# Secrets of the High Woods – research agenda from 2017 to 2022.

#### Introduction

"Secrets of the High Woods" was a project of the SDNPA from 2014 to 2017, funded by SDNPA and Heritage Lottery fund with partnership support from Chichester District Council and Historic England. For the 305sq km of the "Wooded estates" landscape character area between the A3 and the river Arun a Lidar survey was undertaken followed by programmes of ground-truthing, archive research and oral history. Further information about the project can be found at <a href="www.southdowns.gov.uk/highwoods">www.southdowns.gov.uk/highwoods</a>. A Research Agenda for that project was written by project staff and can be accessed from

https://www.southdowns.gov.uk/discover/heritage/secrets-of-the-high-woods/secrets-of-the-high-woods-resources/ and is aslo reproduced as Appendix 1 to this report. The project also included a National Mapping Programme report by Historic England and Cornwall Archaeology and this can be downloaded from <a href="https://www.southdowns.gov.uk/wp-content/uploads/2016/08/TheHighWoodsfromaboveNationalMappingProgramme.pdf">https://www.southdowns.gov.uk/wp-content/uploads/2016/08/TheHighWoodsfromaboveNationalMappingProgramme.pdf</a>. The NMP report is structured under the main headings of the research agenda to achieve a multi-period assessment of key themes. The NMP report also includes an Appendix of future investigations that they propose would answer outstanding questions (here Appendix 2) and these have been included in the list of potential research.

#### Access to information resources

The NMP information, the Lidar data and the results of volunteer ground-truthing are all incorporated into the relevant HER's as well as held by SDNPA. Universities are being offered the opportunity to hold a copy of the Lidar data to inform student projects and it is planned to continue web-based access for independent researchers. Copies of the oral history recordings have been placed in the West Sussex Record Office as well as being held by SDNPA and are available to future researchers. Timed summaries are going to be developed for all the recordings by one of the oral history volunteers. The book of the project includes accounts of a number of pieces of research and the fieldwork. More detailed accounts can be found on the pages of the project web-site, especially under Fieldwork and Archival research.

## Report on current and future research

Now that fieldwork is completed and the NMP report has been published a review has been undertaken of the research agenda for topics not resolved in the project. Areas that were researched in the project are noted to add to the bibliography used in creating the 2015 Research Agenda. In the NMP Report there are new queries posed by Historic England's aerial investigations team in the general discussions in the report and in Appendix 3, a list of sites for future investigations. These sources have been merged under the headings used in the Research Agenda for continuity where possible or added under an NMP heading. Both the sources for this document are written by archaeologists and there are undoubtedly other disciplines with other research potential, especially around forestry. It is hoped that this document might stimulate such other suggestions for addition to this Research Agenda.

This report then identifies priorities for the next stage of research that will underpin further research in the future. These will be incorporated into the SDNP Research Agenda and shared with potential partners in the higher education sector.

### **Progress on 2015 Research Agenda**

During the course of the project the research agenda was used to prompt:

- Topics of research in archive
- Identification of subjects for oral history interviews
- Ground-truthing and community excavations in fieldwork
- Work by independent researchers (although these often had existing topics of research in the project area but they did link to the Research Agenda)

Volunteers and independent researchers chose their own topics of research and although this was informed by the Research Agenda that did not restrict their areas of investigation. The oral history work concentrated on two areas of investigation – the lives and work of people in the project area and the archaeologists who have worked in the project area. The extent of progress against the Research Agenda is recorded in Table 1.

## Research priorities from 2017

Analysis of Table 1 and discussions have identified the priorities for the first three years after the completion of the Secrets of the High Woods project. These have been chosen for one or more of the following reasons:

- 1. Improved understanding is fundamental to the progression of more detailed research in the future
- 2. More information is needed to evidence the potential designation of a site discovered in the project
- 3. The assets concerned are under particular threat and evidence to assist their survival is crucial
- 4. Fit with other areas of National Park work especially in landscape, biodiversity and woodland/forestry management
- 5. Identification of potential partners/funders to work in this topic.

These priorities have been identified against the research topics and then a series of priority research topics identified by bringing together linked items.

This strategic approach does not prevent the opportunistic pursuit of other research where resources in people and funds are available and where enough evidence is available to develop an acceptable research proposal.

Research might be undertaken by universities and other sources of learning; by partner organisations such as Forest Research or the National Trust; by local societies with interests in the subject matter and/or locality and by independent researchers.

# Research topics from 2017

The prioritisation of the research agenda leads to a number of potential topics for detailed research being identified. In some cases this includes the potential for fieldwork as part of the programme. The same topic headings have been used as in the project Research Agenda for consistency although sub-topics have been amalgamated here to provide flexibility. Topics are listed in order of priority. Sections 1 to 5 are chronological and 6 onwards are thematic and include non-heritage research.

Any proposal for research funding will require development to meet academic standards and there is scope for linking to other long-term research work.

	Research Priority	Area for research
1	Continuity and Change – Environment and Land Cover	Prehistoric field systems –  1 – Can we establish a typology, dating, uses/re-uses of different types of field systems in the project area and at different dates; what does this add to our understanding of the development of agriculture in project area; what is the influence of landform variation on agricultural development?
	Ownership and Control	2- Can environmental studies, including geo-chemistry, help to clarify the activities undertaken in the field systems across the farming year? If field systems can be dated, is there variation in the uses of prehistoric fields across time?  3 – Excavations in the project have shown that the
		fields/ lynchets sampled have much more complex phasing than has been predicted. Can further investigations establish
		2 - Can PAS data be used to help date field systems?
		3 -How do cross-dykes relate to field systems? Are they part of managing an agricultural landscape? How do they influence the development of tenurial and territorial development of the landscape?
		4- How extensive was de-afforestation and the uptake of agriculture from the Neolithic period, through Bronze Age and Roman periods
		5 - Can different "sets" of fields be identified? Are gaps in the field systems real or an artefact of preservation?
2		Prehistoric funerary and ceremonial monuments

