

PRELIMINARY ECOLOGICAL APPRAISAL

LAND OFF VICARAGE LANE, SCOPWICK, LINCOLNSHIRE

APRIL 2021



CGC Ecology

27 Southlands Avenue
Louth
Lincolnshire
LN11 8EW

Telephone: 07507 371704
E-mail: celia@cgcecolology.co.uk
Web: www.cgcecolology.co.uk

Company number: 12622959
VAT registration number: 367018590

Issued to:
Mr Tim Banks
Blankney Estates Ltd
The Estate Office
Temple Grange
Navenby
Lincoln
LN5 0AX

PRELIMINARY ECOLOGICAL APPRAISAL LAND OFF VICARAGE LANE, SCOPWICK, LINCOLNSHIRE

Report to: Mr Tim Banks
Blankney Estates Ltd
The Estate Office
Temple Grange
Navenby
Lincoln
LN5 0AX

Report title: Preliminary Ecological Appraisal,
Land off Vicarage Lane, Scopwick, Lincolnshire

Revision: Final

Original issue date: April 2021

Amended: N/A

Issued by: Celia Commowick

Date: 15th April 2021

PRELIMINARY ECOLOGICAL APPRAISAL LAND OFF VICARAGE LANE, SCOPWICK, LINCOLNSHIRE

Contents

1	INTRODUCTION	1
2	METHODS.....	2
2.1	Data search	2
2.2	Great crested newt	2
2.3	Common reptiles.....	3
2.4	Badger	3
2.5	Bats	3
2.5.1	Preliminary roost assessment.....	3
2.5.2	Ground level roost assessment	4
2.5.3	Assessment of commuting and foraging habitats	4
2.6	Birds	5
2.6.1	Common bird species	5
2.6.2	Schedule 1 species.....	5
2.7	Habitats and plant species.....	5
2.8	Survey constraints and limitations	5
3	SITE ASSESSMENT	6
3.1	Location and grid reference	6
3.2	The agricultural shed	6
3.3	The grassland.....	7
3.4	The broad-leaved woodland	8
3.5	Site boundaries and surrounding areas	9
4	RESULTS.....	11
4.1	Data search	11
4.2	Great crested newt	11

4.3	Common reptiles.....	14
4.4	Badger	14
4.5	Bats	14
4.5.1	Preliminary roost assessment.....	14
4.5.2	Ground level roost assessment	15
4.5.3	Assessment of commuting and foraging habitats	16
4.6	Birds	16
4.6.1	Common bird species	16
4.6.2	Schedule 1 species.....	17
4.7	Habitats and plant species.....	18
5	DISCUSSION AND RECOMMENDATIONS	18
5.1	Great crested newt	18
5.1.1	Legal Protection.....	18
5.1.2	Recommendations.....	19
5.2	Common reptiles.....	19
5.2.1	Legal protection	19
5.2.2	Recommendations.....	20
5.3	Badger	20
5.3.1	Legal protection	20
5.3.2	Recommendations.....	21
5.4	Bats	21
5.4.1	Legal protection	21
5.4.2	Recommendations.....	22
5.5	Birds	22
5.5.1	Legal protection	22
5.5.2	Recommendations for common bird species.....	23
5.6	Habitats and plant species.....	23
5.7	Recommendations for ecological enhancement	24
6	SUMMARY	26
7	REFERENCES	26

APPENDIX 1	28
Plant list	28
APPENDIX 2	31
Data search results	31

Photographs

Photograph 1: Western elevation of the shed.....	7
Photograph 2: Southern elevation of the shed	7
Photograph 3: Eastern elevation of the shed.....	7
Photograph 4: Interior view of the shed.....	7
Photograph 5: The grassland on site.....	8
Photograph 6: Further view of the grassland on site	8
Photograph 7: Further view of the grassland.....	8
Photograph 8: Hawthorn scrub within the grassland	8
Photograph 9: Brash pile within the grassland	8
Photograph 10: Broad-leaved woodland at the north of the site.....	9
Photograph 11: Broad-leaved woodland strip along the southern edge of the site.....	9
Photograph 12: Managed hedgerow along the eastern boundary	9
Photograph 13: Outgrown hedgerow along the southern boundary	9
Photograph 14: Fencing along the western boundary	10
Photograph 15: Arable field to the north of the site	10
Photograph 16: Scopwick cemetery to the east of the site	10
Photograph 17: Vicarage Lane to the south of the site.....	11
Photograph 18: View of Pond 1 on the site	12
Photograph 19: View of Pond 2 to the west of the site	12
Photograph 20: Rabbit burrow on site with A4 clipboard for scale	14
Photograph 21: Gap in blockwork wall that extends to the exterior	15
Photograph 22: Rot hole within an ash tree on site	16
Photograph 23: Split along the limb of an ash tree on site	16
Photograph 24: Swallow nest taken over by a wren within the shed	17
Photograph 25: Disused blackbird nest within the shed	17
Photograph 26: Ibstock integral bat box (source: www.nhbs.com)	25

Tables

Table 1: HSI calculation for Pond 1	13
Table 2: Assessment of survey site to support roosting bats.....	15
Table 3: Assessment of surrounding habitats to support commuting and foraging bats.....	16
Table 4: Common bird species seen or heard during the survey	17
Table 5: Risk assessment tool showing breach of legislation is highly likely if development occurs and great crested newts are breeding within Pond 2.....	19

Figures

Figure 1: Aerial view of the survey site outlined in red (Apple Maps, 2021)	6
Figure 2: Locations of the two ponds on and within 500m of the survey site (Apple Maps, 2021).....	13

PRELIMINARY ECOLOGICAL APPRAISAL

LAND OFF VICARAGE LANE, SCOPWICK, LINCOLNSHIRE

1 INTRODUCTION

CGC Ecology Ltd has been commissioned by Graham Prior of Robert Doughty Consultancy on behalf of Blankney Estates to undertake a preliminary ecological appraisal of land off Vicarage Lane, Scopwick in Lincolnshire. The survey is required in connection with proposals to develop the site for residential use.

The purpose of a preliminary ecological appraisal is to identify the likely ecological constraints associated with any development that might take place on the site, to make recommendations for mitigation and/or further survey work, and to identify any opportunities to deliver ecological enhancement.

The site was surveyed on 30th March 2021, in warm and dry conditions by Celia Commowick (registered to use Natural England Class Licences WML-CL08 to survey great crested newts and WML-CL18 to survey bats; registration numbers 2016-25124-CLS-CLS and 2018-37729-CLS-CLS respectively, and FISC Level 4).

During the initial appraisal of the site the protected species considered likely to occur on site were identified. These were:

- Great crested newts
- Common reptiles
- Badger
- Bats
- Common bird species
- Schedule 1 bird species

Certain protected species were scoped out of the survey; in particular it was considered that white-clawed crayfish *Austropotamobius pallipes*, otter *Lutra lutra*, water vole *Arvicola amphibius* and common dormouse *Muscardinus avellanarius* were highly unlikely to occur on the survey site due to lack of suitable habitat.

Any species of principal importance (as set out in the Natural Environment and Rural Communities (NERC) Act, 2006) seen on site were recorded.

This report details the methods used, describes the species found on the site, discusses the results and makes recommendations for further work.

2 METHODS

2.1 Data search

Lincolnshire Environmental Records Centre (LERC) was consulted on 29th March 2021 and commissioned to search for sites with statutory and non-statutory designation and records of protected species within 2km of the survey site. Records of protected species more than 20 years old are not referred to in this report but are included within the relevant appendix.

2.2 Great crested newt

Prior to the site visit, a desk study was carried out to identify all water-bodies within 500m of the site boundaries, as the home range of great crested newts *Triturus cristatus* is generally considered to be up to 500m from their breeding pond. During the survey, the site was assessed for its potential to support great crested newt by identifying all habitats and refugia with the potential to support this species during its terrestrial life stage, and any water-bodies that could provide suitable breeding habitat. Where access allowed, habitats and any water-bodies on adjacent land were also assessed.

There is one pond within 500m of the survey site according to the Multi-Agency Geographic Information for the Countryside (MAGIC) website, and one ephemeral pond (Pond 1) was found on the site during the survey. Pond 1 was accessed and assessed for its potential to support great crested newts during the survey. The off-site pond (Pond 2) could not be accessed or assessed for its potential to support great crested newts.

The HSI (Habitat Suitability Index) is a quantitative measure of the habitat quality and evaluates the suitability of the water body and the surrounding land to support great crested newts (Oldham *et al*, 2000). The HSI is a number between 0 and 1 which is derived from an assessment of ten habitat variables known to influence the presence of newts. These variables include quality of the terrestrial habitat, water quality in the pond, presence of fish, and aquatic macrophyte cover. An HSI of 1 is optimal habitat (high probability of supporting great crested newts) and 0 is very poor quality with a minimal chance of occurrence.

The Habitat Suitability Index for Pond 1 was calculated following the survey.

2.3 Common reptiles

All habitats on the site were assessed for their potential to support common reptile species based on factors such as the presence of suitable sites for basking, and refugia and vegetation offering sufficient structure for shelter and hibernation.

2.4 Badger

The site and adjacent areas (where access allowed) was searched for signs of use by badger *Meles meles* including setts, latrines, dung pits, pathways, hairs, footprints and snuffle holes.

