THE FIRST PALAEOLITHIC AND MESOLITHIC SETTLEMENTS IN AUKŠTUMALA, ŠILUTĖ DISTRICT, THE NEMUNAS RIVER DELTA

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Abstract

In 2004, an archaeological survey was carried out in Aukštumala upland bog (in the Šilutė district in western Lithuania), during which the remains of settlements from the Late Palaeolithic and Middle Mesolithic periods were discovered. These were the first sites from the Late Glacial and Early Holocene periods to be found in the lower reaches of the River Nemunas. The chronology and topography of the sites helped to identify the chronology of the area’s population, and to localise the natural environment in which the people of these periods lived. Based on the typology of the discovered artefacts, manufactured flint items in the Palaeolithic settlement were identified as being close to Late Arensburgian or Early Nemunas culture.

Key words: Aukštumala, Palaeolithic site, Mesolithic site, Arensburgian, Mesolithic Nemunas culture, Lithuania.

DOI: http://dx.doi.org/10.15181/ab.v20i0.815

Introduction

Aukštumala upland bog, just like all the Nemunas delta, has long been of interest to specialists in different fields, to geologists, biologists and archaeologists, since discussions between researchers include the evolution and the time of the formation of the former coastal area (Damušytė 2011; Gelumbauskaitė 2010, pp.109-116) and the stages in its population (Žulkus, Girininkas 2012). The latest archaeological Stone Age survey carried out by Bronius Dakinis in this natural territorial complex in 2004 provided some valuable information (Dakanis 2004). A unique site of the earliest residence from the Late Palaeolithic and Mesolithic periods in the Nemunas delta and on the coast is believed to have been discovered during the survey, which is significant to the Prehistoric period in Lithuania. The earliest human traces so far discovered in the Lithuanian coastal region were in two Late Palaeolithic and four Mesolithic settlements, located on a vertical north-south axis in west Lithuania along the Baltic Sea (Fig. 1). The Late Palaeolithic settlements include Kalniškės Palaeolithic find spot (the former Bachman Manor, on the left bank of the River Danė, now in the town of Klaipėda). Four oar-shaped spearheads and one bobbin-shaped spearhead made of reindeer horn were found there, and are now in a museum in Berlin.1 A Late Palaeolithic settlement with flint artefacts characteristic of the period were discovered during excavations in 2004 by Dakinis (Dakanis 2006, pp.11-13). In the Palanga area, excavations of Stone Age settlements started in 1958 under Navickaitė (Navickaitė, 1958).

Settlements from the Mesolithic period discovered in Palanga and Büttinge (Palanga-Šventoji) proved that people also lived in the environs of Palanga at the time (Girininkas 2011, pp.48-57). In the Šilutė district, the Late Mesolithic settlement of Šilmėžiai was identified (Girininkas, Zabiela 2005, p.302ff), and the Aukštumala settlement from the Middle Mesolithic period was discovered in 2004 by Dakinis (Dakanis 2006, p.11ff).

The village of Aukštumala (Lapaliai) has been known to archaeologists since the 19th century, due to a hill-fort in the eastern part of Aukštumala bog. An archaeological survey was carried out in the area of the hill-fort. However, a detailed investigation to find out its period and the circumstances of its appearance, and to identify the potential population and its cultural background, was not conducted, and no exclusive finds were discovered. As is indicated in the ‘Archaeological Atlas of Lithuania’, A. Bezenberger, who tried to excavate the hill-fort, found some large stones and charcoal (Lietuvos archeologijos atlasas [Archaeological Atlas of Lithuania], 1975, p.33). Bezenberger himself wrote that the hill was 2.5 metres high at the time, and was called Pilekalvė or Pileskalns (Bezenberger 1892, p.40ff). Some information can be found in E. Hollack’s Vorgeschichtliche Uebersichtskarte von Ostpreussen (Hollack 1908). The name of the village of Aukštumala (Lapaliai) was mentioned in P. Tarasenka’s book Lietuvos archeologijos medžiaga [Lithuanian Archaeological Materials]: the hill-fort was referred to as Pilekalvė or Pilskalns (Tarasenka 1928, p.99). In 1900, the German botanist Carl Albert Weber examined the bog comprehensively, and in 1902 he published a mono-

