Geophysical Survey and Fieldwalking Report of Neale's Field, Chipstead 2022



NGR: TQ 28168 57842

Prepared by Dr Anne Sassin (Outreach Projects Manager), with contribution from Chris Taylor Surrey Archaeological Society

November 2022



GEOPHYSICAL SURVEY AND FIELDWALKING REPORT OF NEALE'S FIELD, CHIPSTEAD 2022

SUMMARY

In February 2022, a small team of volunteers from Surrey Archaeological Society carried out a geophysical survey and fieldwalking exercise on Neale's Field, Chipstead as part of a small community project. This work was undertaken in order to investigate an unusual concentration of early metal-detecting finds, most notably a number of rare 15th-century coins, which led to speculation of the site being the possible location of a medieval fair which was recorded at Chipstead from the 13th century, and to define, date and characterise the site. Although time restrictions resulted in only the southern half of the field being surveyed, finds uncovered from fieldwalking were mostly modern in date, though included worked flint dating from the late Neolithic to Bronze Age and a small number of Roman pottery sherds. Few features of note were identified in the geophysics to suggest use of the field beyond agricultural or pastural purposes, although excavation would be needed to substantiate this.

CONTENTS

PAGE

1	INTRO	DUCTION	1
2	LOCATI	ION, GEOLOGY AND TOPOGRAPHY	1
3	SOURC	ES CONSULTED	1
	3.1	General	1
	3.2	Historic Maps	2
	3.3	LiDAR	2
4	ARCHA	EOLOGICAL BASELINE	2
	4.1	Introduction	2
	4.2	Prehistoric Period (500,000 BP–AD 43)	2
	4.3	Romano-British Period (AD 43–410)	3
	4.4	Early Medieval Period (AD 410–1066)	3
	4.5	Medieval Period (AD 1066–1540)	3
	4.6	Post-Medieval Period (AD 1540–modern)	4
5	RESEAF	RCH AIMS AND POTENTIAL	4
	5.1	Statement of Significance	4
	5.2	General Project Aims	5
	5.3	Specific Aims and Objectives	5
6	RESULT	S OF GEOPHYSICAL SURVEY	5
	6.1	Terms of Reference	5
	6.2	Acquisition	5
	6.3	Processing	6
	6.4	Interpretation	6
	6.5	Conclusions	7
7	RESULT	TS OF FIELD WALKING	7
	7.1	Methodology	8
	7.2	Finds Summary	8
	7.2.2	Pottery	8
	7.2.3	Ceramic Building Material (CBM)	8
	7.2.4	Distribution	8
	7.3	Flint Report (by Chris Taylor)	8
	7.3.1	Flints summary	8
	7.3.2	Waste flakes and blades	9
	7.3.3	Scrapers including notched pieces	9

	7.3.4	Core, core trimmings and core rejuvenation flakes	9
	7.3.5	Possible projectile point or knife	10
	7.3.6	Weight or spindle whorl?	10
	7.3.7	Distribution	10
	7.3.8	Conclusions	10
8	DISCUS	SSION	11
	8.1	Reliability of Field Investigation	11
	8.2	Evaluation Objectives and Results	11
	8.3	Interpretation	11
9	ACKNO) WLEDGEMENTS	12
APPEN	NDIXES		
Apper	ndix 1 – B	ibliography and list of sources used	13
Apper	ndix 2 – S	ummary of SMR entries within 1000m radius of NGR TO 28168 57842	14
Apper	ndix 3 – S	ummary PAS finds from within Neale's Field	16
Apper	ndix 4 – G	eophysical equipment information	21
Anner	1 dix 1 = 0	Aggnetometry survey and data information	21
Anner	dix 6 - 0	Juantification of all fieldwalking finds	22
Anner	dix 0 = 0	Juantification of Medieval and Roman pottery	24
Anner	dix 8 - F	lint finds summary	24
Apper	dix 0 = 0	nalysis of flint	24
Apper	div 10 -	Rurnt flint by weight and grid	20
Apper	101×10^{-1}	Weight of worked flint recovered from field walk	20
LIST O	F FIGURE	ES	50
Figure	1 – Site	location map of Neale's Field, Chipstead (OS OpenData)	31
Figure	2 – Nea	le's Field Chipstead from John Roque map of Surrey, 1768, 1:10,000	32
Figure	3 – Extro	act from tithe map of Neale's Field Chipstead, 1839, 1:4000	32
Figure	4 – Nea	le's Field Chipstead from First Edition Ordnance Survey map, 1871, 1:4000) 33
Figure	s – Мар	of metal detecting finds from Neale's Field Chipstead	33
Figure	e 6 – Raw	and processed magnetometry survey of Neale's Field Chipstead at 1m	34
	resolut	tion	
Figure	7 – Map	of magnetometry survey of Neale's Field Chipstead	35
Figure	8 – Inter	rpretation of magnetometry survey of Neale's Field Chipstead	35
Figure	9 – Loca	tion and numbering of fieldwalking grids	36
Figure	10 – Dis	tribution map of all CBM collected from fieldwalking, recorded by weight	36
Figure	2 11 – Dis	tribution map of pottery collected from fieldwalking, recorded by weight	37
Figure	2 12 – Dis	tribution map of all pre-18th century pottery, recorded by count	37
Fiaure	2 13 – Dis	tribution map of all flint artefact finds (excluding burnt flint), recorded	38
5	bv cou	nt	
Fiaure	2 14 – Coi	mbined interpretation of features from the dual-technique aeophysical	38
Figure	15 – Dis	tribution map of flint cores and core trimminas, recorded by count	39
Figure		tribution map of hurnt flint, recorded by weight per arid	39
Figure	17 – An	example of a broad, squat flint flake, from Grid 15	40
Figure	18 - Sai	iat round end scraner from Grid 15 steenly retouched	40
Figure	10 Jqt 10_'Hc	Mariound thu scruper from Grid 19, steepin reducied	940 210
Figure	13 - 10	ke with notch showing utilisation from Grid 15)40 //1
Eiguro	20 - 110	re rejuvenation from Grid 15	41
Eigure	21 - 00	e rejuvenution, jioni onu 15 scible projectile point or knife from Grid 11. The ventral surface (left)	41 //1
riyure	shows	the point of percussion and bulb. Both surfaces have been worked.	41
Fiaure	23 - Po	ssible spindle whorl or weight from Grid 3	42
Finure	24 – Aw	l. from Grid 15	42
	/ . //	·/ j · =··· =···	

1 INTRODUCTION

- 1.1.1 As part of the outreach programme of Surrey Archaeological Society (SyAS), a communityled fieldwork project of geophysical (magnetometry) and fieldwalking survey was undertaken at the large arable field known as Neale's Field, Chipstead in February 2022. The site was identified as being of special interest from a concentration of metal detecting finds uncovered and reported by local detectorist Greg Wales from the prehistoric period onwards, most notably a collection of 15th-century coins of Henry V and VI, with possible associations to the medieval fair recorded at Chipstead. As a result, a fieldwalking and geophysical survey took place to find any associated evidence, whether concentrations of medieval pottery or features exposed through geophysics. This was done under close association with the Chipstead Village Preservation Society, who own the field, as skills training for volunteers and community engagement are key components of the Society's outreach programme.
- 1.1.2 The programme of research organised fell under three elements:

i. to assess all historic documents, events and monuments relevant to the area of the site through desk-based assessment

ii. to undertake geophysical survey and produce a mapped plan of the site's main features

iii. to conduct a fieldwalking survey in order to date and potentially characterise the site

2 LOCATION, GEOLOGY AND TOPOGRAPHY

- 2.1.1 Neale's Field is a large 24-acre arable field situated in the parish of Chipstead in the administrative area of Reigate and Banstead Borough in the modern county of Surrey (Figure 1). The field, which is triangular in shape and enclosed by houses on all sides, is located in the centre of the modern village, centred at NGR TQ 28168 57842, approximately 1.3km NW of the medieval parish church of St Margaret and 1.2km SE of Woodmansterne. It is owned and managed by the Chipstead Village Preservation Society and tenanted by Crossways Farm.
- 2.1.2 The site is located at the highest point of the narrow Chipstead ridge, which runs N-S from Upper Gatton Park in the south to the dry valley at Chipstead Valley Road, Coulsdon. At an elevation of *c*160m OD, the site overlooks Farthing Down to the east and is only slightly overlooked by Banstead Wood to its west. There are no watercourses in the area, and presently the only accessible surface water is from local ponds, with the only indication of the presence of prehistoric water the heads of small dry valleys that have eroded into the ridge.
- 2.1.3 The site falls within the Historic Landscape Characterisation of large regular fields with straight boundaries (parliamentary enclosure type), surrounded by 19th and early 20th-century settlement. The field is bordered by Coulsdon Lane to the SE, which would have been the main direct route between Croydon and Reigate, How Lane to the west which leads to Woodmansterne, and Hollymead Road to the north.
- 2.1.4 The geology of the site consists of superficial deposits of Clay-with-Flints (clay, silt, sand and gravel) overlying the Lewes Nodular, Seaford and Newhaven Chalk Formation which formed approximately 93 to 72 million years ago (BGS online). The Pleistocene deposit caps the ridge and high ground locally, sitting on top of the chalk which is exposed about 500m to the east and west of the field. It was formed from Eocene beds, subsequently much sorted and mixed, and consists of a reddish-brown clay, containing angular and rounded flint pebbles, whose thickness varies from 5m to 10m (Ellison 2004, 55). Some sods of brighter, orange-brown clay were seen on the field and had been brought to the surface by the recent ploughing.

3 SOURCES CONSULTED

- 3.1.1 Surrey County Council Historic Environment Record (HER) has supplied data of known assets and events within the site and surrounding study area using a 1km search radius. Historic maps of the area were also accessed via the Surrey History Centre and online, and a search of objects recorded in the vicinity through the Portable Antiquities Scheme (PAS) database was also made (Appendix 3). A full list of sources consulted can be found in Appendix 1, and a gazetteer of all listed monuments within the study area is presented in Appendix 2.
- 3.1.2 The thorough coverage of the site via metal detector has been undertaken by Greg Wales of Chipstead since 2013, with all finds identified with the input of Simon Maslin, Surrey Finds Liaison Officer, and recorded in detail on the PAS database (see Appendix 3 and Figure 5).

3.2 Historic Maps

- 3.2.1 The earliest map of the site is John Rocque's survey of Surrey in 1768, which indicates division of the field into three parts, an eastern field and a northern and southern half to the western one, with a distinctively curving N-S boundary in between (Figure 2). Whilst the eastern and north-western fields appear as cultivated, the south-western field at this time may be indicating use as pasture. Two houses are apparent within the field's southern half, bordering the southern end of How Lane and Coulsdon Lane, one of which (between the eastern and south-western fields along Coulsdon Lane) does not appear on later maps, including the Colonel William Mudge map of 1819.
- 3.2.2 At the time of the Tithe Apportionment of 1839, the field was still split into three: *The twelve acres* to the NW, *Yew tree field* to the SW and *Portnall's Lissoms Field* in the east. A clear footpath can be seen cutting cross the field from Coulsdon Lane on the eastern end (and Starrock Lane to its south, with what is Starrock's Farm likely its origin point) and leading to How Green to the NW of the site (Figure 3).
- 3.2.3 The field boundaries changed throughout the remainder of the 19th century, with only the curving N-S boundary in place at the time of the first edition OS map of 1871 (Figure 4). This boundary was no longer extant by the time of the second edition (1897), and the field remains open from this point onwards.

