

**Jari Okkonen**

## **ARCHAEOLOGICAL INVESTIGATIONS AT THE SÁMI SACRIFICIAL SITE OF UKONSAARI IN LAKE INARI**

### **ABSTRACT**

The island of Ukonsaari in Lake Inari is one of the most prominent ritual sites in northern Lapland and therefore it is in many ways important research subject in Sámi archaeology. The Laboratory of Archaeology and Giellagas Institute at the University of Oulu in cooperation with the Finnish Forest and Park Service and Sámi Museum Siida conducted fieldwork at the Ukonsaari site in summer 2006. The main objective was to carry out an intensive survey of the island but also to collect various samples in order to gather chronological information from the site and define the precise locations of the earlier research. The main focus of the fieldwork was on archaeological heritage management and in improvement of the site preservation, but the survey also yielded new information related to reconstruction of the past ritual use of the site. The evidence obtained from the fieldwork, two artefacts and six <sup>14</sup>C-datings from the animal bones, indicates that the ritual use of the site occurred from the 14<sup>th</sup> to the early 17<sup>th</sup> century although the silver ornament discovered by Arthur Evans in 1873 points to somewhat earlier activity in Ukonsaari.

Keywords: Ritual landscape, Sieidi worship, paleo-DNA, Sámi, Finland

Jari Okkonen, Department of Art Studies and Anthropology, P.O.Box 1000, FIN-90014 University of Oulu, Finland, jari.okkonen@oulu.fi

### **INTRODUCTION**

The island of Ukonsaari (Äijihsuálu) in the Ukonselkä basin of Lake Inari is one of the most famous sacrificial sites in Finnish Lapland and thus a crucial object of archaeological research with regard to the Sámi culture. The island is about 1.5 ha in area, with steep slopes, and is located just over 11 kilometres ENE of the village of Inari (Fig. 1). It stands out quite distinctly from the other islands in the Ukonselkä basin and dominates the landscape by virtue of its rock faces, boulder fields and generally sparse tree cover (Fig. 2).

The Archaeology Laboratory and Giellagas Institute at the University of Oulu, in cooperation with the Finnish Forest and Park Service and the Sámi Museum Siida, conducted fieldwork at the site in summer 2006, with the aim of mapping it, identifying the locations of earlier investigations

on the island and taking samples for dating. One important further aspect to emerge was the analysis of bone samples associated with the past ritual use of the site. The basic aim was to generate relevant new information for the use of those responsible for the management and preservation of Ukonsaari.

### **EARLIER RESEARCH**

The history of research focused on the island of Ukonsaari in Lake Inari is interesting in many ways, as the site has figured in the lives of numerous celebrated scholars. Jacob Fellman, a priest and early explorer of Lapland, wrote in his memoirs of his dramatic feelings on visiting a dark 'sacrificial cave' on the island in 1825 and 1826, although it should be noted at once that there are no actual caves extending into the rock on



Fig. 1. Location of the Sámi sacrificial site of Ukonsaari in Inari, Finnish Lapland.

Ukonsaari and that the early mentions of caves must refer to clefts of varying depths in the bedrock. Fellman reported that there had been a large heap of reindeer antlers at the mouth of the cave, some of which had decomposed, but others were still fairly well preserved, from which he concluded that the sacrifices must have continued into Christian times, beyond the end of the 17<sup>th</sup> century (Fellman 1906: 215, 411; T.I. Itkonen 1962: 134–5).

The young Arthur Evans gave in to the temptation to visit Ukonsaari in September 1873, and his short stay and spontaneous excavation session left him with a few written observations, a drawing and a find of a silver head ornament to take back with him to England. This example of late Iron Age filigree work (Fig. 3) was stylistically of eastern origin and proved to have originated from the region of the Kama and Vychegda rivers in eastern Russia and to date from the latter half of the 13<sup>th</sup> century. It ended up in the Ashmolean Museum in Oxford, from where it is at present on loan to the Sámi Museum Siida in Inari (Carpelan 2003: 67, 89). Evans recounted that he had spent only one day on the island and had excavated a ‘votive cave’ close to the highest point on the island. The future discoverer of Knossos also referred to this structure as a ‘grotto’ and a ‘rock shelter’, the latter being perhaps a better description of the cleft in which the major-

