Bradford-on-Avon Museum Research Group

Belcombe Mounds Report

Introduction

The Research Group's Interactive Landscapes Project aims to discover or confirm archaeological features in the landscape through the use of LIDAR images, field walking, geophysics and excavation in order to add to the existing knowledge of the history and archaeology of the Bradford Hundred. The highest man-made mound (Mound 1) in the Bradford Hundred is located in Belcombe park (OS 81692, 60895) and is 3.3 metres high and approximately 16m in diameter. This is shown on the Wiltshire Historic Environment Record as a garden feature. There is a shallower mound, Mound 2, (OS 81466, 60734) which is 1.2 metres high with an oval shape, 21 metres by 13 metres, 1.2 metres high, on the opposite side of the valley. This looks much more like a barrow. The Museum Survey team was approached in September 2021 to see if a geophysical survey could establish the origin of the mounds. A third, much smaller, mound (Mound 3 OS 81438, 60765)) was identified during the project.

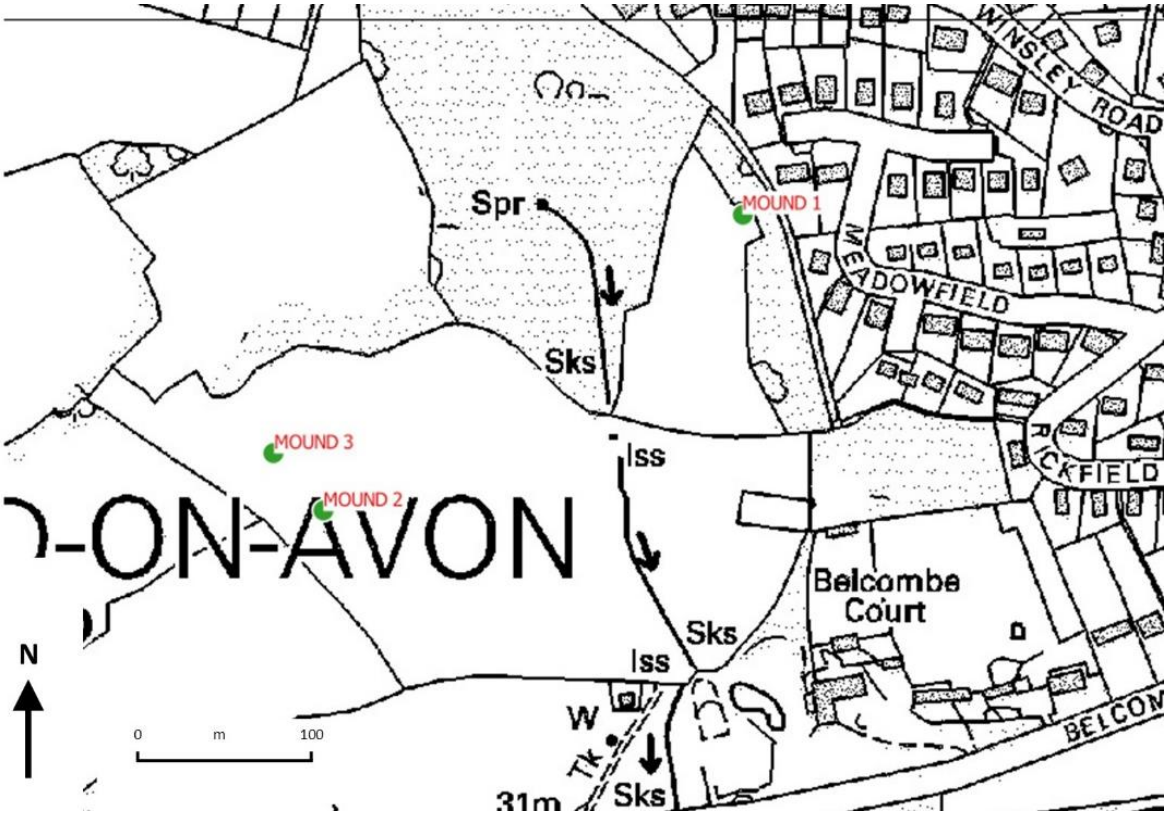

Fig 1 Mound locations relative to Belcombe Court on the western edge of Bradford on Avon

Preliminary Survey

An inspection of the mounds in October 2021 established that Mound 1 had very steep sides and its base was overgrown with trees and brambles. This made it difficult and unsafe to carry out a geophysical survey. The steepness of the sides indicated that it was unlikely to be a surviving barrow and the garden feature description was accepted. Mound 2 had one steep side falling away into the valley but the other three sides had the appearance of a barrow. A resistance survey and resistance profile were proposed to establish the structure of Mound 2.