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1 They are in the Museum für Vor- und Frühgeschichte Staatliche Museen zu Berlin Preussischer Kulturbesitz.
The survey of the Aukštumala settlement: the excavation of trench No 4 of the first settlement

A thorough archaeological excavation was carried out in 2004, after an application to reduce the protected area and the buffer zone. Four trenches and five test excavations were made (Fig. 2) in the area of Aukštumala (Lapaliai) ancient settlement. Flint finds dating from the Stone Age were found in trench No 4, ten square metres in a north-south direction, in partly open sands, on a 0.3-metre elevation, in the area along the north-west edge of a grove frequently used by peat-digging machinery. Further east, the elevation rose to one metre. By carefully prospecting the surface of the sandy elevation and the environs of the trench, six flint artefacts were found (Nos 29-34). In trench No 4, under a thin two-to-six-centimetre peat layer, a layer (two to six to ten centimetres) of greyish white sand with grey argil inserts was discovered. After the sand layer began the subsoil, totally white sand with grey sand inserts (Fig. 3). In trench No 4, in the sand layer, 28 flint finds (Nos 1-28) were discovered at a depth of one to 28 centimetres.

Thirty-four flint artefacts were discovered in trench No 4: four blades, four cores, 15 flakes and small flakes, and nine manufactured items made of double-ended cores. Specimens No 2 and 10 represented surviving parts of one manufactured item, the upper blade part of a white flint covered with a light patina, possibly an arrowhead (Fig. 4). Specimen No 19 was the lower part of a blade, greyish white flint with a patina, the tang part of an arrowhead (Fig. 5). Specimen No 4 was a small flake-microlith, of white flint with a light patina (Fig. 6). Specimen No 11 was a bladelet-microlith; the flint was dark grey with light inserts (Fig. 7). Specimen No 33 was a trapezoid microlith made of black flint, and covered with a white-grey cortex (Fig. 8). Specimen No 27 was the middle part of the blade of a white flint covered with a light yellow patina (Fig. 9). Specimen No 16 was a borer, a small triangular white flint flake with a light yellow patina (Fig. 10). Specimen No 18 was an arrowhead made of a dark-grey flint blade.
Fig. 2. The location of the trenches and excavation pits examined in the area of the 1st Aukštumala settlement. Excavation pits (S) and trenches (P) located by Grigaliūnas.

Fig. 3. Trench No. 4 in the north-south direction and its stratigraphy (photograph by B. Dakanis).
Fig. 4. Specimens No 2 and 10 represented surviving parts of one manufactured item (photograph by G. Slah and M. Grigaliūnas).

Fig. 5. Specimen No 19, the lower part of a blade (photograph by G. Slah and M. Grigaliūnas).

Fig. 6. Specimen No 4, a small flake-microlith (photograph by G. Slah and M. Grigaliūnas).

Fig. 7. Specimen No 11, a bladelet-microlith (photograph by G. Slah and M. Grigaliūnas).

Fig. 8. Specimen No 33, a trapezoid microlith (photograph by G. Slah and M. Grigaliūnas).

Fig. 9. Specimen No 27, the middle part of the blade (photograph by G. Slah and M. Grigaliūnas).

Fig. 10. Specimen No 16, a borer, a small triangular flint flake (photograph by G. Slah and M. Grigaliūnas).

Fig. 11. Specimen No 18, an arrowhead with a truncated upper part (photograph by G. Slah and M. Grigaliūnas).
with a truncated upper part (Fig. 11). Specimen No 34 was an unidentified purpose flake made of grey flint (Fig. 12). Specimen No 29 was an unidentified purpose microlithic flake made of grey flint (Fig. 13). (More details about the techniques and functions of these finds can be found in Gvidas Slah’s paper in this volume.)

The excavation of trench No 6, and test excavations Nos 6, 7 and 8 of the second settlement

Two trenches and three test excavations were explored in the area of the second settlement. In trench No 6, one flint artefact was found, and the settlement was identified by means of test excavations. A flint flake (No 42) was found during the survey in the eastern corner of trench No 6 (Fig. 14), in the area of the ancient settlement of Aukštumala. The trench of ten square metres stretched in an east-west direction. The surface of the trench was three to five centimetres of peaty soil. Beneath it, light brown sand mixed with peaty soil was found down to a depth of 20 centimetres; and below that started the subsoil, consisting of sand with small ore-bearing inserts. No finds were discovered in the trench itself.

