

Ecological Consultants Environmental and Rural Chartered Surveyors

Ecological Appraisal

Land at Waterworks Lane, Winwick





ACCURACY OF REPORT

This report has been compiled based on the methodology as detailed and the professional experience of the surveyor. Whilst the report reflects the situation found as accurately as possible, all of the protected species this survey covers are wild and can move freely from site to site. Their presence or absence detailed in this report does not entirely preclude the possibility of a different past, current or future use of the site surveyed.

We would ask all clients acting upon the contents of this report to show due diligence when undertaking work on their site and/or in their interaction with protected species. If protected species are found during a work programme, and continuing the work programme could result in their disturbance, injury or death, either directly or indirectly an offence may be committed.

If in doubt, stop work and seek further professional advice.

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	ECUTIVE SUMMARY	
2. IN	TRODUCTION	6
2.1	Background	6
2.2	Objectives	7
3. ME	THODOLOGY AND SOURCES OF INFORMATION	8
3.1	Data Search	
3.2	Vegetation and Habitats	8
3.3	Timing and Personnel	
4. SP	ECIES SURVEY METHODOLOGY	9
4.1	Amphibian	
4.2	Badger	9
4.3	Bats	. 10
4.4	Birds	. 10
4.5	Brown Hare	. 11
4.6	Invertebrates	. 11
4.7	Reptiles	
4.8	Survey limitations	
5. RE	SULTS	
5.1	Data Search	. 13
6. PH	ASE 1 SURVEY RESULTS	. 16
6.1	Habitat Results	. 16
6.2	Vegetation	. 25
6.3	Amphibian	. 25
6.4	Badger	. 26
6.5	Bats	. 26
6.7	Birds	. 30
6.8	Brown Hare	. 30
6.9	Invertebrates	. 30
6.10	Reptiles	. 31
6.11	Other	. 31
6.12	Statutory and Non-Statutory Sites	. 31
7. MI	TIGATION/RECOMMENDATIONS	. 33
7.1	Compensatory planting and habitat enhancement	. 33
7.2	Amphibians	. 33
7.3	Badger	. 34
7.4	Bats	
7.5	Birds	. 35
7.6	Brown Hares	. 35

7.7	Invertebrates	35
7.8	Reptiles	35
CO	NCLUSION	36
REI	FERENCES	37
. A	PPENDIX	38
	7.8 CO REI	7.7 Invertebrates 7.8 Reptiles CONCLUSION REFERENCES APPENDIX

1. EXECUTIVE SUMMARY

- 1.1.1 Envirotech NW Ltd were commissioned in May 2019 by Rowland Homes to carry out an ecological appraisal of land off Waterworks Lane, Winwick. It is proposed that new houses are constructed on the site.
- 1.1.2 A data search and desk study of the site and an area within 2km of the site were undertaken to establish the presence of protected species and notable habitats.
- 1.1.3 The site was then visited by two licenced ecologists from Envirotech NW Ltd on the 16th May 2019. A full botanical survey of the site was initially undertaken and this was followed by surveys to establish the presence or absence of notable species at the site or in proximity such that they may be affected by the proposed development.
- 1.1.4 The plant species assemblages recorded at the site are all common in the local area and are considered to be of low ecological value. Domestic gardens and sympathetically landscaped open space is considered to offer habitat of equal or greater ecological value.
- 1.1.5 None of the hedgerows around the site perimeter were considered important under the Hedgerow Regulations (1997), but all should be retained with adjacent groundflora.
- 1.1.6 The trees on site boundaries, particularly mature oaks on the west boundary, have high ecological value and should be retained under the proposed scheme.
- 1.1.7 The ditch adjacent to the northern hedge may provide refuges for amphibians and small mammals and should be retained.
- 1.1.8 Bats are considered unlikely to roost at the site. It is proposed that some roosting provision for bats will however be incorporated into the new houses on site.
- 1.1.9 Birds are likely to utilise hedges and trees on site for nesting between March and September. Any vegetation clearance should therefore be undertaken outside of this period. It is proposed that some nesting provision for birds will however be incorporated into the new houses on site.
- 1.1.10 No other notable or protected species were recorded on the site.

2. INTRODUCTION

2.1 Background

- 2.1.1 In May 2019 Envirotech NW Ltd were commissioned by Rowland Homes to carry out an Ecological Appraisal of land off Waterworks Lane, central grid reference SJ60897 93120 (Figure 1). A site investigation was undertaken and a report compiled which includes recommendations for any future actions and or mitigation required.
- 2.1.2 The survey was requested in connection with the proposed construction of new houses.



Figure 1 Site location at SJ 60897 93120 outlined red.

2.2 Objectives

- 2.2.1 The main objectives of the study were:
 - The completion of a Phase 1 Habitat Survey including the preparation of a vegetation and habitat map of the site and the immediate surrounding area.
 - The survey and assessment of all habitats for statutorily protected species.
 - An evaluation of the ecological significance of the site.
 - The identification of any potential development constraints and the specification of the scope of mitigation and enhancement required in accordance with wildlife legislation, planning policy and other relevant guidance, and;
 - The identification of any further surveys or precautionary assessments that may be required prior to the commencement of any development activities.

3. METHODOLOGY AND SOURCES OF INFORMATION

3.1 Data Search

- 3.1.1 The Biolodiversity Information System for the local areas, RECORD, the Envirotech dataset, and the Multi-Agency Geographic Information for the Countryside (MAGIC) were searched to establish the presence of any records of statutorily protected, notable or rare species, and any designated sites of international, national, regional or local importance within a 2km radius of the site boundary.
- 3.1.2 The Envirotech dataset is compiled from extensive field surveys from the period 2004present, as well as records obtained from third parties during this time.
- 3.1.3 Google Earth and Google Street View were consulted to establish the presence of any features of ecological importance within the local area.

3.2 Vegetation and Habitats

- 3.2.1 A vegetation and habitat map was produced for the site and the immediate surrounding area. The mapping is based on the Joint Nature Conservation Committee Phase 1 Habitat Survey methodology (JNCC 2003).
- 3.2.2 Searches were made for uncommon, rare and statutorily protected plant species, those species listed as protected in the Wildlife and Countryside Act (1981) and indicators of important and uncommon plant communities. All plant nomenclature follows Stace (1991).
- 3.2.3 Searches were carried out for the presence of invasive species, including those listed on Schedule 9 of the Wildlife and Countryside Act (1981), namely Japanese knotweed (*Fallopia japonica*), Himalayan balsam (*Impatiens glandulifera*) and giant hogweed (*Heracleum mantegazzianum*) on terrestrial habitat and aquatic species such as floating pennywort (*Hydrocotyle ranunculoides*), water hyacinth (*Eichhornia crassipes*) and New Zealand pygmyweed (*Crassula helmsii*).

3.3 Timing and Personnel

- 3.3.1 During the visit, weather conditions were suitable for the survey types undertaken being warm and dry in spring.
- 3.3.2 The site and surrounding land was visited on the 16th May 2019 by
 - (FW) Miss Flora Whitehead BSC (Hons)
 Natural England Bat Class Licence Agent (Level 1)
 - (SC) Miss Sian Comlay BSc (Hons), GradCIEEM
 Natural England Bat Class Licence Agent (Level 1)
 Natural England Great Crested Newt Licence Agent (Level 1)

4. SPECIES SURVEY METHODOLOGY

4.1 Amphibian

- 4.1.1 Great crested newts (*Triturus cristatus*) are listed on Annexes II and IV of the EC Habitats Directive and Appendix II of the Bern Convention. It is protected under Schedule 2 of the Conservation (Natural Habitats) Regulations (2017) and Schedule 5 of the Wildlife & Countryside Act (1981).
- 4.1.2 Water-bodies located within or adjacent to the study area were identified and where access was possible were assessed for their potential to support great crested newts.
- 4.1.3 The criteria used in the assessment are based on those contained in the Herpetofauna Workers Manual and Oldham et al, 2000, and in applying these criteria a precautionary approach was adopted. Following the criteria developed by Oldham et al (2000), the HSI tool developed for use with great crested newts and forming part of Natural England's EPS Licensing process was used to determine the suitability of ponds for great crested newts.
- 4.1.4 The pond assessment was undertaken in order to determine which water-bodies, based on their potential to support great crested newts, should be subject to presence/absence surveys.

4.2 Badger

- 4.2.1 Badgers (*Meles meles*) and their setts are protected under the Protection of Badgers Act (1992). This legislation arises from animal welfare issues (rather than on the basis of nature conservation grounds) and protects badgers from being killed, injured or disturbed whilst occupying a sett.
- 4.2.2 A disturbance to badgers in their setts may occur as a result of construction operations. Natural England recommends that the use of heavy machinery in proximity of a sett entrance should be avoided, with a 'disturbance free-zone' being established.
- 4.2.3 The degree of disturbance attributed to construction activity is a function of the background level of activity badgers are accustomed to and that which will be attributed to a proposed activity. The "disturbance free zone" is therefore site specific.
- 4.2.4 The survey for badgers comprised an assessment of all suitable habitat within and outside the study area boundary (where this was possible) to a distance of 30m for indications of use by badgers.
- 4.2.5 Signs of badgers which were searched for included:
 - Setts 'D' shaped entrances at least 25cms wide and wider than they are high with large spoil mounds
 - Discarded bedding at sett entrances (this includes grass and leaves)
 - Scratching posts on shrubs and trees close to a sett entrance

- The presence of badger hairs which are coarse, up to 100mm long with a long black section and a white tip
- Dung pit latrines and footprints
- Habitual runs through vegetation and beneath fences
- Hedgehog carcases

4.3 Bats

- 4.3.1 All British bat species are fully protected under Schedule 5 of the Wildlife and Countryside Act (1981), and are included on Schedule 2 of the Conservation (of Natural Habitats) Regulations (2017), as European Protected Species. Taken together, these pieces of legislation make it an offence to:
 - Intentionally or recklessly kill, injure or capture bats;
 - Deliberately or recklessly disturb bats (whether in a roost or not);
 - Damage, destroy or obstruct access to bat roosts.
- 4.3.2 The Bat Conservation Trust (Hundt (2012) and Collins, J. (ed) (2016) issued guidelines on bat survey methodology, a key feature of their recommendation is for the undertaking of a pre-survey assessment – an initial desk-study and a walkover assessment of the survey area and its surrounding area to identify the relative value of the habitats present for bats and likely commuting routes. This is to be followed by a survey program that is appropriate to the likely level of bat activity within the survey area to be determined by and based on the experience of the surveyor.
- 4.3.3 The potential value of the survey area for foraging bats was assessed through consideration of two main factors: professional knowledge of bat ecology and foraging behaviour in combination with the geographical location, topography and habitats present within the survey area and surrounds. This resulted in the production of a map showing habitat quality both on and adjacent to the site.
- 4.3.4 Trees and structures on and within the survey area boundary were assessed for their potential to support roosting or hibernating bats. This comprised a close inspection of all trees and buildings on the site to allow an assessment of their potential to be used by bats to be made by a licensed surveyor.
- 4.3.5 Trees were all assessed in accordance with Collins, J. (ed) (2016).

4.4 Birds

4.4.1 All breeding birds, other than pest species, are protected under the Wildlife and Countryside Act of 1981 when building a nest, rearing young or sitting on eggs. Some bird species, such as barn owl (*Tyto alba*), are protected when near an active nest site. Several birds are listed as UK and or County BAP species.

4.4.2 Bird species and behaviour was noted during the other field surveys. All areas are covered equally, in order to avoid the subjective survey of better quality 'bird habitat'. All birds displaying breeding behaviour were recorded.

4.5 Brown Hare

- 4.5.1 The brown hare (*Lepus europaeus*) is a UK BAP species.
- 4.5.2 The survey method involved walking boundaries and surveying with binoculars. The survey was conducted at a suitable distance to ensure that the hares were not disturbed.
- 4.5.3 Where present the number of brown hares in each field or hedgerow was recorded, together with the nature and use of the field, climatic conditions and time of day. The presence of forms and faeces where present were also recorded.

4.6 Invertebrates

- 4.6.1 A general assessment was made of the study area's suitability for supporting invertebrates during the phase 1 survey. The study area's lack of habitat diversity, species-poor composition and uniformity of vegetation structure (i.e., lack of variation in height and microtopography) resulted in our belief that a low diversity of invertebrates would be likely to occur across the site.
- 4.6.2 The presence of invertebrates was noted during the other surveys which were undertaken. The extent of sampling was limited in that it could be confirmed that no priority or BAP species would be likely to be affected by the proposal.

4.7 Reptiles

- 4.7.1 All native reptiles are protected in Britain under the Wildlife and Countryside Act of 1981. It is an offence to intentionally kill, injure, sell or advertise to sell any of the six native species.
- 4.7.2 The survey for these species was based on assessing the habitat type and suitability of the site. This comprised an assessment of satellite imagery for the site and surrounding area as well as comparison of the results from the records searches with habitat types. The general habitat at the site was evaluated in terms of its suitability to reptiles for foraging or breeding.
- 4.7.3 Reptile surveys comprising visual encounter surveys were undertaken. Habitat at the site was not considered sufficiently suitable for a full presence/ absence survey to be warranted.

4.8 Survey limitations

4.8.1 Due to the habitats present on site there were no significant constraints in respect of identifying the botanical interest of the site. Bats were active at the time of the survey.

- 4.8.2 The duration, extent and scope of the surveys were considered sufficient to plan appropriate mitigation and recommend additional precautionary survey work required prior to the commencement of work.
- 4.8.3 No significant survey limitations were encountered.

5. **RESULTS**

5.1 Data Search

- 5.1.1 Envirotech and RECORD hold no records of protected or notable species for the site. There are however records of protected or notable species within 2km (Figure 2). These are discussed in the relevant sections below.
- 5.1.2 The nearest statutory protected site is Highfield Moss SSSI 2km to the north (Figure 3). This is isolated from the site by the M6 motorway.