Fig 2 Mound 1 from west

Fig 3 Mound 2 from west

Fig 4 Mound 3 from south

Fig 5 Mounds 3 and 2 (background) from north

Resistance Survey of Mound 2

A survey area of two 20m by 20m squares was surveyed with a Frobisher TAR 3 using probes with a one metre spacing (which will read to a one metre depth) with two readings per metre being taken in one direction and one reading per metre in the other. The data was analysed using Snuffler software and printed with black indicating high resistance. The results are shown in figure 6, with the approximate outline of the mound shown in red.

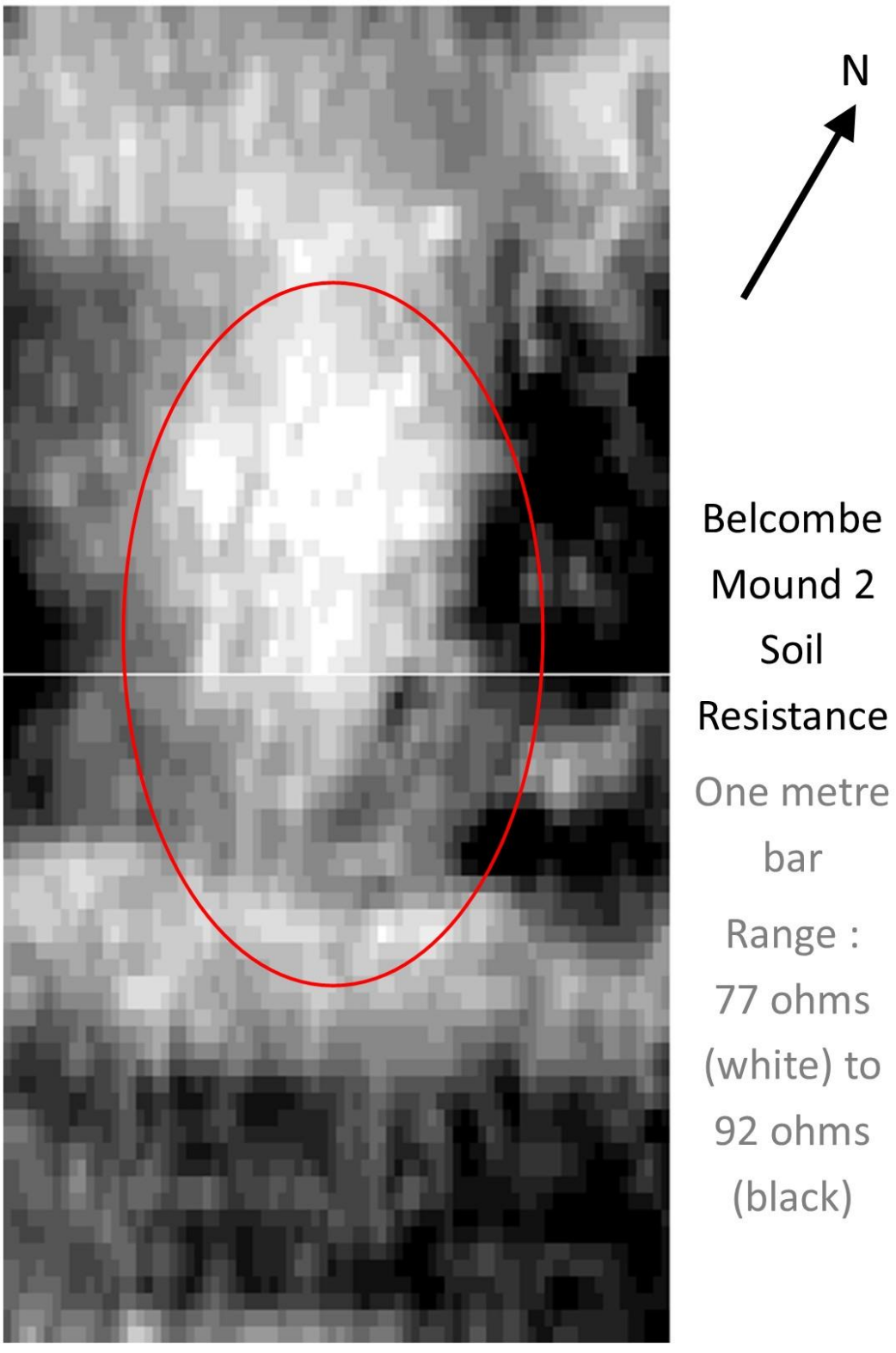

Fig 6 Resistance Survey Output

Discussion of Soil Resistance Results

