

# A Polish-German research project into a Bronze Age fortified settlement at Bruszczewo in Wielkopolska

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Excavations at Bruszczewo, Śmigiel commune, Kościan district, site 5 in Wielkopolska are the first long joint project of Polish and German archaeologists, initiated in 1995. In Early Bronze Age Bruszczewo was part of a compact settlement cluster referred to as the Kościan group of the Únětice Culture. Geomagnetic examinations enabled to delineate the general course of the fortifications. In the fortification zone the stratigraphic sequence exceeds 4 meters and is an effect of complex processes in which human interference overlapped with natural episodes. A still more complex stratigraphy is found in the peat zone. Generally speaking, there are two sets of peat layers separated by a sandy layer of lake transgression: the upper one (the Lusatian Culture) and the lower one (the Early Bronze Age). Palynological examinations as well as aerial photographs and archaeozoological analysis were carried on at the site.

KEY-WORDS: Early Bronze Age, Únětice Culture, fortified settlement in Bruszczewo, Polish-German project, wetland archaeology, palynology

A research project involving excavations at an Early Bronze Age fortified settlement at Bruszczewo, Śmigiel commune, Kościan district, site 5 in Wielkopolska (Fig. 1) is the first long joint project of Polish and German archaeologists. So far, it has brought many valuable results in terms of both actual findings and mutual understanding of researchers from both countries.

## HISTORY OF INVESTIGATIONS

Site 5 in Bruszczewo was discovered in 1943 by E. Schlicht (Czebreszuk, Müller and Silska 2004). However, it has been more widely known only since the 1960s when the first excavations were taken up there. They were directed by Z. Pieczyński of the Archaeological Museum in Poznań. During five seasons (from 1964 to 1968), he investigated mainly the summit portion of the elevation (Fig. 2), where he discovered

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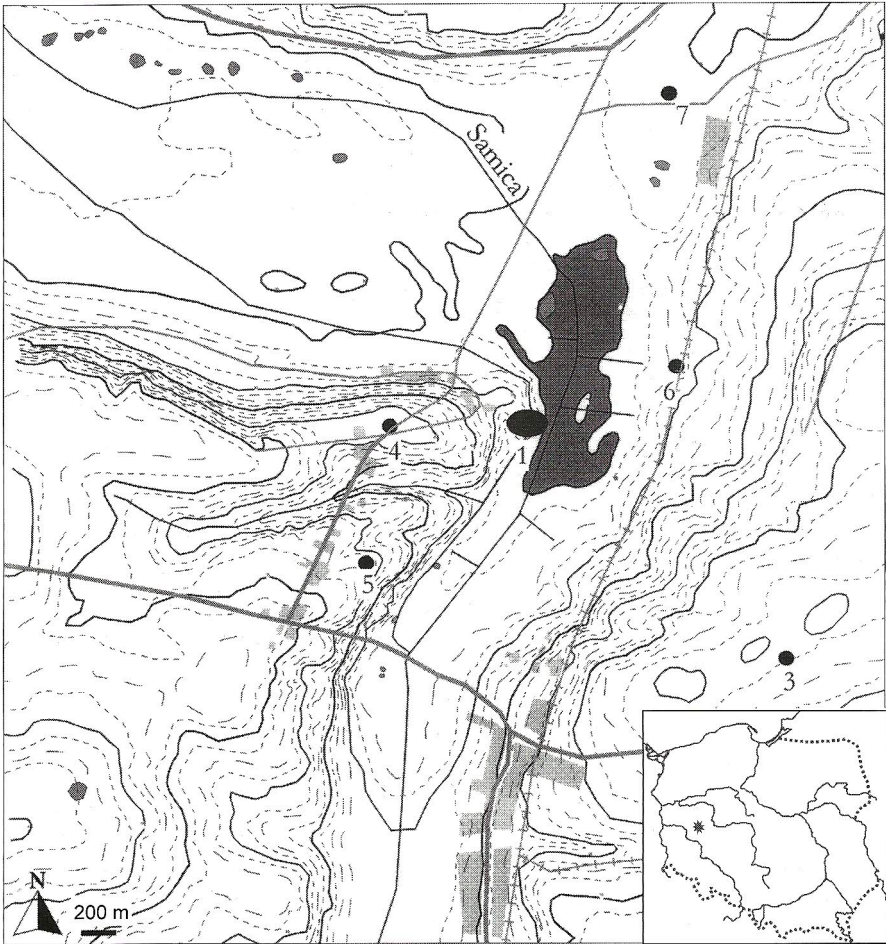


Fig. 1. The location of the Bruszczewo site on a map of Poland and on a large-scale map. The map gives the present-day range of water-logged meadows, built-up areas, roads and railway lines and the reconstructed limits of a Bronze Age lake. Site Bruszczewo 5 is designated as 1. Other numbers refer to sites from the Early Bronze Age (Czebreszuk and Müller 2004b).

the remains of an Early Bronze settlement with traces of metallurgical production in the form of a workshop. In the eastern portion of the site, Z. Pieczyński discovered some structures which he interpreted as being remains of three phases of an embankment built of earth and stones (Pieczyński 1985).

In the 1990s, in the Adam Mickiewicz University (AMU), Institute of Prehistory, it was suggested to resume work on the processing of Early Bronze materials from Bruszczewo. Hence, in 1995–97, the second stage of excavations at the site started (Fig. 2).

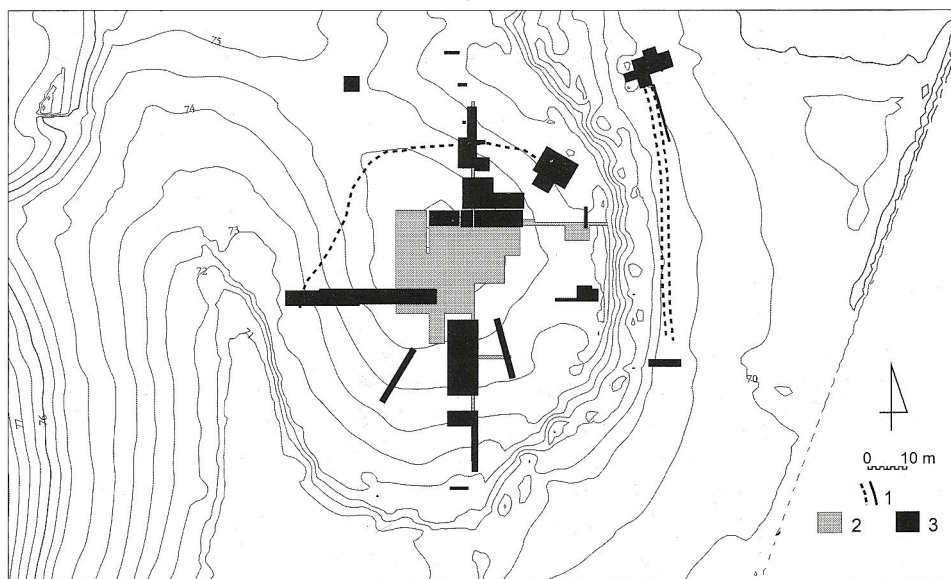


Fig. 2. The range of excavations at site 5 in Bruszczewo.

