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The Environmental History of the Prehistoric Sárköz Region in Southern Hungary

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Lectori salutem!

The launching of a new monograph series is a matter of courage and confidence. Courage that it is worthwhile to publish new books in this digital age of ours, and confidence in readers that they will be willing to take yet newer thick volumes in their hand and use them for their academic work or read them out of pure interest in prehistoric archaeology. The host institute, the Romano-Germanic Commission (RGK) of the German Archaeological Institute, has established, edited, and published several monograph series during its long life since it was founded in 1902: suffice it here to refer to the *Römisch-Germanische Forschungen*, the *Kolloquien zur Vor- und Frühgeschichte*, the series *Die Ausgrabungen in Manching*, and to the *Limesforschungen*. So, one may rightly ask, wherefore yet another one?

During the past few years, research in the RGK has been organised around two major themes and two logistically separate work teams, which are nevertheless bound by many strands scientifically. Under the umbrella of *Forschungsfeld* 2, the research topics related to the Iron Age and the Roman provincial period, research on the Roman *limes* and on the Barbaricum, i. e. the regions not occupied by the Romans, as well as research on the Late Antique period are addressed through related overarching questions such as "border studies". *Forschungsfeld* 1, established at a later date, brings together fields of research and grand themes that had commanded scholarly interest during the first half of the 20th century and were revived during the past decade as part of the RGK research agenda. These cover the Late Mesolithic and the transition to the Neolithic, alongside themes from the Neolithic to the Bronze Age. Currently, there are several RGK and collaborative projects with various institutions and colleagues based in different countries within the framework of this research group. Similarly to the work group focusing on later prehistoric and early historic periods, the basic research questions in Neolithic and Bronze Age studies are few, but they are closely related to each of the running projects and those in plan.

While members of the Forschungsfeld 2 work team have had several options for publishing their findings in the traditional RGK monographs, the early periods could not be fitted into any of the already existing series. Hence the idea of establishing Confinia et horizontes. The title of the new series matches the major theme of Forschungsfeld 1, "Marginal zones, contact zones". The choice of one Latin and one Greek word was wholly intentional: marginal, liminal zones would be ideal settings for potential interactions between different groups initially separate from each other, which then established contacts through exchanges and trade, and later expanded the contacts to a mutual sharing and transferring of innovations and knowledge. And, as is usually the case, these contacts can be traced in the genetic make-up of the once separate population groups. Our goal is to publish cutting-edge new research: principally the projects of the RGK community, but since the time of individual research and authorship has since long passed, these publications, as a rule, will present the findings of dynamic collaboration with other institutions. The monographs will be grouped according to the various collaborative projects. Although it is not our intention to break up Confinia et horizontes into subseries, we shall quite clearly indicate if a major project is published in more than one volume that these volumes are closely related. Even more importantly, individual volumes will never be publications released

solely by the RGK, but will be equally owned by our partner institutes. This can also be seen as a symbolic gesture: these days, archaeological research generally involves the joint effort of specialists of fieldwork, environmental and non-invasive landscape research, geo- and bioarchaeology, all brainstorming together. The evaluation will then be based on data coming from each field of investigation. It needs to be repeatedly stressed that there is no difference between the two Forschungsfelder, between the different periods and phases of archaeological periodisation. Prehistory and history are equally important chapters of the human past. The ultimate goal of Confinia et horizontes is to integrate the data provided by various disciplines and interpret them jointly, in the hope that the result will contribute to a reconstruction and better understanding of the various dimensions of past societies. In other words, we truly hope that our prehistoric data will ultimately lead to history writing.

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The Danubian Sárköz: A geographic, prehistoric, and historic region in the southern Hungarian section of the Danube Valley. An introduction

Archaeological investigations involving the use of precise geographic maps, let alone of aerial photography, were impossible in Hungary for long decades in the 20th century, as these were forbidden in the Eastern European countries behind the Iron Curtain. Environmental archaeology was therefore virtually restricted to the work undertaken by geologists and botanists. Military maps with a scale smaller than 1:25 000 were classified and kept under strict control. These maps were made available to professional archaeologists exclusively for field surveys in smaller areas, for example along a stream, or for areas encompassing the territory of no more than a few villages. Aerial archaeology was unknown for the very same reasons.

One of the main concerns of archaeological research into the Neolithic of the Carpathian Basin was the creation of a firm relative chronological sequence, primarily based on ceramics, less frequently on stone tools or other artefact types. As a result of archaeological work, the typological description of the finds and the nature of the interaction between the period's cultures were largely clarified by the later 20th century.

