Extended Phase 1 Survey at Spinney Farm, Main Street, Woodnewton, Northamptonshire

Client: Lucy Porter

November 2018

Hillier Ecology Limited
127 Fletton Avenue, Peterborough, PE2 8BX
[redacted]

Site Name	Spinney Farm, Main Street, Woodnewton
Report Type	Extended Phase 1 Survey
Client	Lucy Porter

	Name	**Position**
Surveyed by	[redacted]	Principal Ecologist
Prepared by		Principal Ecologist
Checked by		Ecologist

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VALIDITY

Due to the dynamic nature of ecological conditions the results of the survey(s) and related conclusions and recommendations as contained within this report should only be considered valid for up to 12 months from the date the last survey was undertaken.

Any alterations to the site proposals may invalidate the recommendations contained within this report.

Contents

1.0 Summary

1.1 An Extended Phase 1 Survey has been carried out at Spinney Farm, Main Street, Woodnewton, Northamptonshire.

1.2 The survey covered bats *Chiroptera*, birds *Aves*, Barn Owl *Tyto alba*, [redacted] reptiles, Hedgehog *Erinaceous europaeus* and flora.

1.3 The survey of the buildings for potential bat roosts indicated negligible potential to support roosting bats with no evidence of roosting bats and no suitable roosting features identified; scattered feeding remains suggest that Building 2 is an occasional feeding perch.

1.4 The survey of trees for potential bat roosts identified all trees as having negligible potential to support roosting bats with an absence of suitable features.

1.5 No birds were recorded during the survey; no evidence of nesting birds was recorded.

1.6 The buildings and trees offer suitable nesting habitat the loss of which should be mitigated.

1.7 No further bird surveys are required.

1.8 There was no evidence to suggest that Barn Owl are using or have used the buildings.

1.9 No further Barn Owl surveys are required.

[redacted]

1.11 It is recommended that video monitoring is carried out in Spring 2019 to establish if the main sett is a breeding sett.

1.12 The sett will need to be closed to allow the conversion of the building to take place; closure of the sett will need to be carried out under licence from Natural England, closure of a breeding sett would need to be mitigated through the creation of an artificial sett nearby.

1.13 The survey for reptiles considered the site unsuitable for supporting reptiles.

1.14 No further reptile surveys are required.

1.15 A habitat assessment of the site was carried out to look at its suitability to support Hedgehog, it was thought that the site had the potential to support Hedgehog.

1.16 No further Hedgehog surveys are required.

1.17 Nine common and widespread species of plant were recorded.

1.18 To complement the field survey a data search covering a 2km radius from the site was conducted with Northamptonshire Biological Records Centre.

2.0 Introduction

2.1 Hillier Ecology Limited were commissioned by Lucy Porter to carry out an Extended Phase 1 Survey and produce the ecological report.

2.2 The survey was carried out to support the planning application for conversion of the buildings.

3.0 Site Details

3.1 The site is located at NGR TL0359494312 (Appendix 1).

3.2 The site is situated in the village of Woodnewton; the site and its surrounds are made up of the following habitats:

- Assorted buildings
- Tall ruderal vegetation
- Mature trees
- Hardstanding
- Mature gardens

3.3 The diversity of habitats found is thought to be capable of supporting protected species.

3.4 The buildings are constructed of the following and shown in the photographs below and (Appendix 2).

Building Name/Number	1			
Building Grid Reference	TL0357094294			
Type of Building	Agricultural building			
Age of Building	20th century			
Condition of Building	Good			
Wall Construction	Corrugated tin			
Roof Construction	Corrugated asbestos			
Roof Type	Gable			
Potential Access Points for Bats	No visible access			
Roof Void	Yes		**No**	X
Insulation	Yes		**No**	X
Structure of Roof	Not applicable			
Roof Lining	None			
Dimensions of Roof Void	Not applicable			
Suitable Roosting Features	None			
Evidence of Bats	None			
Evidence of Birds	None			
Evidence of Barn Owl	None			
Potential to Support Roosting Bats	Negligible			
Suitable for Hibernating Bats	No			

Plate 1 Building 1

Plate 2 Building 1

Building Name/Number	2			
Building Grid Reference	TL0356094274			
Type of Building	Agricultural building			
Age of Building	20th century			
Condition of Building	Good			
Wall Construction	Breeze block, corrugated asbestos			
Roof Construction	Corrugated asbestos			
Roof Type	Gable			
Potential Access Points for Bats	Between wall and roof			
Roof Void	**Yes**		**No**	X
Insulation	**Yes**		**No**	X
Structure of Roof	Not applicable			
Roof Lining	None			
Dimensions of Roof Void	Not applicable			
Suitable Roosting Features	None			
Evidence of Bats	Scattered feeding remains			
Evidence of Birds	None			
Evidence of Barn Owl	None			
Potential to Support Roosting Bats	Negligible			
Suitable for Hibernating Bats	No			

Plate 3 Building 2

Plate 4 Building 2

3.5 The wider survey area is shown in the photographs below and (Appendix 2).

Plate 5 Survey Area

Plate 6 Survey Area

Plate 7 Survey Area

Plate 8 Survey Area

4.0 Survey Methodologies

Bats (Buildings)

4.1 The buildings were assessed as to their potential to hold bat roosts.

4.2 The building surveys involved a thorough external and internal search of all suitable cavities, holes and crevices, all suitable areas and floors were inspected for the following signs:

- Bat droppings
- Stains around roosting places and entrance points
- Urine marks
- Prey remains
- Areas devoid of cobwebs
- Live or dead bats
- Suitable cracks and crevices for bats to enter

4.3 The buildings were categorised using the criteria below.

Assessment of Potential to Support Roosting Bats - Categories for Buildings	
Negligible potential	Buildings with no features capable of supporting roosting bats. Often these buildings are of a 'sound' well-sealed nature, or have a single skin and no roof void. They tend to have high interior light-levels, and little or no insulation. Buildings without any roofs may also fall into this category.
Low potential	Buildings with limited features for roosting bats (e.g. shallow crevices where mortar is missing between building blocks/bricks). They may have open locations which may be subject to large temperature fluctuations and bat-access points may be constrained. No evidence of bats found (e.g. droppings / staining). Buildings may be surrounded by poor or sub-optimal bat foraging habitat. No evidence of bats found.
Moderate potential	Buildings with some features suitable for roosting bats. Buildings usually of brick or stone construction with a small number of features of potential value to roosting bats e.g. loose roof / ridge tiles, gaps in brickwork, gaps under fascia boards, and/or warm sealed roof-spaces with under-felt. Evidence of bats found a small scattering of droppings or urine staining. Could be suitable for summer day roost.
High potential	Buildings with a large number of features or extensive areas of obvious potential for roosting bats. Generally, they have sheltered locations, with a stable temperature regime and suitable bat-access points. Evidence of bats found droppings/urine staining. Could be suitable for a maternity roost or summer day roost.
Confirmed roost	Bats discovered roosting within the building, or recorded emerging / entering the building at dusk / dawn. A confirmed record (as supplied by an established source such as the local bat group) would also apply to this category.

