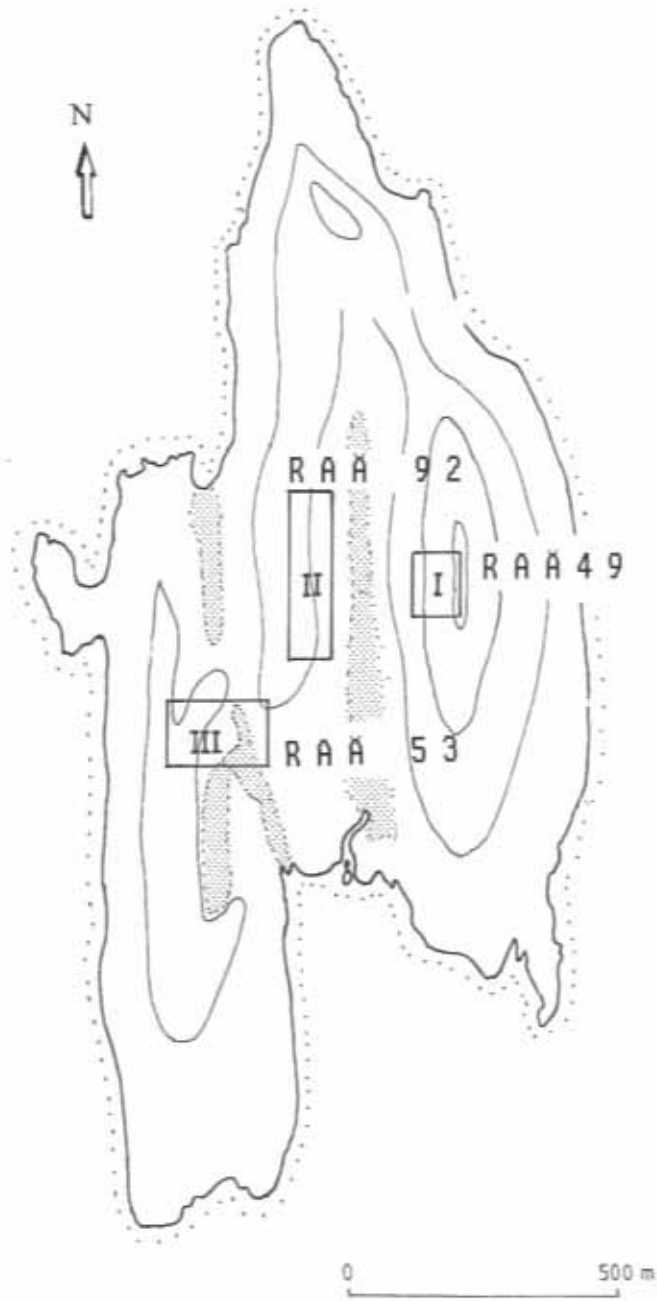
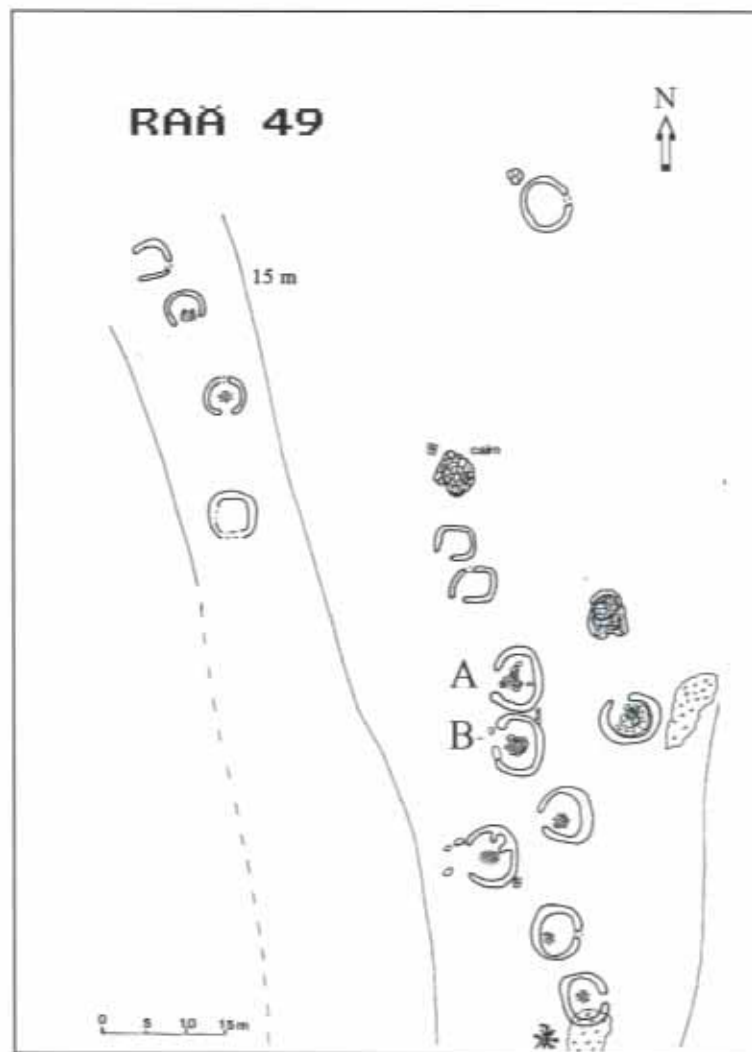