2.5 Bats

2.5.1 Preliminary roost assessment

In accordance with Bat Surveys for Professional Ecologists: Good Practice Guidelines 3rd Edition (Collins J, 2016), a preliminary roost assessment was carried out the agricultural shed to determine whether any features were present that bats could use for entry/exit points and roosting, and to search for signs of bat presence. High-powered torches were used to search for internal and external features including but not limited to;

- Gaps around windowsills, door frames and lintels
- Lifted rendering, paintwork, shiplap boarding
- Soffit boxes, weatherboarding and fascias
- Lead flashing, hanging tiles and lifted or missing tiles/slate
- Gaps >15mm in brickwork and stonework
- Bat specimens (live or dead)
- Bat droppings and urine staining
- Feeding remains (e.g. moth wings)
- Cobweb-free sections of ridge beam

The agricultural shed was then assigned a measure of potential suitability to determine the extent of future survey work needed. The categories of potential suitability and further survey effort required are as follows;

- Negligible – Negligible features on site likely to be used by roosting bats – no further survey work
- Low – A structure with one or more potential roost sites that could be used by individual bats opportunistically – one survey visit (dusk or dawn)
- Moderate – A structure with one or more potential roost sites that could be used by bats on a regular basis – two separate survey visits (one dusk and one dawn)

- High – A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a regular basis and for longer periods of time – three separate survey visits (one dusk, one dawn and one dusk or dawn).

The following should be noted: 'The guidelines do not aim to either override or replace knowledge and experience. It is accepted that departures from the guidelines (e.g. either decreasing or increasing the number of surveys carried out or using alternative methods) are often appropriate. However, in this scenario an ecologist should provide documentary evidence of (a) their expertise in making this judgement and (b) the ecological rationale behind the judgement.' (Bat Surveys for Professional Ecologists: Good Practice Guidelines 3rd Edition (Collins J, 2016)).

2.5.2 Ground level roost assessment

A preliminary ground level roost assessment was carried out on the trees on the site, in accordance with Bat Surveys for Professional Ecologists: Good Practice Guidelines 3rd Edition (Collins J, 2016) Table 4.1 page 35. The trees were visually checked for potential roost features such as:

- Woodpecker holes
- Broken limbs, snag ends, cracks and splits in branches and rot holes
- Cankers with cavities
- Gaps between overlapping stems or branches
- Dense ivy, with stem diameters in excess of 50mm
- Flaking bark

2.5.3 Assessment of commuting and foraging habitats

In accordance with Bat Surveys for Professional Ecologists: Good Practice Guidelines 3rd Edition (Collins J, 2016), the survey site and adjacent areas were assessed for their potential suitability for commuting and foraging bats and categorised as follows;

- Negligible – Negligible habitat features on site or in surrounding area likely to be used by commuting or foraging bats
- Low – Habitat features that could be used by small numbers of commuting bats such as a gappy hedgerow or small numbers of foraging bats such as a patch of scrub, but that are isolated from other habitat features
- Moderate – Continuous habitat connected to the wider landscape such as lines of trees that could be used by commuting bats or trees, grassland or water features that could be used by foraging bats
- High – Continuous, high-quality habitat that is well connected to the wider landscape for use by commuting and foraging bats such as river valleys, woodland, grassland and

parkland.

2.6 Birds

2.6.1 Common bird species

All bird species noted on site were recorded. The survey site was searched for signs of use by nesting birds, typically old nests and concentrations of faecal deposits associated with a breeding site.

2.6.2 Schedule 1 species

The agricultural shed was inspected for the presence of barn owl *Tyto alba* and the signs indicative of their past or present use including regurgitated pellets, concentrated accumulations of flattened pellets indicative of a nest site, faecal encrustation, eggs or eggshell remains, surplus prey items, bodily remains of chicks or infant down feathers. The site was not considered to provide suitable breeding opportunities for other Schedule 1 species.

2.7 Habitats and plant species

An extended ecological assessment survey was undertaken to identify the habitats present, including any classed as priority habitats (NERC Act, 2006), and to record more detailed information on plant species on site. Any plant species listed on Schedule 8 or Schedule 9 of the Wildlife and Countryside Act (1981, reviewed in 2010) were recorded, and the habitats on site were assessed against the Local Wildlife Site (LWS) criteria for Lincolnshire. All hedgerows were assessed to determine whether they qualify as species-rich (with 5 or more woody species within 30m) or as 'important' under the Hedgerow Regulations (1997).

2.8 Survey constraints and limitations

It should be noted that March is a sub-optimal season for undertaking botanical surveys and the floral diversity recorded may not be fully representative.

The information contained in this report was accurate at the time of the survey; however, it should be noted that the status of mobile species such as badger, birds and bats can alter in a short period of time and any survey only represents a 'snapshot' of the site at one point in the season. Advice released by CIEEM (Chartered Institute of Ecology and Environmental Management) in April 2019 states that an ecological report remains valid for between 12-18 months, depending on the presence of mobile species, after which an update survey should be carried out.

3 SITE ASSESSMENT

3.1 Location and grid reference

The survey site comprises an agricultural shed, grassland and woodland to the north of Vicarage Lane, Scopwick in Lincolnshire - central grid reference TF068582.

The habitats on site are described below and representative photographs are included in the text. An aerial view of the site location is provided as Figure 1 and a plant list is included in Appendix 1.



Figure 1: Aerial view of the survey site outlined in red (Apple Maps, 2021)

3.2 The agricultural shed

The single-storey shed lies at the north of the access track from Vicarage Lane, and is surrounded by hard-standing, close-mown grass and bare earth. It is constructed of blockwork and timber panel walls over a steel frame, supporting a corrugated fibre-cement roof. The structure is divided internally into various storage areas and livestock pens. The shed has several timber doors and a large opening on the southern elevation, and high ambient light levels within. There is a substantial ivy covering on the north-western corner.



Photograph 1: Western elevation of the shed



Photograph 2: Southern elevation of the shed



Photograph 3: Eastern elevation of the shed



Photograph 4: Interior view of the shed

3.3 The grassland

The majority of the site comprises semi-improved calcareous grassland, although not many typical calcareous grassland species were recorded, likely due to the season and the current management of the site. The site is a former limestone quarry, with a central 'bowl', steep sides and undulating topography. Species noted include lesser burdock, perennial rye-grass, common chickweed, common nettle, mullein species, red fescue, common ragwort, musk thistle, common field-speedwell, crane's-bill species, broad-leaved dock, spear thistle, cock's-foot, Germander speedwell, tor-grass, vetch species, white clover, common mouse-ear, white campion, ivy-leaved speedwell, creeping bent, hemlock, daisy, cow parsley, creeping cinquefoil, common knapweed, creeping buttercup, dandelion, lord's-and-ladies, and white dead-nettle. There is a small amount of scattered hawthorn scrub and a large brush pile within the grassland.



Photograph 5: The grassland on site



Photograph 6: Further view of the grassland on site



Photograph 7: Further view of the grassland



Photograph 8: Hawthorn scrub within the grassland



Photograph 9: Brash pile within the grassland

3.4 The broad-leaved woodland

The strips of broad-leaved woodland on site are restricted to the higher ground along the northern, western and southern boundaries. The main tree species present is ash, with some hawthorn, elder and dog-rose. The ground flora comprises species such as rough chervil,

common nettle, lord's-and-ladies, cleavers, ivy, forget-me-not species, bramble, ground-ivy, snowdrop, nipplewort, lesser celandine, hedge woundwort and sweet violet.



Photograph 10: Broad-leaved woodland at the north of the site



Photograph 11: Broad-leaved woodland strip along the southern edge of the site

3.5 Site boundaries and surrounding areas

The northern site boundary comprises a post and wire fence and an outgrown hedgerow of hawthorn, ash and elder, the eastern boundary a post and wire fence and a managed hawthorn and elder hedgerow, and the southern boundary a post and wire fence and an outgrown hedgerow of hawthorn, elder, cherry plum, dog-rose and bramble. The western boundary is marked in places by the fencing of the adjacent property.



Photograph 12: Managed hedgerow along the eastern boundary



Photograph 13: Outgrown hedgerow along the southern boundary



Photograph 14: Fencing along the western boundary

The immediate surroundings of the site comprise arable fields to the north, Scopwick cemetery to the east, Vicarage Lane to the south and an adjacent residential dwelling and small-holding to the west.

The wider area comprises arable fields, woodland, grassland, quarries and the village of Scopwick to the south.



Photograph 15: Arable field to the north of the site



Photograph 16: Scopwick cemetery to the east of the site



Photograph 17: Vicarage Lane to the south of the site

4 RESULTS

4.1 Data search

The results from Lincolnshire Environmental Records Centre show that the site lies within 2km of the following non-statutory sites;

- Green Man Lane LWS (Local Wildlife Site)
- Long Wood, Blankney LWS
- Scopwick Heath Old Quarry LWS
- Longwood Quarry, Blankney LGS (Local Geological Site)

The site also lies within 2km of ancient woodland (within Long Wood, Blankney LWS) and the priority habitats of lowland calcareous grassland, lowland mixed deciduous woodland and arable field margins. There are no statutory sites within 2km of the survey area.

The survey site is not within or adjacent to any of these non-statutory sites or the areas of priority habitat, and the development of the site is not expected to have any adverse effect on these protected areas.

Where applicable, the records of protected species are included within the relevant section of this report.

4.2 Great crested newt

There are no recent records of great crested newt within 2km of the survey site, although a lack of records does not prove absence.

The grassland, scrub and woodland habitats, and the brash pile on the survey site are considered to be highly suitable for great crested newts, providing good shelter and foraging opportunities for this species.

