LAKE DWELLINGS IN THE SOUTH-EASTERN BALTIC SEA REGION DURING THE EARLY METAL PERIOD

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Introduction

Prehistoric lake dwellings are considered objects of phenomenal value in the archaeology of Europe. For a long time these dwellings were surrounded by secrecy while the image of pile constructions erected above water were associated with a unique and particular mode of living.

The first lake dwellings were discovered at the feet of the Alps back in the XIX century. Over a period of more than 150 years, the interpretation of the purpose and meaning of lake dwellings has proceeded through three stages. In the first stage, researchers tried to examine and explain the reasons that determined the choice of living place. During the second stage, they focused on the exceptional state of preservation of the organic material of lake dwellings and the related survival of everyday items and the information provided by them. Within the present third stage, greatest attention has been given to the investigations of lake dwellings and other objects of wetlands being undertaken by natural science. The data which is being acquired from ongoing investigations is being used for the general reconstruction of the region and the reconstruction of the mode of living of a wider geographical space, furthermore, for the contextualisation of the material.

The interpretations of lake dwellings are in flux at the present time. Those sites in which people did not live exclusively above water on raised pile constructions are now also labelled as lake dwellings. A period of the romanticisation of such dwellings has given way to a period of scientific research – these dwellings are now considered to be particularly exhaustive complexes of sources that help us to reconstruct a mode of living in the past. Interdisciplinary investigations of the preserved organic material have enabled us to reconstruct the development of the economy – the features of the manner of living led by communities of hunters, fishermen, farmers and cattle-breeders, and the paleogeographic situation. The unique preserved details of architecture are witness to the technologies of
wood processing and building features of those prehistoric communities.

Although hundreds of years have passed since the discovery of the first dwellings, researchers are still preoccupied by unanswered questions. No one can deny that one of the main questions which generate most interest for both researchers and the broad society alike is this: why did communities of the past choose such a different, unaccustomed and uncomfortable setting for their living place? This question is influenced by our present understanding or idea that living in such a constantly damp environment is uncomfortable or unusual. However, there is no firm reason to maintain that our present understanding corresponds with the ideas or solutions made by prehistoric communities.

For a long time lake dwellings were considered to be a specific feature of the Alpine region. The lake dwellings found in the North Eastern Europe – South Eastern Baltic Sea Region – expanded the boundaries of this phenomenon quite considerably. The web of objects that is spread with a greater density far beyond the region of the Alps has proved that this was not a phenomenon that was exceptional to one area. Nowadays, lake dwellings are considered to be a part of the common European heritage.

In North Eastern Europe, the existence of lake dwellings dated to the transitional Late Bronze – Early Iron Period was based on the dwellings found only in the territory of Poland (Masuria) which have been under investigation since the end of the XIX century. Until the last decades of the XX century and the early XXI century these dwellings were the only type of lake dwellings that were known in North Eastern Europe. Other lake dwellings, which altered the boundaries of the spread of dwellings that had been known up until then, were found only during latter decades in the territories of central Poland and Lithuania – the Lake Luokesa dwellings.

The investigations of the Lake Luokesa dwellings complement the material of the period in various ways. The new archaeological material and new types of objects change the image of
prehistory that has been formed by investigations and raise the main problems related to this subject.

The archaeological material of the Lake Luokesa dwellings appears to be the only material so far discovered in Lithuania which contains such a wealth of preserved architectural and other organic material dated to the Early Metal Period. The investigations of these dwellings disprove the existence of a long and uniform archaeological culture in Eastern Lithuania during the 1st millennium BC. Therefore, within the common context of the period, the importance and uniqueness of these dwellings is undoubted.

The object of the doctoral dissertation is the lake dwellings of the South Eastern Baltic Sea region. Geographical and chronological boundaries have been defined by taking into consideration the main object of the research – the Lake Luokesa dwellings and their dating.

The South Eastern Baltic Sea region has been defined on the basis of geographical indicators – it contains a belt of lakes that were formed during the last Ice Age. In a geopolitical map of the present day, this region covers the territories of Northern and Central Poland, Northern Belarus, Lithuania, Latvia and Estonia. The lake dwellings found in Eastern Lithuania appear in the centre of this territory. In the map of Europe this is one of the territories, between the Alps and the British archipelago, in which lake dwellings were found and investigated. In the widest sense of the meaning, this South Eastern Baltic Sea region lay in the North Eastern part of Europe1.

The chronology of the dissertation. This research analyses only the dwellings which are dated to the end of the Early Metal Period (1300 BC–AD) – Late Bronze and Early Iron Age. Chronological boundaries were determined by the period of the settling of the Lake Luokesa dwellings.

The relevance and uniqueness of the dissertation. The study analyses objects of the Early Metal Period, i.e. lake dwellings. These are objects new to Lithuanian archaeology and have yet to be

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1 This division is based on the economical-political and geographical grouping of Europe of the Organisation of the United Nations
properly investigated. The dwellings were discovered in Lake Luokesa (Molėtai dist.), in 2000–2001. They are the first lake dwellings to be found in the territory of Lithuania that are dated to this period. Up until this date no facts had been confirmed concerning the existence of lake dwellings within the period under discussion in Lithuania, although speculation had been made in earlier literature (until the mid-XX century) regarding their existence. This work was inspired by the discovery of lake dwellings and the results which arose from their investigation, and from the fact that these objects had not previously existed in the Early Metal Period material of the archaeology of Lithuania. The main questions and the uniqueness of these objects intertwine in various contexts: in the usage of specific investigational methods, in the preservation of material, in the possibilities of its investigation, and in the choice of a living place, etc. The discovery of lake dwellings in Lithuania generated great interest both in the academic and wider society.

The investigations of the Lake Luokesa dwellings is an example of the application of new interdisciplinary methods as the outdoor investigations were carried out through the use of the methods of underwater archaeology. These were the first exhaustive investigations of such type applied to such objects in the territory of Lithuania. Since 2000 the Lake Luokesa dwellings have also been investigated using various interdisciplinary (natural science) methods. The main conclusions of this work are based on the corollary models of interdisciplinary investigations which provide data for a well-grounded interpretation and reconstruction of the dwellings of the period under discussion. Evidence of the work’s innovative nature also lies in the fact that various interdisciplinary methods (micromorphology, dendrochronology) were applied to the analysis and interpretation of the material. Such methods have not previously been applied to the archaeology of Lithuanian prehistory. The basic archaeological material that was gathered by applying such investigational methods became the source for this scientific research. The work demonstrates the possibilities for collaboration among various subsidiary disciplines, as well as the significant results that
can arise from their interaction. The dissertation proposes the presumption that a well-grounded interpretation and conclusions are not possible without the carrying out of additional laboratory investigations.