ity of finds indicative of ancient rites would appear to have been concentrated. Evans wrote that there was ‘a half-circle of reindeer horns’ outside the mouth of the cave, conforming to the description of *sieidi* worship given by Johannes Schefferus in his *Laponia* of 1673, and also that the floor of the cave was full of bones, some of which were charred (Bradley 2000: 3–5). The young Evans’ verbal description of Ukonsaari owes much to Schefferus’ drawing of a Sámi sacrificial site in the above-mentioned work (Schefferus 1979 [1673]: 109), while he also appears to have marked the site on his own sketch of the island – at a point about halfway up its slope (Bradley 2000: 4). Evans mentioned later, in a letter to C.A. Nordman of the Finnish Antiquarian Society in 1914, that there was a thick layer of soot on the roof of the cave and that there were some human bones among those scattered on the floor (Nordman 1922: 1–2). These observations, like his identifications of bear, wolf and wolverine bones, are not consistent with modern evidence, and thus at least some of his statements should be treated with caution.

The next scholars to concern themselves with Ukonsaari were the Itkonen brothers, who carried out archaeological and ethnological fieldwork in Inari in 1910–12 (T.I. Itkonen 1962: 127–38). Their informants were similarly two brothers, by the name of Valle, whom they asked to show them

the sacrificial site described by Fellman – but to no avail. They were, however, shown a cleft in the bedrock in an area on the west side of the island midway between the shore and the highest point where there were still some reindeer antlers, charred wood and partly burned pieces of birch bark to be seen. T.I. Itkonen believed that this was probably the same place that Evans had excavated. The heap of antlers had disappeared, but the Valle brothers were able to tell them of metal objects that had been found there (T.I. Itkonen 1962: 135–6). Another interesting piece of information was recorded by Ilmari Itkonen, that Evans’ collecting activities had not been confined to Ukonsaari but that legend had it that ‘the Englishmen’ had taken away ‘all sorts of stone objects’ from a house in the nearby area (I. Itkonen 1910: 6).

In 1953 a small expedition that included Professors Erkki Itkonen, Jouko Hautala and Matti Hako made a survey of Ukonsaari and, with the aid of a guide, visited a corridor-like crack in the rock that was located due west of the mid-point of the island. The article published by T.I. Itkonen on the observations made by this group identifies the site as that first described by Fellman. Although there were no longer any antlers or other objects connected with ritual activities to be seen there, the writer was inclined to believe that this corridor-like crack in the rock had been the original sacrificial site that the Valle brothers had refused to take the Itkonens to at the time of the 1910–12 fieldwork (T.I. Itkonen 1962: 136–7). All the same, no archaeological evidence to support this claim has been uncovered at the site in subsequent investigations.

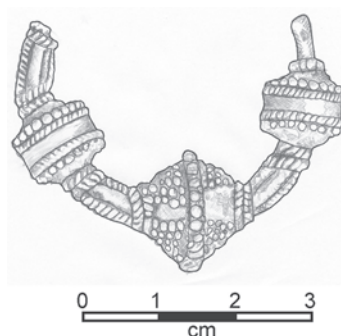
Small-scale excavations were carried out in a cleft in the bedrock in the south-western part of Ukonsaari for three days in August 1968 under the direction of Anja Sarvas, yielding a large number of partly fragmentary animal bones, antlers and teeth. Some of these were dug out from between stones and others from the rock shelter itself or from in front of it. The results suggested that this was the same place where Evans had found the silver ornament and which T.I. Itkonen had still regarded as the sacrificial site in the 1940s. Other holes and crevices in the bedrock of the island were also explored but did not yield any finds (Sarvas 1971: 1–2).