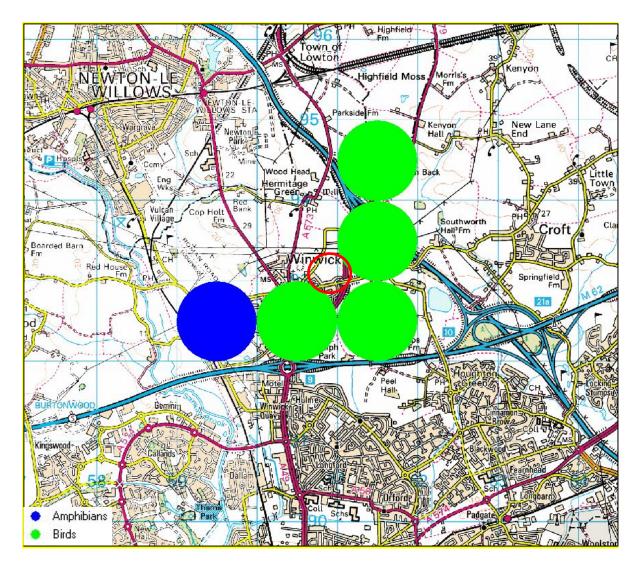


Figure 2 Notable species records, site location is circled red.

MAGIC

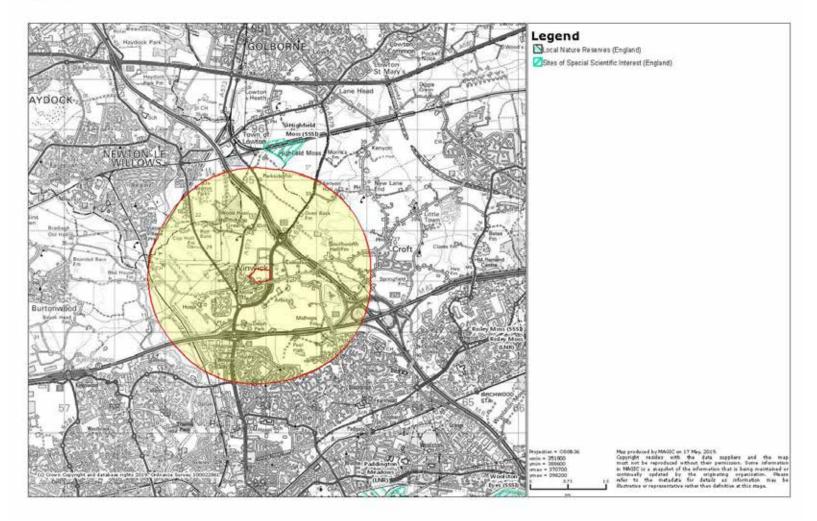


Figure 3 Statutory designated sites 2km buffer.

6. PHASE 1 SURVEY RESULTS

6.1 Habitat Results

- 6.1.1 The site comprises an arable field (currently sown with wheat) hedges and fences on its boundaries. There is the A49 dual carriageway to the east, residential houses of Winwick to the south, Waterworks Lane toe west and pasture to the north.
- 6.1.2 See Figure 4 for the Phase 1 Habitat Plan and Table 1 for the descriptive Botanical and Faunal Target Notes, hereafter referred to as BTN and FTN.

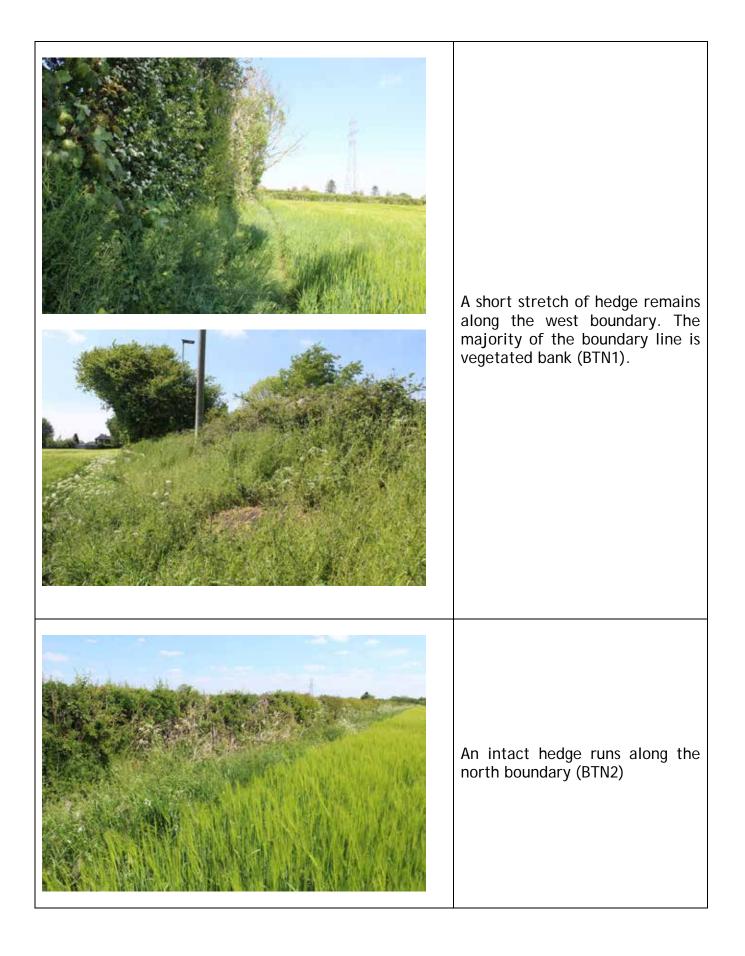
Target Note	Description	Comment	
BTN1 Defunct hedge - species-poor		The west boundary of the site comprises an old hedgeline which no contains only short stretches of hedge and intermittent standard trees (see BTN6). The hedgeline features a bank covered by bramble (<i>Rubus fruticosus</i>), nettle (<i>Urtica dioica</i>) and rosebay willowherb (<i>Chamaenerion angustifolium</i>) and old bracken (<i>Pteridium</i> sp.) from last year, with patches of common fumitory (<i>Fumaria officinalis</i>), creeping thistle (<i>Cirsium arvense</i>) and broad-leaved dock (<i>Rumex obtusifolius</i>). The remaining hedge comprises hawthorn (<i>Cretaegus monogyna</i>) with infrequent sycamore (<i>Acer pseudoplatanus</i>) and elder (<i>Sambucus nigra</i> . Hazel (<i>Corylus avellana</i>) is also present on the boundary. The base of the hedge is dominated by nettle and cleavers (<i>Galium aparine</i>), with occasional raspberry (<i>Rubus idaeus</i>).	
BTN2	Intact hedge - species- poor	This intact hedge has a ditch alongside (see BTN7). The hedge comprises hawthorn with infrequent hazel, holly (<i>llex aquifolium</i>), elder and dog rose (<i>Rosa canina</i>). Nettle cleavers and bracken grow along the base.	
BTN3	Intact hedge - species- poor	This hedge of privet (<i>Ligustrum</i> sp.) and occasional sycamore runs along a short stre of the boundary between the survey site and residential housing of Winwick.	
BTN4	Row or trees	A row of trees, unfenced, along the east boundary is unfenced but has stretches of closely-growing semi-mature trees, with species including bird cherry (<i>Prunus padus</i>), cherry (<i>Prunus avium</i>), alder (<i>Alnus glutinosa</i>), ash (<i>Fraxinus excelsior</i>), maple (<i>Acer</i> sp.), elder, silver birch (<i>Betula pendula</i>) and a small stand of pine trees (<i>Pinus</i> sp.). The ground flora is dominated by cleavers.	
BTN5	Cultivated/disturbed land - Arable	The field is sown with a monoculture of wheat (<i>Triticum</i> sp.) which extends to the field margins on each side. At the main entrance to the field on the west boundary there is scattered cuckoo flower (<i>Cardamine pratensis</i>), pineappleweed (<i>Matacaria discoidea</i>), cow parsley (<i>Anthriscus sylvestris</i>) and cleavers.	
BTN6	Scattered trees - broadleaf	Along the west boundary there are two semi-mature sycamores and three mature oaks (<i>Quercus robur</i>).	

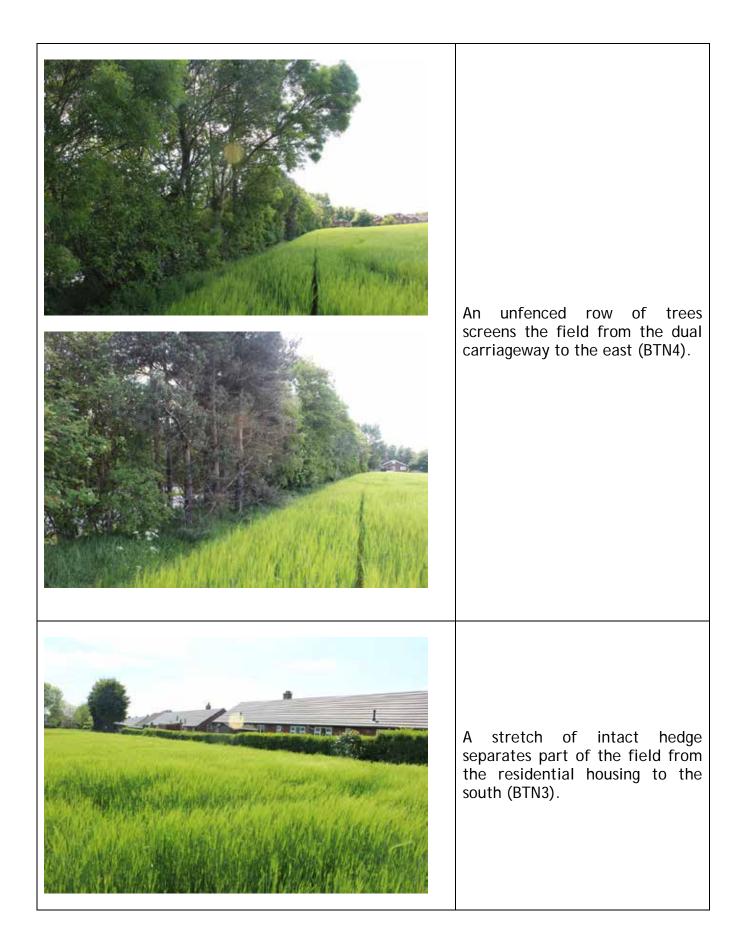
BTN7	Ditch	The ditch along the north boundary has a slow flow of shallow water running toward a culvert in the north-east corner of the field. The ditch is largely overgrown with vegetation, dominated by bramble, cleavers, nettle and cow parsley. Rosebay willowherb, broad-leaved dock, greater stitchwort (<i>Stellaria holostea</i>) and hogweed (<i>Heracleum sphondylium</i>) are also present.	
FTN1	Birds	Birds may nest in the trees and hedges on the site boundary.	
FTN2	Bats	Bats may forage over the site, but are unlikely to roost at the site.	
FTN3	Ditch	The ditch may provide refuge for amphibians such as frogs and toads, but is not suitable for amphibians breeding. There is poor connectivity with other habitat in the local area.	
Table 1 Details of Botanical and Faunal Target Notes.			

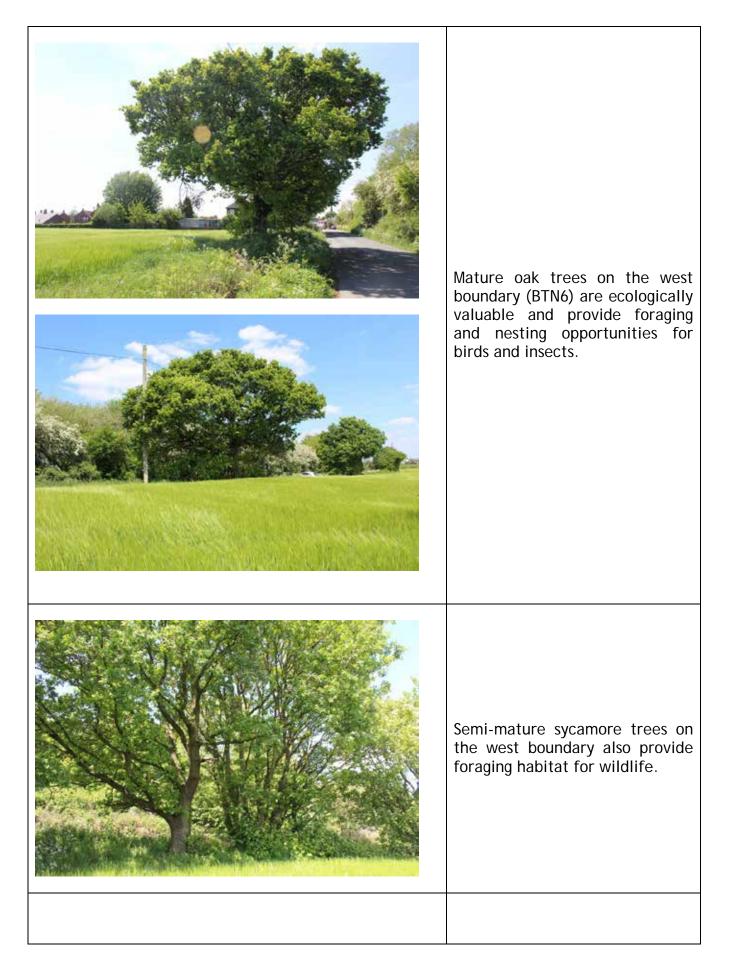


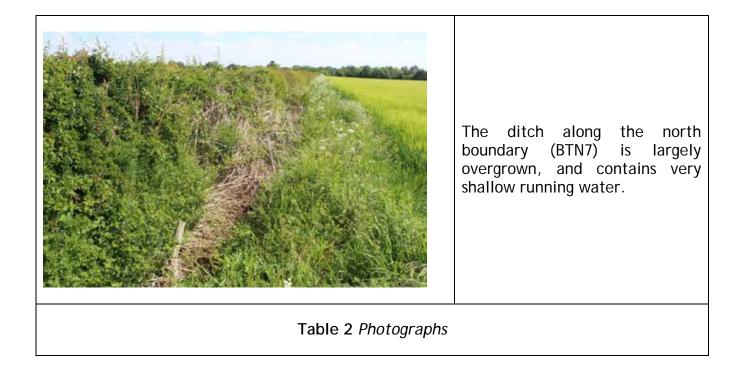
"Habitata outside the site boundary are indicative only and have been mapped from within the site boundary or from publicly accessible land











6.2 Vegetation

- 6.2.1 Details of the plant species found on site are included in the target notes. Species recorded are all commonly occurring and undoubtedly occur elsewhere in similar habitats in the local area.
- 6.2.2 The wheat crop has a very low species diversity and ecological value, though it does provide cover and foraging opportunities for some small mammal and birds. There is greater species diversity and ecological value at the uncultivated field margins.
- 6.2.3 The hedge to the west is defunct in that it is not stock proof, but the remaining stretches of hedge are tall with some species diversity and ecological value. There are also standard oak trees along the west boundary which are highly ecologically valuable.
- 6.2.4 The hedge bounding the site to the north is species poor and contains a low diversity of woody plant species, but has ecological value as it is an intact hedge with a ditch alongside and variety of groundflora.
- 6.2.5 The east boundary comprises a row of semi-mature mixed trees, screening the field from the dual carriageway, and should be retained.
- 6.2.6 The fence and intermittent hedge between the field and the residential housing to the south has a low diversity of species, but the short stretches do proved some cover.
- 6.2.7 All hedgerows are a UK BAP habitat. They should be retained in any proposed scheme and where lengths need to be lost, they should be transplanted or new hedges planted as compensation. None of the hedgerows are classified as important under the Hedgerow Regulations (1997) (See Appendix 1).
- 6.2.8 There is no evidence of Japanese knotweed, giant hogweed or Himalayan balsam on the site. No other invasive or notable weed species listed on Schedule 9 (Section 14) of the Wildlife and Countryside Act (1981) (as amended) was identified within the site or adjacent land.

