

## TELL A DIFFERENT STORY

## Preliminary Results from Investigations at the Late Neolithic Herpály Settlement Complex of Csökmő-Káposztás-domb

DANIELLE J. RIEBE<sup>1</sup> – JÁNOS DANI<sup>2</sup> – ATTILA GYUCHA<sup>3</sup> – MÁTÉ STIBRÁNYI<sup>4</sup> – GÁBOR MESTERHÁZY<sup>4</sup> – MIHÁLY PETHE<sup>4</sup> – APOSTOLOS SARRIS<sup>5</sup> – ATHANASIOS V. ARGYRIOU<sup>6</sup> – VICTORIA NUCCIO<sup>3</sup>  
Hungarian Archaeology Vol. 12. (2023) Issue 3, pp. 1–13. <https://doi.org/10.36338/ha.2023.3.1>

*Over the past 100 years, archaeological research in Southeastern Hungary has resulted in a complex picture of the prehistoric past. To a certain extent, early concepts of archaeological cultures and their defining characteristics have become reified in the literature. Research on Late Neolithic (ca. 5,000–4,500 BC) cultures on the Great Hungarian Plain is no exception. However, through new collaborative archaeological projects, traditional concepts of culture and their associated cultural characteristics are being challenged and refined. This paper presents the results generated by the Prehistoric Interactions on the Plain Project (PIPP) at the Herpály site of Csökmő-Káposztás-domb. The data collected thus far illustrates that Herpály settlements could be quite expansive and complex in terms of settlement organization, which is transforming our understanding of cultural developments in the region*

**Keywords:** Late Neolithic, Herpály Culture, tell settlement, magnetometry, excavation, Csökmő-Káposztás-domb

The Late Neolithic (ca. 5,000–4,500 BCE) on the Great Hungarian Plain has been well studied over the past one hundred years. During this time, three major archaeological cultures inhabited the region, including the Csöszhalom (located in the northern sections of the Plain), Herpály (primarily located along the Berettyó River and its tributaries), and Tisza (were restricted to the Körös Rivers and their tributaries and along the southern section the Tisza River by the end of the Late Neolithic; see Fig. 1). For all these three contemporaneous cultures, the Late Neolithic was a period when fewer sites were inhabited than in the preceding period, but larger sites, specifically tell-centered settlements, dominated the landscape. With tells easily identifiable in the flat landscape of the Great Hungarian Plain, these became the typical focus of Late Neolithic archaeological investigations. More recent research in the region, however, has noted that many tells are part of settlement complexes, with various sized external settlements found in association with them (GYUCHA et al. 2015; HOFMANN et al. 2019; RACZKY 2009; RACZKY & ANDERS 2014). Therefore, while tells can be informative about various social and cultural practices, they are only one component of a site and without contextualizing the tell with the rest of the settlement, an already fragmented past becomes more convoluted.

Following the precedent set by the Körös Regional Archaeological Project (directed by Attila Gyucha and William Parkinson) at the Tisza site of Szeghalom-Kovácsshalom (2010–2019; see GYUCHA et al. 2015; 2019; PARKINSON et al. 2018), since 2018, the Prehistoric Interactions on the Plain Project (PIPP; directed by Danielle Riebe and János Dani) has conducted intensive and extensive archaeological investigations at the Herpály site of Csökmő-Káposztás-domb. These investigations identified a large contemporaneous settlement surrounding the central tell, and the results of the ongoing research has made it possible to start

<sup>1</sup> University of North Georgia, Department of History, Anthropology, and Philosophy, Gainesville, GA, USA

<sup>2</sup> University of Szeged, Department of Archaeology, Szeged, Hungary and Déri Museum, Debrecen, Hungary

<sup>3</sup> University of Georgia, Department of Anthropology, Athens, GA, USA

<sup>4</sup> Hungarian National Museum, National Institute of Archaeology, Budapest, Hungary

<sup>5</sup> The Archaeological Research Unit, DigHumanities GeoInfo Lab, Sylvia Ioannou Chari on Digital Humanities, Department of History and Archaeology, University of Cyprus, Nicosia, Cyprus

<sup>6</sup> GeoSat ReSeArch Lab, Institute for Mediterranean Studies, Foundation for Research and Technology Hellas, Rethymno, Crete, Greece