3.3 LiDAR

3.3.1 The site of Neale's Field is covered by the Environment Agency's 1m resolution LiDAR survey, made available as a composite layer in 2020. Other than the curving N-S field boundary, one feature of note apparent on the LiDAR is a large circular depression in the north-eastern area of the field which represents a ploughed-out Second World War bomb crater (also apparent on aerial imagery).

4 ARCHAEOLOGICAL BASELINE

4.1 Introduction

4.1.1 Known archaeology within the study area is not extensive with no previous interventions. Whilst there are no scheduled ancient monuments in the vicinity, nearby Areas of High Archaeological Potential (AHAP) within approximately 500m of the site include possible Late Iron Age and Roman occupation sites at Wapole Avenue and Brighton Road (see 4.3). The site is also just over 600m north of the Elmore Road Conservation Area, and a couple Grade II listed buildings are within 400m of the site, including the 16th-century Hazelwood Farm (MSE10322).

4.2 Prehistoric Period (500,000 BP–AD 43)

4.2.1 Early prehistoric evidence at the site is limited to only a couple findspots, including a small number of Mesolithic or Neolithic flints uncovered during a watching brief at Outwood Lane

(MSE13888) and a Neolithic flake reported amongst the detecting finds from Neale's Field itself (SUR-B3E01F).

4.2.2 Detecting within Neale's Field has also resulted in a small number of finds of Bronze Age and Iron Age date, including an early Bronze Age flat axe fragment dating to c2000-1750 BC (SUR-14CAFD) and an incomplete copper alloy unit of Cunobelinus, AD 8-41 (SUR-1C5194). Possible nearby Late Iron Age activity is also suggested from 'Belgic-type' pottery sherds from a bomb crater in a field above the Brighton Road (MSE2501).

4.3 Romano-British Period (AD 43–410)

- 4.3.1 Two possible Romano-British occupation sites lie near to the site, the first being a refuse pit found in a garden only 300m to the west at Wapole Avenue, Woodmansterne, containing animal bones and pottery dated AD 60-120, suggesting a likely nearby associated site (MSE945). A further potential Late Iron Age/Early Roman occupation site is that listed in 4.2.2, near Starrock Wood and just over 500m to the field's SE (MSE946), where a number of Romano-British potsherds dated to the 1st century AD (MSE946).
- 4.3.2 Only a handful of stray finds were uncovered within Neale's Field, including two coins, a possible Trajan sestertius (AD 98-117; PUBLIC-D74881) and radiate or nummus of late 3rd or 4th-century date (SUR-6D65D5), as well as three brooch fragments of 1st-century date, two of Colchester-type (PUBLIC-A5B8A5, SUR-14D688, SUR-7E37D6).

4.4 Early Medieval Period (AD 410–1066)

- 4.4.1 The name Chipstead (Old English **Ceapstede*) in effect means 'market place' or 'place where a market existed' (Gover *et al* 1934, 290). Nearby placenames of similarly early medieval origin may include How Green, to the NW of the site, whose name, which has been proposed to go back to *Le Hoo* 1390 and *Hooe Hill* 1580 (SEPN), may also derive from the Old English *hoh* 'spur of land', cf nearby Hooley (R. Briggs pers comm). In 675 Frithuwald, *subregulus* of Surrey, is said to have given 5 hides of land in Chipstead to the abbey of Chertsey, which would become the manor of Pirbright, with a similar grant by Athelstan in 933 (Malden 1911, 189-96).
- 4.4.2 Only three finds of potential early medieval date were uncovered via detecting within Neale's Field, including a cast copper alloy early medieval openwork strap end of the Winchester Style, probably dating to *c*950-1100 (SUR-996B96), with no contemporary finds nearby, suggesting limited early medieval activity at the site.

4.5 Medieval Period (AD 1066–1540)

- 4.5.1 The manor of Chipstead was held of King Edward by one Ulnode, according to Domesday, and at the time of the Survey was in the possession of Richard de Tonbridge, part of the honour of Clare, whose descendants held it in chief until the beginning of the 16th century. Whilst valued as 10 hides in 967 under Edgar, the extent was assessed at 5 hides under Edward, and rated at 1 hide only at the time of Domesday, reflecting variation in estimates. The Church of St Margaret is 12th century in its fabric (Malden 1911, 189-96).
- 4.5.2 Although the earliest date given for the inception of a fair at Chipstead is 1279 and the reign of Edward I (Letters 2005), reference in the rolls of the 1258-59 Special Eyre of Surrey and Kent may suggest an earlier date, as it records a fair at Chipstead ('Nundinas de Chepsted') held on the feast of St Margaret from which the manorial bailiff 'collected the toll from all who bought or sold there'. It was said by the jurors that 'at the time when the manor was in the hands of Odo Damaroy[n] and Alice there was no toll', apart from the one collected by the king's bailiff for amend to the assize of bread and ale (Hershey 2004, 41-2, case number 70). Odo Damaroyn is of the Dammartin or Danmartin family, who held the manor in subfee from the Clares, and whose father was also named Odo. 'Odo ... son of Odo de Dan Martin'

gifted half a virgate in Chipstead to Lewes Priory in an undated grant and was deceased by 1230, per reference to his widow Margery (Malden 1911, 189-96), suggesting a fair was in existence by at least the first quarter of the 13th century (R. Briggs pers comm).

4.5.3 Despite this history, evidence for nearby associated medieval activity is limited and includes single findspots such as the large quantity of early to mid-13th-century in situ pottery behind Dene Farm, Outwood Lane (MSE19652), possibly a midden dump. The number of objects of medieval date from Neale's Field is comparatively substantial, with a total of 35 objects recorded on the PAS database. This includes 15 pieces of silver or gold coinage spanning Henry II to Henry VI: Henry II halfpenny (SUR-2D4940), Henry III farthing (SUR-997820), two Edward I pennies (PUBLIC-3940C6, SUR-7E4D82), groat and halfgroat of Edward III (SUR-E7AF4E, SUR-7640B5), Henry IV penny (PUBLIC-81E898), two groats and a gold quarter noble of Henry V (PUBLIC-0858F0, SUR-6D41B6, SUR-7630F3), and a halfgroat and four groats of Henry VI (PUBLIC-C0E678, PUBLIC-05DE1B, SUR-14DE58, SUR-765043, SUR-7E4082). The later 14th and 15th-century coins are particularly notable, especially when associated with a copper alloy purse bar, dated c1450-1550 (PUBLIC-A633B2) and also found within the field, suggesting the contents of a purse. The assemblage also includes a range of jewellery and riding gear, e.g. the fragments of four buckles (PUBLIC-9D025E, PUBLIC-BAE460, PUBLIC-6CE938, SUR-6907F6), two brooches (PUBLIC-5E2681, PUBLIC-35AC93), spur (PUBLIC-80D82B), strap fitting (SUR-D0C8D6) and two harness mounts (SUR-998470, SUR-44D9A4).

4.6 Post-Medieval Period (AD 1540–modern)

- 4.6.1 As discussed in 3.2, the field was still of a tripartite division at the time of the tithe map, both used for cultivation and as pasture, with a presumable farmhouse apparent in the Rocque map of 1768 on the field boundary along the southern side, adjacent to Coulsdon Lane. Other farmhouses in the immediate vicinity include at How Green and Starrock Lane, with nearby Hazelwood Farm house dated to 1481 (MSE16559).
- 4.6.2 Metal-detecting has recovered over 60 post-medieval finds from the field, including over a dozen lead uniface tokens of likely 16th or 17th-century date (PUBLIC-DB0BF5, PUBLIC-CA5387, PUBLIC-3DEEBF, PUBLIC-3D4101, PUBLIC-3AD286, PUBLIC-7F302B, PUBLIC-2CB81A, SUR-14F90A, SUR-F582B3, SUR-998BB4, SUR-769AF6, SUR-692352, SUR-691AB4), a late 16th to early 18th-century lead alloy cloth seal (PUBLIC-D86E1A), 16th-century copper alloy purse bar suspension loop (PUBLIC-9F16FD), and silver coins from Henry VIII to William III: Henry VIII penny (PUBLIC-A53B28), threepence (x4) and sixpence of Elizabeth I (SUR-6D1A66, PUBLIC-3C62B0, SUR-14E855, SUR-7E65A4, SUR-7E5914), pennies (x3), halfpenny (x2), halfgroat and copper-alloy farthing of Charles I (SUR-7E70B5, PUBLIC-2020AE, SUR-14F09E, PUBLIC-2AE0D4, SUR-768E77, PUBLIC-5990DC, PUBLIC-A99B42), Charles II penny and copper alloy farthing (PUBLIC-AA7646, SUR-2B075E) and William III shilling (SUR-7E7FC2).

5 RESEARCH AIMS AND POTENTIAL

5.1 Statement of Significance

5.1.1 The distribution and high number of late medieval / early post-medieval finds from Neale's Field suggests an unusual concentration of activity at the site, whose naturally prominent position in the landscape at the junction of important routeways would have dominated the surrounding area. Rural settlement in the county is in need of much more analysis and recovery of archaeological evidence in order to help determine the origins and development of hamlets and farms, markets and fairs, and communication routes (Bird 2006, 54-55), making any evidence or identification of new sites valuable resources for gaining a picture of life in the Surrey countryside in this period.

5.2 General Project Aims

5.2.1 Following desk-based assessment and analysis, geophysical survey and field walking of the site to identify and clarify archaeological remains is proposed to be undertaken with the following general aims:

i. to establish the presence/absence of archaeological remains

ii. to identify, characterise and plan any features and remains present

iii. to determine or estimate the date range of the site through artefacts

5.3 Specific Aims and Objectives

5.3.1 Specific research aims for the investigation were based on the desk-based assessment and included the following project and research questions:

iv. to what extent can the use and function of the site be confirmed?

- v. can the presence or absence of medieval or early post-medieval features be established?
- 5.3.2 As a community archaeology project, training and outreach are essential outcomes and also address project-specific questions, including:

vi. how can the methodology and skills learnt through fieldwalking survey training be taken forward in future work and projects undertaken by the Society?

6 RESULTS OF GEOPHYSICAL SURVEY

6.1 Terms of Reference

- 6.1.1 In February 2022, a small team of volunteers worked alongside the SyAS Outreach Projects Manager to undertake a geophysical magnetometry survey over the concentration area of metal detecting finds. The aim of the survey was to detect possible archaeology within the area, and investigation followed Level 1 (Prospection) criteria in order to identify areas of archaeological potential and define any features (Schmidt *et al* 2016, 10-11).
- 6.1.2 The survey involved flux gradiometer data across an area of 24,300m² (approximately one third of the total area of the field), extending across much of the field's southern half, though mostly encompassing the original *Yew tree field* to the SW. The area was entirely within the ploughed area of the field, which was difficult to walk over, particularly in the western half; the terrain of the southern-most area of the field was left out of the survey area due to almost impassable conditions. No modern obstructions, including fences around the field's border, were within the survey area.
- 6.1.3 The magnetometry survey took place over four days between 24 and 28 February in relatively mild weather conditions, both sunny and overcast.

