

Archaeological investigations in Hvalseyjarfjörður, Eystribyggð 2005

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Front page: Ruin 4 in Ø80 left of centre, looking SSW. The main farm site (ruins 5-10) is across the inlet to the right, and ruins 11-12 further out on that side. Orri Vésteinsson August 31st 2005.

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Introduction

In 2005 I had the good fortune of being invited to Greenland by Georg Nyegaard, then director of the Qaqortoq Museum, with the aim to carry out an archaeological survey in Hvalseyjarfjörður, the area around the well-known ruins of the farm and church commonly referred to as Hvalsey. I have been carrying out archaeological surveys in Iceland for well on two decades and as I had never been to Greenland before this was a welcome opportunity to get to know the Norse ruins there at first hand and hopefully to produce new insights arising from the contrast between the two countries. The most obvious difference between the Norse archaeology of Iceland and Greenland is of course that in Greenland all the sites were abandoned before the end of the middle ages whereas in Iceland they have largely remained in occupation to this day. This means that in Iceland the medieval remains are buried under and/or disturbed by several centuries' worth of settlement activity. Unaltered medieval landscapes are as a result few and far between. The study of Norse-Greenlandic landscape archaeology therefore has the potential to provide information which could aid in understanding and asking the right questions about the Icelandic medieval landscape. Conversely, applying what we do know of Icelandic medieval landscapes to questions of Norse-Greenlandic archaeology could also be fruitful. While in broad terms the two countries had the same culture there were significant differences, not least in economic strategies, and the study of these can without a doubt be furthered considerably by systematic comparison of the archaeological landscapes of Iceland and Greenland. This report represents the first tentative steps towards such comparison, with a number of avenues for further research being outlined in the Discussion at the end.

Another aim with this fieldwork was to start to obtain an idea of the landscape context of the major farm and church at Hvalseyjarfjörður. Not only must the church there have had a parish, but the major architectural monuments at the site represent an economic centre which is unlikely to have existed in vacuum. A first step towards obtaining a sense of the network of economic, social and pastoral relationships which such a major site is surely at the centre of is to look at the neighbouring sites, and

begin to gain an idea of their hierarchy, issues of productivity, communications et c. Again no firm results are presented in this report but a few loosely defined ideas are described in the Discussion.

The fieldwork was carried out over a period of 6 days, from August 27th to September 1st 2005. Georg Nyegaard kindly arranged for transport to and from Hvalseyjarfjörður and my lodging with Kalistaarq Karlsen the farmer of Qaqortukulooq farm, who on most of the days I spent there gave me a lift on his boat to a number of the sites. While this allowed me to concentrate on mapping the known sites I cannot claim to have fully surveyed the area in between them. The only significant stretches I walked were between Ø84a and Ø283, between Ø284 and Ø285 and between Ø281 and Ø282. In those I can confidently claim there are no other Norse sites than reported here. In other parts the possibility that further sites may be found cannot be precluded. I hasten to add however that the likelihood of substantial new sites coming to light in this region is **very slim; it has been surveyed several** times before, most comprehensively by Joel Berglund in 1980-91, and I only found one new site, and a very minor one at that. A further proviso I should add is that I know practically nothing about the non-Norse archaeology of Greenland and may as a result be guilty of some blunders, which I can only beg those who know better to treat with kindness.

Georg Nyegaard provided me with copies of the files on each site kept by the Qaqortoq Museum, and armed with these I proceeded in the same manner at all the sites: I began by locating the site, which in most cases was easy enough, although two of the minor sites I failed to identify with certainty. I then identified the ruins described in the earlier field-reports and looked for new ones. I based my descriptions on Joel Berglund's numbering (except at Ø80 where Svend Erik Albrethsen's seemed more logical), adding new numbers to the sequence where new structures were identified. I then mapped all the major sites (except Ø83 which had been recently mapped in detail by Niels-Christian Clemmensen in 2004) with a GPS station I brought with me from Iceland (jointly owned by the University of Iceland and the Institute of Archaeology, Iceland), limiting the mapping of physical features to coastlines and rivers, and concentrating on showing the relationship between ruins and their location in relation to likely home-field areas. The aim of the mapping was to collect enough data to be able to compare and characterize the sites. I did not



The Hvalseyjarfjörður region. Known Norse sites are marked with red squares, the numbers refer to the sites discussed in this report.

produce an accurate drawing of each ruin, and I did not describe every single feature in detail. For the majority perfectly adequate descriptions already existed but the few additional structures I did find I tried to describe to the same level of accuracy as in Berglund's files. On all the possible farm sites I tried to assess the likely extent of the home-field, based primarily on vegetation. This involved a good deal of guesswork but in most cases I found it easy to define a relatively rock-free area around the main cluster of ruins dominated by grass and sedge in contrast to the shrub and moss that characterizes the lowland stretches in this region. I doubt that these grassy (and often partly marshy) areas can be seen as relics of the medieval home-fields. Rather they should be seen as indicators of home-field potential. In addition to recording notes in the field I kept a diary where I noted my impressions and speculations. Copies of the diary and all the photographs I took are stored with the Qaqortoq Museum.

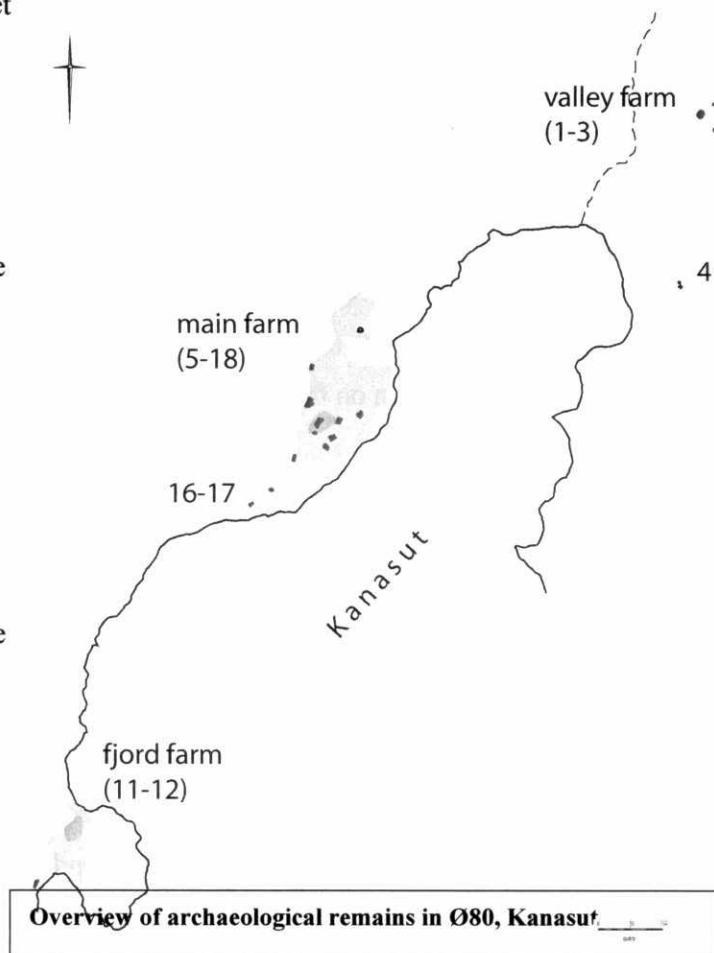
My principal thanks go to Georg Nyegaard who made the trip possible and was an excellent host. I would also like to thank Kalistaarq Karlsen and Arne Lynge at Qaqortukulooq farm for their assistance and good company, as well as Oscar Aldred who taught me how to use the GPS station and helped with the digital files.

Survey results

Ø80 (60V2-0IV-634)

60°45.900 N 45°45.578 W

On the west side of the inlet Kanasut, which cuts into the south side of the peninsula that forms the south side of Hvalseyjarfjörður, there are extensive Norse ruins in three main clusters. While not on Hvalseyjarfjörður itself this farm is easily accessible from the fjord over a low ridge on the neck of the peninsula, some 6 km from Ø84. On sea this site is however closer to Ø78 (Eqaluit) on the other side of Igaliko fjord, and if the chapel there was a parish church this farm could easily have belonged to it.



The files contain three detailed descriptions with sketch maps of the ruins; Christian L. Vebæk's from 1939, Svend-Erik Albrethsen's from 1971 and Joel Berglund's from 1990. Previously Gustav Holm had described the site (MoG 6, 103) which has been associated with the Norse place-name Þorvaldsvík. The ruins seem to represent three settlements, a main farm in the middle, a small farm at the head of the inlet (valley farm) and another small farm on a promontory jutting out towards Igaliko fjord (fjord farm).

South of the promontory, which the fjord farm is situated on, the shore becomes impassable with steep cliffs jutting into the sea. It seems therefore that reaching Ø81 overland will have been difficult. North of the promontory the coastal strip widens gradually with some pasture potential on both sides of the inlet but it narrows again on the eastern side and becomes impassable once the coast turns eastwards along Igaliko fjord. There is therefore no coastal land-route to the next farm, Ø79. Grassy vegetation also stretches inland along the river which drains a string of lakes in a valley that cuts deep into the mountains. There is potentially fish in the river and lakes. Through this valley there is overland access to the south side of Hvalseyjarfjörður, in the direction of Ø84 and Ø211. There are several small patches of marshland, especially at the head of the inlet, and also a few small grass-fields, most with some willow. There is much seaweed along the shore – much more so than in Hvalseyjarfjörður – and this may have been a significant source of fodder in winter. Iron oxide slicks can be seen on the eastern side of the inlet, a short distance from its head.

Valley farm

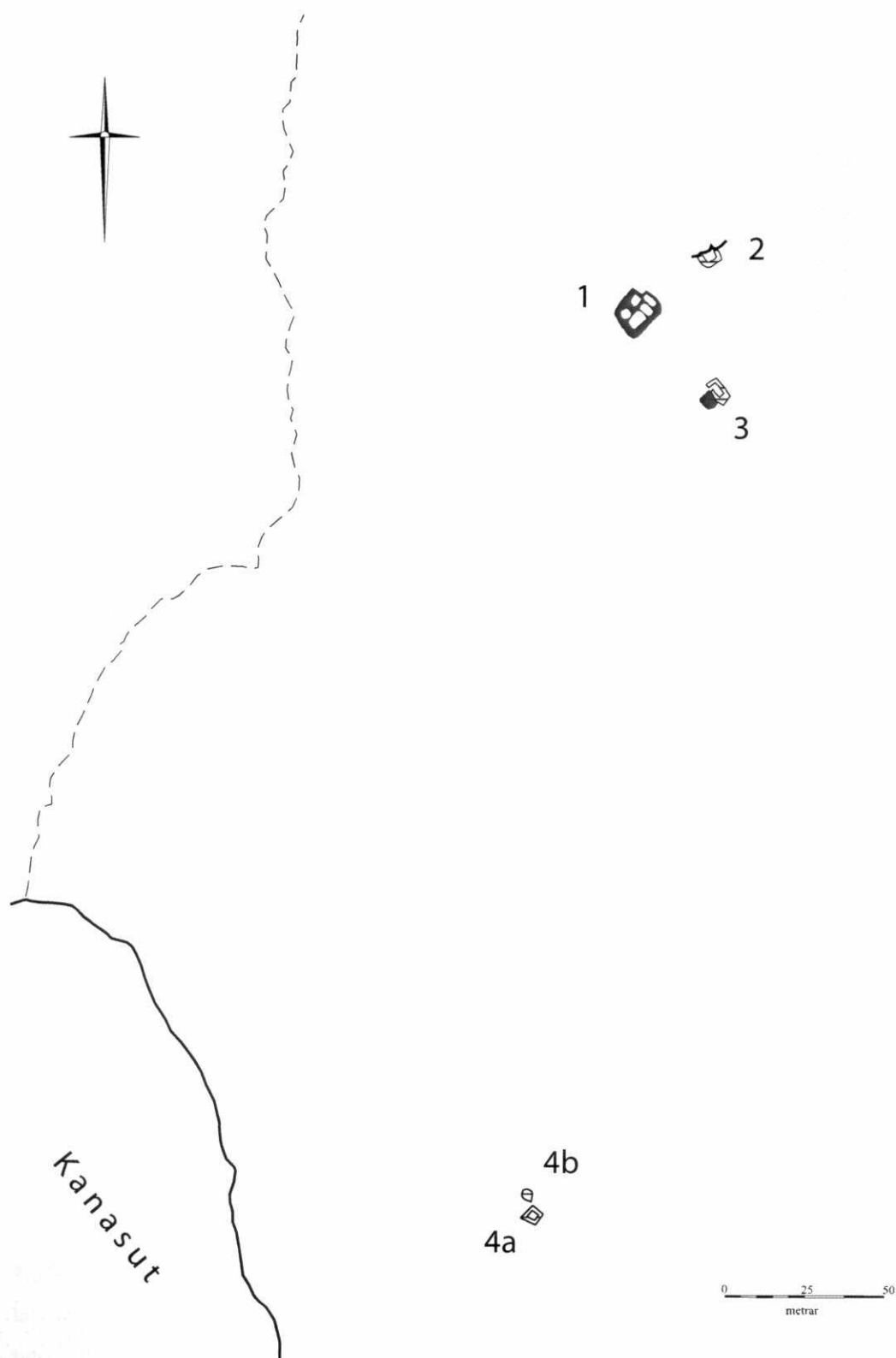
This is represented by three structures all situated on the east side of the river that drains into the head of Kanasut inlet and flows from a series of lakes in a valley that stretches NNE from the fjord. The ruins are quite high up, almost level with the lowest lake in the valley, in the north-western corner of a small grassy plain on a terrace overlooking the inlet. Vebæk describes this as a home-field ('thun') and there is some 2 ha worth of more or less stone-free grassland on the terrace, but apart from its south-eastern corner which is marshy the ground is hard and dry and the grass

patchy and low, suggesting that the home-field potential is relatively low, although meadow hay would have been plentiful.