In test excavation No 6 (Fig. 15), an area of one square metre on a 0.4-metre-high hill in almost open peaty sands 193 metres north of trench No 6 (Fig. 16) was explored. Flint artefacts and burnt-out stones were discovered. The hill was 0.4 metres high, and only on the eastern side did it rise from the lower surface of the peat bog to almost a metre. A little further to the south-west (approximately 32 metres from test excavation No 6) stretched a coastal dune washed out of yellow clayey sand. On the hill, we expected to find the intact surface of a Stone Age settlement. The test excavation was explored in a north-south direction, and then extended eastwards to four square metres (Fig. 17). Grey sand of a brownish shade was mixed with peat or light-
Fig. 14. Trench No. 6 (photograph by B. Dakanis)

Fig. 15. Excavation pit No. 6 and its environs (photograph by B. Dakanis).
Fig. 16. The location of the trenches and excavation pits examined in the area of the 2nd Aukštumala settlement. Excavation pits (S) and trenches (P) located by Grigaliūnas.

Fig. 17. Excavation pit No. 6 extended in the eastern direction (photograph by B. Dakanis).
Fig. 18. The subsoil of excavation pit No. 6 in the depth of 30-35 cm: greenish-yellow sand with brownish veins and greenish sand patches (photograph by B. Dakanis).

Fig. 19. Excavation pit No. 7 and its environs (photograph by B. Dakanis).
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Fig. 20. Excavation pit No. 7 extended eastward (photograph by B. Dakanis).

Fig. 21. Stratigraphy of excavation pit No. 7; on the southern wall, a 10 to 20 cm peat layer can be seen (photograph by B. Dakanis).
Nine-centimetre layer of peat and a six-centimetre layer of sand below it (No 35). In test excavation No 7, several burnt-out stones (two by three by three, and 3.5 by five by 5.5 centimetres in size) were also discovered.

Test excavation No 8 (Fig. 23), with an area of four square metres, was excavated in a north-south direction, 102.5 metres north of test excavation No 6 and 92 metres of test excavation No 7 in the same direction, in a slightly higher and more open peat bog mixed with sand, not overgrown with forest. At the southern edge of the measured excavation area, 50 centimetres west of the southwest corner of the test excavation and ten centimetres south of its wall, a piece of flint was found (No 46) during the survey, and another three (Nos 43 to 45) were found during the exploration of the test excavation. Test excavation No 8 was explored to a depth of 28 to 35 centimetres. Its surface was a four to 12-centimetre layer of peat, with a 26 to 30-centimetre layer of greyish yellow sand with veins of brownish grey sand under it. Even deeper was yellow sand of a greyish green shade, with inserts of grey traces of tree roots and clean white sand washed by water eddies (Fig. 24).

Test excavations Nos 6, 7 and 8 provided 12 flint finds: two blades, four flakes and six manufactured items. Specimen No 39 was a burin, with the cutting edge formed on the upper part of the blade; the flint was white, and the item was covered with a yellowish patina (Fig. 25). Specimen No 36 was a burin-scraper, made of white flint with a light yellow patina (Fig. 26). Specimen No 42 was a gouge, made of a dark grey flint flake and covered with a dark yellow, brown and white patina (Fig. 27). Specimens Nos 40 and 41 together made up one manufactured item, a broken blade. The flint was a dull pale grey, covered with a light semiclear patina (Fig. 28). Find No 35 was a burin, a massive white flint blade, split from a double-ended core, covered with a light bluish-grey patina, and the burin was formed on its upper part (Fig. 29). More details about the techniques and functions of these finds can be found in Gvidas Slah’s paper in this volume.

Discussion

Even though the ancient settlements discovered in the Aukštumala upland bog in 2004 were located topographically close to each other (Fig. 30), and even though their areas (the first settlement of 0.08 hectares, and the second settlement of 0.1 hectares) were similar, the sites lead us to believe that they belong to different periods. The low sand hills rising above the peat and the sand underneath them remind us of the vicinity of the Baltic Ice Lake and the shores of Lake Ancylus in its transgression period. The settlements appeared there due to the favourable natural conditions and the amount of food typical of the seaside zone. As no re-
Fig. 23. Excavation pit No. 8 and its environs (photograph by B. Dakanis).

