

The Piast castrum Steclyn - on the way towards Prussia

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PL ISSN 0079-7138, e-ISSN: 2657-4004

DOI: <https://doi.org/10.23858/PA71.2023.3041>

<https://rcin.org.pl/dlibra/publication/276196>

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Chudziak, W. (2023). The Piast castrum Steclyn - on the way towards Prussia. *Przegląd Archeologiczny*, 71. <https://doi.org/10.23858/PA71.2023.3041>

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THE PIAST *CASTRUM STECLYN* – ON THE WAY TOWARDS PRUSSIA

ABSTRACT: The article concerns the early medieval settlement at Niedźwiedź/Steklin located on Lake Steklin in the Dobrzyń Land commonly identified with the *castrum Steclyn* mentioned in the so-called Mogilno Falsification of 1065. Although research has up to now produced relatively little information on the stronghold itself, numerous luxury items discovered on the lake bottom within the remains of the wharves, as well as a silver hoard recently found in a suburbium settlement testify to the special importance of this place on the northeastern border of the Piast state. The article discusses the origins and functions of the stronghold, as well as its role in the local supra-local settlement structure. It is also shown that its location directly on the long-distance route leading from Gniezno through Mogilno and Kujawy to Prussia enabled communication with Benedictine monks.

KEY WORDS: early medieval, Dobrzyń region, Steklin, stronghold, so-called Mogilno Falsification, long-distance route

PRELIMINARY ISSUES

In the academic achievements of Prof. Leszek Kajzer, an important point was the study of the medieval fortified settlements of the Dobrzyń Land. In a co-authored monograph devoted to this issue, published in the middle of the last decade of the 20th century,

an important place was taken by the stronghold in Niedźwiedź/Steklin, ‘an example of one of the best-preserved ring-shaped strongholds’ in this area and, and importantly, remains of a stronghold mentioned in the so-called Mogilno Falsification, a key document for the history of the early medieval Kuyavia and Mazovia (Kajzer, Horonziak 1995, 53; Kajzer 1995). The site is located in the edge zone of a narrow, winding subglacial tunnel valley filled with the waters of Lake Steklin (formerly Głębokie: Słownik, 1881, 601; TKKP map; German *Glubokoer See*, Reymanns Special-Karte, 228 Thorn). The valley, currently cut by a causeway bearing a national road, is about 6 km long, and the width of the lake usually does not exceed 250 metres (Fig. 1). This water body, originally associated with the outflow towards the Vistula River, is located in the catchment area of the Lubinka watercourse (historical name: Gnilszczyzna), the left-bank tributary of the Drwęca River (Nechay 1932, 139). In the early Middle Ages, however, it could have been an endorheic water body, as evidenced by the results of recent archaeological research, and which may be associated with the etymology of the name of the lake into which the waters ‘dripped’ from the surrounding areas. The stronghold occupies a peninsula on the southern shore of the water body at the place where the valley changes its course from longitudinal to latitudinal (Figs. 2-3). Around the valley, there is a clayey moraine plain, currently largely

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Received: 28.02.2022; **Revised:** 30.01.2023; **Accepted:** 2.02.2023

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Declaration of competing interest: The author declare that he has no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.



Fig. 1. Lake Steklin valley. A hang glider view from the east with the location of the stronghold marked (photo by M. Petelewicz 2001)

deforested, although in the 19th century still covered in many places with forest communities (map, Fig. 4). The history of the vegetation around the lake is well known mainly thanks to the palynological studies of the bottom sediments carried out in the late 1970s by Bożena Noryśkiewicz from the Institute of Geography of the Nicolaus Copernicus University in Toruń (1982). On their basis, it can be assumed that in the

early Middle Ages in the vicinity of Lake Steklin in the upland areas, broad-leaved forests with a predominance of hornbeam and oak still dominated, although their acreage was significantly reduced due to the agricultural activity reflected in the presence of pollen of synanthropic plants and cereals occurring in lake sediments from that period.



Fig. 2. Early medieval stronghold in Steklin. A hang glider view from the north (photo by M. Petelewicz 2001)

THE HISTORY OF RESEARCH ON THE SETTLEMENT COMPLEX IN NIEDŹWIEDŹ/STEKLIN

The stronghold in Niedźwiedź/Steklin was repeatedly explored by various researchers, starting with Aleksander Zalewski, who visited the stronghold in Steklin in the years 1879-1891, placing it on the list of defensive structures of the Dobrzyń Land (1892). It is worth recalling the words of this antiquarian of merit for the region, also quoted in the monograph by L. Kajzer and A. Horonziak, ‘... at Lake Steklino ... next to the village of Władysławowo, stretches a beautiful, though not too high stronghold, entering deep into the lake ..’ (1892). It was also included by Erazm Majewski in the materials for the archaeological map of the Płock Governorate (1900, 128) and by Gustaw Zieliński in a short study on prehistoric monuments of this area (1905, 324). In the interwar period, the structure was examined by Roman Jakimowicz, the then Conservator of Monuments for the Warsaw District, who published its first sketch (1923, 201-224) (Fig. 5a). After World War II, already in the 1950s, the stronghold in Steklin was examined by other researchers, including Bonifacy Zielonka from

the District Museum in Toruń (1959, 16) and Kazimierz Żurowski, head of the Chair of Polish and General Archaeology of the Nicolaus Copernicus University, the author of the first known photos of this site (Fig. 5b; 6). It was also included in the list of strongholds from Polish lands prepared by Włodzimierz Antoniewicz and Zofia Wartolowska (1966). At the beginning of the 1970s, the first underwater penetrations in this place were also carried out, during which unspecified wooden structures were found. Their contractor was the Warsaw Diver’s Club led by Mieczysław Kwapisiewicz (Niegowski 1997). Unfortunately, the results of this action have not been registered in the literature on the subject. Another recorded field survey was carried out on the site by Andrzej Gajda, who was preparing a master’s thesis at the University of Łódź on the medieval settlement of Dobrzyń Land (1981). During this, the section of a ‘wild’ trench in the stronghold’s internal courtyard was cleaned. In the years 1986-1987, the stronghold and the adjacent settlement underwent systematic fieldwalking within the framework of the nationwide AZP project (area 41-47; WKZ archive in Włocławek). An underwater reconnaissance carried out in 1993 by Jacek Niegowski confirmed the observations of the Warsaw divers. It

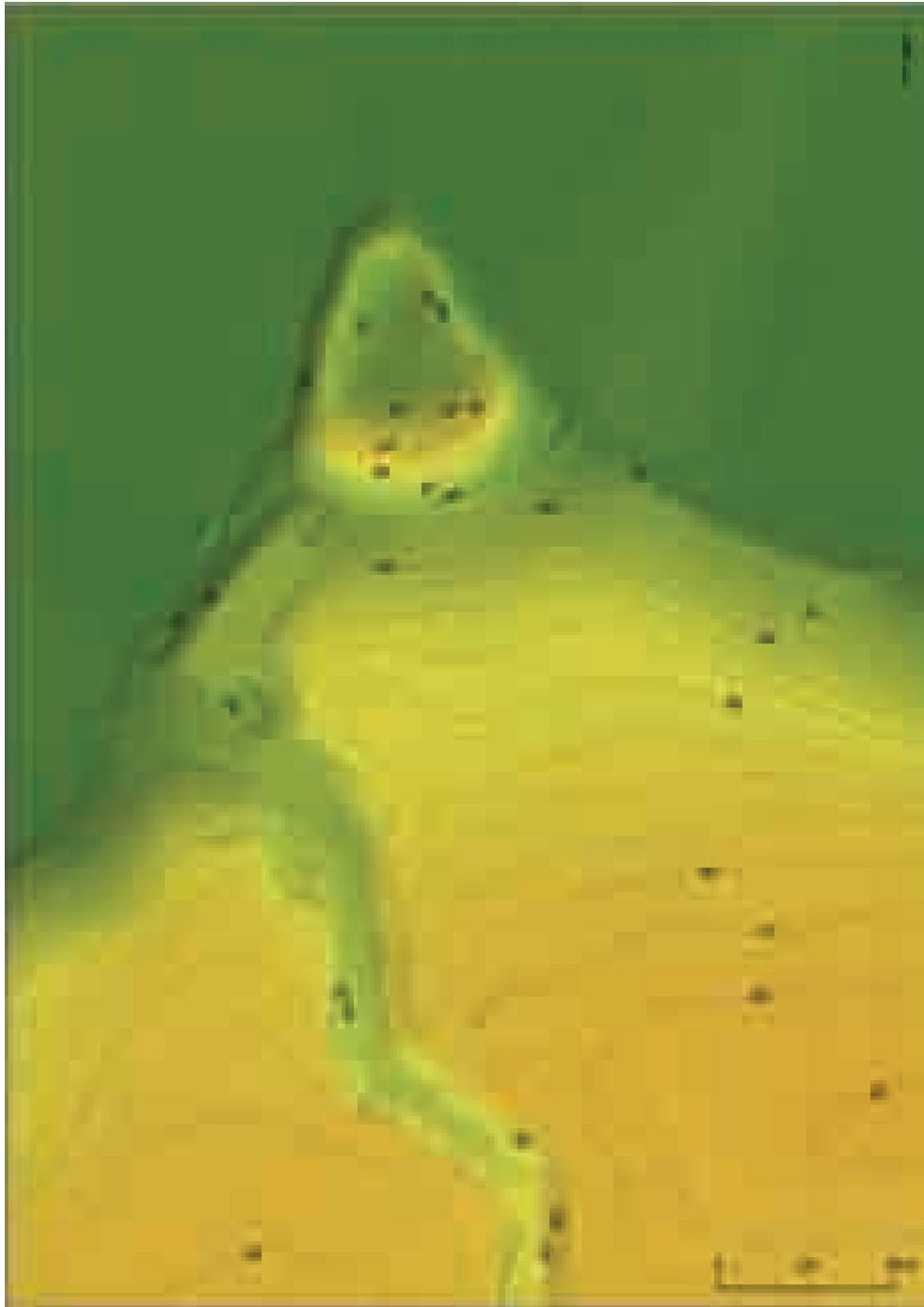


Fig. 3. LIDAR plan of the area within which the early medieval settlement complex in Niedźwiedz/Steklin is located (edited by M. Skrzatek)

was then that an oak dugout canoe was discovered, which, dated using the radiocarbon and dendrochronological methods, was included in a monographic study by Waldemar Ossowski devoted to monotrunk boats from Poland (1999, 189). In 1991, the stronghold became the subject of a verification and conservation survey conducted by a research team from the University of Łódź, led by L. Kajzer (a 2x1 m trench and seven boreholes along the N-S axis of the stronghold)

(Fig. 7-8). Three years later, the test excavation work on the adjacent settlement was undertaken by a team from the Institute of Archaeology of the Nicolaus Copernicus University in Toruń under the supervision of the author (trench 1 – 1 x 10 m; trench 2 – 1 x 2.5 m; trench 3 – 1 x 1.5 m and 21 boreholes along the N-S and W-E axes) (Fig. 7-8). Both prospectings conducted by friendly research units on the border of the then Toruń and Włocławek voivodeships separating



Fig. 4. Fragment of a topographic map, sheet Massau and Schwarzen Dorf from 1944 (Archives of maps of western Poland: <http://igrek.amzp.pl>; edited by W. Ochotny)

the settlement complex in Niedźwiedź/Steklin were of a small nature and were limited to a narrow scope of field exploration. The source data obtained at that time, although insufficient in many respects, was included in the monograph on the problem of the settlement of the Chełmno-Dobrzyń zone in the early Middle Ages (Chudziak 1996, 257).

In a way, a new stage of research work on this place was opened by underwater research initiated by J. Niegowski back in 1993, and carried out by the Institute of Archaeology and Ethnology of the Nicolaus Copernicus University within the water body of Lake Steklin since 1997 as part of the project 'Poland in the era of the Congress of Gniezno and its place in the European culture of the 10th-20th centuries' (Niegowski 1997; Chudziak 2000, 96). During this, the examination of the lake's bottom sediments was carried out both in the immediate vicinity of the stronghold and along the shoreline of almost the entire water body. The results of non-invasive bottom sediment examination carried out directly at the stronghold with the use of a metal detector are of unquestionable value.

