

INTERIM REPORT ON TEST EXCAVATIONS AT WOGAN CAVERN (PEMBROKE, PEMBROKESHIRE): OCTOBER 2023 SEASON

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SUMMARY

This document is an interim report on test excavations at Wogan Cavern (Pembroke, Pembrokeshire) carried out in October 2023.

A two-week field season was the fourth phase of test excavations, which are aimed at understanding what intact sediments remain in the cave and whether these are of archaeological value. The October 2023 work was limited to Trench 8, an area in the centre of the cave that was first investigated during the June/July 2023 season.

A two-square-metre area of Trench 8 was excavated to a maximum depth of c.1.6m, revealing several accumulations of spoil deposits, the lowermost of which are probably medieval-age. Overall, the excavated deposits are formed of different types of sediments within the cave, and therefore contain archaeological objects of different ages. This includes clast-free clays that contain fauna and struck lithic flakes, and which may be older than any intact deposit previously encountered in the course of our work.

Intriguingly, previous excavations in 2022 established the presence of an intact Mesolithic layer only c.25cm below the cave surface in Trench 7, which is only 3m to the east of the excavated part of Trench 8. Between the two trenches there is presumably a large cut, which has been filled so that the cave floor is today flat. Future investigation of the area between the two trenches would help establish the extent of this presumed historic-period groundworks.

WOGAN CAVERN: SITE BACKGROUND

Wogan Cavern lies beneath the Great Hall of Pembroke Castle. The cave is formed of a single, large chamber measuring c.23m north—south and c.18m west—east, with a maximum height of around 5m (Fig. 1). It has a wide and high north-facing entrance and a present-day floor that is somewhat uneven but generally flat, with a height above Ordnance Datum of 9–10m. The cave was incorporated into the castle in the thirteenth century, when a wall was built across its mouth (Fig. 1), with a spiral stair allowing access from the castle above.

Wogan Cavern is thought to have seen numerous early archaeological and antiquarian investigations, but these are extremely poorly documented, with extant historic collections from the cave small and poorly contextualised. Prior to our work, the cave's present archaeological status was unknown (see Dinnis et al. 2022 and references therein). (For further details of the cave and its historic context the reader is referred to Dinnis et al. (2022) and Gunn et al. (2022)).



FIGURE 1 – WOGAN CAVERN DURING EXCAVATION IN OCTOBER 2023, TAKEN FROM THE BACK OF THE CAVE. (PHOTO: ROB DINNIS.)

SUMMARY OF FIELDWORK PRIOR TO OCTOBER 2023

The current fieldwork project (see Dinnis 2019) has two major objectives: to determine the extent of intact deposits, and to test these deposits for material of archaeological importance. It is envisaged that this work will:

- Provide an assessment of the archaeological value of the cave's extant sedimentary deposits
- help to contextualise old collections from the cave
- establish the site's research potential
- provide information necessary to inform future conservation strategies

Prior to the October 2023 fieldwork the project had comprised three field seasons: a small-scale excavation over two weeks in June/July 2021, and larger-scale excavations over three weeks in June/July 2022 and four weeks in June/July 2023. This work established the presence of intact Holocene and Pleistocene deposits close to the cave's eastern wall, towards the cave's centre and close to the cave's western wall (respectively Trenches 5, 7 and 9; see Fig. 2). In all three areas, two-square metre excavation areas revealed a well-stratified early Holocene layer, including diagnostic Mesolithic artefacts, underlying a calcium carbonate speleothem floor. Underlying this layer in all three areas were intact Pleistocene sediments. The Pleistocene deposits in Trench 5 have been partially excavated, revealing additional Upper Palaeolithic layers (Dinnis & French 2023).

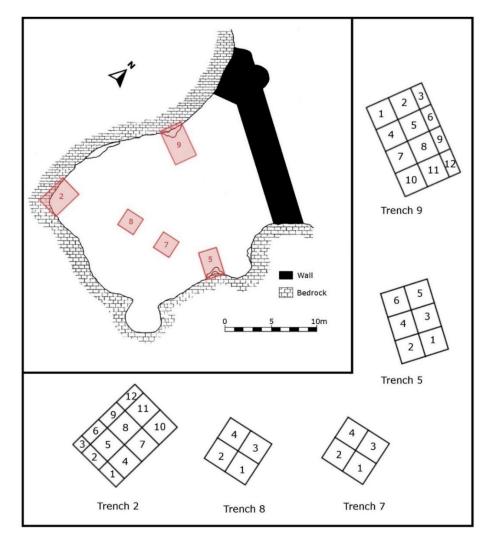


FIGURE 2 – PLAN OF WOGAN CAVERN (MODIFIED FROM KING 1978: 111), SHOWING THE LOCATIONS OF TRENCHES 2, 5, 7, 8 & 9 (TOP LEFT) AND THE DESIGNATED SQUARES WITHIN EACH TRENCH (RIGHT AND BOTTOM). WORK IN OCTOBER 2023 WAS RESTRICTED TO TRENCH 8. NOTE: SOME OF THE FEATURES OUTCROPPING FROM THE WALLS IN THE PLAN ARE REMNANT PARTS OF SPELEOTHEM FORMATIONS (SEE TEXT), WHEREAS OTHERS REPRESENT OUTCROPPING AREAS OF BOTH BEDROCK AND SPELEOTHEM FORMATION.

Elsewhere in the cave, a limited amount of work in the cave's southwestern corner (Trench 2; see Fig. 2) indicated the historical removal of a prehistoric archaeological layer. This is interpreted as equivalent to the layer with Mesolithic artefacts still present elsewhere in the cave. Intact lower deposits of probable Pleistocene age were also identified in this area.

Lastly, excavation of a one-square-metre area of Trench 8 in June/July 2023 revealed disturbance of recent historical age to a depth of c.75cm, in contrast to the largely intact nature of other areas so far tested (Dinnis & French 2023). Within these disturbed deposits were remains of hippopotamus, which most likely date to the last interglacial (Ipswichian/Eemian; c.125,000 years ago), indicating that sediments of that age are preserved in the cave.

Full details of this work can be found in Dinnis and French (2021, 2022 & 2023) and Dinnis et al. (2022 & 2023).

OCTOBER 2023 FIELDWORK: TRENCH 8

Excavation of Square 4 of Trench 8 in June/July 2023 revealed disturbed deposits to a depth of c.75cm below surface. The October 2023 fieldwork described here further tested this area, in order to establish the extent of this disturbance. The was achieved via further excavation of Square 4 and of the adjacent Square 3¹ (Fig. 2; Fig. 3). Square 3 was excavated to a maximum depth of c.1.6m.

Whereas the June/July 2023 work was coded "WC23", the October 2023 work was coded "WC23A". A description of Trench 8's sequence based on the October fieldwork can be found in Table 1 (below), and Trench 8 sections at the end of excavation are shown in Fig. 4. All excavated sediments were passed through 0.7cm dry sieves. All archaeological material was retained, with the exception of small oyster shell fragments (when representative larger shells/fragments were in the same context). Appendix 1 lists material recovered during the October 2023 season. Appendix 2 is a list of people participating in the October 2023 fieldwork, and Appendix 3 provides photographs of the backfilled trench.