	Research	Area for research
	Priority  Continuity and Change – Environment and Land Cover	1 Neolithic long barrows – ground-truthing and investigation of the new examples identified in the NMP report, comparison with others in SDNP and beyond. How were they located in their landscape?  2 Bronze Age barrows – ground-truthing and investigation of the many new examples identified in the NMP report. Can their landscape setting be reconstructed? What are the patterns of location of barrows in the topography? How do they relate to field systems and other monuments?
	People in the Landscape – Settlement and Communications	3 – What was the connectivity between monuments through viewshed analysis?
	Understanding how the landscape influences experience	4 – Ritual landscapes – does the Lidar evidence support or debunk current models and theories by shedding light on the spatial distribution of funerary and ritual monuments.
3	People in the landscape – Settlement and Communications	Prehistoric settlements and communications  1 With the Lidar data, can we start to identify settlement sites, particularly from the earliest periods, and their relationship with field systems and other monuments?
		2 With viewshed analysis can we start to consider the features that were visible and hidden in the landscape at different dates in prehistory?
		3 What evidence is there from the Lidar survey of the communication routes used in the prehistoric period? Do these deviate from expected routes based on last-cost analysis, for example? Can phasing (establishment, deviation and abandonment) and purpose (drove roads, access, and leisure) be ascribed to these routes? How did these routes link to the external landscapes of the coastal plan and the Weald?
4		Roman Settlement and communications  1 – what was the pattern of settlement in the project area during the Roman period? What evidence is there

	Research	Area for research
	Priority	for the relationship between villa estates and less Romanised settlements?
		2 Can the Lidar evidence be used to reconstruct the estates associated with the known and any new villa sites?
		3 What is the relationship between Roman roads (Stane St, Chichester-Brighton and Chichester-Silchester) and features such as field systems.
		4 A programme of fieldwork including environmental studies to inform any proposal for designation of the newly discovered Roman road at Binsted woods.
5	Ownership & Control	Medieval landscapes  1 What evidence is there for medieval field systems? How do these relate to prehistoric field systems in same area? Are they influenced by other earlier features eg cross dykes?
	People in the Landscape – Settlement and Communications	2 How/why and where do early medieval settlements develop and decline in the project area, including potential investigation of DMV sites identified in the Lidar survey
		3 What can place names tell us about the pattern of settlement in the project area? How does that compare with evidence from Lidar, archaeology and documentary sources?
		4 What can place names tell us about the pattern of forestry/woodland in the project area? How does that compare with evidence from Lidar, archaeology and documentary sources?
		5 How did deer parks in the area develop using Lidar and documentary sources and what was their relationship with the free chase of Arundel?
		6 How have deer parks been re-used since being sold at end of 16th C and how has this re-use influenced the extent of survival of deer park features in the Lidar survey results?

	Research Priority	Area for research
	Ownership & Control	7 To what extent has this landscape been shaped by the influence of ecclesiastical landowners and influences such as the establishment of a parochial system?
6	Ownership & Control	Post-medieval landscapes  1 How did the estate economy develop in the (17th?)  18th and 19th centuries and what is its significance for the area?  2 What evidence is there in the landscape for the ancestry of the great estates?  3 Why have estates in the project in the project area survived when others have failed?
		4 How does the Lidar data inform research on historic designed landscapes in the project area? Does it provide a major source of new evidence alongside documentary, visual and other records?  5 Can the Lidar data be used to chart the identification of dense exotic planted species such as rhododendron and can this be sued to identify the gentrification of the landscape from the 18 <sup>th</sup> century onwards?
7	Ownership & Control	20 <sup>th</sup> century  1 What were the impacts (economic, social and environmental) of the requisition of property during the two World Wars?  2 What were the impacts of the County War Agriculture Committee system in the project area, at local level and overall?
	The Woodland resource	3 Can we quantify/map the strategic need to timber and for areas for military training in the project area and in the wider National Park? What has been the impacts of both these activities on the development and management of woodland in the project area?  4 To what extent can the identification of veteran trees add to our understanding of continuity and change on the woodland cover?

	Research Priority	Area for research
8	Continuity and Change – landscape formation and processes	Landscape development  1 Can the results of the lidar survey be used to evidence past climatic change? eg water meadows by winterbournes,  2 Can use of the3D model of the current landscape inform the understanding of the formation and location of colluvial deposits? Specifically does this help us to understand:  - The distribution of Palaeolithic material?  - Levels of erosion caused nu agriculture on the higher grounds throughout the prehistoric and
	Environment and Land Cover	historic periods?  3 – Is it possible to better understand the exploitation of natural resources such as flint, chalk and stone using the 3d landscape model?  4 How do the discoveries from Lidar affect our understanding of the time depth of Historic Landscape Characterisation of the project area? How can Lidar become part of the HLC tool kit?
	Ownership and control	5 How can boundaries and landmarks (ie barrows, cross dykes, hundred meeting points etc) help shed light on the tenurial and territorial development of the landscape?  6 Can we re-examine the archives of mid and late 20 <sup>th</sup> C archaeological investigations within the area to place these site-focussed projects into their wider landscape context?
9	Environment and Land Cover	Forest development and change  1 – How extensive was deforestation during the Neolithic, Bronze Age, iron Age and Roman periods? (depends on knowing more on dating the fields, see section 1 above)
	The Woodland resource	2 using the oral history archive captured in this project can we now research broader stories of:  • Forestry and game related occupations