6.2 Acquisition

- 6.2.1 The survey grids were laid-out with a baseline running roughly parallel to the southern edge of the field. GPS points were obtained for each of the grid points via a Trimble Catalyst GNSS satellite with an accuracy of under 0.05m and referencing the Ordnance Survey National Grid. Equipment for marking out and adjusting the grid layout included plastic pegs, bamboo canes and 100m tapes.
- 6.2.2 The magnetic gradiometer survey was carried out using a Bartington Grad601 gradiometer, which operates on a twin system and measures the magnetic gradient between two fluxgate sensors set 1m apart on a single frame. The device measures magnetic variation to 0.1 nanoTesla (nT), with all readings saved to an integral data logger.

- 6.2.3 The Bartington was adjusted prior to data collection in order to balance the sensors and remove effects of the magnetic field. Adjustment was also undertaken throughout the survey on a minimum of at least three occasions per day to allow for instrument drift and temperature change. The Bartington was considered to be in good working order at the time of the survey and has undergone servicing and calibration which is undertaken by the manufacturer. The sensor calibration results are available in Appendix 4.
- 6.2.4 The sampling interval which was selected was based on the minimum recommendation for a Level 1 (Prospection) investigation, but is still considered to be effective at detecting archaeological features over large areas (Schmidt *et al* 2016, 13). The magnetometer data was collected in parallel at 0.25 centres along traverses 1.0m apart. The survey grids were 30m by 30m and gave 1800 measurements per grid.

6.3 Processing

- 6.3.1 The data was downloaded from the Grad601 data logger and processed in the specialist software TerraSurveyor Lite. The survey grids are assembled to form composite files of the datasets. Appendix 5 contains information and data attributes for the surveys and is derived directly from TerraSurveyor.
- 6.3.2 Only minimal processing has been carried out to enhance the results of the survey for display, with the raw data clipped at +/- 2.0 SDs.

6.4 Interpretation

- 6.4.1 The magnetometry survey was conducted with parallel traverses extending N-S across the site, orientated roughly perpendicular to the plough lines of the field. Changes in the geological make-up of the soil, including patches of heavier clay, are apparent within the survey, with particularly rough furrows at the western edge and more traversable in the middle, where modern plough lines can still be seen (see Figures 7 and 8).
- 6.4.2 The amount of ferrous objects and magnetic disturbance affecting the data is notably minimal and restricted to only a couple plough shares and other large objects left in the ploughsoil that created dipolar anomalies. This is likely to reflect the extensive metal detecting which has taken place prior to the survey.
- 6.4.3 Several potential features are apparent as anomalies in the magnetometry, including (Figure 8):

(1) two parallel, positive linears approximately 5m apart and running at an angle across the NE corner of the field, which coincide with a modern headland created to divide the field during ploughing

(2) faint NE- SW linear anomalies running parallel in the eastern half of the survey area, which may align with the direction of ploughing in the eastern field as seen on the Rocque map, thus the remains of a ridge and furrow system, although as they extend over at least two (eastern and western) fields, they are difficult to date

(3) area of disturbance with faint traces of a rectilinear shape approximately 60m² extending across the N-S former field boundary and within both the NW and eastern field, which may represent a former enclosure, with a possible circular outline 50m in diameter (4) also apparent within its interior and along its northern and eastern sides

(5) several negative anomalies varying from 3m to 8m across in the western area of the survey, which may possibly represent former quarrying, as the geological makeup of this area of the field is noticeably heavier clay and prominently disturbed.

6.5 Conclusions

- 6.5.1 Overall there is a lack of magnetometry anomalies revealed from the survey, to include only one obvious modern feature or strong dipolar ferrous reading, with even the former field boundaries not obvious in interpretation. A small number of features of potential archaeological interest have been identified, and though difficult to interpret, they may represent earlier activity and use of the field, including a possible structure or enclosure identified as (3) and (4) in 6.4.3 above.
- 6.5.2 The disturbed area indicating a possible enclosure is notable, but its position which extends over the junction of the former fields makes it very difficult to date: either being post-1871 and the last appearance of the N-S field boundary, which seems less likely, or representing an earlier feature associated with the presumable farmhouse noted on the Rocque map, though possibly pre-dating the field's tripartite division. Its outline is too faint for clear interpretation, especially as both a circular outline and possible rectilinear feature can be discerned. However, it is possible it represents a former stock enclosure, perhaps for sheep.
- 6.5.3 Although further geophysics is possible, including extending the grid line and covering the northern half of the field, the lack of features found thus far within the area of concentrated detecting finds would not recommend additional magnetometry. The heavy clay in parts of the field, in particular the southern portion, also make some areas unlikely to be surveyable. It is possible that supplementing the area of the possible enclosure with electrical resistance would define these anomalies further, but the overall dearth of features would not make a strong case for further geophysical survey.

7 RESULTS OF FIELDWALKING

7.1 Methodology

- 7.1.1 Between 24 and 28 February, the small team of volunteers undertook fieldwalking over the concentration area of metal-detecting finds, in order to obtain further artefacts and material which might help characterize activity at the site. The survey was approximately five weeks after the field had been ploughed, and the clay geology made walking challenging. The team involved was small, varying between four and ten participants at any one time, with the weather occasionally with strong winds and light rain.
- 7.1.2 Field walking took place following a Level 2 (gridded analytical survey) specification in order to identify any discrete concentrations of finds (Connolly 2008). The survey followed the same 30m² grid pattern as the magnetometry survey, though due to time constraints, the most northern row was not covered, with only 19 of the 27 grids walked over (17,100m² in total). Transects were established at 2m intervals, with each participant walking the length of the grid along these lines, covering 1m either side. There was not considered to be enough material to warrant further sub-division of the grids.
- 7.1.3 Every artefact of possible archaeological significance was collected from the ground surface and placed in a bag marked with its own grid number (see Figure 9). This included ceramic building material (CBM), pottery, flint (worked and burnt), glass and iron. Finds were taken to the base at Chipstead Rugby Club, where the finds team identified each piece by type, weight and quantity and spotdated for their potential period. Pottery of earlier date (pre-1750) and worked flint were retained for later analysis, whilst all other material was returned to its respective grid number within the field.
- 7.1.4 Finds were recorded by members of Surrey Archaeological Society's Artefacts and Archives Research Group (AARG). The pottery was assessed by SyAS' Roman and Medieval Pottery Groups by reference to the London MoL series for Roman pottery and Surrey type series for Medieval pottery (SyAS 2017; 2020), with reference to the type-series held at the Society's

Research Centre in Abinger Hammer. The flints were analysed by Christopher Taylor and are discussed at depth in 7.3.

7.1.5 The medieval and Roman pottery and worked flint have been archived with the Chipstead Village Preservation Society.

7.2 Finds Summary

7.2.1 The overall number of artefacts uncovered was small for the area of the field, comprising over 25kg of material. With the exception of the flint and a very small number of sherds of Roman date and one of Medieval, the finds were of modern date or generally undiagnostic, and are recorded in Appendix 6. The early pottery and flintwork are discussed in more detail below, whilst the flint, which is discussed in more detailed assessment, is reported in 7.3.

7.2.2 Pottery

7.2.2.1 A total of 1593g (172 sherds) of pottery was uncovered, although the vast majority is either post-medieval redware (PMR; 1580-1900) or modern flowerpot (1830 onwards), with a few sherds of blue and white refined earthenware (REFW; 1830). Six sherds of Roman pottery were uncovered: four sherds of sand-tempered ware (SAND), one Oxfordshire red/brown colour-coated ware (OXRC, 270-400), and one possible Portchester D ware (PORD, 350-400). Only one single medieval sherd was identified, which was WW1B (sparse coarse whiteware including Kingston type), c1240-1400.

7.2.3 Ceramic Building Material (CBM)

7.2.3.1 The CBM recovered formed 72.6% of the site's finds assemblage (17.8kg in total), with the vast majority tile, rather than brick. The pieces all likely date to the post-medieval or modern period, with few diagnostic features, and are highly abraded, likely relating to plough damage and manuring in the field. The number of roof tiles and parts of land drain suggest association with the houses adjacent to the field.

7.2.4 Distribution

- 7.2.4.1 As seen in Appendix 6 and Figures 10-16, which plot the distribution of the CBM, pottery and flints, the distribution of artefacts overall does not appear to show any concentration of finds that could indicate an archaeological site. The spread appears to be random, as would be expected with manuring processes.
- 7.2.4.2 A possible concentration of Roman pottery might be suggested to the south-western part of the field, but with such a small number of sherds, no real pattern can be detected. The only notable distribution which is apparent is the CBM in the western-most grids of the top row (9-12), likely related to the adjacent houses and the field's entrance, and suggesting possible further spread to the north.

7.3 Flint Report (by Chris Taylor)

7.3.1 Flint summary

- 7.3.1.1 The flint, including prehistorically worked pieces, is mostly a light grey to black. Only a tiny percentage have a white patination; a few are a light brown, which is to be expected on a Clay-with-flints site. The flint is generally of fairly good quality with a few cherty inclusions.
- 7.3.1.2 Flint is very densely scattered over the field and most pieces examined had some degree of battering, probably from other flints and hits by agricultural machinery. This is an important aspect to bear in mind with any field collection where there can be a blur between, on the one hand, machine damage and natural field battering, and on the other, prehistoric working of edges and the effects of utilisation. Waste flakes have been divided into edge battered

pieces and those showing the effects of utilisation (see Appendix 8 for the flint finds summary).

- 7.3.1.3 The collection is a tiny fraction of what probably remains and cannot be statistically significant; the fieldwalk was over what was turned up by the last few ploughings, and not all the grids were fieldwalked. So far only Holocene, i.e. post Ice Age finds, have been made.
- 7.3.1.4 The distribution of the finds will have been materially affected over the millennia by weathering, soil creep and agricultural activity so that flints will be some metres from where they were first dropped. However, the field is very flat, so soil creep will be minimal.

7.3.2 Waste flakes and blades

- 7.3.2.1 As shown by Appendix 8, most finds were of waste flakes, with only one blade. The flakes are generally broad and squat in shape (Figure 17). Flake dimensions give a general indication of date. Butler (2005, 179-186) mentions several Bronze Age sites (e.g. Black Patch, Sussex and Micheldever Wood barrow, Hampshire) where flakes were found to be mostly broad and squat. At Neale's Field, the average breadth:length ratio of flakes is 2.5:3.0. This is very similar to the ratios calculated at Durrington Walls in middle and late Neolithic levels (Wainwright and Longworth 1971, 160-3).
- 7.3.2.2 The lack of blades is significant. Blades are defined as having a length of at least twice their breadth, and only one piece (Appendix 8) met this criterion. Blades are a well-known characteristic of Mesolithic assemblages (Rankine 1956, 10) although they continued to be produced in numbers into the early Neolithic (Butler 2005, 121). Blades got squatter through the Neolithic (Malone 2001, 217) and were rare by the end of the period (Butler 2005, 157).