It was then that the largest series of early medieval military items in the Chełmno-Dobrzyń zone, single agricultural and weaving tools, fishing equipment, numerous pottery vessels and a unique bronze bowl (see below) were found (Fig. 8). Most of them were deposited at a depth of 4 to 6 metres below the water surface, within wooden structures associated, as it turned out later, with the buildings of a jetty adjacent to the stronghold. Such a conclusion was formulated as a result of exploratory research carried out by joint research teams of the Department of Archaeology of Middle Ages and the Post-Medieval period (W. Chudziak, J. Niegowski) and the Department of Underwater Archaeology (Andrzej Kola, Wojciech Szulta) of the Institute of Archaeology and Ethnology of the Nicolaus Copernicus University in 2001 (five trenches 2 x 2 m) (Fig. 8). In one of the underwater trenches, the structural elements of the jetty were discovered *in situ* (Szulta 2002) (Fig. 9). The sonar examinations carried out on the bottom of the lake basin did not reveal the alleged bridge connecting the two shores of the lake. The research on Lake Steklin

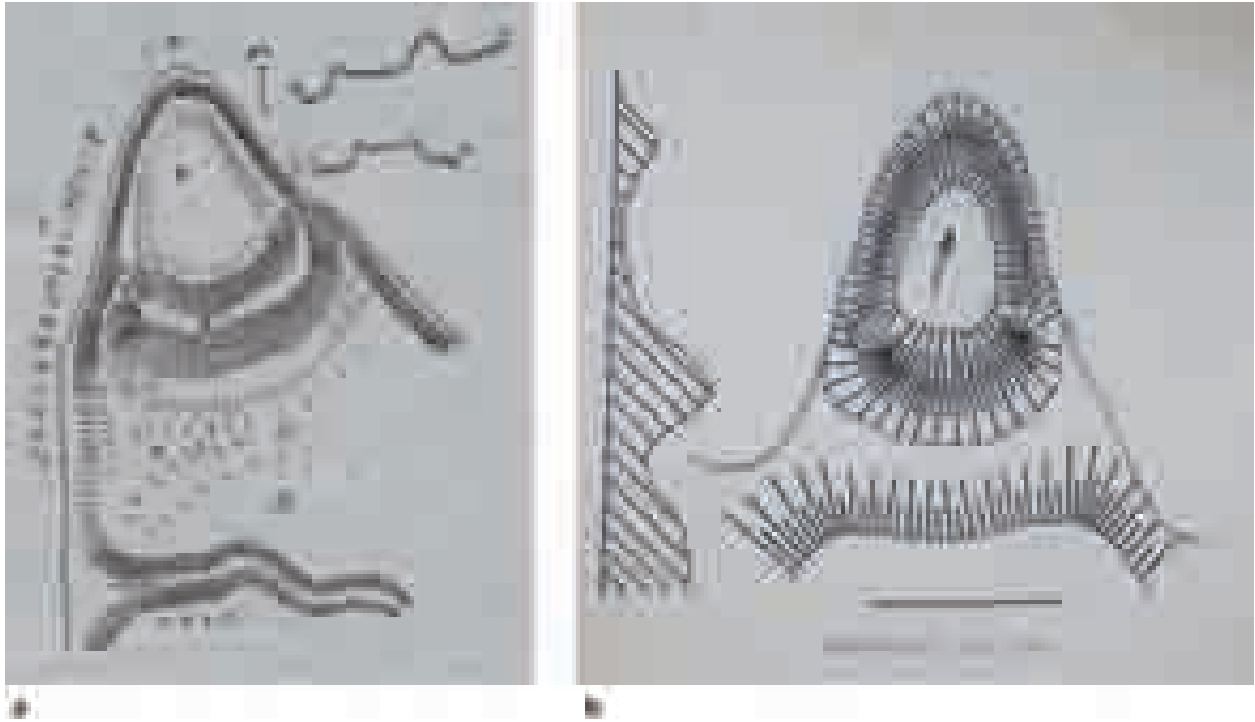


Fig. 5. Sketches of the stronghold in Niedźwiedź/Steklin made in 1923 by Roman Jakimowicz (a) and Kazimierz Żurowski in 1953 (b) (Chudziak, Weinkauff 2019, Fig. 5.6)

was also continued in the following years, which was partly related to the systematic inventory of underwater sites in Poland, complementing the AZP research. The research was financed by the National Institute of Cultural Heritage (2006). Subsequent underwater archaeological sites were then identified, usually spatially and chronologically referring to the land settlement points located in the shore zone of the water body (Chudziak *et al.* 2011, 141-147) (Fig. 8, 10). The site in Hornówek, located opposite the stronghold, where military and pottery from the early Middle Ages were also discovered, had the greatest cognitive value. At the time of writing, the latest event in the history of discoveries related to the stronghold in Niedźwiedź/Steklin is the discovery of a deposit of silver coins and jewellery located in the adjacent settlement in 2019. This hoard, obtained by chance, was handed over to the WKZ in Toruń, and has become the subject of an analytical study currently awaiting publication (Chudziak, Musiałowski, Weinkauff in press). An iron spearhead discovered on the surface of the settlement was also recovered at the time. Source materials from the stronghold in Niedźwiedź/Steklin and its immediate hinterland have recently been presented in the catalogue of early medieval strongholds in the Toruń district (Chudziak, Weinkauff 2019, 104-129; see also Chudziak 2016b, 167).

Despite the fact that the scope of research carried out to date on the stronghold is small, the knowledge of this settlement centre, which is important in the Dobrzyń Land, is relatively significant compared to other defensive structures in this area. Therefore, it is worth summarising it and trying to interpret the genesis and function of this stronghold, which previously aroused particular interest of Prof. Leszek Kajzer. He had no doubts that the structure ‘was built on the initiative of the state in order to secure Mazovia from the north and west, as well as a seat of the local administrative centre’. He was also in favour of ‘interpreting the structure as the state centre, perhaps a castellany, unknown in sources’ (Kajzer, Horonziak 1995, 54).

THE STRONGHOLD IN STEKLIN IN THE SO-CALLED MOGILNO FALSIFICATION AND OTHER HISTORICAL CONTEXTS

The stronghold in Steklin appears for the first and only time in medieval written sources in the oldest bestowal for the Benedictine monastery in Mogilno, recorded in the so-called Mogilno Falsification, allegedly dated to 1065 (Labuda 1978). This note, stating the one ninth rent of the Masovian strongholds in the



Fig. 6. Grodzisko in Niedźwiedź/Steclin. Selection of photographic documentation made by K. Żurowski in 1953 (Chudziak, Weinkauff 2019, Fig. 5.5)

original version, repeatedly quoted in the literature on the subject, read:

(...) *Et per totam Mazovian nonum forum, nonum denarium, nonum porcum, nonum poledrum, nonum piscem sum largitus; quo ne quis ulterius irritumfaciat, auctoritate Dei omnipotentis sit prohibitus. Et hec sunt nomina castrorum: (...) Ripyn, Steclyn, (...) Dobryn, Wlodislaw, Pripust, Slonzch* (KDW 1879).

The document shows that the Benedictine abbey in Mogilno, situated on the border of eastern Greater Poland and Kuyavia, less than 80 km away from the stronghold in Steclin, was to receive from the Mazovian strongholds one ninth of market fees and cash income calculated in pennies, and also one ninth of hogs, foals and fish. Steclin is mentioned here in a group of several other strongholds located in the Dobrzyń Land and Kuyavia: the Vistula centres in Dobrzyń, Włocławek, Przypust and Słońsk, as well as the stronghold in Rypin located in the area between the Drwęca, Vistula and Skrwa rivers.

This document has been the subject of numerous discussions and studies that cannot all be cited here,

anyway, it would be pointless here. First of all, it became the basic source of interpretation on the stronghold-provincial organisation in Poland in the 11th and at the beginning of the 12th century (Lalik 1966, 22-24; Modzelewski 1975, 95). From the point of view of the issues related to the origins of the monastery's foundation and its original income, which would include the tribute from the Steclin stronghold, the most important seem to be the publications by Jan Płocha (1969), Brygida Kürbis (1978), Gerard Labuda (1978), Henryk Lowmiański (1985) and Jan Powierski (1996). Above all, there is no agreement as to the person of the founder of the abbey, referred to in the document as *Boleslaus*, traditionally associated with Bolesław the Bold, as evidenced by the annual date of the foundation of the Mogilno abbey in the document. This view was adopted by many scholars, although there is consensus that the oldest document bearing this date is a counterfeit transumpt of a later date. Therefore, most of the aforementioned researchers attribute the foundation to Bolesław the Bold, although from the scope of considerations, especially in the light of the results

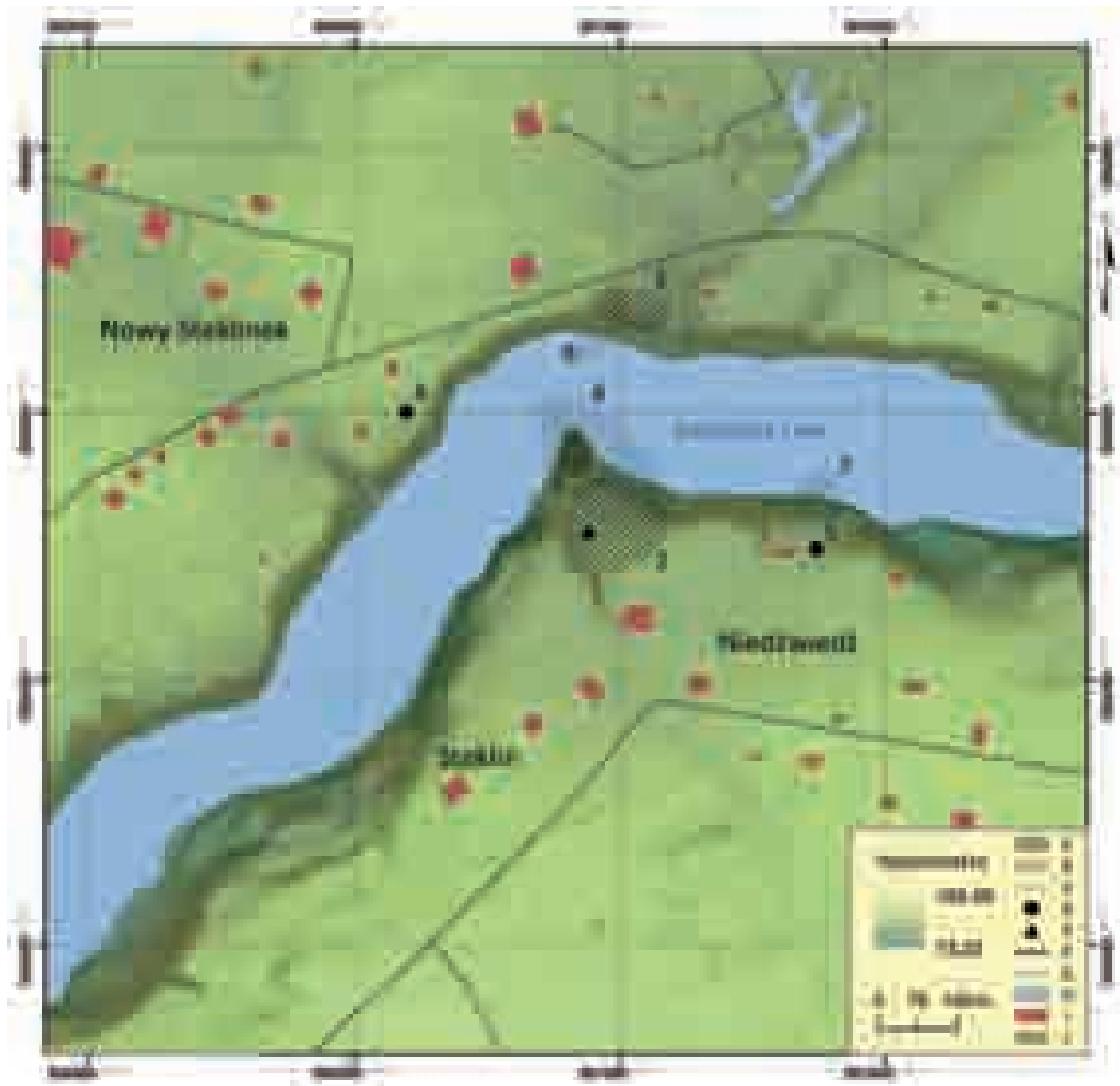


Fig. 7. Early medieval settlement complex on Lake Steklin. Legend: A – stronghold; B – suburb settlement; C – range of underwater remains; D – settlement point; E – silver hoard; F – dirt roads; G – watercourses; H – surface waters; I – buildings; J – forest areas. List of sites: 1. Niedzwiedź/Steklin, Site 1; 2. Niedzwiedź, Site 1a; 3. Steklinek, Site 4; 4. Steklinek, Site 3; 5. Niedzwiedź, Site 2; 6. Niedzwiedź, Site 5; 7. Niedzwiedź, Site 6; 8. Hornówek, Site 8 (Chudziak, Weinkauff 2019, Fig. 5.2; with additions)

of archaeological research, B. Kürbis did not exclude a potential founder in the person of Kazimierz the Restorer (Kürbis 1978, 72). According to this researcher, the one ninth rent could have been a ‘secondary bestowal’ in relation to tithes already collected in the same strongholds by the church institution: probably either the archbishopric of Gniezno or the Płock diocese separated from it around 1075 (Kürbis 1978, 78). H. Łowmiański expressed his view more clearly on this issue. He assumed the convergence between the Mogilno bestowal of 1065 and the consecration of the Gniezno cathedral in 1064 related to the ‘restora-

tion of the material foundations of the archbishopric’ (1985, 311). An important missionary role in the archbishopric was to be played by the newly established Benedictine abbey in Mogilno, which was its partner in terms of the Mazovian income. Therefore, he believed that the tithes from the trans-vistulian strongholds were sent to Gniezno (Łowmiański 1985, 312). He also drew attention to the modest range of Mazovian tributes, intended mainly for consumption of the Mogilno missionaries.