Our June/July 2023 excavation of Square 4 of Trench 8 revealed a sequence of different spoil deposits. Through the entire depth these contained recent age finds (e.g. clay pipe fragments, glass) alongside early prehistoric lithic artefacts and Pleistocene-age bones. Most notable in the lower of these deposits were two very large Pleistocene bone fragments: Wc23 SF111 (Context 8008; c.200 grams) and WC23 SF165 (Context 8009; c.500 grams) (Dinnis & French 2023). The lowermost context reached during the June/July work (Context 8010) was composed of a geologically heterogenous mixture of sometimes-large sediment clods. It contained shell, recent and ancient bone, lithic artefacts of probable early prehistoric age, burnt bone, metal-working waste, coal/anthracite, charcoal, fragments of glazed pottery, wood, and probable fish scales, alongside lenses of ash and clods of lime mortar (Dinnis & French 2023).

Excavation of the adjacent Square 3 during the October 2023 fieldwork revealed a stratigraphy of spoil deposits matching well those found in Square 4 during the previous season. Excavation of deeper deposits in both squares revealed further, geologically distinct, sub-horizontal layers across the excavated area (Table 1; Fig. 4). Although overall these distinct layers form a coherent stratigraphy, the entire sequence is characterised by the heterogeneous nature of the sediments within the layers (see Table 1; Fig. 5). It is clear that the different layers represent different accumulations of spoil.

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¹ Instability of the northern trench wall, caused in particular by the unconsolidated nature of Contexts 8007 and 8007A, resulted in a small collapse of this wall at some time between the afternoon of Saturday 7th October and the morning of Monday 9th October. To stabilise the northern trench wall, the higher (and looser) contexts were removed from a c.50cm strip to the north of the trench's northern wall, creating a graded step to the trench. All sediments removed during this process were screened. Sediments that formed part of the collapse were designated "collapse cleaning". Deposits removed to stabilise the trench were grouped into contexts based on the shared nature of their matrix and their archaeological contents: Contexts 8001-8006 and Contexts 8007-8007A. To ensure the trench's stability, a small volume of sediments underlying this (Contexts 8008-8010) was also removed.



FIGURE 3 – SCREENGRABS OF A 3D MODEL OF TRENCH 8 DURING OCTOBER 2023 EXCAVATION, SHOWING THE BASE OF CONTEXT 8011 IN SQUARE 3 (LEFT) AND CONTEXT 8012 PART EXCAVATED IN SQUARE 4 (RIGHT). TOP IS A VIEW OF THE TRENCH OVERALL, SHOWING THE NORTH-FACING SECTION AND TRENCH FLOOR; BOTTOM IS A SECTIONED VIEW TO SHOW DETAIL OF THE TRENCH FLOOR AND THE NORTH-FACING SECTION.

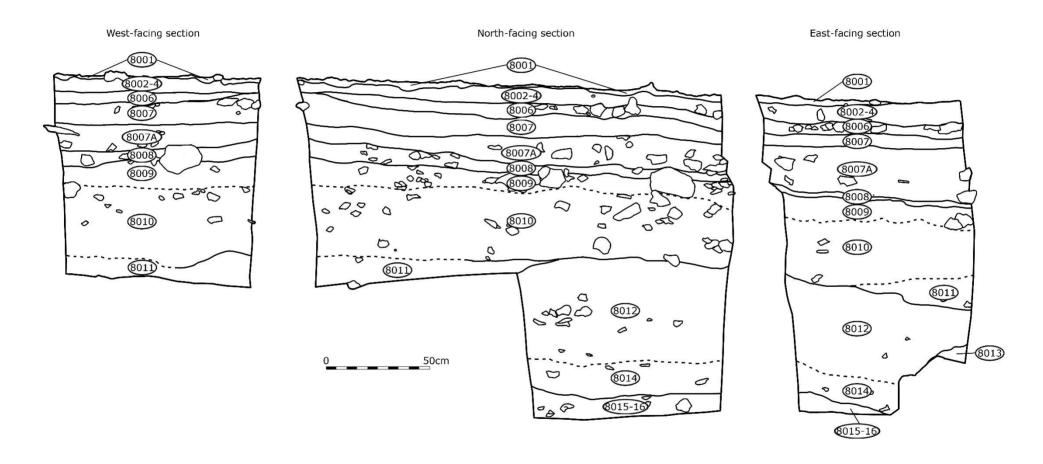


FIGURE 4 – WEST-, NORTH- AND EAST-FACING SECTIONS OF TRENCH 8 AT CLOSE OF EXCAVATION.



FIGURE 5 – SMALL FIND 054, A HEAVILY MINERALISED FRAGMENT OF A HIPPOPOTAMUS TOOTH (TOP LEFT OF IMAGE), EMBEDDED IN A REDEPOSITED CLAY CLOD WITHIN CONTEXT 8012.

Unsurprisingly, archaeological finds within each context vary greatly in age, although some chronological patterning is apparent. The lowest deposits to contain clay-pipe fragments were Context 8008 (during the June/July 2023 excavation) and Context 8007A (during the October 2023 excavation). Clay pipe fragments found so far elsewhere at the site are consistent with a 19th century age (Dinnis & French 2022), suggesting that the uppermost c.40-45cm of deposits may have accumulated during the 19th and 20th centuries.

The lower Context 8012 contains Roman-age material, including several probably or certainly Roman-age pottery fragments (e.g. SF043, SF044 & SF052), and a 4th century coin. However, four sherds of medieval glazed pot, all probably dating to the 13th/14th Century, were recovered from even lower deposits (Context 8014, SF059 & SF061; Context 8015-8016, SF063 & SF064), showing that the entire investigated sequence is no older than medieval. The lowermost Contexts 8015 and 8016, excavated from the southern part of Square 4 at a depth of c.1.5-1.6m below surface, contained two of these glazed pot sherds, as well as bone, shell and one piece of coal/anthracite.

Although not recovered from primary context, several finds are noteworthy. A glass bead of possible Roman age (SF030) was found in Context 8010, with a composite bone and antler comb of either late Roman or Anglo-Saxon/early-medieval age (SFo₃8) recovered from the underlying Context 8011. As reported previously (Dinnis & French 2023), some of the bone material from the mixed deposits in Trench 8 appears to be of Pleistocene age. During the October 2023 excavation, several of these bones were found within large clods of largely or wholly clast-free clays, which are unlike the sediments we have so far encountered during our excavation of intact deposits (for an example, see Fig. 5 above). One large clod of clay found in Context 8010 contained a struck lithic flake (SF035) between a large deer tooth (probably Cervus; S. Parfitt pers. comm.) (SF036) and a large herbivore vertebra (SF034). The condition of the bone and tooth suggest a Pleistocene age, and the struck flake differs from lithic artefacts in the archaeological layers excavated previously during our work. Taken together, this flake's geological context (i.e. in a clay deposit), its technological character, and its association with apparent Pleistocene fauna suggest it stems from a previously unknown archaeological layer in the cave, potentially older than those hitherto recognised. Lastly, along with the fragment of hippopotamus humerus found in Trench 8 during the June/July 2023 excavation (Dinnis & French 2023), the fragment of hippopotamus tooth recovered during the October work (SF054; Fig. 5) further suggests the presence in the cave of last-interglacial-age deposits.

Finally, the distribution of lithic artefacts through the various spoil layers is worthy of note. With the exception of one large lithic flake (SF041), which was found embedded in a large clod of clay within Context 8011, all lithic artefacts came from Context 8010 or higher. This is despite the presence within lower deposits of objects that were already ancient when they were (re)deposited, for example the Roman-age material in Context 8012. While firm conclusions are tempered by the small volume of lower deposits excavated, this distribution may indicate that the lower spoil layers (i.e. 8011/8012 and lower) are formed of redeposited cave sediments that originally contained little or no early prehistoric archaeological material.

