APPENDIX II.

SIEIDIS EXCAVATED DURING THE WRITING OF THIS DISSERTATION

All the excavations described here have been carried out under the Human-animal relationships among Finland's Sámi 1000–1800 AD: DNA and stable isotope analyses of bones from ritual sites project. The parties responsible for the fieldwork were the Laboratory of Archaeology at the University of Oulu, the Department of Biology at the University of Oulu, and Metsähallitus. The responsible director of the research was Professor Milton Núñez, and fieldwork was directed by MA Tiina Äikäs. In addition, osteologist, Dr. Anna-Kaisa Salmi (formerly Puputti) and a group of archaeology students participated in the fieldwork. The objective of the research was to acquire bone samples for C14, DNA, and stable carbon isotope analyses and to clarify the nature and extent of ritual activities at the sites. In connection with the excavations, all finds were documented, regardless of their age. However, finds dating to the 20th century were left in place. The sites are presented here in the order in which they were studied.

KITTILÄ 41 TAATSI

Basic map sheet 3722 09 Uurrekarkia
Northing = 7571 640, Easting = 3440 370, z = 280 m ASL

The sieidi at Taatsi in Kittilä is formed of a high bedrock outcrop located on a steep bank. No previous excavations have been carried out at the site, but it is mentioned in written sources and known as a touristic site. The site is characterized by its location on a stony slope, where stone material has rolled downslope and mixed the stratigraphy. Clearly outlined test pits could not be dug in the stony slope, but instead the sieidi was studied by making small test holes in the hollows of the sieidi stone itself and under the rocks in the crag surrounding the sieidi stone. As far as the environment permitted, small holes of about 20 to 30 cm in diameter and 10 to 20 cm in depth were dug at the base of rocks lying on the ground. Of all the excavated sieidis, Taatsi showed the greatest variety of offered animals, and the bone finds were rather well preserved. The finds consisted of the bones of reindeer (Rangifer tarandus), an unidentified mammal, capercaillie (Tetrao urogallus), scaup (Mergus sp.), some kind of fowl, an unidentified bird, pike (Esox lucius), perch (Perca fluviatilis), trout (Salmo trutta), and an unidentified fish (Tables 13 & 14). Taatsi also provided the oldest dating: a pike bone near the sieidi was dated to 1040–1220 A.D. Datings from reindeer bones were no older than 80 BP. In addition to bones, the finds included a bone ring (KM 37853:1) and modern artefacts dating to the late 20th and 21st centuries. The finds concentrated to the west of the sieidi, the side that is dominated by a view over the nearby sacred place of Taatsinkirkko (Figure 99). Both fish and bird bones were found only to the west of the sieidi, both next to the stone and slightly further away in the crag. Bones were found in the cracks of the sieidi stone, on the surface and deeper in the ground. In addition to the sides of the sieidi, the inspection also covered a plateau at the top of the bank with a connection to the top of the sieidi. A test pit was dug in the plateau, and bones were found. The area was studied at a radius of approximately 30 metres from the sieidi, but the finds were concentrated around the sieidi. The finds farthest away from the sieidi were located at a distance of about 10 metres.

Table 13. *The distribution of species in the bone finds from Taatsi expressed in number of identified specimens (NISP) and minimum number of individuals (MNI) (Puputti 2008b).*

Taxon	Scientific name	NISP	MNI
Reindeer	*Rangifer tarandus*	9	2
Mammal	*Mammalia*	1	
Capercaillie	*Tetrao urogallus*	2	1
Scaup	*Mergus sp.*	1	
Fowl	*Galliformes*	1	
Bird	*Aves*	1	
Pike	*Esox lucius*	2	1
Perch	*Perca fluviatilis*	225	1
Trout	*Salmo trutta*	12	1
Fish	*Pisces*	4	
Total		258	

Table 14. *The anatomical distribution of reindeer by number of identified specimens (NISP) at Taatsi (Puputti 2008b).*

Anatomical element	NISP
Skull (*cranium*)	4
Tooth (*dens*)	1
Sacrum (*sacrum*)	1
Tibia (*tibia*)	1
Calcaneus (*calcaneum*)	1
Metatarsus (*metatarsus*)	1