Figure 39. Map of Snöan Island, Umeå Kommun, Västerbotten (63°N 29' N 19° 53' E). Areas studied indicated by rectangles.



**Figure 40. Map of Raã 49. Two huts were sampled: Hut A and Hut B.**

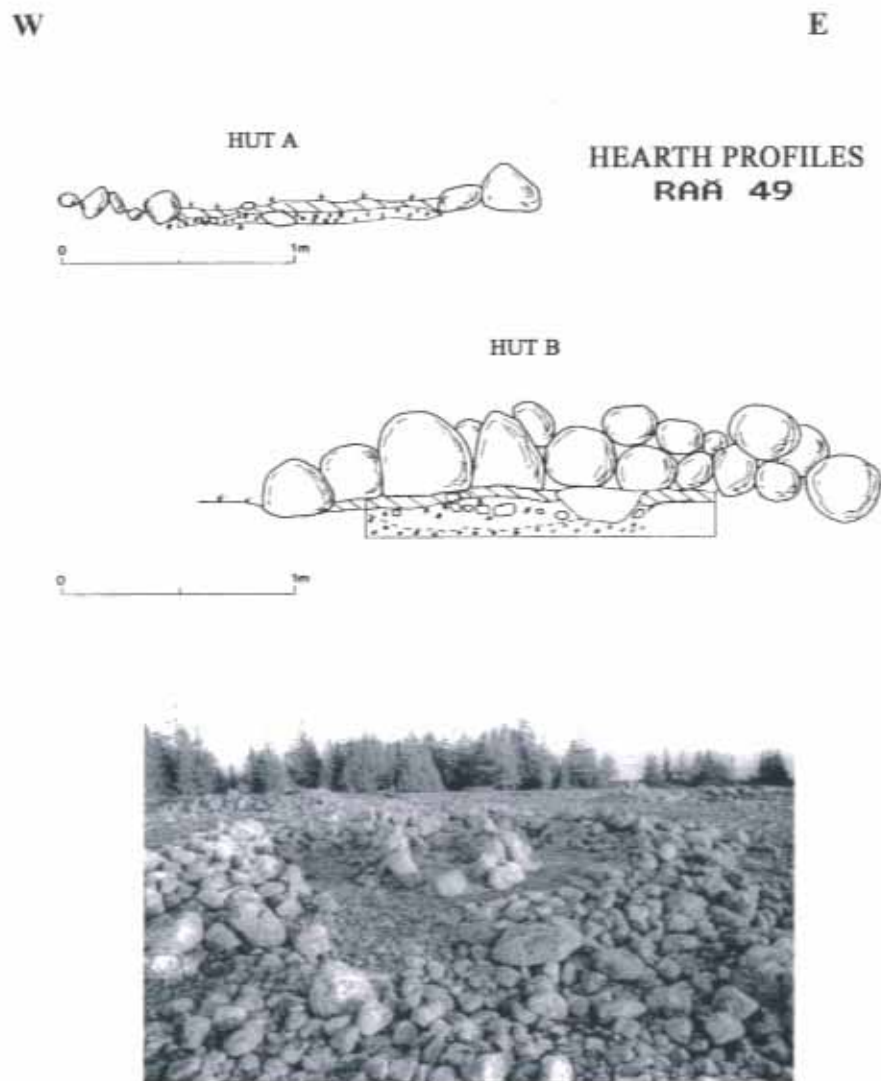
## RAã 49

These oval huts form a cluster of features near the highest part of the island. Fourteen huts cluster above the 10 m level. Five of the huts face West, three face East, one faces north and two face south. Nine of the huts have hearths.