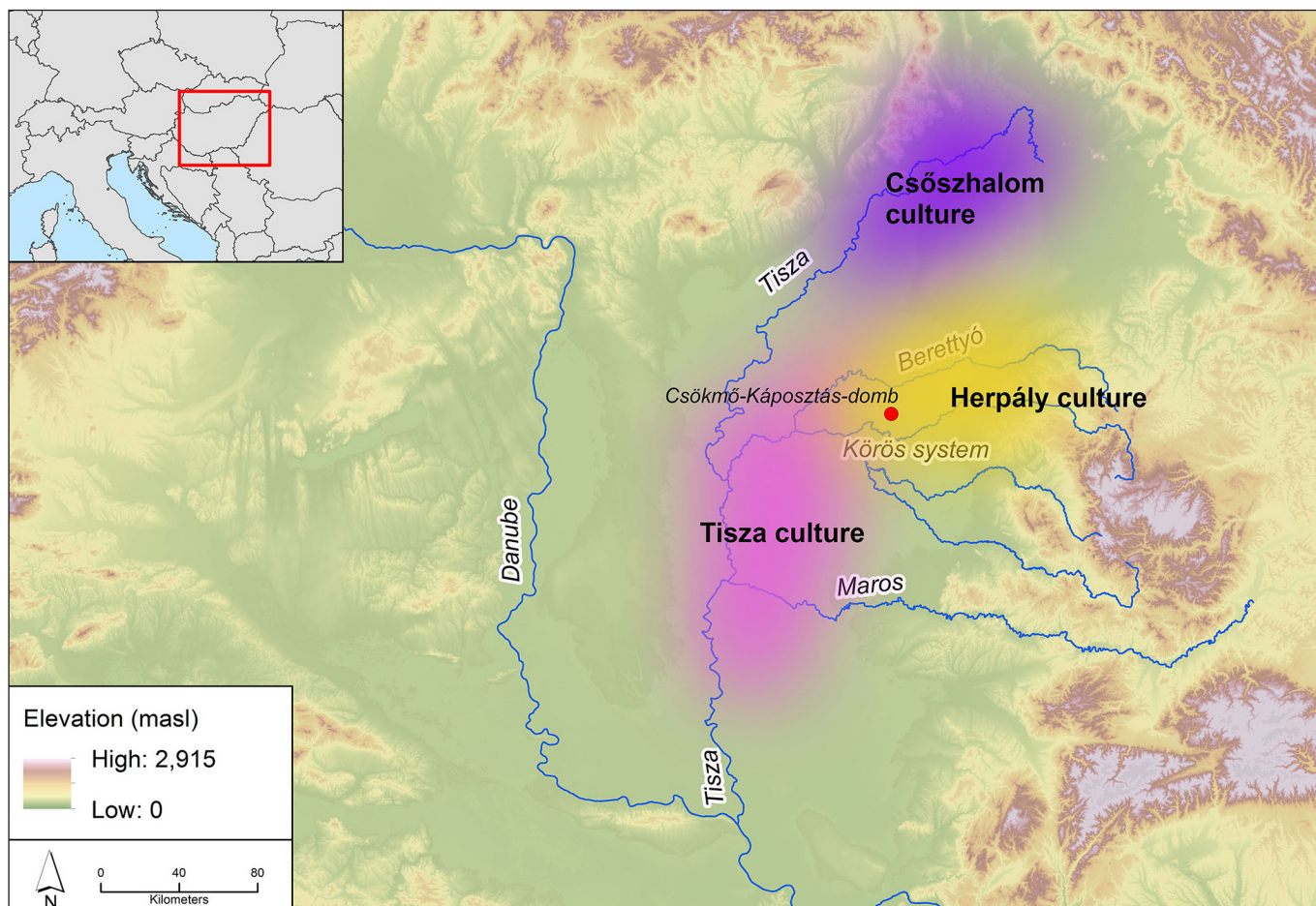


Fig. 1. Archaeological cultures for the Late Neolithic and the location for Csökmő-Káposztás-domb on the Great Hungarian Plain (map by D. Riebe)

reconstructing site-scale changes in land use and function over time. The purpose of this paper is to present the preliminary findings generated by PIPP from field research conducted between 2018 and 2022, and to begin contributing to a more nuanced understanding of large Herpály settlements.

## RESEARCH ON THE LATE NEOLITHIC HERPÁLY CULTURE

In the late 1970's and early 1980's, excavations were conducted on the type-site of the Herpály culture, Berettyóújfalu-Herpály (KALICZ & RACZKY 1984; 1987a; 1987b; KALICZ *et al.* 2011; KOREK & PATAY 1956; RACZKY *et al.* 2020). To a lesser extent, several other Herpály sites also have been investigated (Berettyóújfalu-Szilhalom: MÁTHÉ 1978; Esztár-Fenyvespart: KALICZ & RACZKY 1987a; Körösújfalu-Jákó-halom: ECSEDY *et al.* 1982; Szeghalom-Várhelyi erdő: GOLDMAN & SZÉNÁSZKY 1998), but the excavations at Berettyóújfalu-Herpály set a precedent for defining Herpály cultural characteristics and their developments over time. Like many of the excavations at Late Neolithic sites before recent times, most of the archaeological attention at Berettyóújfalu-Herpály was given to the tell itself, with very little research invested in the external site areas. As such, there is currently a skewed understanding about how Herpály settlements are organized and how they developed over time. Particular cultural and economic aspects identified for the Herpály, such as two-storied structures (KALICZ & RACZKY 1984), subsistence practices more reliant on wild game and fishing (BARTOSIEWICZ 2005; VÖRÖS 2005), and specific burial practices (KALICZ & RACZKY 1984), are all based on the recovery of materials from the Berettyóújfalu-Herpály tell.

More recent archaeological investigations have been conducted at the Herpály tell sites of Szentpéterszeg-Kovadomb and Berettyóújfalu-Szilhalom. These sites underwent excavations in the early to mid-1900s (see RACZKY & ANDERS 2014) and the 1970s (see NEUMANN *et al.* 2014), and the work in the



2010s largely focused on implementing geophysical prospection. In 2011, magnetometric survey at Szentpéterszeg-Kovadomb revealed a ditch system around the tell that had several houses located on it, and 10–15 structures off-tell also were identified (RACZKY & ANDERS 2014). However, additional magnetometric survey to determine the complete extent of the external settlement has yet to be completed. In 2013, magnetometric survey was implemented at Berettyóújfalu-Szilhalom and a ditch encircling the tell was identified, along with additional houses located on the other side of the ditch suggesting a potential adjacent external settlement (NEUMANN *et al.* 2014). These geophysical surveys have offered some new insights on the spatial layout of Herpály sites, however, investigations remain primarily restricted to the tell. This is where the current research at Csökmő-Káposztás-domb differs. By equally focusing on both the tell and off-tell areas and using an array of intensive field techniques, it becomes possible to reconstruct a more complete picture of Herpály settlements and the variability that may exist in settlement layout and use.

### GEOGRAPHICAL SETTING OF CSÖKMŐ-KÁPOSZTÁS-DOMB

The name of the site – more precisely, the highest part, that is the tell – was denoted as ‘*Halas hát*’ on the map of the First Habsburg Military Survey (1763–1787). ‘*Halas*’, which can translate to ‘rich in fish’, suggests that the area surrounding the tell was abundant in natural resources. By the time of the Second Habsburg Military Survey (1806–1869), the area had been renamed to ‘*Molnár-halom*,’ that is ‘*Molnár Hill*’ (Fig. 2).

The site is located on the western border of the town of Csökmő, on the northwestern periphery of an extensive marshland, the Kis-Sárrét, between the Berettyó and Sebes-Körös rivers. The variety of waterways that flows into the Kis-Sárrét divides this flat, lowland landscape into dry lands that are both smaller and larger in extent. These ridges and islands were suitable for human habitation throughout prehistoric times.

In multiple periods, centers with a focal role in their microregional settlement systems were established along a corridor of communication and transportation between the vast marshes of the Nagy- and Kis-Sárrét, north of the Körös rivers, and this corridor provided an overland connection between western Transylvania and the Great Hungarian Plain. In the microregion surrounding Csökmő, this geostrategic position explains