Finds: KM 37853:1
Dating: Late Iron Age/historical period
Excavated area: approximately 4 m²
Total area studied: approximately 855 m²
Field season: 9 to 13 June 2008

ENONTEKIÖ 1 NÄKKÄLÄ

Basic map sheet 2814 07 Näkkälä
Northing = 7616 192, Easting = 3360 665, z = 370 m ASL

No previous excavations have been carried out at the Näkkälä sieidi, but it is mentioned in written sources. Three excavation areas were opened at the sides of the sieidi stone, and additionally two test pits were dug to the west of the stone. Eight test pits were dug farther away from the sieidi stone in order to find out how the bones are distributed. The test pits were 1 x 1 m in size, and they were dug all the way down to the leaching layer. It was observed that the finds were concentrated on the side of the shore, about 2 to 3 metres from the sieidi (Figure 88). The bones found close to the stone concentrated on its eastern and southern sides. However, phosphate samples taken at the site later indicate that ritual activities were carried out in the entire area around the sieidi (Figure 92). The bone material from Näkkälä consists of

50 bone fragments, from which reindeer and bear (Ursus arctos) could be identified (Table 15). Most of the reindeer bones were antlers and teeth, which seems to indicate that mainly skulls or loose antlers were left at the site (Table 16). However, the material also included bones of meatier body parts. Six reindeer bones and a bear bone were dated, giving dates in the range 1165–1290 A.D. In addition to the bones, finds from the Näkkälä sieidi included a bone button (KM 37851:3), coins from 1866 and 1906, and modern artefacts.

Table 15. *The distribution of species in the bone finds from Näkkälä expressed in number of identified specimens (NISP) and minimum number of individuals (MNI) (Puputti 2008c).*

Taxon	Scientific name	NISP	MNI
Reindeer	*Rangifer tarandus*	21	4
Cloven-hoofed animal	*Artiodactyla*	1	
Bear	*Ursus arctos*	4	1
Mammal	*Mammalia*	18	
Fish	*Pisces*	6	
Total		50	

Table 16. *The anatomical distribution of reindeer by number of identified specimens (NISP) at Näkkälä (Puputti 2008c).*

Anatomical element	NISP
Antler (*cornu*)	5
Mandible (*mandibula*)	1
Tooth (*dens*)	12
Radius (*radius*)	1
Tibia (*tibia*)	1

Finds: KM 37851:1–3
Dating: Late Iron Age/historical period
Excavated area: 16.45 m²
Total area studied: 102.5 m²
Field season: 5 to 9 August 2008

UTSJOKI 16 SIEIDDAKEÄDGI

Basic map sheet 3913 03 + 3911 12 Outakoski
Northing = 7729 000, Easting = 3460 180, z = 170 m ASL

No previous excavations have been carried out at Sieiddakeädgi in Utsjoki, but Petri Halinen took phosphate samples at the site in 2005. In connection with the 2008 fieldwork, a total of seven test pits were dug at the sides of the sieidi stone. The interior of the cave-like hollow southwest of the stone was also excavated. Several bones of wild or domesticated reindeer were found around the stone, concentrating on the western side of the stone. In addition, a large number of coins was documented from the cave-like hollow, the oldest of which dated to the late 19th century. However, only a small amount of bone altogether was found in the test pits around the sieidi stone. Instead, small test holes in the slope to the northwest of the sieidi revealed the majority of the bone finds (Figure 93). Bones were observed in an extensive area

on the slope slanting away from the sieidi. The most distant bones were 11 metres away from the sieidi. One of these small test holes was enlarged into a test pit of 1 x 1 metres, which yielded bones throughout the total area of the pit in an approximately 15-cm-thick layer. The total material consists of 116 bones, 62 of which could be identified (Table 17). The identified bones were all reindeer bones (Table 18). The material included 36 antler fragments. Ten datings were made of the reindeer bones, indicating that the sieidi was used between 1165 and 1660 A.D. In addition to bones, finds from the sieidi included three coins from the late 19th century, green bottle glass from the 19th century, and modern artefacts.

