Park Lane Spinney Sample Assessment

Project Code: INI8PLBTT **Project No:** n/a

Authors: Mhairi Hastie BSc MSc FSA Scot MCIfA & Mike Cressey HND, BA (Hons) MSc Phd FSA Scot MCIfA

Date Issued: November 2019 **Version:** 1

1. METHODOLOGY

Twelve bulk soil samples were retained during archaeological investigations carried out at Park Lane Spinney (see Table 1 for details).

Sample number	Trench No	Context number	Cut number	Feature type	Approx. sample vol (litres)	Processed?
1	124	12408	12405	Ditch	20	Y
2	-	wood sample	-	-	-	N
3	91	9104	9103	Ditch	20	Y
4	91	9108	9103	Ditch	20	Y
5	86	8615	8614	Ditch	20	Y
6	86	8620	8619	Pit	20	Y
7	86	8623	8624	Ditch	20	Y
8	86	8605	8604	Ditch	20	Y
9	86	8630	8629	Ditch	20	Y
10	86	8625	8626	Ditch	15	Y
11	86A	8637	8636	Pit	20	Y
12	86A	8645	8646	Pit	10	Y
13	57	5714	5715	Pit	20	Y

Table 1: Samples retained

Each sample was processed through a system of flotation. The floating debris (flot) was collected in a $250\mu m$ sieve and the remaining material (retent) in the tank was washed through a 1mm mesh. Both the flot and retent fractions were then air-dried under controlled conditions.

The retents were sorted by eye for small finds and non-buoyant archaeobotanical remains and scanned with a magnet to pick up ferrous debris. Any archaeologically significant material was removed and bagged.

The flots were scanned using a binocular microscope (x10-x100 magnifications) and the presence of any charred plant remains and other archaeologically significance material recorded. Identifications of archaeobotanical material were carried out with reference to seed atlases and in-house reference collection.

The results are summarised in Table 2: Composition of flots and Table 3: Composition of retents (below), organised by trench.

This report concentrates on the carbonised plant remains recovered from the samples (cereal grain, nutshell and wood charcoal). The small finds (artefacts) recovered from the samples

have been submitted to appropriate specialists for detailed analysis (see separate reports) and these are not discussed below.

2. RESULTS

Cereal Remains

Carbonised cereal grains were recovered from two of the samples, from the fill of pit [8619] (Trench 86) and from the full of ditch [9103] (Trench 91). In both cases, only small amount of grain (< 10 grains per sample) were recovered from each sample. Preservation of the grain was poor; where preservation allowed grains of barley (*Hordeum* sp.) and possible wheat (*Triticum* sp.) were identified. No other cereal remains (i.e. chaff or culm nodes) were recovered.

Other Plant Remains

One small fragment of hazel nutshell (*Corylus avellana*) was recovered from the fill of ditch [8629] (Trench 86).

Wood Charcoal

Wood charcoal was recovered from all the samples, in varying quantities and preservation (Table 4). The largest amount of charcoal was recovered from the fills of ditch [8614] (Trench 86); ditch [5714] (Trench 57) and pit [8620] (Trench 86). Initial identification of the wood charcoal indicates that oak (*Quercus sp*) was the dominant species followed by lesser fragments of birch (*Betula sp.*), hazel (*Corylus sp.*), willow (*Salix sp.*) and elm (*Ulmus sp.*). Nine of the samples were below the level of reliable identification owing to their small size (below 2mm). The bulk of the assemblage was classified as abraded and amorphous due to taphonomic processes. The oak charcoal had maintained its blocky structure due to its resilience in the buried environment.

3. DISCUSSION

The quantity of palaeoenvironmental remains recovered from the samples was generally low.

The bulk of the remains comprised of wood charcoal, which comprised principally of oak with smaller amounts of birch, hazel, willow and elm. Most of the charcoal was abraded and amorphous. Roundwood was present in very low frequency. All of the species are typical of lowland broadleaf woodland, the bulk of which is the residue from domestic fuel.

The cereal grains and fragment of nutshell were much abraded and fragmentary suggesting that the debris had undergone much movement prior to be being buried. The carbonised plant remains are unlikely to be associated with the original function of the features from which they were recovered. The very small amount of plant remains recovered does not allow for detailed discussion.