The relevance of this work also comes from the fact that the common territorial distinction of the lake dwellings of South Eastern Baltic Sea region has not yet been emphasised, neither has their material been compared. Moreover, not even a single summarizing work has been devoted to this particular subject. The lake dwellings in the South Eastern Baltic Sea region are considered to be the only dwellings in Europe that provide information about the existence of such type of objects in the North Eastern part of Europe during the Early Metal Period – just at the time when the building tradition of settlements in the Alpine region had come to an end. This investigation of the lake dwellings and their regional features contributes to research into the evolution of prehistory and involves the region under discussion within a common European context.

This dissertation analyses the archaeological objects attributed to wetland archaeology. The field of wetland archaeology is a newly distinguished field whose popularity is experiencing rapid growth in North Eastern Europe and in the Baltic Sea region in particular. This work contributes to the accentuation of this new field of archaeology. Although the quantity of lake dwellings in the region under discussion is not large, the recent growth in interest in the objects of wetland archaeology provides an optimistic prognosis. As new technologies continue to develop, new survey methods are applied which hugely increase the chance for the discovery of such objects. The examples provided by the freshly discovered dwellings have allowed researchers to look once more with new light upon the material that had hitherto been gathered. This, in turn has created new interpretations of old material and a desire for the prospecting for new objects and their investigations to be carried out.

The problem of this study lay in the freshness of the material. Because of that the work does not engage with “obsolete” problems. The discovery of new objects and their material has brought up
specific questions, forcing the writer to revise the already accumulated information and ascertain a common position and significance for new archaeological objects in the image of prehistory.

The problem of the work can be divided into three levels. Firstly, the problem which arises when aiming to evaluate these lake dwellings and explore their significance is that no-one has ever attempted define or accentuate regional distinction. The dwellings have not been analysed within the wider context of a distinguished region, as up until 2000 there was no a comparative material except for the dwellings of a grate-and-beam construction in the Masurian Lake District (Gackowski 1998, Gackowski 2000). The dwellings of the variety of building types that have recently been investigated in the South Eastern Baltic Sea region are arranged in islands and belong to different archaeological cultures. The lake dwellings were analysed only in the narrow contexts of particular archaeological cultures but not at a regional level. Thus far neither the earliest period of the building of the region’s dwellings, nor the continuation of a cultural tradition have been established. Moreover, the questions related to the settlement of lake dwellings have not been given categorical answers, nor have the similarities or the differences of the dwellings’ construction been ascertained. The analysis is also burdened by the fact that only some of the region’s known lake dwellings have been investigated on an equal scale. Only that part of the dwellings that has been investigated can be adapted to a comparative analysis and these are those dwellings in which the paleogeographical conditions and building features were reasonably established.

Secondly, the interpretations of the main object of the research – the Lake Luokesa dwellings – have not been completely grounded: the features of their inhabitants’ mode of living, the development of the dwellings and the nature of their building have not been finally ascertained. With the absence of a well-grounded interpretation of the Lake Luokesa dwellings, the status and importance of these dwellings among the dwellings of the region remains unclear: how are they different and how do they compare? What is the influence of the results of the Early Metal Period lake
dwellings’ investigations upon the common specifics of such a type dwelling in the region?

Thirdly, the topic of the Early Metal Period in the region of the East Baltic remains poorly researched while the situation of the Lake Luokesa dwellings in the material of the Lithuania’s period has not been analysed. In comparison with the later Iron Age, the investigations of settlements and their importance for the general reconstruction of the mode of living of the society (its economical and social aspects) within the territory of Lithuania before the first century AD differ significantly (Vengalis 2009). Prominence is given to the material relating to the investigations of the settlements of the 1st millennium BC, although its model of the Bronze Age mode of living – the development of agriculture and economical processes – is grounded on very limited information. This situation has been determined by the fragmental nature of prior investigations – the formulation of summarizing conclusions becomes very complicated due to the lack of the investigation of diverse archaeological material (burial sites, living areas or complexes). Almost all of the information available consists of material from hillfort investigations and multilayered settlements that have been inhabited for a long period. The evaluation of Lithuanian lake dwellings in the context of the settlements of the period under discussion is complicated because these dwellings do not have any analogues and can only be evaluated as unique and solitary examples.

The objective of this work is to evaluate Early Metal Period Luokesa Lake dwellings in the context of the lake dwellings of the South Eastern Baltic Sea region. Making reference to investigations and interpretations of the region’s dwellings, the aim has been made to establish the features of the Lake Luokesa dwellings and to ascertain how these dwellings differ and how they compare. The work also attempts to verify and check the already presented hypotheses and interpretations of the origins, and the development and usage of the region’s dwellings.

Aiming to demonstrate the uniqueness of the lake dwellings’ material and the significance of wetland archaeology for the
reconstruction of the past, the material of the Lake Luokesa dwellings has been inserted into the territorial and chronological context of the period. While carrying out analysis of the lake dwellings’ material, the following tasks have been set: 1. To define the term of wetland archaeology and to distinguish the main aspects of this field, including its importance and the problematics of the region; 2. To present a summary of the region’s lake dwellings and indicate the reliability of their investigations and material; 3. To distinguish the main types of lake dwellings and the peculiarities of their construction during the Early Metal Period in the South Eastern Baltic Sea region by placing emphasis on the importance of interdisciplinary investigations and the possible nature of erosion, and its influence upon the interpretation; 4. By referring to the data of interdisciplinary investigations, to examine the paleogeographical conditions of the settling of the Lake Luokesa dwellings, moreover, to establish the stages of the settling and the life expectancy of the people of the Lake Luokesa dwellings, and the reasons for the dwellings’ abandonment; 5. To establish a model for the economy and mode of living in the Lake Luokesa dwellings; 6. To distinguish the main possible reasons for the construction of lake dwellings in the South Eastern Baltic Sea region during the Early Metal Period; 7. To compare the material of the Lake Luokesa dwellings with other dwellings of the region from the angle of the mode of construction, as well as its economic model and functions.

In order to achieve the objective and the tasks that have been set, various research methodologies have been applied: experimental research, comparative analysis, and cartographic method. The main sources of this work consist of the data of unpublished interdisciplinary researches and the reports of underwater archaeological investigations of Lake Luokesa. Usage has been made of published material only as regards the lake dwellings of the South Eastern Baltic Sea region.
Structure of dissertation and abstract of contents

The dissertation is composed of an introduction, six chapters of research, conclusions, a list of reference sources, literature, and appendices. The appendices include maps of the spread of dwellings, summaries presenting the level of investigation surrounding the dwellings, their main features, and the nature and period of these investigations. Plans of the dwellings and reconstructive drawings are also presented.

The first chapter of the dissertation – Terminology – analyses the specific terms which still do not have established definitions or uniform names in the material of Lithuanian archaeology.