6.3 Amphibian

- 6.3.1 There are three records for amphibians within 2km of the site, all for common frog (*Rana temporaria*).
- 6.3.2 There is as ditch along adjacent to the hedge on the north boundary. At the time of the survey this contained very shallow water and was largely overgrown. It is not considered to provide suitable breeding habitat for amphibians.
- 6.3.3 There are no records of great crested newt in the local area.
- 6.3.4 The core development area has a low value to amphibians as it is a monoculture of wheat which does not provide foraging opportunities. Arable fields are open and exposed at other times of year, and subject to disturbance as the crop is maintained

and harvested. Whilst not a physical barrier to the dispersal of amphibians, the site is regarded as being a potentially hostile environment to them.

- 6.3.5 The boundary hedgerows and ditch could be utilised as refuges and/or hibernacula but there are no breeding ponds in proximity to the site.
- 6.3.6 Structural diversity at ground level across the site is very poor. There are no areas with log, rubble piles or compost heaps which would be particularly favourable to amphibians. Habitat connectivity is poor in the local area.
- 6.3.7 The proposed development will not result in the permanent loss of or a substantial negative effect on any waterbodies or foraging areas linked to them. Boundary areas which may provide foraging or refuge sites, are to be retained.

6.4 Badger

- 6.4.1 No records of badgers occur within 2km of the site.
- 6.4.2 Badger setts do not occur on site and a lack of feeding signs or runs across the site would suggest that they do not occur within 30m of site boundaries.
- 6.4.3 The proposed development will not impact on any existing badger runs or setts. The porosity of the surrounding fields to the passage of badgers will not be affected.

6.5 Bats

- 6.5.1 There are no records of bats within 2km of the site.
- 6.5.2 The foraging habitat at the site is poor for bat species being open and exposed. The arable field offers negligible foraging opportunities for bats.
- 6.5.3 The trees and hedgerows on the site offer the best foraging habitat for bats on the site as the remainder of it comprises open and exposed monoculture. Whilst these areas of the site are the most structurally diverse but they are not considered exceptional in the local area. More extensive areas of medium and high quality habitat occur locally, including the gardens, woodland and existing residential dwellings adjacent (Figure 5).
- 6.5.4 It is not considered there would be significant degradation of foraging habitat as a result of the proposal so long as the hedgerows and trees are retained and or their loss is compensated for in any landscaping scheme.
- 6.5.5 All trees around the site perimeter were also assessed in accordance with Collins ed. (2016) and assigned a risk category. The majority of the trees on site were category 2 (low) or category 3 (negligible) risk, with no indications of suitable roosting sites within the trees.
- 6.5.6 The two mature oaks on the west boundary (BTN6) were judged to Category 1 (medium) risk. If these trees are to be affected by the proposed development, a further check for roosting bats is required. However, no indications of roosting bats were located within these trees and the poor quality habitat and lack of recorded bats suggests roosting is unlikely. All of the trees could be adequately inspected. Risk

categories from Hundt (2012) and the requirement for mitigation for each tree category are shown on Figure 6.

6.5.7 We consider bat species are highly unlikely to rely on the site for feeding but may occur in the local area. Roosting by bats is unlikely to occur on the site.



Tree category and description	Stage 1 Initial survey requirements	Stage 2 Further measures to inform proposed mitigation	Stage 3 Likely mitigation
Known or confirmed roost	Follow SNCO guidance and these guidelines wherever possible, to establish the extent to which bats use the site. This is particularly important for roosts of high risk species and/or roosts of district or higher importance and above		The tree can be felled only under EPS licence following the installation of equivalent habitats as a replacement.
Category 1* Trees with multiple, highly suitable features capable of supporting larger roosts	Tree identified on a map and on the ground. Further assessment to provide a best expert judgement on the likely use of the roost, numbers and species of bat, by analysis of droppings or other field evidence. <i>A consultant ecologist is</i> <i>required</i>	Avoid disturbance to trees, where possible. Further dusk and pre-dawn survey to establish more accurately the presence, species, numbers of bats present and the type of roost, and to inform the requirements for mitigation if felling is required.	Felling would be undertaken taking reasonable avoidance measures ³ such as 'soft felling' to minimise the risk of harm to individual bats.
Category 1 Trees with definite bat potential, supporting fewer suitable features that category 1* trees or with potential for use by single bats	Tree identified on a map and on the ground. Further assessed to provide a best expert judgement on the potential use of suitable cavities, based on the habitat preferences of bats. <i>A consultant ecologist</i> <i>required</i>	Avoid disturbance to trees, where possible. More detailed, off the ground visual assessment. Further dusk and pre-dawn survey to establish the presence of bats, and if present, the species and numbers of bats and type of roost, to inform the requirements for mitigation if felling is required.	Trees with confirmed roosts following further survey are upgraded to Category 1* and felled under licence as above. Trees with no confirmed roosts may be downgraded to Category 2 dependent on survey findings
Category 2 Trees with no obvious potential, although the tree is of a size and age that elevated surveys may result in cracks or crevices being found; or the tree supports some features which may have limited potential to support bats.	None. A consultant ecologist is unlikely to be required	Avoid disturbance to trees, where possible. No further surveys.	Trees may be felled taking reasonable avoidance measures. Stop works and seek advice in the event bats are found, in order to comply with relevant legislation.
Category 3 Trees with no potential to support bats	None. A consultant ecologist is not required unless new evidence is found	None.	No mitigation for bats required.

Figure 6 Tree risk categories from Hundt (2012).

6.7 Birds

- 6.7.1 There are numerous records of birds within 2km of the site. Starlings (*Sturnus vulgaris*), blackbird (*Turdus merula*) and woodpigeon (*Columba palumbus*) were noted on site during the survey.
- 6.7.2 The hedgerows and trees at the site offer potential habitat for feeding and nesting birds. Theses should be retained.
- 6.7.3 The arable field may provide nesting habitat for certain species, but the disturbance caused by crop maintenance and harvesting reduces the suitability of the site for breeding birds.
- 6.7.4 The oak trees on the west boundary featured a small number of rot holes or cracks in which would could support tree hole nesting species such as woodpeckers.
- 6.7.5 A risk assessment of the site in respect of its future potential for and value to nesting birds could be adequately made.
- 6.7.6 Precautionary mitigation is considered appropriate. The landscaping scheme should include species such as rowan (*Sorbus aucuparia*) which are seed bearing and will provide food for birds in the winter.
- 6.7.7 The habitat on site is not considered to be of anything more than local significance, habitats present are well represented in the local area. The impact on nesting birds is therefore considered likely to be minor if hedges and trees are retained.

6.8 Brown Hare

- 6.8.1 Brown hare are a UK BAP priority species. There are no records of brown hares within 2km of the site.
- 6.8.2 No indication of brown hares was recorded on the site.
- 6.8.3 The site has some potential for brown hares to create forms. Use of the site for foraging by hares is likely to be limited to the early stages of wheat growth when the shoots are tender.
- 6.8.4 A risk assessment of the site in respect of its future potential for and value to brown hares could be adequately made. We consider the risk to brown hares is very low.

6.9 Invertebrates

- 6.9.1 Numerous invertebrates have been recorded within 2km of the site.
- 6.9.2 No deadwood or vegetation on site was recorded which would provide an important resource for invertebrates in the local area.
- 6.9.3 Given the poor quality habitats contained within the site in comparison to the wider area, it is not considered that this site is of any local significance for invertebrates.

- 6.9.4 Hedgerow vegetation has some value to species such as common butterflies.
- 6.9.5 Impacts on the species are considered likely to be negligible if hedgerows and trees on the boundaries are retained; post development domestic gardens will create greater habitat diversity in the area than already exists.
- 6.9.6 Trees on the site boundaries contain comparatively little rotten wood in their canopies.

6.10 Reptiles

- 6.10.1 There are no records for reptiles within 2km of the site.
- 6.10.2 The majority of the site has a very low value to reptiles being devoid of suitable ground cover. There are no areas of the core development area which would be particularly favourable to reptiles.
- 6.10.3 Reptiles may occur along the boundary of the site and this provides linkage across the local landscape. However, habitat connectivity is poor in the area.
- 6.10.4 No indication of reptiles was recorded at the site.
- 6.10.5 As a consequence, precautionary mitigation would be appropriate in respect of construction activities so as to ensure reasonable avoidance measures are taken to avoid the killing or injury of these species.

6.11 Other

- 6.11.1 The boundary hedgerows provide a little potential for use by hedgehog (*Erinaceus europaeus*) and should be retained. Fragmentation of habitat locally and existing land use do not provide optimal conditions for the free passage of this species across the site and slugs and snails are likely to occur only in low numbers.
- 6.11.2 The site may be crossed by species such as fox (*Vulpes vulpes*) and rabbit (*Oryctolagus cuniculus*), which are known to occur locally.
- 6.11.3 The boundary hedgerows may provide suitable habitat for small mammals such as field vole (*Microtus agrestis*) and these area are to be retained.

6.12 Statutory and Non-Statutory Sites

Direct Impacts:

- 6.12.1 There are no statutory or non-statutory sites which are connected to the site such that site development would directly affect the dispersal of species between them or directly impact upon their integrity.
- 6.12.2 The habitats on site do not represent or are linked to those found in any of the statutory or non-statutory sites locally.

Indirect Impacts:

6.12.3 There are no statutory or non-statutory sites which are connected to the site such that site development would indirectly affect the dispersal of species between them or indirectly impact upon their integrity.

7. MITIGATION/RECOMMENDATIONS

7.1 Compensatory planting and habitat enhancement

- 7.1.1 The roots of trees on the site and its boundaries should be adequately protected during work in accordance with industry standards. All trees and hedges (with adjacent groundflora) should as far as possible be retained in the scheme.
- 7.1.2 The mature oak trees on the west boundary and screen of mixed trees on the east boundary should be retained.
- 7.1.3 The landscaping scheme should utilise plants which are native and wildlife friendly. In particular night flowering species would be beneficial to bats. Wildflower seed could be used to plant verges to enhance the ecological value of the site and continuity between the site and the wider area.
- 7.1.4 Hedgerows around the site should be retained or improved where possible. Any lengths of intact hedgerow to be removed to facilitate development should be transplanted and or replanted in order that there is no net negative impact on this BAP habitat due to development. The roots of hedgerow plants/trees should be adequately protected during development from compaction/ground disturbance.
- 7.1.5 If the defunct species poor hedges are removed, transplantation of them is not considered to be of significant ecological benefit as there are no notable species assemblages associated with them, replanting of linear lines of trees/ shrubs would be more beneficial.

7.2 Amphibians

- 7.2.1 There is no requirement for specific mitigation for these species. There are currently no suitable breeding sites on or near the site. However, as a precautionary measure, in the unlikely event that any signs of any amphibian activity is subsequently found, all site works should cease and further ecological advice should be sought with a view to a detailed method statement and programme of mitigation measures being prepared and implemented.
- 7.2.2 In order to further minimise impacts on amphibians the following points should also be followed.
 - All work must take place during daylight hours as amphibians are more likely to be commuting over night and this will ensure the risk to any amphibians commuting through the site will be minimised.
 - During the development, measures should be put in place to discourage amphibians from using the development area, the creation of any piles of earth, materials and rubble which could form potential artificial hibernacula and refuge should be avoided at all times. It is recommended that any spoil or rubble will be removed immediately to skips, or on hard standing or short grass. This will ensure that no potential amphibian hibernation or resting sites are created.

- The storage of all loose materials must be palletised or similar so they are off the ground whenever possible.
- Should any trenches and excavations be required, an escape route for animals that enter the trench must be provided, especially if left open overnight. Ramps should be no greater than of 45 degrees in angle. Ideally, any holes should be securely covered. This will ensure amphibians are not trapped during work.
- All excavations left open overnight or longer should be checked for animals prior to the continuation of works or infilling. Back filling should be completed immediately after any excavations, ideally back filling as an on-going process to the work in hand.

7.3 Badger

- 7.3.1 Badger setts may occur within 2km of the site. These setts will be undisturbed by work but in order to minimise impacts on badgers passing over the site the following points should also be followed.
 - All work must take place during daylight hours as badgers are more likely to be commuting over the site at night and this will ensure the risk to any badgers passing through the site will be minimised.
 - Should any trenches and excavations be required, an escape route for animals that enter the trench must be provided, especially if left open overnight. Ramps should be no greater than of 45 degrees in angle. Ideally, any holes should be securely covered. This will ensure badgers are not trapped during work.
 - All excavations left open overnight or longer should be checked for animals prior to the continuation of works or infilling. Back filling should be completed immediately after any excavations, ideally back filling as an on-going process to the work in hand.
 - Boundary fences/walls should incorporate gaps at their base to facilitate the passage of badgers across the site.