7.3.3 Scrapers including notched pieces

- 7.3.3.1 Five scrapers were found, which are the only tool type (as distinguished from debitage/waste flakes and blades) represented in the collection. The low ratio of tools found to the total number of finds (in this case 5 scrapers to a total count of just over 70 pieces) is not unusual. Very commonly only a small percent of most assemblages and collections are of tools.
- 7.3.3.2 Scrapers tend to be squatter as time progresses. In the early Mesolithic, end-scrapers are often on narrow blades, although scrapers on flakes were also common and continued into the Neolithic. Scrapers were no longer manufactured on blades in the later Neolithic and from then on tended to be on squat flakes (Butler 2005, 166). At the Neolithic site at Hurst Fen, for example, the average ratio of breadth to length of a sample of many hundreds of scrapers was 30mm:40mm (Clark 1960, 219). The example at Figure 18 is Breadth 40mm: Length 38mm. Bronze Age scrapers are very common and also tend to be on broad flakes with rounded scraping edges achieved by steep retouch. Individual finds of scrapers are very difficult to date but a late Neolithic or Bronze Age date is suggested for this example.
- 7.3.3.3 Notched flakes (Figures 19 and 20) are very frequently found on later Neolithic and Bronze Age sites (Butler 2005, 170). The extent of notching on pieces varies from significant micro-flaking to the presence of a few micro flakes which may be difficult to distinguish from field battering.

7.3.4 Core, core trimmings and core rejuvenation flakes

7.3.4.1 A significant number of core trimmings were found. These are relatively squat, thick, flakes often with cortex, removed from a core during the initial stages of its preparation to arrive at the optimum core shape before the desired final flakes and blades are struck off. The finds of core trimmings are not unexpected given the number of flakes collected. Two core rejuvenation flakes were found, one a core tablet, the second a large plunging flake (Figure 21). The discoidal core and thick, broad core trimmings fit well with the characteristically squat, broad flakes.

7.3.5 Possible projectile point or knife

7.3.5.1 Figure 22 is of a small flake which has been bifacially worked. It has been worked quite extensively on its dorsal surface. Its general shape is indicative of it being some sort of projectile point. However, it is larger than most arrowhead forms. Neolithic forms of arrowhead are the leaf and transverse types; in the Bronze Age barbed and tanged arrowheads predominate (Green 1984). This example does not fit neatly into a specific category. It may be a large form of leaf arrowhead, minimally worked or possibly a form of knife. Bifacial working was common in the Neolithic and Bronze Age.

7.3.6 Weight or spindle whorl?

7.3.6.1 Grid 3 produced a piece of flint that has been deliberately and purposely knapped to produce a fairly regular shape around a natural, cortex lined hole in the flint (Figure 23). This may be a weight or spindle whorl. A similar piece was discovered at the Bronze Age monument at Crowlink, Sussex (Greatorex 2001, Fig. 17, 68) and was interpreted as a weight.

7.3.7 Distribution

- 7.3.7.1 As shown by Figures 13-16, most finds have been from the most northern row of grids (9 to 16), although the pattern of concentrations of finds in grids needs further work in the field to establish its wider significance, if any. The pattern may reflect concentrations of lithic debitage from habitation and or a knapping site. It should be borne in mind that the concentrations are of a relatively evenly distributed and low absolute number of finds per square metre and do not represent close scatters.
- 7.3.7.2 The concentrations of burnt (also referred to as calcined) flint is more notable (Figure 16). This material is mapped by the gram weight. Burnt flint seems to occur in a pattern in that there is a gradual increase as the grid row progresses to the east from grid 9, increasing to a maximum density in grid 12 and then diminishing to zero in grid 16. Significantly, the incidence of burnt flint is similar in its concentration along this top row to that of worked flint.
- 7.3.7.3 Burnt flint arises from a number of agencies and is material which is not always reported in site excavation reports. Burnt flint was used as a grog in pottery, as exampled in Beaker sherds from Selmeston (Clark 1934, 139). It is usually found in association with hearths and charcoal and sometimes interpreted as a method of heating water (for example at Neolithic Hurst Fen; Clark 1960, 207). Its association with hearths and concentrations of worked flint is well exampled at the Mesolithic sites at North Park Farm (Jones 2013, Fig. 2.1, 10; Fig. 5.13, 43) and Thatcham (Healy *et al* 1992, 49). Burnt flint is also found in Bronze Age cremation pits (Greatorex 2001, 69). It can of course arise from a more mundane, incidental, association with fairly intense fires, for example possibly to clear forest ('slash and burn'), although this is often questioned because of the general lack of intense heat during such events. Its interpretation here is uncertain until more information on the archaeology of the field is gathered.

7.3.8 Conclusions

- 7.3.8.1 This site is away from water and on a heavy clay soil and is unlikely to have been favoured during the Mesolithic when riverbank and sandy soils sites predominate (Simmonds *et al* 2019, 52-4; Wymer 1991, 22). This explains the noticeable lack of blades. The dating of the artefacts is problematical because these are surface finds, i.e. not an assemblage or from a close scatter. However, as indicated above, the material is likely to be late Neolithic to Bronze Age and may indicate the first agricultural use of the land.
- 7.3.8.2 Future research here should focus on the likelihood of at least some Lower Palaeolithic material being present. No Palaeolithic material was recovered from the site and nothing

Palaeolithic is known from it in the SHER and published literature. However, at the nearby Clay-with-flint site at Rookery Farm, Kingswood (Harp 2005; Walls and Cotton 1980) palaeoliths have been dragged up to the surface by the plough from the Clay-with-flints layer below the sub-soil. The Rookery Farm site and other Clay-with-flints sites (see especially Winton 2004) are recognised to be important 'traps' of Palaeolithic material which is nearly *in situ* (Wymer 1987, 24).

8 DISCUSSION

8.1 Reliability of Field Investigation

8.1.1 Although the fieldwalking was undertaken entirely by volunteers with varying levels of experience, the survey was closely monitored and is considered a generally reliable distribution of artefacts across the field. As discussed in **7.3**, the distinction between recent battering from ploughing and prehistoric workings of flint is not always clear, but overall the identification and spotdating of the artefacts is considered reliable, in particular the flint and pottery assessment.

8.2 Evaluation Objectives and Results

- 8.2.1 Despite the large number of finds previously recovered from metal detecting, the fieldwalking survey over an area of *c*1.7ha did not identify any concentrations of artefacts which would indicate that a site of particular archaeological interest is located within the field. However, it should be noted that it is difficult to locate what might be expected to be artefactually sparse archaeology through fieldwalking. The ceramic building material in particular is most likely from manuring undertaken during the post-medieval period, and its distribution suggests likely deposition by the field's western entrance and access point, later ploughed through the field.
- 8.2.2 The geophysical survey (2.4ha in total) did identify a possible enclosure or area of interest which might relate to a former animal or stock enclosure, but this identification is by no means certain, and further investigation is needed to establish this potential feature. Overall, the magnetometry was also limited in establishing archaeological remains, and there is not a strong argument for an additional survey over the possible enclosure area with electrical resistance, given the overall lack of features.
- 8.2.3 Despite the large number of metal-detecting finds which date to the medieval and early post-medieval period, the single sherd of medieval pottery uncovered from fieldwalking is not convincing evidence of significant medieval activity at the site. Likewise, the small number of Roman sherds would not suggest a notable settlement from this period. Although collected as surface finds, the prehistoric flint is more suggestive of activity at the site, likely late Neolithic to Bronze Age, possibly indicating the first agricultural use of the land. With the lack of any identifiable features, it is difficult to ascertain the site's use and function over time, beyond being used for agricultural or pastural purposes.
- 8.2.4 Despite the lack of concrete findings, the survey at Neale's Field was a considerable achievement as an outreach project, with collaboration with and interest from the local residents and wider community, largely through the work of the Chipstead Village Preservation Society. The Society volunteers also gained valuable experience in fieldwalking methodology, to be applied to future work and projects.

8.3 Interpretation

8.3.1 Neale's Field is a site which is both prominent and centrally situated within its landscape, ideal for attracting considerable activity, such as a marketplace or fair. Despite the metal-detecting finds, including the number of 15th century coins, the 2022 fieldwork has been unable to provide insight into the artefact concentration. If it had once been the location of

the fair, a larger number of coins might be expected, and it may be that a portion of the assemblage was merely the contents of a dropped purse, later dispersed through ploughing.

- 8.3.2 The origins of the name Chipstead (OE *Ceapstede, meaning 'market place') would suggest possible earlier origins for the fair, first recorded in the 13th century, although the lack of early medieval finds from Neale's Field might argue against its location there at this early period. As the church of St Margaret, a patronal dedication which the fair shares, is largely 13th century in date, it is possible that the fair was relocated at this time, accounting for the increased number of later medieval finds from the site. However, this is merely one possible interpretation, and not one which is well supported by the limited evidence available.
- 8.3.3 Overall, the main activity identified at the site is agricultural use of the land, originating as far back as the late Neolithic and continuing, not necessarily uninterrupted, to the present day. Another possible interpretation of the limited fieldwork results, taking into account the potential enclosure identified on the geophysics, is a sheep enclosure or pen associated with the farmhouse last apparent on the 18th-century Rocque map. Pastoral activity would certainly befit the site's high downland location, and 13th-16th century late medieval sheepcotes, with their rectilinear ditches and enclosures (see Dyer 1995), may have suggestive parallels in form with those at Neale's Field. Further fieldwork, including an investigatory trench across one of the ditches, would be needed to investigate this theory.
- 8.3.4 With the need for the identification of more rural settlements and within Surrey, the site of Neale's Field, Chipstead attests to the value of assessing concentrations of finds reported to the Portable Antiquities Scheme, as well as responsible and meticulous detecting in general. The added advantage and value of a local archaeological society who can carry out large-scale geophysical or fieldwalking surveys to investigate potential sites supports the need for continued resources and expenditure into training and outreach amongst the volunteer archaeological community.

9 ACKNOWLEDGEMENTS

9.1.1 The fieldwork at Neale's Field relied on the volunteer contribution and dedication of a small team, all of whom were invaluable to the work undertaken. Special thanks must first be made to the Chipstead Village Preservation Society, including Iris Spooner, Jon Grant and Simon Kolesar, for their kind permission and access to the site, as well as Richard Kent of Crossways Farm. We are also very grateful to Peter Quiney and the Chipstead Rugby Club for their kind agreement to allow the use of their facilities as a base. Thanks are also extended to Rob Briggs and team at the HER for the additional research and access to data; Dr Simon Maslin (Surrey Finds Liaison Officer) for advice and first bringing the site to the attention of SyAS; Chris Taylor for his detailed assessment of the flints; and the fieldwork and finds team, including Tim Wilcock for helping to lay out the grids, Ann Morrison and Irene Goring for recording the finds in the field, Emma Corke and the Roman Pottery Group for assessment of the Roman and Medieval sherds, and Lyn Spencer, Mairi Sargent, Daryll Bewick, Helen Kemp, Tony McLaughlin, Roger Hunt, David Wilkinson, Sarah Blumire, Ray Cocks and Barry Hayter for their hard work in carrying out the survey. A final acknowledgement and special thanks must be made to Greg Wales for his constant help, local knowledge, enthusiasm and careful recording through metal detecting, which highlighted the site as one worthy of further study.