Bats (Trees)

4.4 The survey involved a thorough search of all the trees looking for potential roost sites, which are the following:

- Cracks
- Cavities
- Loose Bark
- Broken Limbs
- Ivy

4.5 A search was made for the following signs:

- Faeces
- Urine staining
- Fur rubbing
- Live bats

4.6 The trees were categorised using the criteria below.

Assessment of Potential to Support Roosting Bats - Categories for Trees	
Negligible potential	Tree contains no suitable features for roosting bats. These can include young trees without ivy and without loose bark and obvious cracks / fissures. Usually saplings, semi-mature specimens with a small girth or mature trees which do not tend to form fissures as readily such as sycamore.
Low potential	Tree contains limited features suitable for roosting bats. Usually young (sapling or semi-mature) trees with some ivy or some loose bark but no obvious cracks or fissures. No evidence of bats found (e.g. droppings / staining).
Moderate potential	Tree contains some features suitable for roosting bats. Trees with some cracks or fissures and/or large amounts of ivy / loose bark. Usually semi-mature or mature specimens. Trees tend not to have large splits, hollow trunks or woodpecker holes. No evidence of bats found.
High potential	Tree contains features that are highly desirable for roosting bats. Trees with woodpecker holes / large cracks and/or crevices. Often with a hollow trunk. May support very dense ivy. No evidence of bats found.
Confirmed roost	Bats discovered roosting within the tree, or recorded emerging / entering a tree at dusk / dawn. Trees found to contain conclusive evidence of occupation by bats, such as bat droppings. A confirmed roost record (as supplied by an established source such as the local bat group) would also fall into this category.

Birds

4.7 An assessment of the sites suitability to support breeding birds has been carried out.

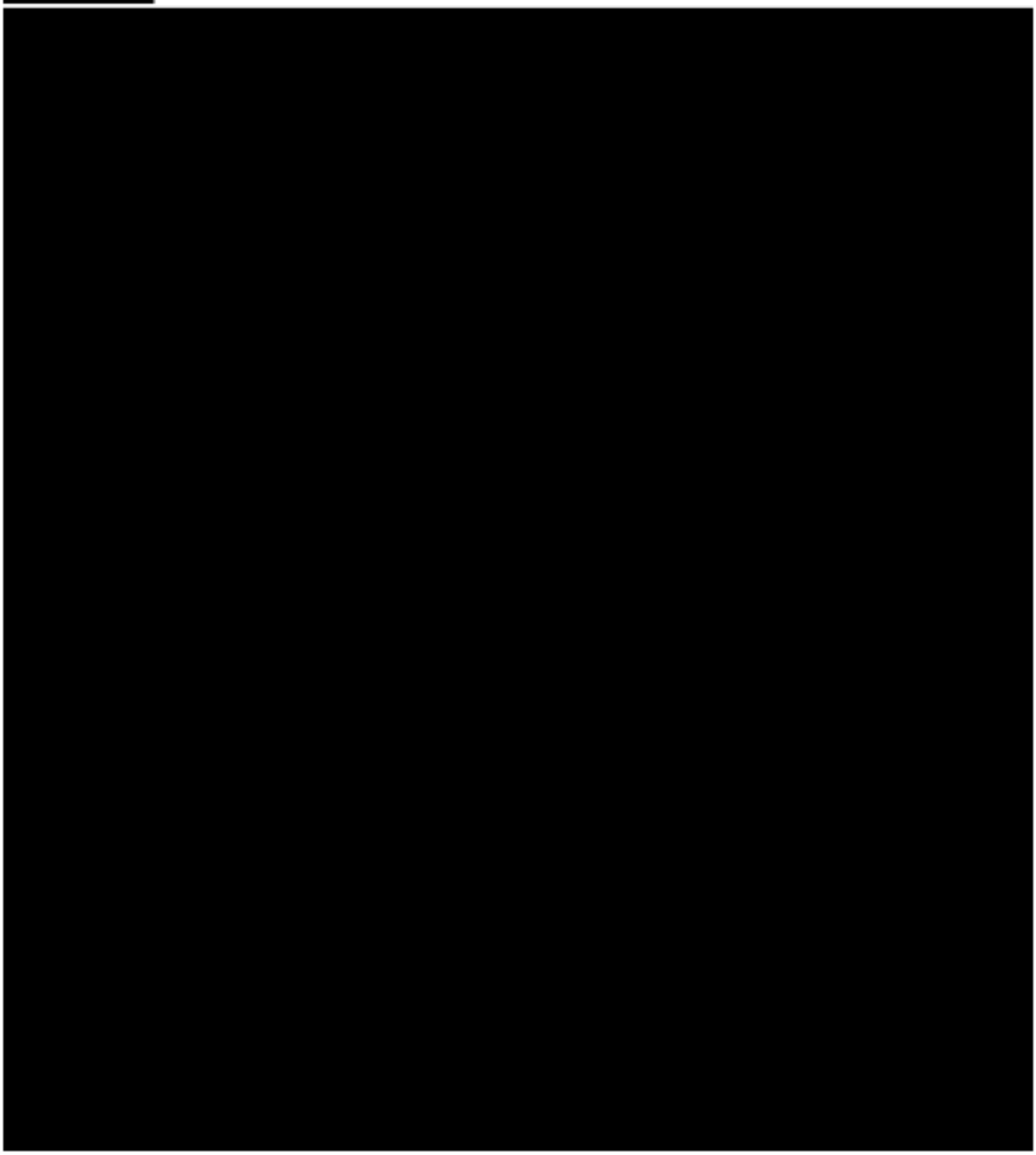
4.8 All birds seen and heard were recorded.

Barn Owl

4.9 The building has been inspected for the following signs:

- Owl pellets (feeding remains)
- Feathers
- Faecal deposits
- Live sightings

[redacted]



Reptiles

4.15 A walkover of the site has been carried out to assess if the habitat is suitable to sustain a population of reptiles. The following habitats were looked for:

- Bare Ground
- Variety of Sward Heights
- Natural Refugia
- Basking Areas

Hedgehog

4.16 A habitat assessment of the site was carried out to look at its suitability to support Hedgehog.

4.17 Favoured habitats are shown below:

- Gardens
- Hedgerows
- Woodlands
- Grasslands
- Parkland

Flora

4.18 A walkover of site was carried out and all native plant species recorded.

5.0 Survey Results

5.1 The Extended Phase 1 survey were carried out by Howard Hillier who holds Natural England Bat Survey Licence 2016-21564-CLS-CLS.

5.2 The Extended Phase 1 Survey was carried out on 20th August 2018 in the following weather conditions; overcast, Beaufort 1 and a temperature of 19°c.

Bats (Buildings)

5.3 The buildings indicated negligible potential to support roosting bats with no evidence of roosting bats and no suitable roosting features identified; scattered feeding remains in Building 2 indicated its use as an occasional feeding perch.

Bats (Trees)

5.4 The tree assessment for potential bat roosts identified all trees as having negligible potential to support roosting bats with an absence of suitable features.

5.5 The trees offer foraging opportunities for bat species.

Birds

5.6 No species of bird were recorded during the survey; the buildings and trees have potential to support nesting birds.

Barn Owl

5.7 There was no evidence of Barn Owl using or having used the buildings.

[redacted]

[redacted] Number	NGR	Type of Sett	Active Holes	Disused Holes	Evidence
1	TL0354094200	Outlier	1	0	Fresh spoil
2	TL0355094211	Outlier	1	0	[redacted] hair, fresh spoil
3	TL0356094261 to TL0355194273	Main	4	1	Fresh spoil, fresh bedding

Plate 9 [redacted]1

Plate 10 [redacted]2

Plate 11 Sett 3

Reptiles

5.9 The habitat did not meet the criteria as suitable reptile habitat; lacking in a variety of sward heights.

Hedgehog

5.10 A habitat assessment of the site was carried out to look at its suitability to support Hedgehog, the site held habitats which are favoured by Hedgehog.