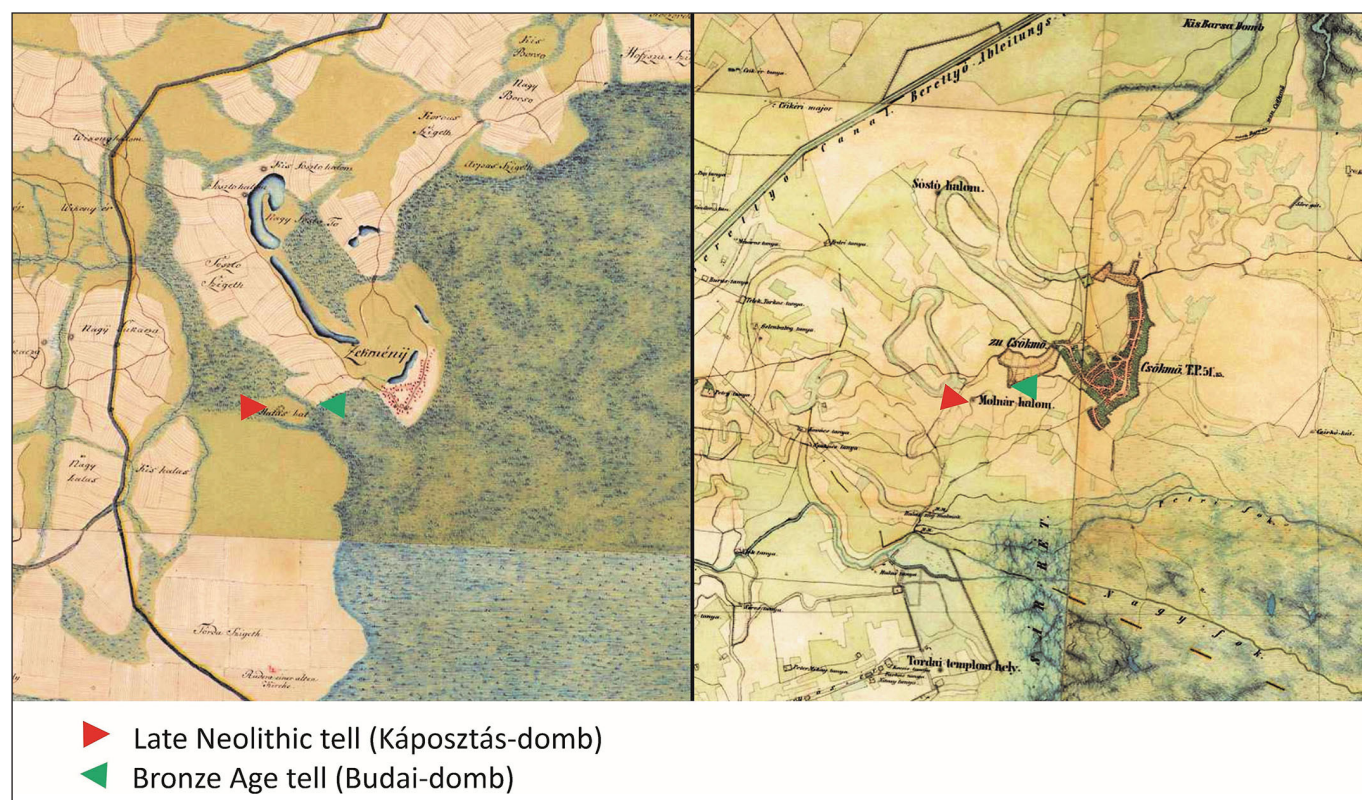


Fig. 2. The Late Neolithic tell of Csökmő-Káposztás-domb and the Bronze Age tell of Csökmő-Budai-domb on the 1st (left) and 2nd (right) Habsburg military survey maps (map by J. Dani)



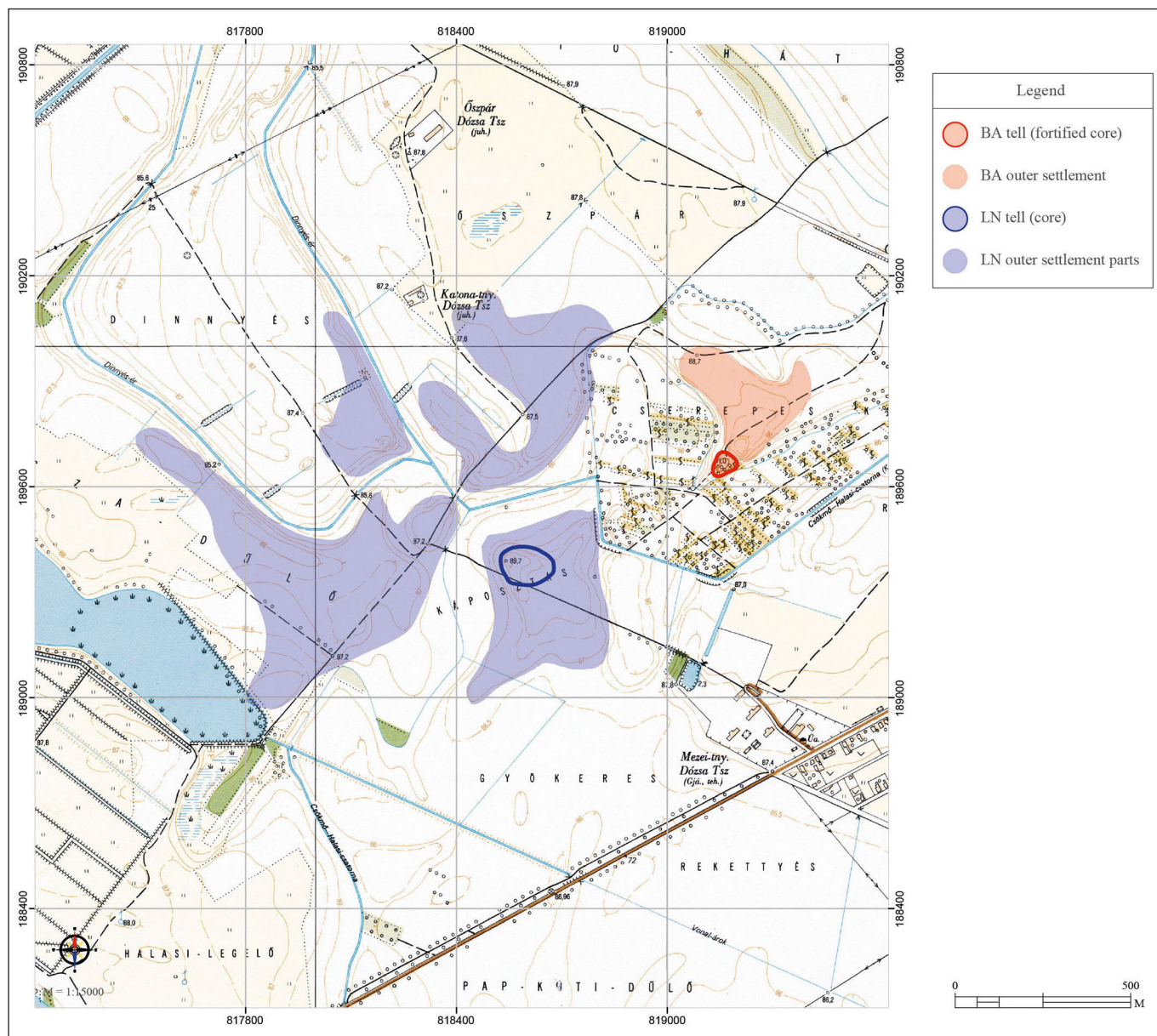


Fig. 3. The topographical context and settlement extent of Csökmő-Káposztás-domb and Csökmő-Budai-domb (map by T. Czirbik-Gulyás)

why two important prehistoric centers developed over time: Csökmő-Káposztás-domb in the Neolithic and, only ca. 700 m northeast of it, Csökmő-Budai-domb during the Bronze Age (Fig. 3). Whereas Budai-domb has been relatively well-known by the archaeological community throughout the 20th century (DANI 2012; DANI & FISCHL 2009), Káposztás-domb remained unstudied until recently.