Any modern environmental work on the Neolithic of the riverine plains can only be based on the previous work of Krisztina Kosse, Nándor Kalicz, János Makkay, Ottó Trogmayer, and Pál Raczky (Kosse 1979; Kalicz 1965; Kalicz/Makkay 1972; 1977; Makkay 1982; Trogmayer 1968; Raczky 1983; 1988). Based on this past research work, the pioneering fieldwork by Pál Sümegi and his co-authors and students means a step change, along with novel investigations on the fluctuation of groundwater over millennia by Gábor Serlegi (see these studies in the present volume with relevant literature).

Archaeological research on the Neolithic and Copper Age lagged behind in the western half of the Carpathian

Basin. This is especially valid for the Early Neolithic, i.e. the earlier 6th millennium BC. In 1990, N. Kalicz published a monograph summarising our knowledge of the Early Neolithic of Transdanubia, principally based on the evidence from field surveys and smaller excavations that indicated that the first farmers from the northern Balkans, various Starčevo communities, had crossed the Drava and had advanced as far as the hilly region near Lake Balaton. For many years, his study was an essential textbook for research on the Transdanubian Early Neolithic. Regarding the later 6th millennium BC, the first major advances were brought by the large-scale preventive projects. The investigation of extensive areas brought to light hundreds of LBK sites (BÁNFFY/OROSS 2009; MARTON/OROSS 2012). In contrast to the earlier Neolithic, the intensive presence of Lengyel cultural features was identified already in the early days of Hungarian archaeology, particularly in the south-eastern corner of Transdanubia, which was intensively studied by István Zalai-Gaál for many years (ZALAI-GAÁL 1986; 2002).

Following the transition in 1989, the methods employed in landscape archaeology began to develop rapidly and the number of specialists partaking in this work also increased. Significant advances have been made in the study of the northern frontier of the Körös culture in the Alföld (Great Hungarian Plain) through the insights gained from new sites investigated with wholly new research questions in mind, which also explored the nature of the interaction between prehistoric communities and their environment. The excavations conducted by Alasdair Whittle and his team at Ecsegfalva, Békés county, and the work by László Domboróczki must be mentioned in this respect (Whittle 2007; Domboróczki/Raczky 2010; Domboróczki et al. 2010).

The large-scale salvage excavations ahead of motorway constructions in the 1990s and especially from the

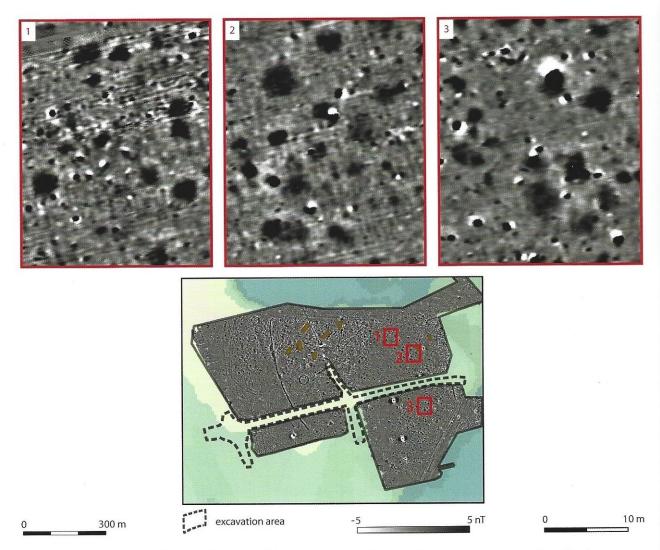


Fig. 55. Alsónyék, Hosszú dűlő (area 7). Details of the eastern prospection areas showing magnetic anomalies of settlement pits.

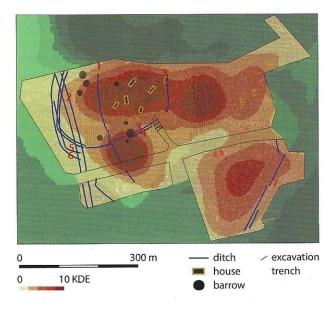


Fig. 56. Alsónyék, Hosszú dűlő (area 7). Kernel density estimation of anomalies > 3 nT and an area > 3 m².

around the late 54th to 53rd centuries BC (BÁNFFY 2004; JAKUCS ET AL. 2016), and spent some time at the place, although without establishing their own settlement with longhouses. The time-gap is similar to the Alsónyék case. Judging from the rich surface finds it seems highly probable that at Pityerdomb the later LBK people, perhaps even distantly related to the first farmers, were aware of what they had found. These short visits to places that were obviously still visible may have been part of the process of constructing collective memories. This is but one possible explanation; however, the issue of avoidance vs. overlap between distinct periods of the Alsónyék occupants implies that this question needs to be raised separately for each case.