In archaeology, the field of wetlands is unique as regards the specific methods of investigation that it utilises and the well preserved organic remains of its material culture. Different criterions are often emphasized when defining the field of wetland archaeology. The ascription of objects to wetland archaeology remains unclear. Should such ascription be based on the circumstances of discovery or the specifics of the usage of the living environment? Despite some imperfections as regards the definition of wetland archaeology, the dwellings analysed in this work have been ascribed to the field of wetland archaeology and they are often investigated using the methods of underwater archaeology. The field of wetland archaeology in Europe began with the discovery of such lake dwellings and the objects they contained. Wetland archaeology is a completely new term in the archaeology of Lithuania. Although the uniqueness of archaeological objects in waterlogged places had been acknowledged earlier, these objects and the methods of their investigations had never been ascribed to wetland archaeology or evaluated within the context of wetland archaeology. The term of wetlands was defined and clarified in the latest research into the wetlands of Lithuania (Povilaitis et al. 2011). Having reconciled the English translation – “wetlands” – and the term of wetlands defined in 2011, the objects
that have been investigated in wetland environments can be substantively ascribed to the field of wetland archaeology.

The rapid growth in the investigation of lake dwellings forces us to state that due to differences in their construction, a uniform term for the description of dwellings does not exist. From a scientific point of view, within the common European context these dwellings could simply be named using a very wide term – “wetland settlements”. In the region of the South Eastern Baltic Sea, no traces of more diverse building styles have so far been detected in the wetlands environment. As a result of this, proposals have been made to label objects as lake dwellings. Within the framework of this study, the proposal for a very clear application of the presented criteria has been made with the aim of thus separating lake dwellings from shore dwellings that were constructed on flood lands or higher places, and settlements erected on natural islands. A lake dwelling is a dwelling or a part of some dwelling constructed on wet and periodically flooded areas, shallow lake shores, confluences of rivers and lakes, or artificially formed islands. The buildings of these dwellings can be raised on piles or on platforms held by piles; or they can also be erected on islands artificially formed from wooden constructions and field stones. Such features as the construction and inhabitation of domiciles in wetland environments, along with the usage of vertical and horizontal wooden constructions aimed at avoiding dampness and seepage, are obligatory when ascribing dwellings to such types of site.

The second chapter – The History of Investigations of Lake Dwellings – is split into four subsections. The first subsection – “The Discovery of dwellings and First Investigations” – is devoted to the primary investigations of lake dwellings in the Alpine region and, moreover, to the discussion of the phenomenon of lake dwellings. The archaeological type “lake dwellings” has remarkably influenced the image of the prehistory of Europe since the XIX century. The first dwellings to create a sudden and unprecedented resonance among contemporary scientists and also within the broader society were discovered in Switzerland. Information regarding the existence of lake dwellings, and the unique remains of prehistoric objects they
offered up, caused the so called “lake dwelling fever” which rapidly spread around the Alpine region and part of Europe. Only a few decades had passed before there were maps marked with dots indicating newly discovered lake dwellings.

The second subsection – “The Spread of the Idea of Lake Dwellings in the Baltic Sea Region” – analyses the responses to this “lake dwelling fever” in North Eastern Europe. The lake district of North Eastern Europe is one of the areas in the map of Europe, near to the Alpine region and British archipelago, where lake dwellings were found and investigated. An analysis of the history archaeological investigations of the lake dwellings of different countries (according to their present day territories) was chosen for this work.

A major part of the archaeological material consists of dwellings investigated in the territory of Poland (former East Prussia). It is within this territory until the present day that the greatest number of various types of investigation has been conducted into the largest concentration of dwellings. This analysis presents only the main stages and objects. It also deals with the issues of interpretation and dating, the influence of the dominance of Southern Europe over the region under discussion and the influence of the development of underwater archaeology over the investigations of lake dwellings.

The very first dwellings were discovered and investigated in the II\textsuperscript{nd} half of the XIX century. The first stage of dwellings’ investigations in the present territory of Poland can be related to their main investigator J. Heydeck. In 1933 K. O. Rossius systemised and presented new information as regards the lake dwellings discovered in the lakes of East Prussia. The catalogue presented by him records about 40 dwellings (Rossius 1933).

The investigation of lake dwellings in the post war period was marked by a revival and re-analysis of the material that had already been gathered (mostly from the XIX century). The first underwater investigations of lake dwellings were carried out during the post war period. This new examination of prior investigations and the localisation of fresh and already fixated dwellings began in the 1980s. “Re-localisation” was not possible for all dwellings. In 2000, a
systematic underwater and land archaeological survey was began in and around Lake Powidz in search of new archaeological objects. During the survey two lake dwellings which are of large importance to this study were discovered. The growing activity of underwater archaeological investigations in the late XX century influenced the investigations of lake dwellings. In the larger part of the discussed countries the development of underwater archaeology in fresh water began with the investigation of lake dwellings.

The phenomenon of lake dwellings had already reached Estonia, Latvia and Belarus by the XIX century, although intensive investigations into dwellings were not conducted. The existence of lake dwellings dated to the Early Metal Period has not been confirmed in these territories. The dwellings investigated in Sweden, Finland and Russia (in the regions of Pskov and Smolensk) have been dated to the Neolithic Period.

It is possible to trace a few common features in all investigations of lake dwellings of the South Eastern Baltic countries. Firstly, the inspirations from the work and investigations carried out by F. Keller. Secondly, land-reclamation and the change in landscape that was its outcome made it burdensome to locate the dwellings.

The third subsection – “The History of the Survey and Investigation of Lake Dwellings in Lithuania” – analyses the history of surveys and interpretations before the discovery of the first lake dwellings in the country.

The history of the investigations of the Early Metal Period lake dwellings in Lithuania is rather short. It only starts with the discovery of the Luokesa dwellings, i.e. at the turn of the XXI century. However, information regarding the possible existence of lake dwellings in the territory of Lithuania can be traced in the literature of an earlier period, where, without any reference being made to a concrete fact about an identified dwelling, it is possible to find analysis of structural plans, the features of buildings, and a discussion of their inhabitation. Interest in the unique nature of the dwellings “above water” and the uniqueness of their inhabitants’ mode of living was inspired by the first investigations in Switzerland. It resulted in
the wave of “lake dwelling fever” that spread throughout Europe. Information about the unique objects found under water in the Alpine region reached Lithuania only after more than 40 years.

A. Spicinas, P. Tarasenka, L. Kšivickis and P. Galaulnė mention lake dwellings (at that time they were known under a different title) at the beginning of the XX century. In the 1920s discussions took place among contemporary scientists regarding the building of lake dwellings and their purpose in Lithuania. By the 1950s, more than ten places had been mentioned as possible dwelling sites in the territory of Lithuania.

The 1930s–1950s are marked by an intensive accumulation of information about lake dwellings arising from the carrying out of land-reclamation works. Attention began to be drawn to the importance of wetland objects for the science of archaeology through the involvement of not only academic society but local inhabitants as well. During this period a large amount of information about different wetland objects or solitary archaeological finds can be found in the files of the State Commission of Archaeology.

The first surveys of lake dwellings to use underwater archaeology methods were conducted at the end of the XX century.