*Fig. 2. View of the Ukonsaari sacrificial site from the south-east. The ancient ritual activity would seem to have been concentrated in the south-western part of the island – on the left of the photograph. The summit in the centre of the island and the gently sloping north-eastern parts showed no evidence of such activity.*

## THE FIELDWORK OF 2006

The purpose of the small-scale excavations carried out in June 2006 was to gather material for dating and examine the spatial distribution of evidence for ritual behaviour at the site. It was also necessary to trace the locations of previous work done on the island, which meant exploration of



*Fig. 3. The silver head ornament with filigree work discovered by Arthur Evans in a ‘votive cave’ on Ukonsaari in 1873. The find was dated to the latter half of the 13<sup>th</sup> century and originated from the area of present-day Russia.*

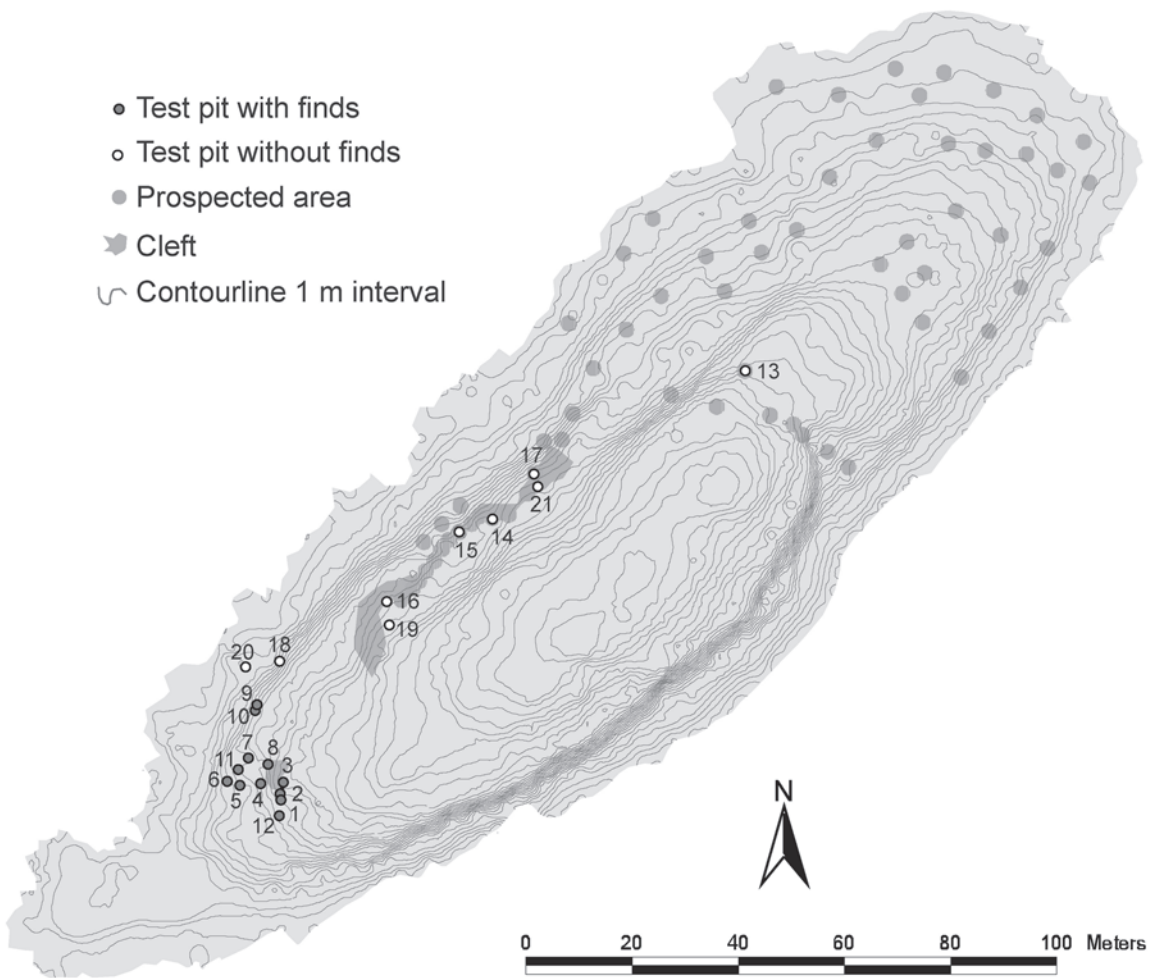


Fig. 4. General map of Ukonsaari showing the test pits dug in summer 2006 and the areas where prospecting with a metal detector was carried out.

the clefts and cave-like depressions described above, either by superficial examination or from test pits.