4. **RECOMMENDATIONS**

Further Analysis

• No further detailed analysis of the plant remains is recommended.

Radiocarbon Dating

- None of the cereal grain nor the nutshell would be suitable for AMS dating.
- The bulk of the charcoal is oak, with only small amounts of non-oak charcoal present. Given the poor preservation and infrequency of the non-oak charcoal it would not be suitable for AMS dating.

Table 2. Composition of flots (organised by trench)

Trench	Context no	Fill of	Sample no	Feature type	Approx. vol of flot (ml)		Wood Charcoal		
no						Qty	Pres.	Id.	
57	5714	5715	13	Pit	2000				
	8605	8604	8	Ditch	<10				+ (vsf)
	8615	8614	5	Ditch	500				++++
86	8620	8619	6	Pit	500	+	+ ma Hordeum sp. x 4 Triticum / Hordeum spp. x 1		++++
	8623	8624	7	Ditch	30				++
	8625	8626	10	Ditch	10				+ (vsf)
	8630	8629	9	Ditch	150				+ (sf)
86A	8637	8636	11	Pit	100				+++
OOA	8645	8646	12	Pit	10				+
0.1	9104	9103	3	Ditch	50	+	ma	Triticum sp. x 1	+++
91	9108	9103	4	Ditch	20				++
124	12408	12405	1	Ditch	30				+

Key: + = rare (1-10 items), ++ = occasional (11-50 items),

+++ = common (51-100 items), ++++ = abundant (101+ items)

char. = charcoal, sf = small fragments (<5mm in dia.), vsf = very small fragments (<2mm in dia.)

ma = much abraded, m + abraded, f = fragmentary, s-g = small grained

Table 3. Composition of retents (organised by trench)

Trench no	Context no	Fill of	Sample no	Feature type	Pottery	Fired clay	Lithic flake	Fire- cracked stone	Nutshell	Magnetic residue	Wood Charcoal
57	5714	5715	13	Pit							++++
86	8605	8604	8	Ditch		+					++
	8615	8614	5	Ditch	+	++		+			++
	8620	8619	6	Pit	+	++		+		+	+++
	8623	8624	7	Ditch	+						++
	8625	8626	10	Ditch						+	+
	8630	8629	9	Ditch					+(x1)		+
86A	8637	8636	11	Pit	+		+(x1)	+++			+
	8645	8646	12	Pit							+
91	9104	9103	3	Ditch						+	+
	9108	9103	4	Ditch		+		+		+	+
124	12408	12405	1	Ditch	+		+				+

Key: + = rare (1-10 items), ++ = occasional (11-50 items),

+++ = common (51-100 items), ++++ = abundant (101+ items)

Sf = small fragments (<5mm in dia.), vsf = very small fragments (<2mm in dia.)

Table 4. Charcoal assemblage species identified, frequency, weight and condition (organised by trench)

Key: BLOI = below the level of id (<2mm in dia.), AF = amorphous fragments

Trench	Context	Fill of	Sample	Feature			•••	G 11.1
no	no		no	type	Species	Frequency	Wgt (g)	Condition
57	5714	5715	13	Pit	Quercus	25	10.5	Fair
37					Betula	1	0.2	AF
	8605	8604	8	Ditch	Quercus	3	0.3	AF
		8614	5	Ditch	Quercus	25	1.16	Fair
					Ulmus	1	0.1	AF
	8615				Betula	1	0.2	AF
					Salix	1	0.2	AF
86					Quercus	30	3.3	AF
	8620	8619	6	Pit	Quercus	25	0.8	AF
					Quercus	25	219	Good
	8623	8624	7	Ditch	BLOI	N/a	N/a	N/a
	8625	8626	10	Ditch	BLOI	N/a	N/a	N/a
	8630	8629	9	Ditch	BLOI	N/a	N/a	N/a
	8637	8636	11	Pit	BLOI	N/a	N/a	N/a
86A					BLOI	4	0.4	AF
	8645	8646	12	Pit	BLOI	N/a	N/a	N/a
91	9104	9103	3	Ditch	BLOI	N/a	N/a	N/a
	9108	9103	4	Ditch	BLOI	N/a	N/a	N/a
124	12408	12405	1	Ditch	BLOI	N/a	N/a	N/a