Lighter shade of colour – excavations from the 1960s, darker shade of colour – excavations from the second stage of investigations (late 20<sup>th</sup> and early 21<sup>st</sup> centuries).

Already in 1997, owing to the help of S. Kadrow, the first attempts were made to start cooperation with German researchers. The efforts were successful and resulted in a reconnaissance by S. Jahns, a palynologist from the German Archaeological Institute in Berlin, completed within the framework of the Oder Project (Czebreszuk and Kadrow 1998). S. Jahns was the first to assess the palynological potential of the site by saying that the peat bogs surrounding it were at least 5 m thick and that they preserved a Holocene sequence in full.

In 1998, by the agency of Prof. Bernhard Hänsel, a possibility emerged to conduct joint Polish-German excavations in Bruszczewo. After a few conversations with J. Czebreszuk, Prof. B. Hänsel got Dr J. Müller, who had just received his post doctoral degree (*habilitation*) at the Free University in Berlin, interested in the question. In this way, the Bruszczewo settlement became the object of investigations by a Polish-German expedition headed by both authors of the present paper. The joining of forces of both parties provided an impulse that both invigorated field work and broadened the possibilities of carrying out various specialist analyses.

In the first season of investigations, the institutional partner on the German side was the Institute of Prehistoric Archaeology of the Free University in Berlin. Since the year 2000, the major partners in the project have been the AMU Institute of Prehistory and Bamberg University. The second stage of excavations lasted through the

seasons of 1995–1997, 1999, 2000–2001, 2003–2004 and covered in total 1876.5 sq. m (Fig. 2). The work concentrated on elevation slopes and encompassed the eastern peat zone of the site for the first time.

The project has been financed so far by Bamberg, Berlin and Poznań Universities, the Polish-German Cooperation Fund in Warsaw, *Deutsche Forschungsgemeinschaft* and the Poznań Prehistoric Society. To these institutions we owe our gratitude.

#### SITE TOPOGRAPHY

Site 5 in Bruszczewo is located in the Wielkopolska Lake District (Fig. 3), in the northern portion of the Śmigiel-Lipno Plateau which is defined as an undulating morainic plateau of the Leszno phase of the Würm glaciation (Hildebrandt-Radke 2004). North of it, stretch Obra Marshes (*Łęgi Obrzańskie*) considered an element of the Warsaw–Berlin meltwater channel with which the valley of the Samica River is connected. The river flows immediately next to the site. The site itself is situated on a sediment outwash consisting of sand and gravel deposited by water derived from melting glaciers on the undulating morainic plateau. The outwash area together with the plateau mass protrude towards the interior of the Samica valley that turns northwest in this place. The outwash area, elevated 70–80 m above sea level, was surrounded by the deep and waterlogged Samica valley from the north and east. From the south, the outwash was cut off by a small erosion-denudation valley filled with organic sediments as well.

The Early Bronze settlement forms a small peninsula within the outwash (Fig. 4). Peat sediments surround the site from the southwest, south, east and northeast. Only from the northwest, the area was joined to the plateau by a narrow neck (Hildebrandt-Radke 2004). On the sandy elevation brown soils developed. The Samica valley was drained in the 19th century causing the water level to lower. At present, the valley bottom is covered by meadows. Along the eastern edge of the elevation a drainage ditch was dug in the 1930s. Its periodic deepening damaged many remains of the prehistoric settlement.

#### REGIONAL CONTEXT

The site was settled many times in the prehistoric times and in the early Middle Ages. Few traces of Neolithic settlement have been recorded there as well as those of Early (Únětice Culture) and developed (Lusatian Culture) stages of the Bronze Age. Other remains pointed to the erstwhile presence of societies from the times of Roman influences and to the activities of Early Medieval populations. The greatest number of artefacts come from the Early Bronze stage. At that time Bruszczewo was part of

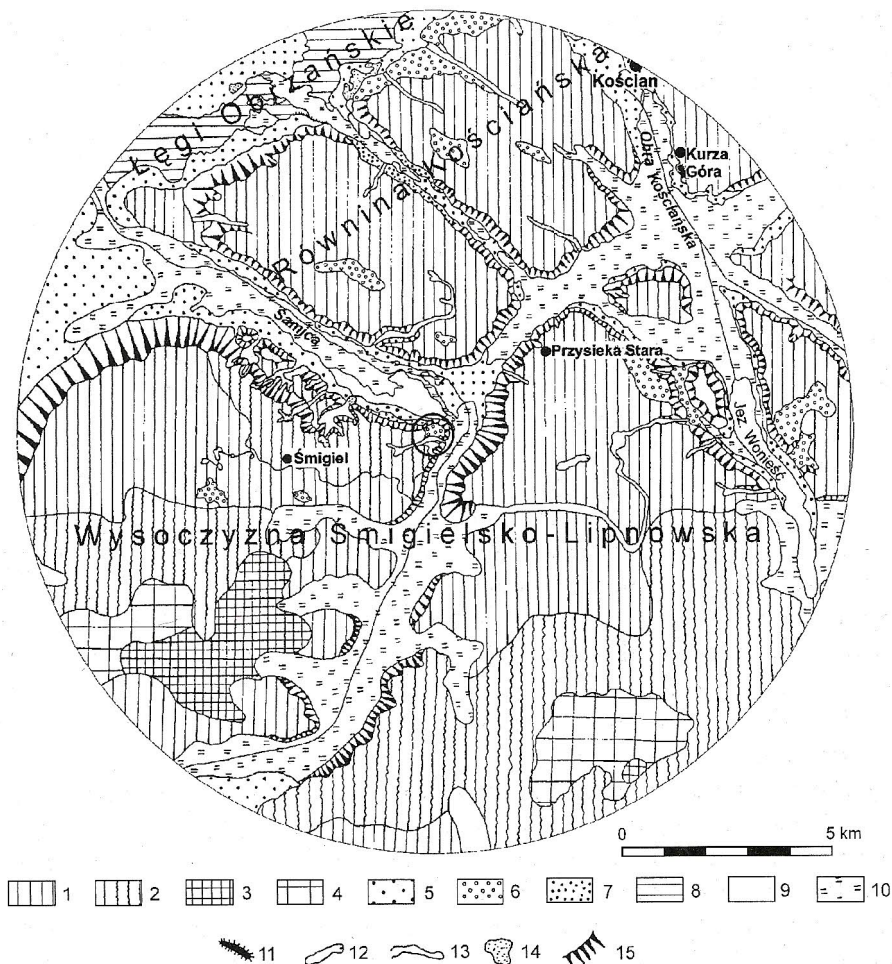


Fig. 3. Geomorphological outline of the vicinity of the Bruszczewo site (centre of figure).

