Investigations at the Šventoji Find Site 4 1986-1995

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Šventoji is a little village on the Baltic coast, which belongs to the health-resort of Palanga. There are reclaimed and cultivated fields on the southern side of village, on the site of a former lagoon. The archaeological finds were detected during land reclamation activities along the coast of the former lagoon. The first archaeological investigations were conducted from 1966 to 1972. At that time, five Stone Age sites were investigated (No 1, 2, 3, 9, 23, 26, 28). The results were published in the archaeological press (Rimantienė 1979; 1980; 1992). These sites span the period from the middle of 4th millennium BC to the beginning of 2nd millennium BC, and provide insight into the occupants' hunting and fishing activities at that time, as well as some information regarding public and spiritual life.

Over the past thirteen years (1982-1995), three more Stone Age sites (No 4, 5, 6) have been investigated, and the resulting material has not only enriched the old data, but has produced entirely new interpretations (Rimantienė 1996a, b, c).

The fourth site was especially distinguished for its volume of artefacts from all periods. It has proved to be a continuation of what was previous called the second site (Fig.1). The site was investigated over a period of 9 years. A coastal tract 140 m in length and 10 m in breadth (1352 m²) was excavated. The entire area has since been converted either into arable soil or pasture. A 40 cm layer of peat covers the site surface, followed by a dark green stratum of gyttja, which is separated from the previous one by a narrow brown, ferruginous limiting bed. In the gyttja stratum, two archaeological horizons, A and B, were distinguished (Fig.2). Four pollen diagrams (Fig.3), radiocarbon data, and several macro-fossil investigations helped to establish the site chronology.

The material from cultural horizon B relates to the Narva culture, from the second half of the Earlier Neolithic until the first half of the Middle Neolithic. The oldest group dates back to the middle of the 4th millennium BC, the second one includes the period up until the middle of the 3rd millennium BC. That can you see in the cross section of the cultural layer (Fig. 2) and also from the following radiocarbon dates which were obtained on samples from Horizon B:"

Earlie: $(Vs - 811) 5110 \pm 110 \ bp / cal^1 3631 (3510) 3359 \ BC (Vs - 633) 4910 \pm 110 \ bp / cal 3373 (3302) 3083 \ BC Middle: <math>(T - 11004) 4145 \pm 80 \ bp / cal 2885 - 2590 \ BC (Bln - 4385) 4360 \pm 50 \ bp / cal 2584 (2534) 2461 \ BC$

¹ University of Washington Quaternary Isotops Lab Radiocarbon Calibration Program Rev 3.0.3c.

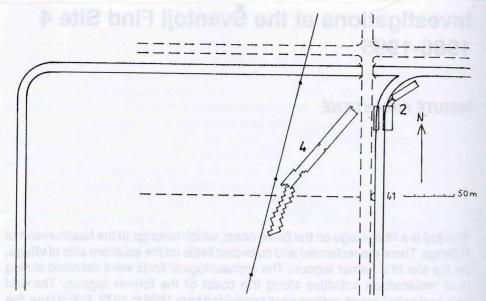


Fig. 1. Location of Sites 2/4

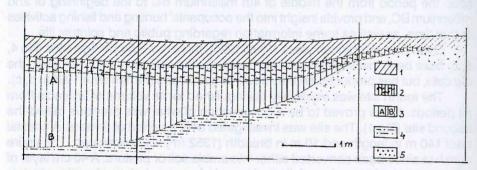


Fig. 2. Section of investigated area, Site 4: 1-peat, 2-gyttja limiting bed, 3-gyttja kulturlayer A and B, 4-aleurit, 5-sand

Paleogeographical investigations carried out in Šventoji 4 area also cleared up why there are not any finds from the Earlier Neolithic on this part of the coast. It is important to point out that an additional layer (possibly a cultural one, though without finds) was detected in the profile of the lagoon soil at the second site (Fig.4). Large tree roots stuck up out of this stratum, and they can be attributed to the 6th to 5th millennia BC:

(Vs - 814) 6440±110 bp / cal 5070 (4941) 4822 BC

Thus, the cultural layers of the Mesolithic and the very beginning of the Neolithic sit under a thick bed of alluvial sand deposits and can not be fined, as is the case in Northern Germany and Denmark, where they have been excavated under water.

The finds indicate that the fishing site of the Narva people existed here for a long time (almost thousand years), though there was no permanent settlement. Inhabitants of neighbouring settlements used to visit the site during the fishing season. A well known ritual pillar protected the area (Rimantienė 1979:112).