The northern end of the mound showed lower resistance which can be interpreted as a smaller quantity of stone being present. The higher resistance shown on the eastern side shows a larger amount of stone being present, with stone being visible on the surface.

Resistance Profile

A resistance profile option on the Frobisher TAR 3 allows a cross-section of the ground resistance to be created. Since the site was sloping levels were taken over the 30 metre length of the resistance profile to be input into the resistance profile model (Fig 7). The upper and lower ditches are visible together with a central depression.

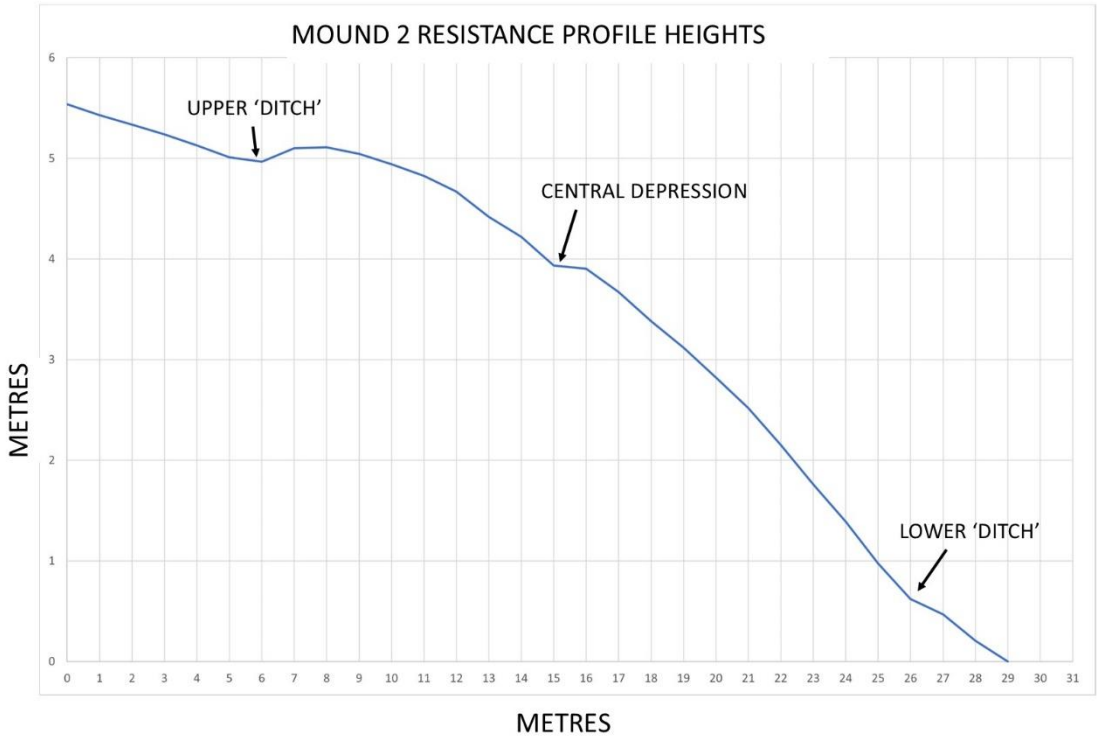

Fig 7 Profile of hillside along centreline of Mound 2

The resistance profile results are shown in Figure 8 with the line of the profile indicated by the red dotted line on the resistance survey.