The turning point in the surveying of lake dwellings began at the turn of the XXI century. Surveying of new objects has been carried out in the lakes of Lithuania since 1998. With short breaks, 45 lakes and the sections of 6 rivers were surveyed from 1998 to 2010. In 12 of the lakes new archaeological objects were detected, while in 8 of them loose archaeological finds were discovered. The discovery of new objects during recent years has completely put aside any doubts regarding the existence of pile buildings in Lithuania. From the late XX century, archaeological investigations were carried out in the Neolithic Žemaitiškė II pile-dwelling settlement. The data from Luokesa dwellings I and II contributes to these facts. Investigations of the Lake Luokesa dwellings have been carried out from 2000 to the present day.

The survey of lake dwellings stretched from the beginning of the XX century to the XXI century. Throughout this period no
underwater investigations of lake dwellings were conducted. Only assumptions concerning their existence exist in reference to unconfirmed survey material. Although by the mid-XX century investigations had not yet taken place, the archaeologists and persons concerned had no doubts that such types of building existed above water in the territory of Lithuania; therefore, they attempted to localize dwellings by referring to ethnographic sources and the archaeological finds that had been discovered close to water. The main questions which were raised by investigators regarded the nature of the building, reasons for its construction and tendencies of its population and economy. We can probably relate the fact that no lake dwellings were discovered in the territory of Lithuania until the late XX century to the relative lateness of the application of the methods of underwater archaeology to the survey of such objects.

The fourth subsection – “The Investigations of the Lake Luokesa Dwellings – the Characteristics of the Sources and Methods of Investigation” – discusses investigations accomplished in the Lake Luokesa dwellings. The data from these dwellings compose the main sources of this study. Underwater archaeological investigations of the Lake Luokesa dwellings were carried out in 2000–2011. The underwater investigation of such type of objects is unprecedented in the territory of Lithuania. Survey investigations using test excavations were carried out on the shores and islands of the lake, with the aim of checking the inhabitation of the lake’s shores and the lake’s islands. Comprehending the importance of the results for final interpretations, samples for interdisciplinary investigations (archaeobotany, palynology, geoarchaeology, dendrochronology) were taken while carrying out archaeological investigations. Samples for investigations were taken from the territories of both dwellings. However, the majority of the investigations were conducted only from Lake Luokesa dwelling I. Separate samples were analyzed stratigraphically. Later on the data of samples were correlated.

Throughout the years of investigation, the organic material of the dwelling was dated with a radiocarbon method in various laboratories and the entirety of the osteological material was analysed.
Research was conducted by B. Pollmann and S. Jacomet (archaeobotany), N. Bleicher (dendrochronology), A. Heitz-Weniger (palynology) and K. Ismail-Meyer (geoarchaeology). The publication based on these researches is planned for 2014, therefore I used unpublished data and annual reports of the project in this dissertation. 

Zooarchaeology – L. Daugnora, G. Piličiauskienė and L. Baltrūnaitė. The analysis of tree species was conducted by R. Pūkienė. Micromorphologic research was carried out by H. Lewis and G. Motuzaitė–Motuzevičiūtė. Archaeobotanical research – by G. Motuzaitė–Motuzevičiūtė. The latter research was presented in a few publications.

The fourth chapter – Lake Dwellings Within their Territorial and Time Context – is divided into three subsections. With the aim of understanding the nature of the environment in which lake dwellings were located, the main features of the period have been outlined. Efforts are made to establish what basic cultural, social and economic processes may have determined the building of lake dwellings. Because the region under discussion is quite large (embracing a few historiographically distinct archaeological cultures), a deeper analysis of the separate characteristics of cultural groups and their material has not been taken. The specific character of the dwellings of the cultural regions is of especial importance to the study. A great deal of attention has been given to the features and issues of the archaeological material of Late Bronze and Early Iron Ages of Lithuania.

The first subsection – “The Features of the Development of the Economy and Natural Environment of the Early Metal Period” – analyses a few aspects. A larger part of lake dwellings of the South Eastern Baltic Sea region are situated in the Baltic highlands on the belt of borders formed within the last Ice-Age. This territory was formed by Scandinavian glacier during the last period of the Nemunas River icing. The period of lake dwellings in the South Eastern Baltic Sea region is related to the Subboreal and Subatlantic periods. The juncture between the Late Bronze and Early Iron Ages in Lithuania corresponds to the transition between the late glacier Holocene and
Chronozone epochs. During these periods quite significant fluctuations in climate took place in the territory of Lithuania, and this influenced the populations of that time and, very likely, the builders of lake dwellings. Referring to the reconstruction of the climatic and natural conditions, we may maintain that lake dwellings in the South Eastern Baltic Sea region were formed during an “unfavourable” colder and damper period. A stage of intensive economic activity was reached during the Late Bronze and Early Iron Age. Cattle-breeding remained an especially important branch of economy in comparison to agriculture in the communities of Lithuania in the 1st millennium BC.

The second subsection – “The Archaeological Context of the Early Metal Period” – looks into the common cultural situation. The lake dwellings under discussion were established during a transitory period – between the Bronze Age and Early Iron Age. Lake dwellings in the South Eastern Baltic Sea region during the Early Metal Period are divided into three archaeological cultures – Brushed Pottery Culture, West Baltic Barrow Culture and Lūžitėnai Culture. The lake dwellings of Lithuania (Lake Luokesa) both territorially and chronologically, and according to their finds (brushed pottery) have been attributed to the early stage of Brushed Pottery Culture.

In the literature, issues concerning the criterion for the attribution of these periods are still under discussion. There is little difference between the Late Bronze Age and Early Iron Age as regards material culture and the specific character of the economy. The Early Iron Age does not have archaeological finds that can be typologically distinguished and attributed exactly to it; moreover, changes in economy have not been detected. In literature these periods are most frequently not separated, while lake dwellings have been attributed to both periods with no exceptions. The Early Metal Period is still considered as poorly understood and investigated in Lithuania, as various reconstructions of life lack data and the investigations of archaeological objects of differing types.

Within the archaeological material of Lithuania, the Late Bronze Age is identified with the spread of the Brushed Pottery Culture and the emergence of fortified settlements – hill-forts. The
Lake dwellings of the Early Metal Period of the region are distinguished by the fact that they were inhabited (in nearly all cases) for only a short period. They do not have cultural layers of earlier or later periods and are dated to the transitional period between the Late Bronze Age and Early Iron Age. It is possible that the material of lake dwellings will contribute to the establishment of the peculiarities of the mode of life of this transitional period and even help us to solve the issues regarding dating that have up until remained unsolved.

The recent discovery of open unfortified settlements and lake dwellings has demonstrated the non uniform nature of the culture and perhaps its more local variants. Lake dwellings, as a new type of settlements, and the spreading of the distinguished boundaries of the culture indicate the need to revise the specific features of this culture and its historiographically distinguished features.