Flora

5.11 Nine common and widespread species were recorded; a species list can be found in (Appendix 4).

6.0 Data Search

6.1 A data search was conducted with Northamptonshire Biological Records Centre.

6.2 The data search covered non-statutory sites, statutory sites and protected and notable species.

6.3 Nine non-statutory sites fall within the search area; four Local Wildlife Sites and five Potential Wildlife Sites.

6.4 Potential Wildlife Site 775 sits directly south of the site although the small scale of works is considered to have negligible impact outside of the site itself and works are a considerable distance from this area of the site.

6.5 A total of 4256 species records were returned by the search, comprising of 140 species.

6.6 Species within the records include birds (including Barn Owl), flora, invertebrates, moss, Water Vole *Arvicola amphibius*, Brown Hare *Lepus eurcpaeus*, Otter *Lutra lutra* and Badger.

6.7 In terms of the survey area records for birds, flora and Badger are of note; the suitability of the buildings and trees to support nesting birds has been noted; the absence of signs of Barn Owl has also been noted; the flora of the site is unremarkable and the presence of Badger setts has been identified with further monitoring recommended.

6.8 Northamptonshire Biological Records Centre do not hold information for bats; the buildings and trees are considered unsuitable to support roosting bats with an absence of evidence or roosting features.

6.9 In terms of other species the habitat is unsuitable.

6.10 The results are summarised in (Appendix 5).

7.0 Conclusions

Bats (Buildings)

7.1 The survey of the buildings indicated negligible potential to support roosting bats with no evidence of roosting bats and no suitable roosting features identified; the presence of scattered feeding remains indicated that Building 2 is likely used as an occasional feeding perch and the conversion will result in the loss of a feeding perch.

Bats (Trees)

7.2 The assessment of trees for potential bat roosts identified that all trees have negligible potential to support roosting bats with an absence of suitable features.

7.3 The trees offer suitable foraging habitat and where retained lighting to the trees should be avoided.

Birds

7.4 No species of bird were recorded during the survey although the buildings and trees offer suitable nesting habitat.

7.5 Vegetation removal should take place at an appropriate time of year and bird boxes installed to provide enhancements.

Barn Owl

7.6 There was no evidence of Barn Owl using or having used the building.

Reptiles

7.10 The survey for reptiles produced no evidence to suggest that reptiles are present on the site; the habitat did not meet the criteria as suitable reptile habitat lacking in variety of sward heights.

7.11 No further reptile surveys are required.

Hedgehog

7.12 The habitat assessment recorded suitable Hedgehog habitat within the survey area.

7.13 No further hedgehog surveys are required; recommendations are made to provide enhancements for Hedgehog.

Flora

7.14 All species are considered common and widespread.

8.0 Recommendations

Bats

8.1 To enhance biodiversity one Schwegler 1FR and one Ibstock Enclosed Bat Box 'C' should be installed in a south facing position at a height not less than 2 metres.

8.2 Regardless of the presence of roosting bats it will be necessary to employ a bat friendly lighting scheme avoiding lighting to key areas of retained habitat

and newly created roost features and otherwise directing light downwards through the use of hoods and cowls as appropriate.

Birds

8.2 If the trees or buildings are to be impacted on by works then any work should be completed outside of the bird breeding season (March to September inclusive), if this is not practical then a qualified ecologist should make an inspection prior to work being carried out.

8.3 The loss of suitable nesting habitat will be mitigated through the creation of new nesting opportunities comprising of one Schwegler Sparrow Terrace, one Ibstock Eco-habitat for Swifts and one Ecosurv Starling box to be installed between north and east at a height between 2 and 4 metres.

Hedgehog

8.7 Any disturbance to Hedgehog will be mitigated through the installation of two Hedgehog homes.

9.0 Legal Protection

Bats

9.1 The Conservation of Habitats and Species Regulations 2017 transpose into UK law Council Directive 92/43/EEC of 992 (often referred to as the Habitats Directive). All bats are listed under Annex IV and some (horseshoe bats, Bechstein's and Barbastelle) are also listed under Annex II which relates to Special Areas of Conservation. These Regulations make it an offence to:

- Deliberately capture, injure or kill a bat.
- Deliberately disturb bats in a way as to be likely significantly to affect the ability of any significant groups of bats to survive, breed, rear or nurture their young, or to affect the local distribution of abundance of that species.
- Damage or destroy a breeding site or resting place of a bat.
- Keep, transport, sell or exchange, or offer for sale or exchange a live or dead bat or any part of a bat.

9.2 In addition the Wildlife & Countryside Act 1981 (as amended) makes it an offence to:

Intentionally or recklessly;

- Disturb any bat whilst it is occupying a structure or place which it uses for shelter or protection.
- Obstruct access to any structure or place which any bat uses for shelter or protection.

.

9.3 Penalties are fines of up to £5000 per bat and up to a 6 month custodial sentence.

Birds

9.4 All common wild birds are protected under The Wildlife and Countryside Act 1981 (as amended). Under this legislation it is an offence to:

- Kill, injure or take any wild bird.

- Take, damage or destroy the nest of any wild bird while it is in use or being built.

- Take or destroy the egg of any wild bird.

9.5 Certain rare breeding birds are listed on Schedule 1 of The Wildlife and Countryside Act 1981 (and as amended). Under this legislation they are afforded the same protection as common wild birds and are also protected against disturbance whilst building a nest or on or near a nest containing eggs/unfledged young.

Barn Owl

9.6 The Barn Owl is fully protected under Schedules 1 and 9 of the Wildlife and Countryside Act (1981) as amended.

9.7 The Act makes it illegal to:

- Kill or injure a Barn Owl.

- Catch a Barn Owl.

- Take or destroy any egg of a Barn Owl.

- Damage or destroy the active nest site with eggs or young or before eggs are laid.

- Disturb the dependant young of a Barn Owl.

- Possess, offering for sale or selling a Barn Owl.

- Release or allow the escape of a Barn Owl into the wild.

Reptiles

9.11 Common Lizard, Slow Worm, Adder and Grass Snake are all protected under Section 9 of the Wildlife and Countryside Act, 1981 (as amended) against injuring, killing or selling.

9.12 For developers in England, Wales or Scotland to reduce the risk of prosecution under the Wildlife and Countryside Act, 1981 (as amended), wherever works may impact on reptiles there must be evidence that reasonable effort was made to avoid breaking the law, including proof of adequate surveys.

Hedgehog

9.13 Hedgehog are afforded limited protection under Schedule 6 of the Wildlife and Countryside Act 1981 (as amended) making it illegal to capture or kill them using certain methods. They are also protected from cruelty through the Wild Mammals Protection Act 1996.

The Natural Environment and Rural Communities Act (2006)

9.14 Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006) sets out a list of habitats and species that are of principal importance for the conservation of biodiversity in England. The list (including 56 habitats and 943 species) drawn up in consultation with Natural England, provides a guide to local and regional authorities when implementing their duty as defined in Section 40 of the NERC Act 2006;

- "Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity." - Section 40(1).

- "Conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat". - Section 40(3).

National Planning Policy Framework (2018)

9.15 National Planning Policy Framework (NPPF) (2018) sets out Government Policy on Biodiversity and Nature Conservation and places a duty on planners to give material consideration to the effect of a development on legally protected species when considering planning applications. NPPF also promotes sustainable development by ensuring that developments take account of the role and value of biodiversity and that it is conserved and enhanced within the development.