This issue is treated differently by G. Labuda, who refers the Mogilno document to Bolesław the

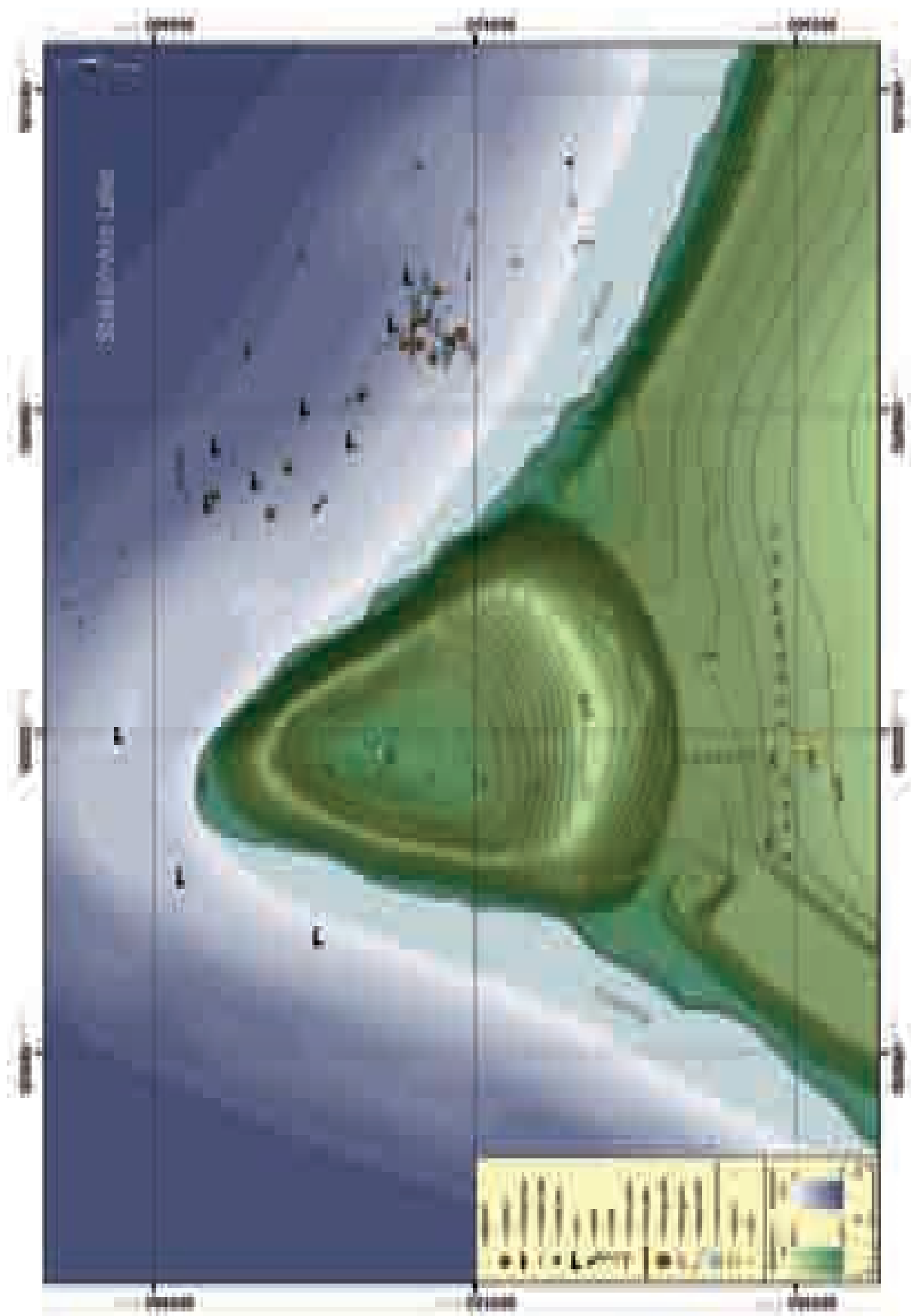


Fig. 8. Plan of the stronghold and adjacent settlement with marked points identified by invasive methods along with the planigraphy of underwater trenches and the location of archaeological artefacts discovered underwater (drawing by W. Ochotny and M. Skrzatek)

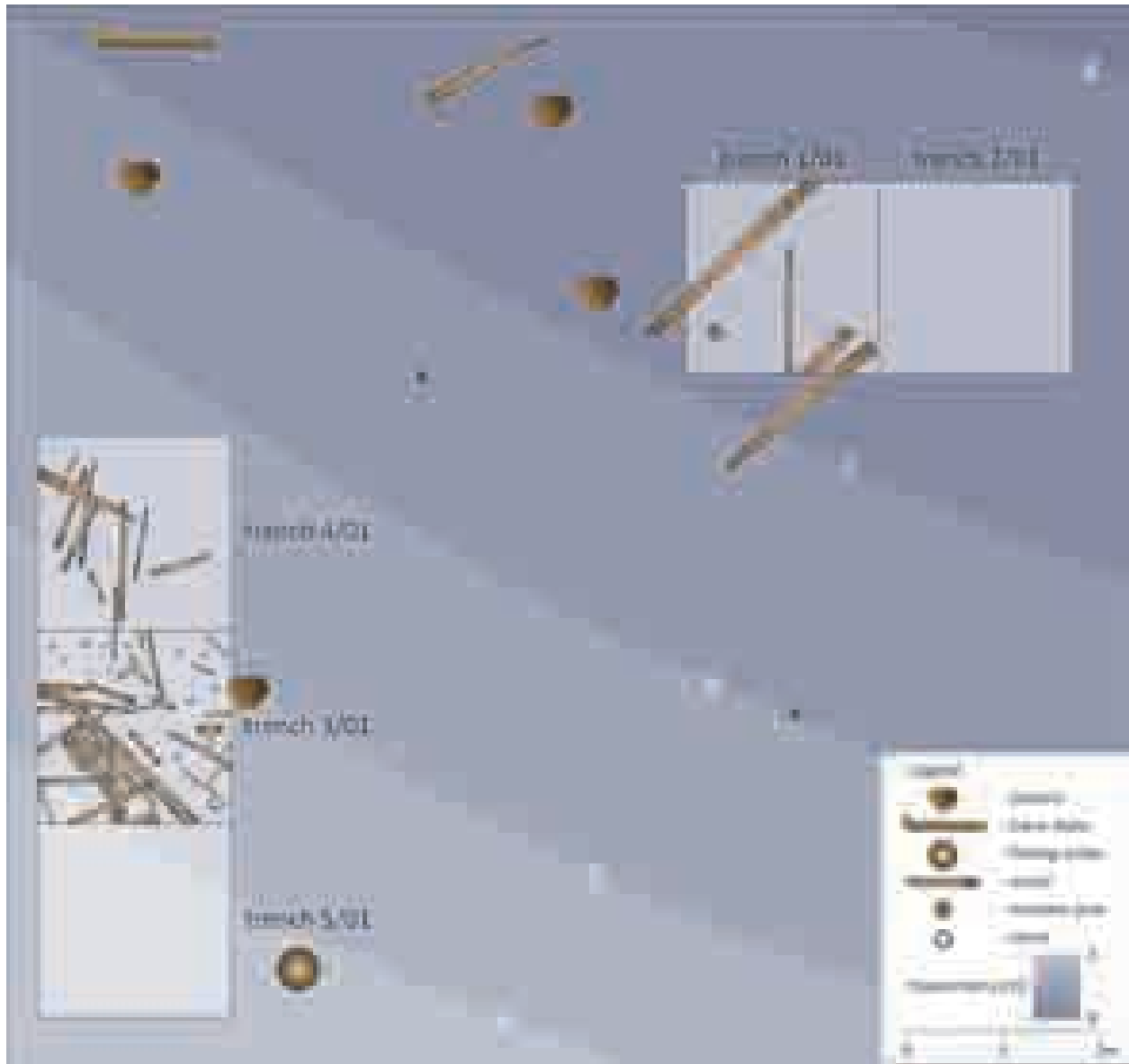


Fig. 9. Planigraphy of construction remains in underwater trenches with the location of adjacent posts (drawing by W. Ochotny)

Curly, who in 1147 summarised the income of the monastery after its one-century existence (Labuda 1978, 37). The scholar believes that the date '1065' appearing in the document is the result of its deliberate backdating, as evidenced in particular by the list of witnesses (Labuda 1978, 29). He has no doubts that the one ninth rents were the core of the property dowry that was given to the monastery at the time of its foundation. The base of the income originating from the strongholds falls in the early stage of the fiscal organisation of the early feudal Piast monarchy (Labuda 1978, 44). He indicates Kazimierz the Restorer as the founder of Mogilno. After defeating Miecław and the Pomeranians in 1047, Kazimierz took over Kuyavia

and Mazovia (Labuda 1978, 45). According to this researcher, the expression of the restoration of diocesan jurisdiction in Gniezno was to be the tithes from the Mazovian strongholds. The next step in activating the church in the areas that were poorly 'mastered' was the establishment of a monastery on the border between Greater Poland and Kuyavia, intended for the Christianisation of Kuyavia and Mazovia.

Jan Powierski (1996, 169-170) presented a different interpretation of the meaning of the list of one ninth rent strongholds mentioned in the document. By assigning the foundation of the Mogilno abbey to Bolesław the Bold, he interprets the list of Mazovian strongholds as a detailed description of the territorial

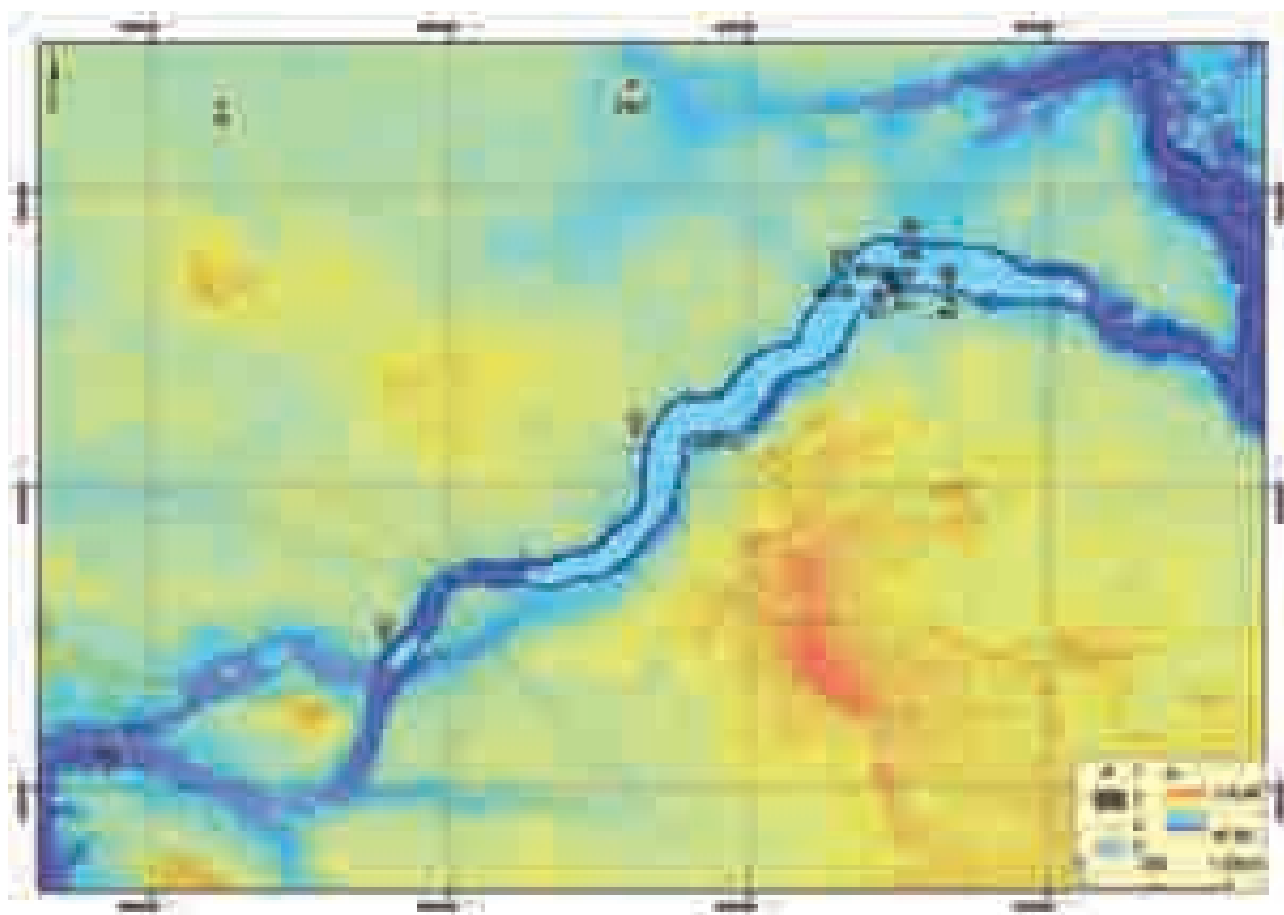


Fig. 10. Lake Steklin with marked terrestrial and underwater sites from the early Middle Ages along the shoreline of the water body. List of abbreviations of place names: H – Hornówek; J – Jacewo; N – Niedźwiedź; NS – Nowy Steklinek; PM – Parcele Mazowsze; S – Steklinek; SN – Steklin; W – Witoważ; Z – Zajączkowo

range of the one ninth rent. The listed strongholds were to define the area of one ninth rent, in comparison with the general description of ‘the whole Mazovia’. According to this researcher, the list of strongholds did not present all existing strongholds in this area. The strongholds in question, including Steklin, ‘stood out among others because of their direct affiliation to the ruler and their special position in the system of tributes for the ruler’ (Powierski 1996, 170). Marcin Danielewski has recently presented this problem in yet another way by. He linked the one ninth rent strongholds with the rule of Bolesław the Curly, mainly due to the dating of the Mogilno Falsification (Danielewski 2016, 146).

