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Presses universitaires de Rennes | « ArcheoSciences »

2021/1 n° 45-1 | pages 59 à 61

ISSN 1960-1360
ISBN 9782753585874
DOI 10.4000/archeosciences.8455

Article disponible en ligne à l'adresse :

https://www.cairn.info/revue-archeosciences-2021-1-page-59.htm

ArcheoSciences
Revue d'archéométrie

45-1 | 2021
14th International Conference of Archaeological Prospection

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Electronic version
URL: https://journals.openedition.org/archeosciences/8455
DOI: 10.4000/archeosciences.8455
ISSN: 2104-3728

Publisher
Presses universitaires de Rennes

Printed version
Date of publication: 16 August 2021
Number of pages: 59-61
ISBN: 978-2-7535-8587-4
ISSN: 1960-1360

Electronic distribution by Cairn

Electronic reference
Chris Gaffney, Vincent Gaffney, Eamonn Baldwin, Martin Bates, Richard Bates, Tim Kinnaird, Tom Sparrow, Klaus Lockyear, Wolfgang Neubauer, Immo Trinks and Mario Wallner, "Multidisciplinary Investigation of the Pit Circuit at Durrington Walls, UK", *ArcheoSciences* [Online], 45-1 | 2021, Online since 16 August 2021, connection on 30 August 2021. URL: http://journals.openedition.org/archeosciences/8455 ; DOI: https://doi.org/10.4000/archeosciences.8455

Multidisciplinary Investigation of the Pit Circuit at Durrington Walls, UK

Chris Gaffney [a], Vincent Gaffney [b], Eamonn Baldwin [c], Martin Bates [d], Richard Bates [e], Tim Kinnaird [d], Tom Sparrow [b], Klaus Lockyear [f], Wolfgang Neubauer [g], Immo Trinks [g] and Mario Wallner [h]

Highlights:

- *Comprehensive geophysical assessment of huge pits; ERT, GPR, mag and EM.*
- *Novel approach to testing and interpreting pits via coring.*
- *Largest pit circuit confirmed in both the Stonehenge landscape and the UK..*

Keywords: Stonehenge landscape, Durrington walls, pit circuit, geophysics, coring.

A series of massive geophysical anomalies, located south of the Durrington Walls henge monument, were identified during fluxgate gradiometer survey undertaken by the Stonehenge Hidden Landscapes Project (SHLP). While they were initially interpreted as dewponds, these data have been re-evaluated with greater archaeological significance and they have been shown to extend north of the henge monument, which lies outside of the SHLP survey area. Their interpretation as large pits, provides additional data on this significant research issue within British later prehistory (e.g. Anderson-Whymark & Thomas, 2011; Bailey, 2018; Blinkhorn & Little, 2018; Garrow, 2006, 2007; Roberts & Marshall, 2020). The literature indicates that 'pits' have a plethora of uses in prehistory including settlement, mining, through to proxies for the arcane; pits within British prehistory are, as Garrow concluded for the British and Irish Neolithic, 'a diverse phenomenon' (Garrow, 2011, 219).

At Durrington, analysis of the available data, has identified 20 comparable features, which align within a series of arcs adjacent to the henge. In 2019, further geophysical survey, supported by mechanical coring, was undertaken on several of the geophysical anomalies that had been interpreted as pits to assess their nature, and to provide dating and environmental evidence (Gaffney *et al.*, 2020).

The results of fieldwork demonstrate that some of these features, at least, were massive, circular pits with a surface diameter of 20 m or more and a depth of at least 5 m. Struck

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flint and bone were recovered from primary silts and radiocarbon dating indicates a Late Neolithic date for the lower silts of one pit. The degree of similarity across the 20 features suggests that they could have formed part of a circuit of large pits around Durrington Walls. It is of interest that the circuit could also have incorporated the recently discovered Larkhill causewayed enclosure (Fig. 1). The diameter of the circuit of pits exceeds 2 km and there is some evidence that an intermittent, inner post alignment may have existed within the circuit of pits. One pit may provide evidence for a