Ruin 1, looking SW.

Ruin 1. Multi-celled structure, some 15x10 m in size, with three cells in a row on the eastern side and two on the western. The ruin is



Valley farm (1-3) and "store-house" (4a-b).

covered in high grass but stones are frequent and in places aligned rows. The ruin is low, suggesting a single rather than multiple phases of use.



Ruin 2. A 4x3 m stone wall built at the side of a boulder. The wall is very thick (1-1,5 m) and mostly collapsed but in places survives up to 4 courses. No opening is discernible.

Ruin 2, looking west. Ruin 1 in the background, to the left.

Ruin 3. A 4x3 m stone-built cell incorporating natural boulders in the construction. It has a door opening to the south-west and on that side there are in an area of c. 3x3 m traces of an additional or earlier structure.

Ruin 3. Looking south, from ruin 2.



“Store-house”

250 m south of the valley farm, closer to the water's edge, there is an exceptionally well preserved example of the peculiar Norse-Greenlandic structure which in the literature is referred to as a “store-house” or “skemma”.

Ruin 4a. Perched on a nearly 2 m high boulder this rectangular (5x5 m) dry-stone construction survives up to 10 courses with the NW corner being best preserved and the north, east and west sides largely intact whereas the southern side is completely collapsed with only the lowest course surviving. The walls are c. 1 m wide and survive up to a height of 1,8 m. The surviving sides have no opening and it is difficult to see how the structure could have been entered without the aid of a ladder.



Ruin 4a, looking west.



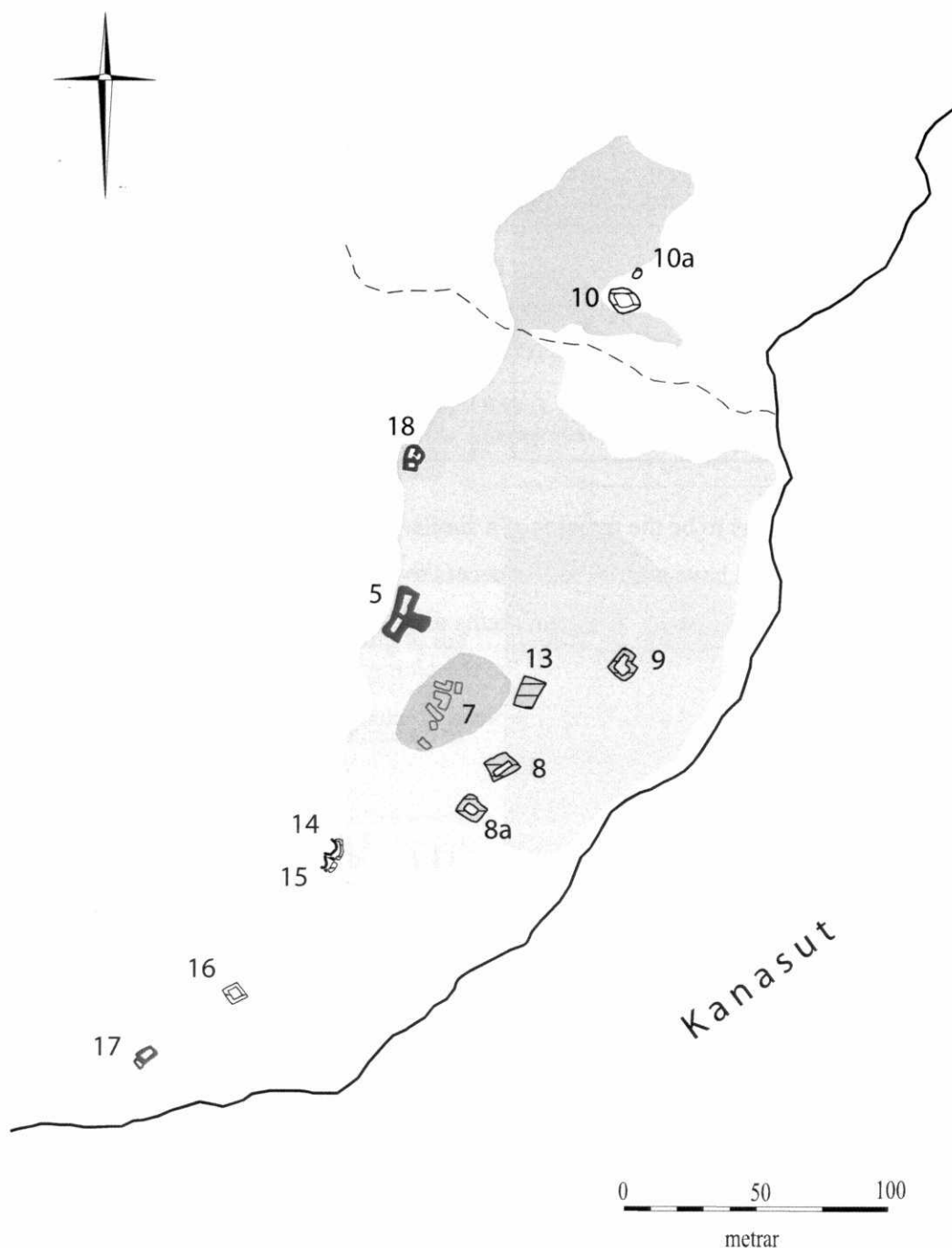
Ruin 4a to the left and 4b to the right, looking southwest towards the main farm across the inlet.

Ruin 4b. This seems to be the remains of a similar building on an adjacent but lower boulder which would have allowed direct access to the structure. Only a scatter of stones remain on the boulder. This ruin seems to be 4a's predecessor – robbed for the building of the other one. Judging from the remaining foundations this earlier structure does not seem to have been completely rectangular.

Main farm

The main ruin complex comprises ruins 5-10, 13-15 and 18, with ruins 16-17 somewhat to the side, on a separate piece of south-facing grassland on the way to the fjord farm (11-12). The home-field is potentially quite extensive (+3 ha) although it is quite wet on the northern side and quite stony on the southern side where most of the ruins are located. The home-field centres on a shallow basin drained by a small brook although the parts closest to the brook itself are very stony. The core of the farm site is on a flat rise south of this basin which juts slightly into the inlet, forming the most extensive lowland in the Kanasut area. The northern extension of the home-field only has one ruin (10) with the rest lining the edge of the southern part of the home field or scattered around the farm mound (7).

Ruin 5. This is a single structure, but an extension or additional room to the east was labelled 6 by Vebæk and Berglund. The main structure is 22x7 m in size, divided in two elongated rooms, the northern one somewhat longer. Both rooms have stone facing on the inside with up to 4 courses still in place in parts (particularly the eastern



The main farm at Ø80, Kanasut.

side). In the southern room there are still upright flat slabs suggesting that this was a byre and the larger room a hay-barn. It is remarkably similar to the byre and barn excavated by Jouko Voionmaa in Lundur in W-Iceland in 1939. The ruin is on top of a slight mound and remains of earlier phases can be detected on the eastern side,



where the extension also is, perpendicular to the main ruin, aligned with the junction between the two rooms.

Close-up of stall partitions in ruin 5, looking west.

Ruin 6. See Ruin 5.

Ruin 7. The farm mound is quite extensive, 45x25 with up to eight definable cells, mostly lining up in a single row on the western half of the mound. The mound is inside 1 m high and does not seem to represent many phases of vertical phasing but its large area may be a function of horizontal displacement of buildings. Largely covered in vegetation but lines of stone as visible in places and one of the cells is full of collapsed building stone. There are also suggestions of more cells or rooms in other parts of the mound.



The farm mound, ruin 7, looking west.



Ruin 8, looking south. Ruin 8a on the crest to the left.

Ruin 8. A stone-built rectangular building, completely collapsed, measuring 13x7 m. The walls seem to have been very wide, perhaps suggesting rebuilding. There are 2 large slabs among the jumble of stones which could have been used as stall partitions.

Ruin 8a. A 10x7 m pile of stone on exposed bedrock. It is possible that the foundations of north- and west walls are covered in soil and vegetation to the side of the exposed rock, in which case this may have been a small enclosure similar to 10. It looks like it has been robbed.



Detail of the stone-box in ruin 9, looking east.

Ruin 9. A stone-built house, 14x8 m, which may have been divided in two rooms. There is a well preserved stone box by the northeast corner. In Iceland such boxes are associated with storage and smithies, and this would in fact be a typical location for a smithy.

Ruin 10. Sub-rectangular enclosure built of stone on an exposed piece of sloping bedrock. It measures 15x10 m. There is possibly an entrance in the northwest corner. This enclosure is some distance from the main cluster of ruins, on the northern side of the brook.



Ruin 10, enclosure, looking southwest.

It has similar dimensions as comparable enclosures at Ø282 and Ø84.

Ruin 10a. This is a small pile of stones outside the northeast corner of enclosure 10, and may be just that rather than evidence for a separate structure.



Ruin 13, looking NNE.

Ruin 13 (7a in Berglund's report). A rectangular spread of building-stone, 15x10m, aligned nearly N-S. Seems rather too wide for a house, but too small for an enclosure. Its location at the corner of the farm mound would be consistent with a chapel but the

alignment of the structure speaks against such an interpretation.

Ruins 14 and 15 (5a in Berglund's report). Two stone-built cells constructed up against a low cliff which forms the western side in both. Both have entrances on the south ends. 14 is further north and measures 6x2 m on the inside whereas 15 is 5x3 m on the inside.



Ruin 16 in the foreground, partially obscured by the willow. Ruin 17 above centre of picture to the left. Looking south.

Ruin 16 (13 in Berglund's report). A stone-built enclosure, ca. 10x10 m, with walls marked by double rows, but only a single course. No collapse is visible so either this structure has been robbed or the stone foundations never stood higher. Albrethsen detected a possible division of the structure in two halves, both with entrances to the east.

Ruin 17 (14 in Berglund's report). A stone built structure, measuring 12x6 m, with a possible small cell on the southern end. Marked by a single line of stone, with only one course.



Ruin 18, looking west.

Ruin 18 (9a in Berglund's report). A 10x6 m ruin divided into 3 cells. Stone facings are visible on the insides in the western half of the ruin, with the northwest cell most distinctive, with up to 4 courses of stone. A doorway connects it to a smaller cell to the east but the cell on the southern end has no discernible entrance.