TABLE 1 – TRENCH 8 SQUARES 3 AND 4 CONTEXTS AND ARCHAEOLOGICAL CONTENTS. DESCRIPTIONS ARE BASED ON OBSERVATIONS MADE DURING BOTH THE JUNE/JULY (=WC23) AND OCTOBER (=WC23A) FIELDWORK. FURTHER DETAILS OF THE SEQUENCE FOUND IN SQUARE 4 DURING THE JUNE/JULY FIELDWORK ARE GIVEN IN DINNIS AND FRENCH (2023). SEE ALSO FIGURE 4.

Context(s)	Context description	Contents	Preliminary interpretation / notes
8001	Dark brown-grey silty sand on cave floor, 1-3cm thick.	Bone/microfauna; lithic artefacts; glass; plastic; shell.	Thin, modern tread containing mixed-age material, equivalent to comparable deposits found across much of the cave.
8002-4	Predominantly a pale white-brown sandy silt matrix (comparable to the friable "granular" calcium carbonate material), but with some mid/dark-brown silt clods/patches, some small lenses of fine red-brown clay and pale yellow-brown clay, and containing angular-subangular limestone clasts (generally c.2-5cm in maximum dimension), charcoal flecks and small pieces of dark grey slate. Overall matrix supported.	Shell; glass; lithic artefacts; bone/microfauna (including human bone); burnt bone; coal/anthracite; charcoal; metal (including Roman-age coins); ceramics (including pot & clay pipe fragments). WC23A Small Finds 001-008.	Compacted spoil deposits, similar to Contexts 7002 and 7004 in the adjacent Trench 7 (see Dinnis & French 2022). During WC23 Contexts 8002, 8003 and 8004 were excavated separately. Given their similarity (see Dinnis & French 2023), during WC23A they were excavated as one unit.
8005	Fill of possible cut feature [801] found in Square 4 during WC23 (see Dinnis & French 2023). Friable mid-brown sandy silt, matrix supported with uncommon subangular limestone inclusions (c.3-5cm). Coherent patch of dark red-brown clay towards (but not at) the base of the feature.	Shell; bone; coal/anthracite; clay pipe fragment.	
8006	Clast-supported layer of angular-subangular limestone clasts, average size 5-10cm, alongside less common clasts of other minerals including slate. Matrix is pale- to mid-brown clayey silt, with some sandy matrix possibly derived from the overlying 8003/8004. Some small voids evident between the clasts.	Shell; lithic artefacts; bone/microfauna; glass; ceramics (pot & clay pipe fragments). WC23 Small Find 036. WC23A Small Find 009.	Clear boundary with underlying 8007 when trowelling, suggesting the boundary was a former cave floor. Absent from southeasternmost part of Square 3.
8007	Series of pale white-brown sandy silt (calcium carbonate) layers interspersed with lenses of the different reddish and brownish clays and containing some charcoal. Matrix supported. Darker in hue in Square 3 than in Square 4, due to a relatively greater prevalence of charcoal compared to the pale sandy silt.	Shell; bone/microfauna; glass; lithic artefacts; charcoal; coal/anthracite; clay pipe fragments. WC23A Small Find 010.	Clear boundary with overlying 8006 when trowelling, suggesting the boundary was a former cave floor. Context 8007 from WC23 was divided into "Context 8007 (upper)" and "Context 8007 (lower)". During WC23A, "Context 8007" corresponded to WC23 "Context 8007 (upper)", and "Context 8007A" to WC23 "Context 8007 (lower)".

Context(s)	Context description	Contents	Preliminary interpretation / notes
8007A	Matrix-supported dark-mid brown clayey silt. Inclusions, most abundant in the northern part of the excavated area, are mostly slate and angular/subangular limestone (average max dimension 5-15cm). Abundant fine plant roots are evident, especially in the northern section where the context was thicker. Some wood also present.	Shell; bone/microfauna; lithic artefact; metal; glass; coal/anthracite; ceramics (including pot & clay pipe fragments). WC23A Small Find 011.	Context 8007 from WC23 was divided into "Context 8007 (upper)" and "Context 8007 (lower)". During WC23A, "Context 8007" corresponded to WC23 "Context 8007 (upper)", and "Context 8007A" to WC23 "Context 8007 (lower)".
8008	Matrix-supported heterogeneous deposit, mainly composed of pale white-brown sandy silt (similar to the friable "granular" calcium carbonate material), but also including pockets of various clays and silts. The relative prevalences of the different matrices varied across the excavation area.	Shell; bone/microfauna; glass; coal/anthracite; metal; ceramics (including pot & clay pipe fragments). WC23 Small Finds 097 & 111. WC23A Small Finds 012-014.	
8009	As 8008 (i.e. a heterogenous mix of different sediment types), but looser, with more mixed clays, including an orange-red clay, and less pale white-brown sandy silt. Flecks of charcoal present, along with clumps of possible lime mortar, the latter being especially noticeable towards the base of the context. In some places the boundary between Context 8009 and Context 8010 was either difficult or not possible to determine.	Shell; bone/microfauna; coal/anthracite; metal; charcoal; glass; ceramics; lithic artefact. WC23 Small Find 165. WC23A Small Finds 015-022.	Series of rounded cobbles of c.20cm in maximum dimension, interspersed with fine red clays, at surface of or within the uppermost part of the context. Clasts included apparent freestone (=the ornamental stone used in the castle?). The white material, whiter and more consistent in structure than the pale calcium carbonate deposits in overlying contexts, may be lime mortar.
8010	Heterogenous mix, similar to 8009, but marked by larger clods of sediment. This included: fine, stiff pale-red-pink and pale-yellow-brown clays; a dark brown clayey silt with angular limestone clasts; fine yellow sand; large (c.5-10cm) pockets of possible lime mortar; and sometimes large quantities of charcoal-stained sediment. Some voids evident between the sediment clods. In some places the boundary between Context 8009 and Context 8010 was either difficult or not possible to determine.	Shell; bone/microfauna (including human bone); lithic artefacts; burnt bone; metal (including slag); coal/anthracite; charcoal; pottery fragments; wood; ?fish scales; ?lime mortar; ?ash; glass (bead). WC23 Small Finds 163, 164, 166, 168 & 169. WC23A Small Finds 023 & 029-037.	The white material, whiter and more consistent in structure than the pale calcium carbonate deposits in overlying contexts, may be lime mortar. While the clay(s) formed by volume the majority of the context across the excavated area, the dark brown clayey silt was relatively more abundant in the northern part of Square 3, and more generally the dark brown clayey silt became more prevalent with depth. Archaeological finds seemingly most abundant in the dark brown clayey silt.