Ukonsaari consists mostly of exposed bedrock and boulder fields, and the little mineral soil that is to be found is mostly concentrated in the north-eastern part of the island. The holes in the rock and gaps between the boulders are filled with litter, weathered rock fragments and soil created through the decomposition of plant material. Since it was impossible to define consistently sized quadrats in the boulder terrain, the points chosen for examination were gaps or crevices from which it was possible to extract finds of various kinds after careful examination. Test pits were used in particular for checking the area of the ‘sac-

rificial cave’ studied by Sarvas in 1968 and its surroundings at the south-western end of the island (Figs. 4–5). Altogether 12 pits were dug in this area (Fig. 4, numbered 1–12), mostly less than 1 m<sup>2</sup> in size and chosen on the basis of finds of bone or antler that were visible on the surface, although two test pits were dug in the northern part of the area at points where no finds were visible. These latter proved on examination to be empty (Fig. 4, nos. 18 and 20). The steep south-eastern slope of the island was also examined thoroughly in the course of the fieldwork.

Since there were some other promising sites alluded to in the history of research on the island that warranted closer examination, six test pits were dug in clefts in the bedrock on the north-



*Fig. 5. Examining the rock shelter at the ‘sacrificial cave’ on Ukonsaari. Fieldwork in the area in summer 2006 yielded animal bones, fragments of antler, teeth and two artefacts, a piece of sheet copper and a Russian coin. This is the same area where Arthur Evans found a silver ornament in 1873.*

west-facing slope of the island, three more (nos. 14, 17 and 21) in the crevice in the centre of the island described by Fellman, and one (no. 15) at the foot of a rock face immediately to the west of this. Similarly, one pit (no. 16) was dug in the deepest cave-like cleft in the rock, that located in the area between the corridor-like formation and the area with finds in the south-west. A small area on the bedrock surface to the south of this where a recent find had been documented was also examined (no. 19) and a further pit was dug beside a large boulder located north-east of the highest point on the island where modern observations had been made (no. 13).

#### **FINDS OF BONES, ANTLERS AND TEETH**

The majority of the finds, lying among the dried-up leaves, litter and peat on the ground surface, in the mixture of humus and mineral soil or beneath the stones and boulders, consisted of fragments of the bones, teeth and antlers of animals. In a few of the test pits in the ‘sacrificial cave’ in the south-western part of the island the bone material had already been crushed to a powder.

It had been decided in advance that, with the exception of the samples for DNA analysis, the bone finds would not be collected up but would be analysed in situ as far as possible and returned to their original context in the same crevice. The collecting of bones from the ritual site for museum displays, for example, was not regarded as justi-