Legend: 1 – flat morainic plateau; 2 – undulating morainic plateau; 3 – end moraine hills; 4 – undulating morainic plateau; 5 – meltwater channel terrace; 6 – outwash and fluvio-glacial plains; 7 – kame terraces; 8 – flood terraces; 9 – bottoms of river valleys; 10 – peat plains; 11 – eskers; 12 – no-drainage depressions; 13 – erosion-denudation valleys; 14 – dunes; 15 – long slopes (Hildebrandt-Radke 2004).

a compact settlement cluster referred to as the Kościan group of the Únětice Culture (Szydłowski 2003) made well-known by rich and spectacular finds attributed to it (Fig. 5). About 13 km northwest of Bruszczewo, there is a cemetery of princely tumuli in Łęki Małe, Kamieniec commune (recently: Czembreszuk 2001: 84–8; Knapp 2001). There is material evidence to believe that apart from Bruszczewo there were other fortified settlements in the Warta drainage. In this context, one can mention such



Fig. 4. Aerial view of the site from the east (Nowakowski and Rączkowski 2004).

features as Słopanowo or Pudliszki (recently: Kłosińska 1997). What is more, less than 20 kilometres from Bruszczewo, hoards were found at Bojanowo Stare, Śmigiel commune (Blajer 1990: 103), Granowo, Granowo commune (Blajer 1990: 111–2), Grodnica, Borek Wielkopolski commune (Blajer 1990: 112), Kokorzyn, Kościan commune (Blajer 1990: 114), Naclaw, Kościan commune (Blajer 1990: 122), Piotrkowice, Czempień commune (Blajer 1990: 125), Poniec, Poniec commune (Blajer 1990: 125–6) and Szczodrów, Kościan commune (Blajer 1990: 140). It is also believed now that the find from Przysieka Polska, Śmigiel commune, described in the relevant literature as a hoard is a grave deposit found in the immediate proximity of the Bruszczewo settlement (oral communication from P. Silska, M.A.; see also Schwenzer 2004).

#### THE COURSE OF POLISH-GERMAN EXCAVATIONS AND THEIR FIRST RESULTS

The first stage of excavations (in the 1960s) has been recently summarized by P. Silska (Silska 2001). The excavations centred then on the summit portion of the elevation, where the remains of Early Bronze settlement concentrated. In total, the area of 1265 sq. m was investigated in which 110 features and 80 postholes were

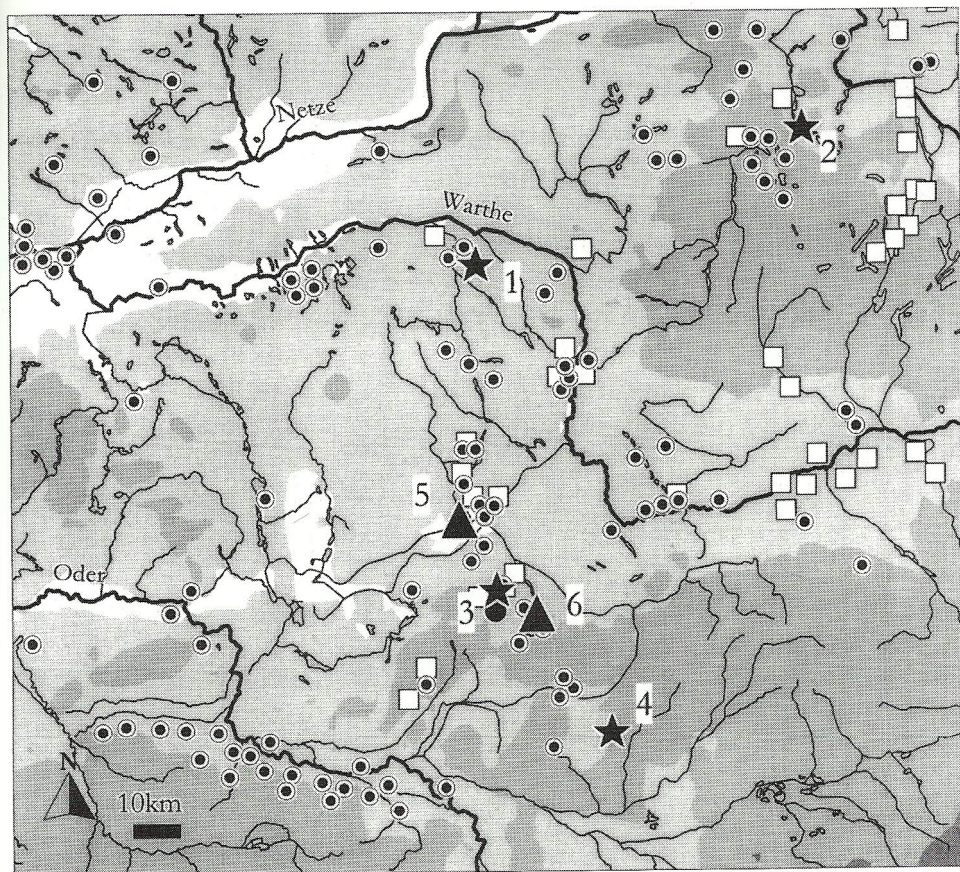


Fig. 5. Fortified settlements and other Early Bronze Age sites in Wielkopolska. 1 – Słapanowo; 2 – Biskupin, site 2a; 3 – Bruszczewo, 4 – Pudliszki, 5 – Łęki Małe, 6 – Przysieka Polska. Circles – Únitice and Iwno culture sites; squares – Trzciniec sites; asterisks – certain and probable fortified settlements; triangles – special grave finds.

recorded and which yielded 30,000 potsherds and 60 complete vessels and many other goods made of other materials (Silaska 2001). Apart from Early Bronze artefacts, traces of activities by Lusatian Culture populations were recorded at the site, however, in a much smaller number. The main achievement of the first stage of investigations, apart from obtaining such a large number of Early Bronze settlement artefacts, was the discovery of fortifications (three phases of a stone-earth embankment in the eastern portion of the site) and a “metalworker’s workshop” (a smithy).

Begun in 1995, the second stage of investigations initially concentrated on attempts to verify the above-mentioned hypotheses. One excavation was placed immediately next to the eastern trench carried out by Z. Pieczyński. A stratigraphic

arrangement was discovered imitating that known from the first stage of investigations. The only significant difference was the finding of the remains of large timber objects directly underneath the stratigraphic arrangement. The objects were dated by the  $^{14}\text{C}$  method. The results: Ki-5610,  $1540 \pm 70$  BP and Ki-5609,  $1280 \pm 70$  BP (Czebreszuk and Müller 2004a) unequivocally pointed to the decline of antiquity, which was considered conclusive evidence (supported also by expert opinions of geomorphologists) to consider the presumed stone-earth embankments as erosion strata produced by intensive land cultivation in the early Middle Ages (Czebreszuk 2004).