All artefacts and ceramics were collected from the lower part of the gyttja layer, together with animal and fish bones. The pottery was of two types: porous with shell temper (d=1,13) and denser with granite temper (d=1,30-1,32). There were also fragments of intermediate density. All fragments were found at the same epth, but were scattered across the site. Presumably, they belonged to different periods. The total number of bowl and pot fragments was 4020.

The ornamentation of the shell-tempered ceramics (i.e. the earliest ones) does not conform to a strict pattern, and often only individual areas were ornamented. However, the later granite-tempered pots were regularly decorated with lines of Stamps surrounding the mouth. Pot shapes were characteristic of the western variant of the Narva culture (Fig.5). Pots had I, C, S, and CS profiles, with pointed bases (angle: 95-120°). The height of the pots was almost equal to their diameter (20-35 cm). Pots were often repaired with drilled holes.

Ornamentation was simple, and consisted of: overturned drops and impressed pits, and in rarer cases wedges, winding

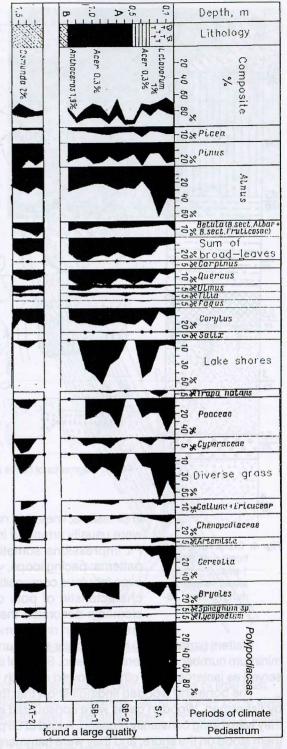


Fig. 3. Pollen diagram (G. Kleimionova 1992)

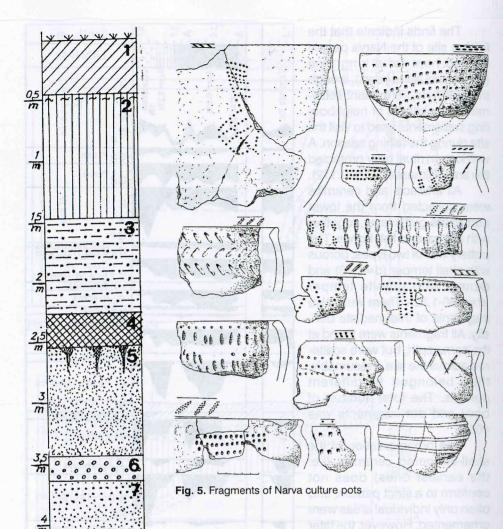


Fig. 4. Exposed section bordering Site 2: 1-peat, 2-gyttja, 3aleurit, 4-fosil humus, 5-sand, 6gravel, 7-sand

impressions, lines, and nail impressions. The impressions were usually arranged in a few lines around the mouth. Pit impressions sometimes displayed more intricate patterns: pacing loops, vertical lines, broken curves and even fabulous compositions. Similar ornamentation was characteristic of pots of different density. The same elements decorated the rims of pots; 285 ornamented and 220 plain rim fragments were collected.

Platters (small bowls) had a tubular shape and were individually decorated. A minimum number of 25 were recovered. Some of them were sooty and presumably served as lanterns, while others showed no such indications.

The bone and wooden findings show that the site was an isthmus inhabited by fisherman. Wooden dams were constructed in the isthmus of the lagoon, and they were being constantly repaired. A total of 66 poles are preserved. A number of them stood on the shore, and they were hammered in quite deeply. A second part was situated in the lagoon and to all appearances, nets were stretched between

the two. In one place, 3 rows of poles were found which may represent a landing-stage (Fig.6). Sinkers, pieces of floats, net ropes, fishing-baskets, as well as oars and the partial side of a boat were recovered between the poles.

I shall not discuss all of the findings, but will present instead a few of the more rare ones. The first of these is a wooden leister for eel spearing (Rimantienė 1975), well preserved but broken off at the shaft. The shaft is quadrangular in shape with a bone point hammered in its end and wrapped in place with lime bast. Four small wedges are driven in between a stem and branches, and are wrapped in the same way. Individual branches are found regularly.

Bifurcated leisters are the most primitive fishing instruments. They are usually constructed using naturally forked branches. However, one example was found where it was composed of two parts held together with a cord of lime bast.