Fig. 24. Stratigraphy of excavation pit No. 8: the deeper layer of yellow sand of a gray-greenish shade with gray inserts of tree roots and clean white sand washed out by water (photograph by B. Dakanis).
Fig. 25. Specimen No 39, a burin, with the cutting edge formed on the upper part of the blade (photograph by G. Slah and M. Grigaliūnas).

Fig. 26. Specimen No 36, a burin-scraper (photograph by G. Slah and M. Grigaliūnas).

Fig. 27. Specimen No 42, a gouge (photograph by G. Slah and M. Grigaliūnas).

Fig. 28. Specimens Nos 40 and 41 together made up one manufactured item, a broken blade. (photograph by G. Slah and M. Grigaliūnas).

Fig. 29. Find No 35, a burin; a massive white flint blade, split from a double-ended core, covered with a light bluish-grey patina, and the burin was formed on its upper part (photograph by G. Slah and M. Grigaliūnas).

Remains of buildings were discovered, and the number of finds and manufactured items was small, the settlements could have been seasonal. A traceological and technical assessment of the flint artefacts discovered (Fig. 31) shows that they belong to two different periods. Chronologically, they are from the Late Palaeolithic and Middle Mesolithic periods. Three microliths and one arrowhead are from the Mesolithic period. In the second settlement, attributed to the Late Palaeolithic period, the burins discovered in the same place were of a similar flint texture and manufacture technique: at the level of percussion and patinisation. Manufactured items similar to those of the Auštumala settlements have been found in techno-complexes of Late Arensburgian culture in Lithuania at the Šilelis, Vilnius I and Pasieniai settlements (Šatavičius 2005, pp.67-70); in Latvia, at Salaspils Laukskola settlement (Zagorska, 2012, p.161, III Tables 22-29); in Poland, at the Szczebar XIV settlement (Siemaszko 2000, pp.251-271); in southern Scandinavia, at Rönneholm, Ageröd I, Henningebr, etc (Andersson, Knarrström 1999, pp.73-78); and in northern Germany, at Stellmoor (the up-
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Fig. 30. The First and Second Aukštumala’s settlement indicated by Grigaliūnas.
Fig. 31. The flint finds discovered in Aukštumala upland bog settlements that were typologically identified and traceologically and technologically examined with the aim of their dating and assigning to respective cultures. A - Microliths. B - A gouge. C – Burins. D – A borer. E – A blade. F – Arrowheads. G – Scrapers (draw and designed by Girininkas, Grigaliūnas).
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Conclusions

During archaeological excavations of the Aukštumala upland bog in 2008, two unique ancient settlements were discovered, localised, and assigned to the Late Palaeolithic and Middle-Mesolithic periods. Topographically, they might be Late Palaeolithic and Middle Mesolithic settlements that were on the shores of the former Baltic Ice Lake and a lake that had existed at the time of the Ancylus transgression. In the first Aukštumala upland bog settlement from the Middle Mesolithic period, flint articles were found which, according to their function, traceological examination and the technique of flint percussion, may be attributed to the Mesolithic period, to Early Nemunas culture. In the second Aukštumala upland bog settlement from the Late Palaeolithic period, finds were discovered which, according to their function, percussion technique and typology, may be considered Late Palaeolithic manufactured items used by a community of Late Arensburgian culture.

Acknowledgements

The author is very grateful to the archaeologist Bronius Dakanis for the opportunity to use and publish Stone Age material discovered in the Aukštumala bog area. I would also like to thank Professor Algirdas Girininkas for his constructive comments in the process of writing this article.

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Santrauka


Abi senovės gyvenvietės buvo sezoninės, jų kūrimai dabartinės auksčiapėkės teritorijoje galėjo nulemti Baltijos ledyninio ežero ir Ancyliaus ežero transgresijos laikotarpui netoli gyvenviečių buvus pajūris, prie kurio gyvenusios bendruomenės turėjo pakankamai mais-