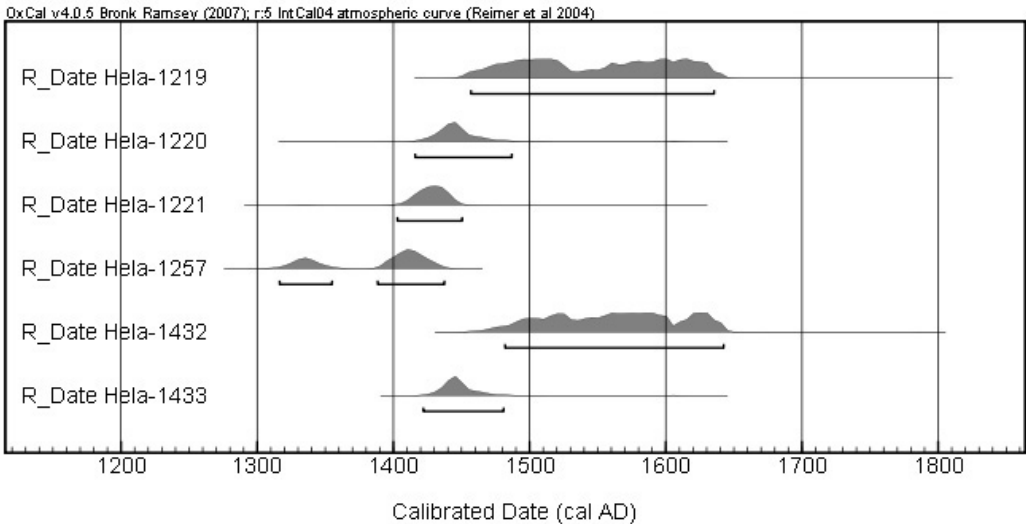


Fig. 6.  $^{14}\text{C}$  dates for six bone specimens obtained during the fieldwork on Ukonsaari. Laboratory numbers are shown on the left.

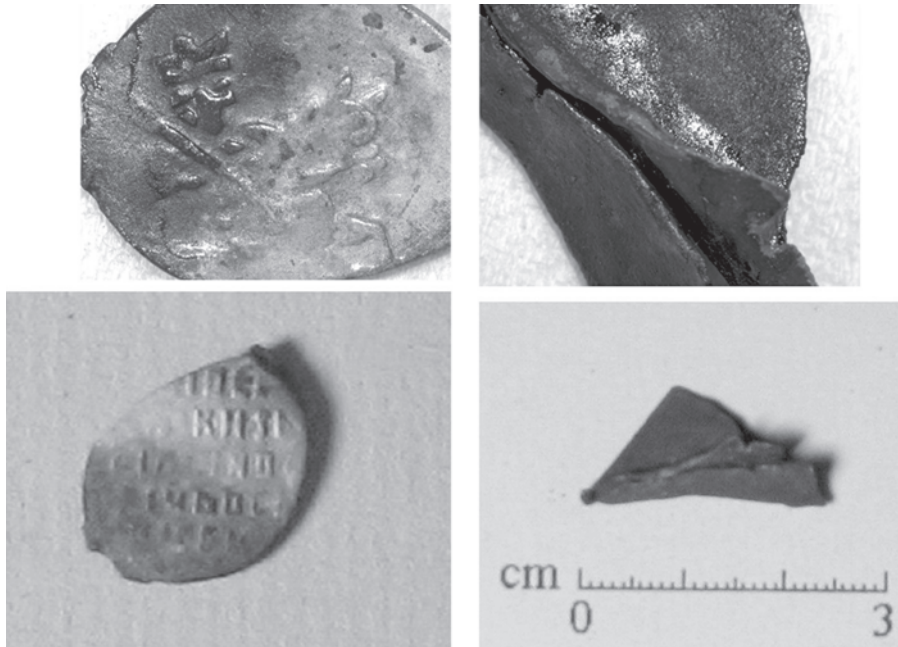
fiable, as it was not necessary to have authentic bones from Ukonsaari for exhibition purposes. This deliberate policy was partly a response to the problems of contamination encountered recently in DNA analyses of museum specimens and partly an expression of sensitivity to the nature of this ancient site that is so closely bound up with the local identity, leading to adoption of the principle that largely information was to be extracted rather than material examples of the cultural heritage.

The osteological analyses, carried out by Eeva-Kristiina Harlin, at the Sámi Museum Siida (Harlin 2007), covered 693 parts or fragments of bones, including 19 that were charred, and it proved possible to identify about half of them, i.e. 356. The largest group that could be identified to species were bones of reindeer, *Rangifer tarandus*, of which there were 67 specimens. The tooth finds suggested that both young and old individuals were represented. The finds seemed to contain an overrepresentation of skulls and antlers, and a few of the latter carried saw-marks. One especially interesting osteological group consisted of the bones of ovicaprids, *Ovis aries/Capra hircus*, of which there were 30 altogether. DNA analyses performed at the University of Oulu confirmed that three of them were definitely from sheep. Again the tooth specimens pointed

to both young and old individuals and the material contained an excess of limbs, skulls and teeth, whereas joints were in a minority. There were 15 specimens attributable to the black grouse or capercaillie, *Tetrao tetrix/Tetrao urogallus*, including bones from the head, limbs and spine. As expected, the distribution of bone finds was restricted to the south-western part of the island (Fig. 4, test pits 1–12), with no remains to be found elsewhere in spite of intensive efforts.