Hut A measures 7 x 8 m and has an inner measurement of 5 x 6 m. The opening is 2 – 3 m wide. Hut B has the same measurements. Hut B has a very large built up hearth measuring 2 x 3 m. This hearth nearly fills the floor.

Charcoal was recovered from Hut A and dated (Ua-1323):  $233 \pm 100$ . This shows that the hearth was contaminated by later re-use. One artifact was found: a white-gray burned flint piece 22 x 15 mm.

Hut B (Ua-1322) rendered a date of  $1150 \pm 100$  BP (AD cal. 770—990). Burned bone (15.66 g) was found in both huts. In Hut A, seal, and a large ungulate were identified. In Hut B seal and hare were identified.



**Figure 41. Above: Profiles of hearths. Photograph of Hut B facing E.**

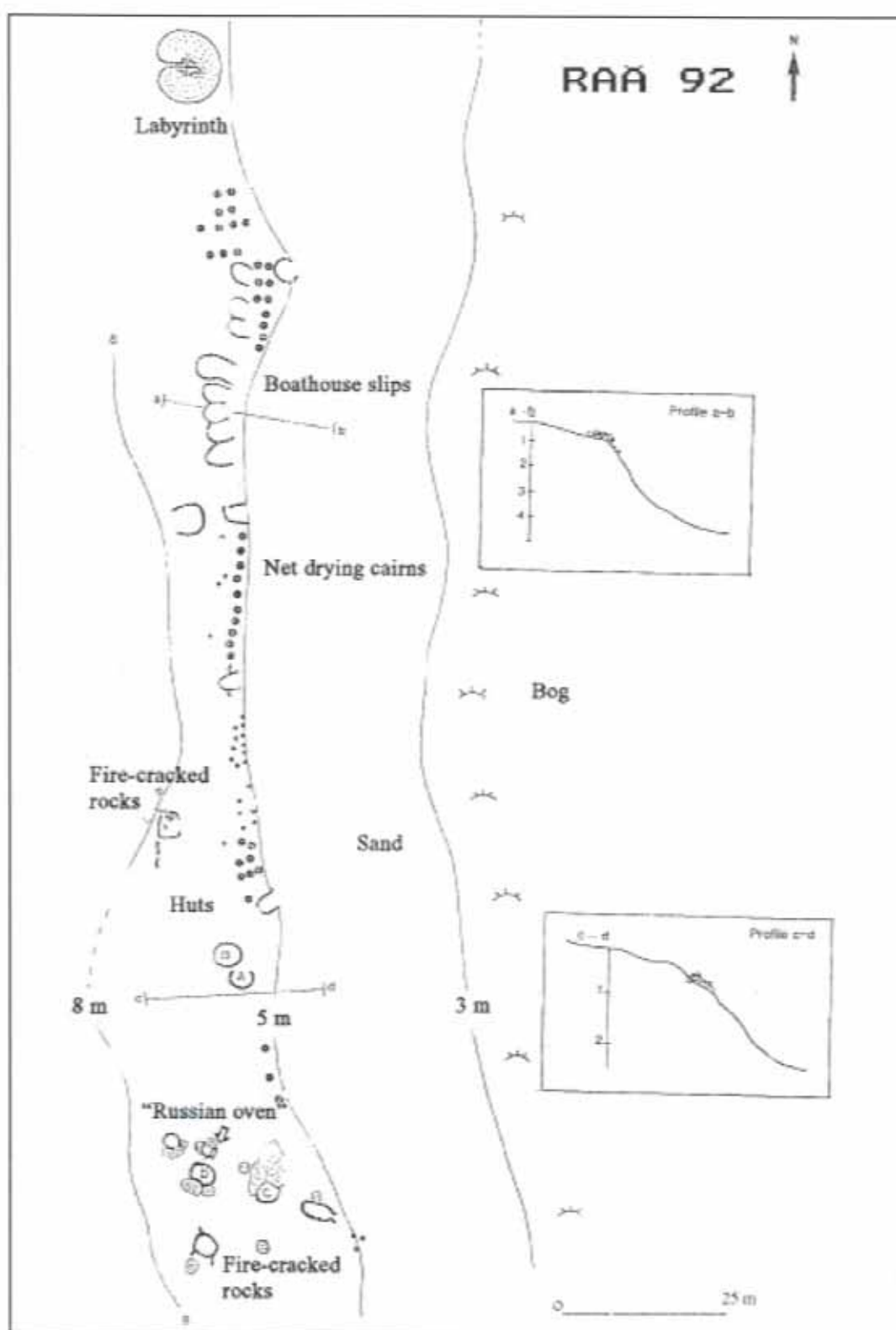


Figure 42. Map of fishing harbor site Raä 92.

## RAÄ 92

Site Area II (Raä 92) is located in the center of the island and by a narrow former inlet. The numerous features lie on the West site of the inlet and follow the 5 m elevation. The entrance to the inlet has a threshold of 2.75 meters above sea level which means it could not have been used after c. 1600.

The stone features consist of U-shaped stone structures that open towards the former inlet. These were probably boat slips, and it is possible once had boat-houses attached to them. There are also many small cairns that probably supported posts for drying nets. A number of small hut-like shelters, fire-cracked rocks and a "Russian Oven" were found as well. Two radiocarbon dates were obtained for the oven: (St. 11902)  $430 \pm 95$  BP (AD cal. 1410 – ) and (St. 11903)  $470 \pm 95$  (AD cal. 1310 – 1620).

These are among the few radiocarbon-dated Russian ovens in the region and their association with a fishing harbor shows them to pre-date the Russians. They were used by late Medieval fishermen in the 16<sup>th</sup> century. The labyrinth at the site indirectly supports this interpretation as does the elevation for the boat-slips, 5 m.a.s.l. This level dates to c. AD 1400 – 1500.

## RAÄ 53

Site Raä 53 is a complex of small cairns, hut-like enclosures, boat-slips, an associated labyrinth, and a compass rose. This site (Area III) follows the 3.0 m elevation and it had succeeded Raä 93 when it became too shallow due to landrise. Two features were sampled for charcoal and rendered two dates.

Feature A, situated at 5-6 m above sea level, is a hut and produced a radiocarbon date (St. 11904)  $735 \pm 120$  (AD cal. 1160 – 1400). Feature B, located just above the 3.0 m shoreline, rendered (St. 11905)  $445 \pm 105$  (AD cal. 1400 – 1640). This is consistent with the elevations. The net drying cairns lie lower than 3.0 m and show the use of this harbor after 1600.

These two harbors are very similar to the harbors dated in the project on Stora Fjäderägg and at Jungfruhamn. No seal bone or other artifacts were



found in association with them, and fishing seems to have been the principal activity.