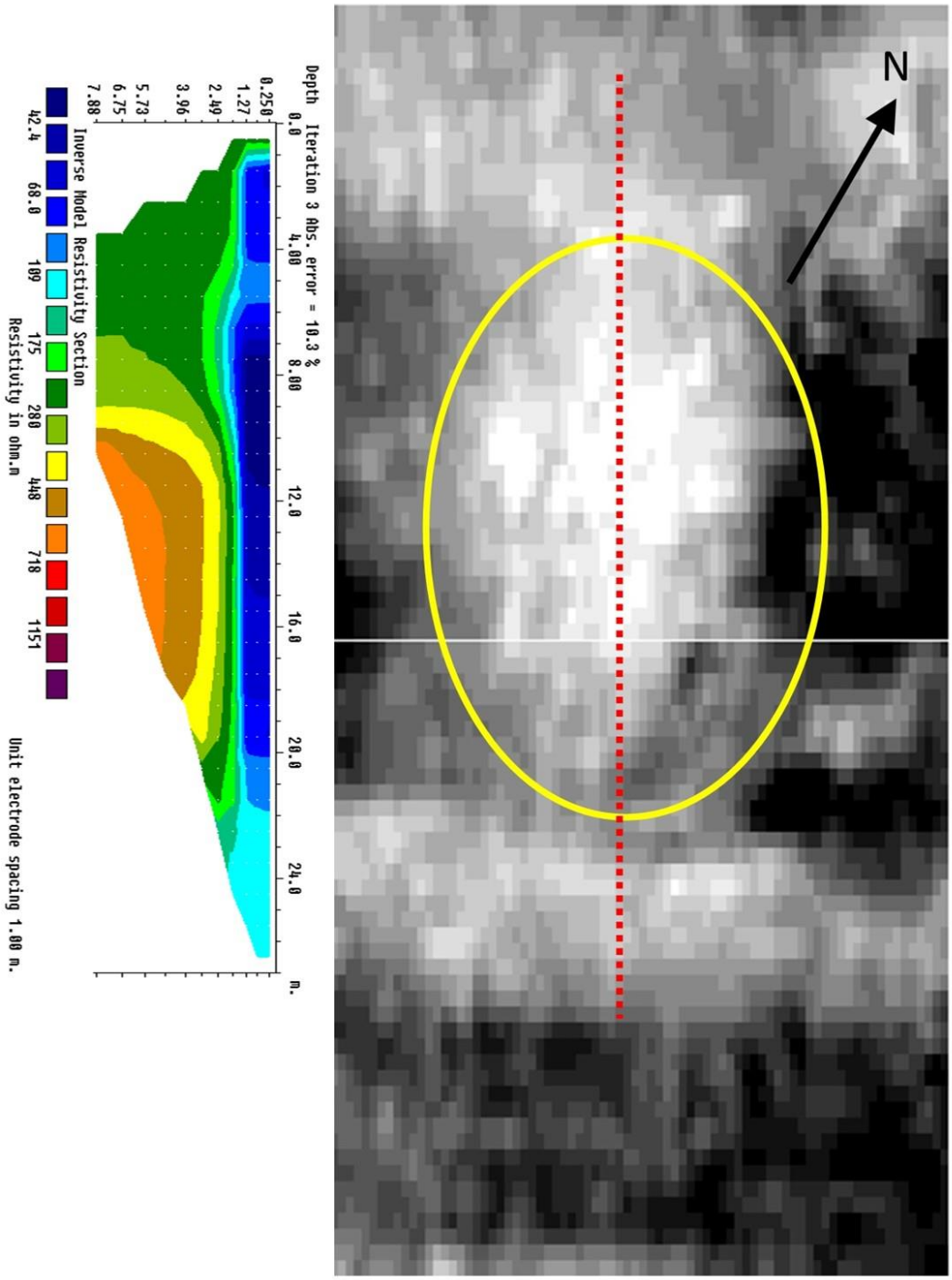

Fig 8. Resistance Profile results alongside Resistance Survey output

Discussion of Resistance Profile Results

The surface results down to 1 metre depth are broadly similar to the resistance survey with the central area of the mound having lower resistance, with zones of slightly higher resistance in the upper and lower ditch areas. There is no evidence of voids or concentrated stony zones which might be expected in a barrow.

Test Pit Findings and Discussion

In the absence of any survey evidence for a barrow it was decided to put in test pits. Test Pit 1 was dug across the upper 'ditch' of Mound 2 as ditches are defining features of barrows. Test Pit 2 was put in 10m to the north-west of Test Pit 1 to confirm the underlying geology. Test Pit 3 was located over the central depression of Mound 1. Test Pit 4 was dug across the upper 'ditch' of Mound 3. The relative positions of the test pits on a LiDAR image are shown in Figure 9.