A flooring of harel-nut tree, about 1.5 metres in length, and secured to a plank with a hole in its middle, is another very interesting find (Fig. 7). These special planks are fairly common on Šventoji sites, but their purpose is not clear. We think that they are the remains of mobile dams. In four places, the platform was connected with



Fig. 6. Posts of landing place during excavation

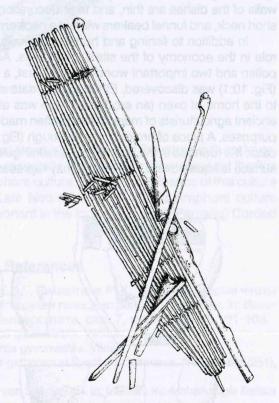


Fig. 7. Stake flooring in situ (mobile dam?)

small branches, covered with birch-bark and tied up with the ropes of lime bast.

Several ritual objects should also be mentioned, namely, a little bone staff with an elk head on its end (Fig. 8), and a small wooden scoop with a duck head on its handle.

Pieces of 6 very long (up to 2.5 m) bows testify to hunting activities near the site. However, a wooden spear with a bone point and a throwing stick are the

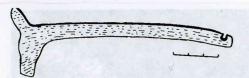


Fig. 8. Bone figurine of elk cub

most interesting weapons. Boar, elk, aurochs, red-deer and various furbearing animals, particularly beaver, as well as seals were hunted.

When the Globular Amphora culture population appeared here after the maximal sea transgression, the

lagoon was already overgrown. The transgression naturally disturbed the stratigraphy of the lower horizon (B).

Artefacts from the upper cultural horizon (A) were detected just under a limiting stratum of gyttja. The radiocarbon dates from layer A follow:

(Vs -957) 4200±100 bp / cal 2456 (2323) 2177 BC (Vs - 967) 4120±110 bp / cal 2377 (2199) 2039 BC

Ceramics from this stratum are typical of the Globular Amphora culture (Fig. 9). The clay contains a considerable admixture of pounded granite (d=1.5-1.88), walls of the dishes are thin, and their decoration is simple. Small low pots with a short neck, and funnel beakers without a neck are the most common pottery types.

In addition to fishing and hunting, agriculture also played a fairly important role in the economy of the site's inhabitants. Agriculture is evidenced by wheat pollen and two important wooden finds. First, a 60 cm long model of an ox yoke (Fig. 10:1) was discovered. Ethnographic data show that similar yokes were fixed to the horns of oxen (an eroded ox horn was also recovered). As for the model, ancient agriculturists of many cultures often made models of various tools for ritual purposes. A piece of broken juniper plough (Fig. 10:2) is another agricultural indicator. It is rounded in the middle and quadrangular in the upper part, while its lower surface is squared and worn out. It may represent a plough of the Døstrup type.

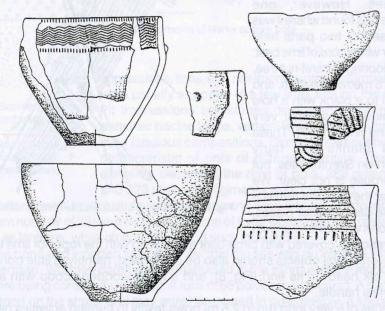


Fig. 9. Ceramics of the Globular Amphora culture

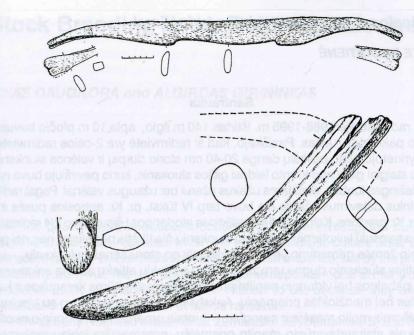


Fig. 10. Wooden yoke model (1) and head of ard (2)

Two adzes made of imported stone also belong to the same cultural layer. The finds from this layer are especially important, for they represent the first discovery of a pure Globular Amphora culture, though the influence of this culture was evident during the entire Late Neolithic. The Globular Amphora culture comprised a considerable component in the local Bay Coast (Pamarių) Corded Ware culture.

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Šventosios 4-osios radimvietės tyrinėjimai

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Santrauka

4-ojoje radimvietėje 1986-1995 m. ištirtas 140 m ilgio, apie 10 m pločio buvusio ežerėlio pakrantės ruožas. Paaiškėjo, kad ši radimvietė yra 2-osios radimvietės tąsa. Tyrinėtojo ploto paviršių dengė 20-40 cm storio durpių ir velėnos sluoksnis. Žemiau staigiai gilyn nuo kranto leidosi gitijos sluoksnis, kurio paviršiuje buvo ryškus geležingas luobas, susidaręs užakus ežerui bei užaugus velėnai. Pagal radiokarboninius datavimus ežeras čia buvo tarp IV tūkst. pr. Kr. antrosios pusės ir Il tūkst. pr. Kr. pradžios. Kaip matyti iš atsitiktinės atodangos į šiaurę nuo 2/4 radimvietės, ankstyvesnių laikotarpių kultūrinių sluoksnių čia tikėtis negalima, nes dėl poledyninio žemės grimzdimo jie gali slūgsoti tik po storu sanašų sluoksniu.

