

**LAND AT LEAGRAVE PARK
SUNDON PARK ROAD
LUTON**

**ARCHAEOLOGICAL OBSERVATION,
RECORDING AND ANALYSIS**

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Preface

Every effort has been made in the preparation of this document to provide as complete a summary as possible. All statements and opinions in this document are offered in good faith. Albion Archaeology cannot accept responsibility for errors of fact or opinion resulting from data supplied by a third party, or for any loss or other consequence arising from decisions or actions made upon the basis of facts or opinions expressed in this document.

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Structure of the Report

After the introductory Section 1, the methodology is described in Section 2. Section 3 represents a summary of the results of the programme of archaeological observation and recording. In Section 4, a summary of the post-excavation assessment work is presented. Section 5 provides a synthesis, including an assessment of the significance of the results. Section 6 is a bibliography and Section 7 is an Appendix containing the full palynological assessment report.

Key Terms

Throughout this report the following terms or abbreviations are used:

Albion	Albion Archaeology
CAO	County Archaeological Officer (Bedfordshire County Council)
Client	Sustrans
HER	Historic Environment Record
IFA	Institute of Field Archaeologists
Procedures Manual	<i>Procedures Manual Volume 1 Fieldwork, 2nd Edition 2001.</i> Bedfordshire County Council



Non-Technical Summary

Planning permission was granted by Luton Borough Council for the erection of sculptures within a new wetland area at Leagrave Park, Luton (NGR, TL 0601 2442). The location of the development was archaeologically sensitive because it was adjacent to a Scheduled Ancient Monument known as Waulud's Bank, a large earthwork enclosure of Neolithic date. A condition attached to the planning permission required the implementation of a programme of archaeological works during ground works to create the wetland area. Albion Archaeology was commissioned by Sustrans to prepare a project design and undertake the archaeological works in accordance with a Brief issued by Bedfordshire County Council's County Archaeological Officer (CAO), acting as archaeological adviser to Luton Borough Council.

The programme of archaeological observation and recording in the field was undertaken between 3 October and 13 October 2005. A series of layers of peat and clay/silt alluvium were found, sealed by modern imported soils.

A programme of post-fieldwork assessment and analysis was agreed with the CAO. The potential programme comprised up to five stages; the implementation of each stage was dependent on the preceding stage demonstrating that further assessment and / or analysis were warranted. The possible stages were: Stage 1 dendrochronological analysis and dating; Stage 2 pollen assessment; Stage 3 radiocarbon dating and full pollen analysis; Stage 4 snail and macroscopic plant remains assessment; Stage 5 snail and macroscopic plant analysis.

Following completion of Stages 1 and 2, a summary of the results was produced by Albion that concluded that there was insufficient potential to justify further analysis. This was agreed by the CAO. This document has been produced to fulfil the reporting requirements of the CAO's brief.

The results show that the site contains two layers of peat alternating with flood or alluvial deposits, which were buried in the modern period by a deep layer of imported soils used to level the site. The lower peat layer appears to have formed in an environment dominated by Alder carr whilst the upper peat layer may have formed in more open conditions. The dating of the peat and alluvial deposits is uncertain. Pollen samples from the peat layers strongly suggest that they were unlikely to date from the Neolithic period and no 'exotic' pollen of introduced species was recovered to suggest a possible terminus ante quem for the samples. The single flint tool of probable Neolithic date recovered from layer (105) may have been redeposited in that context, particularly in view of the fact that it is in alluvium situated adjacent to a prehistoric monument that has produced numerous flint artefacts.

The project archive, consisting of drawings, written records and photographs, is currently held by Albion Archaeology and will be deposited at Luton Museum.



1. INTRODUCTION

1.1 *Background*

Luton Borough Council granted planning permission (04/1586/FUL) for the erection of sculptures within a new wetland area at Leagrave Park, Sundon Park Road, Luton. The planning permission contained a condition requiring the implementation of a programme of archaeological works. Bedfordshire County Council's County Archaeological Officer (CAO), acting as archaeological adviser to Luton Borough Council, issued a brief (BCC 2005) that defined the nature of the required archaeological response.

Albion Archaeology was commissioned by Sustrans to undertake a programme of archaeological observation, recording, analysis and publication to fulfil the requirements of the brief. A project design was prepared by Albion Archaeology, detailing the necessary works (Albion 2005a). The project design was approved as providing an adequate basis for undertaking the archaeological investigation by the CAO on 29th September 2005.

Following the completion of the fieldwork, a programme of post-fieldwork analysis (Albion 2005b) was agreed with the CAO. This was designed as a series of stages. The implementation of each stage was dependent on the preceding stage demonstrating that further assessment and / or analysis were warranted. The possible stages were: Stage 1 dendrochronological analysis and dating; Stage 2 pollen assessment; Stage 3 radiocarbon dating and full pollen analysis; Stage 4 snail and macroscopic plant remains assessment; Stage 5 snail and macroscopic plant analysis. For full details, see Section 4.1.