Context(s)	Context description	Contents	Preliminary interpretation / notes
8011	Dark brown clayey silt, large proportions of which seem to contain charcoal and ash. Some lenses/clods of red-brown clay still evident (as in 8010), but overall less mixed than 8010. Contained probable lime mortar in Square 4. Matrix-supported.	Shell; bone/microfauna; burnt bone; ceramics (including pottery fragments); metal (including ?Roman-age coin); charcoal; lithic artefact.	Boundary with overlying context (8010) in some places not clear. Context absent from the southwestern part of Square 4.
	Incompletely excavated in Square 3.	WC23A Small Finds 024-028 & 038-041.	
8012	Similar to 8011, with dark brown clayey silt, clods of clay, and charcoal, but the main part of the matrix formed of pale, whiteish clayey sand (possibly derived from the granular calcium carbonate formation found elsewhere in the cave). Matrix-supported, but with rare clasts akin to cemented fragments of calcium carbonate formation. Excavated only in Square 4.	Shell; bone/microfauna; charcoal; coal/anthracite; glass; ceramics (including pottery fragments); metal (including Roman-age coin). WC23A Small Finds 043-047, 049-057 & 062.	Surface of 8012 more consolidated and stiffer when trowelled in comparison to overlying 8011. Relative proportions of the different sediment types making up the context variable across the excavated area.
8013	Large clods of red and brown clays containing abundant clasts of coal/anthracite. Abuts large clod of possible lime mortar. Context limited to the northern/northeastern part of the square; incompletely excavated. Excavated only in Square 4.	Shell; bone/microfauna; coal/anthracite; charcoal; seeds. WC23A Small Find 058.	
8014	Matrix-supported pale orange-brown silty sandy clay, with uncommon angular/subangular calcite clasts. Rare small lenses of darker brown clayey silt near the top of the context. Excavated only from the southern half of Square 4.	Shell; bone/microfauna; ceramics (pot sherds). WC23A Small Finds 059-061.	Subtle boundary with overlying 8012.
8015	Matrix-supported dark brown clayey silt, with large lenses/clods of a dark red stiff clay, and a few subangular/rounded limestone clasts. Excavated only from the southern half of Square 4.	Contexts 8015 & 8016: Shell; bone/microfauna; pot sherds. WC23A Small Finds 063 & 064 (recorded as 8015/8016 – see notes).	Context 8016 was assigned a context number when its relationship to 8015 was unclear and when it was considered possible that it was intact rather than redeposited. Excavation of it demonstrated it was just a large clast within 8015, and thus deeper excavation of the context was then recorded as "8015-8016".
8016	Isolated large (redeposited) fragment of calcium carbonate formation, contained within 8015. Excavated only from the western part of the southern half of Square 4.	Shell; bone/microfauna; coal/anthracite.	Context 8016 was assigned a context number when its relationship to 8015 was unclear and when it was considered possible that it was intact rather than redeposited. Excavation of it demonstrated it was just a large clast within 8015, and thus deeper excavation of the context was then recorded as "8015-8016".

CONCLUSIONS AND POTENTIAL FUTURE WORK

Previous fieldwork at Wogan Cavern in 2021, 2022 and 2023 has led to its recognition as a nationally important early prehistoric site, with several areas of the cave now known to have intact sediments that contain evidence for different phases of early prehistoric activity. During the June/July 2023 fieldwork the area of Trench 8 was tested for the first time, with excavation of one square revealing disturbed deposits to a depth of c.75cm. The October 2023 work described here was designed to further test this area, in order to understand better the extent of this disturbance.

Excavation of a two-square-metre area of Trench 8 to a maximum depth of c.1.6m revealed a deep sequence of spoil deposits, the lowermost of which is most likely to be medieval. Because underlying intact sediments were not reached, the full extent of this disturbance is not yet known. The various layers of spoil contain archaeological material of different ages, including some lithic and associated faunal material that is potentially older than anything so far identified in our excavation of intact deposits. In addition, the recovery of hippopotamus remains from spoil deposits during both the June/July 2023 season and the work described here suggests that earlier fossiliferous sediments, most likely dating to the last glacial maximum, are present in the cave.

The presence of deep spoil deposits in the area of Trench 8 has implications for understanding the historical use of the cave as well as the extent of intact early Holocene and Pleistocene sediments. In contrast to Trench 8, intact deposits were previously identified in the adjacent Trench 7 (see Fig. 2), which is only c.3m east of the easternmost part of Trench 8. In Trench 7, an *in situ* early prehistoric layer, including characteristically Mesolithic implements, was found at a depth of only c.25-35cm below ground level (Dinnis & French 2022; Dinnis et al. 2023). Assuming the difference between the two trenches does not reflect a stark difference in the relative height of the cave fill in the early Holocene, the contents of the two trenches indicates that somewhere between them there is a large cut, which has then been filled so that the cave floor is today flat. Future investigation of the area between the two trenches would help establish the extent of this presumed historical-period groundworks.

ACKNOWLEDGEMENTS

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REFERENCES

Dinnis, R. 2019. *Project design for test excavations at Wogan Cavern and adjacent unnamed cave*. Document prepared for Cadw, October 2019.

Dinnis, R. & French, J. 2021. *Interim Report on Test Excavations at Wogan Cavern (Pembroke, Pembrokeshire): 2021 season.* Document prepared for Cadw, December 2021.

Dinnis, R. & French, J. 2022. *Interim Report on Test Excavations at Wogan Cavern (Pembroke, Pembrokeshire): 2022 season.* Document prepared for Cadw, December 2022.

Dinnis, R. & French, J. 2023. *Interim Report on Test Excavations at Wogan Cavern (Pembroke, Pembrokeshire): June/July 2023 season*. Document prepared for Cadw, November 2023.

Dinnis, R., Boulton, J., French, J.C., Buckley, M., Davies, J., Hervé, M., Howells, S. Jimenez, E.-L., Ludlow, N., Masson-MacLean, E., Mogg, J., Pickard, C., Walker, E.A., Williams, D., Chamberlain, A.T. & Stringer, C. 2022. The archaeological potential of Wogan Cavern (Pembroke, UK): results of the first fieldwork season. *Cave and Karst Science* 49(2): 65-72.

Dinnis, R., Boulton, J., Bates, M., Chamberlain, A.T., Davies, J., Hopkins, R., Jimenez, E.-L., Masson-MacLean, E., Mogg, J., Parfitt, S., Payne, N., Pickard, C., Stringer, C., Walker, E.A., Williams, D. & French, J.C. 2023. Report on the 2022 excavations at Wogan Cavern (Pembroke, Pembrokeshire, UK). *Cave and Karst Science* 50(2): 83-91.

Gunn, J., Chamberlain, A.T., Howells, S. & Dinnis, R. 2022. Wogan Cavern (Pembroke, Pembrokeshire, UK): a possible hypogenic void. *Cave and Karst Science* 49: 73–75.

King, D.J.C. 1978. Pembroke Castle. Archaeologia Cambrensis 127: 75-121.

APPENDIX 1: CATALOGUE OF ALL MATERIAL COLLECTED

Below is a catalogue of material recovered during the October 2023 excavations at Wogan Cavern (=WC23A). Note that some of the ID's are the original field descriptions, and therefore not all are accurate. Note also that the table does not include Small Find 038, the late Roman or Anglo-Saxon/early-medieval age comb, which at the time of writing is undergoing conservation at the Natural History Museum (London).