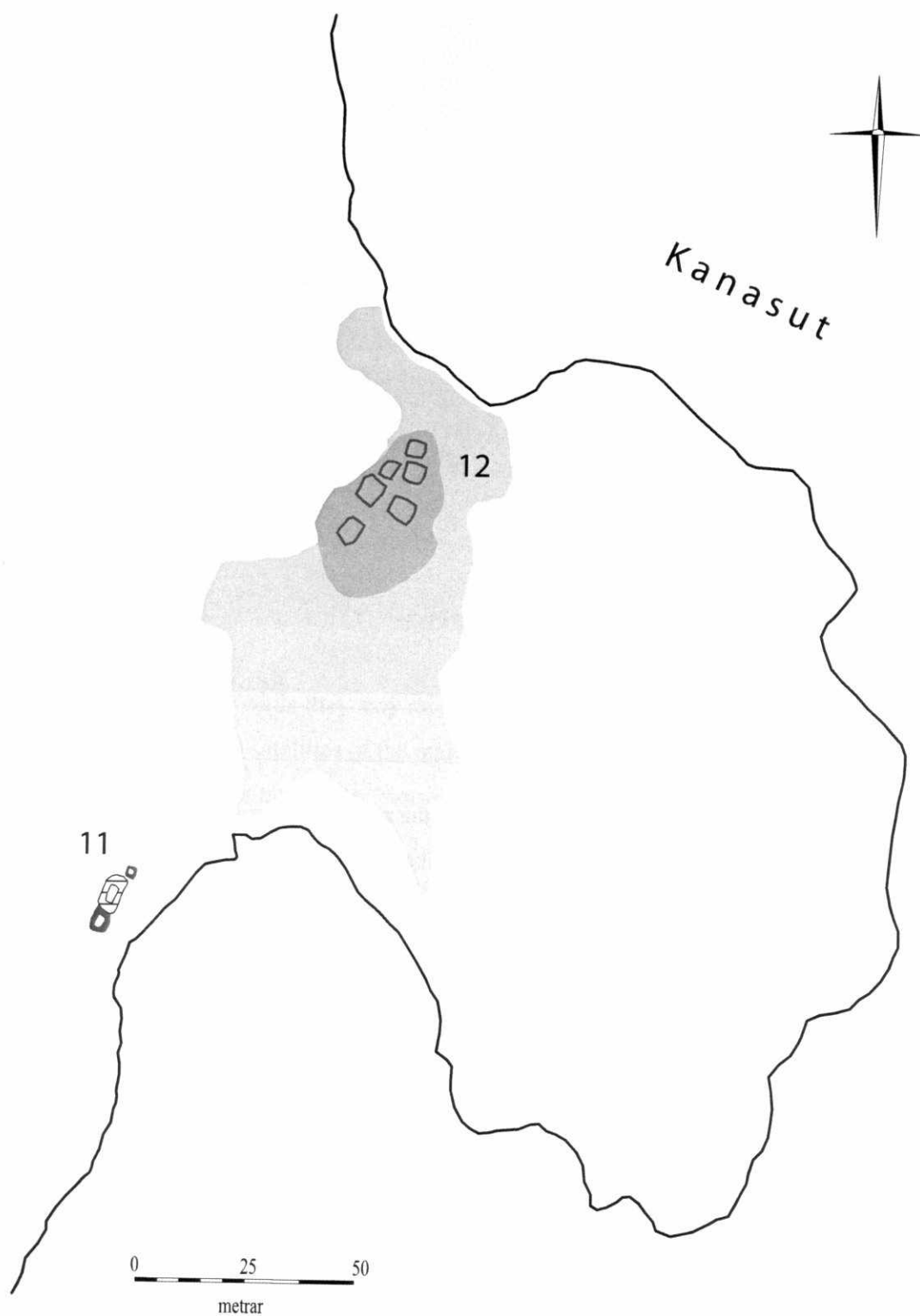
Fjord farm

Ruins 11 and 12 are on a grassy neck between the mountainside and a rocky headland on the western side of Kanasut inlet where it opens onto to Igaliko fjord. There is also a modern hut on this headland. Ruin 12 is a farm mound with several small cells. There is wetland around the mound, a possible home-field of half a hectare. Small brooks drain into the bog but there is no obviously good water source in this place. Although the farm mound is impressive and certainly just as or more substantial than the mound on the main farm or in places like Ø282 or Ø84 this site lacks all the other principal characteristics of a farm – a reasonably large home-field and outhouses.



Ruin 11, looking east.

Ruin 11. On a narrow ledge, some 75 m SSW of the farm mound (12) this ruin is at the extreme end of lowland on the western side of Kanasut inlet. It measures 15x5 m and is divided in three cells. The middle section is largest and built largely of stone while the cells to either end of it are smaller (the northernmost is tiny) and seem to have more turf.



The fjord farm at Ø80, Kanasut.



Ruin 12, looking west.

Ruin 12. The farm mound of the fjord farm is the most substantial ruin in the whole of at Ø80. It measures some 40x30 m, and unlike the mound (7) at the main farm, seems to be the result of substantial build-up of structural debris. The thickness may be as much as 2 m but the mound has accumulated on a slope so the actual thickness of deposits may be less. On top some 6 sub-rectangular cells are visible, all measuring 3-5 m a side, arranged in two parallel rows. Some lines of stones are visible and there are scatters of stone here and there but mainly the mound is covered in grass.

Discussion

Ø80 is the most complex archaeological site surveyed in the Hvalseyjarfjörður area in 2005. The main farm is comparable to Ø84 and Ø282 in terms of home-field size, number of out-houses and the presence of a stone-built enclosure which seems to be a peculiarly Norse-Greenlandic type of structure, associated with permanently occupied or higher-status farms. The exceptionally well preserved store-house sets it apart from these other substantial farms and suggests perhaps that it should rather be grouped with Ø83, Hvalseyjarfjörður itself, the only other site in the survey area

where such a structure is recorded. In addition the satellite farms, up in the valley and out by the fjord, suggest that this was an unusually substantial settlement. The resource potential in Kanasut compares extremely favourably with the sites in Hvalseyjarfjörður proper. There seems to have been substantial hay-making potential on the shores of the inlet and along the main river; there is more seaweed than observed anywhere in Hvalseyjarfjörður which may be significant for winter feeding as well as the improving of fields. No doubt there is also good summer grazing further up the valley, fish in the lakes and possibly workable iron in the bogs.

Of the three farm mounds 12 (the fjord farm) is the most substantial, while 7, on the main farm, looks curiously flat, although it is quite extensive and may reflect horizontal development. The valley farm (1) is the smallest of the three mounds and may represent only a short-lived occupation. 12 on the other hand must have accumulated over a substantial period of time and suggests that maritime connections were important for the settlement in Kanasut. Both the valley farm and the fjord farm lack the home-field potential and the outhouses even of minor/temporary farms like Ø84a and Ø284, and while they may represent separate households it may be that they should be regarded as satellites of the main farm rather than fully independent units.

As already mentioned the “store-house” (4) marks this site as belonging to a select group, and it could be taken as a direct indicator of high status. That chimes well with the apparent complexity of the settlement, which would in turn, in addition to its relative isolation, mark it out as a likely spot for a chapel. However, none of the ruins exhibits the characteristics of such a building. If there ever was one at this farm it has been built on by later structures.

The “store-houses” always seem to be interpreted as food stores, which is in itself conceivable, but surely a food-storing (or goods-storing) function could have been achieved by simpler means. In Ø80 the structure is some 800 m from the main farm, suggesting that regular access to it was not a major consideration. Nor a fear of theft as it would be difficult to monitor in conditions of poor visibility. It will also have been difficult to get into – even with a ladder it will have required some effort. A primarily symbolic function could be suggested and the thought could also be entertained that this type of building is practically unassailable without siege engines. Of course storing of goods for long-distance transport could easily go hand in hand with a symbolic and defensive function, but the fact that these structures are

associated with major sites all over Norse Greenland surely suggests that they were status symbols, whatever their practical function.

Ø81 (60V2-0IV-635)

This site was not visited in 2005 and there are no reports of it later than 1939 when Vebæk failed to find the ruins originally described by Gustav Holm in 1880 (MoG 6, 103). Holm found two main ruins, both elongated, one divided in two and the other into four cells. They are situated on a small plateau behind a headland that protrudes into Igaliko fjord, alongside a brook that drains into the fjord to the west. The site appears extremely inaccessible, both from land and sea, and there does not seem to be much lowland around the ruins. It seems very unlikely that this is a farm site.

That there are still Norse ruins there is confirmed by Kalistaarq Karlsen.

Ø82 (60V2-0IV-636)

This site was described by Petersen in 1894 (reported by Daniel Bruun in MoG 16, 409). Since 1955 when an agricultural college was established at the site a number of the ruins have been destroyed, but the situation has not changed markedly since 1971 when Albrethsen describes 3 ruins remaining. This includes no. 1, which is still to be



Ruin 1, looking southwest.

seen behind the green-house which is highest up the slope on the eastern side. There is also a sizeable bump where no 7 is marked, but no house shape can be discerned there anymore – stones from the field have been piled up there and damage no doubt made to the ruin in the process. Ruin 1 is elongated, possibly divided in 3 rooms with 1-2 annexes to

the east like Bruun indicates. From its size and shape this could well be a dwelling but it is strangely aligned, oriented perpendicularly to the slope – although the incline is not great. At the upper end of the ruin there is a bog, which may be recently formed (there is an overflowing water-tank on the slope above) – otherwise this location would be curious for dwellings.

The buildings of the farm Ø82 were mostly in a cluster at the upper end of a southwest-facing bowl. All in all it has lowland of some 10 ha which – judging from its present completely altered state – would have been all home-field and meadows. There is really no way of assessing the size of the original home-field. North of the site there is a large basin with plenty of pasture and fields have been prepared on the shore further north – facing Hvalsey – indicating at least meadowland.

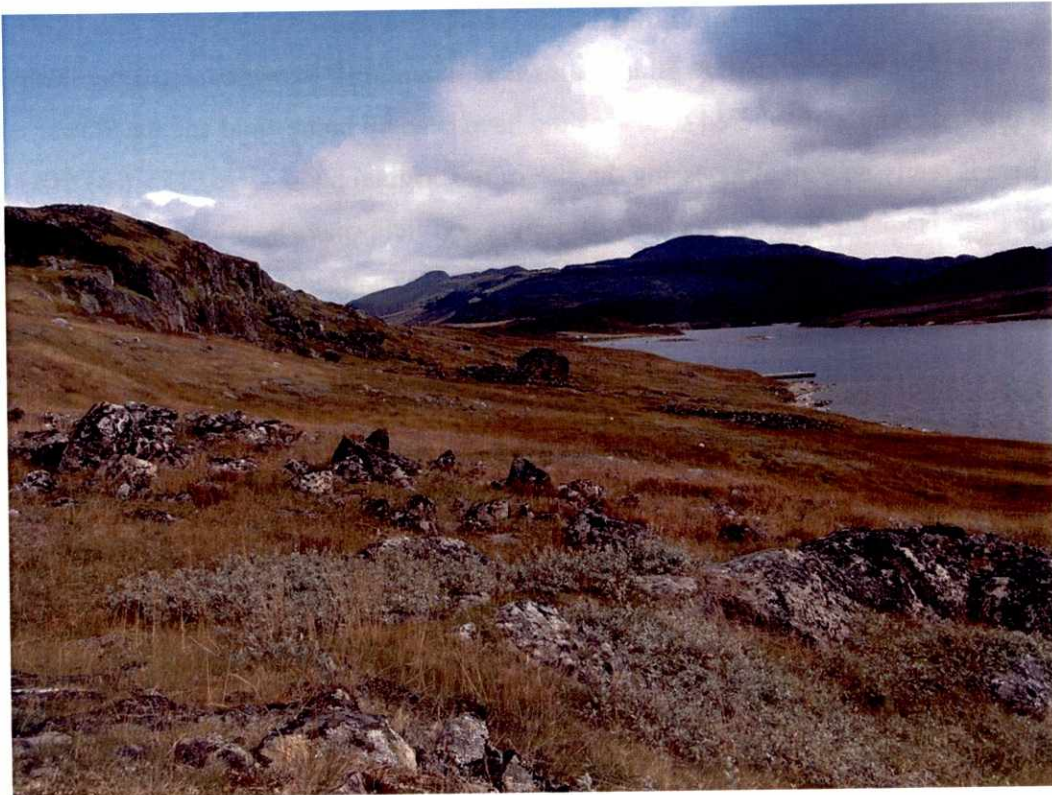
From the descriptions of the ruins and the apparent resource potential at this site it seems safe to characterize this as a permanent/major farm on a par with Ø84 and Ø282.

Ø83 (60V2-0IV-646)

60°49.731 N 45°46.956 W

The site of Hvalseyjarfjörður with its well known church ruin has been documented better than most in Norse Greenland and no attempt will be made here to describe it afresh. The standard description of the site remains Roussell's in his *Farms and churches* (MoG 89:1, 34-37) while Jette Arneborg provides an important update in *Saga trails*, pp. 60-73.

I failed to identify ruins 2-5 and the well does not look like a man-made feature – more like a natural spring. There are more springs (or rather upswells of groundwater from underneath the slope) further up and further west in the home-field so there is not an apparent lack of water sources – although this can of course be changeable according to season and precipitation. I made a very rough measurement of the home-field which seems like it could have been some 8 ha. Large parts of that area have only very low growing grass – even at the end of summer – and large parts are also quite stony. There is really only a 2-3 ha area SW of the farmhouse where the grass grows to any considerable height. This part is essentially wetland although not very boggy. In addition to the home-field, with no doubt variable off-take, there will have been meadows, e.g. northeast of the circular enclosure (14) and further west (of ruin 1) where there is now is a short stretch of flat *mói* with low vegetation before the coastal strip narrows and turns into a scree with surprisingly lush vegetation. In places the willows grow to more than 2 m. While this represents greater hay-making potential than at any of the other sites visited in Hvalseyjarfjörður in 2005, it is not much if cows made up a sizeable proportion of the 15 heads of cattle, which Roussell found room for in the two byres. This only adds up if



The home-field in Hvalseyjarfjörður farm, looking eastwards towards the church (8)

- a) the home-field was substantially larger or unusually productive
- b) there were actually fewer cows than normally assumed from Roussell's figure, either because the proportion of bulls was higher or because the two byres were not in use coterminously. The one at the western end of the home-field could in fact be suggested to be a summer-byre. If so the cows would have been made to graze west of the home-field in summer. It could also be a *geldneytaffjós*, a separate byre for castrated cattle, which may have been kept grazing longer than the milch-cows.
- c) the farm was dependent on resources coming in from other sites. This might make sense if the church and the hall are both from the final phase of occupation of the site, representing a change to a more extensive strategy – pooling of resources from many sites. It may make sense in a situation of increasing isolation and a growing sense of being a backwater to create a single much larger unit than the colony would have seen before.