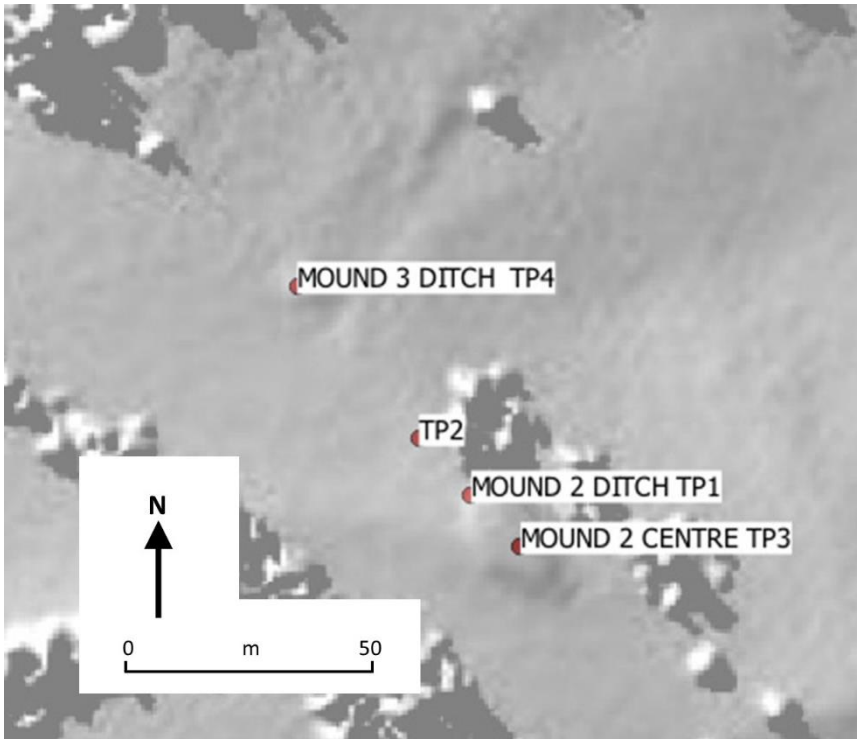

Fig 9: Location of Test Pits on LiDAR image

A summary of the Test Pits and their contents is shown in Table 1. It was felt that the presence of medieval pottery, post medieval pottery and clay-pipe stems would be of most use in establishing whether the mound was not a garden feature. Many of the other finds would be expected to be found in soil from any period.

BELCOMBE TEST PITS								
Test Pit	Depth below turf mm	Med. Pottery	Weight grams	Post Med. Pottery	Weight grams	Clay-pipe stem fragments	Weight grams	Other
TP1 (Mound 2 north ditch 4.0m x 0.6m)								
TP1A (1m x 0.6m)	0-150			1	0.11	2	5.18	oyster shell
	150-200	1	21.46	2	5.46	1	1.66	oyster shell, CBM, Welsh slate, clinker
	200							stone layer
TP1B (1m x 0.6m)	200-300					1	4.32	oyster shell
	300-450/500							no finds
TP1C (1m x 0.6m)	0-150			2	13.5			oyster shell, carbonised wood
	200-300/400					1	3.35	iron nail, clinker, coal, charcoal
	300-450/500	2	6.59					clinker, flint
TP1D (1m x 0.6m)	150-170			1	1.24	1	2.77	bone, charcoal, coal ,clinker
	170-200			1	0.16			coal
	200-250			5	8.84			patinated glass, charcoal, oyster shell
	250-350					1	2.56	coal
	350-450			1	0.71			
	450-590/650	1	5.88					flint
	600-860							coal, charcoal
	860-1000							no finds
TP2 (10m north of TP1 0.45m x 0.45m)	100-150			1	4.33			CBM
	150-250							window glass, stone layer
	250-350							continuing stone and subsoil
TP3 (Mound 2 centre 7m south of TP1D)	100-150			5	241.26			bone
(1m x 1m)	150-200/300	2	2.97					oyster shell, iron nail
	200/300-250/350							bone
	550-650	1	0.57					bone
	970	1	2.11					bone
	1160	1	13.24					
	1230-1450							irregular large stones
TP4 (Mound 3 33m north of mound 2)	50-100			2	20.6			animal tooth,flint
(2.45m x 0.6m)	100-250			2	75.33			bone, clinker, oyster shell
	300							irregular large stones

Table 1: Belcombe Test Pit Summary

TP1A upslope of the 'ditch' was only dug to the level of a stone layer at 200mm. TP2 was dug to confirm that the stone layer was typical of the local area. TP1B did not produce any finds above 200mm. The soil profile in the centre of the ditch is shown in Figure 10.