10.0 References

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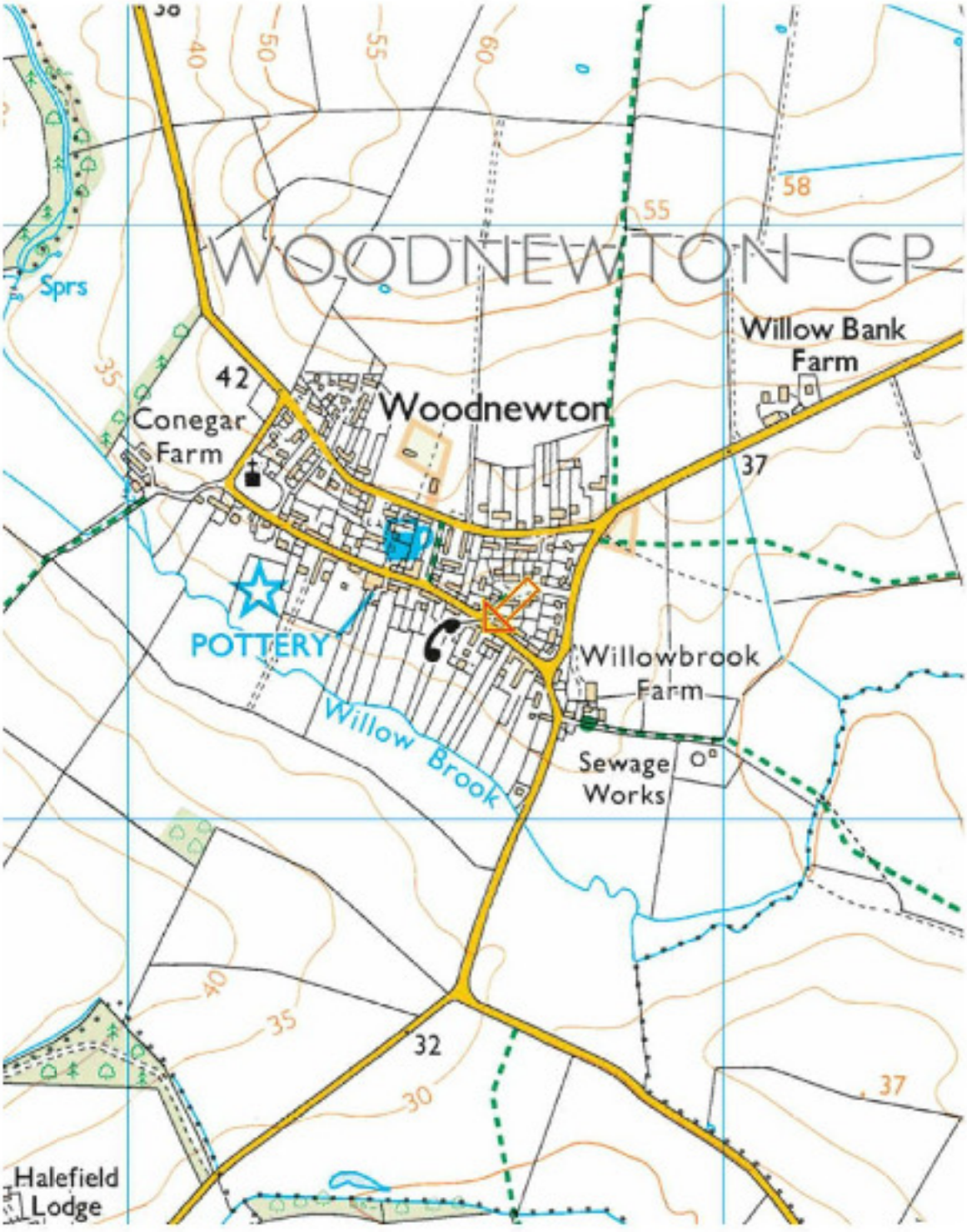
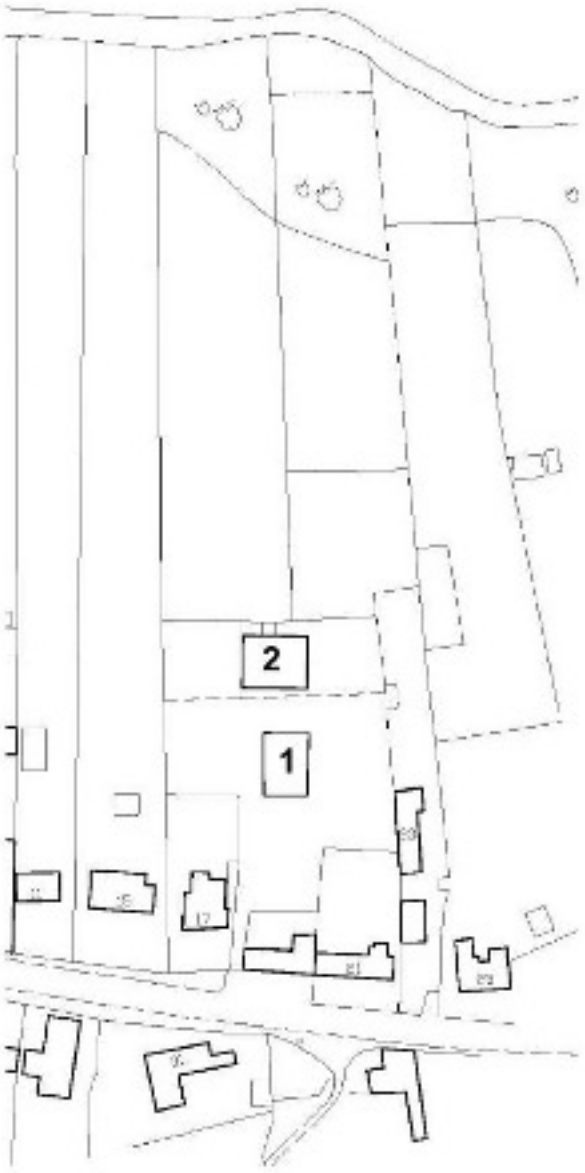
11.0 Appendices

Appendix 1 Site Location



Appendix 2 Survey Area



	Lodge Barn Lindsey Close Woodnewton Peterborough PE8 5EW tel 01780 470636 email cmpsarchitect@gmail.com		CMPS COLIN MOORE architect	
Lucy Porter	Spinney Farm Main Street, Woodnewton	Location Plan	1:1250 @ A4 06.04.17.	17.06/LP1

[redacted]


[redacted]
Scrinny Farm, Woodcreaton
Legend
[redacted]
Google Earth
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Appendix 4 Species List – Flora

Acer pseudoplatanus	Sycamore
Artemisia vulgaris	Mugwort
Dactylis glomerata	Cock's-foot
Erigeron acer	Blue Fleabane
Hieracium murorum	Hawkweed
Plantago lanceolata	Ribwort Plantain
Rubus fruticosus	Bramble
Sambucus nigra	Elder
Urtica dioica	Common Nettle

Appendix 5 Data Search

Northamptonshire Biodiversity Records Centre

[redacted]
Hillier Ecology
127 Fletton Avenue,
Fletton,
Peterborough
PE2 8BX

Northamptonshire Biodiversity Records Centre
C/O The Wildlife Trust
Lings House
Billing Lings
Northamptonshire
NN3 8BE
Tel: 01604 400448
Fax: 01604 784835
nbrc@northantsbrc.org.uk

Our Reference: 18-195

2nd October 2018

[redacted]

Re: Ecological data search, Spinney Farm, Woodnewton

Thank you for approaching the NBRC with this enquiry. All the information that you have requested is contained within this report. This includes a map of the search area, statutory and non-statutory site details and a list of protected and notable species records from your specified search area. For definitions of these sites please refer to the document at the end of this report.

Statutory sites

According to the most recent GIS layers available to NBRC from Natural England there are currently no statutory sites within your specified search area.

Non-statutory sites

Following the Natural Environment White Paper (2011), twelve Nature Improvement Areas (NIA's) were designated and granted government funding in February 2012. They should aim to achieve significant and demonstrable enhancements of the ecological network over large areas by undertaking the actions prioritised in the review.