#### DATING OF THE BONE MATERIAL

Six specimens from among the finds from the ‘sacrificial cave’ in the south-western part of the island have been dated by the  $^{14}\text{C}$  method so far (Fig. 6).<sup>1</sup> Two wing bones of a capercaillie or black grouse that had been deliberately hidden in the dip under a large stone (Hela-1221, in test pit 7) would appear to date from cal. AD 1403–1450, and a number of reindeer teeth and two pieces of sheep or goat bone were found beneath stones in the same place. Likewise a long mammal bone fragment, possibly from a reindeer (Hela-1220, test pit 2) and found in the same general area as the above, beside the boards installed to make it easier to walk round the island nowadays, was dated to the interval cal. AD 1416–1487. A piece of a reindeer skull found in



*Fig. 7. The two artefacts unearthed during fieldwork on Ukonsaari (NM 36625: 1–2/ SA 2251: 1–2). Left: a Russian coin (minted 1606–1610); right: a piece of sheet copper.*

practically the same place (Hela-1219, test pit 1) could possibly be slightly younger, belonging to the period cal. AD 1457–1635. Perhaps the most interesting of the osteological datings, however, concerns three specimens from the area of the ‘sacrificial cave’ as these represent bones identifiable by DNA analysis as that of a sheep. Two of them were discovered in the mixture of mineral soil and stones beneath the overhanging projection of the rock shelter (Hela-1432 and Hela-1433, in test pit 3). The third dated and identified sheep bone find is about 15 meters north from the rock shelter (Hela-1257, in test pits 9/10). This sample indicates that the animal had been brought for ritual slaughter some time between cal. AD 1316 and 1437. The second sample (Hela-1432) can be dated to cal. AD 1480–1650 and the third (Hela-1433) to cal. AD 1420–1485.

## ARTEFACTS

Two other finds were recovered during the 2006 fieldwork in addition to bone specimens, both from the concentration of deposits at the ‘sacrificial cave’ in the south-west of the island (Fig. 7).

The first of these is a silver kopeck (test pit 2) dated to 1606–1610, the times of Vasili Shuiski (Kleschchinov & Grishin 1998), and the other a small piece of sheet copper folded in on itself (test pit 1). A corresponding, slightly older coin, minted in the reign of Ivan the Terrible, has been found at Nukkumajoki in Inari (Carpelan 2003: 76), and both would appear to point to a growth in Russian influence in the region in the late 16<sup>th</sup> and early 17<sup>th</sup> centuries. The piece of sheet metal is more difficult to date, however, as fragments of sheet copper and bronze are characteristic of Sámi sites. On the other hand, there has been much speculation over what purpose these pieces cut from dishes and cooking pots might have served. Carpelan is of the opinion that copper enjoyed a particular status with the Sámi that was derived from the world of their pre-Christian religious beliefs, a view that is supported by the fact that no pieces of this metal are to be found at sites younger than the 17<sup>th</sup> century. Another, partly related explanation is that the copper fragments were used as forms of payment (Carpelan 2003: 76–7). In any case, corresponding pieces of metal have been found in large numbers at the site of

the Nukkumajoki winter village, and the present example would fit well into the same chronological framework as the  $^{14}\text{C}$  dates. In addition to these artefacts, some signs of charcoal and charred stones were found in the test pits dug in the area of the south-westerly concentration of finds, and further examination of the ground surface and the test pits led to the observation of large amounts of rubbish and material evidence of sacrificial practices pursued in recent decades, in the form of recent Finnish and Norwegian coins, splinters of bottle glass, corks and beer or soft drink cans.