	Research	Area for research
	Priority	
		3 Using the evidence from the project for woodland industries what is the story of these activities in the project area and how does that compare with adjacent landscapes such as the High Weald and the New Forest (both have Lidar surveys)
		4 What is the history and distribution of large scale coniferous plantations in the project area and how as that influenced by national/international trends and policies/subsidies?
		5 Does the Lidar survey evidence areas of more traditional woodland management (ie not coniferous plantations) such as pollarding, coppicing and the preservation of veteran trees. What does this add to our understanding of the woodland management history of the project area and how does it compare to other forests in the South Downs NP and beyond?
		6 What changes have occurred in woodland management in the area over the last 100 years and how has this influenced popular perceptions of the landscape/
10		Water resources
		1 – what evidence is there of dolines and other water related features. What does that tell us about the past hydrology of the area and to inform future predictions.
11		Cultural landscape
	Understanding how the landscape	1 can we see evidence of everyday experience of this landscape in literature and art?
	influences experience	2 Do the oral traditions of song and verse and folk stories provide an insight into experience of living in the landscape area?
		3 how is this landscape depicted in early photography and how does that reflect perceptions of the landscape in the past?
		4 to what extent does the literary tradition of the area reflect the landscape (for whom, at what period is this experience most true)? Does the wooded landscape

Research Priority	Area for research
	produce a different literary tradition than the open downs of the eastern part of the South Downs?
	5 using the oral history archive captured in this project can we now research broader stories of:  • Forestry and game related occupations

Append			ts of High Woods pro			
	Research Theme	Theme Sub- heading	Topic for research	Progress to date	Potential for further research	Priority criteria (blank if not a priority)
1.1	Continuity and Change	Landscape Formation and Processes	Can the 3D model of the current landscape be used to better understand the formation and location of colluvial deposits in the study area? Specifically does this help us to understand; - the distribution of Palaeolithic material? - the levels of erosion related to agriculture on the higher ground throughout the prehistoric and historic periods?	Community excavations at Whiteways and East Dean data might be useful here but would require re- assessment.	Palaeolithic material has not been assessed. Opportunity for investigations of colluvial deposits to determine impacts of changes in the landscape eg prehistoric fields.	1
1.2			Is it possible to better understand the exploitation of natural resources such as flint, chalk and stone using the 3D landscape model?	Quarries/pits have been mapped on NMP GIS files. NMP report also included consideration of flint mines.	Geology needs to be assessed by overlaying BGS solid and drift maps – but are not accurate to resolution of Lidar so field survey would be needed.	

Appendix	x 1 – Research	Agenda for Secret	s of High Woods pro	ject, July 2015		
	Research Theme	Theme Sub- heading	Topic for research	Progress to date	Potential for further research	Priority criteria (blank if not a priority)
					Synthesis of results on flint mines not started (one PhD started before the project- progress not known).	
1.3			What evidence for climate fluctuation over time can be seen in the project area, for example, water meadows beside winterbournes, shift in species as identified in pollen records?	Water meadows seen in Lavant valley in Lidar –article in project book.	Opportunity for further work on water meadows. No pollen records gathered in project – snails a better preservation on the chalk.	1
2.1		Environment and Land Cover	How does evidence of agricultural exploitation reflect variations in landform?	NMP has mapped extensive field systems though dating is inferred and not proven (except in community excavations, see reports).	Phasing of field systems and investigations to establish relative and absolute dating is crucial.	1

	Research Theme	Theme Sub- heading	Topic for research	Progress to date	Potential for further research	Priority criteria (blank if not a priority)
2.2			How extensive was deforestation and the uptake of agriculture during the Neolithic, Bronze Age and Iron Age and Roman periods in the study area?	NMP has mapped extensive field systems though dating is inferred and not proven (except in community excavations, see reports).	Needs more dating evidence and typology of field systems developed – opportunity.	1
2.3			Can we successfully distinguish between periods of establishment, use, reuse and abandonment of field systems, allowing the extent and nature of agriculture to be assessed in relation to other evidence?	Community excavation at Whiteways and East Dean provide first evidence. NMP results reveal areas with more than one set of field systems (eg Eartham woods).	Much more work needs to be done in field.	1
2.4			Can targeted geophysical survey help us to identify whether gaps in field systems are genuine	Geophys undertaken as precursor to Whiteways community excavation as an example of what	More examples need to be investigated, learning form geophys experience to date.	1

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			absences or a result of taphonomic processes?	could be achieved and any issues.		
2.5			Using place-name evidence, can we map the earliest occurrences of place names that are descriptive of wooded (ie leah, hyrst, graf) and open environments?	Some place name studies undertaken (chapter in project book) using published sources.	No synthesis yet and scope for original work reassessing origins of names as Mawer and Stinton was published in 1920's (Richard Coates reviewing Sussex for EPNS but has long way to go before completed)	5
2.6			Can we reconstruct the landscape setting of the later prehistoric burial/ceremonial monuments?	Stuart Needham, as independent researcher, undertook study of Devil's Jumps and demonstrated the potential of considering the landscape setting (report in Independent researcher's file). Also see People of	A good time for a major review. Also barrows are the biggest class of Heritage at Risk SM's so may attract Historic England interest?	1.2.3.5

Appen	dix 1 – Researc	h Agenda for Secr	ets of High Woods pro	ject, July 2015		
	Research Theme	Theme Sub- heading	Topic for research	Progress to date	Potential for further research	Priority criteria (blank if not a priority)
				the Heath project results.  NMP transcription and fieldwork found many new barrows.		
2.7			Can the 3D model be used to quantify the most heavily "used" areas of the landscape in terms of agriculture? Do these relate to hypotheses of aspect and land viability? Are there areas that deviate from the general pattern of exploitation?	NMP transcription of field systems provides evidence base although not dated	Could now be researched using soil maps (or new research) and other info to add to project's identification of field systems. What are the prehistoric field systems are used for is still a big unknown – opportunity for geochemistry?	5
2.8			Can the 3D model be used to quantify the least heavily 'used' areas of the landscape? Do these areas contain evidence of prior exploitation?	NMP transcription could be assessed to identify least used areas.	"Least used" areas probably changes over time so need to have more dating evidence and consider other reasons – eg taphonomic.	5