Further information regarding the Nene Valley Nature Improvement Area can be found on the Natural England website using the following link:
http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/funding/nia/projects/nenevalley.aspx

The following non-statutory sites are located within your specified search area. These sites have been labelled on the accompanying map.

Site Name	Site Status
Newton Spinney	Local Wildlife Site
Park Spinney and Green Lane	Local Wildlife Site
Prior's Haw	Local Wildlife Site
Shire Hill Lodge Woods	Local Wildlife Site

Descriptions for these non-statutory sites are attached to this report.

We do not currently hold any information for the following non-statutory sites located within your specified search area.

Site Number	Site Status
775	Potential Wildlife-Site Category 1/NIA
776	Potential Wildlife-Site Category 1
795	Potential Wildlife-Site Category 1
798	Potential Wildlife-Site Category 1/part NIA
799	Potential Wildlife-Site Category 1/NIA

Potential Wildlife Site Category 1 definition is; sites never fully surveyed and assessed against LWS criteria.

For full definitions of Northamptonshire non-statutory sites please refer to the section "Sites of wildlife and geological importance in Northamptonshire" below.

Species records

Please note that we do not provide data for bats. This information can be obtained directly from the Northants Bat Group/County Recorder for Mammals using the contact details already provided.

4,256 protected and notable species records fall within your specified search boundaries. A list of these species records is attached to this report.

This report contains sensitive information about the location of protected species and has been provided in confidence to assist you in your work. Because of this OS Grid References must be withheld from documents destined for public consumption.

I would remind you that these data are limited spatially and temporally and I would strongly recommend that follow-up surveys be carried out to support the baseline provided. I would also like to draw your attention to our terms and conditions once again.

Northamptonshire Biodiversity Records Centre
Terms and conditions

1. All rights to the data are reserved and ownership is not transferred with it. Data held by the Northamptonshire Biodiversity Record Centre (N.B.R.C.) remains the intellectual property, and in the ownership and copyright, of the originator(s).

2. Whilst every effort is made to ensure the accuracy of all the data provided, the N.B.R.C. can accept no responsibility for any costs, damages or liabilities whatsoever arising from the use of the data or for any omissions or inaccuracies within it.

3. The data held by the N.B.R.C. may not be comprehensive and the absence of data, in response to a data search, does not imply that a species, important habitat or designation does not exist within that search area. Recorded presence does not imply current presence and the date for all records will be provided.

4. Data is provided solely for the use of the enquirer (and their client) and only for the purpose(s) specified by the enquirer at the time of its request. Data must not be reused or stored beyond the life of the project for which they were acquired.

5. Data may be used as required in support of the planning process but OS grid references must be removed from documents destined for public consumption due to sensitive data concerning protected species.

6. The N.B.R.C. will provide access to data subject to any conditions imposed on its use by the Data Protection Act, Environmental Information Regulations 2004, Copyright and Intellectual Property Right Law or the data owner. Restrictions on the release of information may therefore apply.

7. The N.B.R.C. will only release un-interpreted data and will not usually comment upon its significance.

8. The N.B.R.C. will release as soon as possible, and within twenty working days of receipt, the request unless an extension of time is necessary. In this event the enquirer will be informed within ten working days.

9. All charges made by the N.B.R.C. relate to the provision of administration, data handling and search services.

As agreed, the total charge for the time taken to extract this information and put together the report is [redacted] An invoice will be sent under different cover from our Cambridgeshire office.

Should you have any enquiries please feel free to contact me at the above address.

Yours sincerely,

[redacted]

Biodiversity Data Officer

Sites of wildlife and geological importance in Northamptonshire

Statutory Sites:

Special Protected Area (SPA)
SPAs are strictly protected sites classified in accordance with Article 4 of the EC Directive on the conservation of wild birds (79/409/EEC), the Birds Directive.

Site of Special Scientific Interest (SSSI)
The SSSI series provide statutory protection for the best examples of the natural environment. SSSI were originally notified under the National Park and Access to the Countryside Act 1949 and they were renotified under the Wildlife and Countryside Act 1981. Improved provisions for their protection and management were introduced in the Countryside and Rights of Way Act 2000.

National Nature Reserve (NNR)
NNRs are declared by the statutory country conservation agency (English Nature) under the National Park and Access to the Countryside Act 1949. NNR contain the most important examples of natural and semi-natural ecosystems within Great Britain. NNR conserve the habitats within them and offer opportunities for research.

Local Nature Reserve (LNR)
LNRs are declared under the National Park and Access to the Countryside Act 1949 by local authorities. LNR are declared and managed for nature conservation, education and research or opportunities for public access to nature.

Non-statutory sites:

Nature Improvement Area (NIA)
Following the Natural Environment White Paper (2011), twelve NIAs were designated and granted government funding in February 2012. They should aim to achieve significant and demonstrable enhancements of the ecological network over large areas by undertaking the actions prioritised in the review:

- Improving the management of existing wildlife sites
- Increasing the size of existing wildlife sites
- Increasing the number of wildlife sites
- Improving connectivity between sites
- Creating wildlife corridors

Local Wildlife Site (LWS)
Local Wildlife Sites are areas of land which are rich in wildlife and are the equivalent to Sites of Importance for Nature Conservation. Criteria for selection take in threats and declines in certain species, national priorities and local distinctiveness. The LWS system is managed, in partnership, by The Wildlife Trust, local authorities, statutory nature conservation agencies, local naturalists and landowners. Local Wildlife Sites were previously known as County Wildlife Site (CWS) in the past.

Protected Wildflower Verge (PWV)
Protected Wildflower Verges are roadside verges rich in wildlife and are crucial to the success of the local Biodiversity Action Plan. Criteria for selection take in threats and declines in certain species, national priorities and local distinctiveness. The PWV system is managed, in partnership, by The Wildlife Trust, local authorities, statutory nature conservation agencies, local naturalists and landowners.

Pocket Park
The Pocket Park vision is to develop easy public access to the countryside, bringing the countryside to the people and providing opportunities for enjoyment and understanding of 'Countryside on the Doorstep'. Over the past 18 years, the county council has worked in partnership with many organisations and other local authorities to help create 80 Pocket Parks. For more information on this scheme please refer to the website at www.pocketparks.com.