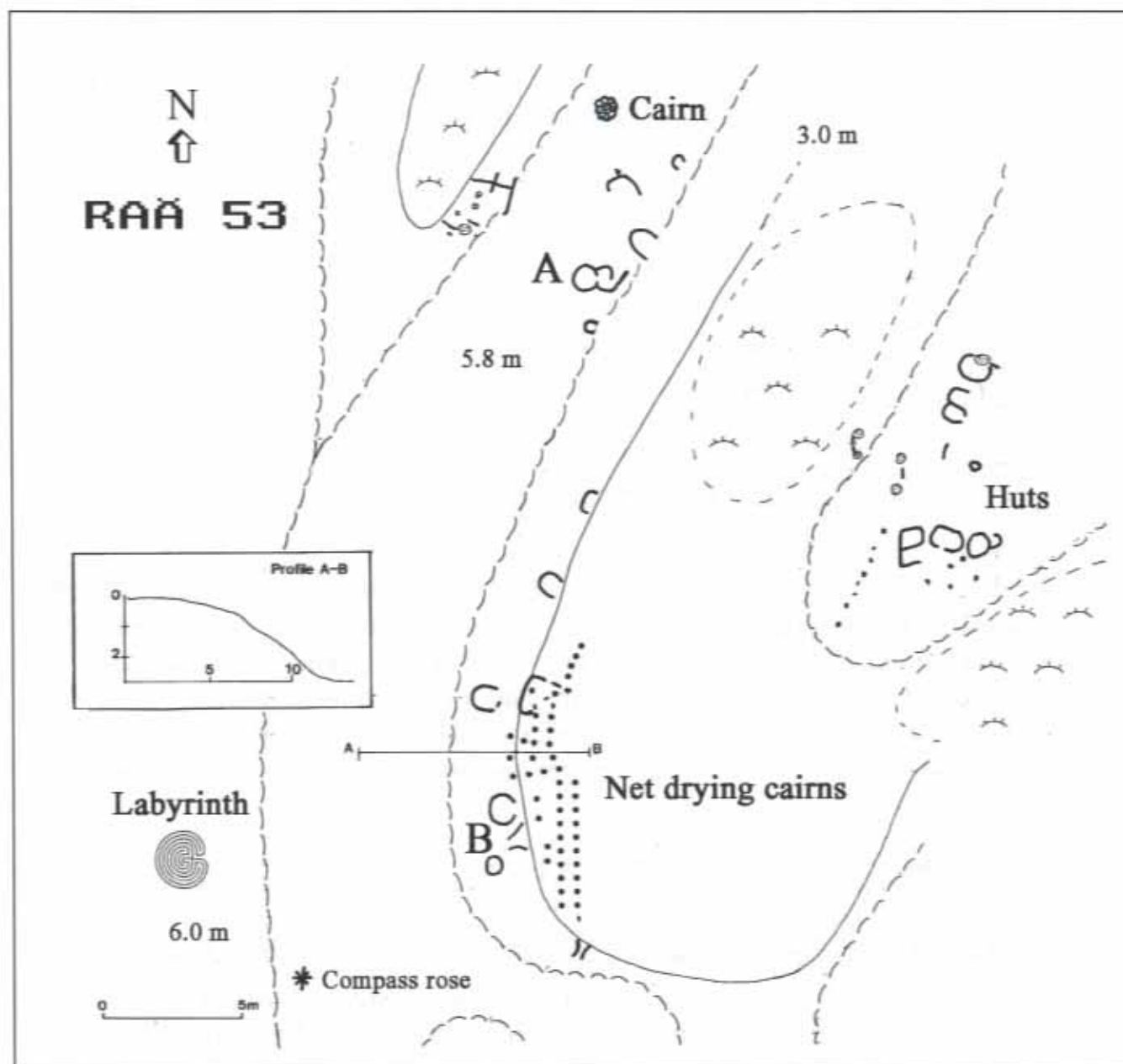


Figure 43. Map of harbor area, Raā 53.

## CONCLUSIONS

The investigations on the Island of Snöan focused on three site areas: the highest lying area, 10 – 15 m.a.s.l., and two harbor sites at 5.0 respectively 3.0 m.a.s.l. The sealing huts date with some certainty to the Viking Period. It is clear that from AD 1300, fishing was the principal activity as evidenced by archaeological features. The two datings of a Russian Oven are a unique contribution.

## TEST TRENCH, LÖVÅNGERS KYRKSTAD

### GOALS OF INVESTIGATION:

The goal of the narrow trench was to determine if there was any stratigraphy on the terraced slope on the East side of the Church Village. This terrace lies between the 10-11 m elevations above sea level. It is possible the terrace represents the shoreline when the site was first occupied. This elevation dates to the Viking Period, and is at the same elevation as the nearby Broänge site where a radiocarbon date has been obtained confirming this date.

### ADMINISTRATIVE INFORMATION

**Date of Investigation:** August 12, 2004. (Investigation undertaken following permission by Allan Olsson, Löfvånger Stiftelsen, (0914/ 70110) and consultation with Berit Andersson and Erik Sandén, Västerbottens Museum. Lage Johansson, Skellefteå Museum, observed).