In the context of deliberations concerning the functioning of the stronghold centre in Steklin, researchers have repeatedly addressed the issue of moving the seat from Lake Steklińskie to the nearby Kikół (Arnold 1968, 329). The stronghold in this locality, 9 km from Steklin, was mentioned in the document separating the Kuyavian province from the Mazovian

province in 1236 (Powierski 1996, 176). Kuyavia was granted the territory of Kikół and Włocławek, while the Dobrzyń one was granted to Mazovia. J. Powierski believes that the transfer of the centre could have taken place around the mid-12th century, which is related to the destruction of the stronghold due to Old Prussian invasions (Powierski 1996, 176). This problem is seen somewhat differently by L. Kajzer, who uses the results of his excavations. According to him, the destruction of the stronghold in Steklin took place after 1217 during the period of increased threat to this area created in connection with the invasion of the Old Prussian tribes (Kajzer, Horonziak 1995, 54). The castellany stronghold established before 1236 in Kikół was to take over the functions of Steklin (Lalik 1967, 24; Arnold 1968, 329; Guldon, Powierski 1974, 133). In such a case, the final stage of its operation would fall during the reign of Kazimierz Konradowicz (Danielewski 2016, 135, footnote 89).

There are also no direct references in written sources to the territory related to the stronghold in

Steklin that would inform us about the political situation in the 11th-12th centuries. First of all, it is not known when these lands belonged to the original Mazovia (Dulinicz 2000, 203). It is also an open question whether they were incorporated into the Piast monarchy with it, or because of their location, directly adjacent to Kuyavia, they were subordinated to the Piasts earlier. As we know, written records, Ibrahim ibn Yaqub and Dagome iudex, indicate the contact of the monarchy with Old Prussian lands and Rus' already in the second half of the 10th century, hence it is difficult to doubt the dependence on Piasts of the communities inhabiting these areas (Dulinicz 1999, 157). The diocesan subordination of the territory in question is also not clear. This problem has been discussed in the literature for a long time (see Żebrowski 1976; further references there). It seems that initially the area of the north-western part of the Dobrzyń Land remained within the reach of the metropolis in Gniezno or possibly within the 11th-century ephemeral bishopric in Kruszwica. Then the territory was incorporated into the newly created bishopric in Płock in 1075. However, it cannot be ruled out that this area, located in the north-west part of the historic Dobrzyń Land, could have been the scene of some of the events described in the Chronicle by Gallus Anonymus (book I). Such connections can be seen in the case of information about the escape of the population of Greater Poland '*ultra flumen Wysła*', which took place during social riots and the Bohemian invasion of the capital strongholds [19] and resulted in the demographic growth and economic development of this area. The wave of refugees could have been multidirectional, which was pointed out by Janusz Bieniak a long time ago, also indicating the Chełmno Land as a potential area for people to move across the Vistula River (1963, see the map). Then, as Gallus has so suggestively described, 'the fields were swarming with ploughmen, the pastures with cattle, and the towns with inhabitants' [20]. The densification of Mazovian strongholds prompted T. Lalik's idea to look for connections between them and the large number of Mazovia's inhabitants in the 11th century, emphasised by Gallus (Lalik 1967, 36). Studies on the early medieval settlement of the area in question, carried out based on archaeological sources, indicate a significant progress in this respect, probably during this period. It manifested itself in the growth of a significant number of rural settlements, and especially in the establishment of a network of strongholds within the left-bank part of the Drwęca River catchment area (Chudziak 1996). This situation contrasted

with the barren and still poorly inhabited areas in the south-eastern part of the Drwęca, Vistula and Skrwa rivers area (south of the Mień). It cannot be ruled out, therefore, that it was in the north-west part of the later, historical Dobrzyń Land that Duke Kazimierz fought first with the Comes Miećław and the Mazovians, and then with the Pomeranians rushing to help them [20-21]. Moreover, it can be assumed that the events described in book II [Gallus, chapter 49] concerning the incursion of the Pomeranians to Mazovia in 1109 in order to 'gather loot and prisoners' took place, at least in part, taking into account the logic of the geographical order, in the north-western zone of the Drwęca, Vistula and Skrwa rivers area. It is also possible that the stronghold in Steklin was on the route of the march of Duke Bolesław's troops towards Sasinia during the campaign in 1107 and at the turn of 1110/1111 [Gallus, chapter 24; Powierski 2001, 21-23]. The starting points in this case, apart from Płock, could have also been Kruszwica and Włocławek, where in the first half of the 12th century a bishopric was established, which also covered a part of the historical territory of the Dobrzyń Land. In this context, it is worth referring to the opinion of H. Łowmiański, who believed that Bolesław the Bold reserved for himself the ownership of the Mazovian strongholds as well as those located in Dobrzyń Land in connection with the organisation of the defence of the populated part of Mazovia against Old Prussian attacks (1985, 313). All these issues require further studies and, above all, confrontation with the conclusions drawn from the analysis of archaeological sources.

THE STRONGHOLD IN STEKLIN IN ARCHAEOLOGICAL SOURCES AND ITS CHRONOLOGY

Castrum Steclyn is commonly identified with the fortified settlement in Niedźwiedź/Steklin, Site 1 located on the border of two localities belonging to the communes of Kikół and Czernikowo (Natanson-Leski 1953, 136-137; Arnold 1968, 230; Płoch 1969, 94; Bogucki 1972, 225; Guldon, Powierski 1974, 127; Kajzer, Horonziak 1995, 53, 202; Powierski 1996, 176; Danielewski 2016, 134-135). The identification of the name *Steclyn* with Steklin was not always obvious. Initially, it was identified with Sąchocin (Helcel 1865, 370) or read as Szczecin (Wojciechowski 1970, 141; on the subject of identifying names from the so-called Mogilno Falsification, see also recently

Kowalczyk-Heyman 2018). Perhaps the first correct interpretation of the name Steklin identified with the village between Czernikowo and Kikół can be found in the work by Edmund Callier (1888). Since the publication of Tadeusz Lalik's paper (1967) it has generally become accepted to associate this name with Steklin (currently Czernikowo commune, Toruń district, Kuyavian-Pomeranian Voivodeship).

The ring-shaped stronghold, currently heavily overgrown with trees and bushes, is located on a separated promontory projecting into the lake (Fig. 2-3). Its ramparts rise about 12 metres above the current water level. The base of the stronghold has a three-sided shape with dimensions of about 70 x 70 x 90 metres (about 45.6 ares). On the side of the upland, there is a rampart about 25 metres wide and up to 7-8 metres high. The remaining ramparts, exposed at the lake shoreline, are much lower and do not exceed a height of about 4-5 metres. Measured along the crown line, the ramparts close a surface of 22.84 ares. They surround a small interior courtyard with surface of about 35 x 25 metres, the area of which is currently about 8.41 ares. The morphology of the structure in question lacks traces of the original gate passage, although there is a supposition that it was located at the junction of the southern rampart with its western or

eastern section (Kajzer, Horonziak 1995, 53). Directly to the south of the stronghold there is a depression in the terrain, which was probably created during the construction of the ramparts and originally used as a dry moat.

Little is known about the cultural stratigraphy of the structure in question, examined to date only to a small extent during the research conducted in 1991 (Marciniak-Kajzer *et al.* 1991; Kajzer, Horonziak 1995; see also Chudziak, Weinkauff 2019, 114-117). In the trench located in the central part of the internal courtyard, a layer of black sand saturated with scorched material, charcoal, small pieces of fired clay and burnt stones, about one metre thick, was found (Fig. 11). It is a remnant of the stronghold buildings that had been destroyed by a fire. In the borehole located to the north of it, in the zone in the lee of the rampart, remains of alleged semi-sunken featured buildings with a depth of up to 1.5 m below the current ground level were recorded (Marciniak-Kajzer *et al.* 1991). In the borehole located at the southern culmination of the rampart, two levels of scorched clay were found, interpreted by the authors of the research as remains of two phases of the rampart construction (Marciniak-Kajzer *et al.* 1991). The older level of the wooden rampart structure, in the form of charcoal,

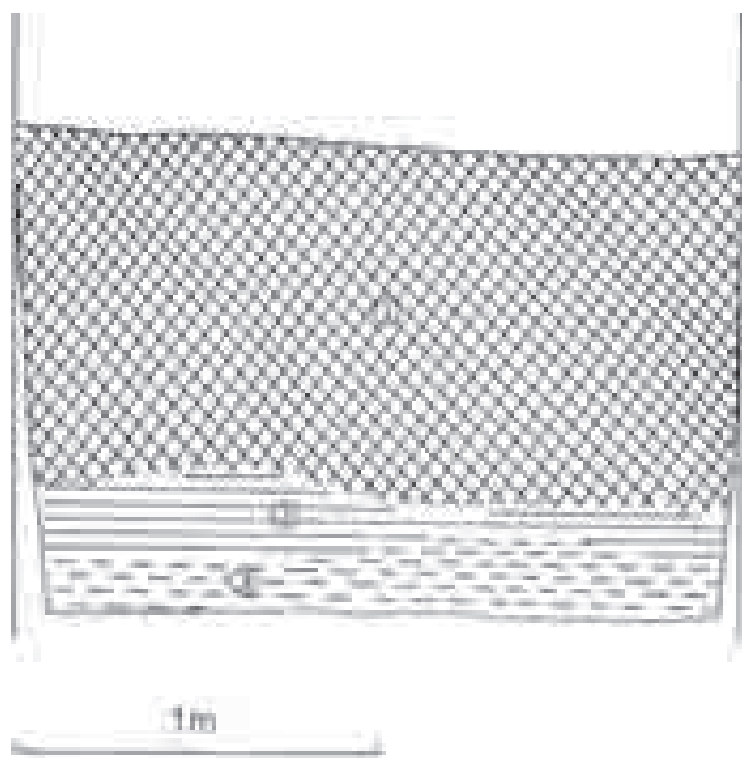


Fig. 11. Niedźwiedź/Steklin, Site 1. Trench 1/92, section (Kajzer, Horonziak 1995)

was covered with the level of scorched clay. The defensive qualities of the huge earthen-wooden rampart were increased by the aforementioned dry moat in front of it. During the borehole research in 1994, it was found that the thickness of the slope layers at this point reached even two metres.

The settlement adjacent to the stronghold in the south has so far also only been explored to a small extent. The range of the site can be determined based on the spread of archaeological material, mainly pottery and animal bones, present on the surface, as well as in cultural layers. It covers an area of less than three hectares and in the south-western side it adjoins an erosion valley strongly cut into the upland (Niedźwiedź, Site 1a). This valley was probably a natural communication route facilitating the descent from the settlement to the lake shore. Single fragments of vessels were also discovered to the west of the valley, which indicates that the area of the settlement could have been much larger, even up to 4 ha (Steklin, Site 1). To date, only occasional settlement pits have been discovered in the settlement, which should be associated with economic activity of an undefined type (Pits 1a and 1b, 2, 3). The most characteristic was the Pit 1a of a baggy shape with a thickness of 1.4 m, which was interpreted as a storage feature (Fig. 12). A dozen or so fragments of pottery (19) and animal bones (14) were obtained from its fill. In the south-western part of the site, a set of coins (29) and silver jewellery (6), which were the remains of a deposit in the secondary context, was also discovered on an area of several square metres (Chudziak, Weinkauff 2019, Fig. 5.12: a), (Fig. 13). Moreover an iron spearhead comes from the surface of the settlement (Chudziak, Weinkauff 2019, Fig. 5.12: b).

Due to the favourable environmental conditions, the space discovered in the water of the lake in the immediate vicinity of the stronghold, especially in its north-eastern side, in the zone of a small bay, was better preserved. Numerous structural elements related to the infrastructure of the shoreline were found there, occurring in a strip 80 m long and 20 m wide (Niedźwiedź, Site 5; Chudziak *et al.* 2011, 141-147). In 1997, nine oak posts were located here, slightly protruding above the level of bottom sediments, which may be – as it was interpreted then – remains of a navigation barrier (Fig. 8). Most of them occurred in a row arrangement, about 20 metres from the present shoreline of the lake. Five of them, northernmost, lay at a depth of 9.1-11.1 m. Another two posts were recorded at a depth of 7.1-7.2 m closer to the base of the

peninsula, where two sharpened beams on the other end equipped with yoke holes were also discovered (Niegowski 1997; Fig. 13). In this case they were probably remains of platforms. Their presence was confirmed during the exploration of underwater layers in 2001, when about 20 metres from the contemporary lake shore at a depth of about 4.5 metres, regularly arranged beams forming a grate construction, a related layer of broken stones and vertical structural elements were discovered *in situ* (Chudziak, Szulta 2001; Szulta 2002), (Figs. 14-15). Some posts lay at a depth of about 6.5 metres, which best proves that the water surface level in the water body during the operation of the structure was lower (about 4-4.5 m). In the area of occurrence of the remains in question, a large group of archaeological finds of high historical value was discovered. Some of them came from underwater trenches, while others from the exploration of the bottom of the lake (279 pottery fragments, including two entire completely slow wheel-thrown vessels, and large fragments of other specimens of this type; Chudziak *et al.* 2011, Fig. 116). Particularly noteworthy are the unique miniature vessel completely slow wheel-thrown with a potter's mark in the form of a cross and an engraving on the bottom, probably representing the structure of the rampart, stronghold gate, siege engine and a bird sitting on it (Chudziak 2003), (Fig. 16)¹. Assuming that the vessel was made by a local potter and the inspiration for the visualisation of the aforementioned elements was the southern rampart seen from the outside, it can be assumed that the gate was situated in the eastern side of the stronghold, as L. Kajzer assumed. In the same zone of the lake, nine iron axe blades, an iron battle axe and a complete spear with a wooden shaft wrapped in a thong, probably used during big game hunting, were discovered (Fig. 17). From the area where underwater

¹ The engravings on the vessel are unique. Several elements can be distinguished on it, the main part of which is probably the depiction of a multi-modular wooden structure resembling the chests of a rampart. On the right side there are vertical lines, perhaps representing the depiction of double gates. The engraving also features a free-standing structure resembling a siege machine of the „porok” type used in the territory of Rus. It is depicted in the Arabic chronicle of Rashid ad-Din (Istoria 1948, 466-467, fig. 284). It is known that machines of an unspecified type were used during sieges of strongholds on the Pomeranian-Greater Poland borderland in the early 12th century (Gallus, 124, 135). In this context, the image of a bird, which may have symbolic connotations, deserves special attention.