### PREVIOUS RESEARCH AT CSÖKMŐ-KÁPOSZTÁS-DOMB

While it is a registered Late Neolithic site, Csökmő-Káposztás-domb is perhaps best known by the locals in the area. In 1988, Imre Szatmári from the Munkácsy Mihály Museum in Békéscsaba visited the nearby Bronze Age site of Budai-domb and learned that “another hill is also known as a treasure place by the people of Csökmő, which is referred to here as Káposztás-domb” (SZATMÁRI 1988, translated by the authors). While Szatmári would again visit Csökmő-Káposztás-domb in 1994 to record the location of the site (SZATMÁRI 1994), formal archaeological research would not occur at the locale until 2013.

As part of a doctoral dissertation project, and the first phase of the PIPP research agenda, Riebe visited Csökmő-Káposztás-domb in April 2013 to conduct a systematic sample survey of the site. A ‘dog-leash’



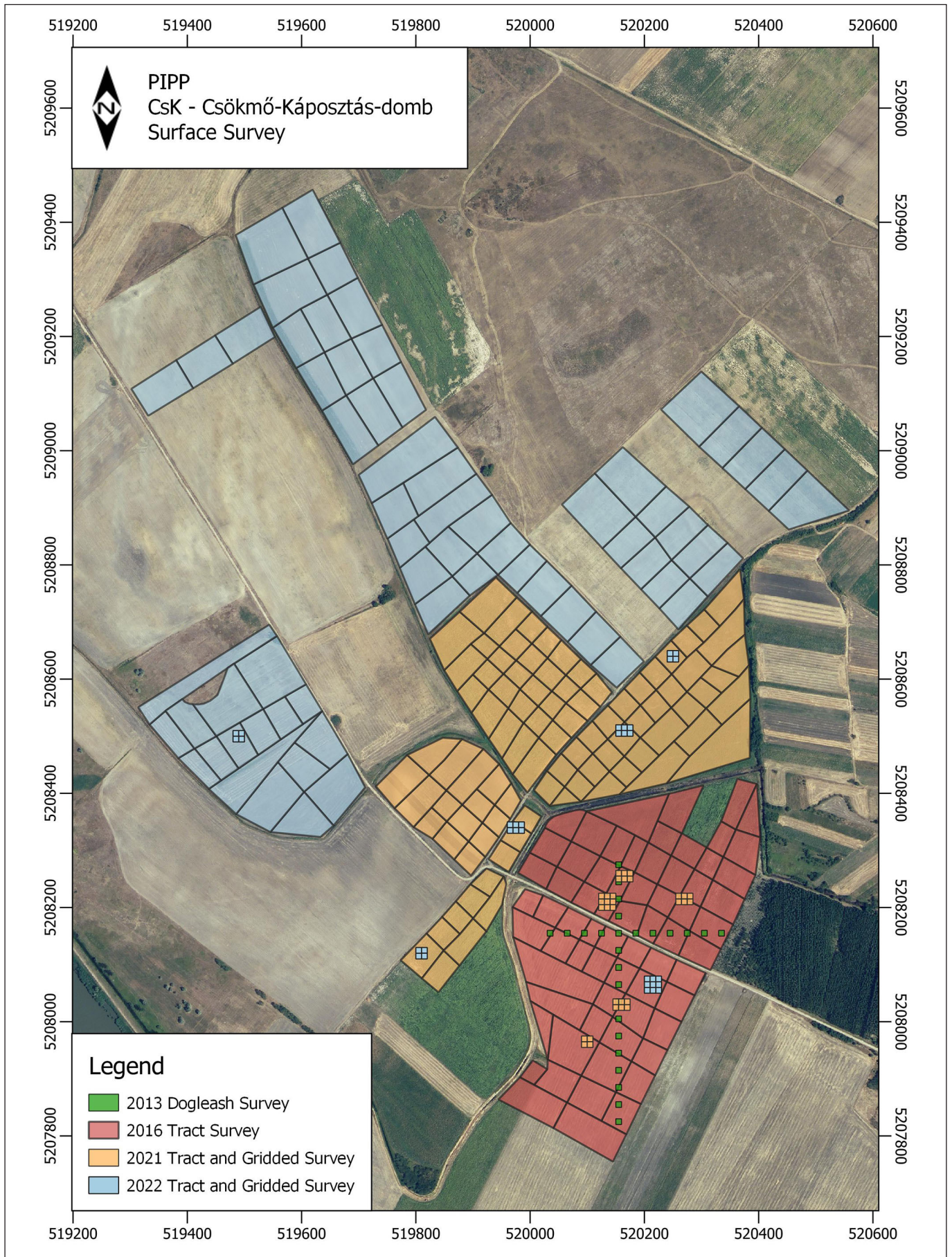


Fig. 4. Surface survey collections by year at Csökmő-Káposztás-domb (map by V. Nuccio)



surface collection method was implemented in which a 10x10meter collection unit was centrally placed on the tell, with additional similarly sized collection units placed in cardinal directions across the known extent of the site (*Fig. 4*). The collected artifacts from these units consisted of a wide range of materials, including bone, daub, chipped stone tools (with all stages of processing present), ground stone tools, shell, and ceramics. Primarily, all diagnostic materials represented a single occupation of the area dating to the Late Neolithic, however, one sherd and one glass bead confirmed that the site had been reused during the Sarmatian period as well (RIEBE 2021).

The surface survey at Csökmő-Káposztás-domb in 2013 laid the foundation for future research at the site. In November 2016, Riebe returned to the site with a team to expand the surface collection and conduct geophysical prospection. The initial surface survey in 2013 was just a small sample, so in this second phase of survey, tract walking with surface collection was implemented to cover the entirety of the known site extent. As was identified previously, the tract survey also indicated a primarily single-component Late Neolithic settlement. In addition to the surface collection, Apostolos Sarris and a team from the Foundation for Research & Technology Hellas (FORTH) conducted a small magnetic survey, approximately 40x60 meters, on the tell to map subsurface features and to test the viability of this investigatory technique at the site. The team identified clear subsurface anomalies representing houses/structures, ditches, and other features. With this new dataset in hand, it was possible to begin planning for more in-depth research at Csökmő-Káposztás-domb.

### CURRENT RESEARCH AT CSÖKMŐ-KÁPOSZTÁS-DOMB

In 2018, Riebe applied for and received a Senior Grant in Archaeology from the National Science Foundation (*BCS-2131357*) to formally begin Phase II of PIPP by expanding archaeological research at Csökmő-Káposztás-domb. Funds were received too late in the year to execute a 2018 summer season, so the inaugural season was pushed to July 2019.

#### *Magnetometric Survey*

PIPP 2019 was prepared to be a multi-pronged summer season with tract surface collection and magnetometric survey. However, a spring drought accompanied by early summer rains resulted in the wheat harvest across the site being delayed by weeks, until the end of July/beginning of August. Thus, the summer plans were reduced to just geophysical survey.