7.4 Bats

- 7.4.1 Work at night should be restricted, new planting within the site should enhance structural diversity and light spill onto the boundary should be minimised.
- 7.4.2 New roosting provision for crevice dwelling bats could be incorporated into the buildings on site or bat boxes could be erected in retained trees.
- 7.4.3 Any category or 1 or 2 trees to be felled should be re-inspected for bats to confirm they remain absent.
- 7.4.4 Overall it is considered there is more than sufficient scope for mitigation and compensation at the site such that there will be no adverse impact on the favourable conservation status of bats affected by the proposal.

7.5 Birds

- 7.5.1 Nesting by birds within the development area is considered unlikely to occur. Birds may nest within hedges and trees on the periphery of the site.
- 7.5.2 Any vegetation to be trimmed or cleared should be checked for nesting birds before it is removed. Ideally this should occur outside the bird nesting period March-September. If vegetation clearance is to occur in the March-September period a check for nesting birds should be conducted first by a suitably qualified individual.
- 7.5.3 New planting within the site and the retention of trees and shrubs on the site boundary will maintain the ecological functionality of the site for breeding birds.
- 7.5.4 Artificial bird nesting sites for swallow and swift could be incorporated into the new buildings under the eaves in suitable locations.
- 7.5.5 If nesting birds are found at the site all site works shall cease and further ecological advice shall be sought with a view to a detailed method statement and programme of mitigation measures being prepared and implemented.

7.6 Brown Hares

- 7.6.1 There is no requirement for specific mitigation for this species. However, as a precautionary measure, in the unlikely event that any signs of any brown hare activity is subsequently found, all site works should cease and further ecological advice should be sought with a view to a detailed method statement and programme of mitigation measures being prepared and implemented.
- 7.6.2 The points in respect of not working at night and leaving open trenches with means of escape detailed for badgers are also applicable to this species.

7.7 Invertebrates

7.7.1 Landscaping should include native or wildlife friendly species including night flowering plants.

7.8 Reptiles

- 7.8.1 There is no requirement for specific mitigation for these species. However, as a precautionary measure, in the unlikely event that any signs of any reptile activity is subsequently found, all site works should cease and further ecological advice should be sought with a view to a detailed method statement and programme of mitigation measures being prepared and implemented.
- 7.8.2 The points in respect of not leaving open trenches without means of escape detailed for badgers are also applicable to these species.

8. CONCLUSION

- 8.1.1 Ecological surveys, site appraisals and impact assessments were carried out with respect to land comprising an arable field at Waterworks Lane, Winwick. It is proposed new houses will be constructed on the site.
- 8.1.2 Amphibians and nesting birds are known to occur in the local area. There was however no conclusive evidence of any specifically protected species regularly occurring on the site or the surrounding areas which would be negatively affected by site development following the mitigation proposed.
- 8.1.3 The vegetation to be cleared has a low ecological significance in the local area; the trees and hedges on the site boundaries are to be retained.
- 8.1.4 The protection of trees on the site boundary and landscaping will promote structural diversity in both the canopy and at ground level and will encourage a wider variety of wildlife to use the site than already occurs.
- 8.1.5 Contractors will be observant for protected species and all nesting birds. Should any species be found during construction, all site works should cease and further ecological advice should be sought with a view to a detailed method statement and programme of mitigation measures being prepared and implemented.

9. **REFERENCES**

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10. APPENDIX

Feature	h 20m +	is not bounding the curtilage of ng	established more than 30years	e boundary of protected or on land or land used for lture or forestry	HISTORY	Archaeological feature which is included in the schedule of monuments	Situated wholly or partly within an archaeological site	oundary of a pre-1600 AD estate	al part of a field system	ted species records		or wall	less than 10%	ard trees		Parallel hedge	ath/ Bridleway	Connection points	y species	ge ground flora species	JE CLASSIFIED AS BRTANT
	Length	Hedge is dwelling	Hedge	Hedge bc common agriculture	AND			В	Integral	Protected		Bank	Gaps	Standard	Ditch		Footpath/	Conn	Woody	Average	HEDGE IMPORT
BTN1	Yes	Yes	Yes	Yes		No*	No*	No*	No*	No		Yes	No	Yes	No	Yes	No	1	3	0	No
BTN2	Yes	Yes	Yes	Yes	OGY	No*	No*	No*	No*	No		No	Yes	No	Yes	No	No	2	4	0	No
BTN3	Yes	No	Yes	Yes		No*	No*	No*	No*	No	S	No	Yes	No	No	No	No	0	2	0	No
	$\mathbf{No} = A$	Automati	ic failur	e	ARCHAEOL	Yes = Au	Yes = Automatic pass		FEATURES	5 wo		pecies	+ 4 fe					res or woody			

* Historic and archaeological records have not been checked for this site.





Using this document

In order to navigate this document easily please enable the bookmark tool view using the bookmark icon on the left of your screen:



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Interpretation of the data

- <u>Species maps</u>: The species maps show the location of protected, notable and Invasive non-native species grouped by taxon. The numbers in brackets adjacent to the species names relate to the grid ID shown on the maps. Records with a grid reference accuracy of 10m square or above are minimised to a 100m square. Where there are more than 100 grid IDs on a map the grid references will be minimised to 1km. The full grid reference can be found within the full record in this report or in the excel spreadsheet of raw data.
- <u>Attribute data</u>: Where available all attribute data is provided with the records. Sex and life stage information as well as the record type all allow greater interpretation of information available. However it is not always possible to provide this information.
- <u>Species designation Status</u>: The species designation information provided within this enquiry output is based on the best available information provided through the JNCC: *Conservation designations of UK Taxa* list. Information on the limitations to this list is available here: (http://jncc.defra.gov.uk/page-3408)

<u>Site/habitat data:</u> Due to changes in the NBN web services we are currently unable to provide site and observation data from the NBN, this does not affect local sites. Information for statutory sites can be found at http://www.natureonthemap.naturalengland.org.uk/MagicMap.aspx and sites and NBN taxa observations at http://www.natureonthemap.naturalengland.org.uk/MagicMap.aspx and sites and NBN taxa observations at https://spatial.nbnatlas.org.
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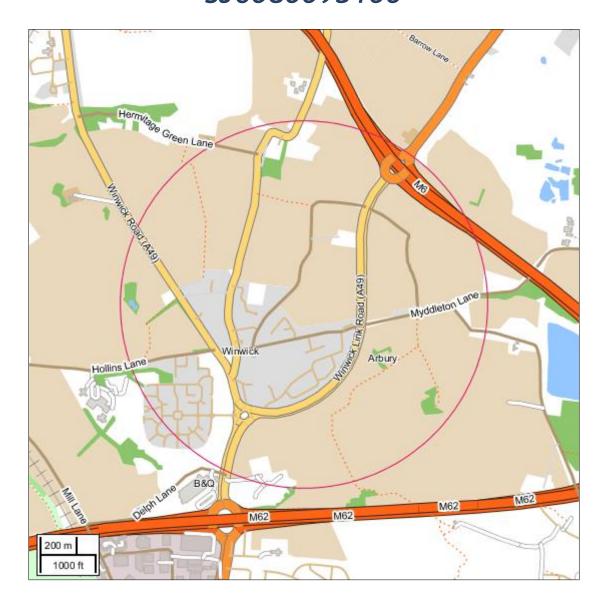


Table of Contents

Interpretation of the data	1
Table of Contents	3
Designated Species Summary	5
Species Report	8
AMPHIBIAN	8
Мар	8
Common Frog (Rana temporaria) (1,2)	9
BIRD	10
Мар	10
Bullfinch (Pyrrhula pyrrhula) (6)	11
Dunnock (Prunella modularis) (1,4,6,7)	11
Grey Partridge (Perdix perdix) (1,2,4,6,7)	11
House Sparrow (Passer domesticus) (1,2,4,6,7)	12
Fieldfare (Turdus pilaris) (1,4,6,7)	13
Kestrel (Falco tinnunculus) (1,2,4,6,7)	14
Gadwall (Anas strepera) (7)	15
Canada Goose (Branta canadensis) (4,7)	15
Greenshank (Tringa nebularia) (7)	
Mallard (Anas platyrhynchos) (4,6,7)	
Herring Gull (Larus argentatus) (1,4,6,7)	
Little Grebe (Tachybaptus ruficollis) (7)	17
Black-headed Gull (Chroicocephalus ridibundus) (4,7)	17
Lapwing (Vanellus vanellus) (1,2,4,6,7)	
Black Tern (Chlidonias niger) (7)	19
Mistle Thrush (Turdus viscivorus) (1,4,6,7)	
Misute minusin (Turuus viscivorus) (1,4,6,7)	
Common Gull (Larus canus) (1,4,6,7)	
	20
Common Gull (Larus canus) (1,4,6,7)	20 20
Common Gull (Larus canus) (1,4,6,7) Black-necked Grebe (Podiceps nigricollis) (7)	20 20
Common Gull (Larus canus) (1,4,6,7) Black-necked Grebe (Podiceps nigricollis) (7) Little Ringed Plover (Charadrius dubius) (7)	
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Common Gull (Larus canus) (1,4,6,7) Black-necked Grebe (Podiceps nigricollis) (7) Little Ringed Plover (Charadrius dubius) (7) Grey Wagtail (Motacilla cinerea) (7) Corn Bunting (Emberiza calandra) (1,4,6,7)	20 20 20 21 21 21 21 21 22
Common Gull (Larus canus) (1,4,6,7) Black-necked Grebe (Podiceps nigricollis) (7) Little Ringed Plover (Charadrius dubius) (7) Grey Wagtail (Motacilla cinerea) (7) Corn Bunting (Emberiza calandra) (1,4,6,7) Merlin (Falco columbarius) (4,7)	20 20 21 21 21 21 21 22 22 22
Common Gull (Larus canus) (1,4,6,7) Black-necked Grebe (Podiceps nigricollis) (7) Little Ringed Plover (Charadrius dubius) (7) Grey Wagtail (Motacilla cinerea) (7) Corn Bunting (Emberiza calandra) (1,4,6,7) Merlin (Falco columbarius) (4,7) Hobby (Falco subbuteo) (4,7)	20 20 21 21 21 21 21 22 22 22 22
Common Gull (Larus canus) (1,4,6,7) Black-necked Grebe (Podiceps nigricollis) (7) Little Ringed Plover (Charadrius dubius) (7) Grey Wagtail (Motacilla cinerea) (7) Corn Bunting (Emberiza calandra) (1,4,6,7) Merlin (Falco columbarius) (4,7) Hobby (Falco subbuteo) (4,7) Meadow Pipit (Anthus pratensis) (1,2,4,6)	20 20 21 21 21 21 22 22 22 22 22
Common Gull (Larus canus) (1,4,6,7) Black-necked Grebe (Podiceps nigricollis) (7) Little Ringed Plover (Charadrius dubius) (7) Grey Wagtail (Motacilla cinerea) (7) Corn Bunting (Emberiza calandra) (1,4,6,7) Merlin (Falco columbarius) (4,7) Hobby (Falco subbuteo) (4,7) Meadow Pipit (Anthus pratensis) (1,2,4,6) Lesser Black-backed Gull (Larus fuscus) (4)	20 20 21 21 21 21 22 22 22 22 22 22 22 23
Common Gull (Larus canus) (1,4,6,7) Black-necked Grebe (Podiceps nigricollis) (7) Little Ringed Plover (Charadrius dubius) (7) Grey Wagtail (Motacilla cinerea) (7) Corn Bunting (Emberiza calandra) (1,4,6,7) Merlin (Falco columbarius) (4,7) Hobby (Falco subbuteo) (4,7) Meadow Pipit (Anthus pratensis) (1,2,4,6) Lesser Black-backed Gull (Larus fuscus) (4) Arctic Tern (Sterna paradisaea) (7)	20 20 21 21 21 21 22 22 22 22 22 22 23 23
Common Gull (Larus canus) (1,4,6,7) Black-necked Grebe (Podiceps nigricollis) (7) Little Ringed Plover (Charadrius dubius) (7) Grey Wagtail (Motacilla cinerea) (7) Corn Bunting (Emberiza calandra) (1,4,6,7) Merlin (Falco columbarius) (4,7) Hobby (Falco subbuteo) (4,7) Meadow Pipit (Anthus pratensis) (1,2,4,6) Lesser Black-backed Gull (Larus fuscus) (4) Arctic Tern (Sterna paradisaea) (7) Brambling (Fringilla montifringilla) (1)	20 20 21 21 21 21 22 22 22 22 22 22 22 23 23 23 23
Common Gull (Larus canus) (1,4,6,7) Black-necked Grebe (Podiceps nigricollis) (7) Little Ringed Plover (Charadrius dubius) (7) Grey Wagtail (Motacilla cinerea) (7) Corn Bunting (Emberiza calandra) (1,4,6,7) Merlin (Falco columbarius) (4,7) Hobby (Falco subbuteo) (4,7) Hobby (Falco subbuteo) (4,7) Meadow Pipit (Anthus pratensis) (1,2,4,6) Lesser Black-backed Gull (Larus fuscus) (4) Arctic Tern (Sterna paradisaea) (7) Brambling (Fringilla montifringilla) (1)	20 20 21 21 21 22 22 22 22 22 22 23 23 23 23 23
Common Gull (Larus canus) (1,4,6,7) Black-necked Grebe (Podiceps nigricollis) (7) Little Ringed Plover (Charadrius dubius) (7) Grey Wagtail (Motacilla cinerea) (7) Corn Bunting (Emberiza calandra) (1,4,6,7) Merlin (Falco columbarius) (4,7) Hobby (Falco subbuteo) (4,7) Hobby (Falco subbuteo) (4,7) Meadow Pipit (Anthus pratensis) (1,2,4,6) Lesser Black-backed Gull (Larus fuscus) (4) Arctic Tern (Sterna paradisaea) (7) Brambling (Fringilla montifringilla) (1) Golden Plover (Pluvialis apricaria) (1,6) Barn Owl (Tyto alba) (1,4)	20 20 21 21 21 22 22 22 22 22 22 23 23 23 23 23 23 23
Common Gull (Larus canus) (1,4,6,7) Black-necked Grebe (Podiceps nigricollis) (7) Little Ringed Plover (Charadrius dubius) (7) Grey Wagtail (Motacilla cinerea) (7) Corn Bunting (Emberiza calandra) (1,4,6,7) Merlin (Falco columbarius) (4,7) Hobby (Falco subbuteo) (4,7) Meadow Pipit (Anthus pratensis) (1,2,4,6) Lesser Black-backed Gull (Larus fuscus) (4) Arctic Tern (Sterna paradisaea) (7) Brambling (Fringilla montifringilla) (1) Golden Plover (Pluvialis apricaria) (1,6) Barn Owl (Tyto alba) (1,4) Redwing (Turdus iliacus) (1,4,5,7) Stock Dove (Columba oenas) (1,2,4,6,7) Willow Warbler (Phylloscopus trochilus) (1,6,7)	20 20 21 21 21 22 22 22 22 22 22 23 23 23 23 23 23 23
Common Gull (Larus canus) (1,4,6,7) Black-necked Grebe (Podiceps nigricollis) (7) Little Ringed Plover (Charadrius dubius) (7) Grey Wagtail (Motacilla cinerea) (7) Corn Bunting (Emberiza calandra) (1,4,6,7) Merlin (Falco columbarius) (4,7) Hobby (Falco subbuteo) (4,7) Meadow Pipit (Anthus pratensis) (1,2,4,6) Lesser Black-backed Gull (Larus fuscus) (4) Arctic Tern (Sterna paradisaea) (7) Brambling (Fringilla montifringilla) (1) Golden Plover (Pluvialis apricaria) (1,6) Barn Owl (Tyto alba) (1,4) Redwing (Turdus iliacus) (1,4,5,7) Stock Dove (Columba oenas) (1,2,4,6,7)	20 20 21 21 21 22 22 22 22 22 22 23 23 23 23 23 23 23
Common Gull (Larus canus) (1,4,6,7) Black-necked Grebe (Podiceps nigricollis) (7) Little Ringed Plover (Charadrius dubius) (7) Grey Wagtail (Motacilla cinerea) (7) Corn Bunting (Emberiza calandra) (1,4,6,7) Merlin (Falco columbarius) (4,7) Hobby (Falco subbuteo) (4,7) Meadow Pipit (Anthus pratensis) (1,2,4,6) Lesser Black-backed Gull (Larus fuscus) (4) Arctic Tern (Sterna paradisaea) (7) Brambling (Fringilla montifringilla) (1) Golden Plover (Pluvialis apricaria) (1,6) Barn Owl (Tyto alba) (1,4) Redwing (Turdus iliacus) (1,4,5,7) Stock Dove (Columba oenas) (1,2,4,6,7) Willow Warbler (Phylloscopus trochilus) (1,6,7)	20 20 21 21 21 22 22 22 22 22 22 23 23 23 23 23 23 23
Common Gull (Larus canus) (1,4,6,7) Black-necked Grebe (Podiceps nigricollis) (7) Little Ringed Plover (Charadrius dubius) (7) Grey Wagtail (Motacilla cinerea) (7) Corn Bunting (Emberiza calandra) (1,4,6,7) Merlin (Falco columbarius) (4,7) Hobby (Falco subbuteo) (4,7) Meadow Pipit (Anthus pratensis) (1,2,4,6) Lesser Black-backed Gull (Larus fuscus) (4) Arctic Tern (Sterna paradisaea) (7) Brambling (Fringilla montifringilla) (1) Golden Plover (Pluvialis apricaria) (1,6) Barn Owl (Tyto alba) (1,4) Redwing (Turdus iliacus) (1,2,4,6,7) Stock Dove (Columba oenas) (1,2,4,6,7) Willow Warbler (Phylloscopus trochilus) (1,6,7) Swallow (Hirundo rustica) (1,4,6,7)	20 20 21 21 21 22 22 22 22 22 22 23 23 23 23 23 23 23
Common Gull (Larus canus) (1,4,6,7) Black-necked Grebe (Podiceps nigricollis) (7) Little Ringed Plover (Charadrius dubius) (7) Grey Wagtail (Motacilla cinerea) (7) Corn Bunting (Emberiza calandra) (1,4,6,7) Merlin (Falco columbarius) (4,7) Hobby (Falco subbuteo) (4,7) Meadow Pipit (Anthus pratensis) (1,2,4,6) Lesser Black-backed Gull (Larus fuscus) (4) Arctic Tern (Sterna paradisaea) (7). Brambling (Fringilla montifringilla) (1). Golden Plover (Pluvialis apricaria) (1,6) Barn Owl (Tyto alba) (1,4,5,7). Stock Dove (Columba oenas) (1,2,4,6,7). Willow Warbler (Phylloscopus trochilus) (1,6,7) Swallow (Hirundo rustica) (1,4,6,7).	20 20 21 21 21 22 22 22 22 22 22 22 23 23 23 23 23 23