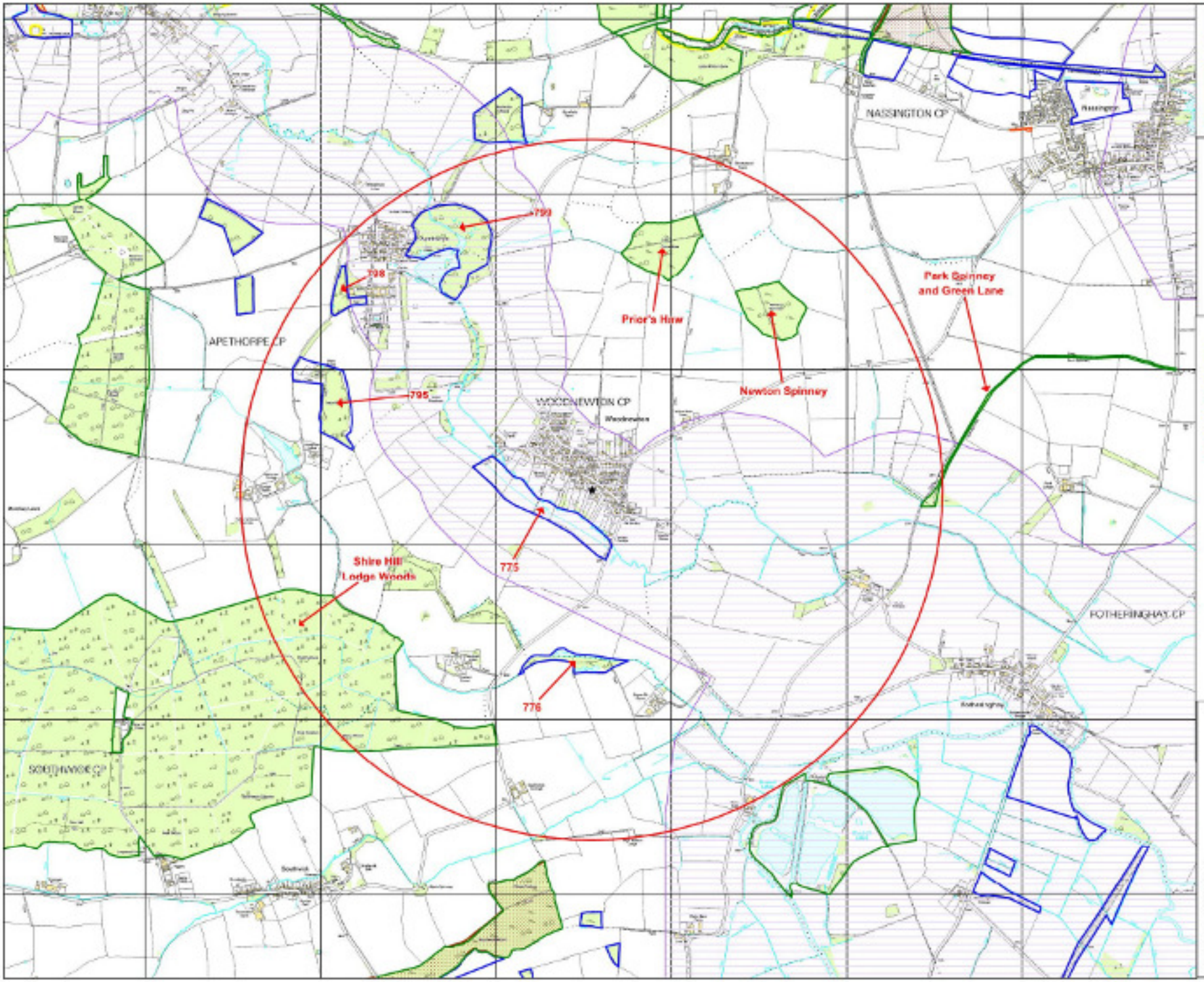
Local Geological Site (LGS)
Local Geological Sites (LGS) are the most important places for geology and geomorphology outside the statutory SSSI. The sites are designated using locally developed criteria and are assessed by the local geological group.

Potential Local Geological Site (PLGS)
Potential Local Geological Sites (PLGS) are sites that were identified and considered to be important geological exposures. These sites have not yet been formally notified as Local Geological Sites by the local geological group. Currently these sites can only be located by a grid reference, as they do not have a formal site boundary and there is no descriptive survey information.

Potential Wildlife Site (PWS)
Potential Wildlife Sites (PWS) are sites that are either known or thought to be of higher biodiversity value than the average countryside but have not been confirmed to be of Local Wildlife Site (LWS) standard.

PWS can belong to one of three categories: 1. Sites never fully surveyed and assessed against LWS criteria. 2. Sites surveyed and assessed against the LWS criteria but not currently reaching the standard. 3. Sites previously recognised as LWS but not currently meeting the latest LWS criteria.

PWS were originally outlined using a combination of local knowledge and looking at aerial photographs for evidence of biodiverse habitats. All PWS are likely to be important for the County's biodiversity, either in their own right, or through buffering and linking current LWS and contributing to Green Infrastructure. Many of these sites could potentially be of LWS standard once surveyed.



NBRC
Northamptonshire Biodiversity Records Centre

Area around Spinney Farm, Woodnewton (2km search area)

- Local Geological Site
- Local Geological Site
- Nature Improvement Area
- Local Wildlife Site
- Potential Wildlife Site
- Wildlife Trust Reserve

N

1km

Site Name: Newton Spinney

Site Code: E138

Status: LWS

Other Designations:

Grid Reference: TL046953

Area (ha): 8.5

District: East Northamptonshire

Site History:
01/01/1979 LWS
01/01/2002 LWS

Habitats present
Broad Habitat:

Reason for Designation:
A broadleaved Oak and Ash woodland with some mature trees as well as overgrown coppice. The site offers useful cover for birds and mammals

Site Description:

01/01/2002
Woodland could be seen from nearby arable field with pROW. Predominantly broadleaved, with Ash and Oak and intact as far as "aerial photographs" show (1999). A full survey should be undertaken to ascertain its importance in value as a LWS.

01/01/1979
A small area of old woodland similar to Prior's Haw that offers useful cover for birds and mammals. Some mature trees are present as well as overgrown coppice. This may also therefore be a good invertebrate site. Thought not to be ancient woodland, although it seems similar to Prior's Haw.

Map:


Newton
Spinney
Track

Site Name: Park Spinney and Green Lane

Site Code: E152

Status: LWS

Other Designations: Nene Valley NIA

Grid Reference: TL059949

Area (ha): 2.35

District: East Northamptonshire

Site History:
02/10/1991 LWS
25/04/2002 LWS
26/11/2015 LWS

Habitats present
Broad Habitat: Grassland, Woodland
BAP Habitat: Lowland Mixed Deciduous Woodland

Reason for Designation:
A narrow green lane with a strip of woodland alongside, the spinney provides some valuable habitat amid what was largely a very open landscape. The woodland / hedgrow habitats contained 10 ancient woodland indicators and so qualifies as a Wildlife Site.

Site Description:

07/05/2015
This site was a mostly narrow strip of woodland known as Park Spinney. It could be very narrow in the north-east but widened out considerably in the south. A green lane or other public right of way ran alongside the western and northern edge of the wood. The green lane was also used by agricultural machinery, and the right of way was connected to several other public rights of way.

The green lane was heavily shaded from both sides in the south, where a selection of woodland and shade species was present, but became more open to the north and east. The proximity of the adjacent woodland did, however, mean that there was always a woodland influence in this grassland.

An often defunct hedge and a quite deep ditch separated the green lane from the spinney in the centre and east, and here the woodland had quite frequent gaps where large trees had once been, leaving a weedy vegetation, or a woodland edge feel.

The spinney provided some valuable habitat amid what was largely a very open landscape.

The spinney was often very sparse and hardly a spinney at all in the north. Wide open spaces where large trees had died and left gaps were frequent, and plants of the field layer were often woodland edge species such as Hedge Garlic Alliaria petiolata, False Brome Brachypodium sylvaticum and Hedge Woundwort Stachys sylvatica, rather than true woodland plants. There were also open areas of abundant Cow Parsley Anthriscus sylvestris and Nettle Urtica dioica. The larger dead trees included an Elm species, most likely English Elm Ulmus procera from the leaves of the suckers, but Pedunculate Oak had also fallen and a large Horse Chestnut, which was regrowing from the stump. In the south there were a few very large Pedunculate Oaks Quercus robur.

Despite this there was also a good selection of woodland plants, which included quite a few ancient woodland indicator species. Ramsons Allium ursinum and Goldilocks Buttercup Ranunculus auricomis were present in small groups throughout the length of the woodland, a small amount of Bluebell Hyacinthoides non-scripta was found in the northern part, while Dog's Mercury Mercurialis perennis was most abundant in the generally older woodland in the south. A single small Wild

Service-tree Sorbus torminalis may have been planted as it was in an area with quite frequent small Horse Chestnut Aesculus hippocastanum. There was also a small conifer plantation in the north.