Site code	Trench	Square	Context	Spit	Date excavated	Material (as on bag, not verified)	SF no.	Photo
WC23A	8	4	8001-8010	N/A (Cleaning)	01-Oct	Mineral	N/A	IMG_7842
WC23A	8	4	8001-8010	N/A (Cleaning)	01-Oct	Coal/ Anthracite	N/A	IMG_7843
WC23A	8	4	8001-8010	N/A (Cleaning)	01-Oct	Shell	N/A	IMG_7844
WC23A	8	4	8001-8010	N/A (Cleaning)	01-Oct	Bone	N/A	IMG_7845
WC23A	8	4	8001-8010	N/A (Cleaning)	01-Oct	Microfauna	N/A	IMG_7846
WC23A	8	4	8001-8010	N/A (Cleaning)	01-Oct	Ceramic	N/A	IMG_7847
WC23A	8	4	8001-8010	N/A (Cleaning)	01-Oct	Glass	N/A	IMG_7848
WC23A	8	3	8001	1	01-Oct	Glass	N/A	IMG_7849
WC23A	8	3	8001	1	01-Oct	Shell	N/A	IMG_7850
WC23A	8	3	8001	1	01-Oct	Mineral	N/A	IMG_7851
WC23A	8	3	8001	1	01-Oct	Bone	N/A	IMG_7852
WC23A	8	3	8001	1	01-Oct	Microfauna	N/A	IMG_7853
WC23A	8	3	8002-8004	1	01-Oct	Misc.	N/A	IMG_7854
WC23A	8	3	8002-8004	1	01-Oct	Bone	N/A	IMG_7855
WC23A	8	3	8002-8004	1	01-Oct	Metal	N/A	IMG_8062
WC23A	8	3	8002-8004	1	01-Oct	Lithic?	N/A	IMG_7856
WC23A	8	3	8002-8004	1	01-Oct	Ceramic	N/A	IMG_7857
WC23A	8	3	8002-8004	1	01-Oct	Shell	N/A	IMG_7858
WC23A	8	3	8002-8004	1	01-Oct	Glass	N/A	IMG_7859
WC23A	8	3	8002-8004	1	01-Oct	Coal/ Anthracite	N/A	IMG_7860
WC23A	8	3	8002-8004	1	01-Oct	Mineral	N/A	IMG_7861
WC23A	8	3	8002-8004	1	01-Oct	Microfauna	N/A	IMG_7862

Site code	Trench	Square	Context	Spit	Date excavated	Material (as on bag, not verified)	SF no.	Photo
WC23A	8	3	8002-8004	1	01-Oct	Charcoal	N/A	IMG_7863
WC23A	8	3	8002-8004	1	02-Oct	Bone/ Teeth	N/A	IMG_7864
WC23A	8	3	8002-8004	1	02-Oct	Bone/ Teeth	N/A	IMG_7865
WC23A	8	3	8002-8004	1	02-Oct	Microfauna	N/A	IMG_7866
WC23A	8	3	8002-8004	1	02-Oct	Mineral	N/A	IMG_7867
WC23A	8	3	8002-8004	1	02-Oct	Coal/ Anthracite	N/A	IMG_7868
WC23A	8	3	8002-8004	1	02-Oct	Ceramic	N/A	IMG_7869
WC23A	8	3	8002-8004	1	02-Oct	Glass	N/A	IMG_7870
WC23A	8	3	8002-8004	1	02-Oct	Shell	N/A	IMG_7871
WC23A	8	3	8002-8004	1	02-Oct	Lithic	N/A	IMG_7872
WC23A	8	3	8006	1	02-Oct	Bone	N/A	IMG_7873
WC23A	8	3	8006	1	02-Oct	Metal	N/A	IMG_8061
WC23A	8	3	8006	1	02-Oct	Lithic	N/A	IMG_7874
WC23A	8	3	8006	1	02-Oct	Ceramic	N/A	IMG_7875
WC23A	8	3	8006	1	02-Oct	Shell	N/A	IMG_7876
WC23A	8	3	8006	1	o3-Oct	Bone/ Tooth	N/A	IMG_7877
WC23A	8	3	8006	1	o3-Oct	Lithic	N/A	IMG_7878
WC23A	8	3	8006	1	o3-Oct	Shell	N/A	IMG_7879
WC23A	8	3	8006	1	o3-Oct	Microfauna	N/A	IMG_7880
WC23A	8	3	8007	1	o3-Oct	Bone/ Teeth	N/A	IMG_7881
WC23A	8	3	8007	1	o3-Oct	Microfauna	N/A	IMG_7882
WC23A	8	3	8007	1	o3-Oct	Mineral	N/A	IMG_7883
WC23A	8	3	8007	1	o3-Oct	Glass	N/A	IMG_7884
WC23A	8	3	8007	1	o3-Oct	Lithic	N/A	IMG_7885
WC23A	8	3	8007	1	o3-Oct	Charcoal	N/A	IMG_7886
WC23A	8	3	8007	1	o3-Oct	Coal/ Anthracite	N/A	IMG_7887
WC23A	8	3	8007	1	o3-Oct	Ceramic	N/A	IMG_7888
WC23A	8	3	8007	1	o3-Oct	Shell	N/A	IMG_7889
WC23A	8	3	8007A	1	o3-Oct	Misc.	N/A	IMG_7890

Site code	Trench	Square	Context	Spit	Date excavated	Material (as on bag, not verified)	SF no.	Photo
WC23A	8	3	8007A	1	o3-Oct	Mineral	N/A	IMG_7891
WC23A	8	3	8007A	1	o3-Oct	Coal/ Anthracite	N/A	IMG_7892
WC23A	8	3	8007A	1	o3-Oct	Lithic?	N/A	IMG_7893
WC23A	8	3	8007A	1	o3-Oct	Bone/ Teeth	N/A	IMG_7894
WC23A	8	3	8007A	1	o3-Oct	Glass	N/A	IMG_7895
WC23A	8	3	8007A	1	o3-Oct	Ceramic	N/A	IMG_7896
WC23A	8	3	8007A	1	o3-Oct	Shell	N/A	IMG_7897
WC23A	8	3	8007A	1	04-Oct	Misc.	N/A	IMG_7898
WC23A	8	3	8007A	1	04-Oct	Mineral	N/A	IMG_7899
WC23A	8	3	8007A	1	04-Oct	Coal/ Anthracite	N/A	IMG_7900
WC23A	8	3	8007A	1	04-Oct	Glass	N/A	IMG_7901
WC23A	8	3	8007A	1	04-Oct	Lithic	N/A	IMG_7902
WC23A	8	3	8007A	1	04-Oct	Shell	N/A	IMG_7903
WC23A	8	3	8007A	1	04-Oct	Ceramic	N/A	IMG_7904
WC23A	8	3	8007A	1	04-Oct	Bone	N/A	IMG_7905
WC23A	8	3	8008	1	04-Oct	Misc.	N/A	IMG_7906
WC23A	8	3	8008	1	04-Oct	Mineral	N/A	IMG_7907
WC23A	8	3	8008	1	04-Oct	Coal/ Anthracite	N/A	IMG_7908
WC23A	8	3	8008	1	04-Oct	Lithic?	N/A	IMG_7909
WC23A	8	3	8008	1	04-Oct	Glass	N/A	IMG_7910
WC23A	8	3	8008	1	04-Oct	Ceramic	N/A	IMG_7911
WC23A	8	3	8008	1	04-Oct	Shell	N/A	IMG_7912
WC23A	8	3	8008	1	04-Oct	Bone/ Teeth	N/A	IMG_7913
WC23A	8	3	8008	1	04-Oct	Microfauna	N/A	IMG_7914
WC23A	8	3	8009	1	04-Oct	Misc.	N/A	IMG_7915
WC23A	8	3	8009	1	04-Oct	Mineral	N/A	IMG_7916
WC23A	8	3	8009	1	04-Oct	Lithic	N/A	IMG_7917
WC23A	8	3	8009	1	04-Oct	Coal/ Anthracite	N/A	IMG_7918
WC23A	8	3	8009	1	04-Oct	Glass	N/A	IMG_7919