Append	ix 1 – Researc	h Agenda for Secr	rets of High Woods pro	ject, July 2015		
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2.9			To what extent can the PAS data set contribute towards refining dating of features identified via remote sensing methods?	PAS data in HER data sets used in the project but no specific study of this topic.	Portable Antiquities Scheme data would have to be released with a high resolution NGR to be useful –can be organised. Need to understand the relationship between the landscape features and the find; how secure is the association? Would be an interesting data set to check out but probably a Masters level piece of work?	1
2.10			Can the lidar data and NMP transcription be used to add significant time-depth to the Historic Landscape Characterisation for the area?		Adding to the HLC would be a useful piece of work — supported by landscape Strategy. A distinct project for a student with experience, rather than a piece of research (unless researching the accuracy of time depth assumptions in HLC?).	4

Append	lix 1 – Research /	Agenda for Secret	s of High Woods pro	ject, July 2015		
	Research Theme	Theme Sub- heading	Topic for research	Progress to date	Potential for further research	Priority criteria (blank if not a priority)
3.1	People in the Landscape	Settlement and Communications	Can we move closer to understanding the pattern of settlement in later prehistory?	NMP and fieldwork have identified possible settlements but they need investigation.	Needs investigation on site especially to date them and then settlement changes might be able to be mapped over time. Important to establish the relationship between field systems and settlements and to also estimate population and changes over time.	1
3.2			Using documentary evidence along with the lidar data, can we define the pattern of deserted/shrunken Medieval settlement?	NMP and volunteer fieldwork has identified new DMV sites and these are important and are often scheduled.	Need to know more about them which might include survey and non-invasive survey and maybe some carefully targeted excavation.	1,2
3.3			Using map and place- name evidence can we establish locations of early-Medieval settlement?	Some work on place names form published sources, see chapter in project book.	This is one of the strands of evidence for a broader study of early medieval settlements. Can be checked against the Lidar and evidence for	5

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					DMVs/shrunken settlements.	
3.4			In recreating the landscape and dominant vegetation, are we better able to capture the connectivity between prominent locations through viewshed analysis? Likewise are we able to identify "hidden" locations?		Landscape can be recreated to some extent from Lidar and NMP although absolute dating is not always resolved.  Vegetation might be inferred in some areas but perhaps we need more palaeo-environmental evidence to substantiate the assumptions (more likely to be snails than pollen –rarely preserved). Given NPA development of viewshed analysis for landscape work and a Google earth 3d model, this could be feasible to investigate.  Might be interesting to look at perceptions of landscape – where they	1

Appen	Research Theme	Theme Sub- heading	Topic for research	Progress to date	Potential for further research	Priority criteria (blank if not
					hidden landscapes in the past?	a priority)
3.5			How can we better understand the relationship of vernacular and polite buildings to their landscapes?	Not been investigated overall though project on Stansted by volunteer an example of use of Lidar (showed that some early engravings were quite imaginative!).	Could also use Lidar to investigate other designed landscapes in the project area as settings for polite buildings and the more modest.  Ability to 3d model buildings from Lidar and place within landscape/Google earth model is an opportunity.	4
3.6			Can we gain greater insight into the overland routes that were used to traverse the study area?  - To what extent do these deviate from expected routes based on least-cost analysis (for example)?	Lidar/NMP has discovered line of Roman road in Binsted Woods and also development of the A27 in this area with map regression and Lidar used.	Other main and minor roads remain to be investigated – eg A286, A283.  Topographic influences on route decisions can be assessed from the 3d model and costs of turnpike roads might	2,3

	Research Theme	Theme Sub- heading	Topic for research	Progress to date	Potential for further research	Priority criteria (blank if not a priority)
			- Can we identify phasing (establishment, deviation, abandonment) and purpose (drove roads, access, leisure) to these routes? - How did these link to "external" landscapes of the Weald and Coastal plain? - What is the relationship of well-known routes such as Stane Street with features such as field systems in their surrounding landscape?	NMP report looks at other aspects of routes. NMP on Stane St and earlier features is interesting	survive in archives for comparative studies. For Stane St. site investigations (noninvasive) might help to clarify relative dating and phasing.	
4.1		Understanding how the landscape influences experience	Are we able to reassess current theories of prehistoric ritual landscape by shedding light on the spatial	Repeat comment from above: Stuart Needham, as independent researcher,	A good time for a major review. Also barrows are the biggest class of Heritage at Risk SM's so	1, 2

	Research Theme	Theme Sub- heading	Topic for research	Progress to date	Potential for further research	Priority criteria (blank if not a priority)
			distribution of prehistoric funerary and ritual monuments?	undertook study of Devil's Jumps and demonstrated the potential of considering the landscape setting (report in Independent researcher's file). Also see People of the Heath project results. NMP transcription and fieldwork found many new barrows	may attract Historic England interest?	
4.2			Can we capture a "day- in-the-landscape" type narrative typical of each period?	The CGI interpretations produced for the project have done this for 3 sites/periods – and showed the large amount of information (and	Scope to do more and do a formal evaluation of the learning achieved but needs collaboration between knowledge of sites/history and digital skills.	

	Research Theme	Theme Sub- heading	Topic for research	Progress to date	Potential for further research	Priority criteria (blank if not a priority)
				resources in people and £s) needed to do this with any authority and authenticity.		
4.3			Can we see evidence of everyday experience of the landscape in literature and art?	Not yet investigated	Needs wide research of collections to find relevant material. How much is the everyday painted (note example of Cocking forge, in? Towner collections and in school project in 2014)	
4.4			Does the oral tradition of song and verse provide an insight into experience of living in the area?	One volunteer undertook archival research on folk songs in area and report is available.	More detailed research specific to project area could be undertaken – if there is enough material that is specific to the project area.	5
4.5			To what extent does the literary tradition of the area reflect the landscape (and for	Not yet investigated.	Particular opportunity around Hilaire Belloc and Edward Thomas in early 20thC. – more authors	