Table 17. *The distribution of species in the bone finds from Sieiddakeädgi expressed in number of identified specimens (NISP) and minimum number of individuals (MNI) (Puputti 2008a).*

Taxon	Scientific name	NISP	MNI
Reindeer	*Rangifer tarandus*	62	2
Mammal	*Mammalia*	54	
Total		116	

Table 18. *The anatomical distribution of reindeer by number of identified specimens (NISP) at Sieiddakeädgi (Puputti 2008a).*

Anatomical element	NISP
Antler (*cornu*)	36
Skull (*cranium*)	5
Tooth (*dens*)	17
Mandible (*mandibula*)	1
Vertebra (*vertebrae*)	3

Finds: KM 37852:1–5
Dating: Late Iron Age/historical period
Excavated area: 10.74 m²
Total area studied: 532 m²
Field season: 11 to 15 August 2008

INARI 327 KOSKIKALTIOJOEN SUU

Basic map sheet 3844 03 Suojanperä
Northing = 7691 304, Easting = 3543 579, z= app. 120 m ASL

No previous excavations have been carried out at the sieidi at Koskikaltiojoen suu [The mouth of the River Koskikaltiojoki], which is better known as the sieidi of Lake Nitsijärvi. In connection with inspections, different interpretations have also been presented concerning the location of the sieidi. During the excavations, bones brought by animals were observed in a cave-like hollow formed between two stones leaning against each other southwest of the sieidi. The sieidi itself is formed of a large stone partly split into several blocks. It is located right on the shore of the river. Six test pits were dug around the sieidi and into its crevices, in addition to which a narrow excavation area of 1 x 2.5 m was opened east of the stone. Some of the test pits were on top of the sieidi stone and consisted of natural cracks in the stone. Other stones, however, were opened in the ground under the sieidi in places where an overhanging part of the

stone formed a cave-like hollow below the sieidi. Most of the test pits were located to the east and south of the sieidi, in an area naturally more abundant in such hollows and depressions (Figure 89). The test pits were dug down to the bottom of the leaching layer or, when they were located in hollows of the stone, down to the stone's surface. In addition, small test holes were made around the sieidi stone, but they did not yield any finds. Two other large stones in the near vicinity were studied by means of three test pits. The sieidi at Koskikaltiojoen suu provided the most extensive find material of all the sieidis studied during the project: 430 bone fragments (Table 19). Most of the bones are reindeer teeth, other skull parts, and upper vertebrae of the spine, but also a fairly large number of capercaillie bones was found (6% of the number of fragments and 31% of the minimum number of individuals) (Tables 20 & 21). The finds concentrated to the east and south of the sieidi, under overhanging parts of the rock. In addition to bones, modern coins were also found. There were no archaeological artefact finds from the sieidi. Nine bones were dated. Eight of them came from the excavation area opened to the east of the sieidi and dated to 1440–1670 A.D. The capercaillie bone found south of the sieidi was slightly older, dated to 1270–1400 A.D.

Table 19. *The distribution of species in the bone finds from Koskikaltiojoen suu expressed in number of identified specimens (NISP) and minimum number of individuals (MNI) (Puputti 2010a).*

Taxon	Scientific name	NISP	MNI
Reindeer	*Rangifer tarandus*	146	11
Mammal	*Mammalia*	235	
Cloven-hoofed animal	*Artiodactyla*	2	
Capercaillie	*Tetrao urogallus*	24	5
Fowl	*Galliformes*	1	
Bird	*Aves*	1	
Unidentified	*indet.*	2	
Total		430	

Table 20. *The anatomical distribution of reindeer by number of identified specimens (NISP) at Koskikaltiojoen suu (Puputti 2010a).*

Anatomical element	NISP
Antler (*cornu*)	8
Frontal bone (*frontale*)	3
Temporal bone (*temporale*)	6
Occipital bone (*occipitale*)	2
Maxilla (*maxilla*)	22
Maxillary tooth (*dens maxillare*)	30
Mandible (*mandibula*)	24
Mandibular tooth (*dens mandibulare*)	19
Tooth (*dens*)	20
Atlas (*atlas*)	3
Axis (*axis*)	2
Cervical vertebra (*vertebrae cervicales*)	6
Vertebra (*vertebrae*)	1

Table 21. *The anatomical distribution of capercaillie by number of identified specimens (NISP) at Koskikaltiojoen suu (Puputti 2010a).*