Sarris and his team from FORTH returned with two Bartington G601 fluxgate gradiometers to do targeted prospection in difficult to access areas at the site, including fields with standing wheat and forested areas. A second team, led by Máté Stibrányi (formerly of the Várkapitányság Ltd., now National Institute of Archeology at the Hungarian National Museum), operated a multi-sensor SENSYS magnetometer pulled by an ATV that was able to cover an immense amount of area in a relatively short amount of time (*Fig. 5*). Between these two teams, a total of 387,678 m<sup>2</sup> was covered during the 2019 season. After processing the raw data, magnetic anomalies showed that the tell was densely covered with structures and two concentric ditches could be seen partially encircling the tell. In addition to these archaeological anomalies, it also became apparent that the eastern and southern extents of an external settlement surrounding the tell could be identified. However, in a surprising twist, the remote sensing results also revealed that the site extended further to the north and west than previously thought – this would kick off the next three years of additional magnetometric survey at the site.

In 2020, while the rest of the world was on pause



*Fig. 5. Multi-sensor magnetometer operating at Csökmő-Káposztás-domb (photo by D. Riebe)*



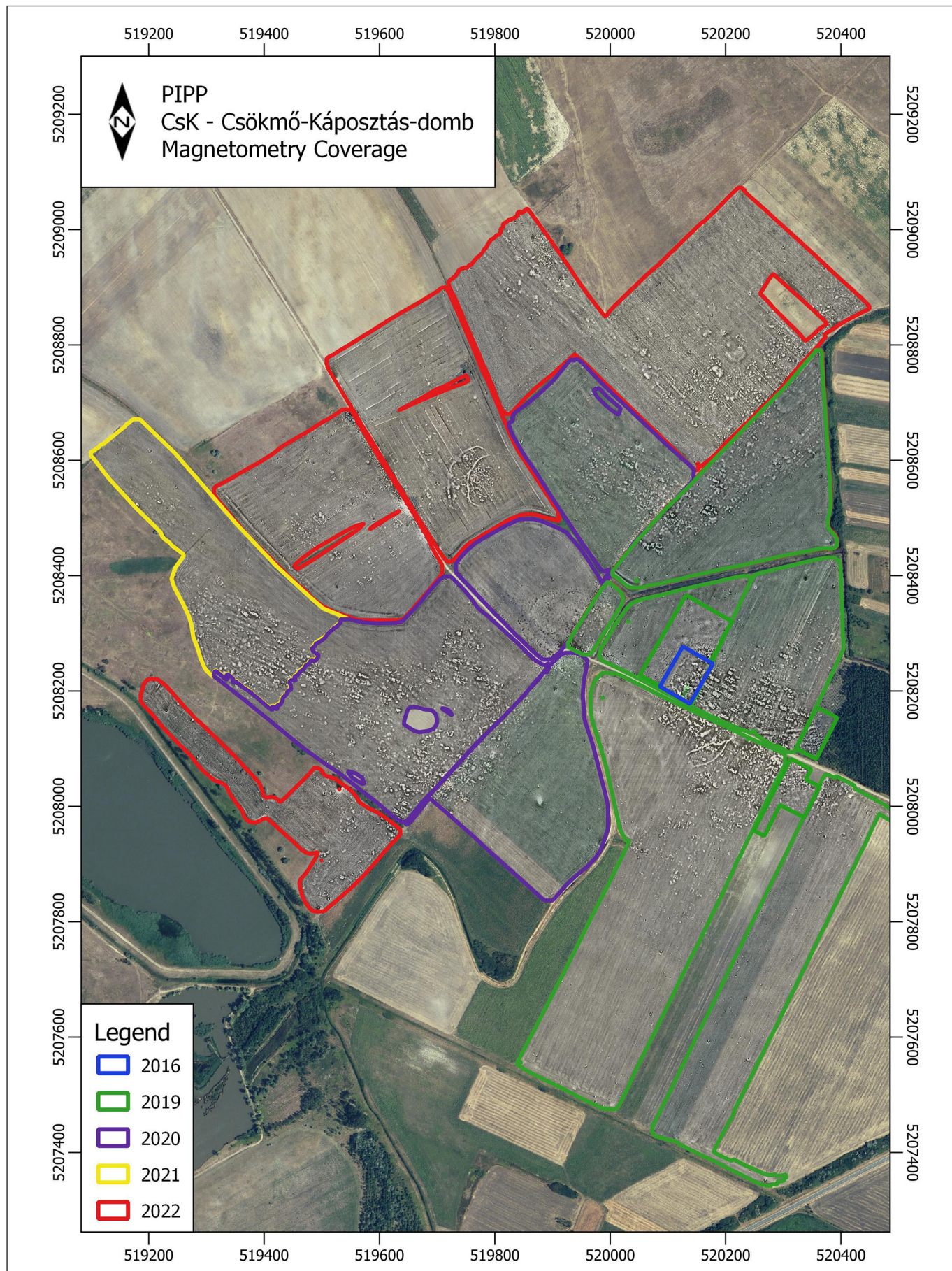


Fig. 6. Magnetometric surveys by year at Csökmő-Káposztás-domb (map by V. Nuccio)



Table 1. Magnetometric surveys at Csökmő-Káposztás-domb

Date	Method	Instrument	Meters <sup>2</sup>
November 1, 2016	Handheld	Bartington G601 fluxgate gradiometer	4,800*
July 16–17, 2019	Multi-sensor	SENSYS MX V3	367,818
	Handheld	Bartington G601 fluxgate gradiometer	19,860
August 27, 2020	Multi-sensor	SENSYS MXPDA	58,075
	Multi-sensor	SENSYS MX V3	175,132
August 31, 2020	Multi-sensor	SENSYS MX V3	109,626
November 21, 2021	Multi-sensor	SENSYS MX V3	78,561
July 25–26, 2022	Multi-sensor	SENSYS MX V3	38,7171
			1,196,243
			≈120 ha

\*Area re-covered by the multi-sensor in 2019, so excluded in total area calculation

due to the Covid-19 global pandemic, Stibrányi's team continued to conduct geophysical prospections. They returned to Csökmő-Káposztás-domb in August and completed an additional 342,833 m<sup>2</sup> of magnetic survey with the multi-sensor. The results again suggested that the site continued to the west, southwest, and northwest requiring that the team return again for additional survey, which would occur both in November 2021 (78,561 m<sup>2</sup>) and July 2022 (387,171 m<sup>2</sup>). In total, the magnetometric survey revealed that the Herpály site extended just over 100 ha (*Fig. 6 and Table 1*).

Beyond its size, the complexity of Csökmő-Káposztás-domb is unique for, as identified by the magnetometry, there are two fortified areas at the site, and both have a double ditch system. Moreover, the sprawling and relatively densely inhabited external settlement is partitioned by the ancient paleomeanders that wind through the site, creating a neighborhood-like appearance in the processed data. Additional investigations will be required to verify the presence of these neighborhoods, as well as to further understand the significance behind the two fortified areas.