Site code	Trench	Square	Context	Spit	Date excavated	Material (as on bag, not verified)	SF no.	Photo
WC23A	8	3	8009	1	04-Oct	Ceramic	N/A	IMG_7920
WC23A	8	3	8009	1	04-Oct	Charcoal	N/A	IMG_7921
WC23A	8	3	8009	1	04-Oct	Shell	N/A	IMG_7922
WC23A	8	3	8009	1	04-Oct	Perforated Shell	N/A	IMG_7923
WC23A	8	3	8009	1	04-Oct	Microfauna	N/A	IMG_7924
WC23A	8	3	8009	1	04-Oct	Bone/ Teeth	N/A	IMG_7925
WC23A	8	3	8009	1	05-Oct	Bone/ Teeth	N/A	IMG_7926
WC23A	8	3	8009	1	05-Oct	Microfauna	N/A	IMG_7927
WC23A	8	3	8009	1	05-Oct	Mineral	N/A	IMG_7928
WC23A	8	3	8009	1	o5-Oct	Coal/ Anthracite	N/A	IMG_7929
WC23A	8	3	8009	1	o5-Oct	Shell	N/A	IMG_7930
WC23A	8	3	8010	1	05-Oct	Bone/ Teeth	N/A	IMG_7931
WC23A	8	3	8010	1	o5-Oct	Microfauna	N/A	IMG_7932
WC23A	8	3	8010	1	05-Oct	Bone?	N/A	IMG_7933
WC23A	8	3	8010	1	05-Oct	Lithic?	N/A	IMG_7934
WC23A	8	3	8010	1	05-Oct	Mineral	N/A	IMG_7935
WC23A	8	3	8010	1	05-Oct	Misc.	N/A	IMG_7936
WC23A	8	3	8010	1	05-Oct	Charcoal	N/A	IMG_7937
WC23A	8	3	8010	1	05-Oct	Ceramic	N/A	IMG_7938
WC23A	8	3	8010	1	05-Oct	Coal/ Anthracite	N/A	IMG_7939
WC23A	8	3	8010	1	05-Oct	Shell	N/A	IMG_7940
WC23A	8	3	8010	1	05-Oct	Shell w/ charcoal	N/A	IMG_7941
WC23A	8	3	8010	1	o6-Oct	Bone	N/A	IMG_7942
WC23A	8	3	8010	1	o6-Oct	Microfauna	N/A	IMG_7943
WC23A	8	3	8010	1	o6-Oct	Ceramic	N/A	IMG_7944
WC23A	8	3	8010	1	o6-Oct	Charcoal	N/A	IMG_7945
WC23A	8	4	8010	2	o6-Oct	Bone/ Teeth	N/A	IMG_7946
WC23A	8	4	8010	2	o6-Oct	Human (?) Bone	N/A	IMG_7947
WC23A	8	4	8010	2	o6-Oct	Microfauna	N/A	IMG_7948

Site code	Trench	Square	Context	Spit	Date excavated	Material (as on bag, not verified)	SF no.	Photo
WC23A	8	4	8010	2	o6-Oct	Coal/ Anthracite	N/A	IMG_7949
WC23A	8	4	8010	2	o6-Oct	Charcoal	N/A	IMG_7950
WC23A	8	4	8010	2	o6-Oct	Misc.	N/A	IMG_7951
WC23A	8	4	8010	2	o6-Oct	Mineral	N/A	IMG_7952
WC23A	8	4	8010	2	o6-Oct	Ceramic	N/A	IMG_7953
WC23A	8	4	8010	2	o6-Oct	Shell	N/A	IMG_7954
WC23A	8	4	8010	2	o6-Oct	Lithic?	N/A	IMG_7955
WC23A	8	3	8011	1	o6-Oct	Bone/ Tooth	N/A	IMG_7956
WC23A	8	3	8011	1	o6-Oct	Shell	N/A	IMG_7957
WC23A	8	3	8011	1	o6-Oct	Microfauna	N/A	IMG_7958
WC23A	8	3	8011	1	o6-Oct	Ceramic	N/A	IMG_7959
WC23A	8	3	8011	1	o6-Oct	Misc.	N/A	IMG_7960
WC23A	8	3	8011	1	o6-Oct	Charcoal	N/A	IMG_7961
WC23A	8	4	8011	1	07-Oct	Bone/ Tooth	N/A	IMG_7962
WC23A	8	4	8011	1	07-Oct	Shell	N/A	IMG_7963
WC23A	8	4	8011	1	07-Oct	Charcoal	N/A	IMG_7964
WC23A	8	4	8011	1	07-Oct	Microfauna	N/A	IMG_7965
WC23A	8	4	8011	1	07-Oct	Ceramic	N/A	IMG_7966
WC23A	8	N/A	Collapse Cleaning	N/A	09-Oct	Bone/ Teeth	N/A	IMG_7967
WC23A	8	N/A	Collapse Cleaning	N/A	09-Oct	Coal/ Anthracite	N/A	IMG_7968
WC23A	8	N/A	Collapse Cleaning	N/A	09-Oct	Lithic	N/A	IMG_7969
WC23A	8	N/A	Collapse Cleaning	N/A	09-Oct	Mineral	N/A	IMG_7970
WC23A	8	N/A	Collapse Cleaning	N/A	09-Oct	Flaked (?) Pebble	N/A	IMG_7971
WC23A	8	N/A	Collapse Cleaning	N/A	09-Oct	Shell	N/A	IMG_7972
WC23A	8	N/A	Collapse Cleaning	N/A	09-Oct	Ceramic	N/A	IMG_7973
WC23A	8	N/A	Collapse Cleaning	N/A	09-Oct	Microfauna	N/A	IMG_7974
WC23A	8	N/A	Collapse Cleaning	N/A	09-Oct	Glass	N/A	IMG_7975
WC23A	8	N/A	Cleaning	N/A	09-Oct	Microfauna	N/A	IMG_7976
WC23A	8	N/A	Cleaning	N/A	09-Oct	Shell	N/A	IMG_7977

