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## SURVEY OF INVESTIGATIONS OF THE STONE AND EARLY BRONZE AGE IN POLAND IN 1967

## Palaeolithic and Mesolithic

In 1967 field work was carried out on about 20 sites, mostly from the End-Palaeolithic and the Mesolithic. The excavation of these sites was conducted with the greatest vigour, but important results were obtained from the study of older sites as well. The cave Raj at Zagórsko, distr. Kielce (investigated by J. K. Kozłowski, Uniwersytet Jagielloński, Kraków), has revealed a middle palaeolithic layer with Mousterian flint artifacts, including leaf-shaped points. In the Mamutowa (Mammoth) cave at Wierzchowie, distr. Kraków (S. Kowalski, Muzeum Archeologiczne, Kraków), the bifacially worked flint points of the Jerzmanowice type were for the first time recorded in upper palaeolithic layers. This confirms the supposition that in Poland these forms do not belong to the Szeletian. Further excavation was carried out of the site at Wójcice, distr. Grodków (B. Ginter, Uniwersytet Jagielloński, Kraków). The site is assignable to an interesting, though not yet well known east Gravettian culture, represented by a number of tools, mostly burins, scrapers and Gravette points.

Important results were obtained from the study of an end-palaeolithic site at Calowanie, distr. Otwock, in Masovia (R. Schild, Instytut Historii Kultury Materialnej Polskiej Akademii Nauk, Warszawa). The stratigraphical position of the site, which was investigated for a number of years, was fully assessed, and seven layers with flint artifacts, ranging from the Late Palaeolithic (layer I) to the Mesolithic, were distinguished. The Usselo soil in layer III has yielded an assemblage of flint artifacts of an uknown industry. As a result of these studies, the End-Palaeolithic period, particularly the Masovian cycle, can be regarded as much later. Important excavation was continued at Gójść, distr. Pajęczno (B. Ginter, Uniwersytet Jagielloński, Kraków), on a site situated in the flint "basin" in the northern part of the Cracow Upland. The site has yielded large series, each comprising tens of thousands of flint artifacts of the Masovian type. The assemblages occurred on habitation and factory sites.

The investigations in the province of Rzeszów promise to be of great interest. Until recently this area has been a blank spot on maps of the Palaeolithic and the Mesolithic. However it is so obviously rich in sites from these periods that the excavations promise to be fruitful. For instance, the investigation at **Gwoździec**, distr. Nisko (A. Talar, Muzeum Okręgowe, Rzeszów), has yielded a large number of flint artifacts, which so far represent the biggest assemblage of the so-called Janisławice culture in Poland.

## Neolithic and Early Bronze Age

Over 20 sites distributed all over Poland, particularly in Little Poland, Silesia and Kuyavia, were investigated. Neolithic and Early Bronze Age materials were revealed on several other sites as well, when features from other periods were explored. The results, arranged in chronological order, are as follows:

Olszanica, distr. Kraków (S. Milisauskas, J. Machnik, Instytut Historii Kultury Materialnej Polskiej Akademii Nauk, Museum of Antropology, Michigan University). A large habitation site of the Danubian I culture was excavated. As a result, traces of big post houses of this culture were for the first time revealed in Poland. The houses are similar to those at Bylany in Czechoslovakia. In addition to numerous potsherds, mostly with note-head ornament, a large number of flint and obsidian artifacts and shoelast celts were discovered. First radiocarbon dates were also obtained. Post houses of the Danubian I culture were also disclosed at Komarnice and Fredropol, distr. Przemyśl (T. Aksamit, Muzeum Okręgowe, Rzeszów). On the other hand, the site at Tomice, distr. Dzierżoniów, in Silesia, revealed a post house of the Stroke Ornamented Pottery culture (B. Miśkiewicz and J. Romanow, Muzeum Archeologiczne, Wrocław, and Zakład Antropologii Polskiej Akademii Nauk, Wrocław). In addition, the site has yielded numerous domestic and dwelling pits.

A rare discovery was made at **Michałowice**, distr. Kraków (S. Milisauskas, J. Kruk, Instytut Historii Kultury Materialnej, Polskiej Akademii Nauk and Museum of Antropology Michigan University), where a Danubian I burial furnished with flint blades came to light on a settlement of this culture.

Detailed examinations were carried out in the saliferous sub-Carpathian areas near Wieliczka, distr. Kraków (A. Jodłowski, Muzeum Żup Krakowskich, Wieliczka). As a result, a large concentration of early neolithic sites, mostly of the Lengyel culture, was recorded. The discoveries at Barycz river (distr. Kraków), are particulary important (M. Godłowska, Muzeum Żup Krakowskich, Wieliczka). Apart from a Lengyel house, they included a unique feature connected with salt-working and consisting of a number of grooves leading to a small rectangular reservoir.

The investigations of the Kuyavian long barrows were continued. New details of their construction were obtained at Wietrzychowice, distr. Koło (K. Jażdżewski, Muzeum Archeologiczne i Etnograficzne, Łódź). At Sarnowo, distr. Włocławek (L. Gabałówna, Muzeum Archeologiczne i Etnograficzne, Łódź), traces regarded as ploughmarks came to light under a barrow of the Wiórek phase. These are the first plough-marks in Poland assignable to the Neolithic period. The investigations included moreover, a settlement of the Funnel Beaker culture, phase AB after Becker, where the use of copper was attested, and a flat cemetery of this culture. In Little Poland, systematic investigations of a large habitation site of the Funnel Beaker culture, the southern group, were commenced at Niedźwiedź, distr. Miechów (B. Burchard, Instytut Historii Kultury Materialnej Polskiej Akademii Nauk, Kraków). The site, which occupied a naturally defensive position, revealed traces of post houses and copper objects. Abundant pottery betrays distinct influences of the late Lengyel culture.