In the south, where the woodland widened out, there were generally more frequent tall trees. In places the woodland floor was quite heavily shaded here, with bare ground or with Ivy Hedera helix on many of the trees and also forming a ground carpet. Areas of less heavy shade were sometimes with abundant Nettle. Some underplanting of young Ash Fraxinus excelsior, Beech Fagus sylvatica and Wild Cherry Prunus avium had been done in the south, where there were some quite large coppice stools of Hazel Corylus avellana, Field Maple Acer campestre and Wych Elm Ulmus glabra.

The green lane was heavily shaded by tall shrubs and trees to each side in the south, and was with more woodland plants than grassland ones. In fact, the best collection of woodland plants found together was on these edges of the lane rather than within the woodland itself. These included the largest amounts of Dog's Mercury Mercurialis perennis and Wood Sedge Carex sylvatica within the site boundary.

The only typical grassland species of the lane in the south was locally abundant Common Knapweed Centaurea nigra. Even to the north and east, where the lane was more open, there was still a strong woodland influence, though Common Knapweed continued to be quite frequent, along with locally frequent Common Bird's-foot Trefoil Lotus corniculatus, occasional Cowslip Primula veris and rare Hairy Violet Viola hirta. On the outer side of the lane in the north was arable land with no buffer and a few arable weeds such as Shepherd's Purse Capsella bursa-pastoris and Cut-leaved Crane's-bill Geranium dissectum were present.

The largest amount of Wood Sedge to be found was in the broader woodland in the south, but just to the east of the site boundary, where young trees were growing on disturbed ground with Teasel and Nettle and lots of Wood Dock.

[redacted] and fox activity was noted. Buzzards and Sparrowhawks were in the area.

25/04/2002
Previous surveyors description still stands.

02/10/1991
A long spinney alongside a public footpath that joins a broader green lane. The path is used by walkers and the track is occasionally used by motorcyclists. The east-west section of the path has rather limited grassland species alongside the path and a narrow strip of very derelict woodland to the south. This woodland contains many fallen trees, mostly english elm and ash. There is some regeneration of the elm. Mature trees still standing include oaks, some very old, old hawthorn and elder. The ground flora has common species such as Viola odorata, Brachypodium sylvaticum, Glechoma hederacea. The north-south section runs alongside a broader strip of woodland than the first, with less dead wood and more tall, mature trees. These are mostly oak and ash, with occasional wych elm, beech and field maple. There is little groundflora but the species present are quite varied compared to the first section of spinney. The best areas of grassland are patchy and contain species such as Odontites verna, Centaurea nigra and Taraxacum officinale. A good habitat corridor with a fair variety of tree species and unspoilt groundflora. The large amount of undisturbed fallen trees have excellent potential for invertebrates. Needs a visit in spring.

Boundary Changes
06/12/2012 Grid reference changed to use central grid reference of site instead of the start and end points. Start and end points of the site are TL054942/TL068950 at this time.

Map:


Track
Park Spinney
Park Lodge

Site Name: Prior's Haw

Site Code: E155

Status: LWS

Other Designations: Ancient semi-natural woodland

Grid Reference: TL040957

Area (ha): 10.3

District: East Northamptonshire

Site History:
01/01/1980 LWS
06/08/2002 LWS

Habitats present
Broad Habitat: Woodland
BAP Habitat: Lowland Mixed Deciduous Woodland

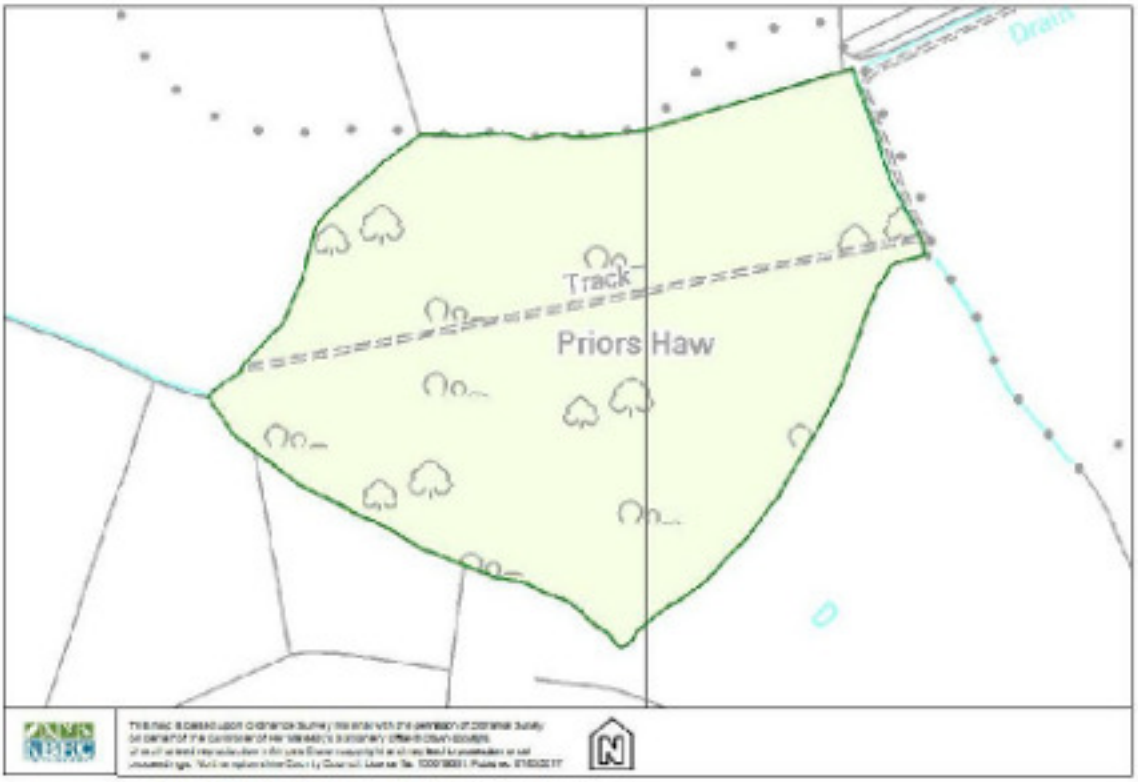
Reason for Designation:
A W8 woodland with Ash and Oak in high canopy and a varied ground flora makes this a seemingly good Wildlife Site woodland.

Site Description:

06/08/2002
W8 woodland. Ash and Oak in high canopy and varied ground flora make this a seemingly good woodland.

01/01/1980
A small area of ancient woodland with overgrown coppice and some ancient woodland groundflora. This is one of several old woodlands in the area, and used to be part of a larger woodland. It now provides a valuable habitat for birds and mammals. Identified in the AWI as ancient and part of a larger area which included Mountjoy Sale. Both this and Newton Spinney seem rather more recent than some of the surrounding ancient woodlands (eg. the Sales to the north). They are now surrounded by arable farmland and have unfortunately become rather isolated.

Map:


Drain
Track
Priors Haw

Site Name: **Shire Hill Lodge Woods**

Site Code: E173

Status: LWS

Other Designations: Ancient semi-natural woodland, Plantation on ancient woodland site

Grid Reference: TL010930

Area (ha): 391.8

District: East Northamptonshire

Site History:
05/05/1994 LWS
12/06/2002 LWS

Habitats present
Broad Habitat: Woodland

Reason for Designation:
A large area of replanted ancient woodland consisting of conifer and broad-leaved plantations. The site has retained a number of ancient woodland indicator species.