Fig. 12. Niedźwiedź/Steklin, Site 2. The settlement adjoining the stronghold.
 An economic pit discovered in 1995 (drawing by W. Ochotny)



Fig. 13. Silver hoard (a) and an iron spearhead (b) accidentally discovered in the settlement adjoining the stronghold in Steklin in 2019 (photo by W. Ochotny)

wooden structures occurred, a bronze bowl, a bone skate, two large spinners with a tinned surface, used to catch large fish specimens, a stone sinker for a fishing net, as well as an iron sickle and semi-scythe were obtained (Szulta 2002, 204; Chudziak *et al.* 2011, Fig. 117). Moreover, 22 fragments of animal bones, mainly red deer and cattle, were discovered (Szulta 2002, 204). The archaeozoological analysis by Daniel Makowiecki of the osteological material obtained at that time narrowed down these terms, especially confirmed the high proportion of wild animal remains (red deer, roe deer and wild boar; over 50%) and occasional bones of domestic animals (cattle, sheep/goat and pig, and also dog).

Of course, the chronology determined based on the archaeological sources is of key importance in interpreting the origins and circumstances of the creation of the Steklin stronghold. In the older literature, the stronghold was generally dated to the early Mid-

dle Ages (Zielonka 1963; Antoniewicz, Wartołowska 1966) or to the 10th-12th centuries (Gajda 1990; Chudziak 1990). The only test excavations on this site to date, carried out in 1991, revealed source materials that allowed the dating of the remains of internal buildings to the second half of the 12th and first half of the 13th century (Kajzer, Horonziak 1995). The completely slow wheel-thrown pottery discovered in the test trench is characterised by stylistic and technological features distinctive of the youngest stage of pottery development in the Chełmno and Dobrzyń lands (Kałdus, phase IX; Chudziak 2003; see Poliński 1996). M. Danielewski stated that the results of these studies clarified the chronology of the stronghold in Steklin, the final stage of its operation he would like to see as part of Kuyavia and associate it with the rule of Kazimierz Kondratowic (2016). The problem of dating this structure, however, is much more complex. The previous studies conducted in the stronghold,



Fig. 14. Posts with yoke holes discovered lying horizontally at the bottom of the lake (photo by W. Chudziak)

limited to a small test trench in the central part of the internal courtyard, of course, do not resolve this issue. There are no grounds for synchronisation of this assemblage with vessels from the cultural layers discovered on the rampart, let alone the chronological stratification of the two stages of its construction. During the surface research of the stronghold in 1956, pottery material was obtained with evidently older technological and stylistic features, characteristic of pottery

in the Chełmno Land in second-third quarters of the 11th century (Kaldus, phase VI; Jedwabno, phase II; Chudziak, Weinkauff 2019, Fig. 5.14; Napole, phase VI, Bojarski 2012, 284). Thus great caution is required in formulating conclusions regarding the dating of the origins of this structure.

There is no doubt, however, that the chronology of the stronghold in Steklin should also be considered in the context of the results of the analysis of



Fig. 15. Grate structures lying *in situ* at a depth of about 4 metres in the shore zone of the lake; trench 3/01 (photo)

the source material from the nearby settlement and the underwater site discovered directly to the north-east of the stronghold. The first of the aforementioned sites is dominated by numerous fragments of completely slow wheel-thrown vessels with typological features characteristic of pottery dated from the second third of the 11th to the middle of the next century (completely slow wheel-thrown pottery, S-shaped forms with and without a separated neck; short, strongly bent rims with a notch for the lid, decoration in the form of surrounding grooves with a separate zone decorated with a multi-toothed tool, etc.; phases VI-VIII of pottery development in Kałdus and phases VI-VIII in Napole; Chudziak 2003; Bojarski 2012, 284-285). In the classification system of pottery developed for the north-western part of the West Slavic territory, they should be classified as Vipperow and Teterow type vessels (Schuldt 1956). It is worth noting, however, that there occur also occasional fragments of handmade vessels, slow wheel-thrown at rim of the Sukow type (second half of the 7th-8th century) and partially slow wheel-thrown undecorated or decorated with a multi-tooth tool in the manner typical of the Menkendorf type vessels widespread from the 9th to the beginning of the

11th century (see Weinkauff 2016, catalogue No. 163). These hint of earlier activity on the stronghold site.

In the case of the adjacent settlement, the hoard of silver items, containing a fragment of a dirham, Western European coins (27) and fragments of silver jewellery (6), has the greatest cognitive value. The oldest coin in this collection was one minted in Amul during the reign of Maṣūir ibn Nūḥin AH 357(?) (967/968). There is also a Saxon denarius of the Otto-Adelaide type (983-1010), a denarius of Henry II (1009-1024), and an English penny of Cnut the Great (1016-1035). The most common coins from the Saxony mints are the V (8+5), VI (5+2) and VII (1+0) type cross pennies (Chudziak, Weinkauff 2019; Chudziak, Musiałowski, Weinkauff 2023; Fig. 5.12a), (Fig. 13). The deposit in question consists of one more fully preserved bead with knobs and four fragments of other beads of a similar type, as well as a fragment of an oval bead (Chudziak, Weinkauff 2019, 118). The approximate time of hiding this deposit found in the ruins of the adjacent settlement based on the type VII cross penny should be associated with the last two decades of the 11th century (after 1080; Chudziak, Musiałowski, Weinkauff 2023).

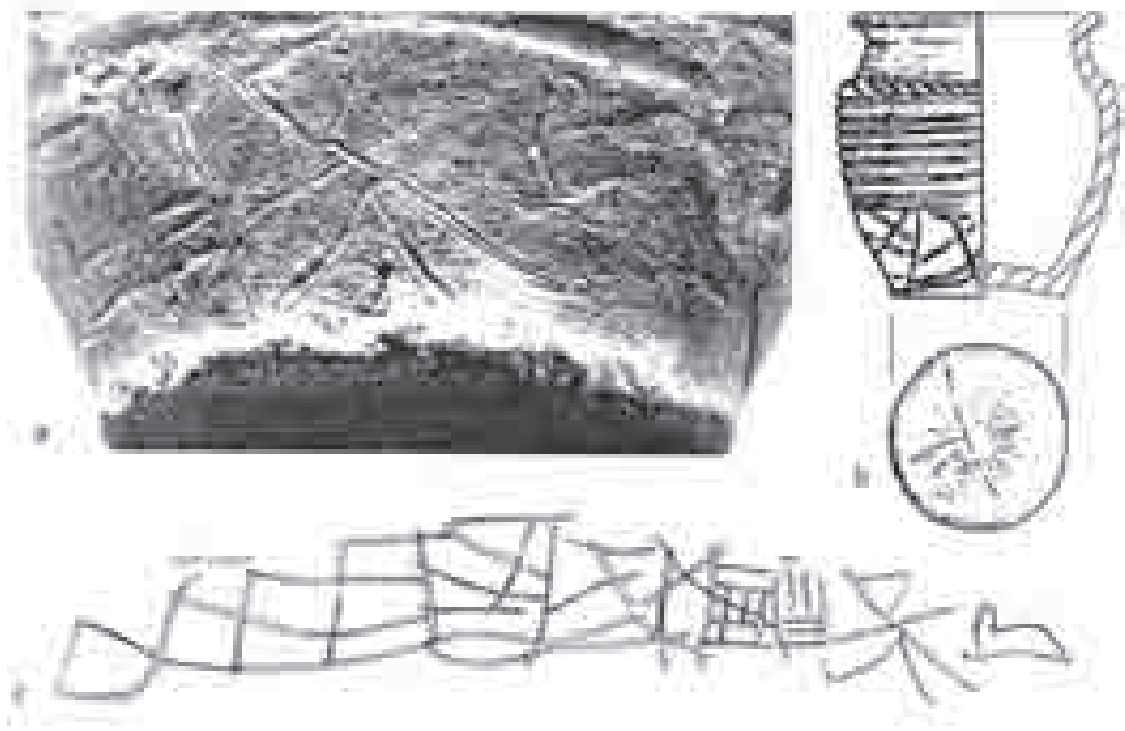


Fig. 16. Niedźwiedź, Site. 5. Pottery vessel with an alleged image of a Steklin rampart

The rich underwater finds also indicate a chronology older than the source materials from the test trench opened in 1991 in the stronghold's internal courtyard. As a whole, they form a heterogeneous assemblage, covering a wide period from the 8th to the first half of the 13th century (Niedźwiedź, Site 5). The oldest time horizon includes the oak dugout canoe radiocarbon dated to 1230 ± 90 BP (689-882 AD, 68.4%; 662-980 AD, 95.2%; Gd-11303; dendrodated after 884; Osowski 1999, 189, 267). An iron battle axe from the 9th or early 10th century with Great Moravian analogies can be associated with the same period (Kotowicz 2014, 111; type 4.5.20a, variant IB.5.34). The younger time horizon is represented, instead, by the largest series of other militaria items known to date from Kuyavia and the Chełmno-Dobrzyń zone, which consisted mainly of axeheads (9), (Fig. 17). Their chronology can be referred to the 11th or 12th centuries and most of them are treated as local products or, more broadly, central or eastern European ones (Kotowicz 2014; type IV.4.5.2a, variant IB.5.2, pp. 78-79; cat. 335; type IV.5.2.c variant IIB.5.2., p. 80, cat. 334; type IV.5.2d, variant IIIB.5.2., p. 81, cat. 331; type IV.5.3. variant IIB.5.3., p. 85, cat. 336; type 4.5.4a, variant IB.5.4, p. 89, cat. 330; type IV 4.5.4b, variant IIB.5.4., p. 90, cat. 322-323; type 4.5.11b, variant

IIB.5.20, p. 100, cat. 337). The fully preserved spear is also not very diagnostic in this respect, it is made of a thick shaft wrapped with a strap and an iron spearhead mounted on it, characterised by a massive blade (type V, according to Nadolski). Chronologically sensitive, instead, is the bronze bowl, originally decorated with a floral and geometric engraving, secondarily decorated with an engraving depicting the figure of a woman with a head surrounded by a halo with outstretched fingers of her right hand raised up and a disc held in her left hand (Fig. 18). Due to the phased formation and complexity of the ornamental engraving, its typological classification is not simple (type Va according to Poklewski 1961, 35; type E, subtype 5 according to U. Müller 1998, Fig. 1; on this subject, Janowski 2002, 224). It was probably produced in the Baltic Sea zone, and the closest analogies to it come from the territory of Gotland. The bowl should be dated to the 12th and first half of the 13th century, mainly to the first half of the 12th century (Janowski 2002, 224). The most reliable, however, is the dendrodate of the sample of oak wood taken from the post constituting the structural element of the jetty, determined to date after 1106 AD (Ważny 1997). Due to too small a series of wood rings, it has so far not been possible to date by this method the remaining elements of



Fig. 17. Militaria discovered at the bottom of the Lake Steklin (photo by W. Ochotny)

wooden structures that are numerous near the stronghold in the lake shore zone.

The set of vessels obtained from the bottom of the lake in the immediate vicinity of the stronghold is also helpful in establishing the chronology of the settlement centre in question (Fig. 19). Admittedly, due to the conditions of its occurrence, it does not represent the features of a homogeneous assemblage. However, most of the specimens of completely slow wheel-thrown vessels – as in the adjacent settlement – can be related to the VI-VIII phases of the Chełmno pottery development, dated from the second third of the 11th to the mid-12th century (Chudziak 2003; Bojarski 2012, 285; Poliński 1996, 169-170). Amongst them we also find analogies to the series of pottery from the East Pomeranian-Kuyavian borderland (Bydgoszcz, dendro 1037-1090 and Pawłówek, dated by dendrochronology to 1068-1102; Bojarski, Chudziak 2019; Błądowski, Chudziak 2019), as well as the Kruszewica suburb (phase 6-9; Dzieduszycki 1982, 44-45), and, importantly, the oldest early medieval settlement phase of the monastery hill in Mogilno, dated recently to the second half of the 11th century (Chudziakowa, Chudziak 2017).