Site code	Trench	Square	Context	Spit	Date excavated	Material (as on bag, not verified)	SF no.	Photo
WC23A	8	N/A	Cleaning	N/A	09-Oct	Bone	N/A	IMG_7978
WC23A	8	N/A	8001-8006	N/A	09-Oct	Bone/ Teeth	N/A	IMG_7979
WC23A	8	N/A	8001-8006	N/A	09-Oct	Coal/ Anthracite	N/A	IMG_7980
WC23A	8	N/A	8001-8006	N/A	09-Oct	Mineral	N/A	IMG_7981
WC23A	8	N/A	8001-8006	N/A	09-Oct	Shell	N/A	IMG_7982
WC23A	8	N/A	8001-8006	N/A	09-Oct	Metal	N/A	IMG_7983
WC23A	8	N/A	8001-8006	N/A	09-Oct	Ceramic	N/A	IMG_7984
WC23A	8	N/A	8001-8006	N/A	09-Oct	Microfauna	N/A	IMG_7985
WC23A	8	N/A	8001-8006	N/A	09-Oct	Glass	N/A	IMG_7986
WC23A	8	N/A	8001-8006	N/A	09-Oct	Lithic?	N/A	IMG_7987
WC23A	8	N/A	8001-8006	N/A	09-Oct	Lithic	N/A	IMG_7988
WC23A	8	N/A	8008-8010	N/A	09-Oct	Tooth	N/A	IMG_7989
WC23A	8	N/A	8007-8007A	N/A	09-Oct	Bone/ Teeth	N/A	IMG_7990
WC23A	8	N/A	8007-8007A	N/A	09-Oct	Microfauna	N/A	IMG_7991
WC23A	8	N/A	8007-8007A	N/A	09-Oct	Shell	N/A	IMG_7992
WC23A	8	N/A	8007-8007A	N/A	09-Oct	Misc.	N/A	IMG_7993
WC23A	8	N/A	8007-8007A	N/A	09-Oct	Ceramic	N/A	IMG_7994
WC23A	8	N/A	8007-8007A	N/A	09-Oct	Mineral	N/A	IMG_7995
WC23A	8	N/A	8007-8007A	N/A	09-Oct	Charcoal	N/A	IMG_7996
WC23A	8	N/A	8007-8007A	N/A	09-Oct	Coal/ Anthracite	N/A	IMG_7997
WC23A	8	N/A	8007-8007A	N/A	09-Oct	Lithic	N/A	IMG_7998
WC23A	8	N/A	8007-8007A	N/A	09-Oct	Glass	N/A	IMG_7999
WC23A	8	4	8012	1	09-Oct	Bone/ Tooth	N/A	IMG_8001
WC23A	8	4	8012	1	09-Oct	Microfauna	N/A	IMG_8002
WC23A	8	4	8012	1	09-Oct	Mineral	N/A	IMG_8003
WC23A	8	4	8012	1	09-Oct	Shell	N/A	IMG_8004
WC23A	8	4	8012	1	09-Oct	Charcoal	N/A	IMG_8005
WC23A	8	4	8012	1	09-Oct	Coal/ Anthracite	N/A	IMG_8006
WC23A	8	4	8012	1	09-Oct	Ceramic	N/A	IMG_8007

Site code	Trench	Square	Context	Spit	Date excavated	Material (as on bag, not verified)	SF no.	Photo
WC23A	8	4	8012	1	09-Oct	Glass	N/A	IMG_8008
WC23A	8	4	8012	1	10-Oct	Bone	N/A	IMG_8009
WC23A	8	4	8012	1	10-Oct	Shell	N/A	IMG_8010
WC23A	8	4	8012	1	10-Oct	Microfauna	N/A	IMG_8011
WC23A	8	4	8012	1	10-Oct	Coal/ Anthracite	N/A	IMG_8012
WC23A	8	4	8012	1	10-Oct	Mineral	N/A	IMG_8013
WC23A	8	4	8012	1	10-Oct	Misc.	N/A	IMG_8014
WC23A	8	4	8012	1	10-Oct	Ceramic	N/A	IMG_8015
WC23A	8	4	8012	2	10-Oct	Bone	N/A	IMG_8016
WC23A	8	4	8012	2	10-Oct	Shell	N/A	IMG_8017
WC23A	8	4	8012	2	10-Oct	Bone?	N/A	IMG_8018
WC23A	8	4	8012	2	10-Oct	Microfauna	N/A	IMG_8019
WC23A	8	4	8012	2	10-Oct	Coal/ Anthracite	N/A	IMG_8020
WC23A	8	4	8012	2	10-Oct	Mineral	N/A	IMG_8021
WC23A	8	4	8012	2	10-Oct	Ceramic	N/A	IMG_8022
WC23A	8	4	8012	3	10-Oct	Bone	N/A	IMG_8023
WC23A	8	4	8012	3	10-Oct	Shell	N/A	IMG_8024
WC23A	8	4	8012	3	10-Oct	Coal/ Anthracite	N/A	IMG_8025
WC23A	8	4	8012	3	10-Oct	Ceramic	N/A	IMG_8026
WC23A	8	4	8012	3	10-Oct	Microfauna	N/A	IMG_8027
WC23A	8	4	8012	4	11-Oct	Bone	N/A	IMG_8028
WC23A	8	4	8012	4	11-Oct	Shell	N/A	IMG_8029
WC23A	8	4	8012	4	11-Oct	Microfauna	N/A	IMG_8030
WC23A	8	4	8012	4	11-Oct	Ceramic	N/A	IMG_8031
WC23A	8	4	8012	4	11-Oct	Coal/ Anthracite	N/A	IMG_8032
WC23A	8	4	8013	1	11-Oct	Bone/ Teeth	N/A	IMG_8033
WC23A	8	4	8013	1	11-Oct	Shell	N/A	IMG_8034
WC23A	8	4	8013	1	11-Oct	Microfauna	N/A	IMG_8035
WC23A	8	4	8013	1	11-Oct	Ceramic?	N/A	IMG_8036

Site code	Trench	Square	Context	Spit	Date excavated	Material (as on bag, not verified)	SF no.	Photo
WC23A	8	4	8013	1	11-Oct	Mineral	N/A	IMG_8037
WC23A	8	4	8013	1	11-Oct	Coal/ Anthracite	N/A	IMG_8038
WC23A	8	N/A	Cleaning	N/A	10-Oct	Microfauna	N/A	IMG_8039
WC23A	8	N/A	Cleaning	N/A	10-Oct	Shell	N/A	IMG_8040
WC23A	8	4	8014	1	11-Oct	Bone/ Tooth	N/A	IMG_8041
WC23A	8	4	8014	1	11-Oct	Microfauna	N/A	IMG_8042
WC23A	8	4	8014	1	11-Oct	Shell	N/A	IMG_8043
WC23A	8	4	8015	1	11-Oct	Shell	N/A	IMG_8044
WC23A	8	4	8015	1	11-Oct	Bone	N/A	IMG_8045
WC23A	8	4	8015-8016	1	12-Oct	Microfauna	N/A	IMG_8046
WC23A	8	4	8015-8016	1	12-Oct	Bone	N/A	IMG_8047
WC23A	8	4	8015-8016	1	12-Oct	Shell	N/A	IMG_8048
WC23A	8	4	8016	1	12-Oct	Shell	N/A	IMG_8049
WC23A	8	4	8016	1	12-Oct	Bone	N/A	IMG_8050
WC23A	8	4	8016	1	12-Oct	Microfauna	N/A	IMG_8051
WC23A	8	4	8016	1	12-Oct	Coal/ Anthracite	N/A	IMG_8052
WC23A	8	3	8009	1	05-Oct	Wood?	N/A	IMG_8053
WC23A	8	3	8009	1	04-Oct	Metal	N/A	IMG_8054
WC23A	8	N/A	Collapse Cleaning	N/A	09-Oct	Metal	N/A	IMG_8055
WC23A	8	4	8012	4	11-Oct	Metal	N/A	IMG_8056
WC23A	8	4	8012	2	10-Oct	Metal	N/A	IMG_8057
WC23A	8	4	8012	1	09-Oct	Metal	047	IMG_8058
WC23A	8	4	8010	2	06-Oct	Metal	037	IMG_8059
WC23A	8	3	8010	1	o6-Oct	Metal	N/A	IMG_8060
WC23A	8	4	8010	2	06-Oct	Metal	N/A	IMG_8063
WC23A	8	3	8009	1	04-Oct	Metal	017	IMG_8064
WC23A	8	3	8010	1	05-Oct	Metal	N/A	IMG_8065
WC23A	8	4	8011	1	07-Oct	Metal	N/A	IMG_8066
WC23A	8	3	8011	1	o6-Oct	Metal	N/A	IMG_8067