A full confirmation was obtained for the hypothesis about the heavy presence of Early Bronze Age metallurgy at the site. For the second stage of investigations supplied a large range of bronze finds and others connected with metallurgy. In light of P. Silska's analyses, the only remaining doubt concerns the existence of the "metal-worker's workshop" as a single compact find. For it turned out that Z. Pieczyński had included in the said "workshop" metal objects (axes and daggers) and others connected with metallurgy (a stone casting mould, clay pads, clay tuyères and crucibles) found in different years and trenches (Silska 2001).

During the first three seasons (1995–1997), the investigations concentrated on the northern portion of the site, while sample excavations and a system of bore-holes were used to explore the central and eastern parts without, however, descending into the peat bogs. The work shed an entirely new light on the question of Early Bronze fortifications of the site (Czebreszuk 2004; Ducke and Müller 2004). A moat was discovered (about 20 m wide) separating the settlement centre from the rest of the plateau (Fig. 6). The moat used to turn the peninsula into an artificial island. From the settlement side, the moat was reinforced by a timber-earth structure, the foundations of which were built of two parallel rows of palisades about 2 m apart (Fig. 7). On the moat bottom, very well preserved organic source materials, permanently kept wet, were recorded.

The making of the excavations at Bruszczewo an international research project as of the 1999 season has intensified the investigations. The exploration of the eastern peat portion of the site was begun bringing incredibly momentous results in the form of a rich corpus of organic information. It is worth mentioning here that excavating in the peat bogs involved huge methodical problems (waterlogged strata environment, necessity of using complex equipment to remove water and explore the strata, *cf.* Fig. 8). The investigations were extended to cover the western and southern parts of the settlement as well. In the former, researchers encountered a continuation of the timber-earth structures known from the northern edge of the settlement while excavations on the southern slope revealed many new features (pits, *cf.*). This contradicts Z. Pieczyński's claim that prehistoric features concentrated only on the summit portion of the elevation (Pieczyński 1985).

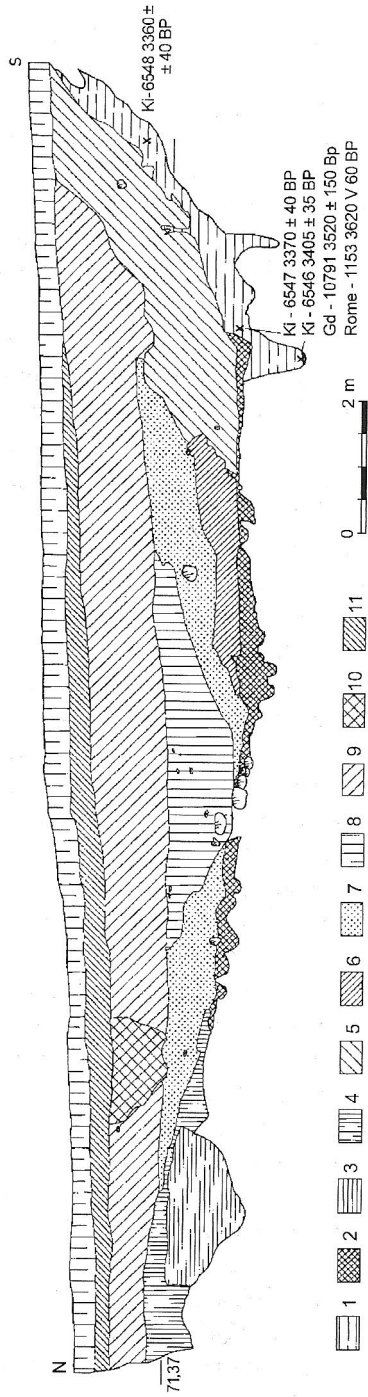


Fig. 6. Moat profile in the northern portion of the site. 1 – layer related to the construction of fortifications; 2 – moat use (dredging) layer; 3–12 – different backfill [?] layers (Czebreszuk *et al.* 2004).



Fig. 7. A photograph of the southern (adjacent to the settlement interior) fragment of the moat profile showing remains of both palisades and a bottom fragment of one palisade. Black marks are traces of oak piles (Müller and Czebreszuk 2003).



Fig. 8. Investigations of the peat zone. Photo: J. Müller.



Fig. 9. Geomagnetic measurements at the site. Photo: J. Müller.

Geomagnetic examinations (Fig. 9), carried out in the 2003 season, turned out to be most fruitful (Ducke and Müller 2004). A detailed map could be drawn showing any and all anthropogenic traces at the site (Fig. 10). Their interpretation, in conjunction with the information obtained earlier from bore-holes and excavations, made it possible to delineate the general course of the fortifications (Fig. 11). We now tend to believe that the Bruszczewo of the Early Bronze Age was circular in plan and about 100 m in diameter. From the side of the river, it was reinforced by an additional timber and timber-earth structure running directly north-south. The general outline of the fortified settlement has been confirmed by analyzing aerial photographs of the site (Figs 4 and 12; Nowakowski and Rączkowski 2004).

At the Bruszczewo site three stratigraphic zones can be distinguished: a central zone, a fortified zone and a peat zone.

The simplest situation was recorded in the first one. This is a result of the extent to which the external portion of the strata had been damaged by a long agricultural