Anatomical element	NISP
Skull (*cranium*)	1
Coracoideum (*coracoideum*)	8
Scapula (*scapula*)	4
Humerus (*humerus*)	7
Ulna (*ulna*)	1
Femur (*femur*)	2
Metatarsal bone (*tarsometatarsus*)	1

Finds: -
Dating: Middle Ages/historical period
Excavated area: 8 m²
Total area studied: about 2550 m²
Field season: 6 to 9 July 2009

MUONIO 229 PORVINIEMI

Basic map sheet 2742 01 Pallastunturi
Northing = 7554 659, Easting = 3381 590, z = app. 270 m ASL

No previous excavations have been carried out at Porviniemi, but it is mentioned in Paulaharju's book Seitoja ja seidanpalvontaa, and it is also associated with a still-living folk tradition. The sieidi stone was studied by opening an excavation area of 2.6 x 2.4 m around it, with the sieidi stone in the centre. However, with the exception of modern artefacts and one fish bone, the excavations did not reveal any signs of human activity in the near vicinity of the sieidi. The modern finds consisted of coins, unchewed chewing gum, bottle glass, and a fishing fly, among other things. Phosphate analyses were also carried out to study activities around the sieidi. In addition to the sieidi itself, the remains of a pit to the north of the sieidi were also excavated. This has been interpreted earlier as a hunting pit. Carbon samples were taken from the pit remains, providing a terminus ante quem of 7000 BP for the digging of the pit. It does not therefore seem to be related to the activities carried out at the sieidi. A fragment of a flint blade was also found at the tip of the headland (KM 38154:1).

Finds: KM 38154:1
Dating: Stone Age/historical period
Excavated area: 11.96 m²
Total studied area: 1040 m²
Field season: 3 to 8 August 2009

MUONIO 10 KIRKKOPAHTA

Basic map sheet 2714 11 Pakasaivo
Northing = 7504 638, Easting = 3365 624, z = app. 230 m ASL

Kirkkopahta is a sieidi site mentioned by Paulaharju in relation with the nearby Lake Pakasaivo. No previous excavations have been carried out at the site. The fieldwork was carried out by opening four test pits around the sieidi stone (Figure 100). The ground around the sieidi was eroded, so the test pits were placed in locations where an overhanging part of the rock had protected the ground. Also, in the smaller test pit, a place where the soil was mixed was checked. However, no finds were discovered in connection with excavations around the sieidi, with the exception of modern artefacts. There were no bone finds, except for elk skulls that had recently been left at the site. In addition to the skulls, modern finds included clear bottle glass, coins, a bunch of flowers, and quartzite chunks set on top of the sieidi. Phosphate analyses were also carried out to study activity around the sieidi.