Ruin 1, possible byre at the western edge of the home-field, looking north.



Ruin 11, a possible stable, looking south.



Ruin 14, a circular enclosure, looking west.



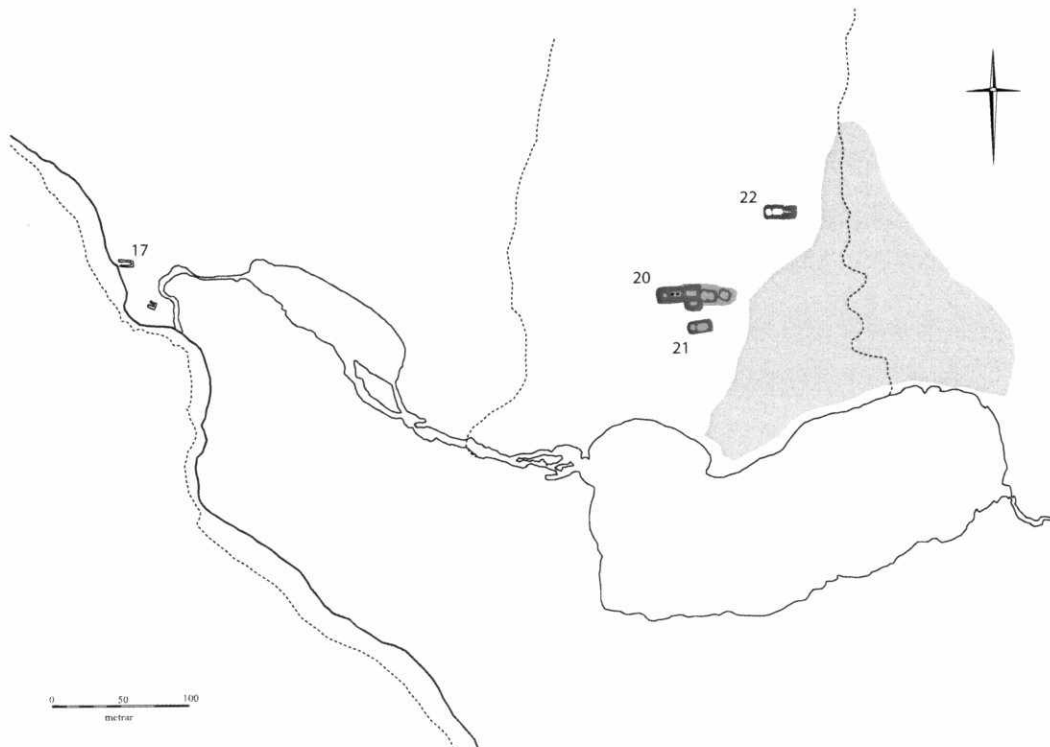
Ruin 15, "Gröf Þorsteins farserks", looking south.



Ruin 7, a byre in the central complex, looking east.



Ruin 13, a possible stable, looking west.



Ø83a, the “dairy farm” showing the remaining ruins.

Ø83a (60V2-0IV-645)

60°49.712 N 45°45.241 W

This site, called the “dairy farm” by Roussell (MoG 89:1, 37-41, which remains the standard description), lies a kilometre and a half east of Ø83, by a series of small lakes on a hilly promontory which all but closes the inlet Tasiussaq from Hvalseyjarfjörður proper. A modern sheep-farm has been established on the site – testifying to the resource potential at this location. Although the landscape has been altered considerably by modern field-levelling and buildings it is still possible to get an idea of the likely extent of home-field and meadows. The most likely location for a home-field is in the south-facing bowl east of the main cluster of ruins (20-22) which are themselves perched on stony ground. Here it is possible to postulate a home-field of 2,5-3 ha. In addition there are wet meadows along the lakeshores and iron-oxide slicks can be seen by a brook some 200m west of ruin 20.

Roussell partly excavated the larger structures at this site and concluded that it could not be an independent farm as he failed to find anything indicating a dwelling. Small scale excavations in 2004 suggested “that the surviving houses had only been used for a short time.” It was concluded that this farm was built at an early stage,

possibly in the 11th century and that it was abandoned soon after, its land taken over by its larger neighbour (Arneborg, Saga trails, 72). Another possibility might be to see this site as a precursor to Ø83, abandoned only when the latter site was established, possibly in connection with the building of the church. That would make sense as Ø83a seems in many ways to be a site of greater resource potential, Ø83 only having the greater home-field size as an advantage.



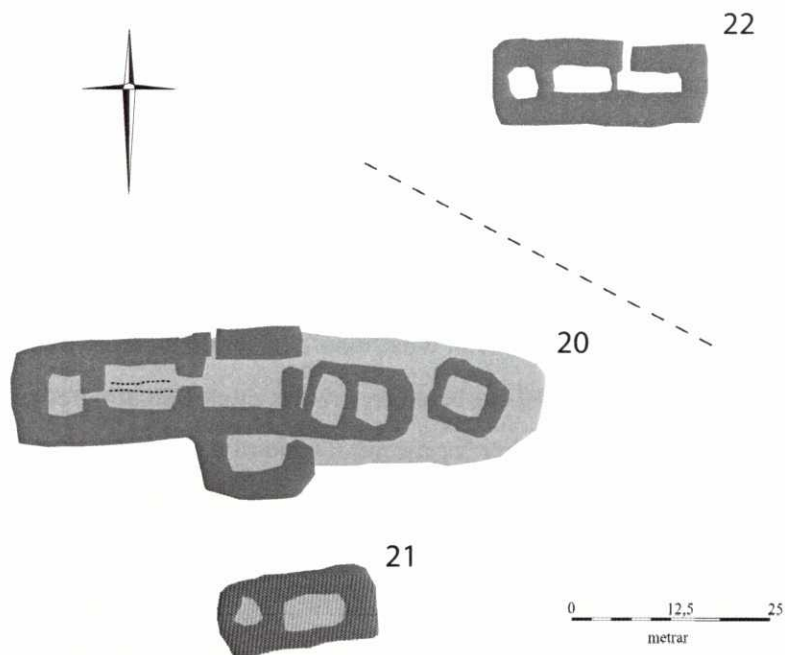
Ruin 17, a possible naust, looking south.

Ruins 18, 19, 23 and 24 have disappeared but 17, 20, 21 and 22 are still to be seen. In addition there is a small rectangular stone built ruin some 30 m east of ruin 17 which could be Norse. It is possible that this is the same as ruin 18 which would then be shown wrongly on Roussell's map. It could

also be one of the "many Eskimo houses" he saw in this area. Ruin 17,

which measures 10x3 m, could well be a *naust* but 20-22 are all quite substantial buildings. 21 and 22 are divided in two and three rooms respectively but 20, which is 60 m long in all,

probably is a combination of dwelling and stables. It seems to have been excavated quite thoroughly by Roussell. His spoil heaps are still to be seen on the western side of the building and his narrow



Ruins 20-22 at Ø83a.



The central cluster of ruins in Ø83a, looking southeast. Ruin 22 in the foreground, 20 in the middle and 21 along side it.

trenches along wall-lines – and in places through walls it seems – attesting to his activities. This building clearly has different phases. The lower (northern) end has compartments with separate entrances which are not an integral part of the complex and there are also signs of rebuilding in the main complex. This massive building is on an incline, sloping from south to north, whereas ruin 21 is more or less level. Ruin 21 is also wider on the inside, 3+ metres instead of 2+ metres in 20, perhaps suggesting that ruin 21 may have been a dwelling. There is a trough-like structure along the centre of the floor in what would be the hall (second room from the south) in ruin 20, with some 40 cm between rows of stones creating edges on either side. This is too narrow, whether for a central aisle of a dwelling or a paving in a byre, and there must be another explanation for it. It is reminiscent of a similar structure in one of the buildings in Pingnes although there the distance between was even less.



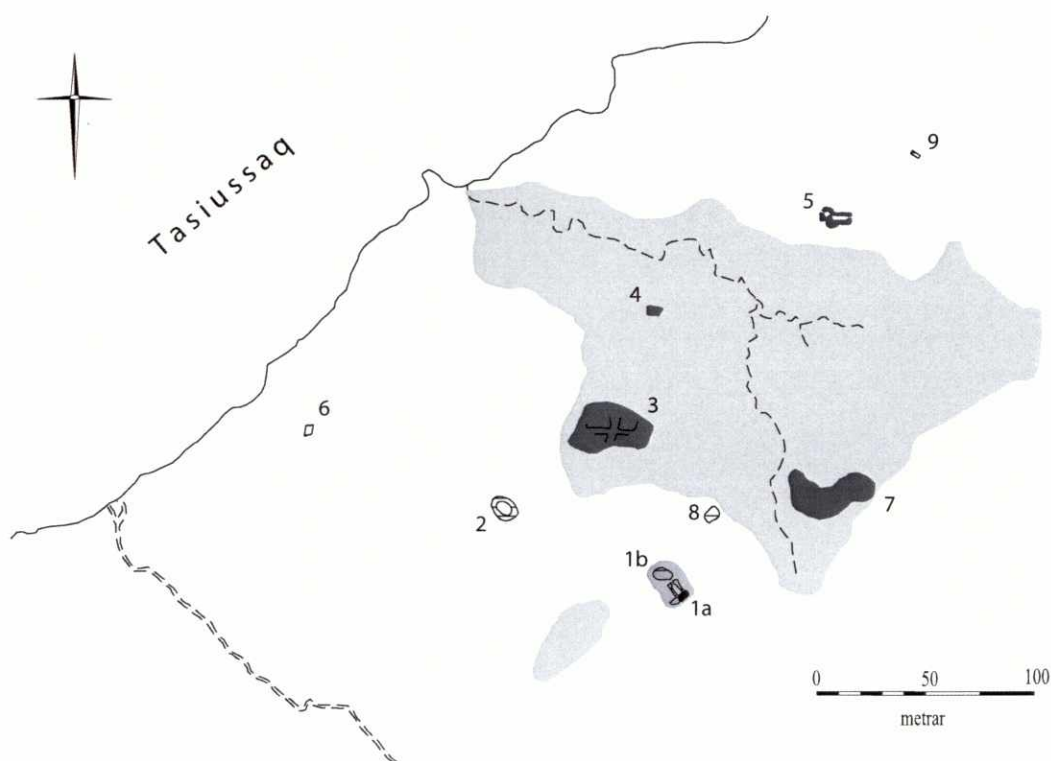
The farm site Ø84, looking southeast.

Ø84 (60V2-0IV-642)

60°49.091 N 45°43.665 W

This site was originally reported by Gustav Holm in 1880 (MoG 6, 100), but a more detailed description was made by Vebæk in 1939 (see also MoG 90,1, 16), supplemented by a sketch of one of the ruins (6) made by Berglund in 1990.

The site is on the southern shore of Tasiussaq inlet which branches off from Hvalseyjarfjörður to the northeast. South of Ø83a the mouth of the inlet is very narrow, but further in the inlet widens. Close to the opening there is an island, and west of that a skerry opposite to the mouth of a large river which drains lakes on the neck of land between Tasiussaq and Kanasut (Ø80). Some 200m east of this river there is a small brook draining a southwest-facing bowl. Along the brook there is wetland with lush grassy vegetation and the ruins of the farm lie scattered around this with a concentration around a small cliff-face which looms picturesquely over the site. Behind this cliff there is a shallow hollow with grass in it and east of that extensive wetland stretching eastwards all the way to the river. Further away from the brook there is drier grassland and still further up in the bowl shrub dominated by willow.



Plan of Ø84.

There is some pasture potential along the shores of Tasiussaq as well as in the valley reaching inland from the head of the inlet. A Norse site (Ø286) on the eastern side of the river in that valley may be a satellite from this farm. Another valley with lakes stretches eastwards north of the site over the ridge to Igaliko fjord. It is likely that this valley, or at least a part of it, was within the sphere of the farm Ø84. If there is fish in the lakes both north and south of the site that may have represented an important resource.



Ruin 1a, looking east.

Ruin 1a is a stone-built house or fold, 8x5 m, with an entrance to the northwest. Its south-eastern end abuts a large sub-rectangular boulder. There are also stones on top of the boulder and a wall stretching south-westwards from it.

Ruin 1b is a 9x6 m pile of stones in front of the entrance to 1a. Both 1a and 1b are clearly built on the remains of earlier structures.



Ruin 2. A sub-circular enclosure measuring 14x10 m, built of stone on exposed bedrock. The northern side has collapsed onto the rock but the southern side incorporates 3 boulders and here there are up to 2 courses.

Ruin 2, looking ENE.

Ruin 3. The farm-mound is quite extensive (30x20 m) and is completely over-grown although single course wall-lines can be discerned, describing a cross-shape. The mound is ca 1 m thick. There is a very green patch on the upper/western side, no doubt a midden, and another, not as pronounced, on the north-eastern side where it merges into a bog which separates the farm mound from ruin 4. This latter midden has potentially organic preservation.



The farm mound, ruin 3, looking north.