## PROSPECTING

Use of the test pits and a metal detector confirmed that the ancient ritual activity had been confined to the west-facing slope in the south-western part of the island, and within this area to the immediate vicinity of the main cleft in the bedrock. It was here that the bone, antler and tooth finds were concentrated, and the two artefacts were recovered from the same area. The most intensive area for finds is thus located very close to the wooden steps built for visitors, being just to the north of these. The test pits dug in the other parts of the island yielded either nothing at all or only coins that were no more than twenty years old. In addition, prospecting with a metal detector was carried out at a total of 65 points, each comprising a circle three metres in diameter, in the central part of the north-west slope and throughout the north-eastern part of the island (Fig. 4), but the only signals were received from two new coins in the corridor-like cleft in the rock (test pits 14 and 21). Otherwise the whole north-eastern part of the island would appear to be bereft of metallic finds. It would also seem that the recent throwing of coins has been concentrated in the corridor-like cleft in the centre of the island and in the deep, cave-like cleft in the south-west (test pit 16). The gently sloping north-eastern part would appear not to contain any material evidence of ancient rites.

## INTERPRETATION

The material evidence for ritual activities on Ukonsaari is confined to an area in the south-western part of the island comprising just under one are and extending about 20 metres in a north-

south direction. Although the ornament discovered by Evans has been taken as a sign of activity on the island beginning in the 13<sup>th</sup> century at the latest (Carpelan 2003: 80), the radiocarbon dates obtained here for the bone samples point to a slightly later period, possibly the 14<sup>th</sup> century. Three of the dates, one from a black grouse or capercaillie and the others from a unidentified mammalian bone and sheep bone fall into the 15<sup>th</sup> century. The youngest radiocarbon dated bones are from those of reindeer and sheep. These samples are from the animals which most likely died at the end of the 16<sup>th</sup> or beginning of the 17<sup>th</sup> century. The oldest date in the present material, for a sheep bone, may be from the end of the 14<sup>th</sup> or beginning of the 15<sup>th</sup> century. These dates are backed up by the two artefacts unearthed in summer 2006, a Russian coin from the early 17<sup>th</sup> century and a piece of sheet copper, while the head ornament discovered by Evans could also be associated with activity that occurred in the 14<sup>th</sup> century, since it can be assumed to have been of some age by the time it ended up fulfilling a sacrificial purpose at Ukonsaari. This explanation would be a still more viable alternative if the find were to date only from the second half of the 13<sup>th</sup> century, as proposed by Carpelan (2003: 89).

The role of Ukonsaari as a cult centre evidently altered in the 17<sup>th</sup> century as a consequence of the missionary work carried out among the Sámi of Kemi Lapland that culminated in the building of a church at Inari in 1646 (Carpelan 2003: 81–2), in conjunction with which various changes may have taken place in the internal social organization of the *siida*, or Sámi villages (Vahtola 2003: 123). The island nevertheless appears to have continued to serve as a cult site for the use of individual persons or families up to the 19<sup>th</sup> century (see I. Itkonen 1910), as also concluded by Fellman on visiting it in the early part of that century, and it is known that reindeer antlers were deposited at the sacrificial site there as late as the 1870s (Carpelan 2003: 80). It is to be hoped that research at other sites of ritual activity in Inari will shed more light on this question and help us to form a better picture of the status of Ukonsaari on the mental map of the ancient inhabitants of Inari.

The dominant position of the reindeer among the animals sacrificed is no surprise. The finds may be associated with the hunting of wild reindeer, or else with a way of life in which domesti-



cated reindeer were used as beasts of burden, decoys or sources of milk. The proportion of sheep or goat bones among the finds, on the other hand, is surprisingly high. It is known that Ottar, who lived in an area adjacent to the Sámi in northern Norway in Viking times – the latter half of the 9<sup>th</sup> century – himself indicated that he possessed a flock of twenty or so sheep in addition to other domestic animals (Simonsen 1957: 9), and that the economy of the Sámi on the Arctic Ocean coast in subsequent periods was not restricted to hunting and fishing but, in the area of Varangerfjord as least, included the rearing of sheep and goats from the 14<sup>th</sup> century onwards and possibly earlier (Aronsson 1991: 25). Could the stocks of sheep in northern Finland have been derived from those existing in northern Norway? Recent studies of the population genetics of sheep in Fennoscandia, north-west Russia and the eastern Baltic have shown that the more than 20 breeds to be found there began to diverge from each other at least hundreds of years ago, which could provide an opportunity for examining their mutual genetic relations by means of palaeo-DNA analyses (Tapio 2006: 16–19, 49–51). The early history of sheep rearing and its significance for the Sámi culture is a new field of research that has been brought into existence by the fieldwork at Ukonsaari.