Pond 1 is located in the south-eastern corner of the grassland and is considered to be an ephemeral waterbody that dries out completely each summer. The water level was extremely low at the time of the survey (approximately 1cm maximum) and most of the pond was covered in brooklime.

The only off-site pond (Pond 2) within 500m of the survey site is located approximately 30m to the west of the site, within grassland. Although it could not be accessed, it was viewed from a distance and appears to be man-made, with a plastic liner. There are no significant barriers to newt dispersal between this pond and the survey site.



Photograph 18: View of Pond 1 on the site



Photograph 19: View of Pond 2 to the west of the site

Figure 2 below shows the location of the two ponds on and within 500m of the survey site.



Figure 2: Locations of the two ponds on and within 500m of the survey site (Apple Maps, 2021)

The Habitat Suitability Index calculation for Pond 1 is provided below.

Table 1: HSI calculation for Pond 1

Suitability Index	Factor	Notes	Score
SI 1	Location	Zone A	1
SI 2	Pond area (m ²)	<50m ²	0.05
SI 3	Pond drying	Dries annually	0.1
SI 4	Water quality	Poor	0.33
SI 5	Shoreline shade	70%	0.8
SI 6	Fowl	Absent	1
SI 7	Fish	Absent	1
SI 8	No ponds/km ² **	1.3	0.68
SI 9	Terrestrial habitat	Good	1
SI 10	Macrophytes	95%	0.85
HSI Score -			0.49 (poor suitability)

The HSI assessment indicates that Pond 1 has poor suitability for great crested newts and they are highly unlikely to use this pond for breeding if they are present on site.

4.3 Common reptiles

There are records of grass snake *Natrix helvetica* from as recently as 2017, approximately 300m from the site.

The site is considered to have moderate potential for use by grass snake and common lizard *Zootoca vivipara*, as it provides a mosaic of habitats, with open areas for basking, and refugia and foraging available within the scrub and woodland. There are also numerous rabbit *Oryctolagus cuniculus* burrows on site, which have potential as reptile hibernacula.

4.4 Badger

There are only two records of badger within 2km of the site, both from 2018. No evidence of badgers was recorded on or around the site during the survey, although numerous rabbit burrows were in evidence. Badgers are likely to be present in the surrounding areas and may use the site for foraging and commuting.



Photograph 20: Rabbit burrow on site with A4 clipboard for scale

4.5 Bats

4.5.1 Preliminary roost assessment

There are records of common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus* and barbastelle *Barbastella barbastellus* from 2014 and brown long-eared bat *Plecotus auritus* from 2015, all within 2km of the site.

The agricultural shed is generally in a good state of repair, with no niches or gaps found within the fabric of the building that are considered suitable to support roosting bats. One crack in the interior of the blockwork wall was found, but this gap extended through to the exterior of the wall, meaning it would be draughty and therefore unsuitable for roosting bats. No evidence of bats was found associated with the building, and it is considered to offer negligible roosting potential for bats.



Photograph 21: Gap in blockwork wall that extends to the exterior

The results of the assessment for the agricultural shed appear in tabular form below;

Table 2: Assessment of survey site to support roosting bats

Building/ Feature	Description	Roost suitability
The agricultural shed	No suitable niches within the building fabric. High ambient light levels within. No evidence of bats found.	Negligible potential to support roosting bats

4.5.2 Ground level roost assessment

Many of the mature ash trees on the perimeter of the site are considered to offer potential for roosting bats, with ivy coverings, split limbs and rot holes noted.



Photograph 22: Rot hole within an ash tree on site



Photograph 23: Split along the limb of an ash tree on site

4.5.3 Assessment of commuting and foraging habitats

There is good connectivity between the site and the wider area, and the survey site is likely to provide foraging and commuting opportunities for local bat populations.

The results of the assessment of the surrounding habitats appear in tabular form below:

Table 3: Assessment of surrounding habitats to support commuting and foraging bats

Feature	Description	Site value for bats
Site and immediate area (<500m)	Grassland, woodland, scrub, ponds, a quarry, Scopwick village and arable fields. Good connectivity via hedgerows. The B1188 to the west may act as a barrier to some bat species.	Moderate potential for foraging and commuting bats
Wider surroundings (500m-3km)	Arable, grassland, woodland, parkland, heathland, scrub, villages and ponds. Connectivity via hedgerows, ditches and woodland edges.	Good potential for foraging and commuting bats

4.6 Birds

4.6.1 Common bird species

A number of common birds were seen or heard during the survey. These are listed below along with their current status as species of principle importance (NERC, 2006) or Birds of Conservation Concern 4 (Eaton et al, 2015):

Table 4: Common bird species seen or heard during the survey

English name	Scientific name	SPI	BoCC
woodpigeon	<i>Columba palumbus</i>		Green
green woodpecker	<i>Picus viridis</i>		Green
magpie	<i>Pica pica</i>		Green
jackdaw	<i>Corvus monedula</i>		Green
rook	<i>Corvus frugilegus</i>		Green
blue tit	<i>Cyanistes caeruleus</i>		Green
long-tailed tit	<i>Aegithalos caudatus</i>		Green
chiffchaff	<i>Phylloscopus collybita</i>		Green
starling	<i>Sturnus vulgaris</i>	Y	Red
blackbird	<i>Turdus merula</i>		Green
robin	<i>Erithacus rubecula</i>		Green
chaffinch	<i>Fringilla coelebs</i>		Green

A total of four disused swallow *Hirundo rustica* nests were found within the agricultural shed, two of which had been taken over by wrens *Troglodytes troglodytes*, along with four disused blackbird nests. A small rookery with a total of three active nests was also noted within the tall ash trees along the northern edge of the site. The agricultural shed and its dense ivy covering, the hedgerows, scrub, brush pile and the trees on the site are all considered to have good nesting potential for common birds.



Photograph 24: Swallow nest taken over by a wren within the shed



Photograph 25: Disused blackbird nest within the shed

4.6.2 Schedule 1 species

No signs of barn owl were noted within the agricultural shed, and no further work or mitigation is required in respect of Schedule 1 birds.

4.7 Habitats and plant species

The habitats and plant species recorded on the site are common and widespread in the local area and in the country, although the northern, southern and eastern boundary hedgerows, which consist of predominantly (>80%) native woody species, are classed as priority habitat.

The plant species recorded are not listed on Schedule 8 or 9 of the Wildlife and Countryside Act 1981 (as amended) and the hedgerows are not species-rich and do not meet the criteria to qualify as 'important' under the Hedgerow Regulations 1997.

Although the site does not meet the required criteria to qualify as a Local Wildlife Site for calcareous grassland (eight scoring species are needed), two scoring species were recorded within the grassland. These species are as follows;

- Common knapweed
- Tor-grass

The woodland areas also contain two scoring species (although 15 are needed for woodland to qualify as a Local Wildlife Site);

- Lord's-and-ladies
- Sweet violet

5 DISCUSSION AND RECOMMENDATIONS

5.1 Great crested newt

5.1.1 Legal Protection

In England, Scotland and Wales, great crested newts are fully protected under the Wildlife and Countryside Act 1981 (and as amended); in England and Wales this legislation has been amended and strengthened by the Countryside and Rights of Way (CRoW) Act 2000. Great crested newts are also protected by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. Taken together, this legislation makes it illegal, inter alia to:

- Intentionally or recklessly kill, injure or capture a great crested newt
- Damage or destroy habitat which a great crested newt uses for shelter or protection
- Deliberately disturb a great crested newt when it is occupying a place it uses for shelter and protection

These provisions apply to all life-stages of protected animals, and in the case of amphibians, to

both their terrestrial and aquatic habitats.

5.1.2 Recommendations

The habitats on site would be highly suitable for great crested newts, and although Pond 1 has poor suitability to support this species and can be scoped out of the survey, Pond 2 could not be assessed.

It will therefore be necessary to determine the status of Pond 2 in relation to great crested newts prior to any development on the site. This is required because loss or damage of land within 100m (in this case approximately 0.7ha) of a great crested newt breeding pond is highly likely to result in an offence being committed, according to the great crested newt risk assessment tool provided by Natural England (see Table 5 below). In addition to this, there is a risk of individual animals being trapped, injured or killed during the works (additional impacts of this are not shown in Table 5).

Table 5: Risk assessment tool showing breach of legislation is highly likely if development occurs and great crested newts are breeding within Pond 2

Component	Likely effect (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)	Notional offence probability score
Great crested newt breeding pond(s)	No effect	0
Land within 100m of any breeding pond(s)	0.5 - 1 ha lost or damaged	0.7
Land 100-250m from any breeding pond(s)	No effect	0
Land >250m from any breeding pond(s)	No effect	0
Individual great crested newts	No effect	0
	Maximum:	0.7
Rapid risk assessment result:	RED: OFFENCE HIGHLY LIKELY	

It is recommended that an environmental DNA (eDNA) test is carried out on Pond 2 to determine the presence/absence of great crested newts. These tests can be carried out between mid-April and the end of June.

If the eDNA test results are positive, then further survey work and mitigation will be required to avoid a breach of the legislation.

5.2 Common reptiles

5.2.1 Legal protection

All four of the common species of native reptiles, that is common lizard, grass snake, slow worm *Anguis fragilis* and adder *Vipera berus*, are given partial protection under the Wildlife and Countryside Act (1981 and as amended) which prohibits the intentional killing, injury or taking of these species. There is no provision in the Act for licensing works which could give rise to an offence, but it does provide a defence where the otherwise unlawful act can be shown to be the

incidental result of an otherwise lawful activity and could not reasonably have been avoided. Permitted development or a development which has received planning permission is clearly a lawful activity but the law does require that a reasonable effort is made to avoid killing or injury of these animals during the implementation of this permission.