Ruin 4 is built of stone on a small dry patch in the middle of the bog. It is completely collapsed. It measures 8x6 m.

Ruin 4, looking west.

Ruin 5 is elongated with two well defined cells, a small one on the western side with a door to the west and a larger oblong one to the east with a door on the eastern gable. The ruin is completely overgrown with grass and hardly a stone to be seen. There is a rise to the south of the oblong cell which may represent a third cell or earlier phases.



Ruin 6, looking west.

Ruin 6. In Vebæk's description he talks about ruin 6 as the fold up in the mountainside east of ruin 5 – and there it is, here labelled 9. On the plans however ruin 6 is shown down by the shore, west of the other ruins. It is really only a scatter of stones forming an oval, 8 m long and 4 m wide.

Ruin 7 has not been registered before. This is quite an extensive series of bumps at the upper end of the home-field. It may be a farm-mound or a cluster of turf ruins which have fused into an amorphous mass. There are several depressions but nothing which can convincingly be suggested as rooms or cells. The ruin is covered in grass. There is just a scatter of stones at its NE end where a red-painted stick has been placed to mark the place (such sticks are by most of the ruins). It is some 40 m long and 20 m wide.



Ruin 7 is indicated by the paler, higher growing grass. Looking ESE. Ruin 9 is under the large boulder upslope to the left.



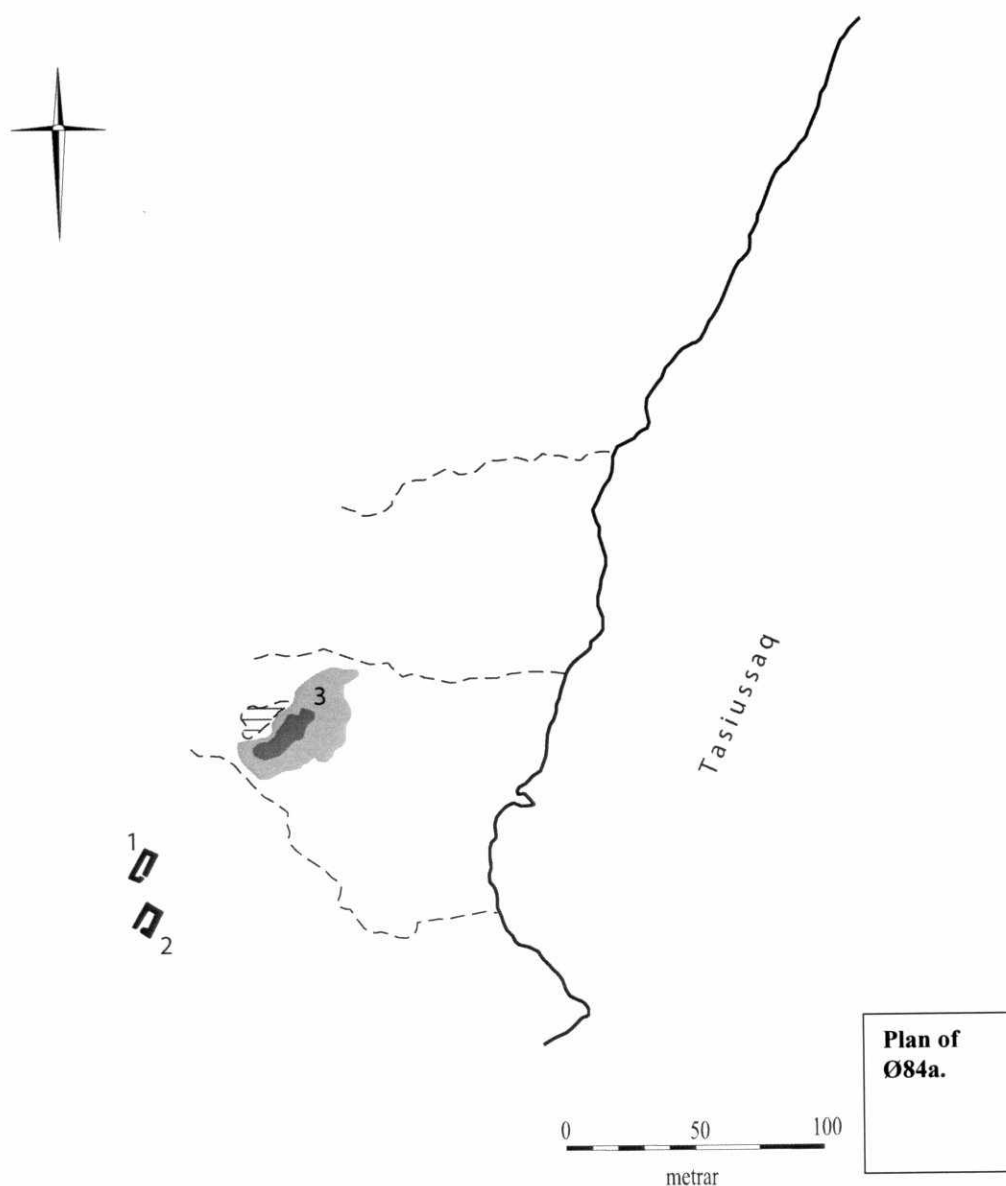
Ruin 8 is a pile of stones on the slope northeast of ruin 1. It is at the edge of the home-field, adjacent to a large boulder.

Ruin 8, looking west



Ruin 9, looking west.

Ruin 9 is a 7 m long stone-built wall creating a small pen in between three large natural boulders on the slope north of the home-field. There are three courses still standing but the wall never seems to have been much higher. There is a gap in the wall and south of that it has collapsed completely.

**Ø84a (60V2-0IV-644)****60°50.480 N 45°42.084 W**

This site was originally reported by Roussell in 1935, but a more detailed description was made by Berglund in 1984.

The site is on the western side of Tasiussaq, 150 m from the head of the inlet, some 75-100 m from the shore on a low terrace that runs adjacent to it. It is 3,25 km northeast of Ø83a. Berglund reported three ruins and no more were found in 2005, but like he notes there may well be more covered in the shrub which is quite dense in this area. Although ruin 3 certainly looks like a farm mound there is nothing in this location which could be described as a home-field, apart from a collar around the



Ø84a seen from the south. The farm mound, ruin 3, is at the centre of the picture.

farm ruin 3, and it is possible that this should be seen as a shieling rather than a small farm.

Ruins 1 and 2 are more than 70 m south of the farm mound and both look like animal stalls, sheep stalls no doubt, although it is conceivable that they could be milking folds. They would then be very well made milking folds, with nicely made stone-built walls, surviving up to 4 courses in ruin 1. The structure on the farm mound is much less distinct as large parts of it are covered in thick shrub. This is clearly a multi-celled building sitting on top of earlier building remains. The archaeological farm mound sits on top of a natural hill and tracing the limits of the former is not easy. There is a small pond at the western edge of the mound which may have contributed to water-logging of the basal deposits in the mound. It has probably been formed by a blockage created by a brook which flows from a spring close by the southern edge of the mound. Another brook flows by the northern edge – there was clearly no shortage of water at this site. The site is SE facing and sits in a broad hollow which faces mainly north. The ground here is very rocky and there is hardly anywhere where a home-field could have been made. The only place is the eastern side of the hill where the farm house has been perched. The hollow is

different however from the land to the south of it (i.e. closer to Ø83a) in that it is quite wet and as a result there is much willow and even clusters of birch. This dense shrub-land amounts to some 2 ha at most. In addition there is green grassland along the river which drains into the head of the inlet, but this is at least 400 m from the site.



Ruin 1 is 13x6 m, aligned north-south and built up against a low rise. There are up to 4 courses in the stone walls on the inside but these are largely collapsed. There is a doorway on the southern side of the eastern wall.

Ruin 1, looking northeast.

Ruin 2 is 17 m southeast of ruin 1 and is aligned more SSW-NNE. It measures 12x8 m and the stone built walls survive up to three courses in the NNE gable. The SSW gable is partly formed by two large natural boulders on either side of the entrance.



Ruin 2, looking southwest. The two large boulders form the SSW gable.



Ruin 3 is 70 m NNE of ruins 1 and 2. It is almost 30 m long and 10-15 m wide. Collapsed stone walls indicate at least 2 cells but this has clearly been a complex building with more than one phase.

Ruin 3, collapsed walls, looking NNE.

Ø211 (60V2-0IV-641)

This site was registered in 1972 but the file does not disclose by whom. Two ruins are described: ruin 1 is down by the shore of Qaqortup ima, divided in two cells. It measures 3,5x13,5 m and is aligned east-west. The smaller, more westerly cell is said to be in danger of erosion, but this is also built of larger stones than the more easterly cell which is shown with a faint south wall. Ruin 2 is a fold built against a 4 m high cliff-face, some 100 m east and further up slope from ruin 1. It is 7x3 m in size, also aligned east-west, and is said to have upright slabs in the walls.

The situation plan shows this site to be on the northern edge of a west facing grassy bowl, drained by a small brook, perhaps 150 m south of the two ruins.

There are conflicting indications as to the location of this site. The map which comes with the site-file shows it on the southern side of the promontory which has Ø211a on the northern side (see below) while the general map of site locations shows it a kilometre or so further north. Due to time constraints only one of these locations could be checked and unfortunately the northern one was chosen. This turned out to be a blank so the site is presumably at the more southerly location.

Ø211a**60°48.568 N 45°47.199 W**

A previously unrecorded site was pointed out by Kalistaarq Karlsen on the northern side of the promontory which blocks the relatively wide stretch of lowland that extends from the mouth of the inlet Tasiussaq south-westwards on the eastern shore of Qaqortup ima. This site is 2,25 km due south of Ø83 and perhaps 1,4 km northeast of Ø211.

There are two ruins in this place located high on a north facing grassy slope, some 50 m south of a brook that drains into a small bay at the northern side of the promontory. The larger of the two ruins stands high and is clearly visible from the fjord.

The slope is dominated by heath with some grass but 10 m further up slope from the ruins there is bare bedrock. There is high-growing willow along the brook below but the strip of lowland stretching northwards from the site has patches of wetland with willow and dwarf birch as well as some meadow.



The two ruins at Ø211a.



Ø211a, looking SSE.



Ruin 1, the easternmost cell in the foreground, looking west.

Ruin 1 is the larger and more westerly of the two. It is 17 m long and mostly 5 m wide. It is formed by a row of four cells, all built of stone apart from the western and northern sides of the most westerly one. These have been built of turf and are overgrown. The eastern half of the

north wall of the second cell from the west has presumably also been built of turf, or possibly wood, as it is

completely missing but the western half is built of stones and is deliberately rounded off, indicating a doorway. The two easternmost cells both have doors to the north. The stone walls are still standing to a remarkable degree, typically 4-5 courses while the northern wall of the second cell from the east has 8 courses, standing to 1,7 m.



Ruin 1, spring in foreground, looking ENE. Ruin 2 can be seen on the right hand edge of the picture.



Ruin 1, detail, looking northwest.

There is a tiny stream emerging from a spring some 10 m south of the ruin's southwest corner, running tight by its western gable.



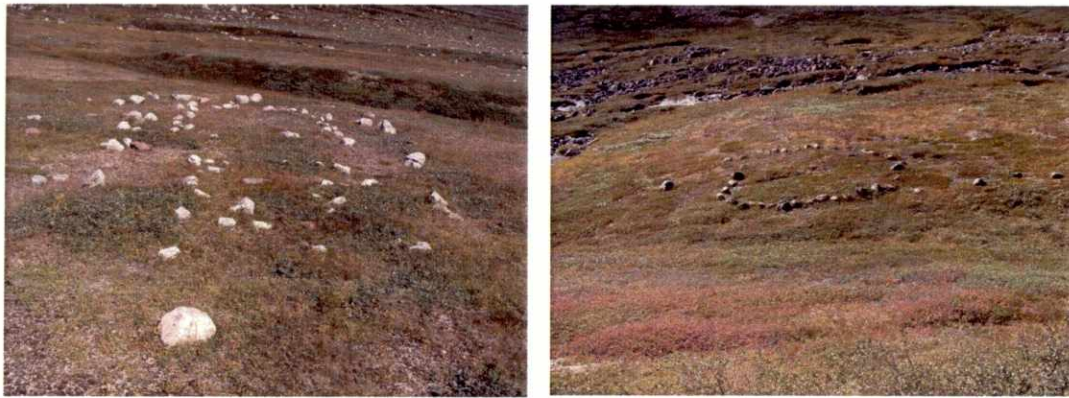
Ruin 2 is 15 m east of ruin 1. It is a single cell, measuring 3x2 m on the inside, completely level with the ground.

Ruin 2, looking north.