Gitijos sluoksnio dugne tarp žuvų ašakų ir kitokių atliekų aptikta ankstyvojo neolito pabaigos bei vidurinio neolito pradžios Narvos kultūros keramikos ir įvairių žūklės bei medžioklės priemonių. Ankstyviausia keramika buvo su kiaukutų priemaišomis molio masėje ir nereglamentuotais ornamentais. Vidurinio neolito keramikoje atsiranda grūsto granito priemaišų, ornamentika labiau reglamentuota. Pakrantėje buvo įrengtos užtvankos žuvims gaudyti ir prieplauka. Rasta įvairių žūklės įrenginių: kilnojamos užtvankos liekanų, ungurių šakių, luoto dalių, irklų ir pan. Čia, matyt, buvusi įvairių gyventojų sezoninės žūklės vieta.

Iš šios vietos žvejus išvijo maksimalioji jūros transgresija. Ji sujaukė ir radinius gitijos sluoksnyje. Po transgresijos nusausėjusioje pakrantėje buvo įsikūrę Rutulinių amforų kultūros gyventojai – jų palikimas slūgsojo tuoj po gitijos luobo sluoksniu. Jis datuotas paskutiniuoju III tūkst. ketvirčiu. Tai būdinga keramika, itveriamieji kirveliai ir žemės darbo įrankiai: jaučio jungo modelis bei arklo išara.

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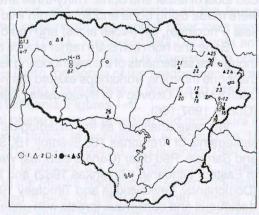
Stock Breeding in the Baltic Culture Area

LINAS DAUGNORA and ALGIRDAS GIRININKAS

Over the past several decades, archaeologists have investigated numerous Neolithic and Bronze Age sites within the traditional Baltic culture area, an area delineated not only by historical and archaeological evidence, but by the presence of Baltic hydronyms. The well preserved organic deposits found at many of these traditional Baltic sites are of particular interest to us, because they allow the identification and quantification of faunal remains.

Three Early Neolithic settlements: Žemaitiškė 3B, Daktariškė 5, and Šventoji 4; six Middle Neolithic settlements: Kretuonas 1B, Šventoji 1B, Šventoji 2B, Šventoji

23, Šventoji 3B, and Šarnelė; seven Late Neolithic settlements: Žemaitiškė 1, Žemaitiškė 2, Kretuonas 1D, Kretuonas 1A, Šventoji 6, Duonkalnis and Daktariškė 5: and two Early Bronze Age settlements: Kretuono 1C, and the Narkūnai hillfort, have been investigated in the Eastern and Western Baltic (Map 1). The Early Neolithic covers the second half of the Atlantic period. and the archaeological material suggests that a hunting-gathering way of life prevailed at this time. At Žemaitiškė 3B (the only known Early Neolithic site in Eastern Lithuania) bones of elk (Alces alces) and red deer (Cervus elaphus) make up 40.00% and 35.38% respectively of the total faunal sample. The remaining bones belong to wild boar (Sus suis), brown bear (Ursus arctos), and beaver (Castor fiber) (Daugnora and Girininkas 1996:143). The number of bone artefacts recovered at the Šventoji 4 settlement is illustrated in Chart 5 (Map 2).



Map 1. Archaeological monuments indicating the places from which the osteoarchaeological material has been taken: I. O Early Neolithic: 1. Žemaitiškė 3B. 2. Daktariškė 5th. II. A Middle Neolithic: 3. Kretuonas 1B, 4. Šventoji 1B, 5. Šventoji 2B, 6. Šventoji 3nd, 7. Šventoji 23rd, 8. Šarnelė. III. □ the Late Neolithic Age: 9. Žemaitiškė 1st, 10. Žemaitiškė 2nd, 11. Kretuonas 1D, 12. Kretuonas 1A, 13. Šventoji 6th, 14. Duonkalnis, 15. Daktariškė 5th; IV. • the Old Bronze Age: 16. Kretuonas 1C, 17. Narkūnai Didysis hill-fort 6th layer; V. ▲ the New Bronze Age: 18. Narkūnai Didysis hill-fort 5th and 4th layers, 19. Nevieriškė, 20. Šeimyniškėliai, 21. Kereliai, 22. Juodonys, 23. Sokiškiai, 24. Vosgėliai, 25. Mockūnai, 26. Veliuona