Bibliography and list of sources consulted

Databases

BGS – British Geological Survey https://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html

PAS – Portable Antiquities Scheme

KEPN – Key to English Place-Names http://kepn.nottingham.ac.uk/

SEPN – Survey of English Place-Names https://epns.nottingham.ac.uk/

Surrey Historic Environment Record (monument entry numbers prefixed by MSE)

Documents

John Roque (1768), A Topographical Map of the County of Surrey

Secondary Documents

Bird, D. (2006), Surrey Archaeological Research Framework 2006.

Butler, C. (2005), Prehistoric Flintwork. Stroud: Tempus.

Cavill, P. (2018), A New Dictionary of English Place-names. English Place-name Society.

Clark, J.G.D. (1934), 'A Late Mesolithic settlement site at Selmeston, Sussex', Antiquaries Journal 14(2), 132-158.

Clark, J.G.D. (1960), 'Excavations at the Neolithic site at Hurst Fen, Mildenhall, Suffolk', *Proceedings* of the Prehistoric Society 26, 202-45.

Connolly, D., 2008 (revised), Field Survey, Field Walking and Detecting Survey, Bajr Practical Guide 15.

Dyer, C. (1995), 'Sheepcotes: evidence for medieval sheepfarming', *Medieval Archaeology* 39, 136-64.

Ellison, R.A. (2004), Geology of London. Keyworth: British Geological Survey.

Gover, J.E.B., A. Mawer, F.M. Stenton (with A. Bonner) (1934), *Place-names of Surrey*. Cambridge: University Press.

Greatorex, C. (2001), 'Evidence of Sussex prehistoric ritual traditions', *Sussex Archaeological Collections* 139, 27-73.

Green, S. (1984), 'Flint Arrowheads: typology and interpretation', Lithics 5.

Harp, P. (2005), 'Work at the Palaeolithic site at Rookery Farm, Lower Kingswood, 2001-5', *SyAC* 92, 231-44.

Healy, F., M. Heaton and S.J. Lobb (1992), 'Excavations of a Mesolithic Site at Thatcham, Berkshire', *Proceedings of the Prehistoric Society* 58, 41-76.

Hershey, A.H., ed. (2004), *The rolls of the 1258-59 Special Eyre of Surrey and Kent*. Surrey Record Society.

Letters, S., ed. (2005), 'Surrey', in *Gazetteer of Markets and Fairs in England and Wales to 1516*. Kew: List and Index Society. *British History Online* http://www.british-history.ac.uk/list-index-soc/markets-fairs-gazetteer-to-1516/surrey [accessed 24 January 2023].

Malden, H.E., ed. (1911), 'Parishes: Chipstead', in *A History of the County of Surrey: Volume 3*, pp. 189-196. *British History Online* http://www.british-history.ac.uk/vch/surrey/vol3/pp189-196 [accessed 24 January 2023].

Malone, C. (2001), Neolithic Britain and Ireland. Stroud: Tempus.

Schmidt, A., P. Linford, N. Linford, A. David, C. Gaffney, A. Sarris and J. Fassbinder (2016), *EAC Guidelines for the Use of Geophysics in Archaeology: Questions to Ask and Points to Consider.* EAC Guideline 2. Europae Archaeologiae Consilium.

Simmonds, M., R. Hosfield, N.P. Branch and S. Black (2019), 'From findspot to site: a spatial examination of the Mesolithic resource in Surrey', *SyAC* 102, 43-69.

Surrey Archaeological Society (2017), A Guide to the Saxon and Medieval Pottery Type Series of Surrey. Surrey Archaeological Society.

Surrey Archaeological Society (2020), A Guide to Roman Pottery from Selected Sites in Surrey. Surrey Archaeological Society.

Walls, T. and J. Cotton (1980), 'Palaeoliths from the North Downs at Lower Kingswood', *SyAC* 72, 15-36.

Winton, V. (2004), A Study of Palaeolithic Artefacts from Selected Sites on Deposits Mapped as Claywith-Flints of Southern England. BAR British Series 360. British Archaeological Reports.

Wymer, J. (1987), 'The Palaeolithic period in Surrey', in J. and D.G. Bird (eds), *The Archaeology of Surrey to 1540*. Guildford: Surrey Archaeological Society, 17-30.

Wymer, J. (1991), Mesolithic Britain. London: Shire Archaeology.

APPENDIX 2

SMR no.	NGR	Description	Monument Type	Period
MSE13888	3 TQ 2730 5750	Mesolithic or Neolithic flints: Outwood Lane, Chipstead	Findspot	Mesolithic to Neolithic (-10000 to -2201)
MSE2501	TQ 2872 5735	Iron Age Pottery	Findspot	Iron Age (-800 to 42)
MSE945	TQ 2764 5777	Possible Romano-British occupation site, Woodmansterne	Settlement	Iron Age to Roman (1 to 409)
MSE946	TQ 2872 5735	Romano-British pottery and animal bones	Findspot	Roman (43 to 409)
MSE970	TQ 2836 5693	Pit containing Romano- British pottery, Chipstead	Findspot	Roman (43409)
MSE19652	2 TQ 2730 5753	13th century (in-situ) pottery, behind Dene Farm, Chipstead	Findspot	Medieval (1201 to 1300)
MSE956	TQ 2720 5770	Post-medieval lynchets, Chipstead	Lynchet	16 th to 19 th Century (1540 to 1900)
MSE3646	TQ 2850 5800	Corporation Of London Tax Post	Coal Duty Boundary Marker	19 th Century (1801 to 1900)

Summary of SMR entries within 1000m radius of NGR TQ 28168 57842 (excluding listed buildings)

MSE3643	TQ 2790 5778	Corporation Of London Tax Post, Coal Duty	Coal Duty Boundary	19 th Century (1801 to 1900)
		Boundary Marker	Marker	
MSE3657	TQ 2750 5783	Corporation Of London	Coal Duty	19 th Century (1801 to
		Tax Post, Coal Duty	Boundary	1900)
		Boundary Marker	Marker	
MSE3640	TQ 2722 5790	Corporation Of London	Coal Duty	19 th Century (1801 to
		Tax Post, Coal Duty	Boundary	1900)
		Boundary Marker	Marker	
MSE16559	TQ 2767 5745	Hazelwood Farm	Park and	16 th to 20 th Century
		Gardens, Chipstead	Garden	(1540-1900)
MSE22958	TQ 2768 5826	Chipstead Railway	Monument	19th to 20th Century
		Station, Chipstead		(1897-1995)
MSE16548	TQ 2773 5809	The Thatched	Park and	20 th Century (1901-
		Cottage/Adderley	Garden	2000)
		gardens, Chipstead		
MSE16526	TQ 2761 5851	Dacre Cottage	Park and	20 th Century (1901-
		(demolished) garden,	Garden	2000)
		Chipstead		
MSE6863	TQ 2770 5820	Air Raid Shelter	Air Raid	20 th Century (1941 to
			Shelter	1945)
MSE14627	TQ 2720 5800	Unfinished WW2 Air	Air Raid	20 th Century (1941 to
		Raid Shelter, Outwood	Shelter	1945)
		Lane, Banstead		
MSE6783	TQ 2785 5827	Pillbox, Chipstead Golf	Pillbox	20 th Century (1939 to
		Course (Type FW3/27)		1945)
MSE6783	TQ 2796 5849	Pillbox (Type FW3/27)	Pillbox	20th Century (1939 to
				1945)
MSE6198	TQ 2800 5880	Pillbox (Type FW3/27)	Pillbox	20th Century (1939 to
				1945)
MSE6117	TQ 2747 5770	Pillbox, Dene House,	Pillbox	20th Century (1939 to
		Bridgeway, Chipstead		1945)
MSE6806	TQ 2747 5804	Pillbox (variant)	Pillbox	20th Century (1939 to
				1945)
MSE6118	TQ 2743 5771	Pillbox, Cleave Priory	Pillbox	20th Century (1939 to
		Cottage, Ridge Way,		1945)
		Chipstead		
MSE16986	TQ 2870 5790	World War Two Aircraft	Aircraft	20 th Century (1901-
		Crash: Hooley	Crash Site	2000)
MSE17036	TQ 2720 5790	World War Two Aircraft	Aircraft	20 th Century (1901-
		Crash: Woodmansterne	Crash Site	2000)
MSE961	TQ 2730 5800	Quadrangular	Earthwork	Unknown date
		earthwork of unknown		
		date, Woodmansterne		
			1	

Summary of PAS finds from within Neale's Field (recorded as SHHER_MSE23450)

PAS ID no.	Broad period	Description
SUR-B3E01F	NEOLITHIC	A Neolithic large flake made from mottled grey flint
SUR-14CAFD	BRONZE AGE	A very worn tongue-shaped fragment of copper alloy comprising the butt of an early Bronze Age flat axe dating to <i>c</i> 2000-1750BC
SUR-76CD35	BRONZE AGE	A cast copper alloy short cylindrical fragment of uncertain original extent
SUR-1C5194	IRON AGE	A worn and incomplete Iron Age copper alloy unit possibly of Cunobelinus, AD8-41
SUR-68FF70	IRON AGE	A solid cast copper alloy ring of uncertain purpose but possibly a sword or harness fitting of late Iron Age or early Roman date
SUR-68D984	IRON AGE	The central part of a late Iron Age or early Roman cast copper alloy button-and-loop fastener
PUBLIC-A5B8A5	ROMAN	A fragment of a Roman copper alloy brooch comprising the catchplate and foot, dating from cAD 1st century
PUBLIC-D74881	ROMAN	A very corroded Roman copper alloy sestertius of uncertain 1st to 2nd century ruler, possibly Trajan (AD 98-117), dating to the period AD 43-138
SUR-14D688	ROMAN	A fragment comprising part of the bow and catchplate from a Roman copper-alloy brooch of possibly Colchester type
SUR-D0D3F7	ROMAN	A cast copper alloy object with an oval plate which may been rivetted to the rim of a small vessel for the attachment of a looping handle or chain
SUR-7E37D6	ROMAN	The upper part of a Roman cast copper alloy two-piece Colchester derivative Harlow double-lugged brooch
SUR-6D65D5	ROMAN	A Roman copper alloy Radiate or Nummus of uncertain late 3rd or 4th century ruler
PUBLIC-CA9144	EARLY MEDIEVAL	An incomplete early Medieval hooked tag
PUBLIC-C8358C	EARLY MEDIEVAL	A cast lead faceted cone, possibly a small pan weight or gaming piece and of early to post Medieval date
SUR-996B96	EARLY MEDIEVAL	A complete cast copper alloy early medieval openwork strap end of the Winchester Style, probably dating to <i>c</i> 950-1100
PUBLIC-0DBB2E	MEDIEVAL	A fragment of a Medieval Surrey white ware vessel, dating to the 14th-15th century
PUBLIC-CACAD1	MEDIEVAL	A cast copper alloy fragment, possibly from a lock escutcheon, furniture fitting or vessel handle and of post Medieval date
PUBLIC-9D025E	MEDIEVAL	A fragment of a Medieval copper alloy composite buckle, dating to cAD 1350-1450
PUBLIC-A633B2	MEDIEVAL	An incomplete late Medieval or early post Medieval cast copper alloy purse bar, of Williams Class B, dating to <i>c</i> AD 1450-1550
PUBLIC-C0E678	MEDIEVAL	A Medieval silver halfgroat of Henry VI, annulet issue dating to 1422-3, Mint of Calais
PUBLIC-BAE460	MEDIEVAL	An incomplete Medieval or post Medieval rough cast pewter double loop rectangular buckle, dating to <i>c</i> 1400-1600