Under Stage 1, a timber sample was assessed for dendrochronological dating. The results of this were included in an amended post-fieldwork project design (Albion 2005c). Under Stage 2, pollen samples were assessed (Cruise 2006) and a summary of the results of the analysis to date was produced (Albion 2006). This concluded that there was insufficient potential to justify additional stages of analysis. The CAO agreed with this conclusion and this report has been prepared to fulfil the reporting requirements of the Brief.

1.2 *Site Location, Description and Nature of Development*

The site is centred at TL 0601 2442, in the south-east corner of Leagrave Park (Figure 1). This forms part of Leagrave Common and lies at a height of approximately 115m OD. The River Lea, which rises a short distance to the north, borders the east edge of the site. A tributary stream of the River Lea borders the northern edge of the site, joining the Lea at the north-east corner of the site. Prior to the start of earthmoving, the site was under grass as part of the open space within Leagrave Park.

The underlying geological deposits consist mainly of valley gravels and alluvium associated with the river.



The newly created marsh area is approximately 700sqm in extent. Its formation involved the removal of existing soils up to a depth of 1.20m and the creation of concrete foundation pads in the base of the excavation to support sculptures.

1.3 Archaeological and Historical Background

The site is adjacent to a Scheduled Ancient Monument, a Neolithic enclosure known as Waulud's Bank (HER 820) (Figure 1). This substantial earthwork enclosure consists of a ditch with an internal bank. It is D-shaped in plan and encloses an area of approximately 7 hectares. Large numbers of Neolithic and Bronze Age worked flints have been recovered from the monument, indicating possible occupation of the site. Excavations in 1953 at two locations on the northern and eastern perimeter of the earthwork recovered Neolithic pottery and animal bone and evidence of a small circular hut on the exterior of the monument (Dyer 1964).

Rescue excavations at Waulud's Bank prior to the construction of a dual carriageway confirmed that the earthwork was Neolithic, with a ditch 6ft deep, and 30ft wide (Dyer 1972).

The site of the proposed sculptures was originally marshy before it was drained and infilled during construction of the railway line in the 19th century.



2. METHODOLOGY

2.1 Introduction

The programme of archaeological works was undertaken between 3 October and 13 October 2005. During this period, all groundwork that required monitoring was completed. The main objectives of the archaeological observation and recording were to:

- Identify and sample any deposits associated with the marsh that was infilled in the 19th century.
- Recover environmental remains that could elucidate past, local environmental conditions.
- Identify deposits contemporary with the construction and use of Waulud's Bank.

A detailed methodology for the fieldwork is set out in Section 2 of the Project Design (Albion Archaeology 2005a). During the earthmoving operations to create the new marshland area, the site was monitored by an archaeologist. The archaeological deposits uncovered by the work were investigated and recorded in accordance with the requirements set out in section 5 the Brief and Albion's Procedures Manual. A series of peat and alluvial deposits were exposed beneath the 19th or 20th century infill. Vertical profiles through these deposits were recorded. A number of column and bulk samples were taken from these deposits in line with advice sought from the English Heritage Regional Archaeological Science Advisor, Jen Heathcote, and palynological specialist, Gill Cruise. The CAO also inspected the site during the course of the fieldwork. The archaeological deposits were recorded in plan at a scale of 1:50 and in section at 1:10.

The record consists of site drawings, context records and digital photographs. The project archive is currently held by Albion Archaeology and will be deposited at Luton Museum.

Throughout the project the standards set out in the Institute of Field Archaeologists Codes of Conduct and Standards and Guidance documents (specifically Standard and Guidance for an Archaeological Watching Brief, September 1999), in English Heritage's Management of Archaeological Projects (1991) and Albion Archaeology's Procedures Manual were adhered to.



3. RESULTS OF OBSERVATION AND RECORDING

3.1 Description of Archaeological Deposits (Figures 2, 3 and 4)

The following sections describe the most significant deposits that were observed during the fieldwork. The soil profile is described from top to bottom. Stratigraphic relationships are presented graphically as a matrix in Section 3.2.

3.1.1 Modern make-up deposits

The uppermost layer consisted of a thin layer of turf and topsoil (100). Immediately below that, was a 0.5–0.75m thick layer (101) of mid grey-brown silty-clay with frequent small to large stones and small to mid-sized chalk fragments. Finds recovered from this layer consist of animal bone and a single sherd of post-medieval pottery. In addition, various items of modern debris were observed during machine excavation but not collected. These included a motorcycle engine and crisp packets.

3.1.2 Flood or dredging deposit (102)

Layer (102) consisted of light reddish grey silt up to 0.1m thick, with frequent small to medium sized stones. The layer contained moderate concentrations of small mollusc shells, including *Planorbis* species.

3.1.3 Clay-silt (103)

Layer (103) consisted of blue-grey silty clay with red-brown mottling; it was 0.05–0.1m thick. It contained frequent mollusc shells, including terrestrial and freshwater species.