5.2.2 Recommendations

As the site is considered to have moderate potential for grass snake and common lizard, a reasonable effort must be made to ensure that no animals are killed or injured during the development works. Adherence to the following precautionary working practices will ensure reptiles are protected.

Precautionary working practices for common reptiles – Vicarage Lane, Scopwick

The aim of these precautionary working practices is to ensure there would be no threat of adverse disturbance, or risk of injury or killing of any reptiles which may be present during the initial phases of work at the above site.

1. Any removal or clearance of trees, the brash pile, scrub or hedgerows, or any groundworks that would impact rabbit burrows must occur **outside** of the reptile hibernation season, which runs between October and March inclusive.
2. All building materials will be stored on pallets to deter reptiles taking shelter underneath them.
3. All site operatives will stay vigilant for the presence of reptiles during the works and will be given a copy of these precautionary working practices.
4. If reptiles are found at any point, works will stop and they will be allowed to move off of their own accord. If they do not move away from the area of operations, then an appropriately experienced ecologist will be required to catch the animal(s), place them in a holding receptacle and release them in suitable habitat nearby.

5.3 Badger

5.3.1 Legal protection

Badgers and their setts are fully protected under the Protection of Badgers Act 1992, which amended and incorporated previous legislation. This Act makes it an offence, inter alia, to:

- Wilfully kill, injure or take, or attempt to kill, injure or capture a badger
- Interfere with a badger sett by doing any of the following things, intending to do any of

these things or be reckless as to whether one's actions would have any of these consequences:

1. Damaging a badger sett or any part of it
2. Destroying a badger sett
3. Obstructing access to, or any entrance of, a badger sett
4. Disturbing a badger when it is occupying a badger sett

A badger sett is defined in the Act as 'any structure or place which displays signs indicating current use by a badger'. A sett is therefore protected as long as such signs remain present. In practice, this could potentially be for a period of several weeks after the last actual occupation of the sett by a badger or badgers. A sett is likely to fall outside the definition of a sett in the Act if the evidence available indicates that it is not in use by badgers.

5.3.2 Recommendations

Vigilance should be maintained for the presence of badgers during the works and advice must be sought if any setts are found. To safeguard ground mammals, including badgers and hedgehogs *Erinaceus europaeus* during the development phase, it is essential that no trenches or pipes are left uncovered overnight unless a suitable escape ramp is provided. No pipes should be left uncapped overnight.

5.4 Bats

5.4.1 Legal protection

In England, Scotland and Wales, all bats are strictly protected under the Wildlife and Countryside Act 1981 (and as amended); in England and Wales this legislation has been amended and strengthened by the Countryside and Rights of Way (CRoW) Act 2000. Bats are also protected by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. Taken together, all this legislation makes it an offence to:

- Deliberately capture (or take), injure or kill a bat
- Intentionally or recklessly disturb a group of bats where the disturbance is likely to significantly affect the ability of the animals to survive, breed, or nurture their young or likely to significantly affect the local distribution or abundance of the species whether in a roost or not.
- Damage or destroy the breeding or resting place of a bat
- Possess a bat (alive or dead) or any part of a bat
- Intentionally or recklessly obstruct access to a bat roost
- Sell (or offer for sale) or exchange bats (alive or dead) or parts of bats

A roost is defined as being 'any structure or place that is used for shelter or protection', and since bats regularly move roost site throughout the year, a roost retains such designation whether or not bats are present at the time.

5.4.2 Recommendations

The preliminary roost assessment indicates that the agricultural shed has negligible potential to support roosting bats, and as per the most recent guidelines (Collins, 2016), no further work or mitigation is required prior to its demolition.

If there are to be any impacts to any of the mature ash trees within the strips of broad-leaved woodland, then further survey work will be required to determine their potential for use by roosting bats.

In addition to the above, the following lighting restrictions are recommended, to avoid any potential impacts on foraging and commuting bats using the site and surrounding areas;

- Any lighting around the new dwellings or access roads should be kept to an absolute minimum. If it is necessary to include some external lighting, this should be carefully designed to minimise disturbance to bats by using down-lights on low bollards rather than up-lights or security style lights on the buildings. Shields must be used to limit light spill. Any external lighting should be sensor-activated and on a timer, to limit light pollution. There should be no light spill onto any adjacent areas or any of the mature ash trees. An example of a bat-friendly lighting solution is the Pharola DS bollard (<https://www.dwwindsor.com/products/pharola/pharola-ds/>).
- Any external lighting used should emit minimal ultra-violet light, be narrow-spectrum (avoiding white and blue wavelengths) and should peak higher than 550nm. Ideally, 'warm-white' LED lights with no UV component would be used. It should be remembered that artificial lighting disrupts and disturbs many animals, including birds and invertebrates, as well as bats. More information is available at <https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/>.

5.5 Birds

5.5.1 Legal protection

All common wild birds are protected under The Wildlife and Countryside Act 1981 (and 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

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.

5.5.2 Recommendations for common bird species

Any demolition works to the agricultural shed, and any tree, scrub, brash pile or hedge removal should commence outside of the active nesting season which typically runs from early March through to early September. If work starts during the bird breeding season, a search for nests should be carried out beforehand, and active nests should be protected until the young fledge. It is recommended that any vegetation removal works are undertaken in late September, to avoid the bird nesting season and the reptile hibernation season. No vegetation removal should be undertaken until the status of Pond 2 in relation to great crested newts is determined.

Replacement nest sites for swallows should be included as part of the development, with the simplest option to build a lean-to or enclosed storage area onto an existing or a new building. Timber nesting ledges should be provided within the lean-to, or nest cups can be installed, such as the No. 10 Schwegler swallow nest (available at www.nhbs.com or www.wildcare.com). These should be located as high as possible to avoid the risk of predation.

5.6 Habitats and plant species

Hedgerows consisting predominantly (80% or more cover) native woody species are a priority habitat, and should be retained where possible. The hedgerows along the northern, eastern and southern boundaries should therefore be retained, and any removal must be replaced by planting at least the amount removed using a mixture of at least five of the native species listed in section 5.7 below.

The broad-leaved woodland and grassland on site do not qualify as Local Wildlife Sites, but both habitats have significance for local wildlife.

It is recommended that the woodland areas along the edges of the site are retained where possible; this will ensure a wildlife corridor around the site and will act as screening for the development. Any individual trees that are removed must be replaced with the native species listed in section 5.7 below.

Areas of longer grass should be allowed to flourish in any public areas of the site. These areas should be left to grow from February through to September and then cut once in late autumn

and again in early spring (and all arisings removed), as there is already significant potential diversity within the sward. If any areas are to be seeded with a wildflower mixture, then a suitable mix such as Emorsgate Seeds EM6 for chalk and limestone soils will be required (available from www.wildseed.co.uk). Any newly seeded wildflower areas must be cut regularly throughout spring and late autumn in the first year to a height of 40-60mm and the arisings removed, to avoid dominant weed species out-competing the wildflowers. Thereafter, these areas should be cut once in spring, and once in late autumn and the arisings removed. There must be no application of herbicides or fertilisers. Further information on the establishment and ongoing management of wildflower meadows is available at www.wildseed.co.uk.

5.7 Recommendations for ecological enhancement

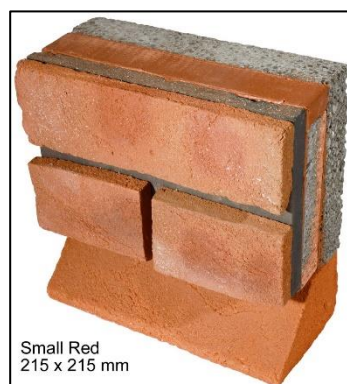
In addition to the legislation which is in place to safeguard protected species, there is also legislation and policy which imposes duties to undertake action to prevent loss of biodiversity and species/habitats of principle importance in the UK. In England and Wales, the Natural Environment and Rural Communities (NERC) Act 2006, imposes a duty on all public bodies (including Local Authorities and statutory bodies) to conserve biodiversity – including restoring and enhancing a population or habitat. In addition, government planning policy guidance throughout the UK, provided in the latest National Planning Policy Framework (February 2019), states that ‘...local planning authorities should apply the following principles’; ‘if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused’.

In order to try and secure biodiversity net gain on site and fulfil the Local Planning Authority’s obligations under the NERC Act 2006, the following outline measures are recommended. A Biodiversity Management Plan or similar is likely to be required by the Local Planning Authority to provide further details of these ecological enhancement measures.

- Any new hedgerows to be planted must comprise native species that provide pollen, nectar and fruit in order to provide a food source for birds and invertebrates. Species should include some of the following; hazel *Corylus avellana*, holly *Ilex aquifolium*, field maple *Acer campestre*, hawthorn *Crataegus monogyna*, blackthorn *Prunus spinosa*, dog rose *Rosa canina*, elder *Sambucus nigra*, wild cherry *Prunus avium*, bird cherry *Prunus padus* and guelder rose *Viburnum opulus*, and should be planted in double rows to ensure a dense hedgerow. Hedgerows should ideally be used in place of fencing or walls.
- The hedgerows along the site boundaries should be appropriately managed by trimming every 2 to 3 years and in sections so that not all parts of the hedgerow are cut

at the same time.