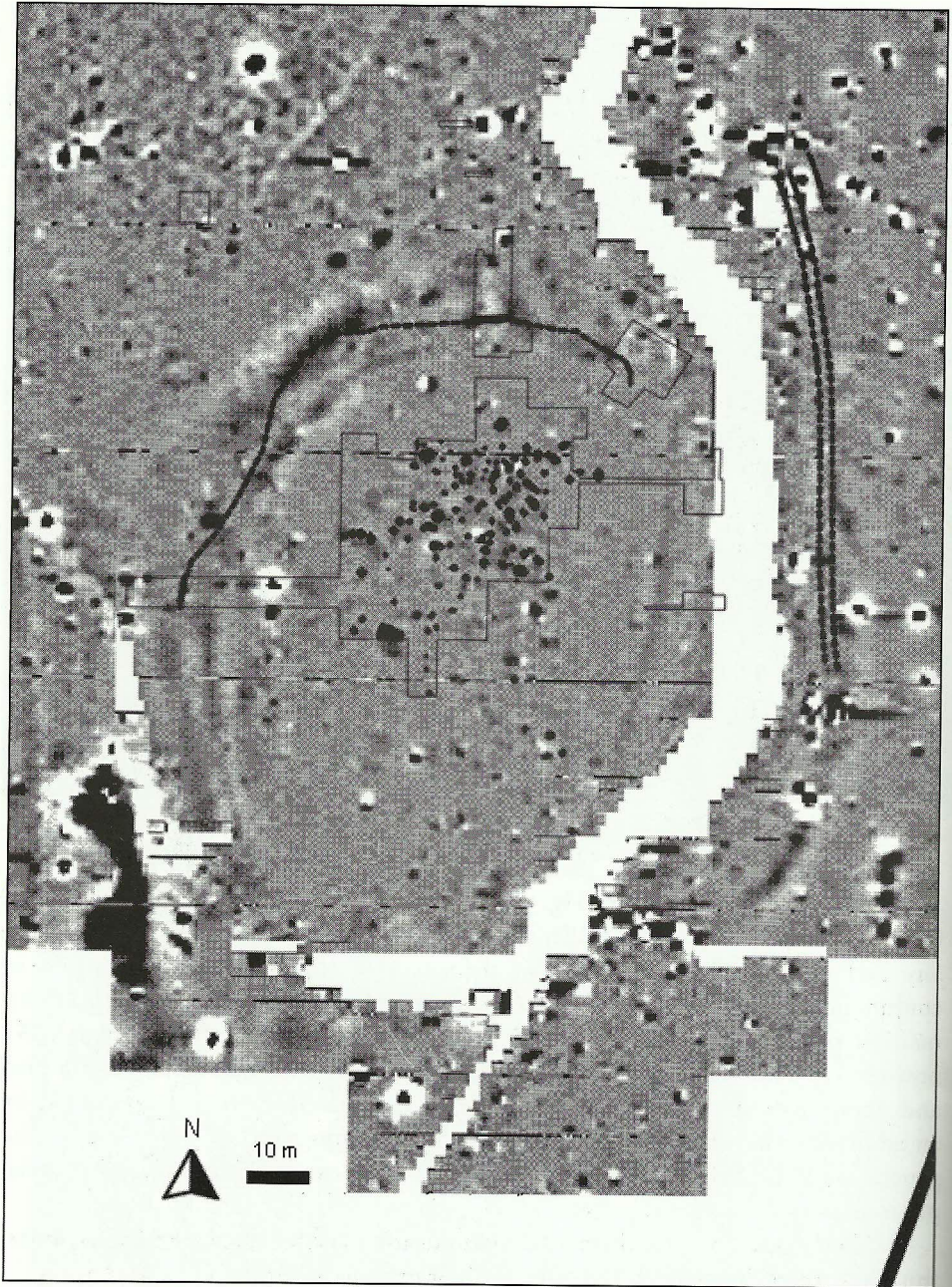


Fig. 10. A geomagnetic map of the Bruszczewo site (Ducke and Müller 2004).

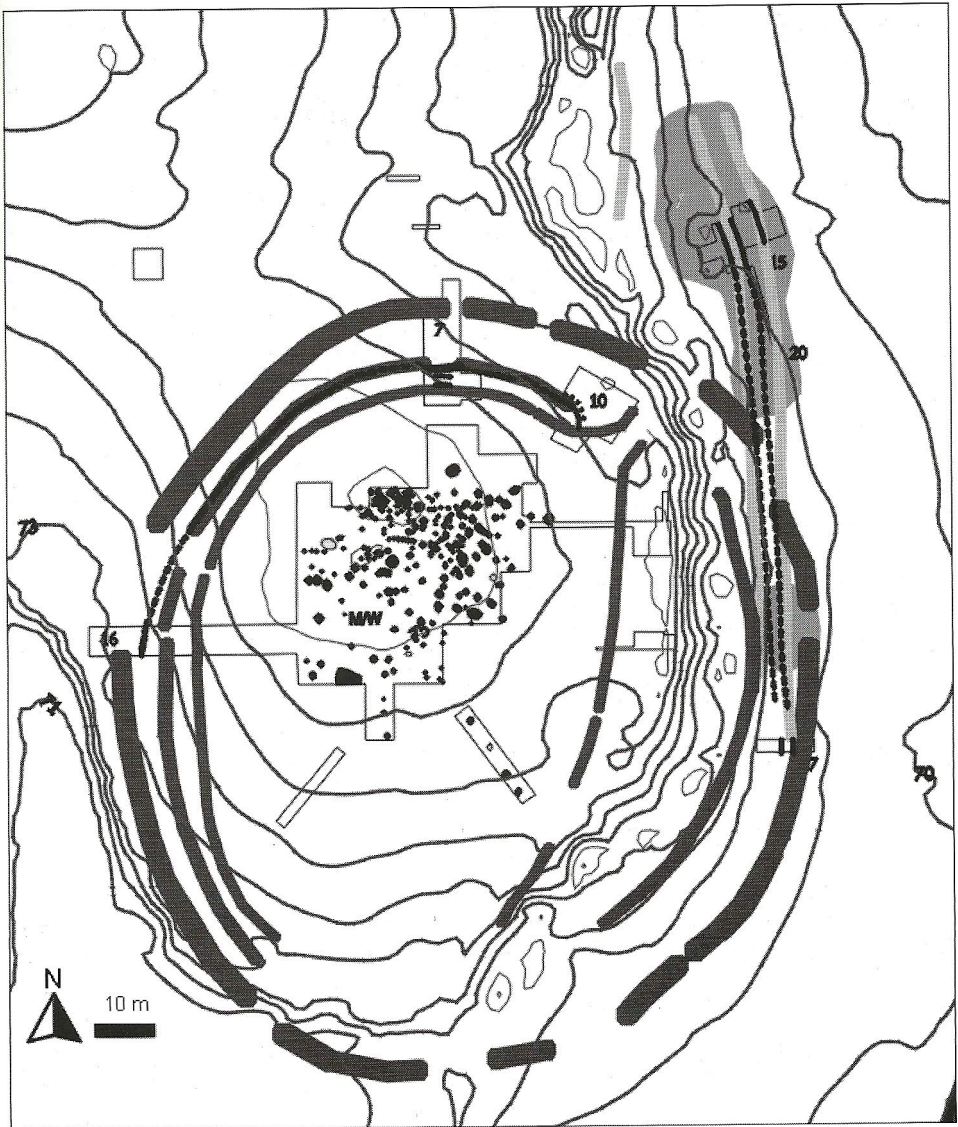


Fig. II. Interpretation of geomagnetic data in Bruszczewo (Ducke and Müller 2004).

use of the site surface. Immediately underneath the ploughsoil, undisturbed soil (yellow sand) is found against which black or grey prehistoric features stand out.