3.1.4 Peat (104)

Layer (104) consisted of dark reddish brown, organic silt; it was 0.1–0.15m thick. It contained frequent mollusc shells, mainly terrestrial species.

3.1.5 Silt (105)

Layer (105) consisted of light grey silt with moderate concentrations of small to medium sized stones and occasional patches of dark red brown silty clay. It contained frequent shells of freshwater molluscs.

3.1.6 Peat (106)

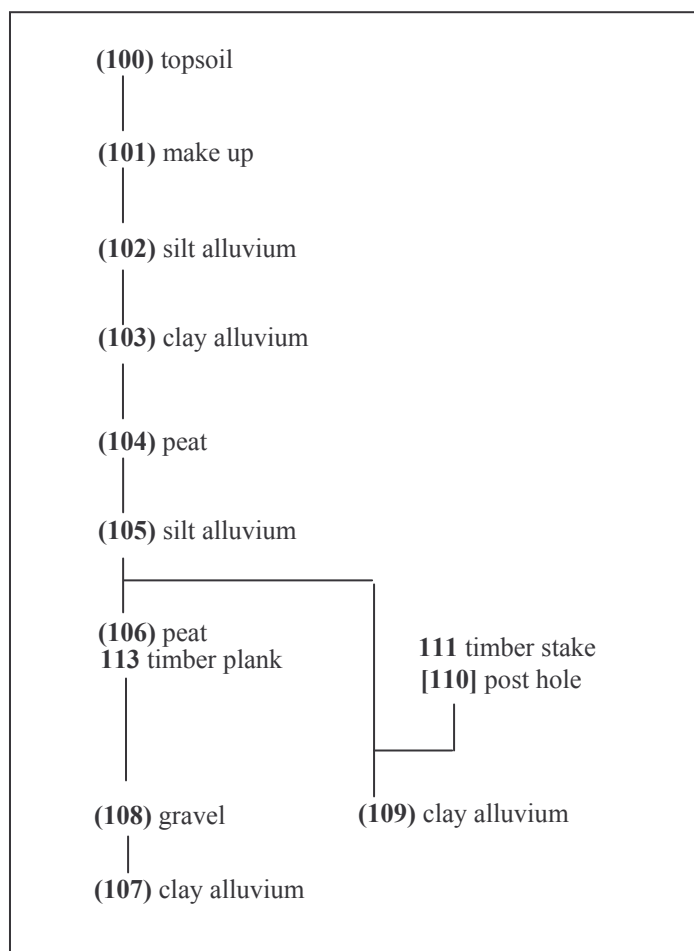
Layer (106) consisted of black, silty peat; it was up to 0.34m thick. It contained frequent small to medium stones and organic material. A fragment of timber (113) was found in this layer at the interface between this and the underlying deposits. The fragment appears to be part of a radially cleft plank.

3.1.7 Gravels and clays

Below the alternating layers of silts and peat, the deposits observed in the base of the excavation consisted of light grey, chalky clay and gravel (107), mid red brown silty-clay gravel (108) and grey brown silty-clay with occasional stones (109). All of these deposits appear to be riverine deposits. A squared timber stake (111) was found in the base of the trench. It was driven into layer (109) and its incomplete upper part survived within the overlying peat layer (106).



3.2 Matrix



3.3 Summary of Context Data

(100)	Turf line	Dark grey brown silty-clay
(101)	Make-up layer	Mid grey brown silty-clay with frequent small to large stones
(102)	Silt alluvium	Light red grey silt with frequent small to medium stones
(103)	Clay alluvium	Mid blue grey silty-clay
(104)	Peat layer	Dark red brown silty clay
(105)	Silt alluvium	Light orange-brown silt with moderate small to medium stones
(106)	Peat layer	Dark grey brown silty clay with frequent small to medium stones
(107)	Clay alluvium	Light grey-white silty clay with frequent small to medium chalk fragments
(108)	Gravel	Mid red brown silty gravel
(109)	Clay alluvium	Mid grey brown silty clay
[110]	Post hole	“Cut” for timber post 111
111	Timber	Squared stake
113	Timber	Radially cleft oak plank fragment

3.4 Artefacts

The investigation produced a small artefact assemblage comprising pottery, animal bone, bottle glass, a copper alloy coin, worked and unmodified flint, and worked and natural pieces of timber (Table 1). The material was scanned to ascertain the nature, condition and, where possible, date range of the artefact types present.



Feature	Type	Context	Spotdate*	Finds Summary
101	Make-up layer	101	Modern	1965 halfpenny; animal bone (999g); stoneware pottery (70g) 'Gold Medal' mineral water bottle J BURGESS of LUTON
104	Peat layer	104	Modern	Stoneware pottery (51g); animal bone (41g)
105	Silt alluvium	105	-	Worked flint (25g); unmodified nodular flint (87g)
106	Peat layer	106	-	Animal bone (177g); worked timber plank (113); unworked timber
107	Clay alluvium	107	-	Worked timber stake
108	Gravel layer	108	-	Animal bone (271g); unworked timber
109	Clay alluvium	109	-	Unworked timber
110	Post hole	111	-	Worked timber stake

* - spotdate based on date of latest artefact in context

Table 1: Artefact summary by trench and context

Most finds are either undatable or modern in origin. The most interesting artefact is a narrow flaked flint tool, recovered from silt alluvium (105). The object is a possible chisel or gouge and is likely to be of Neolithic origin.