	Research Theme	Theme Sub- heading	Topic for research	Progress to date	Potential for further research	Priority criteria
						(blank if not a priority)
			whom and what time period does this experience hold most true)?		might be found in research.	
4.6			Can we collect the memories of residents, woodsmen and farmers from the area to elucidate "hidden" or forgotten aspects of life in the project area in the 20th century?	Oral history has been gathered –total of 50 interviews;	Would be good to draw these resources together into a synthesis with other existing recordings (eg Hampshire RO/Sound Archive project on woodworkers).	1
5.1		Ownership and Control	What influence has the pattern of land ownership had on the project area?	The main area of research has been the deer parks of the project area (see report by James McInnes on archival research part of the web-site) which demonstrates the impact of landowners desire for emparking and the impact this and later	Other aspects of post- medieval ownership and impact on the landscape has not been investigated. There would also be a useful piece of research to be done on the afforestation of the area in the more recent past. Also an opportunity to review to the designations of Ancient	1

	Research Theme	Theme Sub- heading	Topic for research	Progress to date	Potential for further research	Priority criteria (blank if not a priority)
				disemparking has had. The later development of estates and designed landscapes has been considered in the work of Mark Seaman and Brian Tomkinson (project volunteers) – see project book.	Woodlands by Natural England.	
5.2			How can boundaries and landmarks (ie barrows, fords) help shed light on the tenurial and territorial development of the landscape?	NMP and independent researchers led by Judie English have considered cross dykes in particular. There is also NMP discussion of barrows as symbols of ownership and Stuart Needham's work (independent	There is scope for further work looking at landscape settings of monuments and their topography and investigation of individual sites.  Scope for more research on eg hundreds in the project area and for synthesising the results.	1

	Research Theme	Theme Sub- heading	Topic for research	Progress to date	Potential for further research	Priority criteria (blank if not a priority)
				researcher) on the group of barrows known as the Devil's Jumps at Treyford.  NMP has considered the continuity of features being used as parish boundaries.  NMP also identified at least one more hundred site and recent work by Emma Tristram (to be published in SAC) has identified a hundred mound in Binsted woods.		
5.3			Is it possible to identify organised groups or networks of fields that may indicate the influence of prehistoric, Roman or Medieval "estates"?	NMP has broken field systems into "monuments" in line with usual practise. Case studies show potential link	Could be part of typological/topographical analysis of field systems, together with relative/absolute dating	1

	Research Theme	Theme Sub- heading	Topic for research	Progress to date	Potential for further research	Priority criteria (blank if not a priority)
				between fields and settlements.		
5.4			Can the ALS data contribute to the understanding of the Medieval deer parks in the study area, and their relationship with the free chase of Arundel?	The main area of research has been the deer parks of the project area (see substantial report by James McInnes on archival research part of the web-site) which demonstrates the impact of landowners desire for emparking and the impact this and later disemparking has had.	Downley deer park being researched by UCL (Mark Roberts) – opportunities for multidisciplinary investigations of other deer parks (including fieldwork) following this model.	1
5.5			How can we better understand ecclesiastical influence within the study area during the Medieval period?	No specific research to date. NMP report has considered where earlier features are used as parish boundaries –	Potential project looking at archive sources for ecclesiastical ownership or influence and comparing to physical evidence from Lidar.	1

	Research Theme	Theme Sub- heading	Topic for research	Progress to date	Potential for further research	Priority criteria (blank if not a priority)
				debatable if this is ecclesiastical influence or due to being coincident with manorial boundaries.	Parochial development studies using Lidar might be interesting.	
5.6			How did the estate economy develop in the 18th and 19th centuries and what is its significance for the area?	NMP notes the development of woodland in an estate in 18 <sup>th</sup> c and quotes from published sources.	Good archival sources for some estates so worthy of consideration and comparison within the project area and in a broader context.	1
5.7			What evidence of the ancestry of the estates is visible in the landscape?	NMP refers to estate development briefly.	No detailed analysis yet – need to consider impact of sales and exchanges of land between estates. Are state boundaries physically expressed and recognisable in the Lidar data?	1
5.8			Why have estates in the project area survived through periods when others have failed?	Not considered yet.	Needs research into the estates into the project – is this assumption correct? Potential for comparison with other	1

	Research Theme	Theme Sub- heading	Topic for research	Progress to date	Potential for further research	Priority criteria (blank if not a priority)
					area where estates are now fragmented.	а риопту)
5.9			What was the impact of the requisition of property and landscape management during the two World Wars?	Volunteer research particularly on Stansted, Kingley Vale and Slindon – also oral history resources.  NMP chapter with case studies also includes earlier wars and defences.	Scope for research on economic and social impact of these changes – is this area's experience different from that of the open downs? Project has not considered impact of the requisitioning of large houses for either troops or use by evacuated schools etc.	1
6.1		Past archaeological investigations in the area	Can we re-examine the archives for key mid-20th century archaeological investigations within the area to place these necessarily site-focused projects in their wider landscape context?	Oral history collected about some archaeologists and work undertaken but no re-examination of site archives.  Project's CGI has placed 3 sites into their landscape – and film of the Trundle over time.	Scope to re-eaxmine archives and sites and place them in a landscape from Lidar – especially once dating of field systems is underway.	

Append	dix 1 – Research	Agenda for Secre	ets of High Woods pro	ject, July 2015		
	Research Theme	Theme Sub- heading	Topic for research	Progress to date	Potential for further research	Priority criteria (blank if not a priority)
6.2			Through oral-history capture, can we share the experience of people who have worked on archaeological excavations in the area?	Some oral history accounts do include this type of information — disseminated through oral History tree in exhibition and in the project book.	Scope for transcription of recordings and production of a synthesised account with photos, site plans etc.	1
7.1	The Woodland Resource		Can we quantify the extent to which the woodlands in later periods were managed for predominantly local (estate) use or as part of a wider regional economy?	No research at present	Good archives for some estates so good evidence available locally.	1
7.2			What evidence is there of industrial activities in the woodland (saw pits, charcoal platforms etc)? How does this compare with the Wealden woodlands?	Some sites identified in lidar images and in ground-truthing.  NMP report discusses evidence of saw pits and charcoal burning and suggests this	Scope for more research comparing project area to High Weald and New forest lidar surveyed areas.	1