Site Description:

12/06/2002
Mainly coniferous plantation and dark canopy with sparse understory. Also broad-leaved plantations including common oak and ash with aspen, silver birch, sessile oak, common lime and wild cherry are a feauture of this site.

05/05/1994
A large area of ancient woodland, most of which was converted to agriculture in Victorian times and then replanted with various compartments of conifers and broadleaved species. Some of the compartments, notably the Corsican pine, are now very dark and have little groundflora. Many however have a good collection of old woodland species and a fairly open canopy. The compartments with young oak (20 yrs?) have the most diversity but the larch and mixed oak and spruce sections are also more varied than the pine compartments. Scrub species are frequent and diverse throughout the wood. These include blackthorn, hazel, field maple, field rose and ash saplings.

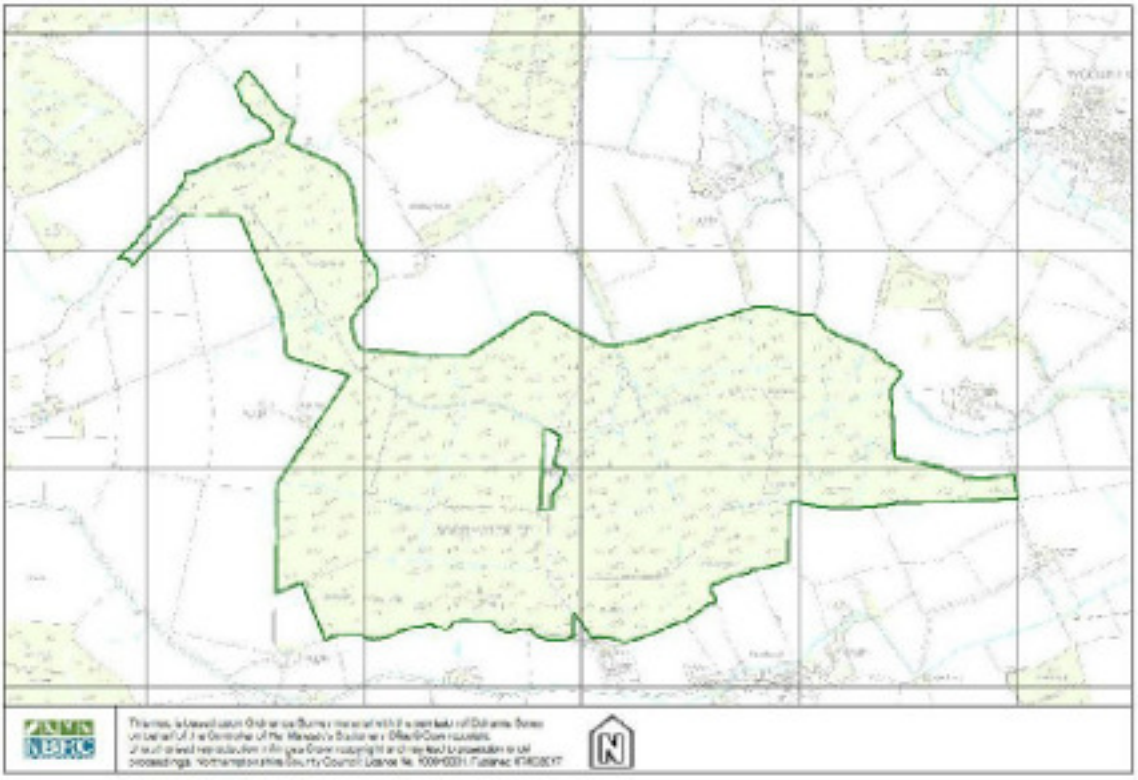
The understorey is dominated by bramble and bracken in the sandier compartments and Mercurialis perennis or Deschampsia cespitosa in the wetter compartments (which have a predominantly clay substrate). Old woodland indicators are rather thin on the ground, although Hyacinthoides non-scriptus occurs in a few patches, and Stellaria holosteoides is present alongside some of the grassier rides. Other groundflora species include Primula veris, P. vulgaris, Prunella vulgaris, Carex sylvatica and Brachypodium sylvaticum, although these tend to be sparsely distributed and in the better-lit compartments. Sedges are frequent, and this looks like a good place to look for some of the rarer sedges.

The large variety of compartments and the broad rides, some with graded scrub edges, provide a particularly good habitat for birds. Ride species include Filipendula ulmaria, Scrophularia nodosa, Rumex obtusifolius, Viola reichenbachiana, Bellis perennis, Calamagrostis epigejos, Cardamine pratensis, Cirsium palustre and Chamaerion angustifolium, although none of the rides are very herb-rich and grasses and sedges predominate. Wetter rides also have abundant Juncus spp.

This is an important and frequently-monitored bird site which supports rarities such as hawfinch, goshawk, grasshopper warbler and nightingale. Buzzards have also been reported. The butterfly

population is also of interest, including the rare white admiral. At the time of survey cuckoo, bluetit, willow warber, nightingale, songthrush, magpie, pheasant, blackbird, wren, robin, coaltit, bluetit, great tit and chiffchaff were seen and/or heard. The bird interest here is well-recorded, but mammal and invertebrate records less so. It may be that the amount of hazel present warrants a dormouse survey (especially as they have been found nearby, in Souther Woods).

Map:



Appendix 6 Biodiversity Enhancements

Bat Boxes

Schwegler 1FR

The 1FR Bat Tube is designed to be installed on the external walls of buildings, either flush or beneath a rendered surface. This makes it ideal for situations where you wish the box to be discrete as only the entrance hole will be visible. It can also be painted to match your building with an air permeable paint if desired.

The 1FR is specifically designed to meet the characteristic behavioural requirements of the types of bats that inhabit buildings. It has an integrated wooden panel onto which bats can cling and a ridged entrance slope which makes it easy for them to enter and leave the box safely. The design maintains excellent climatic conditions inside providing bats with a safe and stable environment in which to roost and it requires no maintenance because droppings fall out of the entrance ramp.

Ibstock Enclosed Bat Box "C"

The Enclosed Bat Box 'C' from Ibstock is designed for the pipistrelle bat. It is ideal for new builds as it can be integrated directly into the brickwork to produce a discrete but attractive home for bats.

The inside of the box is designed to create several roosting zones which are ideal for crevice dwelling bats such as the pipistrelle. The bottom entrance means that no maintenance is required as dropping simply fall out the bottom.

This box is available in two sizes in smooth red, smooth blue or smooth cream brick and has an attractive bat motive on the front. This box is durable and fully frost resistant.

Bird Boxes

Schwegler Sparrow Terrace

Ibstock Eco-habitat for Swifts

Ecosurv Starling Box

Hedgehog Homes

This wicker Igloo Hedgehog Home is designed to be an attractive home and a safe retreat for hedgehogs. It is constructed using a round painted steel frame with a water-proofed roof which is covered with a brush wood finish. It is designed to blend into the garden.

The igloo is spacious and can accommodate family groups and the entrance tunnel is designed to provide protection from predators such as badgers and dogs. The Igloo Hedgehog Home is predominately designed for shelter but may also be used during hibernation if additional garden waste is provided as cover.

Underneath the textured brushwood finish there is a sturdy steel frame covered with a waterproof felt lining. The wooden entrance door is manufactured from FSC wood and forms a short predator defence tunnel, small enough to deter access by dogs or [redacted] The edges of the house can be pegged down using tent pegs to provide extra security. To encourage hedgehogs to use the house site it in a quiet corner of the garden and cover with leaves for extra camouflage. The edges of the hedgehog house are finished with decorative rattan.