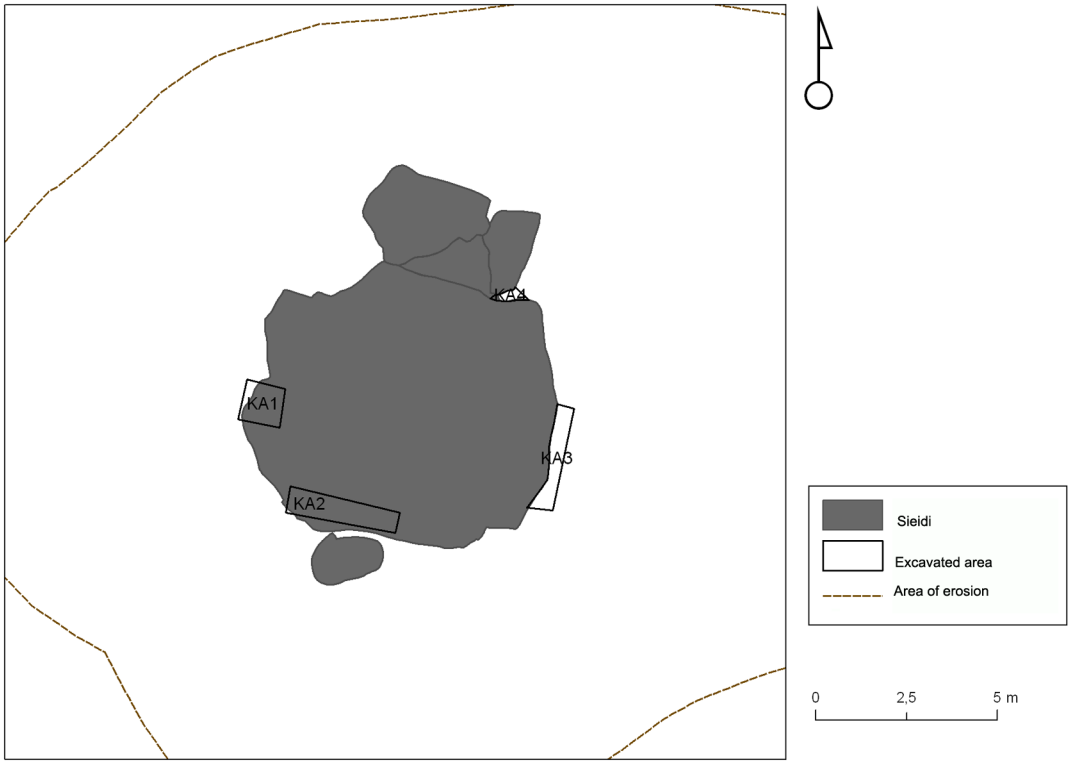

Figure 100. *The locations of excavated areas at Kirkkopahta.*

Finds: -
Dating: historical period
Excavated area: 9.33 m²
Total area studied: 396 m²
Field season: 10 to 12 August 2009

ENONTEKIÖ DIERPMESVÁRRI

Basic map sheet 281408
Northing = 7667 864, Easting = 3268 944, z = 861 m ASL

The fell of Dierpmesvárri is located southeast of Kilpisjärvi, to the south of Lake Dierpmesjávri. On its south-western slope, about 2 kilometres from the western peak of the fell, there is a sieidi stone located between two small streams. The stone is a four-metre-high slab with a white

and tapering top. In connection with the fieldwork, five excavation areas were opened around the stone, but they proved to be poor in finds. Altogether, four bones of wild or domesticated reindeer or a large mammal were found during the excavations, one of which seemed to have been brought there fairly recently (Table 22). Datings showed also the other bones to be modern. The possible moving of bones away from the sieidi was examined by means of test pits. A total of nine test pits of 30 x 30 cm each was dug around the sieidi, but they yielded no finds. In addition to the bones, modern coins were also found at the site.

Table 22. *The distribution of species in the bone finds from Dierpmesvárri (Salmi 2010).*

Taxon	Scientific name	Bone	Excavation area
Reindeer	*Rangifer tarandus*	*Cornu*	1, surface find
Reindeer	*Rangifer tarandus*	*Cornu, frontale*	1
Mammal	*Mammalia*		3
Reindeer	*Rangifer tarandus*	*Cornu*	4

Finds: -
Dating: historical period
Excavated area: 5.25 m²
Total area studied: about 400 m²
Field season: 12 to 14 July 2010

MUONIO 34 ÄKÄSSAIVO

Basic map sheet 273203 Äkäskero
Northing = 7515 070, Easting = 3379 110, z = 250 m ASL

Paulaharju (1962 [1922], 169) has mentioned that the Sámi respected Lake Äkässaivo in Muonio. Its high banks named Kirkkopahta and Hammaspahta were considered as significant. However, it is unclear whether any offering activities were associated with the sáiva lake. In more recent tradition, a rock formation to the north of the sáiva lake, in a bedrock depression 300 m north of the River Äkäsjoki, is also considered as a sieidi. The rock formation in question is 30 metres high and 10 x 30 m in area. The ground around the rock formation is stony, and no excavation areas could be opened in it. Instead, the stony area was studied at a radius of about 10 metres from the rock formation by digging holes into the ground at the base of the stones. However, no bone material indicative of offering activities was found around the rock formation. The only bone finds were those of small rodents. Modern visits to the site were indicated by snuff, reindeer meat, a feather, and a tract. In addition to the rock formation, the slopes of the shores of the sáiva lake were also studied by means of small test holes under stones. However, no signs of offering activities were found during the fieldwork.

Finds: -
Dating: historical period
Excavated area: about 5 m²
Total studied area: about 400 m²
Field season: 12 to 14 September 2010