The third subsection is called “The Continuity of the Tradition of Lake Dwelling Building”. The earliest lake dwellings in Europe are dated to the Neolithic Period. Dwellings of the Early Metal Period are not considered to be a distinct phenomenon although they are used to identify a form of enduring settlements that was widespread during various archaeological periods. From 700 BC the wetland building tradition disappears in the Alpine region. During the Early Metal Period the lake dwelling building tradition that started in the Neolithic Period was continued in part of North Eastern Europe – the South Eastern Baltic Sea region. In almost the entire region under discussion (in Lithuania, Latvia, Estonia, Russia, Belarus, Poland, Finland and Sweden), a significant number of lake dwellings dated with the Neolithic – Early Bronze Age and also Early Middle Ages have been found. It is very likely that lake dwelling building is a fairly widespread, if still poorly investigated, phenomenon. The continuity of lake dwelling building traditions once again confirms the fact that the building of such sites is not a cultural tradition but the outcome of the natural environment and the development of the economy.

The fifth chapter – The Types of Lake Dwellings and the Features of Their Construction – deals with the issues of the types of lake dwellings found in the region and with the ascertaining of the
methods that were used for their construction. The types of dwellings have been analysed in separate subsections: “Pile Dwellings”, “Dwellings of Grate-and Beam Construction”, and “Pile Buildings”. A separate subsection – “The Parts of Dwellings: Bridges and Fences” – is devoted to a discussion of the elements of lake dwellings.

The identification of the nature of the construction of a lake dwelling, its water level and paleogeographical conditions, and the identification of that dwelling’s elements all contribute to the analysis of the reasons for the construction of lake dwellings. It is probable that the chosen character of a given construction directly depended on the purpose for which that dwelling was intended and its natural environment.

Although the organic material found in wetland dwellings (wooden elements of vertical and horizontal constructions) has been rather well preserved in comparison to land settlements, the differences in the construction of dwellings and the identification of the methods of construction is a fairly complex issue. The complicated processes of the formation and accumulation of layers in the damp and watery environment are impossible to perceive by only making reference to the analysis of archaeological material. As far as the region under discussion is concerned, having analysed the published information, the established attribution of the types of dwellings can be traced by making reference to the relation and distribution of wooden horizontal and vertical constructions. Unfortunately, when analysing the published material that deals with dwellings attributed to one or another dwelling type, differences and discrepancies can be detected.

The discoveries of recent years have confirmed that the type of lake dwelling of grate-and-beam construction that was previously established (where dwellings were built on the so-called artificial islands), was not the only mode of construction. A few modes of dwelling construction existed in the South Eastern Baltic Sea region during the Early Metal Period. According to the present data, three dwellings have been attributed to the pile construction type in the South Eastern Baltic Sea region of the Early Metal Period: dwellings
of Luokesa I, Polanowo 12 and Powidz 16 (Poland). In general the features of the building of each of these aforementioned dwellings are different; although they are connected by one main feature – a raised wooden pile construction.

According to the arrangement of vertical piles, the Lake Luokesa dwelling I was composed of such main elements: a double or triple fence, a central part and presumably a pier or place for unloading and loading. It is the preserved horizontal constructions and not the vertical piles that dominate in the territory of this dwelling. This ratio and the plan of its dwelling with its aforementioned elements correspond to the lake dwellings constructed on the artificial islands in the territory of Poland. Lake Luokesa dwelling I has been ascribed to a pile type dwelling because of a few factors: 1. distribution of archaeological finds, the circumstances of their discovery and their relation to wooden constructions; 2. interpretations of the usage of the discovered architectural details and the micro-morphologically distinguished layer of “trampling”.

The height of the raised constructions and the water level which existed during the dwelling’s period of inhabitation were ascertained according to the data of micro-morphology, archaeobotany and palinology.

The preserved remains of pile dwellings in the South Eastern Baltic Sea region are not uniform. The erosion process of the remains is one of the hypotheses that may account for this fact. A rise in water level soon after the dwelling’s abandonment may have determined a larger level of erosion and the washing away of remains (especially of wooden constructions) from a dwelling. If the remains of a dwelling were not submerged in water and instead were left to deteriorate in shoals, the flora which began to grow there strengthened these wooden remains, preserving them until today. Such a model for the impact of erosion upon the remains of dwellings was composed by making reference to the data of the Lake Luokesa dwellings.

Dwellings of grate-and-beam construction (in Polish – konstrukcja rusztowa) were built on horizontal beams strengthened by vertical piles and stones, thus forming artificial islands. Since the
first discoveries of such types of building in the XIX century the interpretations have not changed. The remains of lake dwellings in the Masurian Lake District were attributed to exactly this type of grate-and-beam construction.

As the gathered material demonstrates, the main element that defines this type of dwellings is a wooden platform constructed from a few layers of beams arranged in different directions, thus forming the construction of grates. However, the construction method of grate-and-beam dwellings in the Masurian Lake District is not uniform. From the 64 dwellings known in the Masurian Lake District, only 6 have been investigated presently and dated with the C14 method. The structural plans of the dwellings were composed only in 11 dwellings, while the rest of them have not been thoroughly investigated, with their construction remaining obscure. The material of their investigations is confined only to archaeological finds and separate wooden constructions – piles. Although the material that has been referred to is fragmented, the dwellings, according to the territory (Masurian Lake District) and place (wetlands) of their discovery, have been ascribed to a single grate-and-beam type. As interdisciplinary investigations of Luokesa dwelling I reveal some of the interpretations of these dwellings may be inaccurate. Despite the fact that the remains (of pile and grate-and-beam dwellings) which were found are similar, later investigations revealed differences in their constructional patterns.

A separate type of dwellings or lake building whose purpose is unclear was detected in Luokesa dwelling II. Herein the buildings (constructions) have been attributed to an unclear type because of the absence of main features in the territory of this dwelling – a cultural layer and archaeological finds. In this case the dwellings have been defined by the discovery of vertical and horizontal constructions. This chapter, referring to the selected material from the South Eastern Baltic Sea region, discusses a few possible explanations for the purpose of such buildings: 1. impact of erosion; 2. unfinished building; 3. non residential purpose of a building.
The dwellings discussed in this chapter (Luokesa II, Rybical I and Dręstwo 34) should be attributed to a separate dwelling type, i.e. to pile buildings of an unclear purpose which were situated on shoals at the shores of a lake. The territories of these dwellings lack a cultural layer or archaeological finds which could confirm the residential purpose of these buildings. The function of these buildings remains unclear.

Only the data of archaeological investigations was used for the ascertaining of building types for the majority of lake dwellings in the South Eastern Baltic Sea region. The preservation of the cultural layer, archaeological finds and wooden constructions in the dwellings depended on many (and in each case different) factors that are still unexplained. The absence of wooden horizontal constructions can be explained by erosion that was caused by a change in water level. The lake dwellings of the South Eastern Baltic Sea region were more diverse in form and planning that has been previously thought. Dwellings of the region should be divided not according to territory but to the features characteristic to their construction.

**Bridges** are one of the main constituent parts of lake dwellings because they provide passage to a dwelling. Through bridges inhabitants could not only access dwellings but also, according to the data, drive their livestock. Only in some of the dwellings that were investigated in the South Eastern Baltic Sea region were bridges discovered. According to present day data, the relation between the dwelling’s construction type and the existence of a bridge remains unclear.