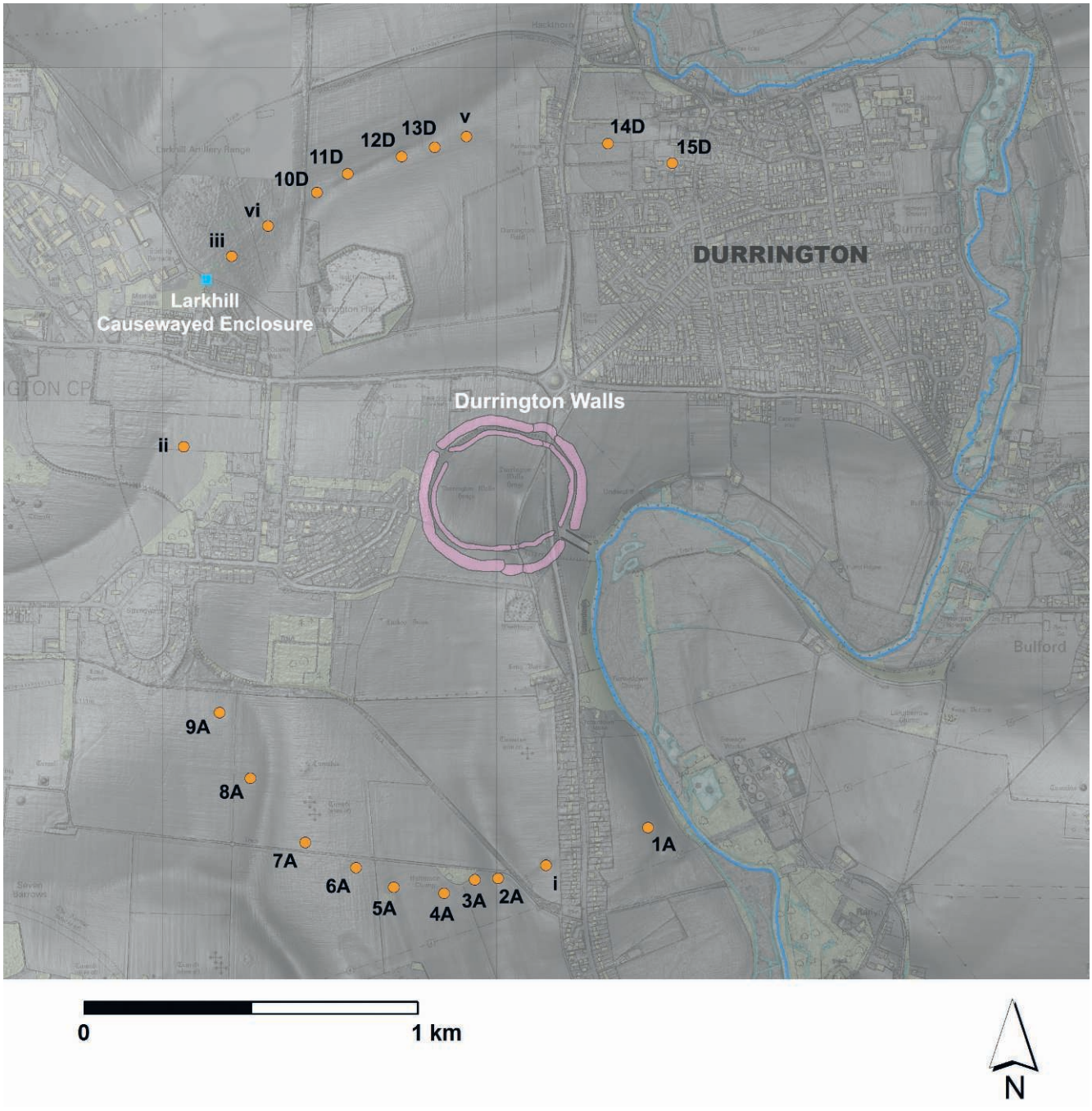

Figure 1. Distribution of features over a composite Lidar and OS profile data derived digital surface model (shaded) with OS 10k overlay © Environment Agency copyright and database right 2019. All rights reserved. Lidar Composite DTM 2m resolution, Scale 1:8000 and 1 m resolution, Scale 1:4000; © Crown copyright and database rights 2013 OS 1:10000 Scale and Profile DTM Raster, Scale 1:10K; EDINA Digimap Ordnance Survey Service (100025252) http://digimap.edina.ac.uk.

Figure 2. Coring rig on site.

recut; suggesting that some of these features could have been maintained through to the Middle Bronze Age. Together, these features represent a unique group of features related to the henge at Durrington Walls, executed at a scale not previously recorded.

To advance the understanding of the pit circuit, additional work was undertaken in 2021 (Fig. 2) and included the following objectives:

– to undertake GPR, ERT and EM survey and coring on six additional features;

– to explore the use of core scanning and high resolution XRF technologies as a tool to explore the geochemistry of the pits;

– to integrate the data through drone photogrammetry and multispectral imagery.

In the paper the authors will outline the significance of the work in the context of the understanding of this important landscape.

References

Anderson-Whymark, H., Thomas, J., 2011. *Regional perspectives on Neolithic pit deposition*. Beyond the Mundane, Neolithic Studies Group Seminar Papers 12, Oxbow Books, Oxford.

Bailey, D., 2018. *Breaking the Surface. An art/archaeology of prehistoric architecture*. Oxford, University Press Oxford.

Blinkhorn, E., Little, A., 2018. Being ritual in Mesolithic Britain and Ireland: identifying ritual behaviour within an ephemeral material record. *Journal of World Prehistory*, 31: 403- 420.

Gaffney, V. *et al.*, 2020. A Massive, Late Neolithic Pit Structure associated with Durrington Walls Henge. *Internet Archaeology*, 55.

Garrow, D., 2006. *Pits, Settlement and Deposition during the Neolithic and Early Bronze Age in East Anglia*. British Archaeological Reports British Series 414, Oxford.

Garrow, D., 2007. Placing pits: landscape occupation and depositional practice during the Neolithic in East Anglia. *Proceedings of the Prehistoric Society*, 73: 1-24.

Garrow, D., 2011. Concluding discussion: pits and perspective. In H. Anderson-Whymark, J. Thomas (eds.) *Regional Perspectives on Neolithic Pit Deposition. Beyond the mundane*, Neolithic Studies Group Seminar Papers 12. Oxbow Books Oxford, 216-225.