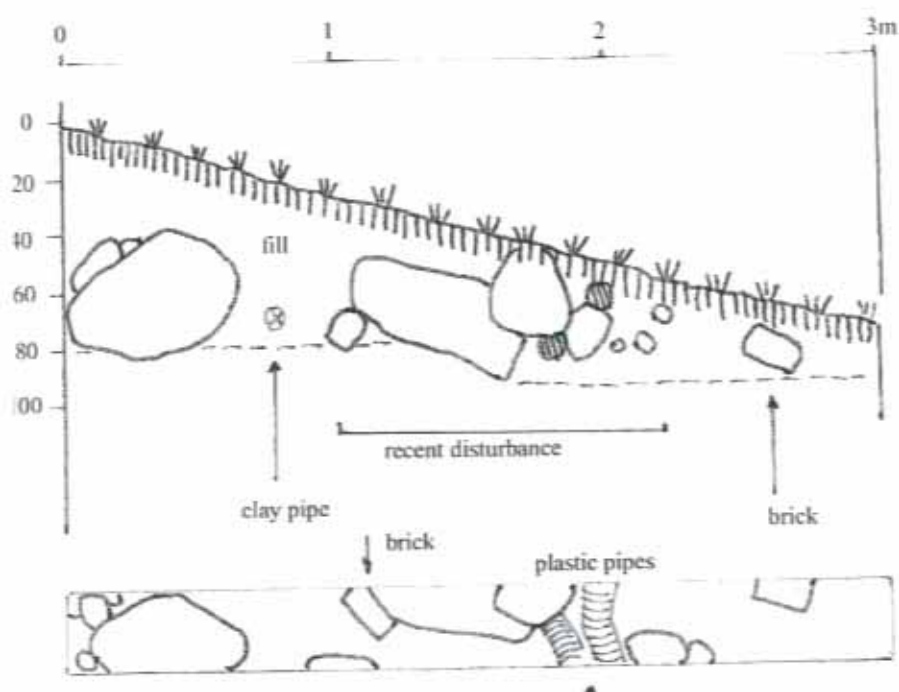
**Participants:** Noel Broadbent, Rosanna Broadbent, Greg Lavallee, Margareta Axelson.

**Area Investigated:** Trench measuring 3.0 m in length and 0.30 m in width (0.90 m<sup>2</sup>).

A narrow trench was excavated to a max depth of c. 80 cm below surface. Rounded cobbles, c. 45 cm in max length, were uncovered at a depth of 40 cm at the upper edge of the trench. The deposit was a mixture of loose soil, plaster, brick rubble and other secondary debris. Building debris was found at a depth of c. 80 cm. Between 1.0 m and 2.0 m of the trench, more cobbles and angular, quarried stones were encountered from just below the surface down to c. 80 cm. Two plastic pipes were found running across the trench and this whole section was recent. Both red and yellow bricks were found in the trench.



**Figure 44.** Area Investigated on slope to the East of Löfvångers Kyrkstad (rectangle). Elevation c. 10 m.



**Figure 45. Profile and Plan of test trench**

One artifact was recovered at a depth of 70 cm in the upper section of the trench. This was a clay pipe bowl with an elaborate stamp. It dates to the 17<sup>th</sup> to 18<sup>th</sup> century.

## CONCLUSIONS

This trench did not reveal any undisturbed stratigraphy. The slope has evidently been a recent dumping area with debris from the cabins and their foundations. The clay pipe is probably secondary and emanates from the nearby and higher-lying Church Village.

Although this area is still of considerable archaeological interest, a wider and deeper trench will be required to identify any older cultural deposits or the original shoreline.

The trench was refilled and covered with the original grass sod on August 12, 2004.



The clay pipe was turned over to Skellefteå Museum (Lage Johansson) on August 13, 2004.

No soil or carbon samples were collected.



**Figure 46. Clay pipe.**



**Figure 47. View of Test Trench from East. Noel Broadbent and Margareta Axelson recording.**





**Figure 48. View of trench from East.**

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# B/W Photography Catalogue (1986 – 1987).

Prepared by Rabbe Sjöberg (Swedish text)

Note: These photographs were taken within the Seal Hunting Cultures Project at the Center for Arctic Cultural Research. Color slides are labeled and stored separately in hard plastic folders. This photographic material is to be permanently archived at Skellefteå Museum.