The constructions of bridges are not known because the bridges in the South Eastern Baltic Sea region have not been investigated – information about them is confined only to the analysis of the arrangement of vertical piles. Whether means other than bridges could have been used in order to access dwellings remains unclear. Referring to the archaeological material, the hypothesis has been presented that dugout canoes may have served as one of the means of transportation.
One further element of lake dwellings has been identified – wooden fences of pile construction which have also only been found in some lake dwellings. How these fences may have looked can only be guessed at. Because of the limitations of previous investigations and the unclear paleogeographic situation it is hard to present a connection between the arrangement of fences and the territory that they bordered. Two main functions of these fences can be distinguished – to protect against unwanted access into a dwelling’s territory and to protect the exit from a dwelling.

The separate parts of the dwellings that have been found (bridges, fences) do not indicate the nature of building (pile or grate-and-beam); neither do they suggest the paleogeographic environment. It is very likely that the existence of these elements could be related to the function of the dwellings and the chosen place of living. According to present day data, the existence of these parts of lake dwellings cannot be related to water level; and the correlation between fences and bridges is unclear.

The sixth chapter of the dissertation – Reconstruction of the Mode of Living: the Analysis of the Investigations of the Lake Luokesa Dwelling I – is devoted to the analysis of the evolution of the inhabitation of the Lake Luokesa dwelling and the change in the natural environment surrounding the lake; moreover, it also looks into the dwelling’s economy and material. The sixth part of the study is divided into a few subsections: “Equipment and Inhabitation of Lake Luokesa Dwelling I” and “The Economy of the Inhabitants and Their Materialistic Culture”.

Lake Luokesa dwelling I was situated on the shoal of the northern shore, which was overgrown with vegetation and moss during the initial stage of the dwelling’s construction. Before the establishment of the dwelling, the area of the shoal was burnt and thus freed from the vegetation that grew there.

Before the erection of the dwelling in the environs of the lake – coniferous forests were dominant; however, during the time of its erection the vegetation of alluvial forests, which are characterised by a density of birches and alders, prevailed along the shores of the lake.
The lake dwelling was situated on the boundary between dry land and water – an open, wet place that rarely dries up. The environment’s permanent state of saturation probably ensured that all organic remains were covered. With the establishment of the beginning of the formation of the cultural layer we can trace the existence of meadows and fields on the shore of the lake. The established structure of the cultural layer and archaeological finds illustrate the farming activity that was carried out in the dwelling. The cultural layer is predominated by remains related to livestock and their feeding and not the remains of artefacts relating to everyday life.

By making reference to the composed scale it becomes clear that the inhabitants began constructing the Lake Luokesa dwelling in 600 BC and that it was inhabited for no longer than 20 years (around 16 years).

A production economy dominated in Lake Luokesa dwelling I. The data of Lake Luokesa dwelling I confirms the cultivation of slash-and-burn agriculture. 6 cultivated plants which had a large impact upon its inhabitants were identified in this dwelling. These were cereals and leguminous, and oil-bearing plants; agricultural tools were found as well. The theory that cattle-breeding was important to the inhabitants of Lake Luokesa is based not only on the significant amount of bones of livestock that were found there but also on the identified remains of manure and excrement. These remains identify that livestock was bred in the territory of the dwelling. 60% of the bone material unearthed consists of the bones of domesticated animals. The existence of wooden fences confirms that the breeding of domesticated livestock was important to the inhabitants of Lake Luokesa.

**Appropriative economy – gathering, fishing and hunting.** The fact that field plants composed a part of the dwellings’ produce was ascertained with the help of archaeobotanic research. According to the data of Lake Luokesa dwelling I, the largest part of the gathered food produce consists of hazelnuts. Catch gathered from hunting and the meat of wild animals also played a significant part in the diet of the inhabitants of lake dwellings. According to present day data, the
proportion stands at 60-40% in favour of domesticated animals. Fish bones and fishing tools that were detected are witness to the fact that the dwellers of Lake Luokesa engaged in fishing activity. Further archaeological finds of Lake Luokesa dwelling I – nets, floats, the fragments of fishing baskets – support the evidence of fishing activity. However, the significance of this activity was not huge in the economy of the dwellers of the Lake Luokesa sites.

Household items and working tools consist of artefacts made not only of stone, flint stone or bone but also wood, birch-bark and other bark. Such finds have not figured in the material of the Lithuanian archaeology of the Late Bronze – Early Iron Age. Ceramic pots of various sizes constitute the majority of vessels used for food storage, preparation and eating.

The slightly brushed but undecorated pots tempered with a coarse crushed granite that were detected in Lake Luokesa dwelling I are characteristic of the pottery group of the Žalioji- Bratoniškės type. The latter group was detected according to the material of the Žalioji settlement (Vilnius dist.). By making reference to the data of the Lake Luokesa dwelling I and the new dating of the material of the Žalioji settlement, it is possible to maintain that these unfortified sites existed alongside early hill-forts. Perhaps, by making reference to the information obtained, it is possible to detect the existence of a separate local cultural derivative or a cultural group.

From all the archaeological finds found in Lake Luokesa dwelling I, only a few typologically mobile and recognizable finds are suitable for comparison – a bronze pendant and ceramic artefacts. The majority of archaeological organic artefacts are universal – their shapes and methods of processing changed very little from the Stone Age to the Middle Ages. Furthermore, such artefacts are the only artefacts in Lithuania that have been dated to the end of the Early Metal Period. It is of interest to note that artefacts made from organic material are not perceived as cultural features. According to the analysis of the finds of Lake Luokesa dwelling I, the archaeological material does not identify any differences between the Late Bronze – Early Iron Age material. The explorations of the dwelling complement
the spectrum of archaeological material with new organic finds. The material of lake dwellings from the Masurian region (the West Baltic Barrow Culture) and central Poland (Lūžitėnai Culture) does not illustrate that any essential differences might exist among the sites of the period that belong to the identified cultural groups. Connections between the West Baltic Barrow Culture and Brushed Pottery Culture have been detected in the types of finds and the complexes of the dwellings’ finds themselves. The interrelations of these cultural groups (archaeological groups detected according to certain specific features) and analysis of their influence is a future issue that requires separate study. The model of the mode of living and scenario of the Lake Luokesa dwellings was composed according to the archaeological material and the data of interdisciplinary investigations.

The last seventh chapter of the study – Discussion: the Reasons for the Establishment and Abandonment of Lake Dwellings – is debatable in nature. The chapter analyses the reasons that lay behind the construction and abandonment of lake dwellings.

Various aspects of the mode of lake dwelling living – economy, building features, period of habitation, a paleogeographic situation, climate and the common cultural situation of the period – influenced the choice of where to settle. Why the dwelling’s inhabitants may have decided to live in constantly wet and flooded locations is one of the main questions that have yet to be answered by researchers. The present assumptions that the living conditions in such lake dwellings were uncomfortable have been grounded on a few imagined factors (following the present day understanding). Not all of the choices made by ancient populations regarding the location of their habitation were logical and “comfortable” from our present day perspective. Although there are no confirmed answers, a few main theories have been presented in the investigations of European lake dwellings.