Recently, the current state of knowledge on the chronology of the settlement complex in Niedźwiedź/

Steklin has been summarised, with particular emphasis on the stronghold (Chudziak, Weinkauff 2019, 119-120). At this point, it is appropriate to maintain the main theses formulated there. Based on the archaeological data to date, it can be assumed that in the discussed place, a rural settlement was established probably already in the 8th century, which may have existed for the next two centuries. The dugout canoe radiocarbon dated and the Great Moravian battle axe would come from this period, although in the case of the latter its longer use and getting into the water at a later date is possible. It must be admitted that on this rather fragile source basis the hypothesis was formulated that the site in question was the central point of the local settlement community of the tribal period (Chudziak 2016b, 118). The dating of the stronghold (probably the younger phase?) was determined based on the pottery discovered in the test trench in the internal courtyard as the second half of the 12th and early 13th centuries (Kajzer, Horonziak 1995, 202). It is possible that the bronze bowl found at the bottom of the lake should also be synchronised with this phase. However, taking into account the technological and stylistic features of the pottery dominant within the entire settlement complex, on the surface of the stronghold, on the surface and in the cultural layers of



Fig. 18. Niedźwiedź, Site. 5. Bronze bowl (drawing by M. Wachnik, photo by W. Ochotny)

the adjacent settlement, as well as in the area where the remains of the harbour infrastructure are present, it can be assumed that the first phase of the stronghold can already be related to the time span covering the period from the second third of the 11th century to the beginning of the 12th century (Chudziak 1996, 257; 2016b, 134). This is also indicated by the sample of oak wood dated by the dendrochronological method. The early dating of the discussed centre is also indirectly confirmed by the chronology of the silver items deposited probably in the adjacent settlement after 1080. However, these findings should be verified in the future during systematic excavation works covering both the stronghold and the adjacent settlement. Continuation of the underwater work would create a potential field for obtaining a longer series of dendrochronological dates.

SETTLEMENT BACKGROUND RELATED TO THE STRONGHOLD CENTRE *IN STECLYN*

The previous archaeological research in the north-western part of the Dobrzyń Land proves that the settlement complex in question, consisting of a stronghold, a vast adjacent settlement (Niedźwiedź, Site 1a; Steklin, Site 1) and the accompanying shore infrastructure in the form of a harbour, was the central point of the microregional settlement structure shaped

directly on Lake Steklin (Chudziak 1996), (Fig. 7). It also included an open settlement situated opposite the stronghold, on the northern shore of the lake, less than 300 metres from it. From its surface (about 1-2 ha) originate numerous fragments of completely slow wheel-thrown vessels with features typical of the VI-VII phase of the development of pottery in Kałdus (Steklinek, Site 4). During the systematic exploration of the bottom of the lake carried out in the vicinity of this site at a depth of 4-5 metres, three iron axe blades, a spearhead, an iron sickle and a bottom fragment of a completely slow wheel-thrown vessel from the 11th-12th centuries were discovered (Hornówek, Site 8; Chudziak *et al.* 2011, 78, Fig. 52), (Fig. 20b, d, e). In the case of two axes, Kotowicz sees Scandinavian inspirations (2014, 91; type 4.3.7, variant IIB.3.28, cat.169-170), while the third one is a rare specimen with analogies known from Slovakia and Moldavia (2014, 102; type 4.5.13b, variant IIB.5.22; cat. 168). Also noteworthy is a long spearhead with a short socket and a long blade with a fuller – a specimen with unknown analogies (Fig. 20a).

Another site interpreted as an open settlement was discovered on the northern side of the lake, about 400 metres west of the aforementioned settlement (Steklinek, Site 3). In this case, only occasional fragments of completely slow wheel-thrown vessels were discovered on the surface. In the shore zone of the water body at a depth of 5-8 metres, the presence of

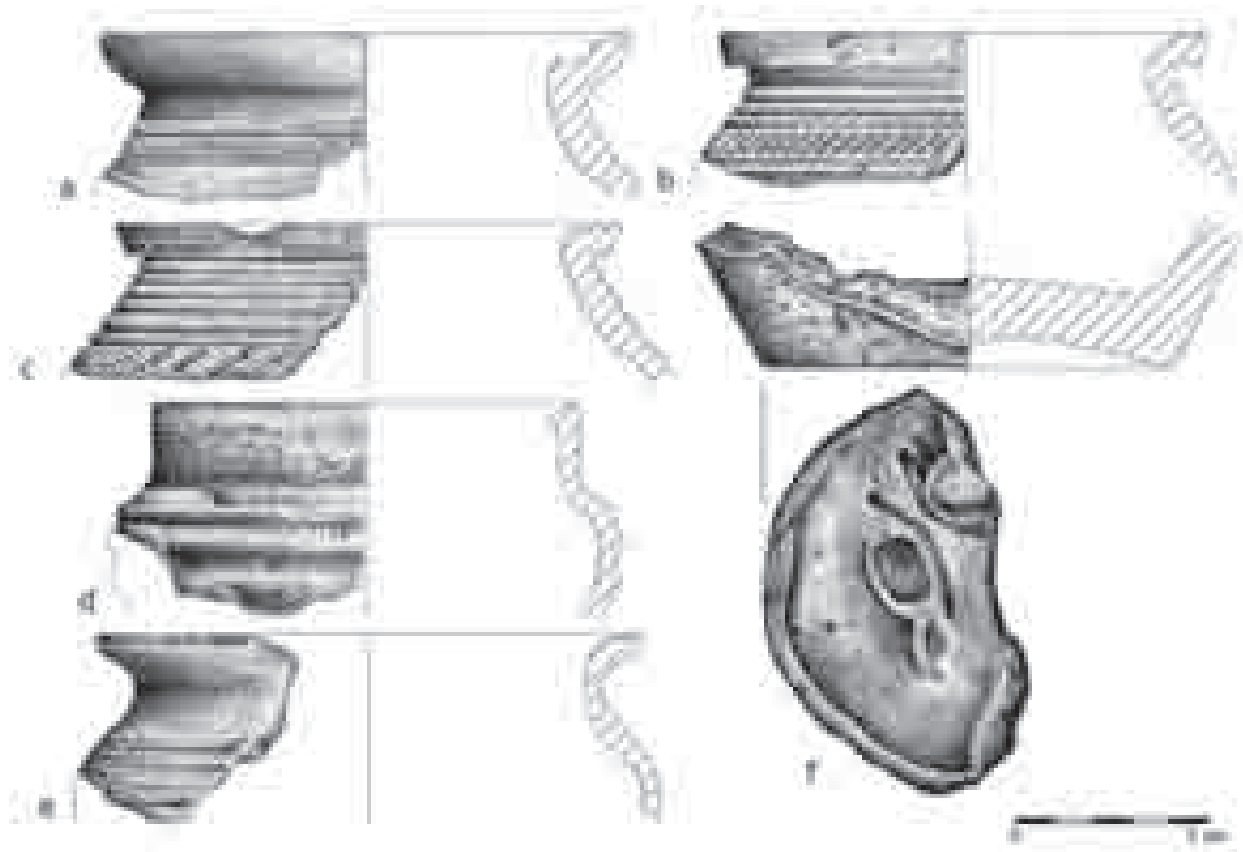


Fig. 19. Niedźwiedź, Site. 5. Pottery vessels (drawing by B. Kowalewska)

numerous wooden stakes driven into the bottom of the lake with unclear chronology and a fragment of a completely slow wheel-thrown vessel dated to the 11th-12th centuries were found (Nowy Steklinek, Site 9; Niegowski 1997; Chudziak *et al.* 2011, 154-155). Moreover, in the north-western side of the lake, there is known an undefined trace of early medieval settlement identified based on occasional fragments of early medieval vessels (Steklinek, Site 2). The spatial and functional relationships of the settlements situated on the northern shore of the lake with the stronghold are obvious, hence the assumption that they were connected with the southern shore by a bridge. This issue has not been finally resolved to date, although the considerable distance between them, and above all, the lake's depth in this place, constitute a premise to question its existence. Communication between both sides of the lake could as well be provided by a ferry crossing or other types of water transport (e.g. dugout boats).

Approximately 400 metres east of the stronghold, there is also another settlement point functionally associated with the settlement complex in question (Niedźwiedź, Site 2). As in the case of the settlement

on the other side of the lake (Steklinek, Site 3), remains of wooden structures were also found here, probably shore reinforcements in the form of beams and stakes driven in the bottom of the lake (Niedźwiedź, Site 6; Niegowski 1997). They were arranged in rows at a depth of 5-8 metres, about 20 metres from the present lake shore. These structures were found along the shore at the distance of about 40 metres. Within them, a spinner, a fragment of a gig and a fragment of early medieval pottery were found. Another iron spearhead from the early Middle Ages, discovered at the bottom of the lake 1.8 km west of the stronghold deserves attention too (Nowy Steklinek, Site 12; Chudziak *et al.* 2011).

The remaining settlement points that could potentially be synchronised with the stronghold in Niedźwiedź/Steklin are located 2 to 7.5 km away from the stronghold (Kikół, Site 8, settlement 11th century; Lubinek, Site 7, 12th-13th centuries; Moszczone, Site 12, 11th-12th centuries; Parcele Mazowsze, Site 1, 11th-13th centuries; Jackowo, Site 4), (Fig. 10). Certainly best connected with the stronghold centre was the settlement in Zajączkowo, Site 2 (9th-13th centuries). It was located at the western end of the same



Fig. 20. Hornówek, Site 8. Selected items discovered at the bottom of the lake (after Chudziak, Kaźmierczak, Niegowski 2011, fig. 52)

subglacial tunnel valley as the stronghold centre in Steklin. On its surface, a large assemblage of pottery vessels (49 fragments) was discovered, among which four sherds of partially slow wheel-thrown vessels and the same number of completely slow wheel-thrown ones were found. It is possible that it should be identified with the nearby village of Witowąż, mentioned in 16th-century written sources (Słownik 1893, 678).

ORIGINS AND FUNCTIONS OF *CASTRUM STECLYN*

From the point of view of the results of the chronological and spatial analysis of archaeological sources, the stronghold in Niedźwiedź/Steklin along with its immediate settlement base should be treated as a remnant of a multifunctional socio-economic

and political centre constituting the basic link of the territorial-stronghold structure of the Piast state in the north-western part of the Vistula, Drwęca and Skrwa rivers area (Moździoch 2002, 213-220). In the model approach to the stronghold system proposed by Karol Modzelewski, strongholds like the Steklin one would be administrative-judicial-treasury and military centres of the state as well as reservoirs of tributes (1975). This structure was built in a place with old settlement traditions dating back to at least the early Iron Age. In the older phases of the early Middle Ages, a typical rural settlement existed here. It is possible that in the early Piast period it gained importance due to the land route connecting this area with Kuyavia (Chudziak 1997; 2016, 167). We assume that its existence – apart from favourable topographic conditions (linear system of geomorphological forms and hydrographic network) – may indirectly be reflected by the hoard of silver items, mainly Arabian dirhams and jewellery, deposited at the end of the 10th century a few kilometres east of Steklin (Kołat-Rybniiki, Site 2; Sobczyk 2015, 48). This is an important conjecture, because it is known that in many cases the construction of the stronghold organisation proceeded along the main communication routes (Kurnatowscy 1996, 120-121; 2001). Probably in the second third of the 11th century or slightly later, thanks to the increase in the number of people reflected in the archaeological sources, the expansion of the settlement and the creation of new habitations on the other side of the lake, a decision was made to erect a stronghold along with the infrastructure of its immediate hinterland (adjacent settlement and harbour in the form of a built-up jetty with platforms). This construction could have also been the result of a deliberate planned colonisation action known from other areas of the Piast rule (Moździoch 2002, 212). In such a situation, the stronghold was the central point of the castle district, which probably included all the settlements on Lake Steklin and the nearby villages within a radius of several kilometres. Their functioning should be considered in connection with the organisation of supplies not only for the stronghold, but also for the needs fulfilled at other levels of the social hierarchy (provincial capital centre, bishopric, monastery). Due to the state of research on the settlement complex in question, especially the stronghold, this view should only be treated as a research hypothesis that requires verification in the future.

The Steklin district was presumably governed by a stronghold's lord appointed by duke or comes

of the province and the officials associated with him, headed by the steward-bailiff constituting the main core of the stronghold administration (Modzelewski 1975). Presumably, together with their families, they lived within the solid wooden and earthen ramparts, protecting a relatively small space, erected by the local population and acting as a refugium in the event of an external threat. It can be hypothetically assumed that they were supported by a group of warriors who probably lived in the open suburb, and who should be associated with a special category of low rank knights (*milites gregarii*), necessary for the protection of the stronghold and property, and also for the armed strengthening of local power (Modzelewski 1975, 217; see Kara 2009). Numerous militaria, rarely found in such a number on early medieval sites in the basin of the lower and middle Vistula River, are undoubtedly evidence of the presence of this social and professional group. A specimen of a spearhead found in the settlement adjoining the stronghold, as well as a series of iron axe blades and another spearhead discovered in the lake, both at the stronghold and on the other side of the lake, were, at least in part, the potential equipment of the stronghold crew². It is not certain whether this group of people should also include the owner of the silver deposited after 1080 within the buildings of the suburb settlement, rewarded for unspecified merits, or a participant in the exchange on the market which was increasingly monetised in the second half of the 11th century (Adamczyk 2018, 314-315). It is not known whether the discussed group of warriors undertook trade and craft activities, as H. Łowmiański would have perceived it years ago (see Kara 2009, 339). We do not know anything about the local craft activities which usually accompany similar strongholds (e.g. smelting and blacksmith production, pottery), or about the exchange organisation, including the existence of a market by the stronghold, which can be guessed from the Mogilno document. These issues directly related to the sociotopography of its

² However, the circumstances of how they got into the water are not clear. They may have found their way into the water accidentally in the course of battles fought on the lake's shoreline and water-communication piers. However, some of them may have entered the water as a result of various ritual behaviours of a magical-sacred nature of both "their own" and „foreign" (Pomeranians, Prussians), which also cannot be ruled out at the current stage of research. Such a hypothesis was formulated in the case of the discoveries at Ostrów Lednicki and Żółty and should still be taken into account (Chudziak *et al.* 2012, 198-207).