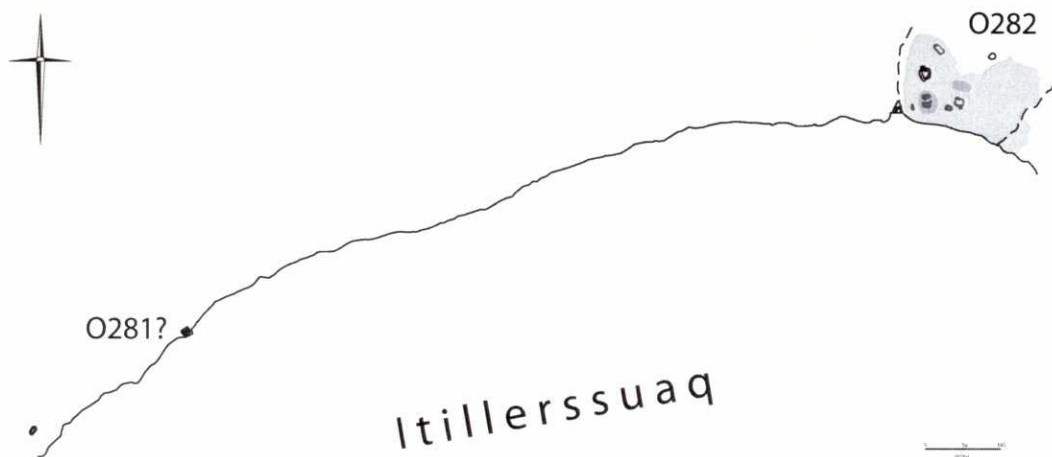
Ø281 (60V2-0IV-649)

60°49.948 N 45°53.611 W

The only description of this site available is a short notice by Joel Berglund tucked at the end of his report on Ø282. There he says that there are three “uanselige ruiner” which he suggests should be seen as a part of the farm Ø282. On his location map he shows one ruin some 1,25 km southwest of Ø282, on the northern side of a river that flows from the neck of land attaching the mountain between Tartoq and Itillerssuaq bays to the mainland.



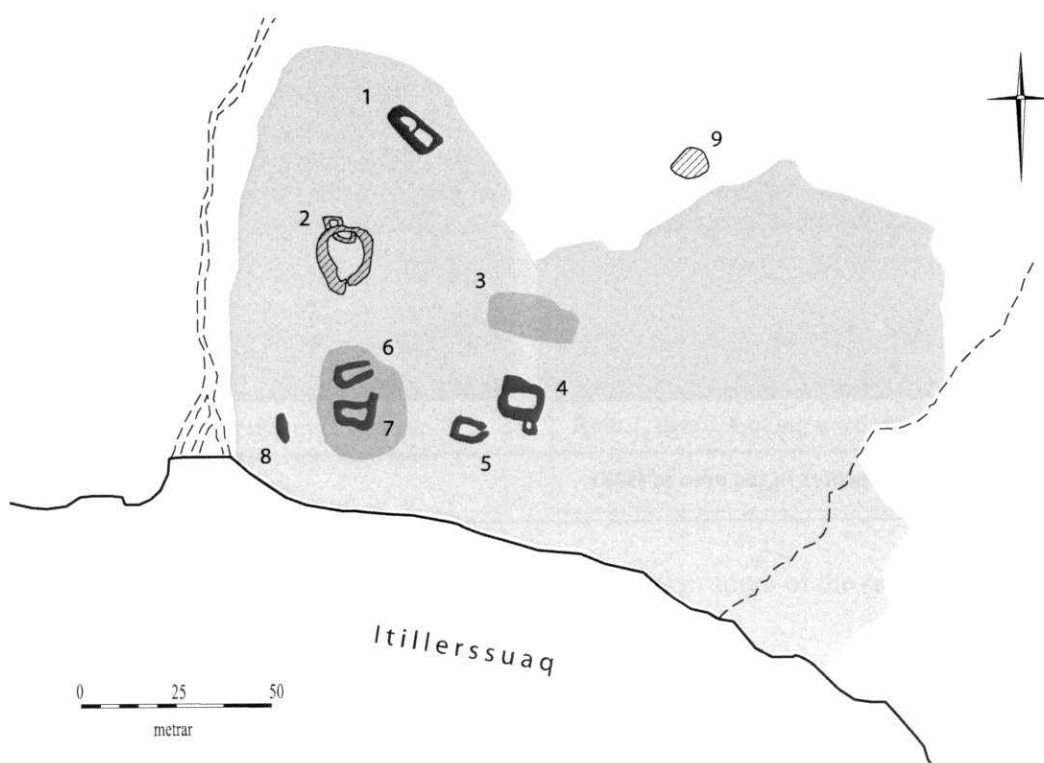
Archaeological features in the area of Ø281.



Map showing two of three archaeological features possibly associated with Berglund's description of Ø281 and their location in relation to Ø282. The ruin furthest to the left is the same as the one on the photograph to the left, above.

In this area no obviously Norse ruins were found in 2005 but there are several archaeological features which may or may not relate to Berglund's account. There are two ruins made of rows of stones, one clearly a tent ring, and also a possible two celled ruin partly eroded by the sea. Close to these there are also a few low cairns.

These ruins are on a stretch of lowland, some 200 m wide or so, covered in thick bush of willow and birch, which extends westwards from Ø282 to the abovementioned neck but the neck itself has only moss and low grass.

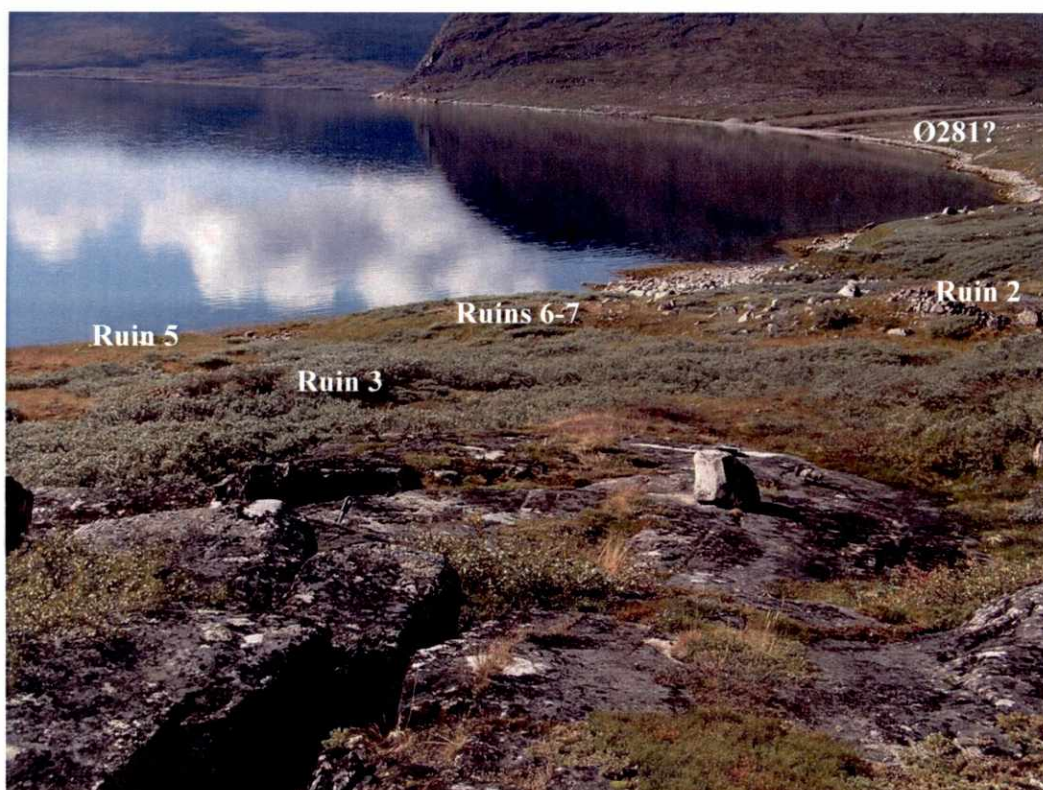


Map of Ø282.

Ø282 (60V2-0IV-648)

60°50.416 N 45°52.541 W

This site was described by Berglund in 1987. It is at the head of Itillerssuaq inlet, which is divided by a steep and impassable headland from the lowland stretching westwards from Ø83. This headland seems like a natural boundary between the two farms. To the east and north of the site there are steep mountainsides with dense shrub towards the bottom. The short valley to the northwest rises quite sharply but there is considerable lowland along the coast westwards to Ø281, covered in dense shrub. The home-field of Ø282 is at the eastern side of a substantial river that drains the short valley into Itillerssuaq inlet with a small but picturesque waterfall about the same level as ruin 2. A small brook runs through the eastern part of the home-field, which is 1,5-2 ha in size. The small home-field, the limited meadow and pasture potential means that this can only be described as a small farm although it is clearly in a class above both Ø84a and Ø284 (see below).



Ø282, looking southwest from ruin 9. A pylon base can be seen in the foreground.

When the site was visited preparations for building a power-line across this site had already been made and a pylon base could be seen on the rock slab between ruins 3 and 9. A large pit had also been dug into the northern side of ruin 3 (see below).



Ruin 1 is elongated, divided in two with a possible entrance on the western side by the partition wall. It is built of turf and stone, the walls fully collapsed, measuring some 18x7 m.

Ruin 1, looking southeast over the home-field.

Ruin 2 is a stone-built circular enclosure constructed at the end of a great scree deposited by the river on its eastern bank. It is some 17x15 m in size, built on a



Ruin 2, looking northwest.

south-facing slope, with an entrance on the southern, lower, side. The dry-stone wall is standing up to 1,5 m, 5-6 courses in the northern and especially southern sides, but quite collapsed in places.

There are at least two small cells built on to the wall on its northern side. One on

the outside adjacent to a large boulder which is incorporated into the wall, and

another one on the inside in the north-eastern quadrant. There is also a suggestion of a third compartment directly east of the one on the outside.

Ruin 3 is covered in high willows and is difficult to make out except as a 23x13 m elongated mound, probably divided into several cells with a few stones visible but none that arrange themselves into clear wall-lines. This structure has been disturbed by a large pit dug into its



Ruin 3, looking north from ruin 5, covered by the willow to the right of the whitened up-cast heap. Ruin 9 can be glimpsed on the cliff in the upper right hand corner.

south-western corner in connection with the planned power-line. Building stones could be seen in the up-cast heap but no other anthropogenic materials could be seen on the surface of the heap or in the exposed sections of the pit. While such superficial examination is hardly conclusive

it does suggest that ruin 3 cannot have been a dwelling.



Ruin 4, looking west.

Ruin 4 is an elongated ruin measuring 13x8 m with a small additional cell attached to the south-eastern corner, measuring 3x3 m. The ruin is overgrown with only a few stones scattered about.

This ruin may have more than one phase.



Ruin 5 is a smaller elongated ruin just south of ruin 4. It is similarly overgrown and measures 9x6 m. There is a possible entrance on the eastern gable.

Ruin 5, looking west. Ruins 6-7 on the farm mound in the background.

Ruins 6 and 7 both sit on top of a mound which is clearly made up of earlier building remains. The mound measures some 30x23 m and is ca. 1 m high. Ruin 6 is on the northern side, elongated, measuring 12x7 m with an open eastern gable. Ruin 7 is parallel to it, 2 m further south, measuring 14x8 m, with a short stretch of wall extending northwards from its northeast corner. There are further bumps and depressions on the mound, presumably from earlier phases. Both ruins have been made of turf and stone but the stone walls are all completely collapsed.

Ruin 8 is a house shaped depression west of ruin 7, fronting onto the break of slope above the shoreline. It is quite indistinct, perhaps 7x3 m.



Ruin 9 is a heap of stones on top of a rocky outcrop northeast of the main cluster of ruins and outside the home-field proper. A place for a *hjallur*.

Ruin 9, looking northeast.

Ruins 8 and 9 were added to Berglund's list but as he notes the coastal strip is covered in thick shrub and there could easily be further ruins outside the home-field.



Ø283 looking ENE. Boulder is A in the foreground to the right with putative walls in front, but boulder B in the background to the left.

Ø283 (60V2-0IV-647)

60°50.197 N 45°49.490 W

This site was described by Joel Berglund in 1990. It is 2,45 km west of Ø83, 300 m to the west of a river which drains a valley west of the mountain which towers above Ø83, overlooking a small inlet. Berglund describes this as a couple of “fåreskjul” constructed under two large boulders on the slope, some 25 m from the shoreline. The more southerly boulder A is very large and triangular, very distinct once one has a line of vision into the small inlet coming from Ø83.

In 2005 only a 3 m stretch of a convincingly manmade wall could be identified. This has 3 courses and is up to 0,7 m high. It is at the western edge of the more northerly boulder, which Berglund labelled B (confusingly shown to the south on his sketch). The whole slope is very rocky and it was not possible to verify Berglund’s sketch in terms of his lines of stones. The vegetation however is anomalous around both boulders – there is a distinct type of grass (looked like tufted hair-grass (Icel. *snarrótarpuntur*) to the surveyor’s untrained eye) south and west of both boulders –



Close-up of the wall under boulder B, looking north.

and this seems to indicate the extent of the archaeological site. The two boulders mark the edge of a flattish ledge in the otherwise steep slope and the whole place would have been good for keeping sheep. While the slope is stony it is also covered in dense shrub, with

willow and dwarf birch. Both stones have overhangs where a person could get some shelter, and the wall in B marks the

edge of a space covered by an overhang. At the eastern end of the boulder B there is an even larger overhang with a jumble of stones underneath which may be the remains of a wall but this is uncertain. By the south-western side of A a triangular area could be defined by a wall some 10 m long from east to west and 5 m wide. Below this there is a jumble of stones which could be collapse from this wall. It is however equally possible that this is all natural.