PUBLIC-AC8362	MEDIEVAL	An incomplete Medieval to post Medieval cast copper alloy biconvex button with an undecorated polished and tinned surface, clate 13th to 16th century
PUBLIC-81E898	MEDIEVAL	A clipped and worn Medieval silver penny of Henry IV (1399-
		1413), minted at Durham under Bishop Thomas Langley, 1412-1413
PUBLIC-80D82B	MEDIEVAL	An incomplete late Medieval or post-Medieval copper alloy, sixteen-point spur rowel
PUBLIC-6CE938	MEDIEVAL	An incomplete Medieval copper-alloy D-shaped buckle plate of folded sheet type
PUBLIC-9E245E	MEDIEVAL	An incomplete Medieval gilded copper alloy probable box or furniture mount
PUBLIC-5E2681	MEDIEVAL	A fragment of a Medieval copper alloy, cast, annular brooch
PUBLIC-35AC93	MEDIEVAL	A fragment of a Medieval copper-alloy annular brooch
PUBLIC-3940C6	MEDIEVAL	A Medieval silver penny of either Edward I (1272-1307) or Edward II (1307-1327), Class 10ab dating to 1303-1305, Mint of Canterbury
PUBLIC-0858F0	MEDIEVAL	A clipped silver groat of Henry V (1413-1422), Class C, Mint of London
PUBLIC-05DE1B	MEDIEVAL	A silver groat of Henry VI (1422-1427), annulet issue, Calais mint
SUR-14DE58	MEDIEVAL	A silver groat of Henry VI (1422-1427), annulet issue, Calais mint
SUR-2D4940	MEDIEVAL	A silver cut halfpenny of the Tealby coinage of Henry II, 1158- 1180
SUR-E7AF4E	MEDIEVAL	A clipped and worn silver halfgroat of Edward III, 1351-1353, pre-treaty period, London mint
SUR-D0C8D6	MEDIEVAL	A medieval cast copper alloy strap fitting
SUR-998470	MEDIEVAL	A very worn cast copper alloy shield-shaped stirrup stud,
		probably originally enamelled
SUR-997820	MEDIEVAL	A silver cut farthing of Henry III (1247-1279), Class Va-g, Mint Canterbury, London or Durham
SUR-44D9A4	MEDIEVAL	A fragment of a cruciform cast copper alloy four-way strap fitting, probably part of a cruciform strap distributor dating from the 12th or 13th centuries
SUR-765043	MEDIEVAL	A silver groat of Henry VI, annulet issue, 1422-1427, Calais mint
SUR-7640B5	MEDIEVAL	The larger part of a clipped silver groat of Edward III, Series G, standard type F, London mint
SUR-7630F3	MEDIEVAL	A gold quarter noble of Henry V, Class G
SUR-694136	MEDIEVAL	A late medieval to 16th century cast copper alloy dome- headed stud with a square-sectioned shank
SUR-693986	MEDIEVAL	A small cast copper alloy dome-headed stud with a square- sectioned shank, probably late medieval or 16th century
SUR-691250	MEDIEVAL	A large cast lead uniface token with a casting runner projecting from the back
SUR-6907F6	MEDIEVAL	A late medieval plain cast copper alloy annular buckle frame with a central dividing bar
SUR-68C054	MEDIEVAL	A medieval gilded cast copper alloy rectangular mount of 12th or 13th century date

SUR-7E4D82	MEDIEVAL	A very worn and fragmentary silver penny possibly of Edward I, 1272-1307, London mint
SUR-7E4082	MEDIEVAL	A silver groat of Henry VI, annulet issue, 1422-1430, Calais mint
SUR-6DA753	MEDIEVAL	A cast copper alloy strap fitting of uncertain date
SUR-6D41B6	MEDIEVAL	A silver groat of Henry V, 1413-1422, London mint, Class C
SUR-999325	POST	A probable cast copper alloy fragment of a post Medieval
	MEDIEVAL	barrel tap
PUBLIC-D86E1A	POST	A post Medieval lead alloy cloth seal, possibly a regional or
	MEDIEVAL	county alnage seal, clate 16th to early 18th century
PUBLIC-D56CEC	POST	A fragment of a post Medieval copper alloy sheet metal
	MEDIEVAL	keyhole escutcheon, probably from a drawer front or similar
PUBLIC-D54A14	POST	A fragment of a post Medieval copper alloy sheet metal
	MEDIEVAL	keyhole escutcheon, probably from a drawer front or similar
PUBLIC-DB35CC	POST	An incomplete post Medieval cast copper alloy eye section
	MEDIEVAL	from a toggle clasp, probably from a sword belt and dating to
	DOCT	the 16th-1/th century
PUBLIC-DB0BF5	POST	A post Medieval cast lead uniface token or small pan weight of
	MEDIEVAL	0.750Z, dating to CAD 1600-1800
PUBLIC-CA5387		A post-medieval lead uniface token, Powell Type I, depicting a
		A post Medieval cast copper allow octofoil mount or stud
PUBLIC-C/DSUD	MEDIEVAI	16th-17th century
	POST	A silver penny of Charles II. dated 1670
	MEDIEVAL	resilver pering of charles if, dated 1070
PUBLIC-5BA7AF	POST	A post Medieval copper alloy cast stud chape from a shoe
	MEDIEVAL	buckle, dating to cAD 1660-1720
PUBLIC-A53B28	POST	A silver "Sovereign" type penny of Henry VIII (1509-1547),
	MEDIEVAL	dating to 1509-1526, minted at Durham
PUBLIC-3E926E	POST	A post Medieval cast copper alloy knife end-cap, dating from
	MEDIEVAL	<i>c</i> 16th century
PUBLIC-3DEEBF	POST	A post Medieval lead circular uniface token of Powell type 3,
	MEDIEVAL	dating to cAD 1500-1800
PUBLIC-3D4101	POST	A post-Medieval lead cast circular uniface token, dating to
	MEDIEVAL	cAD 1500-1800
PUBLIC-3C62B0	POST	An incomplete post Medieval silver threepence of Elizabeth I
	MEDIEVAL	(AD 1558-1603), dating to AD 1565
PUBLIC-3AD286	POST	A post-Medieval lead cast circular uniface token, dating to c
	MEDIEVAL	AD 1500-1800, Powell Type 14
PUBLIC-2E0/AI		A fragment of a post Medieval cast copper alloy double loop
		An incomplete silver halfpenny of Charles L dating to 1625
FUBLIC-ZALUD4	MEDIEVAI	1649 Tower mint
	POST	An incomplete post Medieval cast copper alloy spherical
	MEDIEVAL	animal bell, dating to <i>c</i> AD 1600-1800
PUBLIC-D51F37	POST	An incomplete post Medieval cast copper alloy square
	MEDIEVAL	sectioned stud, decorated with an eight-armed star with two
		pellets in each quadrant
PUBLIC-7F302B	POST	A lead biface token (cAD 1550-1800), Powell Type 30 and
	MEDIEVAL	Powell Type 2

PUBLIC-5990DC	POST MEDIEVAL	A clipped silver halfgroat of Charles I (1625-1649), Group D, Type 3a2-3, dating to 1640-1641, Tower mint
PUBLIC-A99B42	POST MEDIEVAL	An incomplete copper-alloy rose farthing of Charles I, dating to AD 1625-1649
PUBLIC-9F16FD	POST MEDIEVAL	An incomplete post Medieval cast copper alloy purse bar suspension loop
PUBLIC-9E86B5	POST MEDIEVAL	An incomplete post Medieval cast copper alloy square sectioned stud, decorated with an eight-armed star with two pellets in each quadrant
PUBLIC-4B67CD	POST MEDIEVAL	A post Medieval cast copper alloy mount
PUBLIC-270A5C	POST MEDIEVAL	An incomplete post Medieval cast copper alloy double-loop buckle frame, dated to <i>c</i> 1500-1650
PUBLIC-2CB81A	POST MEDIEVAL	A lead or lead alloy cast circular uniface token (<i>c</i> 1500-1800), Powell Type 7
PUBLIC-2020AE	POST MEDIEVAL	A clipped and pierced silver penny of Charles I, 1625-1649
SUR-B3D3EB	POST MEDIEVAL	A fragment of a Post Medieval copper-alloy double framed spur buckle with projections on the outer corners
SUR-B3C954	POST MEDIEVAL	A Post Medieval plain plano-convex lead spindle whorl
SUR-14F90A	POST MEDIEVAL	A Post Medieval biface lead token
SUR-14F09E	POST MEDIEVAL	A clipped and pierced silver penny of Charles I, 1625-1649
SUR-14E855	POST MEDIEVAL	A pierced silver threepence of Elizabeth I, 1579
SUR-F582B3	POST MEDIEVAL	A Post Medieval uniface lead token with a cross but no pellets, Powell Class 14
SUR-2D42AA	POST MEDIEVAL	A Post Medieval lead powder cap which has been broken and distorted
SUR-2D3A64	POST MEDIEVAL	A Post Medieval copper alloy mount or stud in a shape of an open diamond with a central groove running along the frame
SUR-2D2FDE	POST MEDIEVAL	A late 18th century inscribed copper-alloy dog collar, whose legend reads THE RT HON THOMAS HARLEY HORLEY SURRY (The Hon Thomas Harley of Hooley (1730-1804), who lived at at Hooley House)
SUR-E7FCF6	POST MEDIEVAL	One of a pair of Post Medieval strap fittings, likely toggle clasps
SUR-2B15CA	POST MEDIEVAL	A cast lead uniface token, with image of a wooden hay rake, Powell Class 21
SUR-2B075E	POST MEDIEVAL	A copper alloy farthing of Charles II, 1672-1673
SUR-998BB4	POST MEDIEVAL	A cast lead uniface token with what appears to be a bird facing right and pellets in the field
SUR-9D4A18	POST MEDIEVAL	A cast copper alloy square sectioned stud decorated with an eight-armed star with two pellets in each quadrant
SUR-9D4102	POST MEDIEVAL	A cast copper alloy square sectioned stud decorated with an eight-armed star with two pellets in each quadrant
SUR-76D7F3	POST MEDIEVAL	A cast copper alloy fragment of a post medieval curving buckle frame