Fig 10: TP1 Ditch Topsoil Profile

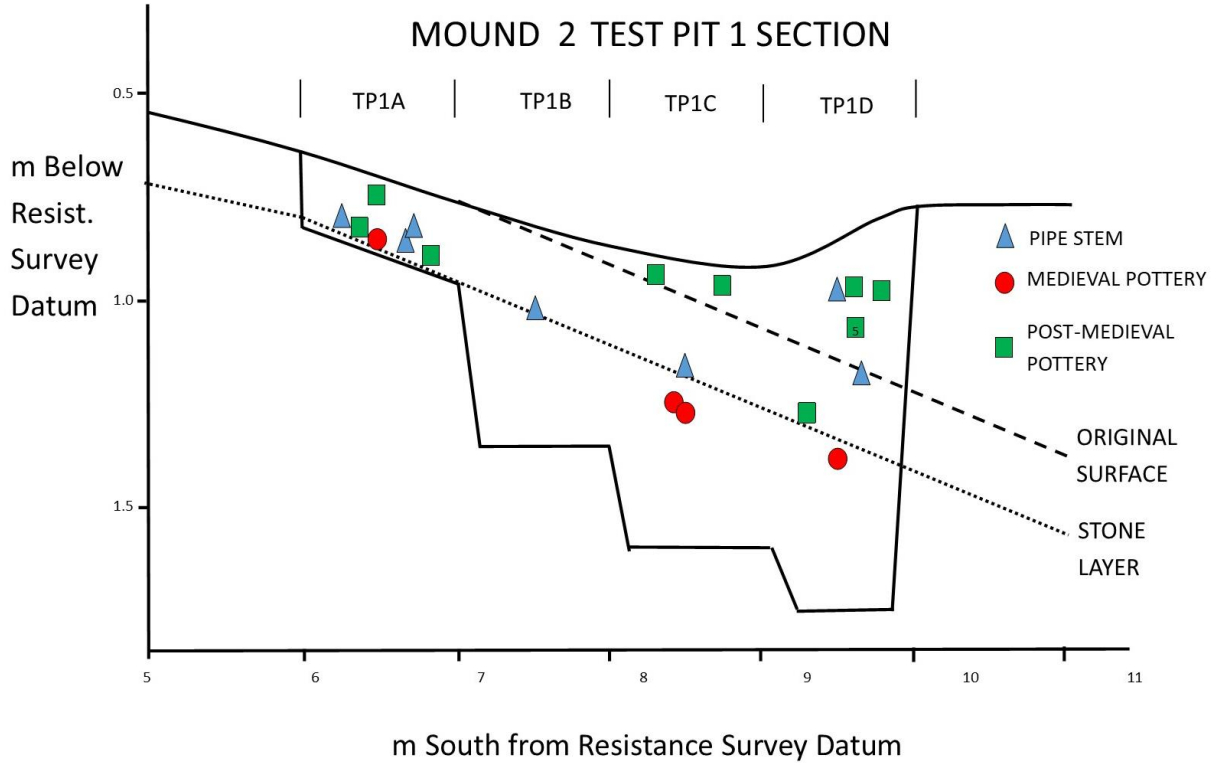

Fig 11: Mound 2 TP1 Section

Figure 11 shows the profile of TP1. The line of the original surface has been taken from Figure 6 and its stone layer could be faintly seen in the wall of the trench. The five pipe stems in 1A, 1B and 1C were found in or just above the stone layer. The pipe stem in 1D at the higher level could have fallen through worm activity but the stem at the lower level would appear to have been buried under the mound. Similarly the medieval pottery in 1C and ID is unlikely to have worked its way down from the modern surface. The post-medieval pottery on the stone layer is pre-Georgian.

Test Pit 3 produced finds typical of post-medieval manuring scatter in the subsurface zone. The section is shown in Figure 12. There was an absence of large stones near the surface despite the presence of large stones on the surface nearby. Medieval pottery was found at all depths indicating that it was already in the soil from which the mound was built. The most distinctive piece is shown In Appendix 2, Figure 15. A layer of larger stones (up to 400mm) was found between 1230mm and 1450mm with subsoil continuing below this level (Fig 13).