Append	dix 1 – Researc	h Agenda for Secr	ets of High Woods pro	ject, July 2015		
	Research Theme	Theme Sub- heading	Topic for research	Progress to date	Potential for further research	Priority criteria (blank if not a priority)
				area has less evidence than other forests.		
7.3			Given the extensive clearance and introduction of coniferous plantation of the 20th century are there any specific woodlands in the study area that might be representative of woodlands managed in more traditional ways e.g. evidence of pollarded and coppiced woodland	Not been investigated apart from NMP report noting the recent coniferous plantations.	DSM could be investigated for evidence of these and other woodland features such as veteran trees.	4
7.4			Can we quantify the requirements both for timber and strategic / training activities, and the impact of WWI and WWII on the woodlands in the project area?	Timber camps at Slindon and works at Eartham noted in NMP report and discussed but no information on quantity of wood extracted.	Scope for further research at National Archives and maybe in Canadian Archives for Slindon in WW1.	1

Appen	dix 1 – Researc	h Agenda for Secre	ets of High Woods pro	ject, July 2015		
	Research Theme	Theme Sub- heading	Topic for research	Progress to date	Potential for further research	Priority criteria (blank if not a priority)
7.5			To what extent can the identification of veteran trees add to our understanding of the changing or continuity of woodland cover?	Not considered yet – see other future work using the DSM	DSM could be investigated for this as well as other features eg coppicing and pollarding.	4
7.6			To what extent can the ALS data set be used for charting the gentrification of the landscape from the 18 <sup>th</sup> century onwards, through identification of dense exotic planted species such as Rhododendron?	Not yet investigated – Rhodendron only found if the soil is derived from clay with flints or on coastal plain– not common.	Lidar can show evidence of past designed landscapes – eg Stansted. Scope for further investigation of large designs eg West Dean and less formal gentrification of the landscape.	1
7.7			What changes have we seen in the last 100 years with respect to woodland management in the area and how has this influenced popular perceptions of woodland?	Oral history has captured information and old photo's about the more recent past management of the woodland. Information on the	Opportunity to investigate other sources of oral history recordings and popular media eg film and newspapers.	1

	Research Theme	Theme Sub- heading	Topic for research	Progress to date	Potential for further research	Priority criteria (blank if not a priority)
				perception of the foresters – not clear if also contains other people's perceptions.		
7.8			What will the woods of the project area look like in 50–100 years from now? How will management have changed?	No predictions made in the project – SDNPA climate change adaptation plan has started to look at potential impacts and mitigation.	Climate change including impact of new pests.	1,4

Research Agenda ref. no.	Feature	Place	SHW number	NGR	Description/recommendation	Priority criteria
8.1	Pit circle	Lordington, Stoughton	200087	SU 7847 0944	The cropmark indicates the subsurface remains of a possible Neolithic or Bronze Age pit circle. This feature consists of six oval pits. There are 60 timber or pit circles recorded in England, but they remain little understood and excavation could determine if these pits ever held posts.	2
8.2	Long barrow	The Valdoe, Lavant	200027	SU 8735 0920	The cropmark indicates the subsurface remains of a probable Neolithic long barrow measuring c.45m by 15m. The eastern end of the barrow ends abruptly against a field boundary and presumably extended further east (though presumably not by much as long barrows rarely exceed 50m in length). Part of the southern ditch is also visible as a cropmark.  Due to their comparative rarity, considerable age and longevity of use, all long barrows can be considered nationally important.	2

National	Mapping Programmo	e –Appendix 3 -	- Sites sugg	ested for F	uture Investigation	
Research Agenda ref. no.	Feature	Place	SHW number	NGR	Description/recommendation	Priority criteria
8.3	Long barrow/ pillow mound	The Warren, Harting	201043	SU 7826 1870	The cropmark indicates the subsurface remains of an earthwork bank 37m by 5m. Any eastern extension lost in woodland. Uncertain if this represents the remains of a long barrow or a pillow mound. Due to their comparative rarity, considerable age and longevity of use, all long barrows can be considered nationally important.	2
8.4	Long barrow	Main Down, Harting	200804	SU 7783 1849	The cropmark indicates the subsurface remains of a possible Neolithic long barrow. The cropmark of the mound is 24m long, flanked by ditch but the monument is truncated at its western end by a field boundary. Only a fragment of the northern ditch can be seen to the west of this boundary, suggesting a total length of c.52m. Due to their comparative rarity, considerable age and longevity of use, all long barrows can be considered nationally important.	2
8.5	Neolithic/Early Bronze Age oval barrow	Lordington, Stoughton	200083	SU 7852 0930	The cropmark indicates the subsurface remains of a possible Neolithic oval	2

Research Agenda ref. no.	Feature	Place	SHW number	NGR	Description/recommendation	Priority criteria
					barrow. Feature is an oval ditched enclosure measuring 35m by 21m. Oval barrows are rare and there are less than 50 recorded examples in England and are considered nationally important. Although no upstanding earthworks survive, the cropmarks indicate that there is sub-surface survival that will have archaeological potential for the recovery of evidence of its date, manner of construction, use and environment.	
8.6	Bronze Age barrow cemetery	Bow Hill, Stoughton	201789- 90, 201793-6	SU 8239 1179 SU 8245 1170 SU 8244 1165 SU 8244 1162 SU 8244 1160 SU 8243 1158	The earthworks of six Bronze Age round barrows on the northern end of Bow Hill, five of which are arranged in a northsouth line. Close to Bow Hill settlement and cross dyke (scheduled 1012319) the barrows are previously unknown must be considered with the linear arrangement of six barrows called the Devil's Humps 500m away on southwestern side of Bow Hill (Scheduled 1008371, 1008372). Unlike the Devil's Humps, there is no obvious trace of these barrows having been excavated.	2