## GRUNDSKATAN.

1. anl.4 övers.
2. --
3. --. schakt.
4. --.
5. --. röse detalj.
6. --
7. --
8. anl.5, övers.
9. anl.3, övers.
10. --
11. anl.3, utgr.plan v röse
12. --, närmare
13. anl.6, övers.
14. --
15. --
16. --
17. anl.4, bengömma profil
18. --
19. --
20. --, större ben
21. --
22. --
23. --, grävplan vid röset
24. --
25. anl. 2
26. --
27. --, översikt
28. --
29. --
30. --
31. anl.5, översikt, överexp.
32. -- --
33. -- --

1986-07.

nr.2

Grundskatan.

1. -
2. anl. 3, övers.
3. --, detalj.
4. --
5. -
6. anl. 8. röse.
7. --
8. --
9. --, påbörj. utgrävn.
10. --
11. --
12. --
13. --
14. --
15. --, storsten frilagd
16. anl. 7, tomtning.
17. --, detalj.
18. --
19. anl. 3, grävschack
20. --
21. --, översikt
22. --, detalj stolphål
23. anl. 9, röse
24. --
25. --
26. anl. 6, översikt m tjejer
27. --, detalj hörn
28. anl. 7, (överexp)
29. ryssugn, under utgrävn.
30. --
31. --
32. --
33. --
34. --
35. --
36. --

GRUNDSKATAN

1986-07.

03.

1. -
2. Anl. 3, stolphål
3. Anl. 9, utgrävd
4. --
5. --
6. --, detalj
7. Svarthällviken. ristn.
8. --, --
9. --, --
10. --, --
11. --, -- Björkö 1908.
12. --, -- Björköby
13. --, -- Ersnäs 1885
14. --, nedre hällen.
15. --, ristn.
16. --, -- bomärke
17. --, --
18. --, inre nedre hällen
19. --, -- halvlång text
20. --, långtexten
21. --, Wasa län 1817
22. --, långtext m.fl.
23. --, --
24. --, 1821
25. --, EIS 1791
26. --, do med utsikt
27. --, texter
28. --, texter o bomärken
29. --, översikt AOS 1791
30. --, do
31. --, 7 maj 1848
32. --, do
33. --, EAS 1797, EJS 1797, CJS 1793
34. --, översiktsbild
35. --, do
36. --, do
37. --, hällarna från viksidan

87-1

1986-09.

1. Jävre. testning av labyrint.
2. labyrint
3. labyrint och röse
4. labyrint och röse
5. testn. av labyrint, RS + Atholl Anderson.
6. största laven.
7. labyrinten sedd från röset
8. do. del av röset syns.
9. Svarthällsviken. stranden.

1987-2

1987-05-09.

1. Grundskatan. storgropen från sidan.
2. do
3. hus 3, efter vintern
4. hus 2 med snö
5. översikt
6. -----
7. -----
8. Grundskatan. labyrinten
9. övre anläggningarna
10. utsikt mot öster
11. utsikt ned mot isbelaggt hav
12. nedre ryssugnen
13. utsikt upp över G.skatan
14. buskvegetation vid stranden
15. strandbild
16. do
17. do. overxp.
18. do is
19. do
20. do
21. vraket
22. Svarthällsviken. klippor
23. do
24. packis
25. do
26. fikapaus
27. do
28. lavbevuxen häll
29. do.
30. grusbottnat hällkar
31. hällkar
32. hällkar
33. do
34. hälltröskeln
- 35.
- 36.
- 37.
- .NP



a87-3

1986-09.

1. Grundskatan. anl. 3. rekonstruktion.
2. do
3. do
4. do
5. stolpdetalj
6. do
7. do
8. do
9. översikt
10. do
11. do
12. anl. 2
13. do
14. Svarthällviken. klippstudier.
15. labyrinten
16. klapper
17. rester av modern jakthydda
18. sand o block
19. strandbild Petberget
20. do.
21. -----
22. -----
23. -----

1987-07.

24. Grundskatan. anl. 12. grävruta. PROFIL
25. do
26. do
27. do översikt
28. do
29. do
30. do "flygbild"
31. labyrinthus översikt
32. vy över anl. 12 m.fl.
33. labyrint (hus)
34. do
35. som 31.
36. översikt över anl 11 m.fl.