A pylon base has been prepared some 30 m west of the site.

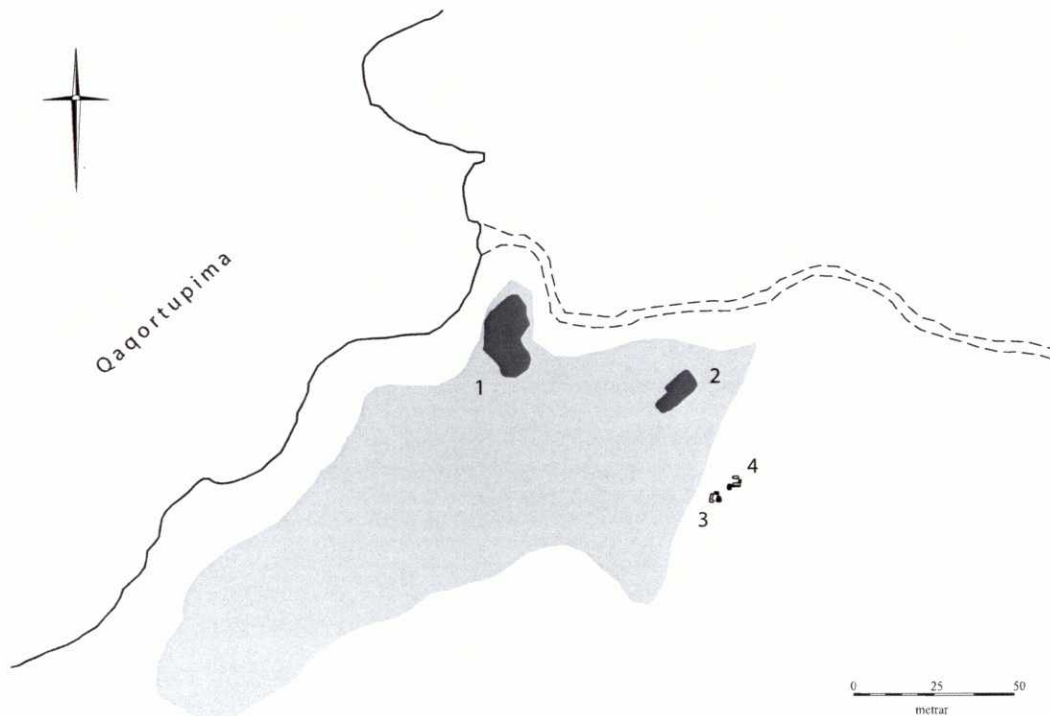
600 m west of Ø283 a large cliff blocks the coastal route over to Itillersuaq inlet, suggesting that this headland marks the property boundary between Ø83 and Ø282 and that Ø284 belonged to the former.

Ø284 (60V2-0IV-640)

60°47.211 N 45°50.064 W

This site was described in 1972, presumably by Ove Bak. It is on the south-eastern side of Hvalseyjarfjörður, on the southern side of a large river, some 3,6 km south of Ø211a and 1,5 km north of Ø285.

The ruins are on the northern side of a small grassy plateau directly on the shore. The home-field is bounded to the north by the river which has thrown up enormous screes on both sides. The estuary is sheltered by a small promontory jutting out to the north. With another promontory to the south a small inlet is created in front of the farmstead. The home-field is unusually stone-free but the grass and shrub is stunted and moss and ling dominate. A low cliff defines the upper side of the home field but the mountainside above is not very steep and there is considerable pasture potential along the entire coast and some patches of meadow along brooks (as at



Map of Ø284.

Ø285). The home-field is ca 1,5 ha, comparable in size, if not lushness, to Ø282, but as this site only has four structures it will either have been short-lived or low-status, or both.

The farm mound (ruin 1) is on a small ridge causing a kink in the river just before it reaches the sea. The mound has been eroded on both sides, to the west by the sea and to the east by the river, but this does not appear to be progressing very rapidly. Neither does the erosion on the seafront seem to be severe – there do not appear to have been major changes since 1972 when the first map was made. It may

however be gradual and this site could therefore do with a rescue operation sooner or later.



Detail of collapsed wall on the farm mound, looking north.

Ruin 1 is clearly a farm mound, some 25x13 m in size and 1,5 m high. It is eroded on all sides except the south and stones from walls

can be seen lying in the sand below on the



Ø284, looking northwest.

western, seaward side. The eastern side is presently stable and overgrown but it is clear that the river has previously taken chunks from the mound and will do so again in the future. At the northern tip of the mound there are distinct wall lines, completely collapsed though, but the southern edge is more diffuse and merges gradually with the home-field.



Ruin 2, looking SSW.

Ruin 2 is elongated, measuring 13x7 m. A kink in the northwest wall may indicate some internal division but this is not discernable on the inside, where there is a scatter of stones in no apparent order. The 1972 survey describes this ruin as "boliglignende" but as it is on a

slight incline it seems more likely to have been an animal stable.



Ruin 3 is an L-shaped stone wall built against a boulder at the edge of the home-field. It forms a tiny pen, some 2x1,5 m on the inside, with a narrow entrance on the south side.

Ruin 3, looking northeast.

Ruin 4 is a coarse stone construction against natural boulders forming an elongated pen, some 3 m long and 1 m wide, with an open west gable. It is 3 m east of ruin 3.

Ø285 (60V2-0IV-639)

60°46.639 N 45°51.262 W

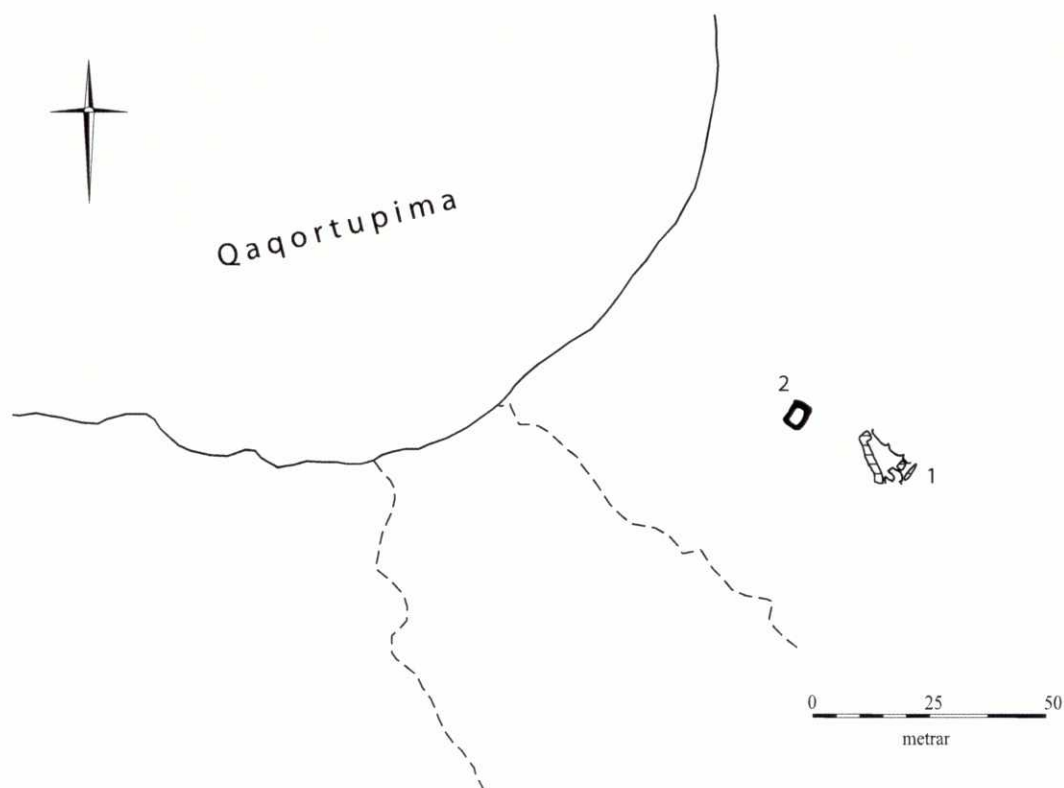
This site was described in 1972, again presumably by Ove Bak. It consists of two ruins on the northern side of a grassy bowl ca 1,5 km south of Ø284. Less than a kilometre further south the coast turns more directly west, and the more southerly of the two brooks that drain the bowl comes from an east-west oriented pass through the mountain giving easy access to Ø82, Upernaviarssuk.

The bowl is much grassier than the coastal stretch further north, with ling and grass down by the coast but more willow upslope. Of the two brooks that drain the bowl, the more northerly is smaller, running some 30 m south of the two ruins.



Ruin 1 is a stone walled pen built against a 2-3 m high rocky outcrop. At the front there is a 10 m long wall with an opening in the middle, completely collapsed. A smaller wall, 1 m long, fills a gap between the cliffs at the back and this is more or less completely up-

Ruin 1, looking west.



Map of Ø285.

standing. Further back there is a hint of a third wall, some 1,5 m long.



Ruin 2 is 20 m down-slope from the pen, a 7x4 m stone-built rectangle with up to 2 courses surviving, but very little collapsed stone around, suggesting that the upper courses were made of turf. This may have been a small hut or a pen.

Ruin 2, looking northwest.

Discussion

A small survey like the one presented here cannot form the basis for any sort of authoritative discussion about Norse Greenlandic settlement archaeology. As a result the following will just be a collection of impressions, written as much to help order my own thoughts as to be useful to others. There are mainly two issues which I would like to highlight: the character of Norse Greenlandic settlement archaeology compared to Iceland, and site classification.

In general terms the similarities between Norse Greenlandic and Icelandic settlement archaeology are overwhelming. The concentration of buildings inside home-fields; the contrast between dwellings, usually forming mounds, and other buildings; the heterogeneity of the latter group; the lack of structured arrangement of these buildings; the use of turf and undressed stone as building materials; the spacing of the farms; the presence of shielings or outstations; the predominance of apparently single households farms with a small amount of more complex settlements, but no villages – these are but some of the most obvious characteristics shared by the two colonies. The differences are possibly less significant but they are nevertheless striking:

In the Hvalseyjarfjörður area there are no constructed boundaries, neither around home-fields nor on property boundaries, and although they are attested in other parts of the Eystrbyggð they are nowhere ubiquitous as they seem to have been in medieval Iceland (taking an abandoned area like Þegjandadalur as typical for the latter). As this is hardly a matter of availability of suitable material – stone would have done nicely in Greenland while the Icelanders seem to have preferred turf – it must mean that the Norse Greenlanders approached their home-field development in a different way and that establishing clear boundaries in the outfield was not a concern for them. The latter issue may relate to the much grater spacing between holdings (see below) but the former may hint at some more fundamental difference. Given the apparent emphasis on cattle raising in Norse Greenland one would have expected every effort to have been made to protect, expand and enhance the home-fields. It is normally assumed that the construction of home-field boundaries served such purposes in Iceland although it may be significant that it seems that in the Northeast at least home-field boundaries were not constructed before the second half of the 10th

century. If that is confirmed as the general development then the fencing-in of home-fields cannot be seen as vital for their initial development, i.e. if we assume that this began immediately after occupation of each site. Adderley et al. 2008¹ found that it took 70-80 years of improvement for a north Icelandic home-field to reach its maximum productivity, but also that irrespective of any management input yields always remained at subsistence level, and that the inherent soil qualities and local climate always were the decisive factors in any home-field's productivity. Home-field boundaries may therefore have more to do with maximizing a particular type of off-take, i.e. fodder for winter, rather than any attempts to increase overall productivity. If this is so then boundaries would be expected even more in Norse Greenland as winter fodder was surely more vital there than in Iceland to keep the livestock alive. Possibly this suggests that the Norse Greenlandic home-fields were so unproductive that a more extensive fodder procurement strategy was needed anyway, that the home-fields were such small contributors to the overall fodder needed that they did not repay investment in boundaries. Another possibility is that this difference reflects different management strategies regarding livestock, e.g. that the animals were kept at such a distance from the home-fields during summers in Greenland that they would pose no danger to the grass growing in the home-field. While this might be seen to add significance to the shieling system in Greenland it may simply be that the much greater spacing of the holdings facilitated such an arrangement. It is possible that the home-field boundaries in Iceland primarily served to protect the fields from those animals which were not driven to shielings or mountain pastures during summer but grazed the outfield of each farm. If this was so then one would expect there to be regions in Iceland where home-field boundaries were absent too, e.g. Hornstrandir, and this may very well be the case. Finally it is worth remembering that home-field boundaries were not just functional, they also had a symbolic and ideological value, as definitions of home-space, a bounding of most peoples' daily lives. That the Norse Greenlanders had no need for such arranging of the space around them surely tells us something.