Worked timbers comprise the compressed tip of a multivariant roundwood stake and a portion of stake with a wedge point, recovered respectively from clay alluvium (107) and post hole [110]. A portion of a radially split plank (113) derived from peat layer (106). The latter was submitted for dendrochronological assessment (see Section 4.1 below). Seven pieces of unworked timber recovered from layers (106), (108) and (109) were retained.



4. POST - FIELDWORK ASSESSMENT AND ANALYSIS

4.1 Introduction

Following the completion of the fieldwork, a programme of post-fieldwork assessment and analysis (Albion 2005b) was agreed with the CAO. The post-fieldwork programme was designed as a series of stages in which each stage would only be undertaken if the results of the preceding stage had demonstrated that further analysis was warranted. As part of the initial assessment stage, a timber sample was assessed for dendrochronological dating. The results of this were included in an amended post-fieldwork project design (Albion 2005c).

The full sequence of assessment and analysis outlined in the amended post-fieldwork project design was as follows:

- Stage 1: Dendrochronology analysis and dating
- Stage 2: Pollen sample assessment.
- Stage 3: Radiocarbon dating and full pollen analysis
- Stage 4: Snail and macroscopic plant remains assessment
- Stage 5: Snail and macroscopic plant analysis.

Following the completion of Stages 1 and 2, it was agreed with the CAO that there was insufficient potential to justify undertaking further stages of assessment and analysis. This decision was based largely on the indications from the pollen assessment that the deposits were unlikely to be contemporary with the Neolithic construction and use of Waulud's Bank.

4.2 Stage 1: Dendrochronological Analysis and Dating

A sample from the fragment of plank (113), recovered from peat layer (106) was sent to the Sheffield Dendrochronology Laboratory. A verbal description of the results was received from Ian Tyers on 15 December 2005. The sample was identified as oak with 110–116 growth rings that included some sapwood. The dating results were inconclusive; the sample could not be matched to existing tree ring data.

4.3 Stage 2: Palynological Assessment

Three column samples were sent to Gill Cruise for assessment of palynological potential. Her assessment report is included in full as an appendix to the present report (see Section 7). The report indicates that pollen preservation was generally very good. There were high concentrations of pollen with potential for environmental reconstruction, with evidence of past land-use (*i.e.*, clearance and development of herb-rich grassland).

In the discussion of the results, it is suggested with a relatively high level of confidence that the deposits post-date the Neolithic period. The pollen showed



few indications of a typical mid-Holocene forest community. In addition, there were no indications for either an Elm or a Lime decline, features that are characteristic of Neolithic sequences.

The pollen species included no exotic species that may have been introduced in the Roman or later periods that could indicate a *terminus ante quem* date for the samples. It is suggested in the assessment that the alder carr and hazel scrub conditions noted in the lower peat layer may reflect the effect of a rise in the water table. It is suggested as a hypothetical possibility that it may reflect similar evidence noted for the upper Thames during the Iron Age.



5. SYNTHESIS – INTERPRETATION

In the following section, the results of the field observations are integrated with the results of post-excavation assessment and analysis.

The lower part of the deposit profile consisted of layers of peat and clay. These deposits were formed through natural processes consisting of alternating marshland and river/flood conditions.

The earliest deposits consisted of clays and gravels (107-109) which were observed in the base of the excavated area. These deposits included coarse gravels. The presence of gravels suggests that they were laid down in a comparatively high-energy environment. It is possible that these deposits represent material deposited in the late Pleistocene or early Holocene.

A layer of peat (106) up to 0.34m thick lay directly above the clays and gravels. Artefacts and ecofacts recovered from this deposit comprised animal bone, unworked wood and a fragment of a cleft timber plank (113) which was found at the base of the layer. Two samples from the upper and lower part of this layer contained abundant pollen of Alder, Hazel, sedges and fern spores. The sample from the upper part showed an increase in pollen from grasses and herbaceous plants. This deposit was formed under marshland conditions leading to the formation of peat in an environment that was dominated locally by Alder carr and hazel scrub.

A layer of light grey silt (105) that contained frequent shells of freshwater molluscs sealed peat layer (106). A narrow flaked flint tool, recovered from this silt is identified as a possible chisel or gouge of probable Neolithic date. The light colour and absence of organic material within this layer show that it was laid down in a very different depositional environment to the peat layer below. It may have formed relatively rapidly as alluvial silt derived from soil erosion of the surrounding landscape.

An upper layer of peat (104) lay above silt layer (105). The peat contained frequent mollusc shells, mainly terrestrial species and small amount of animal bone and stoneware pottery. Samples showed a mixed assemblage of pollen derived from trees, grasses, cereal and herbaceous species. The most abundant types were sedges, grasses and members of the dandelion family. This deposit indicates a return to marsh conditions. The pollen shows no evidence of the Alder carr seen in the lower peat, suggesting more open conditions.