	Pochard (Aythya ferina) (7)	. 27
	Whitethroat (Sylvia communis) (4,7)	. 27
	Whinchat (Saxicola rubetra) (1)	. 28
	Ringed Plover (Charadrius hiaticula) (7)	. 28
	Peregrine (Falco peregrinus) (1,2)	. 28
	Redshank (Tringa totanus) (6,7)	. 28
	Swift (Apus apus) (1,3,4,6,7)	. 28
	Wheatear (Oenanthe oenanthe) (1)	. 29
	Yellowhammer (Emberiza citrinella) (1,2,4,6,7)	. 29
	Ruddy Duck (Oxyura jamaicensis) (7)	. 30
	Teal (Anas crecca) (7)	. 30
	Tree Sparrow (Passer montanus) (1,2,4,6,7)	. 30
	Pink-footed Goose (Anser brachyrhynchus) (6)	. 31
	Song Thrush (Turdus philomelos) (1,4,6,7)	. 31
	Skylark (Alauda arvensis) (1,2,4,6,7,8)	. 32
	Snipe (Gallinago gallinago) (1)	. 33
	Starling (Sturnus vulgaris) (1,2,4,6,7)	. 33
П	NSECT - MOTH	. 35
	Мар	. 35
	Centre-barred Sallow (Atethmia centrago) (1)	. 36
т	ERRESTRIAL MAMMAL	. 37
	Мар	. 37
	West European Hedgehog (Erinaceus europaeus) (1)	. 38
Site	Boundary Report	. 39
L	.ocal Sites	. 39
	Local Wildlife Sites	. 39
	Regionally Important Geodiversity Sites	. 39
S	tatutory Sites	. 39
C	Other Sites of Conservation Interest	. 39

Designated Species Summary

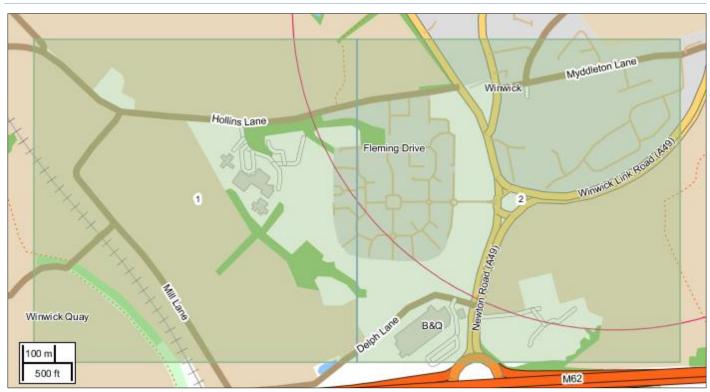
Taxa	Designation name	Occurrence in Cheshire tetrads between 2008-2019 (%)	Occurrence in Cheshire tetrads all years (%)
Arctic Tern (Sterna paradisaea)	Birds of Conservation Concern [RSPB] - Amber	2%	8%
Barn Owl (Tyto alba)	Local Biodiversity Action Plan Species, Wildlife and Countryside Act - Schedule 1, Birds of Conservation Concern [RSPB] - Amber, Wildlife and Countryside Act Schedule 9	24%	58%
Black Tern (Chlidonias niger)	Wildlife and Countryside Act - Schedule 1, Birds of Conservation Concern [RSPB] - Amber	2%	9%
Black-headed Gull (Chroicocephalus ridibundus)	Birds of Conservation Concern [RSPB] - Amber	25%	42%
Black-necked Grebe (Podiceps nigricollis)	Local Biodiversity Action Plan Species, Wildlife and Countryside Act - Schedule 1, Birds of Conservation Concern [RSPB] - Amber	2%	4%
Brambling (Fringilla montifringilla)	Wildlife and Countryside Act - Schedule 1	10%	23%
Bullfinch (Pyrrhula pyrrhula)	Local Biodiversity Action Plan Species, Birds of Conservation Concern [RSPB] - Amber, NERC S41	23%	70%
Canada Goose (Branta canadensis)	Invasive Non-Native Species, Wildlife and Countryside Act Schedule 9	28%	53%
Centre-barred Sallow (Atethmia centrago)	NERC S41, UK BAP Priority Species	1%	6%
Common Frog (Rana temporaria)	Wildlife and Countryside Act - Schedule 5	33%	63%
Common Gull (Larus canus)	Birds of Conservation Concern [RSPB] - Amber	11%	26%
Corn Bunting (Emberiza calandra)	Local Biodiversity Action Plan Species, Birds of Conservation Concern [RSPB] - Red, NERC S41	2%	38%
Dunnock (Prunella modularis)	Birds of Conservation Concern [RSPB] - Amber, NERC S41	31%	83%
Fieldfare (Turdus pilaris)	Wildlife and Countryside Act - Schedule 1, Birds of Conservation Concern [RSPB] - Red	22%	40%
Gadwall (Anas strepera)	Birds of Conservation Concern [RSPB] - Amber	8%	13%
Golden Plover (Pluvialis apricaria)	Birds of Conservation Concern [RSPB] - Amber	6%	17%
Greenshank (Tringa nebularia)	Wildlife and Countryside Act - Schedule 1	4%	12%
Grey Partridge (Perdix perdix)	Local Biodiversity Action Plan Species, Birds of Conservation Concern [RSPB] - Red, NERC S41,	7%	58%

	UK BAP Priority Species		
Grey Wagtail (Motacilla cinerea)	Birds of Conservation Concern [RSPB] - Amber	16%	46%
Herring Gull (Larus argentatus)	Birds of Conservation Concern [RSPB] - Red	17%	36%
Hobby (Falco subbuteo)	Wildlife and Countryside Act - Schedule 1	10%	19%
House Sparrow (Passer domesticus)	Local Biodiversity Action Plan Species, Birds of Conservation Concern [RSPB] - Red, NERC S41, UK BAP Priority Species	35%	84%
Kestrel (Falco tinnunculus)	Birds of Conservation Concern [RSPB] - Amber	36%	79%
Lapwing (Vanellus vanellus)	Local Biodiversity Action Plan Species, Birds of Conservation Concern [RSPB] - Red, NERC S41, UK BAP Priority Species	27%	78%
Lesser Black-backed Gull (Larus fuscus)	Birds of Conservation Concern [RSPB] - Amber	16%	31%
Little Grebe (Tachybaptus ruficollis)	Birds of Conservation Concern [RSPB] - Amber	11%	30%
Little Ringed Plover (Charadrius dubius)	Wildlife and Countryside Act - Schedule 1	3%	14%
Mallard (Anas platyrhynchos)	Birds of Conservation Concern [RSPB] - Amber	43%	82%
Meadow Pipit (Anthus pratensis)	Birds of Conservation Concern [RSPB] - Amber	15%	45%
Merlin (Falco columbarius)	Wildlife and Countryside Act - Schedule 1, Birds of Conservation Concern [RSPB] - Amber	6%	14%
Mistle Thrush (Turdus viscivorus)	Birds of Conservation Concern [RSPB] - Amber	22%	80%
Oystercatcher (Haematopus ostralegus)	Birds of Conservation Concern [RSPB] - Amber	14%	23%
Peregrine (Falco peregrinus)	Wildlife and Countryside Act - Schedule 1	11%	19%
Pink-footed Goose (Anser brachyrhynchus)	Birds of Conservation Concern [RSPB] - Amber	10%	16%
Pochard (Aythya ferina)	Birds of Conservation Concern [RSPB] - Amber	6%	18%
Redshank (Tringa totanus)	Birds of Conservation Concern [RSPB] - Amber	9%	22%
Redwing (Turdus iliacus)	Wildlife and Countryside Act - Schedule 1, Birds of Conservation Concern [RSPB] - Red	20%	38%
Reed Bunting (Emberiza schoeniclus)	Local Biodiversity Action Plan Species, Birds of Conservation Concern [RSPB] - Amber, NERC S41, UK BAP Priority Species	19%	72%
Ringed Plover (Charadrius hiaticula)	Birds of Conservation Concern [RSPB] - Amber	4%	15%

Ruddy Duck (Oxyura jamaicensis)	Invasive Non-Native Species, Wildlife and Countryside Act Schedule 9	3%	15%	
Sand Martin (Riparia riparia)	Birds of Conservation Concern [RSPB] - Amber	8%	34%	
Skylark (Alauda arvensis)	Local Biodiversity Action Plan Species, Birds of Conservation Concern [RSPB] - Red, NERC S41	19%	85%	
Snipe (Gallinago gallinago) Birds of Conservation Concern [RSPB] - Amber		14%	53%	
Song Thrush (Turdus philomelos)Local Biodiversity Action Plan Species, Birds of Conservation Concern [RSPB] - Red		33%	87%	
Starling (Sturnus vulgaris)	Local Biodiversity Action Plan Species, Birds of Conservation Concern [RSPB] - Red, NERC S41	30%	86%	
Stock Dove (Columba oenas)	Birds of Conservation Concern [RSPB] - Amber	12%	65%	
Swallow (Hirundo rustica)	Birds of Conservation Concern [RSPB] - Amber	46%	86%	
Swift (Apus apus)	Birds of Conservation Concern [RSPB] - Amber	23%	81%	
Teal (Anas crecca)	Birds of Conservation Concern [RSPB] - Amber	12%	28%	
Tree Sparrow (Passer montanus)	Local Biodiversity Action Plan Species, Birds of Conservation Concern [RSPB] - Red, NERC S41, UK BAP Priority Species	9%	71%	
Tufted Duck (Aythya fuligula)	Birds of Conservation Concern [RSPB] - Amber	14%	32%	
West European Hedgehog (Erinaceus europaeus)	NERC S41, UK BAP Priority Species	25%	46%	
Wheatear (Oenanthe oenanthe)	Birds of Conservation Concern [RSPB] - Amber	11%	32%	
Whinchat (Saxicola rubetra)	Birds of Conservation Concern [RSPB] - Amber	4%	22%	
Whitethroat (Sylvia communis)	Birds of Conservation Concern [RSPB] - Amber	17%	69%	
Willow Warbler (Phylloscopus trochilus)	Birds of Conservation Concern [RSPB] - Amber	19%	82%	
Yellowhammer (Emberiza citrinella)	Local Biodiversity Action Plan Species, Birds of Conservation Concern [RSPB] - Red, NERC S41, UK BAP Priority Species	14%	77%	