After a long break, large-scale investigations were resumed of the flint mine at Krzemionki Opatowskie, distr. Opatów the biggest neolithic mine in Europe (T. Zurowski, B. Balcer, Ministerstwo Kultury i Sztuki, Warszawa). Detailed geodesic measurements were made, the layout and structure of particular elements studied, and consevation works carried out. Archeological reconnaissance was also carried, out on an open working at Swieciechów-Lasek, distr. Kraśnik. The data obtained concern the method of working and the depth of the flint deposits.

The exploration of a Globular Amphora settlement, one of the few permanent settlement of this culture in Poland, were continued at Siciny, distr. Góra Śląska (W. Wojciechowski, Uniwersytet, Wrocław). In addition to further traces of post houses, the site has revealed remains of occupation of the Brześć Kujawski group with the elements of the Jordanów group. An interesting barrow of the Globular Amphora culture was explored at Niedary, distr. Trzebnica, in Silesia (H. Cehak-Hołubowiczowa, Uniwersytet, Wrocław). The barrow had two concentric stone circles, one surrounding the mound and the other the grave chamber.

Investigations of a habitation site of the Radial Decorated Pottery culture were conducted at **Cheim**, distr. Bochnia (M. Cabalska, Uniwersytet Jagielloński, Kraków). The settlement, which occupied a naturally protected position, yielded pottery showing association with materials from Budakalasz in Hungary. A settlement of the same culture was further excavated at **Brzezie**, distr. Bochnia (M. Godłowska, Muzeum Archeologiczne, Kraków). In addition to pits of the late phase of the Radial Decorated Pottery culture, the site revealed — as in former seasons — a feature with pottery assignable to an interesting, recently distinguished Brzezie-Iwanowice group which shows links with the Slovakian Kosihý-Čaka culture. This group is datable to the transition period from the Neolithic to the Bronze Age. Similar materials were disclosed at **Iwanowice**, distr. Miechów (A. and J. Machnik, Instytut Historii Kultury Materialnej Polskiej Akademii Nauk, Kraków, S. Milisauskas, Museum of Antropology Michigan University), where systematic excavations were begun on a cemetery and settlement of the Brzezie-Iwanowice group. Moreover, workshops manufacturing flint axes were located on the habitation site.

Systematic reconnaissance was carried out in the area of Iwanowice and in the basin of the **Dlubnia** river (J. Kruk, Instytut Historii Kultury Makerialnej Polskiej Akademii Nauk, Kraków). As a result, a number of Neolithic and Early Bronze Age sites were discovered. Moreover, it has been possible to note certain regularities in the occupation of this area by various cultures from this period, and to distinguish several habitation zones.

Systematic excavation was begun in the cave Nad Musorem Starym at **Grodzisko**, distr. Olkusz (S. Kowalski, E. Rook Muzeum Archeologiczne, Kraków). The uncovered stratigraphical sequence included two habitation layers of the Radial Decorated Pottery culture.

Rescue excavations of neolithic habitation sites were continued in the neighbour-hood of **Nowa Huta** (S. Buratyński, Muzeum Archeologiczne, Kraków) and a number of new features, mostly neolithic, were recorded.

The long-term program for investigating barrows in the Little Polish Upland included excavation of a mound at **Zerniki Górne**, distr. Busko-Zdrój (A. Kempisty, Zespół Badań nad Polskim Średniowieczem, Uniwersytet i Politechnika, Warszawa). The discoveries included further pit and niche graves of the Corded Ware culture, and pit burials of the Mierzanowice and Trzciniec cultures. Special attention deserves a niche grave of the Chłopice-Veselé group, which contained two gold spirals. Two collective burials of the Trzciniec culture are also of great interest. The largest known habitation site of the Trzciniec culture was further excavated at **Złota Pińczowska**, distr. Pińczów, in Little Poland (J. Miśkiewicz, Państwowe Muzeum Archeologiczne, Warszawa), yielding domestic and dweling pits in addition to traces of an overground structure with wattle walls. At **Okalew**, distr. Wieluń, the investigations concentrated on a large cemetery of burial mounds assignable to the Łubna group of the Trzciniec culture (B. Adamek, Muzeum, Wieluń). Traces regarded as plough-marks came to light under one barrow. Near the cemetery there was a set-

tlement, attested by pottery assignable to the final phase of the Corded Ware culture. Similar pottery occurred also in barrows.

A cemetery with richly furnished graves of the late phase of the Unietice culture was investigated at Mierczyce, distr. Legnica in Silesia (B. Czerska, T. Kaletyn, Konserwator Zabytków Archeologicznych, Wrocław). Of great interest are the excavations conducted for several years at Bruszczewo, distr. Kościan, in Great Poland (Z. Pieczyński, Muzeum Archeologiczne, Poznań). The site has revealed a fortified settlement from Bronze Age II (after Kostrzewski) with an enclosure for cattle. One of the stone fireplaces, discovered in 1967, contained moulds for casting bronze bracelets. The finds, particularly pottery, betray influences of several Early Bronze Age cultures.