- Any new trees to be planted should include field maple *Acer campestre*, bird cherry *Prunus padus*, pedunculate oak *Quercus robur*, small-leaved lime *Tilia cordata*, holly *Ilex aquifolium*, rowan *Sorbus aucuparia*, hawthorn *Crataegus monogyna*, crab apple *Malus sylvestris* and wild cherry *Prunus avium*, which provide foraging opportunities for various invertebrate and bird species.
- Hedgehog are highly likely to occur on the site. Hedgehog populations have declined by a third in the last 10 years; they are a species of principle importance (NERC, 2006) and were recently classified as ‘vulnerable’ on the IUCN red list due to their decline in the UK. Gardens and green spaces can support high densities of hedgehogs, but habitat fragmentation is thought to be a significant contributor to their decline. Simple solutions within the proposals will ensure connectivity for this species between the site and adjacent areas. To maintain commuting routes for hedgehogs, any solid fences that are installed should have a small hole in the bottom, 13x13cm, or be raised off the ground. Ideally, hedges should be used instead of fencing.
- Install integral bat boxes within the new dwellings for use by pipistrelle *Pipistrelle sp.* bats. The boxes should be of either Woodstone/Habibat or Ibstock design and located as high as possible on the southern or eastern elevations. They should not be placed above windows or doors, where the resultant droppings may become an issue and they must not be subject to external lighting. **These boxes must be installed during the construction phase, as they must be incorporated into the walls.** Suitable bat boxes can be found at www.nhbs.com or www.wildcare.co.uk.



Photograph 26: Ibstock integral bat box (source: www.nhbs.com)

- Install bird nest boxes within the new dwellings, to include provision for house sparrow and starling, both of which are declining in the UK. Nesting features should be integral where possible, and installed on the northern and eastern elevations at a minimum

height of 4 metres (2/3 for house sparrow). Details of nest boxes suitable for use by a range of common bird species can be obtained from www.nhbs.co.uk or www.wildcareshop.co.uk.

6 SUMMARY

Land off Vicarage Lane, Scopwick in Lincolnshire was surveyed in connection with proposals to develop the site for residential use.

eDNA testing of Pond 2 is required to determine the presence or absence of great crested newts before any development commences.

Precautionary working practices in relation to common reptiles are recommended, and lighting restrictions in respect of bats. Further work may be required in respect of bats if any of the mature ash trees are to be impacted.

Vigilance and best practise are required in respect of badgers and ground mammals and appropriate timings for nesting birds.

Ecological enhancements are recommended in order to ensure no net loss to biodiversity and to try and secure a net gain of biodiversity on site. These are as follows:

- Use of native species in the planting/landscaping scheme
- Appropriate creation and management of wildflower areas
- Addition of bird nesting and bat roosting features

7 REFERENCES

CIEEM (2019). *Advice Note on the Lifespan of Ecological Reports and Surveys*. Available at <https://cieem.net/wp-content/uploads/2019/04/Advice-Note.pdf>.

Collins, J. (ed.) (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn)*. The Bat Conservation Trust, London.

Eaton M A *et al* (2015). *Birds of Conservation Concern 4: the population status of birds in the United Kingdom, Channel Islands and Isle of Man*. British Birds 108, pp708–746.

English Nature. (2001). *Great Crested Newt Mitigation Guidelines*. English Nature, Peterborough.

Ferguson Lees J. *et al* (2011). *A Field Guide to Monitoring Nests*, BTO.

Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000). *Evaluating the suitability of habitat for the Great Crested Newt (Triturus cristatus)*. *Herpetological Journal* 10 (4), 143-155.

Pilkington, M (2012). *Wildflower Meadows, Survivors from a Golden Age*. Papadakis, Berkshire.

The Installation of Lighting Professionals (2018), Guidance Note 8 – Bats and Artificial Lighting. Available at <https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/>.

**PRELIMINARY ECOLOGICAL APPRAISAL
LAND OFF VICARAGE LANE, SCOPWICK, LINCOLNSHIRE**

APPENDIX 1

Plant list

ENGLISH NAME

annual meadow-grass
 ash
 bittercress species
 blackthorn
 bramble
 broad-leaved dock
 brooklime
 cherry plum
 cleavers
 cock's-foot
 common chickweed
 common field-speedwell
 common knapweed
 common mouse-ear
 common nettle
 common ragwort
 cow parsley
 crane's-bill species
 creeping bent
 creeping buttercup
 creeping cinquefoil
 daisy
 dandelion
 dog-rose
 elder
 forget-me-not species
 Germander speedwell
 greater plantain
 ground-ivy
 hawthorn
 hedge woundwort
 hemlock
 ivy
 ivy-leaved speedwell
 lesser burdock
 lesser celandine
 lord's-and-ladies

SCIENTIFIC NAME

Poa annua
Fraxinus excelsior
Cardamine sp.
Prunus spinosa
Rubus fruticosus
Rumex obtusifolius
Veronica beccabunga
Prunus cerasifera
Galium aparine
Dactylis glomerata
Stellaria media
Veronica persicaria
Centaurea nigra
Cerastium fontanum
Urtica dioica
Senecio jacobaea
Anthriscus sylvestris
Geranium sp.
Agrostis stolonifera
Ranunculus repens
Potentilla reptans
Bellis perennis
Taraxacum agg.
Rosa canina
Sambucus nigra
Myosotis sp.
Veronica chamaedrys
Plantago major
Glechoma hederacea
Crataegus monogyna
Stachys sylvatica
Conium maculatum
Hedera helix
Veronica hederifolia
Arctium minus
Ficaria verna
Arum maculatum

ENGLISH NAME

SCIENTIFIC NAME

mullein species

Verbascum sp.

musk thistle

Carduus nutans

nipplewort

Lapsana communis

perennial rye-grass

Lolium perenne

red dead-nettle

Lamium purpureum

red fescue

Festuca rubra

rough chervil

Chaerophyllum temulum

snowdrop

Galanthus nivalis

spear thistle

Cirsium vulgare

sweet violet

Viola odorata

tor-grass

Brachypodium pinnatum

vetch species

Vicia sp.

white campion

Silene latifolia subsp. alba

white clover

Trifolium repens

white dead-nettle

Lamium album

**PRELIMINARY ECOLOGICAL APPRAISAL
LAND OFF VICARAGE LANE, SCOPWICK, LINCOLNSHIRE**

**APPENDIX 2
Data search results**


LERC Search Summary Report

Grid Reference: TF 06819 58215
Buffer: 2km

Date of publication: 29/03/2021
Expires: 29/03/2022

Achieving more for nature

Report Details

Produced for	Celia Commowick, CGC Ecology
Search area	

Terms and conditions

1. The data and reports provided by LERC are only to be used for the specific purpose they were produced.
2. The data and any copyright remains the property of GLNP, its licensors and/or the data providers (as applicable), and the data products and services remain the copyright of GLNP.
3. Permission to use the data and reports provided by LERC expires 12 months following supply.

For full terms and conditions see <https://search.glnp.org.uk/terms-and-conditions>

This report summarises a search of statutory sites, non-statutory sites, other sites, habitats and species within the specified area; where no information is returned for a section, it is excluded from this summary report.

About the Lincolnshire Environmental Records Centre

The Lincolnshire Environmental Records Centre (LERC) collates wildlife and geological information for Greater Lincolnshire from various sources and makes it available for various uses. This data is crucial to aid conservation management of sites, to help organisations prioritise action, and to understand the distribution of species and trends over time. For more information on LERC or to request a data search, visit the website at <https://glnp.org.uk/partnership/lerc/>



Lincolnshire Environmental Records Centre is an ALERC accredited LRC, meeting the standard level criteria. For more information on accreditation, see the ALERC website at <http://www.alerc.org.uk/alerc-accreditation.html>

Non-statutory sites

The GLNP works directly with local authorities to coordinate the Local Sites system in Greater Lincolnshire. Sites are selected by the Nature Partnership, based on recommendations made by its expert working groups known as the LWS Panel and LGS Panel. The Register of Local Sites is then submitted for inclusion within local authority planning policy.

These sites are recognition of wildlife or geological value and are a testament to the land management that is already being undertaken on them. Identifying these sites helps local authorities meet their obligations under legislation and government guidance, including reporting on the number of sites in positive management for Single Data List Indicator 160-00.

Code	Designation	Status	Name
1	LWS	Selected	Green Man Lane
2	LWS	Selected	Long Wood, Blankney
3	LWS	Selected	Scopwick Heath Old Quarry
4	LGS	Selected	Longwood Quarry, Blankney

Non-statutory sites within the search area



Leaflet | © Stadia Maps, © OpenMapTiles, © OpenStreetMap contributors, © Crown Copyright and Database Rights (2018) Ordnance Survey (100025370)

Space restrictions on the map may result in some sites not being labelled. Please refer to the site citations for details.



Local Wildlife Site



Search area



Local Geological Site

Other Sites

There are a number of other sites which can be important for the biodiversity they support and as part of the natural environments wider ecological network. For more information on these, please contact the relevant organisation.

Code	Designation	Status	Name
1	Ancient Woodland	Ancient & Semi-Natural Woodland	LONG WOOD
2	Ancient Woodland	Ancient Replanted Woodland	LONG WOOD

Other Sites within the search area



Space restrictions on the map may result in some sites not being labelled.