AMPHIBIAN

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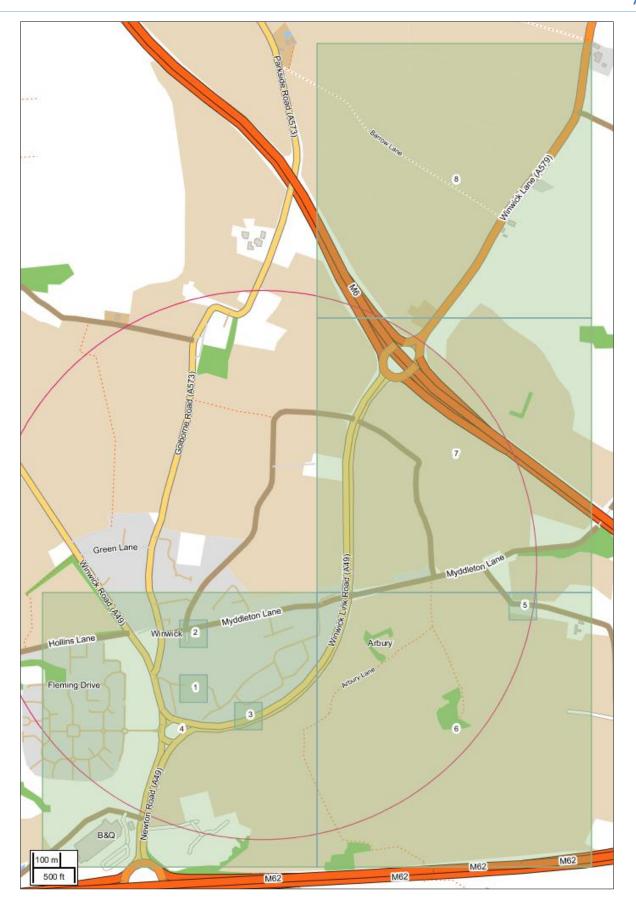


Common Frog (Rana temporaria) (1,2)

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
11 Chesterton Drive, Winwick	SJ6092	2	28/02/2012	None	Numerous	Field Record
Gemini 4 ditch	SJ5992	1	13/03/2008	Ova/Ovum	50 Clumps	Field Record
11 Chesterton Drive	SJ6092	2	23/02/2012	None	7	Field Record

BIRD

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Bullfinch (Pyrrhula pyrrhula) (6)

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Willow / Birch Carr, Peel Hall Area - Comp 17	SJ6192	6	11/01/2012	None	3	Field Record

Dunnock (Prunella modularis) (1,4,6,7)

Location Grid ref. Grid ID Date Sex/Stage Abundance Record type Winwick SJ6192 6 25/04/2012 None 3 Field Record 7 Houghton Green SJ6193 30/05/2011 None 1 Field Record Pool Houghton Green SJ6193 7 12/02/2011 None 1 Field Record Pool Willow / Birch 2 02/04/2012 Field Record SJ6192 6 None Carr, Peel Hall Area - Comp 17 Radley SJ6193 7 29/08/2011 None 4 Field Record Plantation Winwick SJ605926 1 29/11/2012 None 4 Field Record 2 Winwick, SJ6092 4 29/01/2011 None Field Record Myddleton Lane, Winwick Winwick SJ6192 6 26/04/2012 None 4 Field Record **Arbury Pits** SJ6192 6 23/04/2012 None 1 Field Record **Arbury Pits** Field Record SJ6192 6 16/08/2012 None 1 5 Willow / Birch SJ6192 6 24/04/2012 Field Record None Carr, Peel Hall Area - Comp 17

Grey Partridge (Perdix perdix) (1,2,4,6,7)

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Arbury Pits	SJ6192	6	02/04/2012	None	2	Field Record
Houghton Green Pool	SJ6193	7	08/09/2011	None	67	Field Record
Houghton Green Pool	SJ6193	7	25/09/2011	None	37	Field Record
Houghton Green Pool	SJ6193	7	30/05/2011	None	1	Field Record
Arbury	SJ6193	7	03/08/2011	None	16	Field Record
Houghton Green Pool	SJ6193	7	13/09/2011	None	16	Field Record
Houghton Green Pool	SJ6193	7	14/09/2011	None	57	Field Record

RECORD

RECORD

Houghton Green Pool	SJ6193	7	31/07/2011	None	15	Field Record
Houghton Green Pool	SJ6193	7	10/09/2011	None	16	Field Record
Winwick	SJ605926	1	08/10/2012	None	3	Field Record
Winwick	SJ605926	1	05/02/2012	None	3	Field Record
Winwick	SJ605926	1	18/11/2012	None	3	Field Record
Winwick	SJ605926	1	11/05/2012	None	6	Field Record
Myddleton Lane, Winwick	SJ6092	4	08/03/2011	None	6	Field Record
Myddleton Lane , Winwick	SJ6092	4	10/03/2011	None	2	Field Record
Winwick, Myddleton Lane, Winwick	SJ6092	4	08/02/2011	None	5	Field Record
Myddleton Lane, Winwick	SJ6092	4	20/03/2011	None	2	Field Record
Myddleton Lane, Winwick	SJ6092	4	01/03/2011	None	4	Field Record
Winwick	SJ6192	6	25/04/2012	None	2	Field Record
Myddleton Lane	SJ6092	4	30/07/2011	None	4	Field Record
Winwick	SJ605926	1	29/11/2012	None	3	Field Record
Winwick	SJ605926	1	01/02/2012	None	2	Field Record
Winwick	SJ605928	2	02/03/2012	None	4	Field Record
Winwick	SJ605928	2	23/02/2012	None	6	Field Record
Winwick	SJ605928	2	21/02/2012	None	4	Field Record

House Sparrow (Passer domesticus) (1,2,4,6,7)

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Winwick	SJ6192	6	26/04/2012	None	20	Field Record
Willow / Birch Carr, Peel Hall Area - Comp 17	SJ6192	6	13/12/2012	None	19	Field Record
Houghton Green Pool	SJ6193	7	30/05/2011	None	20	Field Record
Houghton Green Pool	SJ6193	7	31/07/2011	None	71	Field Record
Houghton Green Pool	SJ6193	7	02/02/2011	None	30	Field Record
Houghton Green Pool	SJ6193	7	27/08/2011	None	175	Field Record
Arbury	SJ6193	7	25/09/2011	None	10	Field Record

Arbury	SJ6193	7	03/08/2011	None	25	Field Record
Houghton Green Pool	SJ6193	7	08/09/2011	None	60	Field Record
Willow / Birch Carr, Peel Hall Area - Comp 17	SJ6192	6	11/01/2012	None	15	Field Record
Winwick	SJ605926	1	29/11/2012	None	24	Field Record
Winwick	SJ605926	1	08/08/2012	None	24	Field Record
Winwick	SJ605926	1	26/08/2012	None	25	Field Record
Winwick	SJ605928	2	23/02/2012	None	40	Field Record
Winwick	SJ605928	2	21/02/2012	None	59	Field Record
Winwick	SJ605926	1	01/02/2012	None	40	Field Record
Winwick	SJ605926	1	06/08/2012	None	16	Field Record
Hermitage Green Lane	SJ6092	4	09/08/2011	None	100	Field Record
Winwick, Myddleton Lane, Winwick	SJ6092	4	29/01/2011	None	11	Field Record
Winwick, Myddleton Lane, Winwick	SJ6092	4	28/01/2011	None	8	Field Record
Hermitage Green Lane	SJ6092	4	01/08/2011	None	12	Field Record
Winwick	SJ6192	6	25/04/2012	None	12	Field Record
Willow / Birch Carr, Peel Hall Area - Comp 17	SJ6192	6	17/08/2012	None	12	Field Record
Arbury Pits	SJ6192	6	23/04/2012	None	2	Field Record
Willow / Birch Carr, Peel Hall Area - Comp 17	SJ6192	6	24/04/2012	None	57	Field Record
Winwick	SJ605926	1	03/02/2012	None	14	Field Record
Winwick	SJ605928	2	02/03/2012	None	18	Field Record
Arbury Pits	SJ6192	6	16/08/2012	None	20	Field Record
Willow / Birch Carr, Peel Hall Area - Comp 17	SJ6192	6	02/04/2012	None	42	Field Record

Fieldfare (Turdus pilaris) (1,4,6,7)

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Willow / Birch Carr, Peel Hall Area - Comp 17	SJ6192	6	13/12/2012	None	27	Field Record
Houghton Green	SJ6193	7	11/02/2011	None	47	Field Record

Pool						
Winwick, Houghton Green Pool	SJ6193	7	17/02/2011	None	35	Field Record
Houghton Green Pool	SJ6193	7	02/02/2011	None	30	Field Record
Winwick	SJ605926	1	09/02/2012	None	21	Field Record
Winwick, Myddleton Lane, Winwick	SJ6092	4	08/02/2011	None	40	Field Record
Winwick	SJ605926	1	29/11/2012	None	3	Field Record
Winwick	SJ605926	1	05/02/2012	None	1	Field Record
Winwick	SJ605926	1	03/02/2012	None	6	Field Record
Winwick	SJ605926	1	10/12/2012	None	51	Field Record
Winwick	SJ605926	1	18/12/2012	None	62	Field Record

Kestrel (Falco tinnunculus) (1,2,4,6,7)

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Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	7	30/05/2011	None	1	Field Record
Houghton Green Pool	SJ6193	7	08/09/2011	None	2	Field Record
Houghton Green Pool	SJ6193	7	14/09/2011	None	Present	Field Record
Houghton Green Pool	SJ6193	7	03/08/2011	None	2	Field Record
Houghton Green Pool	SJ6193	7	31/07/2011	None	1	Field Record
Houghton Green Pool	SJ6193	7	02/02/2011	None	1	Field Record
Houghton Green Pool	SJ6193	7	27/08/2011	None	1	Field Record
Arbury	SJ6193	7	05/06/2011	None	Present	Field Record
Willow / Birch Carr, Peel Hall Area - Comp 17	SJ6192	6	13/12/2012	None	1	Field Record
Houghton Green Pool	SJ6193	7	10/09/2011	None	2	Field Record
Houghton Green Pool	SJ6193	7	07/09/2011	None	2	Field Record
Winwick	SJ605928	2	02/03/2012	None	4	Field Record
Winwick	SJ605928	2	21/02/2012	None	2	Field Record
Winwick	SJ605926	1	09/09/2012	None	1	Field Record
Winwick	SJ605926	1	01/02/2012	None	1	Field Record

Myddleton Lane	SJ6092	4	30/07/2011	None	2	Field Record
Hermitage Green Lane	SJ6092	4	01/08/2011	None	3	Field Record
Myddleton Lane, Winwick	SJ6092	4	04/03/2011	None	1	Field Record
Myddleton Lane	SJ6092	4	27/09/2011	None	2	Field Record
Myddleton Lane	SJ6092	4	29/09/2011	None	3	Field Record
Arbury Pits	SJ6192	6	16/08/2012	None	2	Field Record
Myddleton Lane , Winwick	SJ6092	4	10/03/2011	None	1	Field Record
Willow / Birch Carr, Peel Hall Area - Comp 17	SJ6192	6	22/09/2012	None	1	Field Record
Arbury Pits	SJ6192	6	21/09/2012	None	1	Field Record
Winwick	SJ6192	6	26/04/2012	None	3	Field Record
Hermitage Green Lane	SJ6092	4	09/08/2011	None	2	Field Record
Winwick, Myddleton Lane, Winwick	SJ6092	4	29/01/2011	None	2	Field Record
Winwick	SJ605926	1	11/09/2012	None	2	Field Record
Myddleton Lane	SJ6092	4	03/08/2011	None	1	Field Record
Winwick	SJ605926	1	09/02/2012	None	1	Field Record

Gadwall (Anas strepera) (7)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	7	04/06/2011	None	4	Field Record
Houghton Green Pool	SJ6193	7	19/08/2011	None	6	Field Record
Houghton Green Pool	SJ6193	7	27/08/2011	None	8	Field Record
Winwick, Houghton Green Pool	SJ6193	7	17/02/2011	None	9	Field Record

Canada Goose (Branta canadensis) (4,7)

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	7	08/09/2011	None	2	Field Record
Houghton Green Pool	SJ6193	7	26/07/2011	None	4	Field Record
Myddleton Lane ,	SJ6092	4	18/03/2011	None	3	Field Record

Greenshank (Tringa nebularia) (7)

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	7	07/09/2011	None	1	Field Record
Houghton Green Pool	SJ6193	7	31/08/2011	None	1	Field Record

Mallard (Anas platyrhynchos) (4,6,7)

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	7	17/09/2011	None	71	Field Record
Winwick, Houghton Green Pool	SJ6193	7	17/02/2011	None	41	Field Record
Houghton Green Pool	SJ6193	7	19/08/2011	None	70	Field Record
Houghton Green Pool	SJ6193	7	26/07/2011	None	23	Field Record
Houghton Green Pool	SJ6193	7	08/09/2011	None	65	Field Record
Houghton Green Pool	SJ6193	7	27/08/2011	None	82	Field Record
Houghton Green Pool	SJ6193	7	13/09/2011	None	68	Field Record
Houghton Green Pool	SJ6193	7	31/08/2011	None	42	Field Record
Houghton Green Pool	SJ6193	7	02/02/2011	None	55	Field Record
Houghton Green Pool	SJ6193	7	04/06/2011	None	4	Field Record
Houghton Green Pool	SJ6193	7	03/08/2011	None	40	Field Record
Houghton Green Pool	SJ6193	7	12/02/2011	None	19	Field Record
Arbury Pits	SJ6192	6	21/09/2012	None	3	Field Record
Houghton Green Pool	SJ6193	7	25/09/2011	None	65	Field Record
Houghton Green Pool	SJ6193	7	31/07/2011	None	27	Field Record
Houghton Green Pool	SJ6193	7	07/09/2011	None	66	Field Record
Houghton Green Pool	SJ6092	4	20/03/2011	None	2	Field Record