The archaeological features of the LBK are more widely distributed than those of the Starčevo culture. The rich excavation data for the LBK houses indicate a concentration at subsite 11 (Oross et al. 2016b, 124; 125 figs 1–2). Outside this area, the distribution of LBK

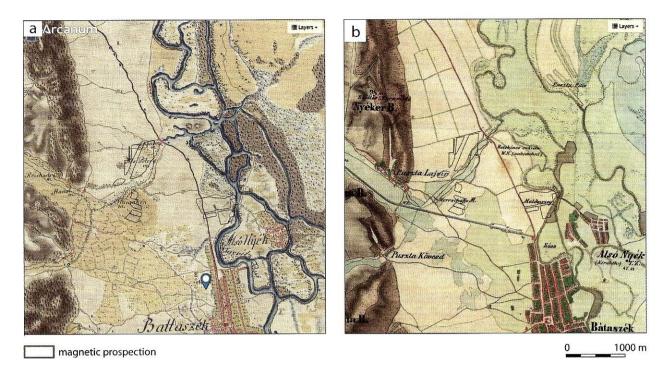


Fig. 57. Alsónyék, Alsónyék-Bátaszék. a Josephinian cadastre, 1782–1785. b Franciscan cadastre, 1806–1869. Both showing the prospection areas between the Szekszárd Hills and the floodplain.

features is less dense. Between the areas with some LBK features are large gaps without any evidence of an LBK presence. The majority of the houses are concentrated in the south (subsite 11). Taking the magnetic data into account, we are able to reconstruct the outer boundary of the LBK settlement and confirm the uneven distribution of LBK features. Very likely, the reconstructed 10 ha for the LBK settlement only marks the overall territory with LBK features, while the houses are actually distributed over a much smaller area of only 5–6 ha. If only the house areas are taken into account, the LBK settlement has a roughly similar size as the Starčevo settlement.

The next occupation phase was marked by the Sopot culture. In contrast to the relation between Starčevo and the LBK, there is no chronological gap between these occupation horizons. The overlap between the LBK and the Sopot culture is clearly evident. The Sopot culture began around 5060 cal BC and ended around 4750 cal BC (with 68% probability) (*Figs* 58–59). In contrast to the change from Starčevo to LBK, the new settlement was not established in the neighbourhood of the previous one. The two settlements lie at a distance of more than 1 km (*Fig.* 58).

The final occupation at Alsónyék started with the Lengyel culture around 4800 cal BC. The settlement features and burials of the Lengyel culture are most widely distributed over an area of some 50 ha (Fig. 58). The settlement features and burials indicate a clear overlap (cf. Fig. 49), but there are also some difference-

es. The highest density of settlement features is in the northern area at Alsónyék-Kanizsa-dűlő (areas 1 and 2). The radiocarbon dates indicate an earlier beginning for the Lengyel occupation in the south and in the north, roughly around 4800 cal BC (Osztás et al. 2016b, 223 fig. 25). Taking these results into account, the circular ditch around the Lengyel settlement was not constructed at the beginning of the Lengyel occupation, but some three or four generations later.

The uneven distribution of the archaeological features of the Lengyel culture might be interpreted either as a shift of the settlement, or as the contemporaneous existence of different house clusters. The fact that the area with the highest density of houses is the place with the shortest occupation period of less than 50 years, whereas the areas in the south-east with low building density are characterised by an occupation lasting nearly 350 years, has implications for the calculation of settlement size and the calculation of the population change. Here, the magnetic prospection possibly raises more questions than giving answers. The probable dissolution of the converse estimations will be hopefully resolved in the dissertations focusing on Lengyel settlement patterns and buildings at Alsónyék. Most probably, an intra-site population shift should also be taken into consideration, certainly at around 4730 cal BC when the northern, 10B part of the Alsónyék Lengyel settlement (cf. Fig. 38) suddenly began to grow, until the aggregation reached a previously unobserved size, with some 50 times as many people moving to