 Ancient & Semi-Natural Woodland

 Ancient Replanted Woodland

 Search area

Habitats

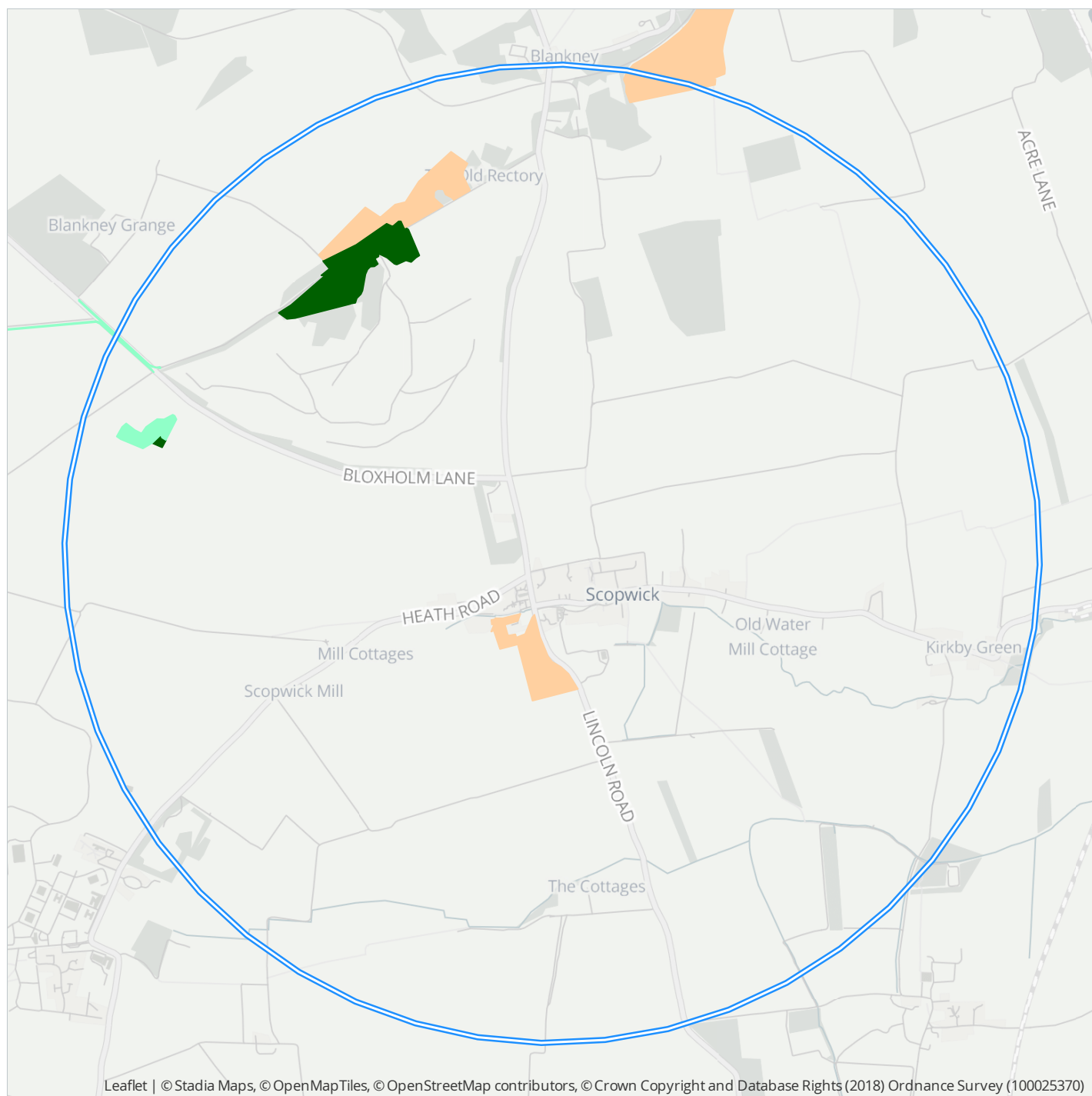
Priority habitats are those identified as being the most threatened and requiring conservation action in the UK. The most-recent list of UK priority species and habitats was published in August 2007 following a 2-year review of the process and priorities, representing the most comprehensive analysis of such information ever undertaken in the UK.

The data presented is the most up-to-date of the data collated by the GLNP and mostly comes from surveys of Local Sites; further historic data and non-Priority habitat data may also be available. Absence of information doesn't mean that the Priority habitat isn't present merely that no information is held.

A number of different datasets have been consulted to produce this report - a summary of attribution statements is available at <https://glnp.org.uk/images/uploads/services/lincolnshire-environmental-records-centre/habitat%20attribution.pdf>.

Type	Habitat	Survey Date	Area (ha)
Priority Habitat	Arable field margins	2019	23.72
Priority Habitat	Lowland calcareous grassland	2008 - 2010	3.71
Priority Habitat	Lowland mixed deciduous woodland	2008 - 2020	8.17

Habitats within the search area



Space restrictions on the map may result in some sites not being labelled.

- Arable field margins
- Lowland mixed deciduous woodland
- Lowland calcareous grassland
- Search area

Species

Lincolnshire Environmental Records Centre holds records on the following species within or overlapping the search area. Data shown is as held by LERC; past records of presence of a species does not guarantee continued occurrence and absence of records does not imply absence of a species, merely that no records are held. Confidential data, zero abundance records, data at poorly defined geographic resolutions and data pending validation and/or verification are also excluded from this report. A number of different datasets have been consulted to produce this report - a summary of attribution statements is available at <https://glnp.org.uk/images/uploads/services/lincolnshire-environmental-records-centre/species%20attribution.pdf>

Amphibian (4 taxa)

Common Frog, <i>Rana temporaria</i>	4	1977 - 1977	Protected
Common Toad, <i>Bufo bufo</i>	1	1977 - 1977	Protected, Priority
Great Crested Newt, <i>Triturus cristatus</i>	1	1977 - 1977	Protected, Priority, Local Priority
Smooth Newt, <i>Lissotriton vulgaris</i>	2	1977 - 2014	Protected, Local Priority

Bird (53 taxa)

Barn Owl, <i>Tyto alba</i>	42	1998 - 2014	Protected, Local Priority
Bewick's Swan, <i>Cygnus columbianus</i>	7	2001 - 2010	Protected
Black Kite, <i>Milvus migrans</i>	1	2008 - 2008	Non-native
Brambling, <i>Fringilla montifringilla</i>	3	1976 - 2012	Protected
Bullfinch, <i>Pyrrhula pyrrhula</i>	20	2004 - 2019	Local Priority
Collared Dove, <i>Streptopelia decaocto</i>	40	2002 - 2017	Non-native
Columba livia 'feral', <i>Columba livia 'feral'</i>	50	2002 - 2006	Non-native
Common Crossbill, <i>Loxia curvirostra</i>	1	2008 - 2008	Protected
Corn Bunting, <i>Emberiza calandra</i>	13	1998 - 2013	Local Priority
Cuckoo, <i>Cuculus canorus</i>	11	2004 - 2017	Priority
Curlew, <i>Numenius arquata</i>	5	2008 - 2010	Priority, Local Priority
Fieldfare, <i>Turdus pilaris</i>	36	1998 - 2019	Protected
Green Sandpiper, <i>Tringa ochropus</i>	2	1998 - 2000	Protected
Greenshank, <i>Tringa nebularia</i>	2	1998 - 1998	Protected
Grey Partridge, <i>Perdix perdix</i>	32	2002 - 2017	Priority, Local Priority, Non-native
Greylag Goose, <i>Anser anser</i>	16	2000 - 2010	Protected
Hen Harrier, <i>Circus cyaneus</i>	2	2008 - 2017	Protected
Hobby, <i>Falco subbuteo</i>	2	1998 - 1999	Protected
Hoopoe, <i>Upupa epops</i>	1	2004 - 2004	Protected
House Sparrow, <i>Passer domesticus</i>	37	2002 - 2019	Priority, Local Priority
Kingfisher, <i>Alcedo atthis</i>	9	1999 - 2014	Protected
Lapwing, <i>Vanellus vanellus</i>	53	1998 - 2016	Priority, Local Priority
Lesser Redpoll, <i>Acanthis cabaret</i>	1	1994 - 1994	Priority
Linnet, <i>Linaria cannabina</i>	28	2002 - 2017	Local Priority
Little Owl, <i>Athene noctua</i>	18	1999 - 2012	Non-native
Little Ringed Plover, <i>Charadrius dubius</i>	2	1998 - 1999	Protected

Bird (53 taxa)