Another difference is the distribution of buildings in the outfield. In the Hvalseyjarfjörður area building remains are confined to the home-fields and their

¹ Adderley, Paul W., Simpson, Ian A. & Orri Vésteinsson (2008): 'Local-scale adaptations: A modeled assessment of soil, landscape, microclimatic, and management factors in Norse home-field productivities.' *Geoarchaeology. An International Journal* 23/4, 500-527.

immediate vicinity with smaller sites, most with 1-2 structures, at considerable distances away from the farmsteads. On average there seems to be one such small site to every holding in this area, typically more than one kilometre away from the farmstead. In Iceland the pattern is of a more gradual fall-off in the number of structures the further one goes from the farmstead. There one will normally expect to find *kvíar* (a milking fold) just outside the home-field and possibly some animal stables, then a *stekkur* (a weaning fold) 100 m or more away, then perhaps a *beitarhús* (winter house for sheep) and further away shepherds' huts. Interspersed with these there may be cairns and other structures relating to transport, and depending on the lay of the land, structures relating to fishing, hunting, hay storage and peat cutting. This diversity is absent in Greenland. The difference may be partly explained by features like *stekkir* and *beitarhús* in Iceland being early modern developments relating to the dissolution of the shieling system, but overall the built landscape of Norse Greenland seems to be much more punctuated, with much larger stretches of lowland completely unaffected by any human activity.

While much is traditionally made of the isolation of Icelandic farmsteads they are positively clustered compared to Norse Greenland. In the Hvalseyjarfjörður area the average distance to nearest neighbour is 3,58 km when all the farmsteads are included, also those which only can have been occupied for a short while. If only those farmsteads are counted which seem to have been occupied for generations (see below) then the figure becomes 5,54 km. A study of mean distances to nearest neighbour in eight areas in Iceland revealed that in 5 areas this figure was below 1 km and only Hornstrandir comes close to resemble Greenland, with a mean distance to nearest neighbour of 3,25 km.² While there are areas within the Norse settlements in Greenland which were more densely settled (esp. in the Brattahlíð area and parts of Vatnahverfi) there was clearly a palpable difference in the spacing of settlements between Greenland and Iceland which can only have been exacerbated by the much greater barriers to overland transport in Greenland. These conditions must have affected communications and social relations in fundamental ways.

² Orri Vésteinsson (2007): 'Communities of dispersed settlements. Social organization at the ground level in tenth to thirteenth-century Iceland.' ed. Wendy Davies, Guy Halsall & Andrew Reynolds: *People and Space in the Middle Ages, 300-1300* (Studies in the Early Middle Ages 15), Brepols, Turnhout, 87-113, here p. 93.

One difference, often commented on, is the apparently much greater use of stone in Norse Greenlandic architecture and the correspondingly more limited use of turf. This may relate simply to the more limited availability of turf in Greenland (or its greater value as a precondition for the growing of grass) but it is worth keeping in mind when contemplating the differences in the development of housing in the two countries.

Finally a couple of structural types are evident in Norse Greenland not found, or not identified, in Iceland. These include the so-called "store-houses" or "skemmur", dry-stone buildings often perched on top of cliffs or boulders, frequently some distance away from the dwellings. These seem to be a characteristically Greenlandic type of building. Also there are on many of the farms circular or sub-rectangular stone-built enclosures, in the Hvalseyjarfjörður area at least typically located within the home field or at its edge, on exposed bedrock and on an incline. At Ø83, where there is an unusually large specimen, it has been called a horse-pen accompanied by speculation that it was required for the horses of the parishioners when they came to church. Given that this site is hardly accessible on horseback from more than a couple of potential farmsteads that seems an unlikely proposition, and as such enclosures, albeit smaller, are also recorded at Ø80, Ø84 and Ø282, it seems that they should rather be given a role in the management of the livestock of these farms. As neither type of structure is found on the small farm sites (Ø284, Ø84a, and Ø83a) it may be that they belong chronologically to the later period of Norse settlement in Greenland or that they are status indicators, or both.

The other issue I would like to discuss briefly is site classification. Ever since the first comprehensive surveys by Gustav Holm and Daniel Bruun were published it has been clear that the Norse sites are of different types. In 1944 Aage Roussell proposed a classification based on his analysis of dwelling typology but which also took into account other factors like the size of the sites and the presence or absence of churches.³ While obviously inadequate, especially in light of the rather arbitrary guesswork involved in ascribing types to all the dwellings, there has been no comprehensive attempt to revise Roussell's scheme although efforts have been made

³ Roussell, Aage (1944): 'Farms and Churches in the Medieval Norse Settlements of Greenland.' *Meddelelser om Grønland* 89.1, 1-354.

to assess site status based on criteria like byre size.⁴ Any revision has been hampered by the lack of dependable and comprehensive survey data, and while important strides have been made, especially since the 1970s in identifying new sites, it is only with detailed mapping such as presented here and on a larger scale in recent projects centring on the Brattahlíð region and Vatnahverfi,⁵ that a sound basis has been created for a discussion on the classification of Norse sites. For these three areas at least data now exist which can be considered to be comprehensive in the sense that next to all sites are recorded and next to all structures within each site too.

A distinction can fairly easily be made between sites which are clearly not farm sites and those that are or may be farms. The former category ranges from a handful of stones like at Ø283 to sites with several structures, some possibly roofed, where however there is nothing which can be considered as a dwelling. Within this range there is considerable variation and I suspect that the distinction may not always be as clear as it is in Hvalseyjarfjörður and appears in the reports of the surveys of the Brattahlíð region and Vatnahverfi. Some of these non-farm sites are in the literature classified as shielings, and they may very well be, but clear criteria for distinguishing between a shieling and other types of outfield sites have not been established. Sites like Ø285 and Ø211a may well be shielings but other interpretations can also be suggested. There may also be room for variation within the shieling category. In Hvalseyjarfjörður non-farm sites make up 43% of all sites, whereas the figures are 36% and 45% for the Brattahlíð region and Vatnahverfi respectively. The lower figure for the Brattahlíð region may reflect the higher density of settlement there.

Classifying the farm sites and potential farm sites is more difficult. These represent a wide range from unequivocal farmsteads with a large number of ruins, one or more obvious dwelling and a home-field to sites with only a handful of structures and pathetic home-fields. Here it will be proposed that in order to be classified as a farm a site must have the following features:

⁴ E.g. McGovern, Thomas H. (1992): "Bones, Buildings and Boundaries: Paleoeconomic Approaches to Norse Greenland", Morris, Christopher D. & Rackham, James (eds.) *Norse and later Settlement and Subsistence in the North Atlantic*, Glasgow, 157-86.

⁵ Guldager, Ole; Stumann-Hansen, Steffen & Gleie, Simon (2002): *Medieval Farmsteads in Greenland. The Brattahlíð region 1999-2000*, Copenhagen; Møller, N.A. & Madsen, C.K. (2006): *Nordboerne i Vatnahverfi. Rapport om rekognoscering og opmåling af nordboruiner i Vatnahverfi, Sommeren 2005* (SILA Feltrapport 24), København; Møller, N.A. & Madsen, C.K. (2006): *Gård og Sæter, Hus og Fold - Vatnahverfi 2006. Rapport om besigtigelser og opmålinger i Vatnahverfi, sommeren 2006* (SILA Feltrapport 25), København.

- a dwelling, represented either by a farm-mound, normally some 20 m+ in length, or, if a single phase site, by one of the known morphological types of dwellings (i.e. a hall with concave long walls or a multi-celled building).
- One or more separate animal stables
- A home-field, however small.

In the Hvalseyjarfjörður area there are sites which barely fulfil these criteria. Ø84a hardly has any home-field to speak of but it has a substantial farm-mound and two substantial stable-like buildings. The fjord farm at Ø80 is similar in that it has a very limited home-field but an even more substantial farm-mound. Ø83a has substantial buildings and a fine home-field but repeated excavation has failed to produce convincing evidence of habitation. Ø284 clearly fulfils the criteria suggested above but is nevertheless a very unassuming site which looks unlikely to have been occupied for a long time. Available documentation about other sites in Hvalseyjarfjörður and neighbouring Kambstaðafjörður (Kangerdluarssuk) suggests that the majority belong to this minor or marginal farm category (i.e. Ø85, Ø279 on the western side of Hvalseyjarfjörður and Ø268 and Ø278 in Kambstaðafjörður). In the Vatnahverfi reports similar sites are normally described as “mindre gårdsanlæg” and these make up nearly 20% of all sites in the region compared to 14% in Hvalseyjarfjörður and 7,5% in the Brattahlíð region. These differences are substantial enough to suggest something about the stability of settlement in the respective regions.

What do these minor farm sites represent? There is too much variation between them to allow a single answer but these are the main possibilities that can be considered:

- attempts at establishing a new farm
 - o in the initial period of settlement (a Greenlandic version of the over-optimistic pioneer fringe)
 - o in later periods
 - incidentally
 - in particular periods of expansion
- dependent/low status farms with very small households and limited numbers of livestock
 - o possibly with intermittent occupation
- one of the above with shieling or other non-farm activity superimposed on an abandoned farm

Most of the marginal farm sites in Hvalseyjarfjörður have farm mounds which suggest multiple phases of occupation. This cannot in itself be taken as evidence for protracted or continuous occupation as such mounds can easily result from one or more rounds of abandonment and re-occupation, or even from the superimposition of a shieling on a farm-house used only for a single season. Nevertheless it is striking that only at the Valley farm in Ø80 and possibly at Ø83a does there seem to be only a single phase of occupation. All the other sites have evidence suggesting a more complex history than indicated by the failed experiment explanation. Obtaining a better understanding of these sites is vital for a more nuanced appreciation of Greenlandic settlement structure. If they can largely be written off as failed experiments turned shielings then our picture of Greenlandic settlement patterns would be substantially altered. The same applies if they turn out to have been more persistently occupied, as that would then have clear implications for our understanding of the social and economic hierarchy of Norse Greenland.

Turning to the more substantial farm sites it is also clear that there is a range among them which can reflect both the length of occupation and site status. Compared to both the Brattahlíð region and Vatnahverfi the Hvalseyjarfjörður farms are all small. Even Ø83 itself has curiously few buildings considering the monumental architecture preserved there. Of the others only Ø80 can be considered a large farm while both Ø84 and Ø282 seem to belong to a category of small but continuously occupied farms.

Short of full scale excavation there are basically five approaches possible to assess site status in Norse Greenland:

- counting the number of ruins. As a rough indicator this has the benefit of being easily carried out, i.e. the data is available and is by and large unequivocal. The number of ruins relates both to the length of occupation and the status of the farm in question, but as both must derive from the quality of the land there should not be too much danger of one aspect seriously outweighing the other. I.e. it is in general not likely that a very high status farm would be occupied for only a short period of time, or that a very low status farm produced a significantly larger number of buildings than its peers on account of its length of occupation. However both scenarios are possible and there may also be variations in the clustering of buildings between sites

and regions which might affect the outcome. Therefore the number of buildings cannot be the only criteria considered.

- The size of the home-field. In Iceland this is as a rule a good indicator of site status and the fieldwork presented in this report found that making assessments of the home-field areas of Norse Greenlandic farms is relatively straightforward.
- The areal of productive (i.e. vegetated) land belonging to the farm. This is much more difficult to assess, not least because of the uncertainty created by the marginal farm sites. However creating von Thiessen polygons can be helpful in ascribing status to a site.
- Size of byres or other animal stables. This has been tried in the Vestribyggð but for the Hvalseyjarfjörður area it would be difficult as byres cannot be identified with certainty at all the sites and where there are more than one the problem of their contemporaneity arises. Similarly an attempt to assess the total size of all animal stables would be bedevilled by problems of identification.
- Particular types of buildings can be seen as status indicators. Churches and chapels are an obvious example and they are few enough in Norse Greenland that they can be taken as a clear signal of the highest status. The “store-houses” also seem to correlate broadly with high status sites (i.e. sites which on other grounds can safely be considered such), although it is also possible that they are more of a chronological marker. In that case they would presumably identify the farms occupied longest, but these can also be assumed in general to have been those of highest status.

I propose that a fairly robust classification could be attempted based on the first two and the final criteria, i.e. number of buildings, home-field size and presence/absence of churches and perhaps other buildings like the “store-houses”. This could produce the following classification:

- Low status farms, with less than 10 buildings and less than 2 ha home-fields (in Hvalseyjarfjörður this applies to Ø84 and Ø282)
- Middle status farms, with 10-15 buildings, 2-4 ha home-fields and no indication of multiple households (in Hvalseyjarfjörður there are no examples of this category)

although Ø82 may have belonged to it, but it is well attested in both Vatnahverfi and the Brattahlíð region)

- High status sites, with 15+ buildings, 4+ ha home fields and/or more than one farm mound. (in Hvalseyjarfjörður this applies to Ø80)
- Highest status sites. As high status sites but also with a churches or a chapel.

This is suggested here as scheme to test and refine, in the belief that working out such a classification will produce new insights into and understanding of the Norse society in Greenland.