Two layers consisting of blue grey clay-silt (103) and reddish grey silt (102) found above the upper peat show a return to conditions of alluvial deposition possibly in the form of flood deposits.

A layer of mid grey brown silty clay (101) up to 0.75m deep overlay the sequence of naturally formed deposits described above. This deposit contained frequent stones, chalk fragments, animal bone, post-medieval pottery and various items of modern debris. This deposit appears to be deliberately imported material used to level the site.



Overall, the site is characterised by lower deposits consisting of peat alternating with flood or alluvial deposits. These were covered in the modern period by a deep layer of imported soils used to level the site. The dating of the peat and alluvial deposits is uncertain. Pollen samples from the peat layers suggested that they were unlikely to date from the Neolithic period and no 'exotic' pollen of introduced species was recovered to suggest a possible *terminus ante quem* for the samples. The single flint tool of probable Neolithic date recovered from layer (105) may have been redeposited in that context, particularly in view of the fact that it is in alluvium situated adjacent to a prehistoric monument that has produced numerous flint artefacts.



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7. APPENDIX

7.1 Legrave Park, Luton, Bedfordshire: palynological assessment

G.M. Cruise BSc., PhD

March 2006

Introduction

Three column samples (2-1, 2-2, 2-3) from close to the Neolithic site near to the source of the River Lea, at Legrave Park, Luton, were received from Albion Archaeology. The samples had been taken through a series of waterlogged organic and inorganic layers in order to carry out a palynological assessment. Of particular interest, was the proxy dating of the organic layers which, it was hoped, would be contemporaneous with the Neolithic site (Mark Phillips, pers. comm.).

Methods and Samples

The three samples were unwrapped, examined and described as below.

Column sample number	Depth from top of core (cm)	Context	Description	Samples (depth from top of core cm)
2-1	25-23	107	Grey, flint gravel and chalky, clay weathering materials.	
	23-21	106	Light brown, as below, becoming more organic above.	
	21-0	106	Black, silty peat with gravel up to 7cm.	Pollen samples - 20, 16, 12, 8, 4 cm 1 x Bulk sample
2-2	40-25	106	Black silty peat	Pollen - 26.5 cm
	25-23	105	Grey silt with gravel	1 x bulk
	23-17	105	As above with abundant organic matter, probable roots	Pollen - 19 cm
	23-11	105	Grey, chalky silt with fine sand	Pollen - 14 cm
	11-0	104	Dark brown organic silt	Pollen - 7.5, 4.5, 2 cm 1 x bulk
2-3	23-14	104	Dark grey organic silt becoming up profile	
	14-0	103	Silts and gravel	

Cores 2-1 and 2-2 were selected for detailed sampling because they appeared to contain intact, representative organic layers. In view of the hoped-for importance of the deposits, and to provide samples if required at a later date, a representative series of pollen samples were taken through the sequence with particular attention being paid to the organic layers. Three bulk samples were also taken in case these may be required at a later date.



Four samples from the top and base of each of the two organic layers were selected for palynological assessment (2-1, 20, 4 cm; 2-2, 7.5, 2 cm) because these seemed to provide a good overview of the organic deposits. The pollen preparations were carried out at Lampeter University, where the chemical preparation methods and methods for determining pollen concentrations were carried out as described in the published literature (Moore *et al.*, 1991; Stockmarr, 1971). The slides were scanned, the observed pollen types were noted and a qualitative appraisal of the frequency of the taxa was made. Additional notes were also made on pollen concentrations and pollen preservation.

Results

The results are outlined in Table 1.

Pollen preservation is generally very good with high pollen concentrations particularly in sample 2-1, 4 cm, which is very rich.

The pollen spectra from the basal peat (context 106) are dominated by high *Alnus* (Alder) frequencies with frequent *Corylus* (Hazel). Other tall woody taxa are present but occur at only very low frequencies. Sedges (Cyperaceae) are very common in both samples, but whereas ferns are particularly abundant in sample 20 cm, grasses and a wide variety of herbaceous taxa appear in the sample from 4 cm.

The pollen spectra from the upper peat (context 104) appear to differ from the lower peat by containing significantly lower *Alnus* and *Corylus*. A possible increase in other tree pollen types may be present in the uppermost sample from 2 cm. As in the lower peat, Cyperaceae are very abundant. Grasses and a good variety of herbaceous pollen types are present with particularly high frequencies of Lactuceae - dandelion family (preservation is good so this is unlikely to be a result of differential preservation).

Cereal type pollen was observed in all samples except the basal sample, although it may be more frequent in the uppermost pollen spectra.

Potential for further study.

In general the site offers potential for environmental reconstruction having both good pollen preservation and much evidence for land-use (clearance and development of herb-rich grassland) within the vicinity of the site. The dating however, is far more questionable which raises doubts about the potential for a study of a Neolithic-age environment.