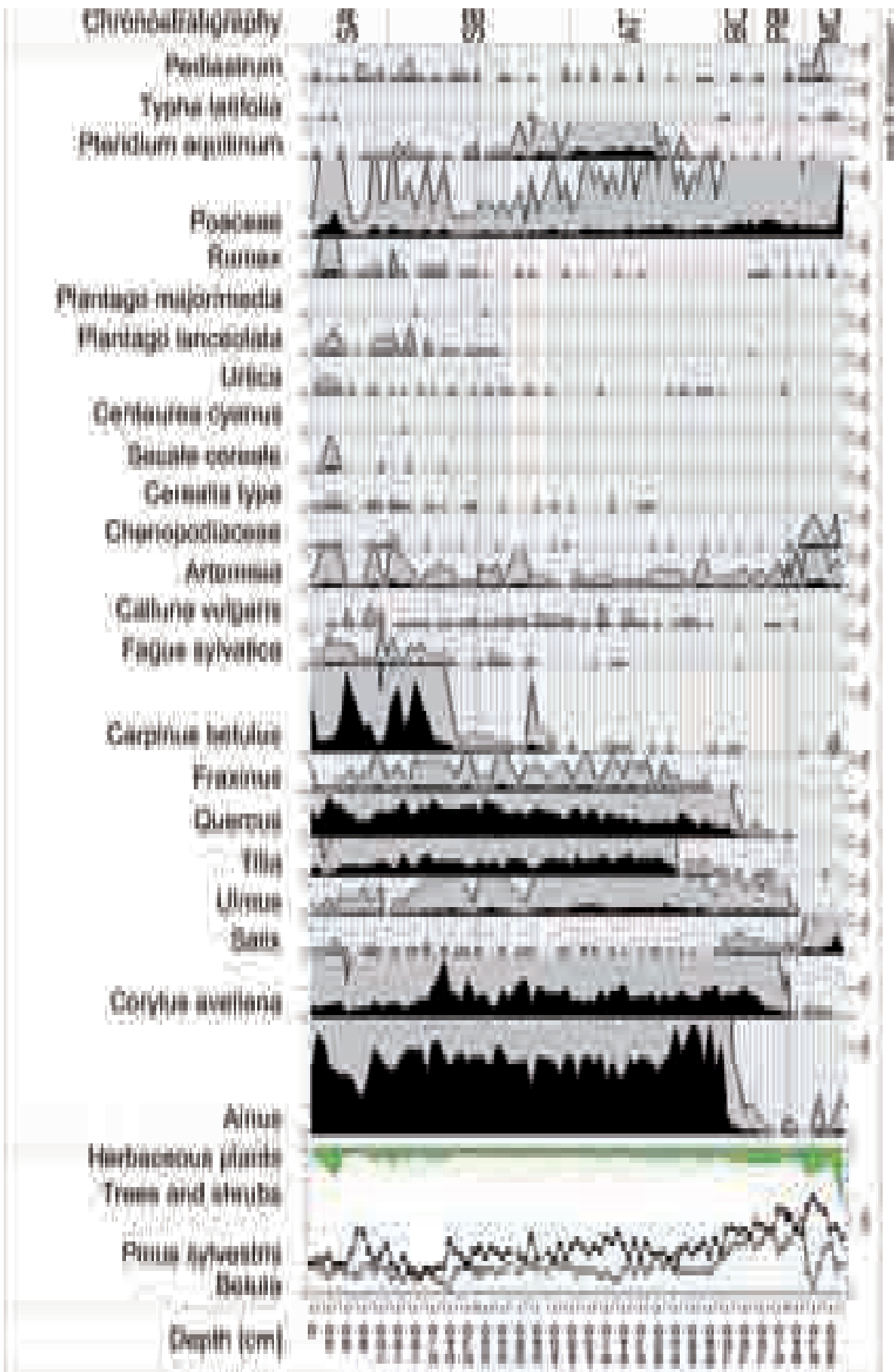


Fig. 21. Lake Steklin. Percentage pollen diagram of selected taxa (compiled by B. Noryskiewicz)

immediate and further hinterland without carrying out excavations in the suburb and within the nearest open settlements are currently impossible to explain.

Certainly, the main group of population living in the vicinity of the stronghold were people involved in agricultural activities, both land cultivation (sickles) and animal husbandry (bones of cattle, pig, sheep/goat), living mainly, as one can guess, in the surrounding rural settlements. It was up to them to provide the inhabitants of the stronghold with basic agricultural resources. This activity was favoured by good-quality soil developed on moraine loams around the lake. At the stage of intensive colonisation of these areas in the 11th century, a significant role can still be attributed to the slash and burn agriculture in the forest-fallow system, which had been replaced over time by stable alternating-fallow cultivation using draught animals. A storage pit discovered near the stronghold was probably used to store products related to this sphere of activity. Among the local inhabitants, one can also envisage the servant hunters engaged in hunting. Documented in palynological research – the broad-leaved forests growing in the immediate vicinity of the lake were certainly rich in game (Fig. 21). A large percentage of red deer bones, wild boar, and roe deer discovered at the bottom of the lake confirm the developed sphere of this type of activity. One can also guess the presence of a group of fishermen exploiting the waters of Lake Steklin. The large size of the spinners discovered near the stronghold indicate that large fish, such as pike or catfish, were caught here, which could have been the subject of a monastery tribute. A clay sinker found in the vicinity also proves that net fishing was used here. Taking into account the content of the bestowal from Mazovian strongholds and the need for warriors' equipment, it can be assumed that horses were also kept in the immediate vicinity of the stronghold.

As one of the main settlement centres, this place was probably visited by clergymen initially associated with the Benedictine monastery in Mogilno or the provost in Płock that was subordinate to it. However, there is no information about the existence of a church in Steklin. In this context, however, a significant find is an engraved bronze bowl discovered at the bottom of the lake at the ruin of the harbour's jetty. Bowls decorated in this way are interpreted as liturgical vessels used for washing hands, hence they were monks' equipment (Wrzesiński 2000). They also played an educational role in monastic novitiates and served the contemplation of monks. Among many functions as-

signed to this category of objects is the perception of them as baptismal bowls that are a trace of the Christian mission (see Janowski 2002, 22). Bowls of this type are known from many Central European sites, appearing as furnishings in elite chamber graves dating from the fourth quarter of the 10th to the 12th century (among others, see Biermann 2009). Foals, hogs and fish were transported directly from the Steklin stronghold to the monastery in Mogilno, the latter were probably dried or preserved with salt available from nearby Kuyavia, mainly through the crossing in Słońsk (Rosik 2013, 156). It cannot be ruled out, however, as noted by H. Łowmiański, that some of these tributes were intended for local consumption. This researcher believed that 'missionaries in Mazovia were apparently anticipated as consumers, and the foals were to be used to organise missionary journeys' (Łowmiański 1985, 312).

THE STRONGHOLD IN NIEDŹWIEDŹ/ STEKLIN IN THE TERRITORIAL AND SPATIAL STRUCTURE OF THE SETTLEMENT OF DOBRZYŃ LAND

The circumstances of formation of the stronghold in Niedźwiedź/Steklin should be interpreted in the context of the socio-economic and political conditions of the functioning of the dominance of the Piast rulers in the second half of the 11th century and at the beginning of the next century. The political status of the area of the Vistula, Drwęca and Skrwa rivers in this period was particularly important, especially in its northern part connected with the Drwęca River catchment area. It is known that these lands, due to their border location in the first half of the 13th century, belonged partly to Mazovia and partly to Kuyavia (Bieniak 1986). This affiliation was shaped differently in the second half of the 11th century, as the entry 'per totam Mazoviam' from the Mogilno Falsification, clearly locates Steklin in Mazovia. However, the former affiliation of these lands is not clear. As mentioned earlier from the record by Ibrahim ibn Yaqub and the document *Dagome iudex*, it would appear indirectly that in the last decades of the 10th century these areas were subordinated to the Piasts, their jurisdiction reaching the borders of Old Prussian lands. However, unlike the Chełmno Land, these areas were rather poorly inhabited both in the older phases of the early Middle Ages (7th-first half of the 10th century) and during the reign of the first two historical

Piast rulers (second half of the 10th–first quarter of the 11th century) (Chudziak 1996). This is indicated by the archaeological knowledge of the intensity of the settlement of this area to date. Above all, for both of these time horizons there is no developed network of strongholds, confirmed north of Drwęca River (Jedwabno, Gronowo, Napole) or in the areas on the Vistula River (Rzęczkowo, Unisław, Pień), which in many cases are centres of relatively densely populated settlement regions. There are also no fortified settlements referring to the declining tribal Kuyavian strongholds dated to the end of the 9th and the first half of the 10th century (Borkowo, Gąski, Kościelec Kujawski, Ostrowo, Ostrów Krzycki – phase C and a slightly longer-existing Lake Gopło centre in Mietlica; phase C-D, Kara 2009, Fig. 86) or the oldest stages of the functioning of the early Piast stronghold centre in Kruszwica (fourth quarter of the 10th–first third of the 11th century; Dzieduszycki 1982). The only centre of this kind known to date in the north-western part of the Dobrzyń Land, which should be associated with the early tribal phase, is known from Borzymin and its functioning should be linked with the long-distance route from Rus' to Pomerania via northern Mazovia (Chudziak 1997; see Bojarski 2016). However, the problem of dating the stronghold in Skępe on the Mień River, situated in the central part of the Dobrzyń Land, from which pottery materials from the 9th–10th centuries come, requires clarification in the future, but the lack of preserved documentation from excavations does not allow for their unambiguous connection with the stronghold phase of this site (Weinkauff 2002). Only the stronghold centre in Nowogród, located in the Drwęca River catchment area, a short distance south of this watercourse, can be synchronised with the activity of the first Piasts, possibly run from the Chełmno Land. The determinant of this time horizon is Gronowo II type pottery widespread in the Chełmno Land at the end of the 10th century and in the first quarter of the 11th century (recently on this topic Chudziak and Weinkauff 2019). In the Dobrzyń Land it has been confirmed up till now only from the site in Nowogród (Kowalewska 2009).

All other early medieval strongholds known from the north-western part of the Dobrzyń Land should be dated to a later period based on a typological and comparative analysis of pottery (Fig. 22). The state of research on these structures is varied, usually insufficient, but in many cases there are important premises to relate them to the period ranging from the second third of the 11th to the first half of the 12th century.

In the context of considerations regarding the Steklin stronghold, special attention should be paid to a group of four partially synchronised defensive structures known from Piotrkowo, Podolina, Somsioy and Mościska-Ostrowite (Fig. 23). They are physiognomically similar and each of them is accompanied by a network of functionally related open settlements. Apart from the first of the above-mentioned structures, they are evidently in a line system and probably refer to other objects of this type dated to the same period: the stronghold in Starorypin (11th–13th centuries) and the stronghold in Księża (11th–13th centuries) located on the eastern edge of this area; Chudziak 1996; 2016a, 50). The stronghold in Steklin was the most north-western stronghold of the Dobrzyń Land, and it was only 15 km away from Kuyavia and the Vistula stronghold in Słońsk. The importance of the latter was probably related to the exploitation of the local salt mine and its location on the route leading from Gniezno via Mogilno into the Dobrzyń Land. It can be assumed that there was a Vistula River crossing, for which the fees for the Benedictines of Mogilno were guaranteed in a document from 1065 (transport *'per Wislam de Camenusque in mare'*). In turn, from the stronghold in Rypin, the fortress mentioned in the Mogilno document, the stronghold in Niedźwiedź/Steklin, appearing on this list immediately after it, was about 30 km away. The way between these two *castra* lead in the immediate vicinity of strongholds in Podolina, Somsioy and Mościska-Ostrowite. It cannot be ruled out that already in this period, near Lake Steklin, it crossed the south-northern land route connecting the original Włocławek (stronghold in Zarzeczewo) with the Chełmno Land.