Mandarin Duck, <i>Aix galericulata</i>	4	1998 - 2000	Non-native
Marsh Harrier, <i>Circus aeruginosus</i>	22	1998 - 2010	Protected
Merlin, <i>Falco columbarius</i>	5	1998 - 2006	Protected
Mute Swan, <i>Cygnus olor</i>	26	2002 - 2015	Non-native
Peregrine, <i>Falco peregrinus</i>	5	2004 - 2013	Protected
Pheasant, <i>Phasianus colchicus</i>	58	2002 - 2017	Non-native
Pink-footed Goose, <i>Anser brachyrhynchus</i>	21	1998 - 2011	Non-native
Pintail, <i>Anas acuta</i>	1	2015 - 2015	Protected, Non-native
Pochard, <i>Aythya ferina</i>	2	2005 - 2005	Non-native
Red Kite, <i>Milvus milvus</i>	3	2006 - 2014	Protected
Red-legged Partridge, <i>Alectoris rufa</i>	38	1999 - 2009	Non-native
Redshank, <i>Tringa totanus</i>	6	1998 - 2010	Local Priority
Redwing, <i>Turdus iliacus</i>	7	1998 - 2011	Protected
Reed Bunting, <i>Emberiza schoeniclus</i>	28	1998 - 2005	Priority, Local Priority
Ruddy Duck, <i>Oxyura jamaicensis</i>	1	2007 - 2007	Non-native
Sacred Ibis, <i>Threskiornis aethiopicus</i>	1	2002 - 2002	Non-native
Skylark, <i>Alauda arvensis</i>	42	2002 - 2017	Local Priority
Snipe, <i>Gallinago gallinago</i>	5	2000 - 2005	Local Priority
Song Thrush, <i>Turdus philomelos</i>	22	2002 - 2017	Local Priority
Spotted Flycatcher, <i>Muscicapa striata</i>	12	2001 - 2010	Priority
Starling, <i>Sturnus vulgaris</i>	39	1999 - 2009	Local Priority
Swift, <i>Apus apus</i>	29	1998 - 2019	Local Priority
Tree Sparrow, <i>Passer montanus</i>	11	2004 - 2017	Priority, Local Priority
Turtle Dove, <i>Streptopelia turtur</i>	23	1998 - 2010	Priority, Local Priority
Whooper Swan, <i>Cygnus cygnus</i>	11	2002 - 2015	Protected, Non-native
Yellow Wagtail, <i>Motacilla flava</i>	19	2002 - 2017	Local Priority
Yellowhammer, <i>Emberiza citrinella</i>	25	2003 - 2009	Priority, Local Priority

Crustacean (1 taxa)

Crangonyx pseudogracilis, <i>Crangonyx pseudogracilis</i>	50	1988 - 2014	Non-native
---	----	-------------	------------

Fern (2 taxa)

House Holly-fern, <i>Cyrtomium falcatum</i>	1	2017 - 2017	Non-native
Water Fern, <i>Azolla filiculoides</i>	1	2017 - 2017	Non-native

Flowering Plant (124 taxa)

Apple, <i>Malus pumila</i>	1	2015 - 2015	Non-native
Barren Brome, <i>Bromus sterilis</i>	5	2015 - 2017	Non-native
Basil Thyme, <i>Clinopodium acinos</i>	1	2015 - 2015	Priority
Beaked Hawk's-beard, <i>Crepis vesicaria</i>	2	2017 - 2017	Non-native
Black Horehound, <i>Ballota nigra</i>	4	2015 - 2017	Non-native
Black-bindweed, <i>Fallopia convolvulus</i>	2	2015 - 2017	Non-native
Black-grass, <i>Alopecurus myosuroides</i>	3	2017 - 2017	Non-native
Bluebell, <i>Hyacinthoides non-scripta x hispanica = H. x massartiana</i>	5	2017 - 2017	Non-native
Bluebell, <i>Hyacinthoides non-scripta</i>	3	2017 - 2018	Protected
Bramble, <i>Rubus armeniacus</i>	2	2017 - 2017	Non-native
Bread Wheat, <i>Triticum aestivum</i>	2	2015 - 2017	Non-native
Bristly Oxtongue, <i>Picris echioides</i>	4	2017 - 2017	Non-native
Broad Bean, <i>Vicia faba</i>	1	2017 - 2017	Non-native
Broad-leaved Osier, <i>Salix viminalis x caprea = S. x smithiana</i>	1	2015 - 2015	Non-native
Bugloss, <i>Anchusa arvensis</i>	1	2015 - 2015	Non-native
Butterfly-bush, <i>Buddleja davidii</i>	3	2015 - 2017	Non-native
Canadian Fleabane, <i>Conyza canadensis</i>	1	2015 - 2015	Non-native
Charlock, <i>Sinapis arvensis</i>	3	2017 - 2017	Non-native
Cherry Plum, <i>Prunus cerasifera</i>	3	2015 - 2017	Non-native
Cherry Plum, <i>Prunus cerasifera var. pissardii</i>	1	2017 - 2017	Non-native
Chicory, <i>Cichorium intybus</i>	1	2017 - 2017	Non-native
Common Fiddleneck, <i>Amsinckia micrantha</i>	1	2017 - 2017	Non-native
Common Field-speedwell, <i>Veronica persica</i>	6	2015 - 2017	Non-native
Common Fumitory, <i>Fumaria officinalis subsp. wirtgenii</i>	1	2015 - 2015	Non-native
Common Fumitory, <i>Fumaria officinalis</i>	1	2017 - 2017	Non-native
Common Mallow, <i>Malva sylvestris</i>	2	2017 - 2017	Non-native
Common Poppy, <i>Papaver rhoeas</i>	3	2015 - 2017	Non-native
Common Vetch, <i>Vicia sativa subsp. segetalis</i>	2	2017 - 2017	Non-native
Cornus sanguinea subsp. australis, <i>Cornus sanguinea subsp. australis</i>	2	2017 - 2017	Non-native
Crepis vesicaria subsp. taraxacifolia, <i>Crepis vesicaria subsp. taraxacifolia</i>	1	2017 - 2017	Non-native
Cut-leaved Crane's-bill, <i>Geranium dissectum</i>	8	2015 - 2018	Non-native
Druce's Crane's-bill, <i>Geranium endressii x versicolor = G. x oxonianum</i>	1	2017 - 2017	Non-native
Dwarf Mallow, <i>Malva neglecta</i>	3	2015 - 2017	Non-native
Early Goldenrod, <i>Solidago gigantea</i>	1	2017 - 2017	Non-native
Equal-leaved Knotgrass, <i>Polygonum arenastrum</i>	1	2015 - 2015	Non-native
False-acacia, <i>Robinia pseudoacacia</i>	1	2017 - 2017	Non-native
Feverfew, <i>Tanacetum parthenium</i>	3	2015 - 2017	Non-native
Field Forget-me-not, <i>Myosotis arvensis</i>	5	2017 - 2017	Non-native
Field Pansy, <i>Viola arvensis</i>	3	2015 - 2017	Non-native

Flowering Plant (124 taxa)

Field Penny-cress, <i>Thlaspi arvense</i>	2	2017 - 2017	Non-native
Flowering Currant, <i>Ribes sanguineum</i>	1	2017 - 2017	Non-native
Fox-and-cubs, <i>Pilosella aurantiaca</i>	3	2015 - 2017	Non-native
Garden Grape-hyacinth, <i>Muscari armeniacum</i>	3	2015 - 2017	Non-native
Garden Lady's-mantle, <i>Alchemilla mollis</i>	1	2015 - 2015	Non-native
Garden Pansy, <i>Viola lutea x tricolor x altaica = V. x wittrockiana</i>	1	2017 - 2017	Non-native
Garden Tulip, <i>Tulipa gesneriana</i>	1	2017 - 2017	Non-native
Giant Scabious, <i>Cephalaria gigantea</i>	1	2015 - 2015	Non-native
Gooseberry, <i>Ribes uva-crispa</i>	1	2017 - 2017	Non-native
Greater Periwinkle, <i>Vinca major</i>	2	2017 - 2017	Non-native
Greater Snowdrop, <i>Galanthus elwesii</i>	2	2017 - 2017	Non-native
Green Alkanet, <i>Pentaglottis sempervirens</i>	3	2015 - 2017	Non-native
Ground-elder, <i>Aegopodium podagraria</i>	5	2015 - 2017	Non-native
Guernsey Fleabane, <i>Conyza sumatrensis</i>	1	2017 - 2017	Non-native
Hedge Mustard, <i>Sisymbrium officinale</i>	5	2015 - 2017	Non-native
Hedgerow Crane's-bill, <i>Geranium pyrenaicum</i>	2	2015 - 2015	Non-native
Hemlock, <i>Conium maculatum</i>	1	2017 - 2017	Non-native
Henbit Dead-nettle, <i>Lamium amplexicaule</i>	1	2017 - 2017	Non-native
Hollyhock, <i>Alcea rosea</i>	1	2017 - 2017	Non-native
Holme Willow, <i>Salix viminalis x caprea x cinerea = S. x calodendron</i>	2	2017 - 2017	Non-native
Honesty, <i>Lunaria annua</i>	1	2017 - 2017	Non-native
Horse-chestnut, <i>Aesculus hippocastanum</i>	2	2017 - 2017	Non-native
Horse-radish, <i>Armoracia rusticana</i>	2	2015 - 2018	Non-native
House-leek, <i>Sempervivum tectorum</i>	1	2017 - 2017	Non-native
Hybrid Black-poplar, <i>Populus nigra x deltoides = P. x canadensis</i>	1	2017 - 2017	Non-native
Ivy-leaved Speedwell, <i>Veronica hederifolia</i>	3	2015 - 2017	Non-native
Ivy-Leaved Speedwell, <i>Veronica hederifolia subsp. lucorum</i>	2	2017 - 2017	Non-native
Laburnham, <i>Laburnum anagyroides</i>	1	2017 - 2017	Non-native
Large-flowered Evening-primrose, <i>Oenothera glazioviana</i>	1	2015 - 2015	Non-native
Least Yellow-sorrel, <i>Oxalis exilis</i>	1	2017 - 2017	Non-native
Lilac, <i>Syringa vulgaris</i>	3	2015 - 2017	Non-native
Long Smooth-headed Poppy, <i>Papaver dubium</i>	1	2015 - 2015	Non-native
Mind-your-own-business, <i>Soleirolia soleirolii</i>	1	2017 - 2017	Non-native
Montbretia, <i>Crocsmia pottsii x aurea = C. x crocosmiiflora</i>	1	2017 - 2017	Non-native
Mugwort, <i>Artemisia vulgaris</i>	2	2015 - 2017	Non-native
Narrow-leaved Ash, <i>Fraxinus angustifolia</i>	1	2015 - 2015	Non-native
Norway Maple, <i>Acer platanoides</i>	2	2015 - 2017	Non-native
Opium Poppy, <i>Papaver somniferum</i>	2	2017 - 2017	Non-native
Oregon-grape, <i>Mahonia aquifolium</i>	1	2017 - 2017	Non-native