The pollen spectra are dominated by local fen (alder-sedge) vegetation that masks the regional pollen assemblages, and masking in turn, the pollen stratigraphy that



would provide a basis for suggesting a probable date for the deposits. A more detailed picture of the regional vegetation could be obtained from full pollen counts and calculation of pollen sums that excluded *Alnus* and Cyperaceae.

The scans of the slides however do provide some information, with the paucity of tree pollen (excluding *Alnus* and *Corylus*) probably being particularly significant. In general there seem to be few indications of a typical mid-Holocene forest community. For example, only one grain of *Ulmus* (elm) pollen and only two grains of rather badly preserved, possibly re-worked *Tilia* (Lime) were noted. There are no indications of an Elm decline that is usually dated to around 5000 - 4500 BP in southern England. Similarly, a *Tilia* decline is seemingly absent. The absence of such features suggests a later date for these deposits although how much later, is more debatable.

No *terminus ante quem* has been so far suggested, because no exotic pollen types such as may have been introduced during the Roman or later periods, were observed.

Alnus and *Corylus* are common features of pollen diagrams from valley fens of the chalk environments of southern England (summarised in Greig, 1996). The decline in their frequencies is unlikely to be significant in terms of date, because the clearance of alder carrs and hazel scrub appear to have been local in character and non-synchronous. In addition the possibility of a hiatus between the two organic layers cannot be excluded.

One hypothetical possibility, however, is that as a tributary of the River Thames, the Upper Lea could have undergone a similar rise in the water-table as that known for the Upper Thames during the Iron Age (e.g. Robinson, 1992). This might suggest a possible Iron Age date for at least the lower layer.

Conclusions

In general, the author is around 75% confident that these organic deposits at Legrave Park are unlikely to be of Neolithic age, and may be significantly younger. Given the presently available information, an Iron Age date is the favoured possibility.

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**Table 1. Leagrave Park, Luton pollen assessment.**

Sample/core	2-1	2-1	2-2	2-2
Depth from top of sample	20 cm	4 cm	7.5 cm	2 cm
Context	106	106	104	104
Tall woody taxa				
Acer	*	*		*
Betula				*
Pinus		*		*
Quercus	*	*	*	*
Salix				*
Tilia	*	*		
Ulmus		*		
Alnus	***	***		*
Corylus avellana t.	**	**	*	
Hedera	*			*
Herbs, grasses and sedges				
Cyperaceae	***	***	***	***
Poaceae	*	***	**	**
Cereal t.		*	*	*
Apiaceae				*
Artemisia				*
Centaurea nigra t.		*	*	
Chenopodiaceae		*		*
Dipsacus			*	
Galium t.				*
Hypericum perforatum t.	*			
Lactuceae	*	*	***	***
Plantago lanceolata t.	*	*	*	*
Polygonum		*	*	*
Primula veris t.			*	*
Ranunculus t.		*		*
Rosaceae		*		
Rumex spp.			*	
Sinapis t.			*	
Solidago virgaurea t.				
Trifolium t.		*	*	
Veronica t.		*		
Spores				
Ophioglossum	*	*		
Polypodium vulgare t.		*		*
Pteridium	*	*	*	*
Pteropsida (mon.) indet.	***	**		*



Table 1. Legrave Park, Luton pollen assessment continued

Pollen concentrations	++	++++	+++	++
Pollen preservation				
Normal	***	***	***	***
Crumpled		*	*	*
Corroded	*	*	*	*
Degraded	**	*	**	**
Split	*	*	*	*

Key 1. Frequency of pollen types and pollen preservation categories

*** Abundant

** Frequent

* Present

Key 2. Pollen concentrations

++++ Very rich (e.g. stabling/floor crust, rich peat/lake sediments)