RECORD

Arbury Pits	SJ6192	6	23/04/2012	None	8	Field Record
Arbury Pits	SJ6192	6	02/04/2012	None	1	Field Record

Herring Gull (Larus argentatus) (1,4,6,7)

						RECORD
Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	7	26/07/2011	None	1	Field Record
Winwick	SJ605926	1	03/02/2012	None	2	Field Record
Winwick	SJ605926	1	29/11/2012	None	7	Field Record
Winwick, Myddleton Lane, Winwick	SJ6092	4	29/01/2011	None	4	Field Record
Winwick	SJ605926	1	26/08/2012	None	10	Field Record
Arbury Pits	SJ6192	6	10/01/2012	None	1	Field Record

RECORD

RECORD

Little Grebe (Tachybaptus ruficollis) (7)

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	7	27/08/2011	None	4	Field Record
Houghton Green Pool	SJ6193	7	09/09/2011	None	7	Field Record
Houghton Green Pool	SJ6193	7	13/09/2011	None	3	Field Record
Houghton Green Pool	SJ6193	7	14/09/2011	None	3	Field Record
Houghton Green Pool	SJ6193	7	19/08/2011	None	3	Field Record
Houghton Green Pool	SJ6193	7	07/09/2011	None	5	Field Record
Houghton Green Pool	SJ6193	7	31/08/2011	None	5	Field Record
Houghton Green Pool	SJ6193	7	25/09/2011	None	4	Field Record

Black-headed Gull (Chroicocephalus ridibundus) (4,7)

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	7	31/07/2011	None	5	Field Record
Houghton Green Pool	SJ6193	7	17/09/2011	None	214	Field Record
Houghton Green Pool	SJ6193	7	07/09/2011	None	12	Field Record

Houghton Green Pool	SJ6193	7	31/08/2011	None	24	Field Record
Houghton Green Pool	SJ6193	7	19/08/2011	None	30	Field Record
Arbury	SJ6193	7	25/09/2011	None	260	Field Record
Arbury	SJ6193	7	03/08/2011	None	150	Field Record
Houghton Green Pool	SJ6193	7	14/09/2011	None	138	Field Record
Houghton Green Pool	SJ6193	7	13/09/2011	None	46	Field Record
Houghton Green Pool	SJ6193	7	09/04/2011	None	61	Field Record
Winwick, Myddleton Lane, Winwick	SJ6092	4	29/01/2011	None	70	Field Record
Myddleton Lane	SJ6092	4	29/09/2011	None	216	Field Record
Hermitage Green Lane	SJ6092	4	01/08/2011	None	120	Field Record
Myddleton Lane , Winwick	SJ6092	4	18/03/2011	None	64	Field Record

RECORD

Lapwing (Vanellus vanellus) (1,2,4,6,7)

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Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	7	03/08/2011	None	1	Field Record
Winwick, Houghton Green Pool	SJ6193	7	17/02/2011	None	70	Field Record
Houghton Green Pool	SJ6193	7	20/03/2011	None	3	Field Record
Houghton Green Pool	SJ6193	7	26/07/2011	None	1	Field Record
Houghton Green Pool	SJ6193	7	05/04/2011	None	2	Field Record
Houghton Green Pool	SJ6193	7	30/05/2011	None	2	Field Record
Houghton Green Pool	SJ6193	7	27/08/2011	None	18	Field Record
Winwick	SJ605928	2	02/03/2012	None	12	Field Record
Winwick	SJ605926	1	03/02/2012	None	19	Field Record
Winwick	SJ605926	1	29/01/2012	None	250	Field Record
Winwick	SJ605926	1	09/02/2012	None	9	Field Record
Myddleton Lane, Winwick	SJ6092	4	04/03/2011	None	6	Field Record

Myddleton lane	SJ6092	4	24/02/2011	None	2	Field Record
Myddleton Lane, Winwick	SJ6092	4	01/03/2011	None	4	Field Record
Winwick, Myddleton Lane, Winwick	SJ6092	4	08/02/2011	None	30	Field Record
Myddleton Lane	SJ6092	4	27/09/2011	None	51	Field Record
Winwick	SJ6192	6	25/04/2012	None	2	Field Record
Willow / Birch Carr, Peel Hall Area - Comp 17	SJ6192	6	13/12/2012	None	26	Field Record
Winwick	SJ605926	1	18/12/2012	None	210	Field Record
Winwick	SJ605926	1	11/05/2012	None	10	Field Record
Winwick	SJ605926	1	15/05/2012	None	6	Field Record
Winwick	SJ605928	2	21/02/2012	None	44	Field Record

Black Tern (Chlidonias niger) (7)

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	7	13/09/2011	None	2	Field Record
Houghton Green Pool	SJ6193	7	11/09/2011	None	1	Field Record

Mistle Thrush (Turdus viscivorus) (1,4,6,7)

Grid ID Location Grid ref. Date Sex/Stage Abundance Record type 7 2 Field Record SJ6193 11/02/2011 Houghton Green None Pool Houghton Green SJ6193 7 27/08/2011 None 1 Field Record Pool Houghton Green SJ6193 7 02/02/2011 None 3 Field Record Pool 7 2 SJ6193 22/03/2011 Field Record Radley None Plantation SJ605926 10/12/2012 4 Field Record Winwick 1 None SJ605926 09/02/2012 Field Record Winwick 1 None 1 Winwick, SJ6092 4 29/01/2011 None 12 Field Record Myddleton Lane, Winwick Winwick SJ605926 1 01/02/2012 None 1 Field Record SJ605926 Winwick 1 03/02/2012 None 2 Field Record Winwick SJ6192 6 26/04/2012 None 1 Field Record Willow / Birch SJ6192 13/12/2012 5 Field Record 6 None

RECORD

Common Gull (Larus canus) (1,4,6,7)

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	7	14/09/2011	None	4	Field Record
Houghton Green Pool	SJ6193	7	13/09/2011	None	3	Field Record
Houghton Green Pool	SJ6193	7	31/07/2011	None	1	Field Record
Houghton Green Pool	SJ6193	7	07/09/2011	None	1	Field Record
Houghton Green Pool	SJ6193	7	17/09/2011	None	2	Field Record
Houghton Green Pool	SJ6193	7	27/08/2011	None	2	Field Record
Winwick	SJ605926	1	09/09/2012	None	1	Field Record
Myddleton Lane, Winwick	SJ6092	4	25/02/2011	None	2	Field Record
Myddleton Lane	SJ6092	4	30/07/2011	None	2	Field Record
Myddleton Lane, Winwick	SJ6092	4	04/03/2011	None	1	Field Record
Hermitage Green Lane	SJ6092	4	01/08/2011	None	1	Field Record
Myddleton Lane	SJ6092	4	29/09/2011	None	Present	Field Record
Arbury Pits	SJ6192	6	21/09/2012	None	5	Field Record
Myddleton Lane	SJ6092	4	27/09/2011	None	Present	Field Record
Winwick	SJ605926	1	14/10/2012	None	3	Field Record
Winwick	SJ605926	1	15/01/2012	None	8	Field Record

Black-necked Grebe (Podiceps nigricollis) (7)

Location Grid ref. Grid ID Date Sex/Stage Abundance Record type Houghton Green SJ6193 7 02/04/2011 None 5 Field Record Pool Field Record 7 Houghton Green SJ6193 09/04/2011 None 4 Pool Houghton Green 7 06/04/2011 Field Record SJ6193 None 4 Pool Houghton Green 7 20/03/2011 1 Field Record SJ6193 None Pool Houghton Green Pool SJ6193 7 26/07/2011 None 1 Field Record

RECORD

Houghton Green Pool	SJ6193	7	01/04/2011	None	5	Field Record
Houghton Green Pool	SJ6193	7	19/03/2011	None	1	Field Record
Houghton Green Pool	SJ6193	7	26/03/2011	None	4	Field Record
Houghton Green Pool	SJ6193	7	05/04/2011	None	6	Field Record

Little Ringed Plover (Charadrius dubius) (7)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	7	28/05/2011	None	2	Field Record
Houghton Green Pool	SJ6193	7	29/07/2011	None	1	Field Record
Houghton Green Pool	SJ6193	7	04/06/2011	None	1	Field Record
Houghton Green Pool	SJ6193	7	06/04/2011	None	2	Field Record
Houghton Green Pool	SJ6193	7	26/07/2011	None	2	Field Record

Grey Wagtail (Motacilla cinerea) (7)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Winwick, Houghton Green Pool	SJ6193	7	18/02/2011	None	1	Field Record

Corn Bunting (Emberiza calandra) (1,4,6,7)

						RECORD
Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	7	30/05/2011	None	3	Field Record
Arbury	SJ6193	7	05/06/2011	None	1	Field Record
Winwick	SJ605926	1	11/05/2012	None	1	Field Record
Winwick	SJ605926	1	15/05/2012	None	2	Field Record
Winwick	SJ605926	1	16/05/2012	None	2	Field Record
Winwick	SJ6192	6	26/04/2012	None	2	Field Record
Arbury Pits	SJ6192	6	23/04/2012	None	1	Field Record
Hermitage Green Lane	SJ6092	4	08/06/2011	None	2	Field Record

Merlin (Falco columbarius) (4,7)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	7	02/02/2011	None	Present	Field Record
Myddleton Lane , Winwick	SJ6092	4	10/03/2011	None	1	Field Record
Myddleton Lane, Winwick	SJ6092	4	04/03/2011	None	1	Field Record

Hobby (Falco subbuteo) (4,7)

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Myddleton Lane	SJ6092	4	03/08/2011	None	1	Field Record
Houghton Green Pool	SJ6193	7	08/09/2011	None	1	Field Record

Meadow Pipit (Anthus pratensis) (1,2,4,6)

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Willow / Birch Carr, Peel Hall Area - Comp 17	SJ6192	6	13/12/2012	None	53	Field Record
Winwick	SJ605926	1	10/12/2012	None	3	Field Record
Myddleton Lane	SJ6092	4	29/09/2011	None	24	Field Record
Arbury Pits	SJ6192	6	02/04/2012	None	2	Field Record
Winwick	SJ605926	1	15/01/2012	None	4	Field Record
Winwick	SJ605926	1	29/11/2012	None	3	Field Record
Winwick	SJ605926	1	08/10/2012	None	40	Field Record
Winwick	SJ605926	1	09/10/2012	None	60	Field Record
Winwick	SJ605928	2	02/03/2012	None	1	Field Record

Lesser Black-backed Gull (Larus fuscus) (4)

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Winwick, Myddleton Lane, Winwick	SJ6092	4	29/01/2011	None	11	Field Record

RECORD

RECORD

Arctic Tern (Sterna paradisaea) (7)

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	7	09/09/2011	None	3	Field Record

Brambling (Fringilla montifringilla) (1)

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Winwick	SJ605926	1	02/12/2012	None	2	Field Record
Winwick	SJ605926	1	13/12/2012	None	1	Field Record

Golden Plover (Pluvialis apricaria) (1,6)

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Winwick	SJ605926	1	03/02/2012	None	28	Field Record
Winwick	SJ605926	1	29/01/2012	None	7	Field Record
Willow / Birch Carr, Peel Hall Area - Comp 17	SJ6192	6	13/12/2012	None	2	Field Record

Barn Owl (Tyto alba) (1,4)

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Winwick	SJ605926	1	06/09/2012	None	1	Field Record
Myddleton Lane	SJ6092	4	29/07/2011	None	1	Field Record

Redwing (Turdus iliacus) (1,4,5,7)

						KLCOKD
Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	7	12/02/2011	None	8	Field Record
Winwick	SJ605926	1	05/12/2012	None	3	Field Record
Winwick	SJ605926	1	18/12/2012	None	14	Field Record
Winwick	SJ605926	1	10/12/2012	None	16	Field Record
Winwick, Myddleton Lane, Winwick	SJ6092	4	29/01/2011	None	8	Field Record
Winwick	SJ605926	1	13/12/2012	None	1	Field Record
Winwick	SJ605926	1	05/02/2012	None	23	Field Record
Winwick	SJ605926	1	29/11/2012	None	14	Field Record
Winwick	SJ605926	1	09/02/2012	None	30	Field Record

RECORD

RECORD

RECORD

RECORD

Houghton Green Pool	SJ617929	5	24/02/2011	None	2	Field Record

Stock Dove (Columba oenas) (1,2,4,6,7)

						RECORD
Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Arbury Pits	SJ6192	6	02/04/2012	None	Present	Field Record
Arbury	SJ6193	7	03/08/2011	None	4	Field Record
Radley Plantation	SJ6193	7	29/08/2011	None	8	Field Record
Houghton Green Pool	SJ6193	7	07/09/2011	None	5	Field Record
Houghton Green Pool	SJ6193	7	31/07/2011	None	4	Field Record
Willow / Birch Carr, Peel Hall Area - Comp 17	SJ6192	6	22/09/2012	None	3	Field Record
Houghton Green Pool	SJ6193	7	11/02/2011	None	4	Field Record
Winwick	SJ605928	2	08/03/2012	None	2	Field Record
Myddleton Lane , Winwick	SJ6092	4	10/03/2011	None	1	Field Record
Myddleton Lane, Winwick	SJ6092	4	20/03/2011	None	26	Field Record
Winwick, Myddleton Lane, Winwick	SJ6092	4	29/01/2011	None	4	Field Record
Winwick, Myddleton Lane, Winwick	SJ6092	4	08/02/2011	None	1	Field Record
Winwick	SJ605926	1	09/09/2012	None	1	Field Record

Willow Warbler (Phylloscopus trochilus) (1,6,7)