1987:4

1987-07.

1. Grundskatan. anl. 11. före utgrävning.
2. do
3. do
4. do
5. 2 provrutor upptagna
6. detalj provruta
7. detalj provrutor
8. detalj östra provruta
9. översikt
10. profil östra grävruta
11. do
12. grävstudie
13. provruta 3 tas upp
14. översikt förstorade provrutor
15. do
16. "flygbild" hus med labyrint.
17. anl. 12. översikt före grävning
18. do detalj.
19. do
20. do
21. -----
22. anl. 13 före utgrävning
23. do
24. do
25. do översikt
26. do
27. do
28. anl. 12. provruta med profil
29. do
30. anl. 13. provruta upptagen, översikt
31. do detalj
32. do detalj, djupare grävning
33. do översikt.

1987-5.

1987-08.

1. -----
2. Grundskatan. Storgropen.
3. do
4. do
5. Jungfrugraven. tomtning. provruta
6. do
7. -----
8. do.
9. -----
10. tomtn. 2. provruta
11. do
12. do
13. naturbild
14. grävplats m tält
15. tomtn. m provruta
16. do
17. do översikt
18. provruta
19. grävplats översikt
20. do
21. Ann vid stenring
22. do översikt
23. do närbild
24. Vid telemasterna. tomtningar
25. do uppmätes
26. do
27. do översikt
28. provruta utlägges i tomtn.
29. uppgrävd provruta
30. STORA FJÄDERÄGG. tomtn. A
32. grävning av tomtn. B
33. tomtn.
34. uts. från klappern upp mot fyren
35. tomtning D
36. anl. på klappern
37. do.

1987-6.

1986-07.

1. Grundskatan.
2. tomtning.
3. Sillhällorna
4. SNÖAN. kompassros
5. tomtning
6. tomtning
7. labyrint
8. do
9. tomtning m hög härdring
10. -----
11. -----
12. -----
13. -----
14. -----
15. -----

1987-08.

16. Grundskatan. anl. 14. lab/hus. provruta utlagd
17. översikt do
18. do. provruta
19. anl. 13. översikt m provruta
20. do
21. anl. 12. översikt
22. räftan översikt mot havet
23. anl. 13. provruta närbild
24. anl. 12. kartering pågår
25. anl. 14(på tavla står 13!). provschackt
26. do. detalj
27. do. översikt
28. do. detalj
29. do. detalj vid lab.vallar
30. storgropen
31. do med provruta
32. do provschackt upptaget
33. do
34. anl. 14. "lodbild" hus o lab.
35. do
36. do.
37. storgropen.

1987-8

1987-08.

1. STORA FJÄDERÄGG. hus C före utgrävning
2. do
3. do närbild
4. hus D. med provruta
5. do
6. do. närbild
7. do
8. hus C. under utgrävning
9. do
10. do profil
11. STORREBBEN. ön vid horisonten
12. do
13. do
14. Sture Berglund konstnär o båtförare
15. ön närmare
16. RS utkik
17. -----
18. ön från sjön
19. do
20. do
21. do
22. fiskeläget från sjön
23. do
24. hus A, före utgrävning
25. do
26. do
27. do. utgrävningsschakt
28. do. närbild
29. do. "översikt"
30. do
31. do
32. do. översikt med båk
33. do. do mot N
34. do.
35. naturbild
36. do med båk
37. översikt hus A.



1987-9

1987-07--10. foto RS.

2. FINLAND, BJÖRKÖ. hamnen
3. på väg ut.
4. VIKARSKATA. båtlänningar
5. giströsen
6. ryssugn
7. do
8. do
9. på väg mot Valsörarna
10. do. smal farled
11. VALSÖRARN. STORSKÄR. exp.delt.
12. do
13. labyrinten
14. do
15. do, Noel mäter lavar
16. do
17. MALSKÄR. båtlänning
18. -----
19. båtlänning
20. labyrinten
21. GRUNDSKATAN. anl. 13. Ljuba
22. anl. 12. Noel o Ann
23. do översikt
24. do
25. LIDBERGET, NORDMALING. tomtning
26. -----
27. do
28. do
29. KRONÖREN. labyrint
30. do.