National	Mapping Programn	ne –Appendix 3	– Sites sugge	ested for F	uture Investigation	
Research Agenda ref. no.	Feature	Place	SHW number	NGR	Description/recommendation	Priority criteria
Tel. IIO.					These form part of the generally well preserved and closely associated Bronze Age and Iron Age monuments on Bow Hill. Round barrows are a major historic element in the modern landscape and their considerable variation of form and longevity as a monument type provide important information on the diversity of beliefs and social organisations amongst early prehistoric communities. They are particularly representative of their period and a substantial proportion of surviving examples are considered worthy of protection.	
8.7	Bronze Age barrow cemetery	Singleton	202384- 90	SU 8759 1282 SU 8759 1278 SU 8789 1288 SU 8791 1295 SU 8794 1290	Loose grouping of six round barrows all seen as cropmarks although one mound (SHW 202384) survives as a very slight earthwork. Round barrows are a major historic element in the modern landscape and their considerable variation of form and longevity as a monument type provide important information on the diversity of beliefs and social organisations amongst early	2

National	Mapping Programme	e –Appendix 3 – 9	Sites sugge	ested for F	uture Investigation	
Research Agenda ref. no.	Feature	Place	SHW number	NGR	Description/recommendation	Priority criteria
				SU 8830 1289	prehistoric communities. They are particularly representative of their period and a substantial proportion of surviving examples are considered worthy of protection.	
8.8	Bronze Age barrow cemetery	Mitchamer Cottage, Singleton	201095, 201099- 201101	SU 7993 1087 SU 7996 1084 SU 8000 1077 SU 8001 1073	A line of four barrows aligned NW-SE. All seen as cropmarks one barrow survives as a slight earthwork (SHW 201095). Round barrows are a major historic element in the modern landscape and their considerable variation of form and longevity as a monument type provide important information on the diversity of beliefs and social organisations amongst early prehistoric communities. They are particularly representative of their period and a substantial proportion of surviving examples are considered worthy of protection.	2
8.9	Later prehistoric/Bronze Age cross dyke	Within Goodwood Park, Charlton Down, Singleton	202481	SU 8880 1100	The low earthworks of a cross dyke consisting of a central ditch flanked by a bank on both sides. It will contain archaeological and environmental	2

National	Mapping Programme	e –Appendix 3 – S	Sites sugge	ested for F	uture Investigation	
Research Agenda ref. no.	Feature	Place	SHW number	NGR	Description/recommendation	Priority criteria
					information relating to their construction, original purpose, and the landscape in which it was built. It is also part of a group of similar linear earthworks across the South Downs.	
8.10	LBA/EIA cross dyke	Duncton Hanger	201013	SU 9625 1600	The earthworks of a cross dyke across the tree-covered ridge between Duncton Hanger and Barlavington Hanger. It will contain archaeological and environmental information relating to its construction, original purpose, and the landscape in which it was built. It is also part of a group of similar linear earthworks across the South Downs.	2
8.11	LBA/EIA cross dyke	Barlavington Hanger	201015	SU 9653 1561	The earthworks of a cross dyke on the tree-covered ride in Barlavington Hanger. It will contain archaeological and environmental information relating to its construction, original purpose, and wider landscape.	2
8.12	Possible LBA/EIA cross dyke.	Upwaltham Hill	200937	SU 9465 1272	The earthworks of a possible cross dyke across the southwestern spur of	2

Research Agenda ref. no.	Feature	Place	SHW number	NGR	Description/recommendation	Priority criteria
					Upwaltham Hill. It has been partially reused as a parish boundary. If a cross dyke this would have been part of a group of contemporary monuments that together could provide evidence for the relationship between land division and funerary practises.	
8.13	Possible LBA/EIA cross dyke/ Medieval boundary bank?	Upwaltham Hill	200126	SU 9510 1261	The earthworks of a cross dyke across the eastern spur of Upwaltham Hill. If a cross dyke this would have been part of a group of contemporary monuments that together could provide evidence for the relationship between land division and funerary practices.	2
8.14	LBA/EIA cross dyke	Upwaltham Hill	200125	SU 9475 1339	The cropmark indicates the subsurface remains of the central section of this cross dyke. Part of a group of contemporary monuments that together could provide evidence for the relationship between land division and funerary practises. The dyke survives as an earthwork at either end and these	2

National	Mapping Programm	e –Appendix 3 –	Sites sugg	ested for F	uture Investigation	
Research Agenda ref. no.	Feature	Place	SHW number	NGR	Description/recommendation	Priority criteria
					are scheduled (List entry number 1018060). Should the scheduled area be extended to cover the central section?	
8.15	Iron Age/Roman rectilinear enclosure	Bushy Copse, Eartham	201023	SU 9326 1019	The cropmark indicates the subsurface remains of a subdivided enclosure, possible trackway and field boundary ditches. The subsurface survival has archaeological potential for the recovery of evidence of its date, manner of construction, use and environment.	2
8.16	Later prehistoric field system	Glass Brow, Buriton	201627	SU 7416 1723	Earthworks of field system damaged in places by post medieval quarrying. A number of pillow mounds also present across site. The field system will contain archaeological information and environmental evidence relating to the field system and the landscape in which it was constructed.	2
8.17	Later prehistoric field system	Grevitts Copse, Compton	201262		The earthworks and to southeast beyond wood some cropmarks of a field system. The field system will contain archaeological information and	2

Research Agenda ref. no.	Feature	Place	SHW number	NGR	Description/recommendation	Priority criteria
					environmental evidence relating to the field system and the landscape in which it was constructed.	
8.18	Later prehistoric enclosure	Red Copes, Halnaker Park, East Dean	202678	SU 9197 1098	The incomplete earthwork remains of a curvilinear enclosure. Further work could determine the level of survival; well-preserved examples are likely to be identified as nationally important.	2
8.19	Later prehistoric enclosure	Red Copes, Halnaker Park, East Dean	202681	SU 9173 1092	The incomplete earthwork remains of a rectilinear enclosure. Further work could determine the level of survival; well-preserved examples are likely to be identified as nationally important.	2
8.20	Later prehistoric /Roman settlement	Eartham Thicket, Slindon	200121	SU 9277 0855	This settlement consists of the earthworks of a group of joined enclosures. Earthworks to the southwest may be the remains of fields. Further work could determine the level of survival; well-preserved examples are likely to be identified as nationally important.	2