The situation in the fortification zone is much more complex. The stratigraphic sequence exceeds there 4 meters and is an effect of complex processes in which human

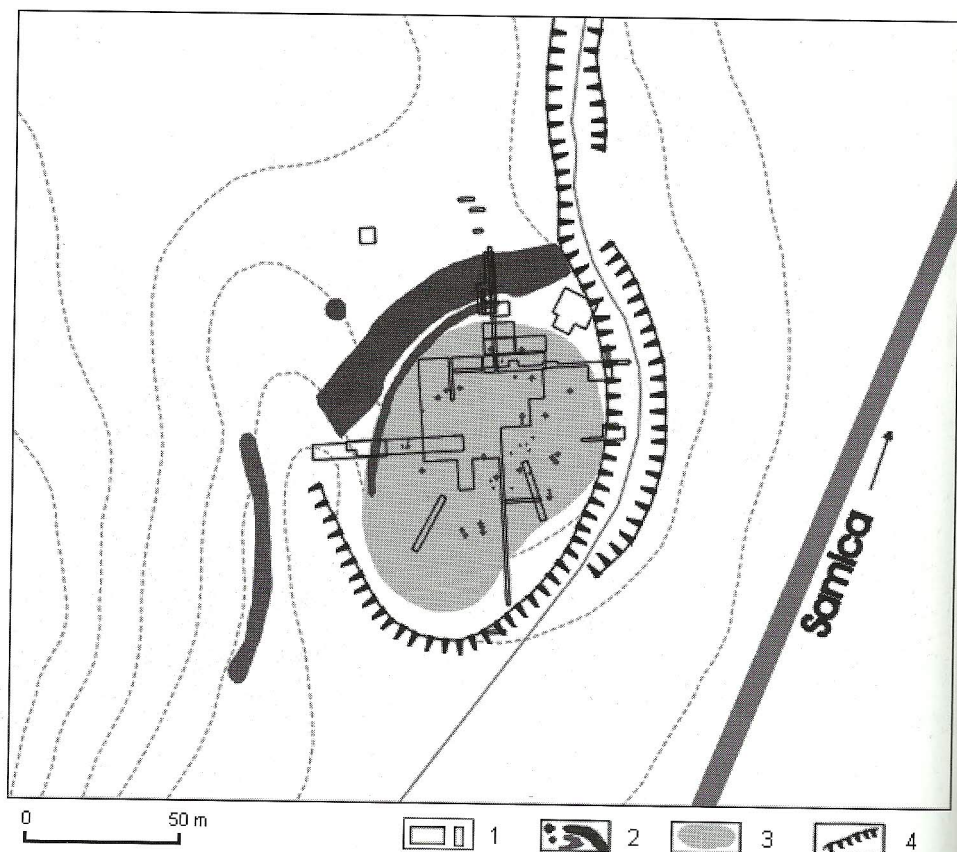


Fig. 12. Archaeological interpretation of aerial photographs of the site. 1 – location of excavations; 2 – vegetation marks testifying to the probable presence of archaeological features; 3 – interior of settlement standing out as a vegetation mark; 4 – terrain fault (Nowakowski and Rączkowski 2004).

interference overlapped with natural episodes (Fig. 6). Three rough stages can be distinguished in it: the excavation (or possibly deepening of a natural depression) of the moat and the construction of the timber-earth fortifications, the use, maintenance and repair of the defensive establishment and, finally, a period following its destruction. The first stage comprises the lowest strata, specifically the moat bottom bearing traces of deepening with wooden “shovels” and the original foundation of the palisades (they were not driven into the ground; instead, a deep ditch had been dug first and next piles were placed close to one another in it and stabilized with small pieces of wood and stones). This was an entirely anthropogenic episode. In the second stage – the use and repairs of the whole establishment – human activity was over-



Fig. 13. A profile of an excavation in the peat zone showing a sand layer dividing the sequence into an upper part (Late Bronze) and a lower one (Early Bronze) (Müller 2004).

lapped with another factor: the natural processes of earth-flow from the higher parts of the settlement and the sedimentation of layers deposited by water (moat bottom). The third stage – after the destruction of the establishment – followed, in principle, a natural course, which can be seen in uninterrupted, approximately horizontal strata.

A still more complex stratigraphy is found in the peat zone (Müller 2004). Generally speaking, there are two sets of peat layers separated by a sandy layer of lake transgression. The upper one is associated with the Lusatian Culture, while the lower one is related to the Early Bronze Age (Fig. 13). The older of them consisted of levels built up prior to the construction of the fortifications, contemporaneous with their construction, use and maintenance and – finally – following the destruction of the timber structures. The structures made up two parallel wattle walls (fascines) approx. 2 metres apart and a wall of double piles driven into the ground with horizontal rods stuck between the piles (on the lake side); see Fig. 14.

All the stratigraphic levels have yielded many movable finds. Those found in the lowest levels – the moat bottom and peat bogs – are the richest as they include also

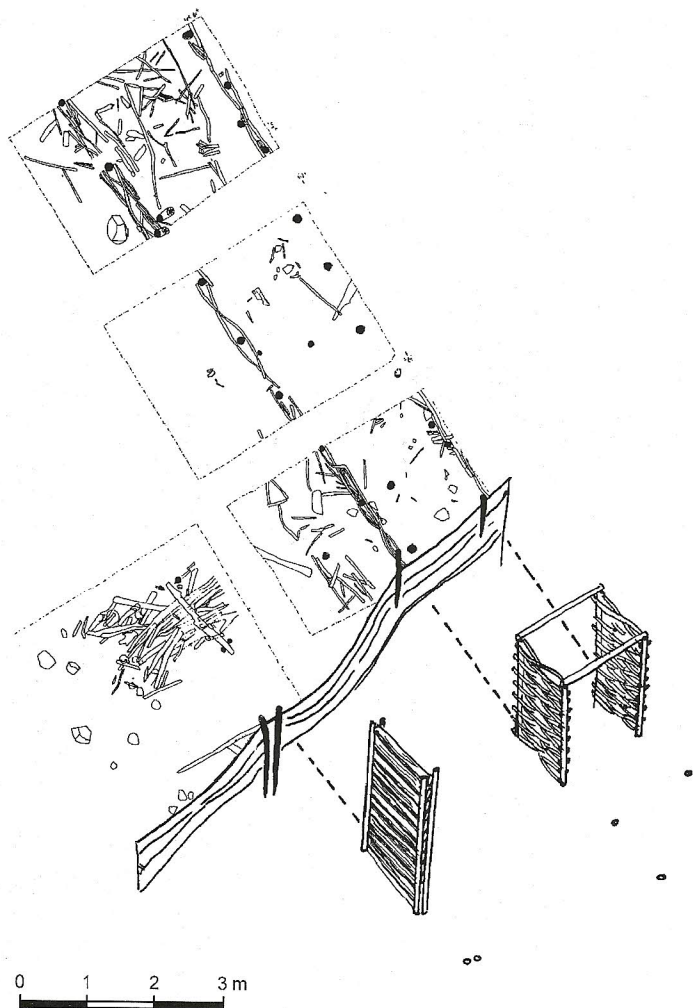


Fig. 14. A drawing of the original course of the palisades in the eastern portion of the site (Müller 2004).

objects made of organic materials, mainly wood. Numerous pieces of worked wood have been collected. The traces they bear unequivocally show that they were worked with metal (bronze) tools (see Fig. 15). Among special finds are the remains of a birch-bark container (Fig. 16) and a creel (Fig. 17). In addition, a large set of antler and bone tools was collected and a collection of post-consumption animal bones, including thousands of items, was accumulated. In the peat zone, some order was brought for the first time to the stratigraphy of pottery by distinguishing eight



Fig. 15. A photograph of sharpened pile ends from the eastern portion of the site (Müller 2004).