### Surface collection

While tract collection surface survey was delayed first due to crop growth in 2019 and then due to the Covid-19 pandemic in 2020, during a brief visit to the site in November 2021, it was possible to begin expanding the tract survey. Building on the 2021 work, during the PIPP 2022 summer season additional areas were collected, but standing crops, such as sunflowers, and undisked fields with thick chaff prevented a complete tract survey of the entire settlement. To date, approximately 75% of the site has been subjected to tract surface collection and the remaining areas will be collected when crop rotations allow.

The results of the tract collection survey showed that Herpály materials were distributed across the site in a manner that may reveal information about area function and use. However, with large portions of the site left to be collected, even initial, tentative conclusions could be misleading. Instead, with the data available, it is interesting to note the current distribution of total materials by square meter. With this calculation in place, it is possible to normalize the amount of material collected from the various sized tract collection areas (*Fig. 7*). For the most part, the pattern is similar to what is seen at other Late Neolithic nucleated, large sites, such as Szeghalom-Kovácsalom, with the tell having a dense concentration of materials per square meter, and the external settlement areas having higher concentrations of materials that correspond with sub-surface magnetometric anomalies, such as structures. However, at Csökmő-Káposztás-domb, what is striking is the area directly to the west of the tell, which has the densest concentration of materials for the site, but with extremely few anomalies of possible structures, making it a locale in need of further investigations.



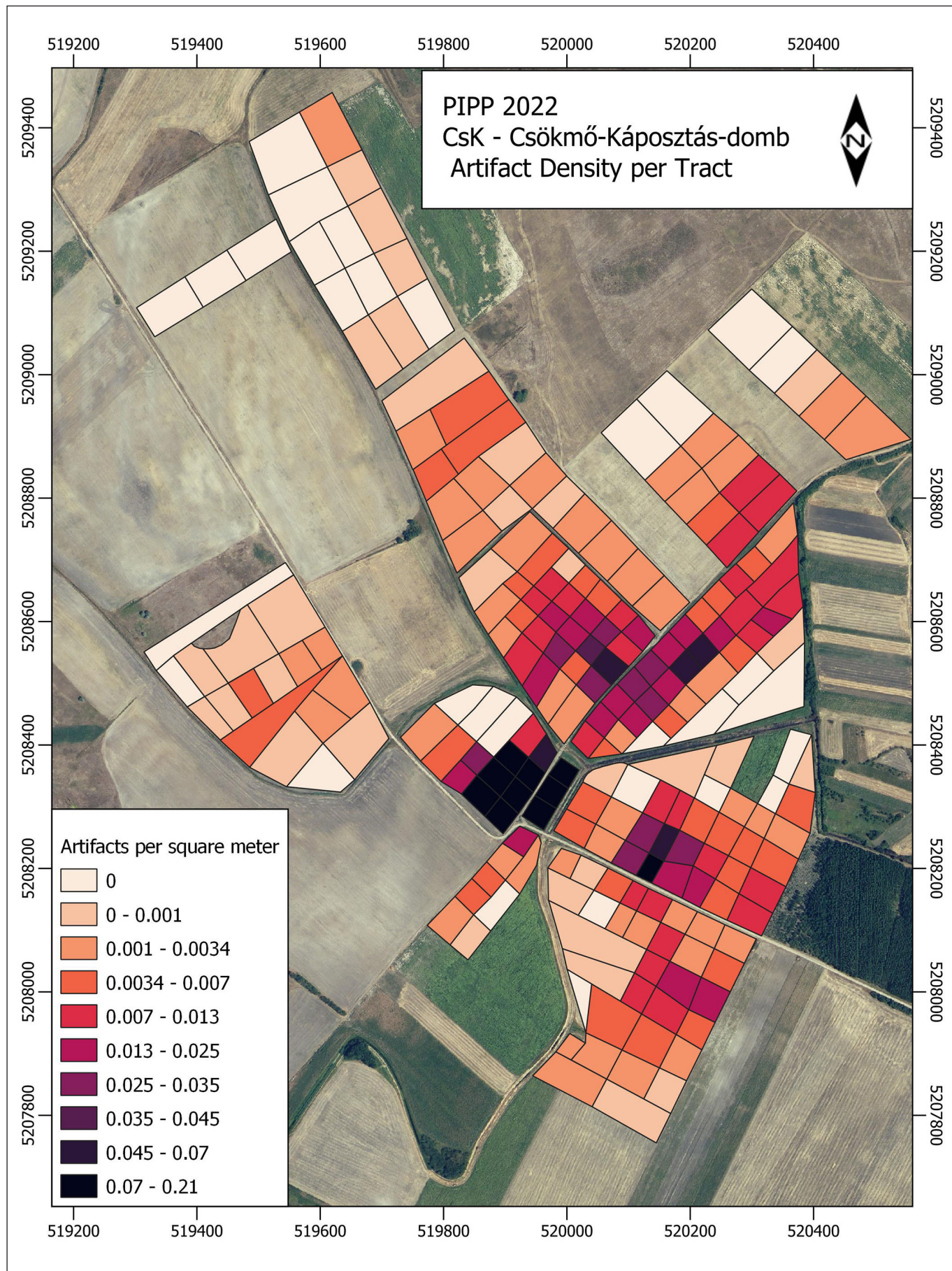
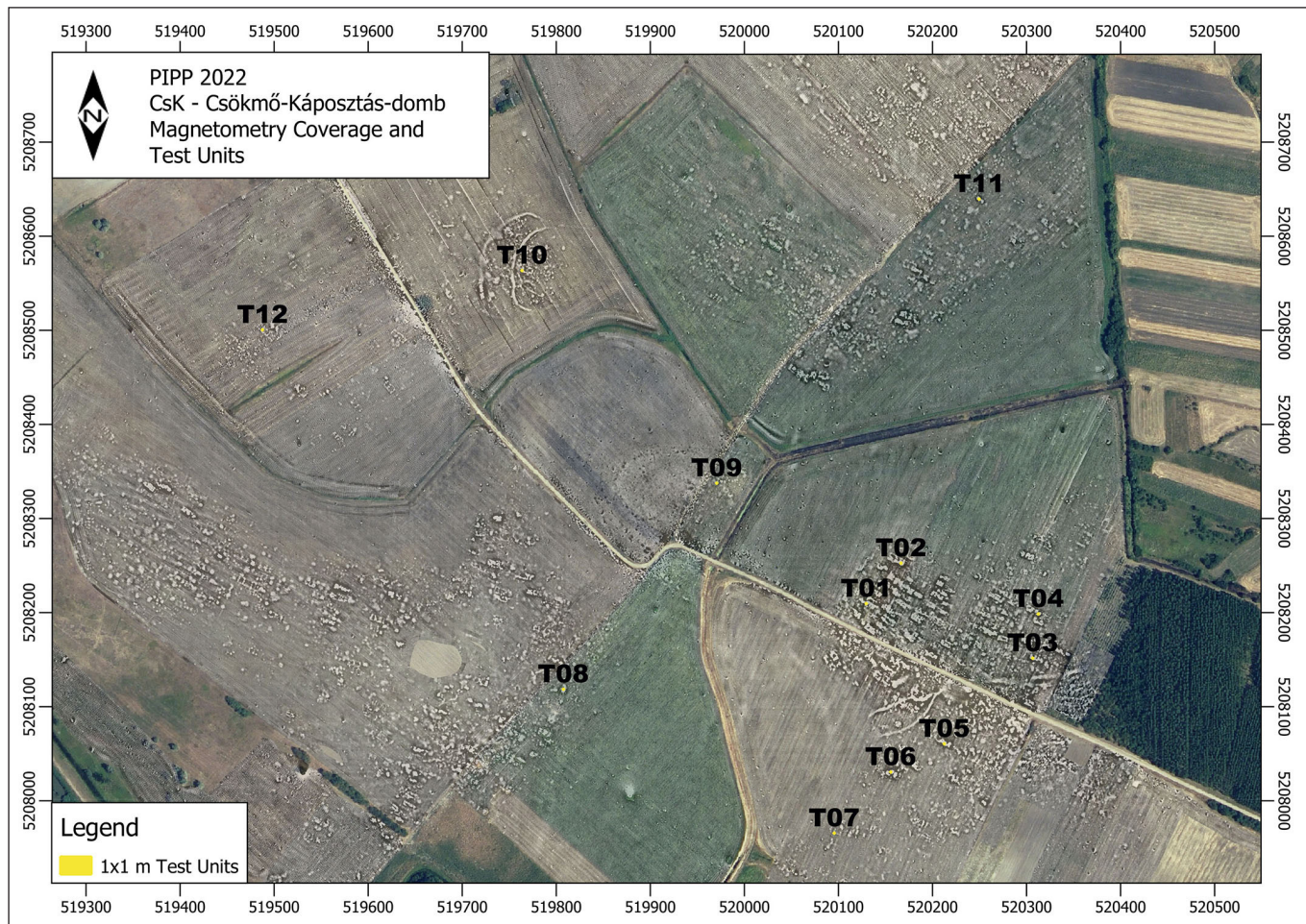