The spatial arrangement of the strongholds and the related network of settlements in the northern part of the Dobrzyń Land corresponds to the model of the spatial organisation of settlement and the distribution of central places relevant to both the transport and administrative structure (Christaller 1937). The layout of the settlements probably reflects the existence at that time of a long-distance route leading from Kuyavia towards Sasinia via Słońsk, Steklin and Rypin. It indirectly indicates that their topogenesis could have been related to the Gniezno Land and not to the central centre of the Mazovian province in Płock. The closest analogy to such a system is the structure of the settlement of strongholds in the Chełmno Land, reflecting, as it has been assumed, the course of a land route from Kuyavia to Old Prussia, dating back to the time of the mission of bishop Wojciech (Chudziak 1997,

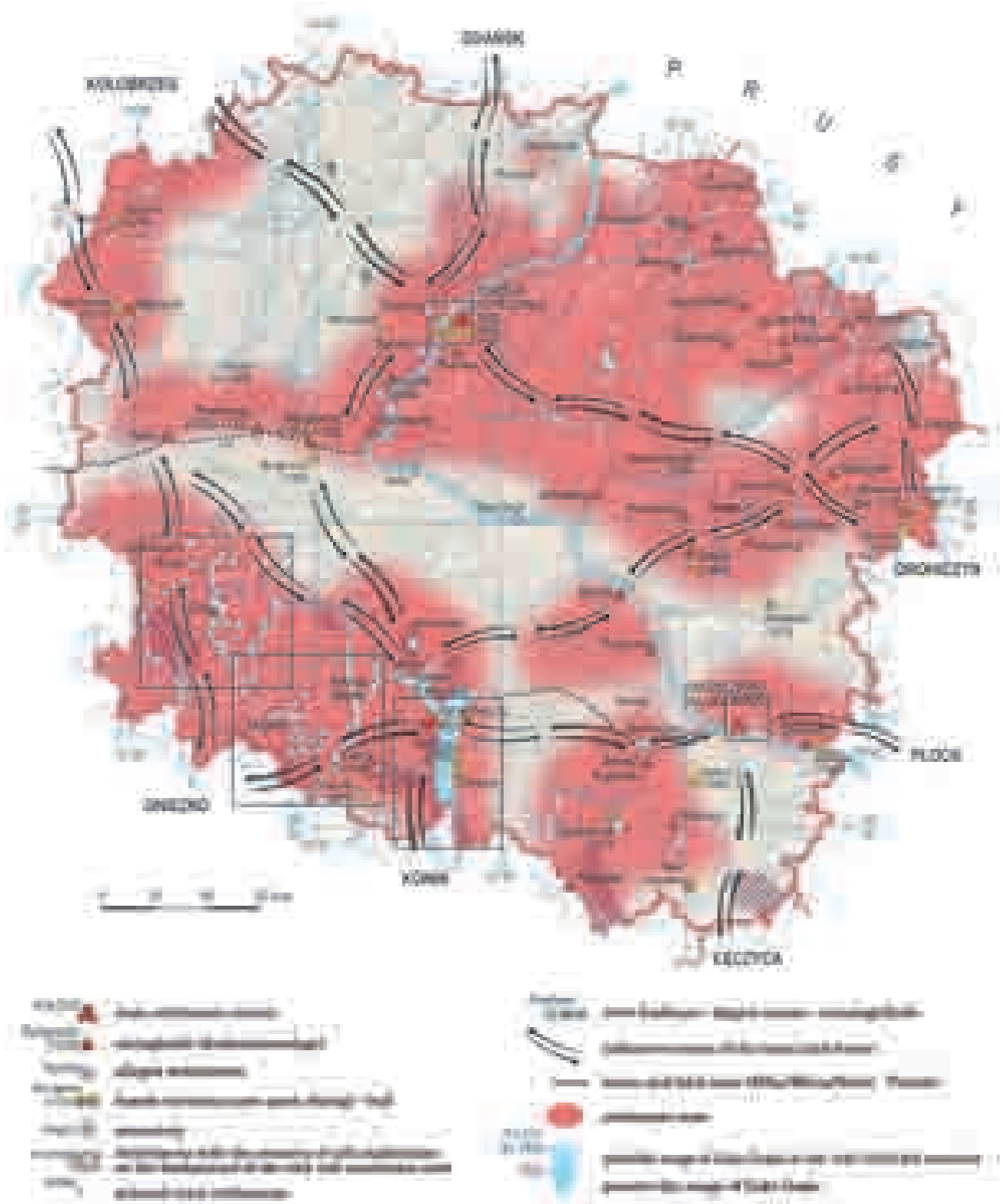


Fig. 22. Settlement in the Kuyavian-Pomeranian region in the second half of the 11th century (after Chudziak 2016 with supplements, drawn by M. Sobiech, W. Ochotny)

Fig. 1; 2016a, 50). In both cases, the expansionary policy of the Piasts seeking to subordinate the region of Old Prussia was not without significance for the development of the road network. There are indica-

tions, however, that the route through the Dobrzyń Land was actively used only in a later period. In view of the significant population of the Dobrzyń Land associated mainly with the escape of groups of people

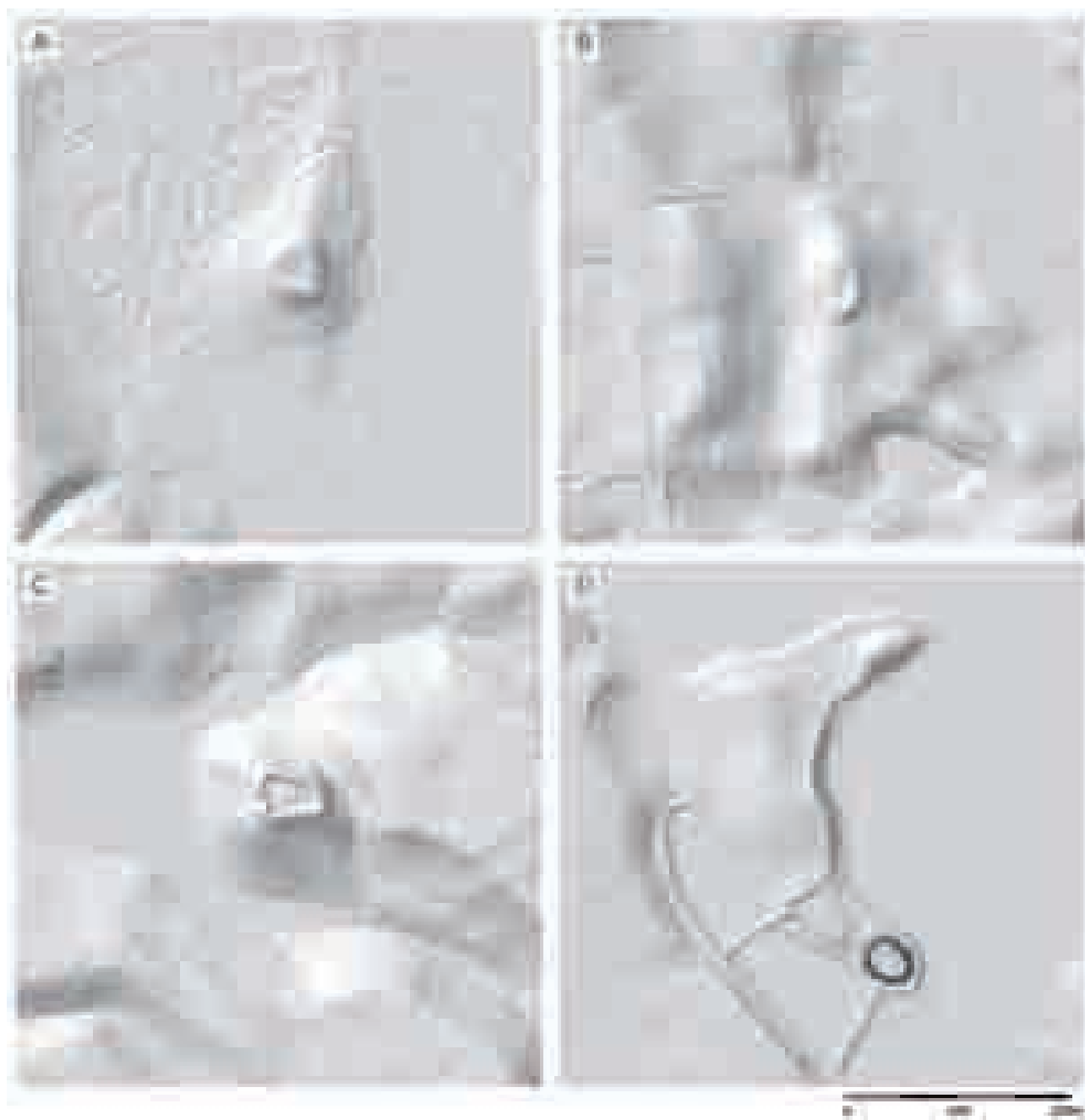


Fig. 23. LIDAR images of strongholds located in the north-eastern part of the Dobrzyń region, potentially synchronized with the site in Niedźwiedź/Steklin: 1. Podolina, 2. Rudaw, 3. Somsioy, 4. Ostrowite (stronghold destroyed; based on measurements by K. Żurowski, Archives of IA NCU)

from Greater Poland and Kuyavia beyond the Vistula River and colonisation in the late 1030s, recorded in the chronicle of Gallus twice, it can be assumed that only then did the conditions for further development of settlement networks in this area occur. The expression of this was probably the internal consolidation of this border territory and the construction of small, but well-fortified strongholds creating a compact and fairly regular network of central places managed by

ducal officials. They were accompanied by rural settlements that were their immediate economic base. Therefore, it should be considered whether the foundations of the march system adapted from the 'Ottonian-Salian model of the state' (Gawlas 2000, 73-75) had been created here. In such a case, the strongholds in question would refer to the idea of the creation of German *burgwards* i.e. administrative and military centres erected in border areas (Tyszkiewicz 1993,

10-11). The emergence of the discussed group of strongholds located on the Pomeranian-Old Prussian-Mazovian border is difficult to unambiguously associate with a specific ruler, the more so as their chronology is based on the results of field studies conducted that have so far been of a limited extent. The basis for dating may be the technological and stylistic features of pottery discovered in the strongholds in Piotrkowo (Chudziak 1991, Fig. 51), Somsioy (Mieczkowska 1997) and Podolina (Gajda 1980), which, however, require detailed comparative studies and a significant correction of the dating proposed to date. This mainly concerns the dating of the assemblage of vessels from Piotrkowo, in the periodisation system of the Drwęca River area pottery, dated essentially to the first half of the 11th century (phase IIIb1; Chudziak 1991). The latest results of studies on pottery in this region indicate the need to rejuvenate the chronology of this group of pottery and to revise its chronological relationship with the older pottery assigned to phase IIIc (Gronowo II type). The issue of dating based on the analysis of pottery of two settlement phases of the stronghold in Somsioy (phase A – 10th/11th-11th/12th centuries and phase B – from the mid-11th to the end of the 12th century; Mieczkowska 1997) requires clarification. The correction should also be made in the dating of the pottery from the stronghold in Podolina, which was established as the 12th-beginning of the 13th century, which, however, will not be fully possible without additional excavation research on this site (Kajzer, Horonziak 1995). The chronology of the currently non-existent stronghold in Mościska-Ostrowite can only be determined based on dating of pottery material lying on the surface of the surrounding settlements (11th-12th centuries; Chudziak 1996). Taking into account the historical context, the construction of this compact group of strongholds can be attributed either to comes Mieclaw or to Kazimierz the Restorer, who probably regained these lands around 1047. The hypothesis concerning the extension of the stronghold network during the fights between Mieclaw and Kazimierz is not new, as it was formulated long ago by Tadeusz Lalik (1967, 36; see Dulnicz 1993, 58). Such suggestions were also made regarding the genesis of the stronghold in Rypin, another stronghold centre mentioned in the so-called Mogilno Falsification (Wroniszewski 2010, 107). It cannot be ruled out, however, that the establishment of a network of strongholds in this area should only be associated with the activity of Bolesław the Bold, especially in the first stage of his rule (Dulnicz 1993,

58; Lewandowska 2016, 131; Wroniszewski 2010, 107), which would correspond to the most frequently adopted concept of the founder of the monastery in Mogilno. However, there are many more possible solutions, taking into account Władysław Herman's rights to Mazovia and related potential bestowal limitations of Duke Bolesław (Łowmiański 1985, 313). The stronghold centre in question functioned during the times of Duke Zbigniew, as well as Bolesław the Wrymouth, during his battles with the Pomeranians and Old Prussians, as shown by the results of analyses of archaeological sources and dendrochronology. Whether the destruction of this centre should be associated with the reign of Kazimierz Kondradowic or whether it happened already in the 12th century – as suggested by Jan Powierski (1996, 176), combining this fact with the Old Prussian invasions – can be clarified only by future excavations. In any case, in the 14th-century written sources, Steklin appears only as a locality in the castellany of Słońsk (Guldon, Powierski 1974).

CONCLUSIONS

The results of the analysis of the list of Mazovian strongholds, which included *castrum Steclyn*, have long been an important premise in Polish historiography for inferring the stronghold organisation of the early Piast monarchy. According to the most commonly adopted interpretation, the stronghold in Steklin would play the role of a centre of administrative, economic and judicial power managed by the stronghold officials appointed by the ruler's decision. Its location within the settlement structure of the north-western part of the Dobrzyń Land would indicate the implementation in this area, colonised to a large extent only around the mid-11th century, of the concept of building a system of heavily fortified military strongholds manned by military crews. This system would be related to the strengthening of the Pomeranian-Old Prussian-Mazovian border. The strategic location of the stronghold in Niedźwiedz/Steklin, right on the land route towards Sasinia (Prussia), could also be a decisive factor in the survival of this centre into the 13th century, when it was replaced by the castellany in Kikół. Rent for the Benedictines paid from the stronghold tribute and the relatively small distance from the monastery in Mogilno, compared to other Mazovian strongholds, indicate that this centre could also play an important role in the Christianisa-

tion mission of this area. The results of archaeological research conducted to date within the settlement complex in Niedźwiedź/Steklin indirectly confirm the establishment of this centre in the period after the crisis of the Piast monarchy, as well as its basic socio-political and economic functions at that time. However, there are no direct archaeological premises to reliably connect the genesis of the *castrum Steclyn* with a specific ruler. It cannot be ruled out, however, that the genesis of the stronghold should be associated with the activity of Kazimierz the Restorer or

Bolesław the Bold, which would be consistent with the interpretation of the oldest part of the Mogilno Falsification proposed by many historians. This problem certainly requires further studies. Therefore, the statement expressed over a quarter of a century ago in the monograph on the settlement of strongholds in the Dobrzyń Land is still valid that the judgments about the stronghold in Niedźwiedź/Steklin 'should be verified during extensive open-area excavations' on this structure (Kajzer, Horonziak 1995, 55).

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