Fig. 16. The bottom of a birch-bark container with clear traces of sewing along its edges from the western portion of the site (Czebreszuk 2004).



Fig. 17. A creel from the eastern portion of the site (Müller 2004).

horizons in all (Kneisel and Schilz 2004). The first four of them encompass layers from the Early Bronze Age (Fig. 18), while the others are associated with the Lusatian Culture (Fig. 19). This is the first proposal of this kind in the history of research into Únětice Culture settlements.



Fig. 18. A stratigraphic sequence of Early Bronze Age ceramics from the eastern portion of the site (Kneisel and Schilz 2004).

Equally momentous results have been brought by palynological examinations (Hass and Wahlmüller 2004). We have learned from them that biogenic layers in Bruszczewo are even thicker (7 m) and more interesting (high condensation of perfectly preserved pollen) than it followed from the optimistic initial opinion of S. Jahns. The two pollen profiles which are currently worked on – from the eastern portion of the site and from the bottom of the Samica River – may turn to be models for the whole of Wielkopolska.

A great challenge to the team investigating the Bruszczewo settlement is the question of chronology (Czebreszuk and Müller 2004a). From the data gathered so far, namely forty-four  $^{14}\text{C}$  dates and the first results of dendrochronological studies (in the form of the “floating” dendrochronological curve), only general conclusions can be drawn. Early Bronze settlement was initiated by the stage of open settlement. The first fortifications, taking the shape of a circular palisade with a moat on the northern side, were built in the 20<sup>th</sup> century BC. Next, in the course of the 19<sup>th</sup> century BC, supplementary wattle reinforcements were added in the eastern peat portion of the

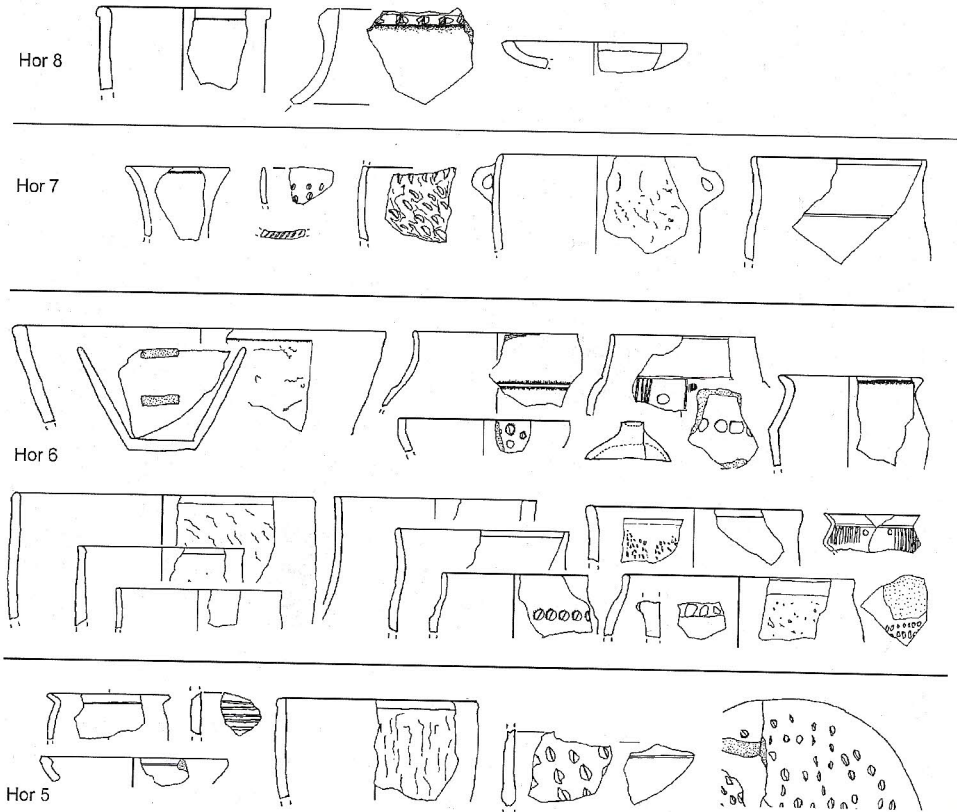


Fig. 19. A stratigraphic sequence of Late Bronze Age ceramics from the eastern portion of the site (Kneisel and Schilz 2004).

site. In this form, the settlement continued at least until the 17<sup>th</sup> century BC. As late as the the 16<sup>th</sup> century BC, “Early-Bronze” settlement prevailed in Bruszczewo.

Making the calendar of events taking place at the Bruszczewo settlement during the Bronze Age more specific is a major task for future research. A dendrochronological analysis of numerous piles from the fortifications should help carry out the task.

#### RESEARCH TEAM

On the Polish-German Bruszczewo Project collaborate many people from both countries. Among them are people working at the excavations and others forming the most important interdisciplinary body that process the results.



Fig. 20. A group picture of the expedition team of the 2004 season (Photo: J.N. Haas).

An important aspect of investigations at Bruszczewo is the fact that researchers and students from Poland and Germany make up a single joint excavation expedition (Fig. 20). The expedition is a trailblazer as it is the first project of this type in the history of archaeology in both countries. Luckily, it is not the only one anymore since other similar projects have been started elsewhere (*e.g.*, a joint research project into the para-Neolithic site in Dąbki, Darłowo commune, taken up by researchers from Poznań and Greifswald). Including the 2004 season, the excavations at Bruszczewo were participated by 44 students from German (Bamberg, Berlin, Bochum), Polish (Poznań) and English (Durham) universities. A majority of them took part in more than one season and three of them got so involved in our project that they wrote a Master's thesis on it. These are: A. Romańska (2000), P. Silska (2001) and M. Szydłowski (2003). In addition, the research team consisted of 18 archaeologists and other specialists. The excavations were directed by B. Ducke (Berlin), S. Kadrow (Kraków), J. Kneisel (Bamberg), A. Matuszewska (Poznań), A. Romańska (Poznań), Ch. Schilz (Bamberg), P. Silska (Poznań) and M. Szydłowski (Poznań).