Fig. 7. Results of tract surface survey illustrating artifact density at Csökmő-Káposztás-domb (map by V. Nuccio; Nuccio 2023)



*Test excavations*

With the magnetometric and the surface collection data in hand, it was necessary to ground truth the anomalies through test excavations. During the PIPP 2022 summer season, twelve anomalies from across the entirety of the site were selected, and 1x1 meter test excavation units were opened (*Figs 8 and 9*).



*Fig. 8. Magnetometry results overlaid with the location of the 1x1 m test excavation units excavated in 2022 (map by V. Nuccio; Nuccio 2023)*

Through these test excavations, it was possible to determine the preservation of the structures indicated by magnetic anomalies, confirm the feature types, explore stratigraphy, note how material cultures varies by test unit location, and collect samples for radiocarbon dating. Small test units were chosen to minimize destruction and they generated data to guide larger-scale excavations of multiple structures, both on-tell and off-tell, at the site in 2023. Some of the analyses for the materials from these test excavations are still in progress, but the radiocarbon results from the units suggest that the site was in use from ca. 5,000 BCE until 4,350 BCE (radiocarbon results will be more fully published in a future article).



*Fig. 9. Excavations on a test unit at Csökmő-Káposztás-domb in 2022 (photo by W. P. Ridge)*



## THE SETTLEMENT COMPLEXES OF THE HERPÁLY CULTURE: MOVING TOWARDS NEW INTERPRETATIONS

Previous research on Herpály sites portrayed them as relatively small, restricted areas. The tells were often surrounded by palaeomeanders with external settlements located adjacent to them. For instance, the tell-centered settlement complex at Berettyóújfalu-Herpály is estimated to have been approximately 15 ha (RACZKY *et al.* 2020), Szentpéterszeg-Kovadomb approximately 34 ha (RACZKY & ANDERS 2014), and Berettyóújfalu-Szilhalom approximately 4.5 ha (NEUMANN *et al.* 2014). The results from Csökmő-Káposztás-domb illustrate a completely different picture in terms of settlement size and complexity. Just like other Herpály settlements, the tell at Csökmő-Káposztás-domb is located along a palaeomeander, however, the external settlement area, as identified through geophysical survey, expands to include an area of approximately 100 ha, making it the largest, most expansive, Herpály settlement to date, as well the largest known Late Neolithic site on the Great Hungarian Plain.

The size of the site alone challenges archaeological generalizations about Herpály culture settlement organization. As more information is generated from PIPP's investigations at Csökmő-Káposztás-domb, other concepts about the culture and period may be refined. As methods improve, as theoretical and research questions advance, and as researchers collaborate together, it is possible to begin to tell a different story about the development of the Late Neolithic Herpály culture.

### ACKNOWLEDGEMENTS

The current phase of research for the Prehistoric Interactions on the Plain Project is funded from a Senior Grant in Archaeology from the National Science Foundation (BCS-2131357).

### REFERENCES

- Bartosiewicz, L. (2005). Plain Talk: Animals, Environment and Culture in the Neolithic of the Carpathian Basin and Adjacent Areas. In Bailey, D., Whittle, A. & Cummings, V. (eds.), *(un)settling the Neolithic*. Oxford: Oxbow, 51–63.
- Dani, J. (2012). Fortified Tell Settlements from the Middle Bronze Age in the Hungarian Reach of the Berettyó Valley. In Jaeger, M., Czebreszuk, J. & P. Fischl, K. (eds.), *Enclosed Space – Open Society, Contact and Exchange in the Context of Bronze Age Defensive Settlements in Central Europe*. Studien zur Archäologie in Ostmitteleuropa, Band 9, Poznan–Bonn, 27–37.
- Dani, J. & Fischl, K. (2009). A Berettyó-vidék középsőbronzkori telljei (Topográfiai megközelítés). *Tisicum* 19, 103–118.
- Ecsedy, I., Kovács, L., Maráz, B. & Torma, I. (Eds.) (1982). *Magyarország Régészeti Topográfiája 6. Békés megye régészeti topográfiája: A szeghalmi járás (IV/1)*. Budapest: Akadémiai Kiadó.
- Goldman, Gy. & Szénászkzy, J. (1998). Topographic Research on the Neolithic Settlements in Békés Sárrét. In Költő, L. & Bartosiewicz, L. (eds.), *Archaeometrical Research in Hungary II*. Budapest: Hungarian National Museum and Directorate of Somogy County Museums, 13–19.
- Gyucha, A., Parkinson, W. A. & Yerkes, R. W. (2019). The Evolution of a Neolithic Tell on the Great Hungarian Plain: Site Formation and Use at Szeghalom- Kovácshalom. *Journal of Field Archaeology* 44:7, 458–479.