Flowering Plant (124 taxa)

Osier, <i>Salix viminalis</i>	3	2015 - 2017	Non-native
Peach-leaved Bellflower, <i>Campanula persicifolia</i>	1	2015 - 2015	Non-native
Petty Spurge, <i>Euphorbia peplus</i>	3	2015 - 2017	Non-native
Pineappleweed, <i>Matricaria discoidea</i>	7	2015 - 2018	Non-native
Pink-sorrel, <i>Oxalis articulata</i>	1	2015 - 2015	Non-native
Pot Marigold, <i>Calendula officinalis</i>	1	2017 - 2017	Non-native
Prickly Lettuce, <i>Lactuca serriola</i>	1	2015 - 2015	Non-native
Procumbent Yellow-sorrel, <i>Oxalis corniculata</i>	1	2015 - 2015	Non-native
Purple Toadflax, <i>Linaria purpurea</i>	1	2017 - 2017	Non-native
Rape, <i>Brassica napus</i>	2	2017 - 2017	Non-native
Red Dead-nettle, <i>Lamium purpureum</i>	2	2017 - 2017	Non-native
Red Horse-chestnut, <i>Aesculus carnea</i>	2	2015 - 2017	Non-native
Red Valerian, <i>Centranthus ruber</i>	6	2015 - 2017	Non-native
Rhubarb, <i>Rheum palmatum x rhaponticum = R. x hybridum</i>	1	2015 - 2015	Non-native
Russian Comfrey, <i>Symphytum officinale x asperum = S. x uplandicum</i>	3	2015 - 2017	Non-native
Russian-vine, <i>Fallopia baldschuanica</i>	1	2015 - 2015	Non-native
Rye, <i>Secale cereale</i>	1	2017 - 2017	Non-native
Scented Mayweed, <i>Matricaria chamomilla</i>	1	2015 - 2015	Non-native
Scentless Mayweed, <i>Tripleurospermum inodorum</i>	2	2015 - 2015	Non-native
Shepherd's-purse, <i>Capsella bursa-pastoris</i>	10	2015 - 2018	Non-native
Slender Speedwell, <i>Veronica filiformis</i>	2	2015 - 2017	Non-native
Small Nettle, <i>Urtica urens</i>	3	2015 - 2017	Non-native
Snow-in-summer, <i>Cerastium tomentosum</i>	1	2015 - 2015	Non-native
Snowberry, <i>Symphoricarpos albus</i>	2	2015 - 2017	Non-native
Snowdrop, <i>Galanthus nivalis</i>	3	2017 - 2017	Non-native
Sun Spurge, <i>Euphorbia helioscopia</i>	3	2015 - 2017	Non-native
Swedish Whitebeam, <i>Sorbus intermedia</i>	1	2015 - 2015	Non-native
Swine-cress, <i>Lepidium coronopus</i>	3	2017 - 2017	Non-native
Sycamore, <i>Acer pseudoplatanus</i>	11	2015 - 2018	Non-native
Wall Barley, <i>Hordeum murinum</i>	2	2015 - 2017	Non-native
Wall Cotoneaster, <i>Cotoneaster horizontalis</i>	1	2015 - 2015	Non-native
Walnut, <i>Juglans regia</i>	1	2015 - 2015	Non-native
Water Bent, <i>Polypogon viridis</i>	1	2017 - 2017	Non-native
Weeping Willow, <i>Salix alba x babylonica = S. x sepulcralis</i>	1	2017 - 2017	Non-native
Weld, <i>Reseda luteola</i>	3	2015 - 2017	Non-native
White Campion, <i>Silene latifolia</i>	5	2015 - 2018	Non-native
White Dead-nettle, <i>Lamium album</i>	11	2015 - 2018	Non-native
White Mustard, <i>Sinapis alba</i>	1	2017 - 2017	Non-native
White Poplar, <i>Populus alba</i>	1	2017 - 2017	Non-native
White Stonecrop, <i>Sedum album</i>	3	2015 - 2017	Non-native
Wild Plum, <i>Prunus domestica</i>	2	2017 - 2017	Non-native

Flowering Plant (124 taxa)

Wilson's Honeysuckle, <i>Lonicera nitida</i>	3	2017 - 2017	Non-native
Winter Aconite, <i>Eranthis hyemalis</i>	2	2017 - 2017	Non-native
Winter Heliotrope, <i>Petasites fragrans</i>	1	2015 - 2015	Non-native
Yellow Archangel, <i>Lamium galeobdolon subsp. argentatum</i>	2	2015 - 2017	Non-native
Yellow Corydalis, <i>Pseudofumaria lutea</i>	1	2017 - 2017	Non-native

Insect - Beetle (Coleoptera) (3 taxa)

Bean Seed Beetle, <i>Bruchus rufimanus</i>	1	2012 - 2012	Non-native
Harlequin Ladybird, <i>Harmonia axyridis</i>	3	2012 - 2015	Non-native
Hide Beetle, <i>Dermestes (Dermestinus) maculatus</i>	1	2013 - 2013	Non-native

Insect - Butterfly (5 taxa)

Grayling, <i>Hipparchia semele</i>	1	2018 - 2018	Priority
Small Heath, <i>Coenonympha pamphilus</i>	3	1997 - 2019	Priority
Small Heath, <i>Coenonympha pamphilus pamphilus</i>	1	2019 - 2019	Priority
Wall, <i>Lasiommata megera</i>	1	1996 - 1996	Priority
White-letter Hairstreak, <i>Satyrrium w-album</i>	2	1996 - 1996	Protected, Priority

Insect - Moth (1 taxa)

Cinnabar, <i>Tyria jacobaeae</i>	2	2019 - 2019	Priority
----------------------------------	---	-------------	----------

Mollusc (4 taxa)

Bladder snails, <i>Physa</i>	1	2009 - 2009	Non-native
Bladder snails, <i>Physa fontinalis</i>	12	2007 - 2017	Non-native
Jenkins' Spire Snail, <i>Potamopyrgus antipodarum</i>	82	1972 - 2017	Non-native
Physella acuta, <i>Physella acuta</i>	1	2017 - 2017	Non-native

Reptile (1 taxa)

Grass Snake, <i>Natrix helvetica</i>	7	1977 - 2017	Protected, Priority
--------------------------------------	---	-------------	---------------------

Spider (Araneae) (1 taxa)

Cobweb Spider, <i>Pholcus phalangioides</i>	2	2015 - 2016	Non-native
---	---	-------------	------------

Terrestrial Mammal (14 taxa)

Brown Hare, <i>Lepus europaeus</i>	133	1977 - 2019	Priority
Brown Rat, <i>Rattus norvegicus</i>	3	1977 - 1977	Non-native
Chinese Muntjac, <i>Muntiacus reevesi</i>	16	2009 - 2019	Non-native
Eastern Grey Squirrel, <i>Sciurus carolinensis</i>	13	1977 - 2018	Non-native
Eurasian Badger, <i>Meles meles</i>	2	2018 - 2018	Protected
European Otter, <i>Lutra lutra</i>	2	2009 - 2009	Protected, Priority

Terrestrial Mammal (14 taxa)

European Rabbit, <i>Oryctolagus cuniculus</i>	17	1977 - 2019	Non-native
European Water Vole, <i>Arvicola amphibius</i>	5	1977 - 2018	Protected, Priority, Local Priority
Fallow Deer, <i>Dama dama</i>	1	2019 - 2019	Non-native
Feral Ferret, <i>Mustela putorius subsp. furo</i>	3	2013 - 2015	Protected, Priority, Non-native
Harvest Mouse, <i>Micromys minutus</i>	2	1977 - 1977	Priority
House Mouse, <i>Mus musculus</i>	3	1977 - 1977	Non-native
Polecat, <i>Mustela putorius</i>	1	2015 - 2015	Protected, Priority
West European Hedgehog, <i>Erinaceus europaeus</i>	34	1977 - 2018	Priority

Terrestrial Mammal (bat) (6 taxa)

Bats, <i>Chiroptera</i>	16	2000 - 2019	Protected, Priority, Local Priority
Brown Long-eared Bat, <i>Plecotus auritus</i>	5	1995 - 2015	Protected, Priority, Local Priority
Common Pipistrelle, <i>Pipistrellus pipistrellus sensu stricto</i>	2	2014 - 2014	Protected, Local Priority
Pipistrelle Bat species, <i>Pipistrellus</i>	6	1976 - 2009	Protected, Priority, Local Priority
Soprano Pipistrelle, <i>Pipistrellus pygmaeus</i>	2	2014 - 2014	Protected, Priority, Local Priority
Western Barbastelle, <i>Barbastella barbastellus</i>	2	2014 - 2014	Protected, Priority, Local Priority

Greater Lincolnshire Nature Partnership
Banovallum House
Manor House Street
Horncastle
Lincolnshire
LN9 5HF

Tel: 01507 528398
Email: info@glnp.org.uk
Web: www.glnp.org.uk

Achieving more for nature



GLNP
GREATER LINCOLNSHIRE
NATURE PARTNERSHIP