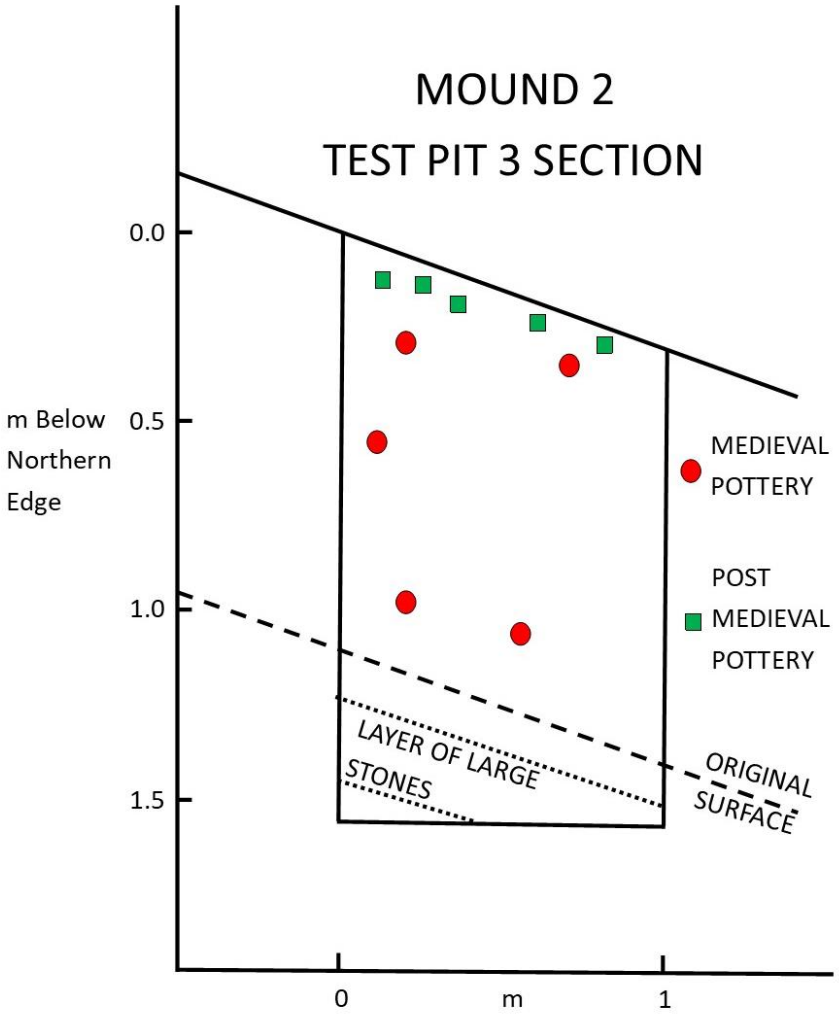

Fig 12: Mound 2 TP3 Section

Fig 13 TP3 Large stones at 1300mm

The finds in Test Pit 4 were all just under the surface and are typical of manuring scatter. There were large stones (up to 400mm) at 300mm depth, similar to those found in the bottom of TP3, with natural subsoil beneath them and no evidence that this area had been previously dug as a ditch.

Conclusion

The soil profile showed no indication that this had ever been a deeper ditch which would be expected if this were a Bronze Age barrow. The medieval pottery below the stone layer in Test Pit 1 and the medieval pottery in the body of the mound in Test Pit 3 also indicate that mound 2 is post medieval. The clay pipe stems in Test Pit 1 point to Mound 2 being a Georgian garden feature created at the same time as the Temple (Fig 14) to add an air of antiquity to the park. Mound 3 is interpreted as a natural feature.

Fig 14 TP1 with TP4 and the Temple in the background

Acknowledgements

Thanks to Paul Weiland for allowing the survey and excavations. Thanks to Rick Buettner, Sue Grier and Malcolm Curtis for assisting with the surveys and to Rick Buettner, Sue Grier and Janet Slack for digging the test pits.

Appendix 1

It was suggested during the course of the project that the mound could be a pillow mound (man-made rabbit warren). The depression in the centre of the mound could have been an access point for underground tunnels and there are modern rabbit holes on the eastern side of the mound. Test Pit 3 did not uncover any evidence for this and there is no record of a warren in the park.

Appendix 2

Fig 15 Medieval pottery rim found at 1.05m depth in TP3

Rob Arkell

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