The research team, apart from the archaeologists mentioned earlier, has been made of J. Budziszewski (Warszawa, flint objects), T. Goslar (Poznań, <sup>14</sup>C dating), J.-N. Haas (Innsbruck, palynology, see also Hass and Wahlmüller 2004), K.-U. Heussner (Berlin,

dendrochronology), I. Hildebrandt-Radke (Poznań, geomorphology, see also Hildebrandt-Radke 2004), P. Honig (Bamberg, stone artifacts, see also Honig 2004), M. Ignaczak (Poznań, Lusatian Culture settlement), S. Karg (Copenhagen, macro-remains, see also Karg *at al.* 2004), M. Krąpiec (Kraków, dendrochronology), A. Krzyszowski (Poznań, flint objects), D. Makowiecki (Poznań, archaeozoology, see also Makowiecki 2004), A. Marciniak (Poznań, animal bone taphonomy), J. Piontek (Poznań, anthropology), W. Rączkowski (Poznań, aerial photography analysis, Nowakowski and Rączkowski 2004), K. Rassmann (Frankfurt, palaeometallurgy, see also Rassmann 2004), M. Szmyt (Poznań, Neolithic settlement) and B. Weninger (Cologne,  $^{14}\text{C}$  dating). Being aware of the need to exchange information among so numerous a research team, members of the team organized the first “Bruszczevo Seminar” in the 2004 excavation season. The Seminar was devoted to the presentation of the current state of research into selected questions. It is our intention to hold such meetings from time to time.

We also collaborate with other institutions, in particular with the Poznań Prehistoric Society, Archaeological Museum in Poznań, Wielkopolska Historical Monument Preservation Office, Labour Office in Kościan and the local authorities in Śmigiel and Kościan.

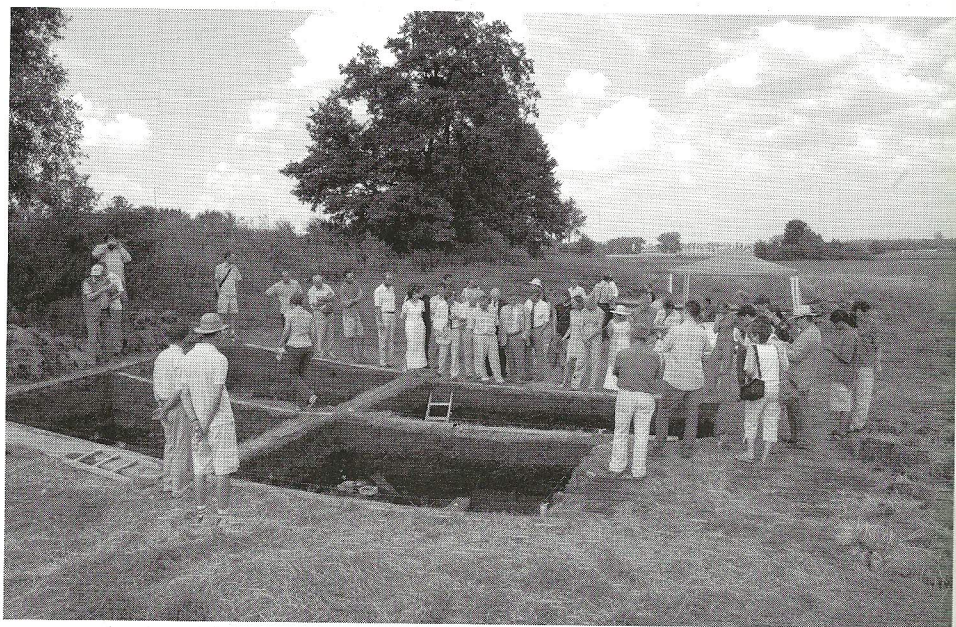


Fig. 21. A visit to the excavation by participants of a popular-science symposium. August 2004.

## DISSEMINATION OF RESEARCH RESULTS

As it has been already stressed, investigations at Bruszczewo continue and it is hard to predict now when they are going to be over. It is our ongoing desire to show the general public the results obtained so far in the form of lectures and popular publications. We also take effort to mention Bruszczewo at archaeological symposia or in academic journals.

Our excavations have received some media coverage by both high circulation regional and national press as well as by the electronic media.

In 2003–2004, on four occasions, the results of our research were presented at public lectures in Śmigiel. Recently, in August 2004, with the help of Śmigiel's authorities, a popular-science symposium was organized that included visits to the excavations (Fig. 21). In the same year, thanks to the efforts of the Mayor of Śmigiel, a book by M. Szydłowski was published popularizing the prehistory of Bruszczewo and the vicinity (Szydłowski 2004).

Bruszczewo was presented at symposia and in guest lectures at several universities in Poland and Germany (Bamberg, Berlin, Hamburg, Kraków, Poznań and Toruń). The first short contributions in specialist journals, in both Poland (Ducke 2001) and Germany (Czebreszuk and Kadrow 1998; Czebreszuk and Müller 2000, 2003; Müller and Czebreszuk 2003), have already appeared commenting on our investigations. Of the greatest importance, however, is the monograph of Bruszczewo, intended as a multivolume publication, of which the first volume was published in 2004 (Czebreszuk and Müller eds 2004). It put together contributions by eighteen authors focusing on the history of investigations, the information potential of the site and the first results. This is a bilingual edition with parallel texts in Polish and German on each page.

## CONCLUSIONS

In many respects the Polish-German research project in Bruszczewo is precursory. The most significant is its undeniable contribution to learning. The Bruszczewo site is an exceptional feature dating to the Early Bronze Age: a stable settlement in the form of a large defensive establishment with remains of intensive bronze metallurgy. When we add to this, the unique state of preservation of organic remains in environments with a constant and high moisture content, we obtain a special point on the map of prehistoric Europe; one that can be compared only with few sites situated in the Alpine region. The point is a peculiar bench-mark for taking up questions of different kinds. It can serve as a basis for studying relationships between man and his environment, the regional peculiarity of Early Bronze Age societies in

Wielkopolska as well as the issue of cultural affinities on the European scale. Bruszcze-wo, owing to excellent preservation of timber resources bearing stratigraphic relationships to rich archaeological deposits, provides us with a unique possibility of plotting a local dendrochronological curve, at least for the Bronze Age.

Our project has become, in particular owing to the German side, a testing ground for new research methods (for instance, the geomagnetic method). Also, all the stages of the excavation process have been digitally stored.

A formidable challenge for us was posed by the organizational and methodical aspects of the excavations at Bruszcze-wo. As it has been already mentioned, this is the first Polish-German archaeological expedition lasting several years. To organize and run it, we had to speak the same language on various issues. Indeed, it was necessary to decide on a single language of everyday communication. English was chosen with some Polish and German words stuck in it like raisins in a cake. The latter referred to specific excavation tools or exploration activities. As a result a peculiar "Bruszcze-wo" language developed. Another hurdle concerned the necessity to combine the two methodological traditions that by no means involved only the contents of artefact ID cards or other excavation prints. In particular, the investigations of peat layers were a completely new experience for the Polish side. And last but not least: settling such a mundane issue as the order of the excavation day did not come easily.

The Bruszcze-wo project constantly teaches us how to be partners; specifically how to strike a balance between academic integrity and the availability of funds for both sides.

So far, already for five years, we have successfully overcome all these difficulties. Summing up, one could metaphorically say that it was our intention from the very beginning to make the Bruszcze-wo joint project a source of many academic papers and deep friendships.

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