+++ Rich

++ Countable

+ Countable with difficulty

- Not countable

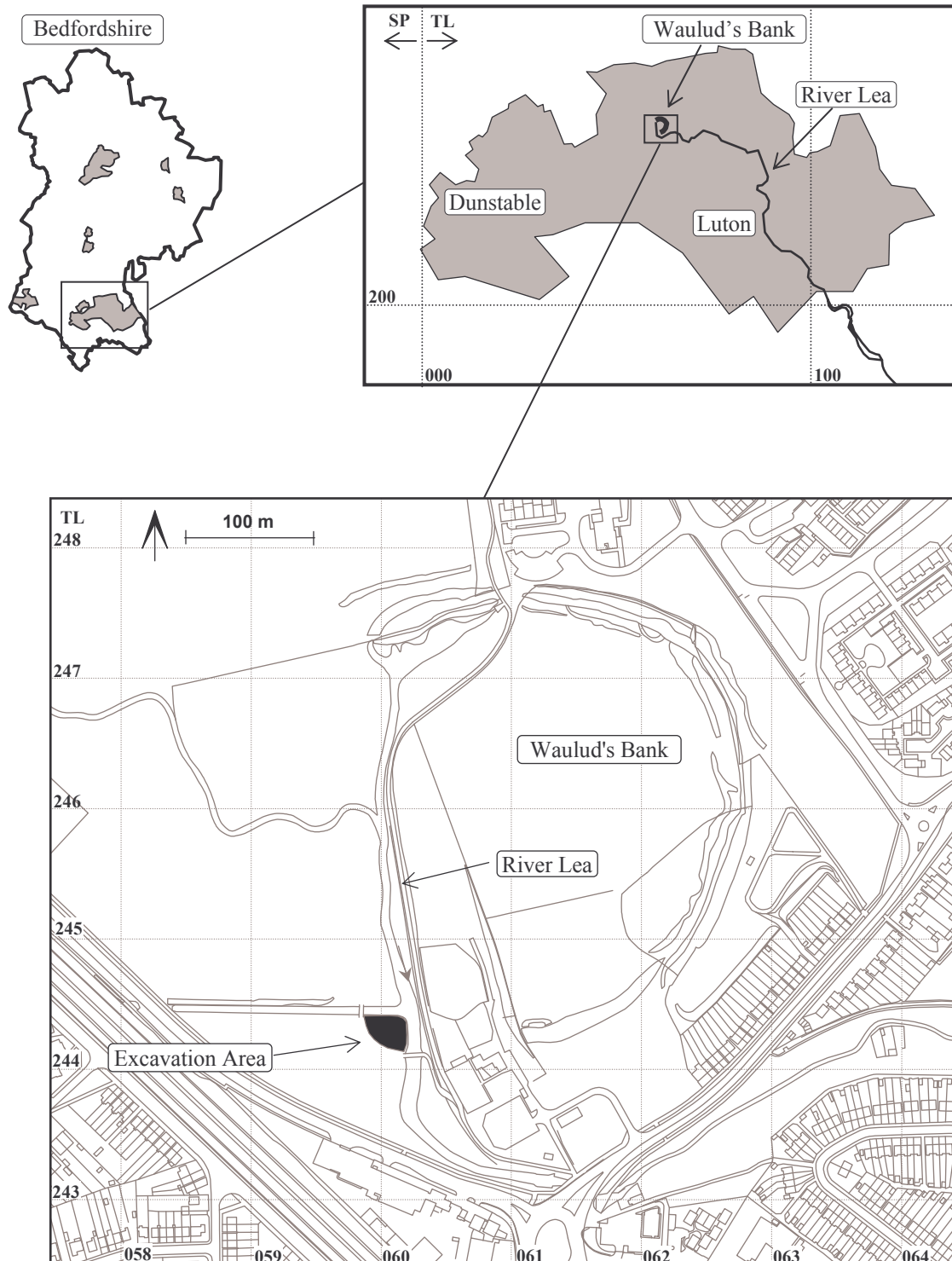


Figure 1: Site location plan

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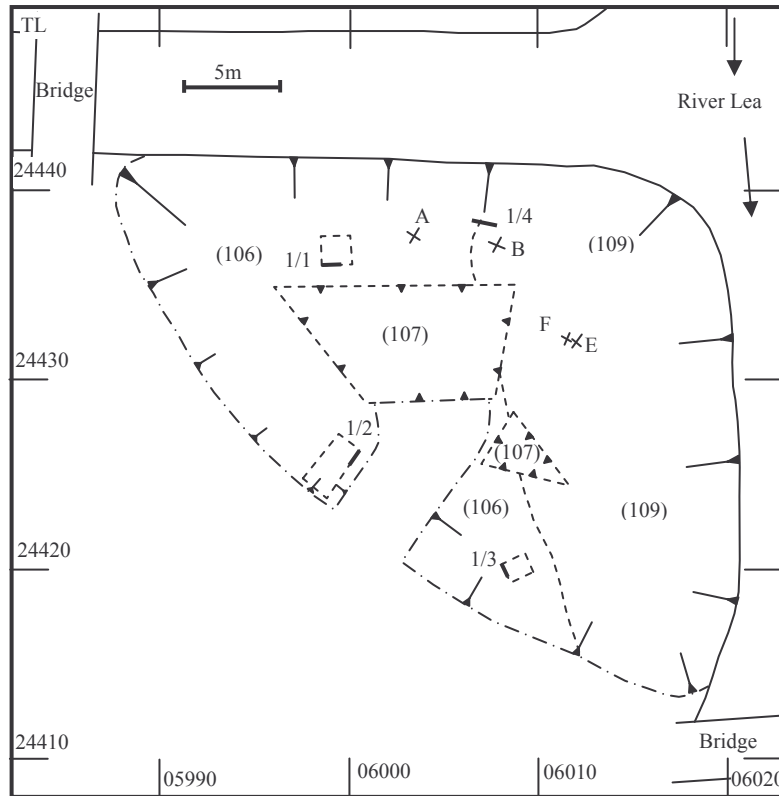