- Gyucha, A., Yerkes, R. W., Parkinson, W. A., Papadopoulos, N., Sarris, A., Duffy, P. R. & Salisbury, R. B. (2015). Settlement Nucleation in the Neolithic: A Preliminary Report of the Körös Regional Archaeological Project's Investigations at Szeghalom-Kovácsshalom and Vésztő-Mágor. In Hansen, S., Raczky, P., Anders, A. & Reingruber, A. (eds.), *Neolithic and Copper Age between the Carpathians and the Aegean Sea. Chronologies and Technologies from the 6th to the 4th Millennium BCE*. Archäologie in Eurasien 31, Bonn: Verlag Dr. Rudolf Habelt, 129–142.
- Hága, T. (2021). Berettyóújfalu, Szentpéterszeg-Körtvélyes 2 (41175). In Kolozsi, B. Nagy, E. Gy. & Priskin, A. (eds.), *Sztrádaörökség: Válogatás az M35-ös és M4-es autópálya régészeti feltárásaiból*. Debrecen: Déri Múzeum, 145–166.
- Hofmann, R., Medović, A., Furrholt, M., Medović, I., Stanković Pešterac, T., Dreibrodt, S., Martini, S. & Hofmann, A. (2019). Late Neolithic Multicomponent Sites of the Tisza Region and the Emergence of Centripetal Settlement Layouts. *Praehistorische Zeitschrift* 94:2, 351–378.
- Kalicz, N. & Raczky, P. (1984). Preliminary Report on the 1977–1982 Excavations at the Neolithic and Bronze Age Tell Settlement of Berettyóújfalu-Herpály. Part I: Neolithic. *Acta Archaeologica Academiae Scientiarum Hungaricae* 38, 85–136.
- Kalicz, N. & Raczky, P. (1987a). The Late Neolithic of the Tisza Region: A Survey of Recent Archaeological Research. In Tálás, L. & Raczky, P. (eds.), *The Late Neolithic of the Tisza Region: A Survey of Recent Excavations and Their Findings*. Budapest–Szolnok: Directorate of the Szolnok Country Museums, 11–29.
- Kalicz, N. & Raczky, P. (1987b). Berettyóújfalu-Herpály: A Settlement of the Herpály culture. In Tálás, L. & Raczky, P. (eds.), *The Late Neolithic of the Tisza Region: A Survey of Recent Excavations and Their Findings*. Budapest–Szolnok: Directorate of the Szolnok Country Museums, 105–125.
- Kalicz, N., Raczky, P., Anders, A. & Kovács, K. (2011). *Preserved by Ancestral Fire: Pictures of an Excavation – The Neolithic Village at Berettyóújfalu-Herpály*. Budapest: Pytheas Printing House.
- Korek, J. & Patay, P. (1956). A Herpályi-halom kőkorvégi és rézkori települése (The Settlement at Herpály-halom from the Late Neolithic and the Copper Ages). *Folia Archaeologica* 8, 23–42.
- Sz. Máthé, M. (1978). Újkőkori település Berettyószentmárton-Morotva lelőhelyen (Neusteinzeitliche Siedlung im Fundgebiet Berettyószentmárton–Morotva). *A Déri Múzeum Évkönyve* 59, 35–56.
- Neumann, D., Siklósi, Zs., Scholz, R. & Szilágyi, M. (2014). Preliminary Report on the First Season of Fieldwork in Berettyóújfalu-Szilhalom. *Dissertationes Archaeologicae ex Instituto Archaeologico Universitatis de Rolando Eötvös Nominatae* Ser. 3. No. 2, 377–404.
- Nuccio, V. (2023). *Going with the Flow: Human-Environmental Interactions at the Late Neolithic Herpály Site of Csökmő-Káposztás-domb*. Unpublished MA thesis. University of Georgia.
- Parkinson, W. A., Gyucha, A., Karkanás, P., Papadopoulos, N., Tsartsidou, G., Sarris, A., Duffy, P. R. & Yerkes, R. W. (2018). A Landscape of Tells: Geophysics and Microstratigraphy at Two Neolithic Tell Sites on the Great Hungarian Plain. *Journal of Archaeological Science: Reports* 19, 903–924.
- Raczky, P. (2009). Archaeological Data on Space Use at a Tell-like Settlement of the Tisza Culture (New results from Öcsöd-Kovácsshalom, Hungary). In Draşovean, F., Ciobotaru, D. F. & Maddison, M. (eds.),

*Ten Years After: The Neolithic of the Balkans, as Uncovered by the Last Decade of Research.* Bibliotheca Historica et Archaeologica Banatica 49, Timișoara: Editura Marineasa, 101–124.

Raczky, P. & Anders, A. (2014). Szentpéterszeg-Kovadomb: Egy késő neolitikus lelőhely tér-képei. In Anders, A., Balogh, Cs. & Türk, A. (eds.), *Avarok pusztái/Avarum Solitudines: Régészeti tanulmányok Lőrinczy Gábor 60. születésnapjára.* Opitz Archaeologica 6, Budapest: Martin Opitz Kiadó – MTA BTK MÖT, 23–42.

Raczky, P., Füzesi, A., Sebők, K., Faragó, N., Csippán, P. & Anders, A. (2020). A Special House from the Late Neolithic Tell Settlement of Berettyóújfalu-Herpály (Hungary): Reconstruction of a Two-Storey Building, Its Furnishings and Objects from the Earlier 5<sup>th</sup> Millennium BC. In Blum, S. W. E., Efe, T., Kienlin, T. L. & Pernicka, E. (eds.), *From Past to Present: Studies in Memory of Manfred O. Korfmann.* Studia Troica Monographien 11, Bonn: Verlag Dr. Rudolf Habelt, 429–457.

Riebe, D. J. (2021). *Redefining Archaeological Cultures: Boundaries and Interactions during the Late Neolithic on the Great Hungarian Plain.* Prehistoric Research in the Körös Region 5, Budapest: Archaeolingua Publishing House.

Szatmári, I. (1988). *Jelentés a Csökmő határában 1988. július 6-án végzett terepszemlékről.* Manuscript on file at the Munkácsy Mihály Museum, Békéscsaba, Hungary.

Szatmári, I. (1994). *Jelentés a Csökmő határában, a Budai-dombon 1994. augusztus 29-én végzett terepszemlékről.* Manuscript on file at the Munkácsy Mihály Museum, Békéscsaba, Hungary.

Vörös, I. (2005). Neolitikus állattartás és vadászat a Dél-Alföldön (Neolithic Animal Husbandry and Hunting in the Great Hungarian Plain). In Bende, L. & Lőrinczy, G. (eds.), *Hétköznapok Vénuszai.* Hódmezővásárhely: Tornyai János Múzeum, 203–243.