Site code	Trench	Square	Context	Spit	Date excavated	Material (as on bag, not verified)	SF no.	Photo
WC23A	8	3	8011	1	o6-Oct	Metal	025	IMG_8068
WC23A	8	N/A	8007-8007A	N/A	09-Oct	Metal	N/A	IMG_8069
WC23A	8	3	8008	1	04-Oct	Metal	N/A	IMG_8070
WC23A	8	3	8010	1	o5-Oct	Metal	N/A	IMG_8071
WC23A	8	3	8010	1	o5-Oct	Metal	N/A	IMG_8072
WC23A	8	3	8010	1	o5-Oct	Metal?	N/A	IMG_8073
WC23A	8	4	8012	1	09-Oct	Metal	N/A	IMG_8074
WC23A	8	3	8002-8004	1	01-Oct	Coin	001	IMG_8075
WC23A	8	3	8002-8004	1	01-Oct	Coin	004	IMG_8076
WC23A	8	4	8011	1	07-Oct	Coin	039	IMG_8077
WC23A	8	4	8012	3	10-Oct	Coin	055	IMG_8078
WC23A	8	N/A	8001-8006	N/A	09-Oct	Misc.	N/A	IMG_8079
WC23A	8	3	8008	1	04-Oct	Misc.	N/A	IMG_8080
WC23A	8	3	8002-8004	1	01-Oct	Bone	002	IMG_8081
WC23A	8	3	8002-8004	1	01-Oct	Lithic	003	IMG_8082
WC23A	8	3	8002-8004	1	02-Oct	Lithic	005	IMG_8083
WC23A	8	3	8002-8004	1	02-Oct	Bone	006	IMG_8084
WC23A	8	3	8002-8004	1	01-Oct	Bone	007	IMG_8085
WC23A	8	3	8002-8004	1	02-Oct	Ceramic	008	IMG_8086
WC23A	8	3	8006	1	o3-Oct	Ceramic	009	IMG_8087
WC23A	8	3	8007	1	o3-Oct	Bone	010	IMG_8088
WC23A	8	3	8007A	1	04-Oct	Ceramic	011	IMG_8089
WC23A	8	3	8008	1	04-Oct	Ceramic	012	IMG_8090
WC23A	8	3	8008	1	04-Oct	Ceramic	013	IMG_8091
WC23A	8	3	8008	1	04-Oct	Glass	014	IMG_8092
WC23A	8	3	8009	1	04-Oct	Bone	015	IMG_8093
WC23A	8	3	8009	1	04-Oct	Bone	016	IMG_8094
WC23A	8	3	8009	1	05-Oct	Ceramic	018	IMG_8095
WC23A	8	3	8009	1	o5-Oct	Tooth	019	IMG_8096

Site code	Trench	Square	Context	Spit	Date excavated	Material (as on bag, not verified)	SF no.	Photo
WC23A	8	3	8009	1	05-Oct	Shell	020	IMG_8097
WC23A	8	3	8009	1	05-Oct	Bone	021	IMG_8098
WC23A	8	3	8009	1	05-Oct	Ceramic	022	IMG_8099
WC23A	8	3	8010	1	05-Oct	Lithic	023	IMG_8100
WC23A	8	3	8011	1	o6-Oct	Ceramic?	024	IMG_8101
WC23A	8	3	8011	1	o6-Oct	Ceramic	026	IMG_8102
WC23A	8	3	8011	1	o6-Oct	Ceramic	027	IMG_8103
WC23A	8	3	8011	1	o6-Oct	Ceramic	028	IMG_8104
WC23A	8	4	8010	2	o6-Oct	Bead	030	IMG_8105
WC23A	8	4	8010	2	o6-Oct	Bone	031	IMG_8106
WC23A	8	4	8010	2	o6-Oct	Lithic	032	IMG_8107
WC23A	8	4	8010	2	o6-Oct	Bone	033	IMG_8108
WC23A	8	4	8010	2	o6-Oct	Bone	034	IMG_8109
WC23A	8	4	8010	2	o6-Oct	Lithic	035	IMG_8110
WC23A	8	4	8010	2	06-Oct	Tooth	036	IMG_8111
WC23A	8	4	8011	1	07-Oct	Ceramic	040	IMG_8112
WC23A	8	4	8011	1	09-Oct	Lithic	041	IMG_8113
WC23A	8	N/A	Collapse Cleaning	N/A	09-Oct	Lithic	042	IMG_8114
WC23A	8	4	8012	1	09-Oct	Ceramic	043	IMG_8115
WC23A	8	4	8012	1	09-Oct	Ceramic	044	IMG_8116
WC23A	8	4	8012	1	09-Oct	Bone	045	IMG_8117
WC23A	8	4	8012	1	09-Oct	Tooth	046	IMG_8118
WC23A	8	N/A	8001-8006	N/A	09-Oct	Lithic	048	IMG_8119
WC23A	8	4	8012	2	10-Oct	Ceramic	049	IMG_8120
WC23A	8	4	8012	2	10-Oct	Ceramic	050	IMG_8121
WC23A	8	4	8012	2	10-Oct	Bone	051	IMG_8122
WC23A	8	4	8012	2	10-Oct	Ceramic	052	IMG_8123
WC23A	8	4	8012	2	10-Oct	Bone	053	IMG_8124
WC23A	8	4	8012	2	10-Oct	Bone?	054	IMG_8125

Site code	Trench	Square	Context	Spit	Date excavated	Material (as on bag, not verified)	SF no.	Photo
WC23A	8	4	8012	3	11-Oct	Ceramic	056	IMG_8126
WC23A	8	4	8014	1	11-Oct	Ceramic	059	IMG_8127
WC23A	8	4	8014	1	11-Oct	Ceramic	060	IMG_8128
WC23A	8	4	8014	1	11-Oct	Ceramic	061	IMG_8129
WC23A	8	4	8012	2	10-Oct	Worked Antler?	062	IMG_8130
WC23A	8	4	8015-8016	1	12-Oct	Ceramic	063	IMG_8131
WC23A	8	4	8015-8016	1	12-Oct	Ceramic	064	IMG_8132
WC23A	8	4	8010	2	o6-Oct	Bone	029	IMG_8133
WC23A	8	4	8012	4	11-Oct	Wood?	057	IMG_8134
WC23A	8	4	8013	1	11-Oct	Charcoal	058	IMG_8135
WC23A	8	4	8013	1	11-Oct	Microfauna from seed screening	N/A	WC23A (1)
WC23A	8	4	8013	1	11-Oct	Seeds (screened)	N/A	WC23A (2)

APPENDIX 2: ON-SITE PERSONNEL DURING THE 2023 EXCAVATIONS

On-site personnel, with the initials used in the paper archive:

Geraint Lloyd: GL
Jude Walters: JW
Rob Walters: RW
John Boulton: JB
Hannah Braniff: HB
Rob Dinnis: RD
Jesse Davies: JD

Sandra Bosanquet: SB
Dave Fisher: DF
Damien Flas: DFlas
Jody Billingham: JBill
Michael Bissmire: MB
Tracy Collins: TC

Mark Harrison: MH

APPENDIX 3: REINSTATED EXCAVATION AREA AT CLOSE OF FIELDWORK

During the October 2023 fieldwork only Trench 8 was opened. At close of excavation the trench was lined with geotextile and then backfilled using the spoil from our work.

Photographs of Trench 8 during/following backfill:



