

Wellhill: Test Pits 2014

WH14TP: Data Structure Report May 2014

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Summary

It is possible that the scheduled pit alignment at Wellhill may date to the Mesolithic period. If so, then the presence of lithic scatters had to be considered. This is particularly important to ascertaining whether the proposed excavation trench(es) should be either opened by hand to maximise the recovery of lithics, or machine stripped. It was decided to undertake a test pitting programme to ascertain the presence or otherwise of encountering lithic scatters. This involved the excavation of a series of six test pits adjacent to the pit alignment and two control test pits outwith its immediate vicinity. The paucity of lithics recovered indicated that it is most improbable that there are lithic scatters in the proximity of the pit alignment. The outcome of the test pitting programme suggests that there is no impediment to the supervised machine stripping of the proposed excavation trench(es) at Wellhill.

1. Introduction

1.1 Archaeological description and background

The pit alignment at Wellhill (NO01NW 75: Index 8918) was scheduled on 31 October 2000. The monument comprises of an irregular alignment of large sub-circular pits/postholes. One of the features has a maximum dimension of c.5m in plan, although the others are c.3m. 8918 has similarities with the Mesolithic pit alignment at Warren Fields, Crathes, Aberdeenshire (Murray *et al.* 2009, Figure 3). The alignment and size of the features at Warren Fields were also irregular with the maximum dimension of the largest feature being 2.4m (Murray *et al.* 2009, 5-10).

It is possible that these features relate to later occupations at Wellhill, however, there is the intriguing possibility of finding evidence for Mesolithic events in Perthshire which has proved to be elusive. For example, an appraisal of all of the chipped stone recovered from Perthshire and held at the National Museum Scotland and Perth Museum and Art Gallery was carried out for the Tay Landscape Partnership Project '<http://taylp.org/index.php>' and determined that none of the lithics could be unequivocally ascribed to the Mesolithic period (Wright 2012).

1.2 Aims and objectives

The possibility of discovering the Mesolithic of Perthshire highlights that the investigation of the top soil to determine its artefactual sterility or otherwise is essential. Lithic scatters are generally the primary evidence for Mesolithic events in Scotland. Old ground surfaces disturbed by ploughing can cast up lithics into the top soil.

It was proposed in the research design dated 1 May 2014 that a series of test pits should be excavated in the vicinity of the scheduled pit alignment to determine if the lithic material recovered indicates the presence of lithic scatters. The

artefactual material indicating the presence of lithic scatters would be representative of either primary or secondary knapping locations, e.g. cores, debitage, small fraction debitage, and possibly pieces with retouch.

The possible presence or otherwise of lithic scatters was to be determined by undertaking a test pitting programme. If it was deemed probable that lithic scatters would be encountered during the proposed excavation of the pit alignment then the trench(es) would have to be opened by hand to maximise the recording and recovery of lithic material. Otherwise the trench (es) will be machine stripped under careful supervision.

Samples of the top soil were taken to ascertain levels of acidity/alkalinity (pH analysis) which may inform interpretations on the possible lack of survival and recovery of organic artefacts.

1.3 Geology, topography and vegetation

The solid geology is the Scone Sandstone Formation. Glaciofluvial sheet deposits comprising of sand and gravels are recorded for the drift geology (Digimap® EDiNA Geology Roam). Glacial till is recorded to the south-west of the pit alignment (NO01NW 75) [Figure 1].

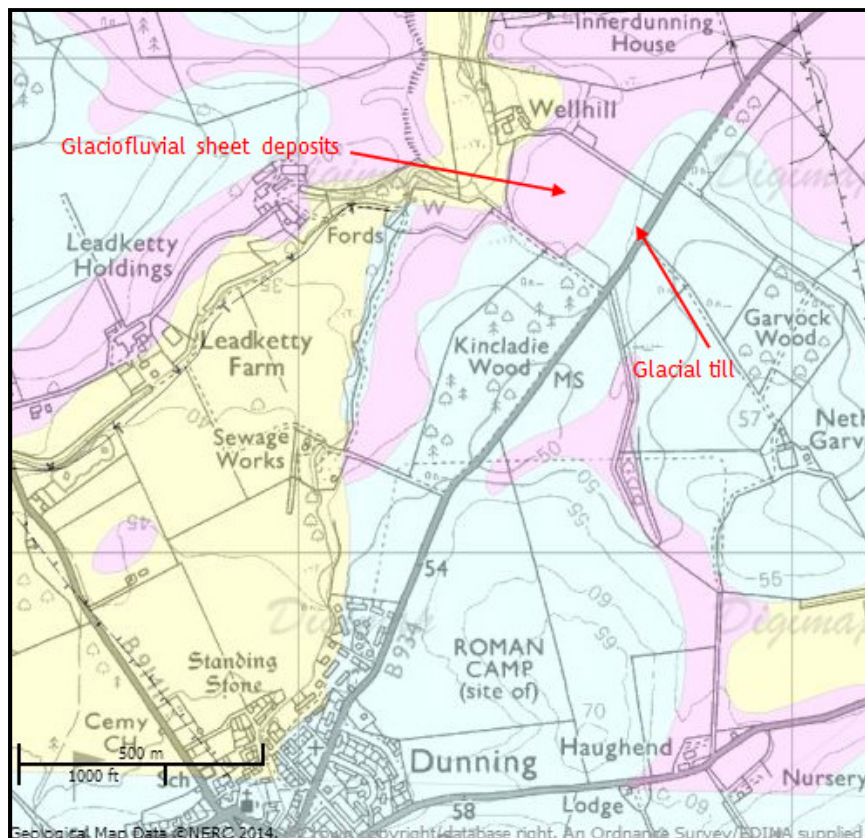


Figure 1: : Drift geology at Wellhill (Digimap® EDiNA Geology Roam online resource; © NERC/Crown copyright database right).

The middle section of the field where the pit alignment is located is on level ground. To the south beyond the parameters of the pit alignment is a shallow hollow. The field has been set aside for grass crops.

2. Methodology

2.1 Test pitting programme

A series of six 1m² test pits were excavated adjacent to the pit alignment. In addition, two 1m² control test pits were excavated outwith the immediate vicinity of the pit alignment in an area where there were no known archaeological features (Figure 2).

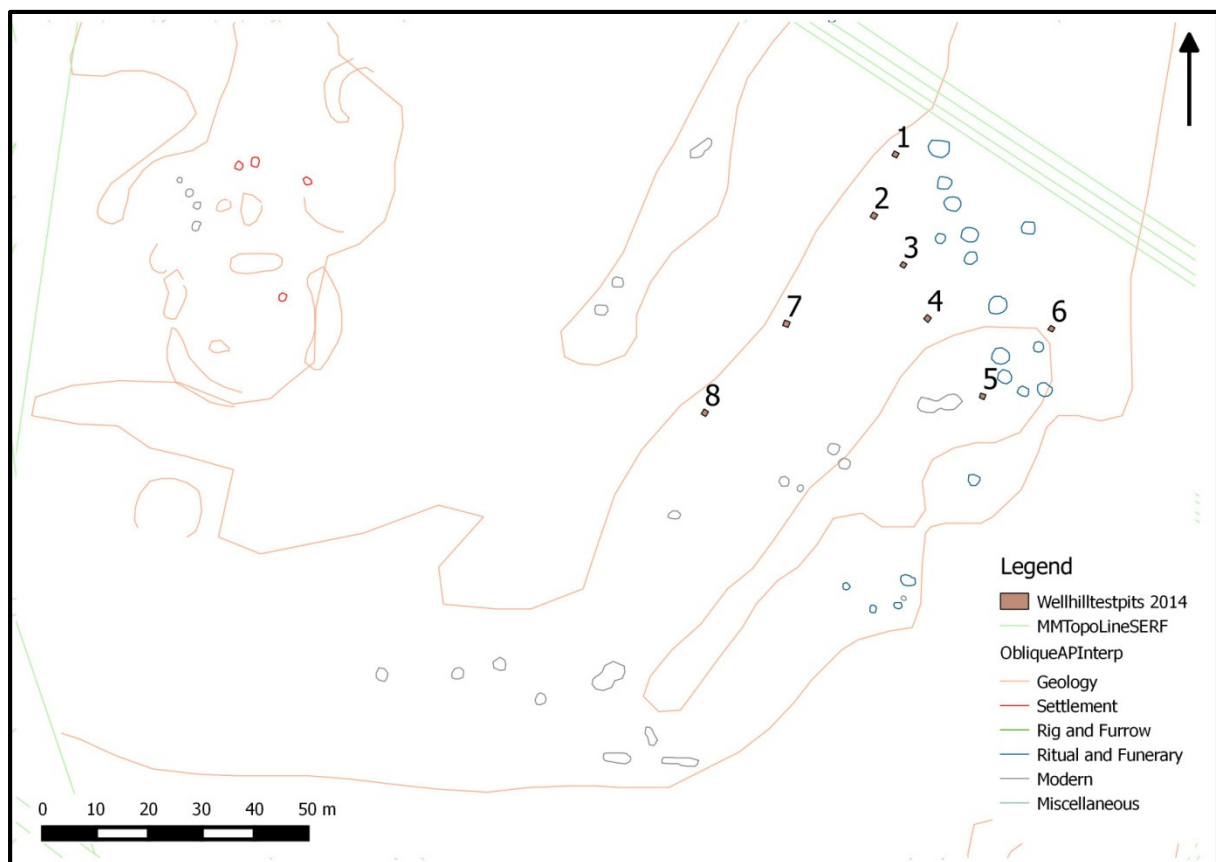


Figure 2: Location of test pits (1-6) and control test pits (7-8). © University of Glasgow.

2.2 Excavation methodology

Excavation of the test pits removed all top soil and recorded all artefactual material recovered.

- The test pits were excavated by hand and all spoil was sieved using a 2mm mesh to maximise the recovery of artefacts.
- The test pits and contexts were recorded in plan and section as appropriate by measured drawing, by digital photography and by written description on *pro forma* sheets.

- The co-ordinates of the location of test pits were recorded by digital GPS with sub-centimetre accuracy.
- Samples of the top soil were taken for future pH analysis to determine its neutrality of otherwise in the survival of organic materials.

3. Results

3.1 Test Pit 1

Top soil (14003) comprised of medium dark brown sandy silt of medium compaction with pea gravel and small rounded and sub-angular stone inclusions; depth 43cm. Top soil was overlying a natural of orange brown gravel clay silt.

Two sherds of modern glass were recovered from Test Pit 1.

3.2 Test Pit 2

The composition of the top soil (14004) and natural was the same as recorded for Test Pit 1, although (14004) was significantly shallower at 27cm (Figure 3).

Finds comprised of two sherds of modern ceramic and one sherd of modern glass.



Figure 3: South facing section of Test Pit 2.

3.3 Test Pit 3

The top soil (14005) was severely compacted to a depth of 33cm. Its composition comprised of dark brownish grey sandy silt with pea gravel, and small rounded and sub-angular stone inclusions. Natural was recorded compacted pea gravel within dark orange brown matrix.

Part of the stem from a clay pipe and two sherds of modern ceramic were recovered from Test Pit 3.

3.4 Test Pit 4

The top soil (14006) is the same as (14005) in composition and depth. The natural comprised of loosely compacted gravel within orange brown matrix.

Finds comprised of three sherds of modern ceramic.

3.5 Test Pit 5

The composition of the top soil (14007) was medium dark brown sandy silt of medium compaction with pea gravel and small rounded and sub-angular stone inclusions. It was recorded to a depth of 35cm overlying a natural of gravelly orange brown coarse sand.

The finds recovered comprised of five sherds of modern ceramic.

3.6 Test Pit 6

The composition of the top soil (14008) and natural is the same as Test Pit 5. The depth of the top soil was 32cm.

Three sherds of modern ceramic were recovered.

3.8 Test Pit 7

The top soil (14001) was recorded as of medium compaction, dark brownish grey sandy silt with pea gravel, and small rounded and sub-angular stone inclusions; depth 40cm. Underlying (14001) was 10cm dark orange brown layer of clay (14013). Beneath (14013) was natural which comprised of gravel within dark orange clay silt.

The unstratified finds from Test Pit 7 comprised of one sherd of modern glass, one sherd of modern ceramic, one jasper flake fragment and one flint flake fragment.

3.7 Test Pit 8

The top soil (14002) was made up of hard compacted, dark brownish grey sandy silt with pea gravel, and small rounded and sub-angular stone inclusions; depth 40cm. Underlying (14002) was firmly compaction, dark brown sandy silt (14012); horizon of darker more organic material within topsoil; depth 10cm. (14012) overlay a natural similar to that found in Test Pit 7.

A posthole/pit [14010] was partially exposed in the test pit (Figure 4). The feature was not excavated. There are a minimum of two fills. The base fill appears to be charcoal rich sandy silt (14009) underlying light orange brown silty sand (14011).

During the cleaning of the surface of the feature prior to taking the post-excavation photograph a grey flint flake (small find 14001) was recovered from the surface of (14009).

Two and four sherds of modern glass and ceramic, respectively were recovered from (14002).

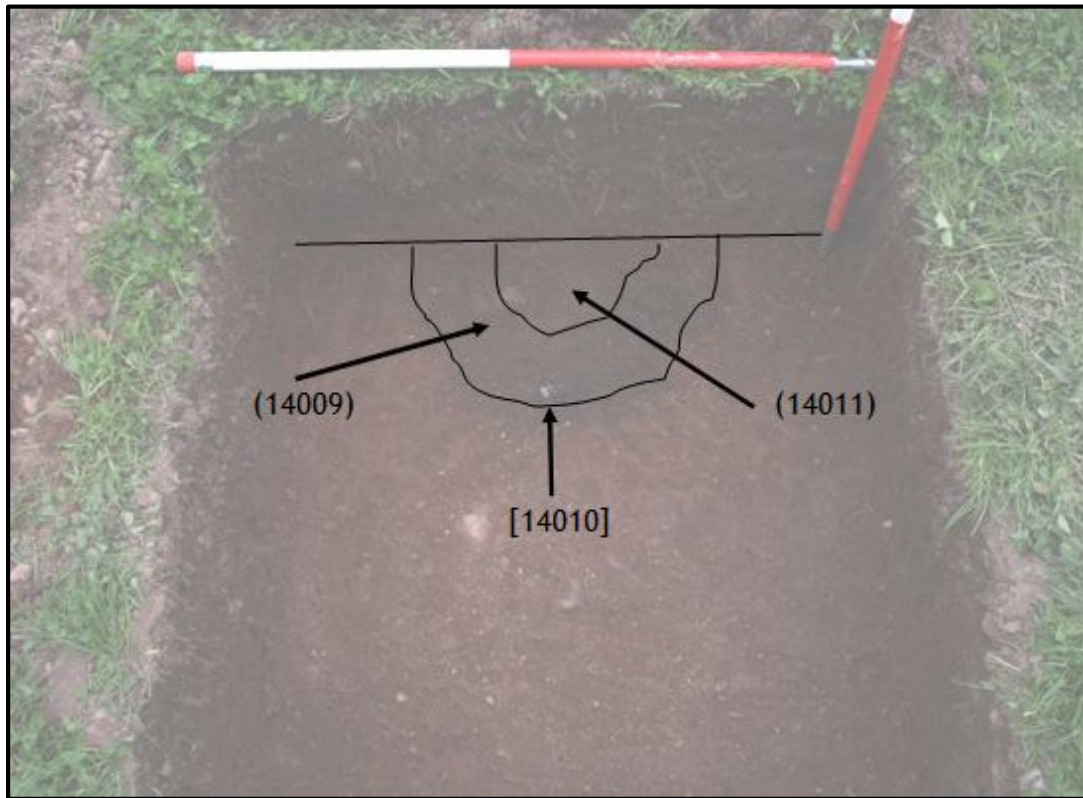


Figure 4: Post-excavation photograph of Test Pit 8 showing partially exposed posthole/pit feature [14010].