SUR-76C311	POST	A plain post Medieval cast copper alloy strap fitting with an
	MEDIEVAL	integral bar on the back, probably used as a strap slide
SUR-76BA48	POST	A cast copper alloy terminal and part of the shaft of an
	MEDIEVAL	unidentified object of post medieval date, perhaps 16th or
		17th centuries
SUR-76AF31	POST	A post medieval cast copper alloy oval buckle frame for
	MEDIEVAL	breeches or shoes
SUR-76A535	POST	A fragment comprising about a half of a plain post medieval
	MEDIEVAL	cast copper alloy double oval buckle
SUR-769AF6	POST	A post medieval bent cast uniface lead token showing the
	MEDIEVAL	initials GI
SUR-768E77	POST	A silver halfpenny of Charles I, 1625-1649
	MEDIEVAL	
SUR-762138	POST	A very worn post medieval copper alloy coin, probably of
	MEDIEVAL	Dutch origin
SUR-692352	POST	An unclear uniface cast lead token showing a multi-stranded
	MEDIEVAL	cross with a pellet in each section
SUR-691AB4	POST	A pierced cast lead uniface token with an open sexfoil
	MEDIEVAL	
SUR-68ED05	POST	A fragment of a barrel tap handle
	MEDIEVAL	
SUR-68E3C2	POST	A cast copper alloy one ounce weight from the reign of
	MEDIEVAL	George I, 1714-1727, with a crown over the letter G, ewer for
		the Plumber's Company and sword for the City of London
SUR-68CD87	POST	A post Medieval button made from cast copper alloy and with
	MEDIEVAL	a high tin content
SUR-7E7FC2	POST	A worn fragment of a silver shilling of William III, 1697,
	MEDIEVAL	Chester mint
SUR-7E70B5	POST	A silver clipped penny of Charles I, 1635-1649
	MEDIEVAL	
SUR-7E65A4	POST	An extremely worn silver threepence of Elizabeth I, 1561-1602
	MEDIEVAL	
SUR-7E5914	POST	A silver sixpence of Elizabeth I, dated 1564
	MEDIEVAL	
SUR-7E25A7	POST	A cast copper alloy leg, probably from a tripod cauldron
	MEDIEVAL	
SUR-6D9964	POST	A cast lead alloy distorted 17th century powder measure cap
	MEDIEVAL	
SUR-6D65D5	POST	A flat cast copper alloy object which has been broken at both
	MEDIEVAL	'terminals' and with two wide projecting lobes, function not
		known but probably of 16th-18th century date
SUR-6D41B6	POST	A silver threepence of Elizabeth I, 1573
	MEDIEVAL	
SUR-6D1A66	MODERN	A Modern copper-alloy six pence token issued by W Mace of
		Covent Garden, London

Geophysical equipment information

Bartington fluxgate gradiometer sensor calibration results

Date of Calibration	December 2019	
Sensor Type	Bartington Grad-01-1000	
Range	1000/100nT	
Bandwidth	Hz (100nT range) 11-13Hz	
Noise	<100pT p-p	
Adjustable errors	<2nT	

APPENDIX 5

Magnetometry survey and data information

Raw data

Composite
Filename: CNF22 composite raw.xcp
Instrument type: Bartington (gradiometer)
Units: nT
Direction of 1 st traverse: 0 deg
Collection method: ZigZag
Sensors: 2 @ 1m spacing
Dummy Value: 2047.5
Dimensions
Survey size (meters): 120m x 240m
Grid size: 30m x 30m
X&Y interval: 0.25m
Stats
Max: 100.00
Min: -100.00
Std Dev: 3.40
Mean: -0.70
Median: -0.73
Composite area: 2.88 ha
Surveyed area: 2.43 ha

Processed data

Programme TerraSurveyor Lite version: 3.0.34.10

Composite
Filename: CNF22 composite processed.xcp
Stats
Max: 4.64
Min: -4.60
Std Dev: 1.25
Mean: 0.02
Median: 0.00

Processes							
Processes: 4							
Base Layer							
Despike (Threshold 1 Window Size)							
Destripe Median Traverse							
Clip at 2.00 SD							

Quantification of all fieldwalking finds

Grid	Туре	Wt (g)	No	Summary Description and Notes
1	Pottery	63	6	PMR
1	CBM – brick	131	22	
1	CBM – tile	736	32	
1	Burnt flint	35	3	
1	Iron	49	1	Bolt
2	Pottery	68	6	REFW and PMR
2	CBM – brick	120	24	
2	CBM – tile	804	35	
2	Burnt flint	86	4	
2	Worked flint		1	
2	Iron	74	1	Latch
2	Glass	3	1	
3	Pottery	96	15	PMR and REFW (blue & white)
3	CBM – brick	138	9	
3	CBM – tile	794	46	(One pc with traces of glaze)
3	Coin	4	1	1921 sixpence
3	Burnt flint	27	1	
3	Worked flint		4	
3	Iron	385	2	Wrench and hinge
3	Glass	9	1	Green bottle
3	Bone	209	1	Cow tibia
4	Pottery	149	24	PMR and Roman
4	CBM – tile	1116	52	
4	Clay pipe	2	1	stem
4	Burnt flint	330	9	
4	Glass	27	7	Green and brown bottle
4	Bone	69	1	Tibia
5	Pottery	22	7	PMR, REFW, Roman
5	CBM – tile	641	33	
5	Burnt flint	277	7	
5	Worked flint		1	
5	Glass	2	1	Green bottle
6	Pottery	196	18	PMR, REFW, BORDB
6	CBM – brick	44	8	
6	CBM – tile	895	45	
6	Burnt flint	35	1	
6	Worked flint		5	
6	Glass	21	2	Clear and brown bottle

7	Pottery	41	5	PMR
7	CBM – brick	58	2	
7	CBM – tile	422	24	
7	Worked flint		1	
8	Pottery	111	10	PMR
8	CBM – tile	699	33	
8	Worked flint		2	
9	Pottery	76	6	PMR
9	CBM – tile	1660	94	
9	Burnt flint	206	5	
9	Worked flint		2	
9	Glass	13	4	Clear (window)
10	Pottery	158	17	PMR and Roman
10	CBM – brick	39	1	
10	CBM – tile	1658	78	
10	Burnt flint	240	5	
10	Worked flint		1	
10	Glass	29	5	Green and brown bottle
11	Pottery	121	7	PMR and MOD
11	CBM – brick	349	46	
11	CBM – tile	1633	55	Includes peg tile
11	Burnt flint	450	16	
11	Worked flint		9	
11	Glass	57	3	Clear bowl
12	Pottery	34	5	PMR and REFW
12	CBM – brick	300	31	
12	CBM – tile	1296	43	
12	Clay pipe	5	1	Stem
12	Burnt flint	839	31	
12	Worked flint		4	
12	Glass	25	2	Green bottle
13	Pottery	121	8	PMR
13	CBM – tile	1253	46	
13	Clay pipe	5	1	Stem
13	Burnt flint	622	17	
13	Worked flint		10	
13	Iron	88	1	
13	Glass	7	1	
14	Pottery	82	4	PMR and MOD
14	CBM – tile	586	30	
14	Burnt flint	130	4	
14	Worked flint		3	
14	Glass	23	1	Green bottle
15	Pottery	62	2	MOD and Roman
15	CBM – brick	45	11	
15	CBM – tile	734	30	
15	Burnt flint	215	5	
15	Worked flint		16	
15	Iron	149	1	
15	Glass	25	2	

16	Pottery	30	3	PMR
16	CBM – tile	380	21	
16	Worked flint		8	
16	Glass	13	1	Blue bottle stopper
25	Pottery	91	17	PMR and REFW
25	CBM – tile	696	38	
25	Burnt flint	61	2	
25	Worked flint		3	
26	Pottery	59	9	PMR and BSGSW
26	CBM – tile	234	11	
26	Worked flint		1	
26	Iron	95	1	Buckle hinge
27	Pottery	13	3	PMR
27	CVM – tile	382	14	
27	Burnt flint	192	2	

Quantification of Medieval and Roman pottery (referencing MoL and Surrey type series fabric codes)

Grid / Location	Fabric	No	Wt (g)	Date Range	Comments
4	OXRC	1	3	270-400	Beaker (Form 3)
5	PORD?	1	2	350-400	Possibly RWW 1400-1550?
10	SAND	1	9	43-400	Jar (Form 2); very abraded
15	WW1B	1	2	1240-1400	
TQ2829157768	SAND	1	3	43-400	
TQ2829457696	SAND	1	14	60-160	Round-bodied neck jar, with fig 7 rim and burnished decoration on shoulder, usually Alice Holt (Form 2D)
TQ2821457768	SAND	1	16	43-400	Very abraded

APPENDIX 8

Flint finds summary

Artefact type	No
Waste flakes & chips – most field battered (Figure 14)	30
Waste flakes – with varying degrees of utilisation, mostly also	16
field battered (Figure 14)	
Possible projectile point or knife, Grid 11	1
Blades, Grids 6 & 13	2
Discoidal core, Grid 15	1
Core trimmings/rejuvenation flakes (Figure 15)	12
Scrapers: incl. notched & 'hollow' pieces, Grids 6, 8 & 15 (x3)	5
Hammerstone, Grid 15	1
Possible loom weight, Grid 3	1
Awl, Grid 15	1
Bashed lump	1
Total	71

Analysis of Flint

Grid	No.	Length (mm)	Width (mm)	Artefact type	Edge features (Worked/Utilised /Plough&Stone/ Battered/None)	Patination	Comments
2	1	51	34	Waste flake – battered; some retouch	Minor battering chips	Grey	Very clear platform, bulb and ripples
3	1			Possibly a core or loom weight	Not applicable	Grey	Hole through centre; has been flaked all round
3	2	51	31	Waste flake – battered	Battering	Black and grey	Irregular and very small platform remnant; chipping on one edge probably plough and stone battering rather than deliberate working or use
3	3	28	28	Waste flake	None	Grey	Very small (2mm) platform
3	4	49	31	Waste flake – battered	None	Translucent; slightly brown	Bulb tiny; no platform
5	2			Core trimming flake	Battered	Black	Flake to shape and manage a core
6	1			Possible scraper on large waste flake; notched and denticulate d along platform edge	May have been used along one edge as scraping tool; very jagged edge	Grey	Clear bulb, ripples and platform; large flake; red staining
6	2	38	46	Waste flake – battered		Grey	Clear bulb, ripples and platform; preparation of edge of platform on dorsal surface visible
6	3	41	38	Waste flake – battered	Probably edge battering only	Black	No platform; bulb and ripples clear
7	1	58	55	Waste flake – utilised & battered	Battering	Grey	Very clear platform, bulb and ripples
8	2			Hollow scraper on one long edge of the piece with	Working and use very clear	Grey	No platform, bulb or platform; one surface may be natural; looks as if the piece has