The degree to which this work sheds light on the nature of the ritual activities that took place at Ukonsaari is limited by the extent of the material. Remains of reindeer are common at other Sámi cult sites, as also are coins and ornaments (Zachrisson 1984: 124–5), and the history of the offering of symbols of wealth and prestige in such a connection can be traced back continuously to the Late Iron Age. These cult activities represented an attempt to maintain an egalitarian ideal and relieve the stratification that prevailed in society. As religious manifestations, such sacrifices served as a social means of buffering the inevitable pressures for cultural and economic change imposed on society from the outside (Mulk 1995: 264). The wealth accumulating in some families as a result of trade may in this sense be seen as an obvious handicap that could be rectified by a mechanism in which sacrifice – manifesting itself to us as an irrevocable loss of economic capital – serves in effect as a form of exchange by which the family is able to acquire

social status and symbolic capital. The position attainable through the possession of the latter may indeed have been very much more important and influential in the society of that time than in later, historical times. We should also remember that even the early sources reflect a world-view that is already permeated by notions of capital and the power of the state and the church.

Ukko, or Äijih in the language of the Sámi, was the figurehead of their religion, and Ukonsaari, or simply Ukko, as it was originally known, was the principal place where he was worshipped. It was Ukko who gave people life and protected their health, and as the spirit of the clouds he was able to guard them against evil spirits when they went out hunting or fishing (T.I. Itkonen 1948: 306–307). The counterpart to Ukko was his wife Akka, or in Inari Akku, who elsewhere in Lapland is connected with other female deities such as Máttaráhkku. Tradition has it that the Ukko of Ukonselkä and the Akka of Kalkuvaara formed a pair of corresponding deities with an assumed marital relationship that was unique to the Inari area (Carpelan 2003: 80).

One interesting fact as far as interpreting the present findings is concerned is that in the Sámi tradition sacrifices of sheep are associated with the goddess Máttaráhkku, who according to Fellman received offerings of both reindeer antlers and ram horns. She is also known to have been given the meat of reindeer, sheep or birds, pieces of each of these being offered up in a tray or trough, although on some occasions a whole animal would be sacrificed to her (T.I. Itkonen 1948: 309). A tale connected with the landscape to the south of Ukonselkä recorded at the beginning of the last century also suggests that Ukko was pacified with offerings of a whole ram at times of great distress (I. Itkonen 1910). We may be justified in reaching the bold conclusion that the finds yielded by the present investigations display features that could be interpreted in the light of the above theme of a pair of deities, although more comprehensive fieldwork and a more thorough analysis of the material would be called for in order to confirm such an interpretation.

Ukonsaari is a place that is capable of impressing people with its topography alone. Its dominant position in the landscape combined with the tales associated with it have given it a hold over people's imagination – at least at the local level.

This is a major achievement for a cultural heritage site in Finland. It is also an archaeological site that is in daily use, i.e. large numbers of visitors in search of new experiences are taken there during the tourist season and these people attach their own meanings to the place and make their own interpretations of what they have seen quite independently of the experts. For the local people the island may represent both a tourist attraction and a nostalgic source of ethnic identity and personal empowerment. As a potential UNESCO World Heritage site it would give expression not only to the vitality of the Sámi culture but also to certain global values entailed in the cultural heritage (Niiniluoto 2000: 80–81). In the last resort, however, Ukonsaari is a resource that belongs to the cultural heritage of the Sámi and the people of Inari, and it is they who have the responsibility to preserve the site for future generations.

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1 All 14C-dates are calibrated using OxCal v4.0.5 with atmospheric data from Reimer et al. (2004).