4. Discussion and conclusion

The paucity of lithic artefacts recovered suggests the absence of lithic scatters in the vicinity of the pit alignment. As such, there is no impediment to the trench(es) being machine stripped under careful supervision.

The recording of a posthole/pit in Test Pit 8 is particularly interesting. Firstly, this feature is in an area where there was previously no known archaeology. Secondly, to ascertain if other putative features have been recognised by the gradiometer. The processing of the raw data from the gradiometric survey will be undertaken in due course.

The test pit was also useful by providing an insight into the heterogeneous character of the natural at Wellhill.

5. Acknowledgements

A profound thank you to the test pitting and geophysics teams (Figure 5). Also to Gert Petersen who not only led the geophysical survey but put together all of the equipment required for the project, and Lorraine McEwan who made sure we had to hand all the necessary paperwork, as well as providing training in the use of the

digital GPS. Thank you to Cathy MacIver for the new transcription of the aerial photograph and to our visitors, namely Drs Colleen Batey and Kenny Brophy who came bearing gifts of cake.

Finally, I was very pleased that David Myles (landowner) found time to stop by for a chat. None of this could have happened without both his consent, and also that of the SMC team at Historic Scotland. Again, thank you to you all.



Figure 5: Gillian Bond, Daniel MacLean, Terence Christian, Jamie Barnes, Leonie Teufel, Gert Petersen and Becca Younger.

A handwritten signature in black ink, appearing to read 'Dene Wright'.

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19 May 2014
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Bibliography

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Appendix I: Contexts

Test Pit	Context	Description	Interpretation	Relationship to other contexts
1	14003	Medium compaction, medium dark brown sandy silt with pea gravel and small rounded and sub-angular stone inclusions	Top soil	Over natural
2	14004	Medium compaction, medium dark brown sandy silt with pea gravel and small rounded and sub-angular stone inclusions	Top soil	Over natural
3	14005	Hard compaction, dark brownish grey sandy silt with pea gravel, and small rounded and sub-angular stone inclusions	Top soil	Over natural
4	14006	Very hard compaction, dark greyish brown sandy silt with pea gravel, and small rounded and sub-angular stone inclusions	Top soil	Over natural
5	14007	Medium compaction, medium dark brown sandy silt with pea gravel and small rounded and sub-angular stone inclusions	Top soil	Over natural
6	14008	Medium compaction, medium dark brown sandy silt with pea gravel and small rounded and sub-angular stone inclusions	Top soil	Over natural
7	14001	Medium compaction, dark brownish grey sandy silt with pea gravel, and small rounded and sub-angular stone inclusions	Top soil	Over (14013)
7	14013	Firm compaction, dark orange brown clay	Clay	Over natural
8	14002	Hard compaction, dark brownish grey sandy silt with pea gravel, and small rounded and sub-angular stone inclusions	Top soil	Over (14012)
8	14009	Friable charcoal rich sandy silt	Primary fill of [14010]	Over [14010]
8	14010	Posthole/pit partially exposed in test pit. Putatively oval shaped with possible maximum width of 60cm	Cut of posthole/pit	Over (14002)
8	14011	Firm compaction, light orange brown sandy silt with small sub-angular and sub-rounded stone inclusions	Upper fill of [14010]	Over (14009)
8	14012	Firm compaction, dark brown sandy silt; horizon of darker more organic material within topsoil	Top soil variant	Over natural

Appendix II: Finds

Find	Context	Number of pieces	Material	Description	Initials	Date
Small Finds						
14001	14009	1	Stone	Flint flake	DM	14/05/2014
Top Soil Finds						
TP1	14003	1	Glass	Modern	JB	14/05/2014
TP2	14004	1	Glass	Modern	JB	15/05/2014
TP2	14004	2	Ceramic	Modern	JB	15/05/2014
TP3	14005	1	Pottery	Part of stem of clay pipe	RKY	14/05/2014
TP3	14005	2	Ceramic	Modern	RKY	14/05/2014
TP4	14006	3	Ceramic	Modern	RKY	15/05/2014
TP5	14007	5	Ceramic	Modern	TAC	14/05/2014
TP6	14008	3	Ceramic	Modern	TAC	15/05/2014
TP7	14001	1	Glass	Green glass	DM	15/05/2014
TP7	14001	1	Ceramic	Modern	DM	15/05/2014
TP7	14001	2	Stone	Jasper & flint flake fragments	DM	15/05/2014
TP8	14002	2	Glass	Modern	DM	14/05/2014
TP8	14002	4	Ceramic	Modern	DM	14/05/2014