Figure 2: Site plan

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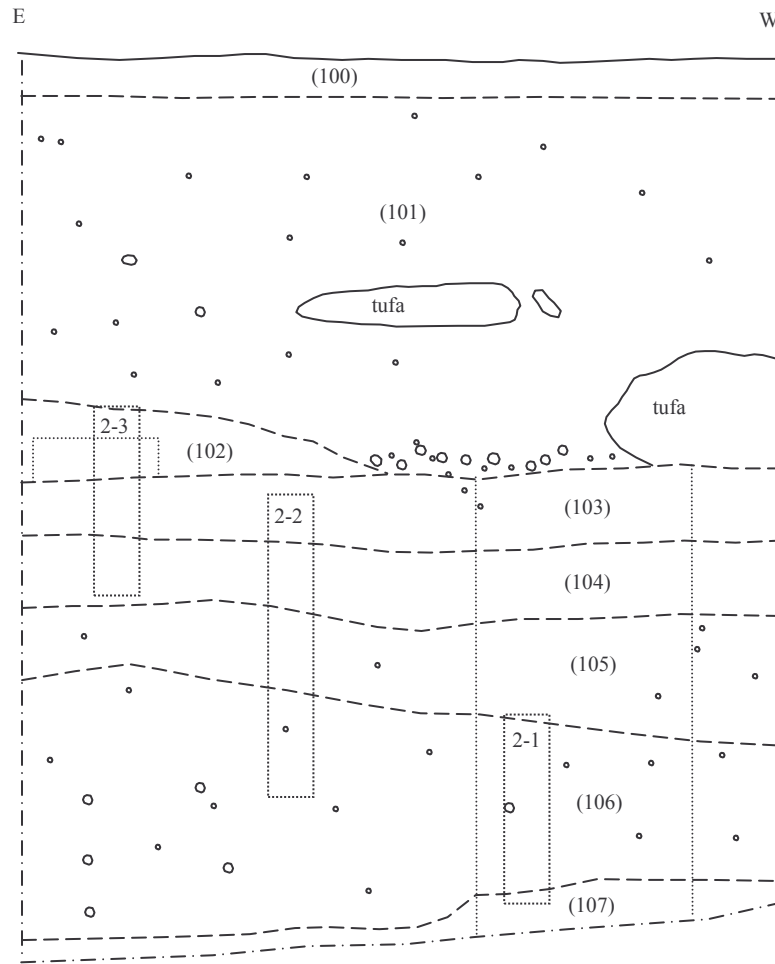


Figure 3: Section 1/1 (scale 1:10)

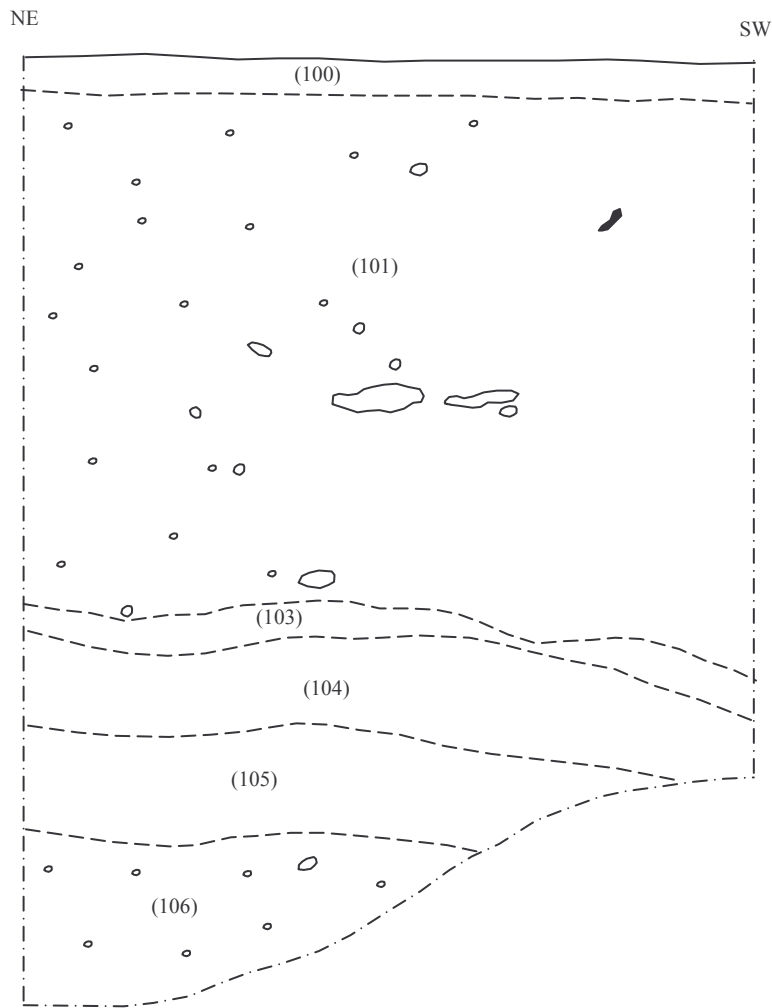


Figure 4: Section 1/2 (scale 1:10)