It is believed that it is only possible to analyse the motivations that lay behind for the construction of lake dwellings if one disregards the preconception that life in wetlands or above water was abnormal
and uncomfortable. It is probable that life in such conditions was not “peculiar” for the populations of that time. The reasons for the establishment of these dwellings should be sought within natural/cultural/social contexts.

This chapter discusses the possible reasons for the construction of the Lake Luokesa dwellings. The archaeological experimental investigations in Lake Luokesa were conducted on the basis of the theory of the “ease of construction”. Experimental investigations proved that at least in the case of the Lake Luokesa dwellings, the initial stage of the construction of the lake dwelling – the preparation and hammering in of piles – was a fairly simple and quick process which did not require much time.

The reasons for habitation may be related to the different purposes for which the dwellings were intended, their different paleogeographical conditions and the different methods of construction arising from this. Separate types of dwellings, the constructed elements of dwellings (fences, enclosures and bridges) and the technologies of construction prompt the theory that the reasons that lay behind their construction might also vary; however, such speculation cannot be confirmed by the present data.

As regards the reasons that led to the abandonment of the dwellings, a few main theories have been presented, i.e. fire within the dwellings or their partial burning, or the changes in water levels. The reason for the abandonment of Lake Luokesa dwelling I did not lay in the change of water levels. It is thought that in this case the abandonment of the dwelling was a conscious decision made on the part of its inhabitants to leave the dwelling and move to another place.
Conclusions

1. This study analyses objects that belong to the field of waterland archaeology for the first time in Lithuania. Moreover, criterions for the usage of the term are offered. It is suggested that those objects whose investigation were carried out by applying specific methods in a damp watery place and which are characteristic of a well preserved organic material be ascribed to this particular field. Suggestions are also made to cease identifying wetland objects with the term of “peat settlements” because the latter is only one example of the objects that are ascribed to this field of archaeology. A general name should be applied to both settlements and the objects of wetland archaeology; and this name should not distinguish differences in construction as the nature of construction can be mistakenly established during the initial stage of an investigation. The suggested term – lake dwellings – defines settlements which were constructed on elevated pile constructions and also settlements on artificial islands or those constructed on wet lake shores.

2. The analysis of historiographic material allows us to maintain that the idea of lake dwellings reached Northern Europe during a relatively short period. The efforts for finding such dwellings were not equally successful in all the states of the South Eastern Baltic Sea region, and this was mainly determined by the lack of experienced experts in the field. On the other hand, due to the differing climatic and environmental conditions between the Alpine region and North Eastern Europe, no efforts were made to find such dwellings in some of the states. The material of the Alpine region’s dwellings (South Europe) determined the specific character of the initial investigations, however, during the further development of investigations – two independent streams of scientific interpretation can be detected. The investigations of lake dwellings of the Alpine region partially determined the preconditions for the formation of the field of underwater archaeology in Northern Europe.
3. The Early Metal Period lake dwellings which were found in the South Eastern Baltic Sea region are so far the only dwellings in the entire North Eastern part of Europe. These discoveries show that lake dwellings are not a unique feature of the Alpine region but also a part of the common European heritage. It is likely that lake dwellings are a poorly investigated type of settlements whose discovery and investigation require specific methods.

4. In the South Eastern Baltic region, some different types of dwellings can be distinguished – grate-and-beam and pile dwellings, and pile constructions with an obscure purpose. The analysis of data reveals that the different types of dwellings and the peculiarities of their construction do not necessarily determine the different reasons for a dwellings’ construction. By not applying an interdisciplinary investigation or by applying such a method in a limited fashion, mistaken interpretations of the peculiarities of dwellings’ building are possible. When establishing the peculiarities of the dwelling’s construction and attributing them to separate types, it becomes necessary to evaluate the impact of erosion upon the remains of the dwellings.

5. The analysis of the investigations of lake settlements which was carried out in this work revealed that 70 percent of dwellings of the Masurian Lake District remained undiscovered during repeated surveys (carried out in 1993–2000), nor was the existence of their remains confirmed. Therefore, the interpretation of the material of Masurian dwellings mainly refers to information gathered in the late XIX century and early XX century. The larger part of dwellings have not been investigated using present day methods nor has their dating, which is mostly based only on the typological dating of finds, been confirmed. The dwellings of the Masurian Lake District bear the same construction and are ascribed to the grate-and-beam type which is considered to be a unique feature of the Masurian region. Some of dwellings were ascribed to this type of construction although no concrete evidence had been provided to support the theory, and reference had only been made to the territorial aspect. The example of the Lake Luokesa dwellings demonstrates that with the help of
interdisciplinary investigations, previous hypotheses might be reassessed.

6. During 2000 and 2011 underwater investigations of the dwellings of Lake Luokesa took place. Interdisciplinary investigations were adopted for their investigation – archaeobotany, palaeontology, dendrochronology and geoarchaeology. Until 2000 only the dwellings of grate-and-beam construction in the Masurian region (Poland) represented the lake dwellings of Early Metal Period in the region. It was only thanks to the discovery of lake dwellings in Lake Luokesa (Lithuania) and Central Poland that the possibility arose to revise the information that had been previously accumulated, and to complement it and indentify the differences.

The dwellings of Lake Luokesa were pile dwellings erected on constructions raised above the damp ground (about 1 m from the surface). The living houses of Lake Luokesa dwelling I were erected on a wooden platform. The archaeological material of this dwelling bears witness to farming activity. The data of the Lake Luokesa dwelling II does not enable us to maintain that this dwelling was used for habitation. It was erected 25 years earlier than dwelling I, which is on the opposite shore of the lake. The ultimate interpretation and purpose of the Lake Luokesa dwelling II remains unclear. Suggestions have been made to ascribe it to a separate type of pile buildings. It is not possible to uniformly maintain that these two dwellings formed a common complex that was used at the same time. Dwelling I of Lake Luokesa has one layer, as is the case with other dwellings of the region that have been investigated. According to dendrochronological dating, it was inhabited for no longer than 20 years (600–580 BC). There are no grounded arguments for maintaining that this dwelling might have been a seasonal dwelling.

7. Lake dwellings are not characteristic of only certain cultural groups and cannot be considered as a unique feature of a separate cultural group. The dwellings of the region are ascribed to the archaeological cultures of Lužiténai, Brushed Pottery and West Baltic Barrow Culture. The material from the lake dwellings and economic model do not display any differences from the other type of dwellings
of the same cultural group (the open type or hill-fort settlements). The organic artefacts found in the lake dwellings complement the existing material of the settlements with new data which enables us to more accurately reconstruct the mode of living. The archaeological material of the lake dwellings of the region does not allow us to distinguish a separate culture of “lake dwellings” in the South Eastern Baltic Sea region. The connections and cultural influences that may exist between these archaeological cultures which share a common feature, i.e. lake dwellings, provide a rich vein for future investigation.