Appendix III: Drawings

Drawing	Subject	Description	Scale	Type	Initials	Date
001	TP1	Post-excavation plan	1:20	Plan	JB	14/05/2014
002	TP1	West facing section	1:10	Section	JB	14/05/2014
003	TP3	West facing section	1:10	Section	RKY	14/05/2014
004	TP3	Post-excavation plan	1:20	Plan	RKY	14/05/2014
005	TP8	East facing section	1:10	Section	DM	14/05/2014
006	TP8	Post-excavation plan	1:10	Plan	DM	14/05/2014
007	TP5	Post-excavation plan	1:20	Plan	JB	14/05/2014
008	TP5	East facing section	1:10	Section	JB	14/05/2014
009	TP2	Post-excavation plan	1:20	Plan	JB	15/05/2014
010	TP2	South facing section	1:10	Section	JB	15/05/2014
011	TP4	Post-excavation plan	1:20	Plan	RKY	15/05/2014
012	TP4	East facing section	1:10	Section	RKY	15/05/2014
013	TP7	East facing section	1:10	Section	DM	15/05/2014
014	TP7	Post-excavation plan	1:10	Plan	DM	15/05/2014
015	TP6	Post-excavation plan	1:10	Plan	TAC	15/05/2014
016	TP6	West facing section	1:10	Section	TAC	15/05/2014

Appendix IV: Samples

Sample	Test Pit	Size	Material	Reason	Initials	Date
14001	1	3L	Top soil	pH	JB	14/05/2014
14002	2	3L	Top soil	pH	JB	15/05/2014
14003	3	3L	Top soil	pH	RKY	14/05/2014
14004	4	3L	Top soil	pH	RKY	15/05/2014
14005	5	3L	Top soil	pH	TAC	14/05/2014
14006	6	3L	Top soil	pH	TAC	15/05/2014
14007	7	3L	Top soil	pH	DM	15/05/2014
14008	8	3L	Top soil	pH	DM	14/05/2014

Appendix V: Photographs

Photo	Test Pit	Context	Description	Taken from	Initials	Date
001			Working shot	S	TAC	14/05/2014
002			Working shot	S	TAC	14/05/2014
003			Working shot	E	ADW	14/05/2014
004			Working shot	E	ADW	14/05/2014
005	1		Post-excavation	S	JB	14/05/2014
006	1		Post-excavation	S	JB	14/05/2014
007	1	14003	West facing section	E	JB	14/05/2014
008	8	14001; 14003	East facing section	E	DM	14/05/2014
009	8	14009; 14010; 14011	Post-excavation	W	DM	14/05/2014
010	3		Post-excavation	W	RKY	14/05/2014
011	VOID					
012	VOID					
013	VOID					
014	VOID					
015	3	14005	West facing section	W	RKY	14/05/2014
016	3	14005	North facing section	N	RKY	14/05/2014
017	3	14005	East facing section	E	RKY	14/05/2014
018	3	14005	South facing section	S	RKY	14/05/2014
019	5		Post-excavation	E	JB	14/05/2014
020	5	14007	East facing section	E	JB	14/05/2014
021	2		Post-excavation	S	JB	15/05/2014
022	2	14004	South facing section	S	JB	15/05/2014
023	4		Post-excavation	E	RKY	15/05/2014
024	4	14006	East facing section	E	RKY	15/05/2014
025	VOID					
026	6	14008	West facing section	W	TAC	15/05/2014
027	6	14008	West facing section	W	TAC	15/05/2014
028	6	14008	West facing section	W	TAC	15/05/2014