				retouched			been picked up as it
				point			is and used
8	3	44	36	Waste flake	None; could be a	Grey	A lot of cortex on
					plough strike		dorsal surface –
							primary flake
9	1	103	54	Waste flake	Battering long	Grey	No bulb, ripples or
				– utilised &	edges probably		platform
				battered	from		
					plough/stones; at		
					short base end		
					bettering or		
					fortuitous		
					coraning adda:		
					odd niece: large		
					triangular "flake"		
					with definite		
					point/apex: one		
					side seems		
					natural. matt		
					surface		
9	3	37		Chip	None	Grey	No bulb or platform
10	3	24		Waste flake	None	Grey	
11	3	49	36	Waste flake	One lateral edge	Translucent	Clear bulb, ripples
				– utilised	is notched and	light brown	and platform
					utilised for		
					scraping	_	
11	4			Core	No working	Grey	Cortex on dorsal
				trimming	battering or use		surface
11	-	10	62		Dettered	Cream	Charty flight care
11	5	40	03	– battered	Ballereu	Cream	red staining
11	6	37	51	Waste flake	Some minor signs	White	Clear hulb and
11	0	57	51	– utilised	of use along edge	white	rinnles: no platform
11	7	57	42	Waste flake	Battered	Grev	Clear hulb and
	,	57	72	– battered	Dattered	dicy	ripples: no platform
11	8	41	51	Waste flake	Probable minor	Black	Clear bulb, ripples
	-			– utilised	usage on two		and platform
					edges and		
					bifacially worked;		
					may be earlier		
					than rest of		
					collection;		
					possibly a		
					projectile point		
11	9	44	34	Waste flake	Probable minor	Translucent	Clear bulb, ripples
				– utilised	usage on one	with	and platform
	1				edge	inclusions;	
	<u> </u>	-				light brown	
11	10	52	42	Waste flake	Seems to have	Grey; some	No bulb, platform or
	1			– utilised	been used as a	whitening	ripples evident
	1				sort of hollow		
					scraper on one		
1	1	1			edge; use on	1	

					other edges as well		
11	11	29	41	Waste flake – utilised	Possibly some very minor use or battering on one edge	Black	Cortex remaining; clear bulb, ripples and platform
12	1			Core trimming flake		Black	Cortex on dorsal surface; bulb and platform clear
12	2			Core trimming flake		Grey-brown	Cortex covers all of dorsal surface; bulb and platform clear
12	3			Core trimming flake		Grey	Cortex covers all of dorsal surface; bulb and platform clear
12	4	29	22	Waste flake – utilised	None	Grey	Very thin chip; bulb clear
13	1			Blade – utilised & battered	Minor signs of utilisation	Dark Grey	Prominent bulb and platform; no cortex
13	2	61	38	Waste flake – battered	Battered	Cream, some red staining	Clear bulb and platform; very cherty flint
13	3			Core trimming flake – utilised	One edge definitely and prominently utilised, probably as a small scraper	Grey	Plunging flake from shaping of the core
13	4	61	47	Waste flake – utilised & battered	Utilised along a 2cm length on one edge	Grey; mottled	Clear platform and bulb; some cortex
13	5	59	60	Waste flake	None	Grey	A lot of cortex
13	6	46	49	Waste flake – battered	Vestigial utilisation and some battering	Black	Definite platform and bulb
13	7	69	31	Waste flake – utilised	Signs of possible utilisation along one edge	Black	No platform but clear bulb
13	8	36	44	Waste flake – utilised	Possibly signs of small utilisation one a 1cm length at butt	Black with mottled white blotches	Clear bulb and platform
13	9	54	51	Waste flake – battered	Minor battering	Black	Clear bulb and platform
13	10	42	21	Waste flake – utilised	Very minor signs of possible use	Translucent light brown	Clear bulb and platform
14	1	84	66	Waste flake – utilised & battered	Signs of battering and possible minor use on one edge	Grey-cream	Very large flake. Cherty flint. Clear bulb and platform
14	2	51	36	Waste flake – utilised & battered	Signs of battering and perhaps minor use as a scraper on one edge	Grey	Clear bulb and platform

14	3	37	43	Waste flake	None	Light grey	Clear bulb and platform
15	1	53	54	Possibly a flake	Battering; very minor	Grey brown	Bulb surface is matt and lacks ripples (which are typical in flint here) and may be pot lid
15	2	58	47	Waste flake – utilised & battered	Battering; very minor	Grey	Prominent bulb, ripples and platform
15	3			Core trimming flake	Battering	Grey	
15	4	52	42	Waste flake – utilised & battered	Possibly utilised on one edge	Grey	Irregular platform
15	5	60	62	Waste flake – battered	Battering	Grey	No platform; prominent bulb and ripples
15	7	45	41	Waste flake – battered	None	Light Brown	Poorly defined bulb; no platform visible
15	8	47	29	Waste flake – utilised	Possibly some minor working and use; pointed on one corner and may have been used as a point/awl	Grey	No platform; bulb clear
15	9	41	30	Waste flake – battered	Battered	Grey	Clear platform and bulb
15	10			Scraper – side	Utilised along one edge as small curved scraper and at a point as a hollow scraper	Grey	Clear bulb but no platform
15	11	30	32	Waste flake	None	Light grey	Clear platform and bulb
16	1	54	48	Waste flake – battered	May be an axe thinning flake	White-grey	Very thin; bulb, platform and ripples very clear
16	2	61	57	Waste flake – battered	Battered	Grey	Bulb, platform and ripples very clear
16	3			Core tablet		Grey	Very clearly a core tablet
16	6	42	36	Waste flake – utilised & battered	Battered	Grey	Some cortex remaining
16	7	32	27	Waste flake – utilised	Battered	White	
16	8			Core trimming flake		Black with some whitening	Some cortex on dorsal surface
16	9	30	31	Waste flake		White & brown variegated	Very thin chip; no signs of having been struck at all – no bulb, no ripples or

							platform; vey flat surfaces
16	10	36	18	Waste flake	None	Translucent brown	Cortex on dorsal surface; bulb and platform clear
25	2	49	27	Waste flake – utilised		Grey	A lot of cortex on dorsal surface
25	3	77	47	Waste flake – battered		Translucent light brown	A lot of cortex on dorsal surface; small bulb and platform visible
25	4	50	40	Waste flake – battered	Edge preparation is visible at platform edge	Grey	A lot of cortex on dorsal surface
26	1			Core trimming flake – probable	None	Grey	
15 Bag 2	1			Discoidal core	Dressing of platform edge visible	Grey	At least 4 flakes removed from platform edge
15 Bag 2	2			Hammer- stone	Large area of surface is severely battered and pockmarked; burnt and bashed	Grey	A lot of cortex remains; oval shape
15 Bag 2	3			Bashed lump – battered		Black	A flake struck from core after previously having been struck several times itself; no bulb or platform visible
15 Bag 2	4			Scraper	Evidence of use along a 6cm section of end	Grey	Clear bulb, ripples and platform
15 Bag 2	5			Awl/piercer	Has very definite pointed end with signs of use	Black	Clear bulb, ripples and platform
15 Bag 2	6			Scraper	Round scraper on squat flake	Black	Clear bulb, ripples and platform
TQ 28218 57764	Calc. as Grid 6			Core trimming flake	Very minor (a few chips) battering or use on one edge	Grey	Very diffuse bulb, may be soft hammer
TQ 28252 57772	Calc. as Grid 6			Core trimming flake	It looks as if some utilisation chips along edge; however, these break through the patination and suggest they are in fact relatively modern from plough and stone battering	White with grey inclusions; some red stains	Very clear platform, bulb and ripples

Grid	Weight	Diameter in	Radius	Area = Base	Area divided
	(g)	mm on PS		row r x r x	by Pi 3.14159
		at 300%		3.14159	
1	35	10.25	5.12	82.46674	26.25
2	86	16.06	8.03	202.6326	64.5
3	27	9.00	4.50	63.6172	
4	330	31.46	15.73	777.5435	247.5
5	277	28.83	14.41	652.6653	207.75
6	35	10.25	5.12	82.46674	26.25
7	0	0.00	0.00	0	0
8	0	0.00	0.00	0	0
9	206	24.86	12.43	485.3757	154.5
10	240	26.83	13.42	565.4862	180
11	450	36.74	18.37	1060.287	337.5
12	839	50.17	25.08	1976.846	629.25
13	622	43.20	21.60	1465.552	466.5
14	130	19.75	9.87	306.305	97.5
15	215	25.40	12.70	506.5814	161.25
16	0	0.00	0.00	0	0
25	61	13.53	6.76	143.7277	45.75
26	0	0.00	0.00	0	0
27	192	24.00	12.00	452.389	144

Burnt flint by weight and grid (base row is emboldened)

APPENDIX 11

Weight of worked flint recovered from field walk

Grid	Weight
	(g)
2	23
3	114
5	37
6	215
7	60
8	40
9	113
11	254
12	152
13	269
14	181
15	817
16	145
25	97
26	61

FIGURES



Figure 1 – Site location map of Neale's Field, Chipstead (OS OpenData)



Figure 2 – Neale's Field Chipstead from John Roque map of Surrey, 1768, 1:10,000 (courtesy of Surrey County Council)



Figure 3 – Extract from tithe map of Neale's Field Chipstead, 1839, 1:4000 (courtesy of Surry History Centre)



Figure 4 – Neale's Field Chipstead from First Edition Ordnance Survey map, 1871, 1:4000 (courtesy of Surrey History Centre)



Figure 5 – Map of metal detecting finds from Neale's Field Chipstead as reported to the Portable Antiquities Scheme



Figure 6 – Raw (left) and processed (right) magnetometry survey of Neale's Field Chipstead at 1m resolution



Figure 7 – Map of magnetometry survey of Neale's Field Chipstead (refer to 6.3.1)



Figure 8 – Interpretation of magnetometry survey of Neale's Field Chipstead (refer to 6.3.1)



Figure 9 – Location and numbering of fieldwalking grids



Figure 10 – Distribution map of all CBM collected from fieldwalking in Neale's Field, recorded by weight



Figure 11 – Distribution map of all pottery collected from fieldwalking in Neale's Field, recorded by weight



Figure 12 – Distribution map of all pre-18th century pottery collected from fieldwalking in Neale's Field, recorded by count



Figure 13 – Distribution map of all flint artefact finds (excluding burnt flint) collected from fieldwalking, recorded by count



Figure 14 – Distribution map of flint flakes and blade finds collected from fieldwalking, recorded by count



Figure 15 – Distribution map of flint cores and core trimmings collected from fieldwalking, recorded by count



Figure 16 – Distribution map of burnt flint collected from fieldwalking, recorded by weight per grid



Figure 17 - An example of a broad, squat flint flake, from Grid 15 (drawing by Chris Taylor)



Figure 18 – Squat round end scraper from Grid 15, steeply retouched (drawing by Chris Taylor)



Figure 19 – 'Hollow' scraper showing utilisation of an edge and an end point, from Grid 8 (drawing by Chris Taylor)



Figure 20 – Flake with notch showing utilisation, from Grid 15 (drawing by Chris Taylor)



Figure 21 – Core rejuvenation, from Grid 15 (drawing by Chris Taylor)



Figure 22 – Possible projectile point or knife from Grid 11. The ventral surface (left) shows the point of percussion and bulb. Both surfaces have been worked. (drawing by Chris Taylor)



Figure 23 – Possible spindle whorl or weight, from Grid 3 (drawing by Chris Taylor)



Figure 24 – Awl, from Grid 15 (drawing by Chris Taylor)