8. Material found during investigations does not indicate a specific purpose or unusual functions of such dwellings, nor does it indicate the cultivation of one dominant branch of agriculture. Inhabitants made a full use of surrounding territories and food sources found in water. Imported artefacts and the use of bronze show that they were not isolated from surrounding settlements. Interdisciplinary investigations and archaeological material allowed us to establish and reconstruct the mode of living and economic model of the Lake Luokesa dwelling. Referring to this data and the results of investigations from neighbouring countries, we may maintain that differences are only traced in the types of archaeological finds and technologies of manufacture.

9. When evaluating the possible preconditions for the building of the Lake Luokesa dwellings, we may maintain that the choice of living place may have been determined by a few factors. Making reference to the fact that material culture and specific character of economy did not differ from dwellings dating with the same period, it is not possible to maintain that the dwellings were built and inhabited for a specific purpose or for some other different activity. The possibility that the erection of the Lake Luokesa dwellings could have been determined by solely defensive purposes has been rejected. Due to the nature of the construction of the dwellings, the most acceptable proposition is that they were simple pile structures built on soft ground – a process that requires little time. The choice of location may have been determined by social factors which, so far, are impossible to ascertain by referring to material data. Lake Luokesa dwelling I was
inhabited by cattle-breeders and farmers who during the warm season put their cattle out to pasture in the surrounding regions and grew cultured plants in slash-and-burn lands. It is possible that after exhausting the soil, the inhabitants moved to other territories. The only thing that is clear is that the reason for the dwelling’s abandonment was not a rise in water levels as it has been established that the water level of the lake rose only after a certain period.

10. The abundance of investigations undertaken allow us to reliably ascertain the type of the dwellings in Lake Luokesa, as well as the nature of economy and farming activities that were carried out. The Lake Luokesa dwellings are some of the most thoroughly investigated objects in the region. These investigations have allowed us to improve specific methods of investigation and opened opportunities for wider interpretations of the material. The investigations of Lake Luokesa demonstrate the perspectives of wetland archaeology and the significance of the reconstruction of the mode of living of the communities of the past.

Translated by Ignė Aidukaitė
Santrauka


gyvenviečių atradimo fakto ir jų tyrimų rezultatų. Pagrindiniai klausimai ir šių objektų unikalumas susipina įvairiuose kontekstuose – specifinių tyrimų metodų naudojimo, medžiagos išlikimo bei jos tyrimų galimybių, gyvenamosios vietos pasirinkime ir k.t.

Luokesų ežero gyvenviečių tyrimai laikotarpio medžiaga papildo įvairiais aspektais. Nauji archeologiniai duomenys bei nauji objektų tipai keičia iki šiol tyrimų suformuotą priešistorės vaizdą, iškelia naujų su šia tematika susijusių problemų. Šių gyvenviečių tyrimai paneigia ilgai trukusios vienodos archeologinės kultūros gyvavimą I tūkstantmečio pr. Kr. Rytyje Lietuvoje, todėl neabejotinai šie tyrimai yra ne tik svarbūs, bet ir išskirtiniai bendrame laikotarpio kontekste.


Bendra Pietryčių Baltijos regiono ežerų gyvenviečių teritorinis išskirtinumas iki šiol nebuvo akcentuotas, jų medžiaga nėra lyginta tarpusavyje ir nėra nė vieno apibendrinančio veikalo, skirto šiai tematikai. Ežerų gyvenvietės Pietryčių Baltijos regione yra kol kas vienintelės Europoje, kurios suteikia informacijos apie tokių objektų
egzistavimą Šiaurės Rytų Europoje ankstyvuojų metalų laikotarpiu, kaip tik tuo metu, kai Alpių regiono gyvenviečių statybos tradicija nutruksta. Ežerų gyvenviečių tyrimai ir jų regioniniai bruožai prisideda prie proistorės raidos tyrimų bei šiaurės apylinkių regionų bendrus Europinius kontekstus.


Darbo problematika slypi medžiagos naujumė, todėl darbe nėra sprendžiamos „įsisenėjusios“ problemos. Naujų objektų atradimas ir jų medžiaga išskelė specifinius klausimus ir privertė peržiūrėti ankstyvesnę žinomą informaciją bei nustatyti bendrą naujo tipo archeologinių objektų vietą ir reikšmę priešistorės vaizdiniuje.

Darbe apibrėžtas šlapynių archeologijos terminas, išskirti pagrindiniai šios srities aspektai. Taip pat sudaryta regiono ežerų gyvenviečių suvestinė, nurodant jų tyrimų ir medžiagos patikimumą, išskirti pagrindiniai ežerų gyvenviečių tipai ankstyvuoju metalų laikotarpiu Pietų Baltijos regione, akcentuojant tarpdisciplininių tyrimų svarbą, galimą erozijos pobūdį bei jos įtaką interpretacijai.

Remiantis tarpdisciplininių tyrimų duomenimis, iššvedotas paleogeografinis Luokesų ežerų gyvenviečių kūrimosi sąlygos ir nustatyti Luokesų ežero gyvenviečių apgyvendinimo etapai, gyvenimo jose trukmė taip pat nustatyta Luokesų ežero gyvenviečių ūkio ir gyvensenos modelis. Palyginus Luokesų gyvenviečių medžiagą su kitomis regiono gyvenvietėmis statybos būdu, ūkio modelio ir
funkcijų požiūriu taip atsakant į išsikeltus uždavinius buvo prieita šių išvadų:


3. Pietų Baltijos regione surastos ir tyrinėtos ankstyvojo metalų laikotarpio ežerų gyvenvietės kol kas yra vienintelės visoje šiaurės rytinėje Europoje. Šie atradimai rodo, kad ežerų gyvenvietės nėra vien unikalus Alpių regiono bruožas, jų yra bendraeurupinio paveldo dalis. Tikėtina, kad ežerų gyvenvietės yra tik menkai pažintas iš bendro kraštovaizdžio neišsiskiriantis gyvenviečių tipas, kurio atradimui bei tyrinėms reikalingi specifiniai metodai.


10. Tyrimų metu rasta materiali medžiaga nerodo specifinės gyvenviečių paskirties, nei prastų tokių gyvenvietės funkcijų ar vienos vyraujančios ūkio šakos kultivavimo. Gyventojai plačiai išnaudojo aplinkines teritorijas, vandenýje esančius maisto šaltinius, o kaip rodo importo dirbiniai ir bronzos naudojimas nebuvo izoliuoti nuo
 aplinkinių gyvenviečių. Tarpdisciplininiai tyrimai bei archeologinė medžiaga leido nustatyti ir rekonstruoti gyvensenos bei ūkio modelį Luokesų ežero gyvenvièteje. Remiantis šiais duomenimis bei kaimyninių valstybių tyrimų rezultatais galima teigti, kad bendruomenių gyvensena nebuvo išskirtinė laikotarpio kontekste, o teritoriniai skirtumai atsekami tik archeologinių radinių tipuose bei gamybos technologijose.


Topic-related Scientific Publications
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