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Research Agenda ref. no.	Feature	Place	SHW number	NGR	Description/recommendation	Priority criteria
8.21	Later prehistoric enclosures/settlement	Parletts Farm, Madehurst	200236	SU 9873 1090	The cropmark indicates the subsurface remains of later prehistoric enclosures and associated boundary ditches including those of a possible trackway. The buried remains have the archaeological potential for the recovery of evidence of its date, manner of construction, use and environment.	2
8.22	Roman Road	Chichester to Brighton	201025	SU 2959 0703 to TQ 0033 0708	The earthworks and some cropmarks of the Roman Road from Chichester to Brighton. A road along this route had been speculated upon since the 1940s. It survives as agger, side ditches or a hollow way depending on terrain. The cropmarks indicate the subsurface remains of double ditches. These roads are highly representative of Roman administration; provide evidence of engineering skills and pattern of conquest and settlement.	2
8.23	Deer park pale	Slindon	201149	SU 9534 0807	Well preserved, though incomplete medieval park pale defining Slindon deer	2

Nationa	Mapping Programme	- Appendix 3 – S	Sites sugge	ested for F	uture Investigation	
Research Agenda ref. no.	Feature	Place	SHW number	NGR	Description/recommendation	Priority criteria
					park, owed by the Archbishops of Canterbury. This well-preserved earthwork will contain archaeological and environmental information relating to the monument and the landscape in which it was constructed.	
8.24	Possible medieval rectangular enclosure	Singleton Plantation, West Dean	202524	SU 8703 1224	The earthwork of a square enclosure within West Dean Park. Possibly the remains of a hunting lodge, its banks, ditches and buried walls will contain information relating to its use.	2
8.25	Possible medieval rectangular enclosure	Counters Gate, East Dean Park, East Dean	202503	SU 8979 1143	The earthworks of a square enclosure within East Dean Park. Possibly the remains of a hunting lodge, its banks, ditches and buried walls will contain information relating to its use.	2
8.26	Possible medieval/post medieval pillow mounds	Glass Brow, Buriton	201629	SU 7430 1735	The earthworks of a group of possible pillow mounds. They will contain information relating to the exploitation of rabbits. Further work will establish	2

National	National Mapping Programme –Appendix 3 – Sites suggested for Future Investigation					
Research Agenda ref. no.	Feature	Place	SHW number	NGR	Description/recommendation	Priority criteria
					the degree of survival; all well-preserved warrens are considered worthy of protection.	
8.27	Medieval/post medieval strip lynchets	Heyshott Down, Heyshott	202068	SU 8854 1695	The earthworks of strip lynchets within woodland on Heyshot Down. They will provide an important insight into medieval farming practices and environmental evidence relating the monument to the wider landscape.	2
8.28	Post medieval charcoal burning platforms	Upwaltham Hill, Upwaltham	200221	SU 9492 1244	The earthworks of post medieval charcoal burning platforms on Upwaltham Hill. These have the archaeological potential for the recovery of evidence of its date, use and environment.	2
8.29	Post medieval charcoal burning platforms	North Side	202778	SU 4907 1467	The earthworks of post medieval charcoal burning platforms at North Side. These have the archaeological potential for the recovery of evidence of its date, use and environment.	2

National	Mapping Programme	-Appendix 3 – S	Sites sugge	ested for F	uture Investigation	
Research Agenda ref. no.	Feature	Place	SHW number	NGR	Description/recommendation	Priority criteria
8.30	Post medieval charcoal burning platforms	Eartham Wood	200240, 200249	SU 9427 1121 SU 9425 1208	The earthworks of post medieval charcoal burning platforms in Eartham Wood. These have the archaeological potential for the recovery of evidence of its date, use and environment.	2
8.31	Post medieval charcoal burning platform	Duncton Hanger	201168	SU 9637 1614	The earthworks of post medieval charcoal burning platforms in Duncton Hanger. These have the archaeological potential for the recovery of evidence of its date, use and environment.	2
8.32	Post medieval enclosures (bee gardens?)	Philliswood Down, Elstead and Treyford	200961	SU 8203 1706 SU 8216 1704	The earthworks of two square banked enclosures. These may be 'bee gardens', built to protect hives from grazing livestock or associated with the rearing of game birds. Further work may be able to determine the date and use of these earthworks.	2
8.33	Undated rectangular enclosure	Selhurstpark Hill, East Dean	202722	SU 9227 1195	The earthworks of a rectilinear enclosure consisting of a bank and outer ditch. Centrally placed within it are the earthworks of a curvilinear banked	2

Research Agenda ref. no.	Feature	Place	SHW number	NGR	Description/recommendation	Priority criteria
					enclosure. Further work may be able to determine the date and use of these earthworks.	
8.34	Undated enclosures	Bexley Bushes, Lavant	200029 & 200071	SU 8729 0981	The earthworks of a large subrectangular enclosure of later prehistoric, Roman or medieval date. Ditches extending from this link with a large incomplete oval enclosure (SHW 200030). Close association but uncertain relationship with cropmark complex (SHW 200028). Further work may be able to determine the date and use of these earthworks.	2
8.35	Undated boundary ditch	Slate Barn, Lavant	202173	SU 8344 1030 to SU 8463 0999	A long linear boundary or trackway of uncertain origin is visible as cropmarks on aerial photographs. The cropmark indicates the subsurface remains of this ditch that runs for over 1200m from Langford Farm west and then WNW. Further work may be able to determine the date and use of this feature.	2

Research Agenda ref. no.	Feature	Place	SHW number	NGR	Description/recommendation	Priority criteria
8.36	Anglo-Saxon settlement	Charlton Down	37754	SU 7341 1443	The cropmark indicates the subsurface remains of a Saxon settlement at Charlton Down. These will have the archaeological potential for the recovery of evidence of its date, manner of construction, use and environment.	2