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	7	30/05/2011	None	2	Field Record
Arbury	SJ6193	7	03/08/2011	None	1	Field Record
Winwick	SJ6192	6	26/04/2012	None	1	Field Record
Winwick	SJ605926	1	16/05/2012	None	1	Field Record
Willow / Birch Carr, Peel Hall Area - Comp 17	SJ6192	6	24/04/2012	None	2	Field Record

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						KLCOKD
Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Willow / Birch Carr, Peel Hall Area - Comp 17	SJ6192	6	22/09/2012	None	Present	Field Record
Houghton Green Pool	SJ6193	7	27/08/2011	None	7	Field Record
Houghton Green Pool	SJ6193	7	28/08/2011	None	12	Field Record
Houghton Green Pool	SJ6193	7	07/09/2011	None	30	Field Record
Houghton Green Pool	SJ6193	7	11/09/2011	None	60	Field Record
Houghton Green Pool	SJ6193	7	13/09/2011	None	11	Field Record
Houghton Green Pool	SJ6193	7	09/09/2011	None	12	Field Record
Houghton Green Pool	SJ6193	7	08/09/2011	None	Present	Field Record
Radley Plantation	SJ6193	7	29/08/2011	None	29	Field Record
Houghton Green Pool	SJ6193	7	31/08/2011	None	22	Field Record
Houghton Green Pool	SJ6193	7	19/08/2011	None	20	Field Record
Houghton Green Pool	SJ6193	7	31/07/2011	None	51	Field Record
Houghton Green Pool	SJ6193	7	14/09/2011	None	4	Field Record
Houghton Green Pool	SJ6193	7	30/05/2011	None	15	Field Record
Winwick	SJ605926	1	19/09/2012	None	31	Field Record
Winwick	SJ605926	1	09/08/2012	None	8	Field Record
Winwick	SJ605926	1	08/08/2012	None	6	Field Record
Waterworks Lane	SJ6092	4	25/09/2011	None	21	Field Record
Willow / Birch Carr, Peel Hall Area - Comp 17	SJ6192	6	24/04/2012	None	Present	Field Record
Arbury Pits	SJ6192	6	26/06/2012	None	10	Field Record
Winwick	SJ605926	1	06/08/2012	None	4	Field Record
Winwick	SJ605926	1	11/09/2012	None	150	Field Record
Winwick	SJ605926	1	16/09/2012	None	130	Field Record
Arbury Pits	SJ6192	6	23/04/2012	None	1	Field Record

Arbury Pits	SJ6192	6	21/09/2012	None	145	Field Record
Arbury Pits	SJ6192	6	16/08/2012	None	10	Field Record

RECORD

RECORD

Oystercatcher (Haematopus ostralegus) (1,7)

						RECORD
Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Winwick, Houghton Green Pool	SJ6193	7	15/02/2011	None	1	Field Record
Houghton Green Pool	SJ6193	7	19/03/2011	None	1	Field Record
Winwick	SJ605926	1	11/05/2012	None	2	Field Record
Winwick, 1	SJ605926	1	12/05/2012	None	Present	Field Record
Winwick	SJ605926	1	15/05/2012	None	1	Field Record
Winwick	SJ605926	1	16/05/2012	None	1	Field Record
Winwick	SJ605926	1	09/09/2012	None	1	Field Record

Reed Bunting (Emberiza schoeniclus) (1,4,6,7)

Location Grid ref. Grid ID Date Sex/Stage Record type Abundance Winwick SJ6192 25/04/2012 Field Record 6 None 1 Houghton Green Field Record SJ6193 7 14/09/2011 None 1 Pool SJ6193 7 05/06/2011 3 Field Record Arbury None 7 Houghton Green SJ6193 30/05/2011 2 Field Record None Pool Winwick SJ605926 1 11/05/2012 None 2 Field Record Winwick, SJ6092 4 29/01/2011 None 10 Field Record Myddleton Lane, Winwick 08/06/2011 Field Record Hermitage Green SJ6092 4 None 1 Lane Willow / Birch SJ6192 6 24/04/2012 None 1 Field Record Carr, Peel Hall Area - Comp 17 **Arbury Pits** SJ6192 6 23/04/2012 None 4 Field Record **Arbury Pits** SJ6192 6 26/06/2012 4 Field Record None Winwick SJ6192 6 27/04/2012 Field Record None 1 Winwick SJ605926 1 29/11/2012 None 3 Field Record Winwick SJ6192 6 26/04/2012 None 2 Field Record

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	7	05/04/2011	None	30	Field Record
Houghton Green Pool	SJ6193	7	07/09/2011	None	5	Field Record

Tufted Duck (Aythya fuligula) (7)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	7	29/07/2011	None	32	Field Record
Houghton Green Pool	SJ6193	7	07/09/2011	None	36	Field Record
Houghton Green Pool	SJ6193	7	12/02/2011	None	45	Field Record
Houghton Green Pool	SJ6193	7	27/08/2011	None	31	Field Record
Houghton Green Pool	SJ6193	7	17/09/2011	None	32	Field Record
Houghton Green Pool	SJ6193	7	31/08/2011	None	37	Field Record
Houghton Green Pool	SJ6193	7	26/07/2011	None	14	Field Record
Houghton Green Pool	SJ6193	7	19/08/2011	None	25	Field Record

Pochard (Aythya ferina) (7)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	7	14/09/2011	None	2	Field Record
Houghton Green Pool	SJ6193	7	08/09/2011	None	1	Field Record
Houghton Green Pool	SJ6193	7	13/09/2011	None	1	Field Record

Whitethroat (Sylvia communis) (4,7)

						RECORD
Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	7	31/07/2011	None	3	Field Record
Houghton Green Pool	SJ6193	7	30/05/2011	None	3	Field Record
Houghton Green Pool	SJ6193	7	29/07/2011	None	4	Field Record

Arbury	SJ6193	7	03/08/2011	None	1	Field Record
Hermitage Green Lane	SJ6092	4	01/08/2011	None	2	Field Record
Hermitage Green Lane	SJ6092	4	08/06/2011	None	1	Field Record

Whinchat (Saxicola rubetra) (1)

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Winwick	SJ605926	1	11/05/2012	None	3	Field Record

Ringed Plover (Charadrius hiaticula) (7)

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	7	26/07/2011	None	1	Field Record

Peregrine (Falco peregrinus) (1,2)

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Winwick	SJ605926	1	11/09/2012	None	1	Field Record
Winwick	SJ605928	2	02/03/2012	None	1	Field Record

Redshank (Tringa totanus) (6,7)

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	7	20/03/2011	None	1	Field Record
Arbury Pits	SJ6192	6	21/09/2012	None	1	Field Record

Swift (Apus apus) (1,3,4,6,7)

RECORD

RECORD

RECORD

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Arbury Pits	SJ6192	6	26/06/2012	None	40	Field Record
Houghton Green Pool	SJ6193	7	03/08/2011	None	20	Field Record
Houghton Green Pool	SJ6193	7	19/08/2011	None	2	Field Record
Houghton Green Pool	SJ6193	7	30/05/2011	None	141	Field Record
Houghton Green Pool	SJ6193	7	31/07/2011	None	64	Field Record
Winwick	SJ605926	1	09/08/2012	None	65	Field Record

Winwick	SJ605926	1	12/06/2012	None	20	Field Record
Winwick	SJ605926	1	08/08/2012	None	60	Field Record
Winwick	SJ605926	1	06/08/2012	None	70	Field Record
Myddleton Lane	SJ6092	4	30/07/2011	None	32	Field Record
Myddleton Lane	SJ6092	4	04/06/2011	None	100	Field Record
Winwick	SJ605926	1	26/08/2012	None	1	Field Record
Winwick, Arbury Pits, Newton-Le- Willows	SJ607925	3	02/08/2012	None	1	Field Record

Wheatear (Oenanthe oenanthe) (1)

Grid ID Location Grid ref. Date Sex/Stage Abundance Record type Winwick SJ605926 1 16/05/2012 None 4 Field Record Winwick SJ605926 1 11/05/2012 None 5 Field Record Winwick SJ605926 1 12/05/2012 None 4 Field Record Winwick SJ605926 1 15/05/2012 None 4 Field Record

Yellowhammer (Emberiza citrinella) (1,2,4,6,7)

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Winwick	SJ6192	6	25/04/2012	None	4	Field Record
Houghton Green Pool	SJ6193	7	31/07/2011	None	1	Field Record
Houghton Green Pool	SJ6193	7	30/05/2011	None	1	Field Record
Winwick	SJ605926	1	11/05/2012	None	9	Field Record
Winwick	SJ605928	2	23/02/2012	None	Present	Field Record
Winwick	SJ605926	1	15/05/2012	None	2	Field Record
Winwick	SJ605926	1	01/02/2012	None	9	Field Record
Winwick	SJ605926	1	16/05/2012	None	2	Field Record
Winwick	SJ605926	1	29/11/2012	None	7	Field Record
Hermitage Green Lane	SJ6092	4	09/08/2011	None	2	Field Record
Winwick, Myddleton Lane, Winwick	SJ6092	4	29/01/2011	None	3	Field Record
Hermitage Green Lane	SJ6092	4	01/08/2011	None	2	Field Record
Hermitage Green Lane	SJ6092	4	31/07/2011	None	2	Field Record

RECORD

Waterworks Lane	SJ6092	4	25/09/2011	None	5	Field Record
Winwick	SJ6192	6	26/04/2012	None	4	Field Record
Hermitage Green Lane	SJ6092	4	08/06/2011	None	2	Field Record
Winwick	SJ605926	1	10/12/2012	None	3	Field Record
Winwick	SJ605926	1	08/10/2012	None	7	Field Record
Winwick	SJ605928	2	02/03/2012	None	1	Field Record
Winwick	SJ605928	2	21/02/2012	None	11	Field Record

Ruddy Duck (Oxyura jamaicensis) (7)

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	7	04/06/2011	None	1	Field Record

Teal (Anas crecca) (7)

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	7	02/02/2011	None	15	Field Record
Houghton Green Pool	SJ6193	7	07/09/2011	None	2	Field Record
Houghton Green Pool	SJ6193	7	14/09/2011	None	1	Field Record
Houghton Green Pool	SJ6193	7	27/08/2011	None	1	Field Record
Houghton Green Pool	SJ6193	7	31/08/2011	None	2	Field Record
Houghton Green Pool	SJ6193	7	09/09/2011	None	2	Field Record

Tree Sparrow (Passer montanus) (1,2,4,6,7)

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Winwick	SJ6192	6	26/04/2012	None	7	Field Record
Houghton Green Pool	SJ6193	7	30/05/2011	None	2	Field Record
Winwick	SJ605926	1	10/12/2012	None	60	Field Record
Winwick	SJ6192	6	25/04/2012	None	6	Field Record
Winwick	SJ605926	1	01/02/2012	None	60	Field Record
Winwick	SJ605926	1	14/05/2012	None	1	Field Record
Winwick	SJ605926	1	18/11/2012	None	45	Field Record

RECORD

RECORD

Winwick	SJ605928	2	23/02/2012	None	65	Field Record
Winwick	SJ605926	1	09/02/2012	None	1	Field Record
Winwick	SJ605926	1	02/12/2012	None	60	Field Record
Winwick	SJ605926	1	03/02/2012	None	32	Field Record
Winwick	SJ605926	1	14/10/2012	None	10	Field Record
Myddleton Lane, Winwick	SJ6092	4	04/03/2011	None	48	Field Record
Winwick, Myddleton Lane, Winwick	SJ6092	4	29/01/2011	None	35	Field Record
Winwick	SJ605926	1	29/11/2012	None	65	Field Record
Winwick	SJ605926	1	15/05/2012	None	3	Field Record
Winwick	SJ605926	1	11/05/2012	None	15	Field Record
Winwick	SJ605928	2	21/02/2012	None	65	Field Record
Winwick	SJ605928	2	02/03/2012	None	65	Field Record
Arbury Pits	SJ6192	6	23/04/2012	None	4	Field Record
Winwick	SJ6192	6	27/04/2012	None	3	Field Record

Pink-footed Goose (Anser brachyrhynchus) (6)

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Willow / Birch Carr, Peel Hall Area - Comp 17	SJ6192	6	13/12/2012	None	120	Field Record

RECORD

Song Thrush (Turdus philomelos) (1,4,6,7)

						RECORD
Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Winwick	SJ6192	6	26/04/2012	None	1	Field Record
Radley Plantation	SJ6193	7	05/06/2011	None	4	Field Record
Houghton Green Pool	SJ6193	7	30/05/2011	None	3	Field Record
Houghton Green Pool	SJ6193	7	12/02/2011	None	3	Field Record
Willow / Birch Carr, Peel Hall Area - Comp 17	SJ6192	6	24/04/2012	None	1	Field Record
Houghton Green Pool	SJ6193	7	31/07/2011	None	1	Field Record
Winwick, Myddleton Lane, Winwick	SJ6092	4	28/01/2011	None	1	Field Record
Hermitage Green	SJ6092	4	08/06/2011	None	3	Field Record

Lane						
Winwick, Myddleton Lane, Winwick	SJ6092	4	29/01/2011	None	1	Field Record
Willow / Birch Carr, Peel Hall Area - Comp 17	SJ6192	6	13/12/2012	None	2	Field Record
Winwick	SJ605926	1	29/11/2012	None	3	Field Record
Winwick	SJ605926	1	10/12/2012	None	2	Field Record
Willow / Birch Carr, Peel Hall Area - Comp 17	SJ6192	6	11/01/2012	None	3	Field Record

Skylark (Alauda arvensis) (1,2,4,6,7,8)

						RECORD
Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Arbury Pits	SJ6192	6	21/09/2012	None	11	Field Record
Arbury Pits	SJ6192	6	23/04/2012	None	5	Field Record
Houghton Green Pool	SJ6193	7	30/05/2011	None	1	Field Record
Arbury	SJ6193	7	05/06/2011	None	1	Field Record
Houghton Green Pool	SJ6193	7	10/09/2011	None	5	Field Record
Houghton Green Pool	SJ6193	7	20/03/2011	None	3	Field Record
Winwick	SJ6192	6	26/04/2012	None	5	Field Record
Winwick	SJ6192	6	25/04/2012	None	3	Field Record
Warrington	SJ6194	8	27/05/2009	None	Present	Field Record
Winwick	SJ605928	2	02/03/2012	None	1	Field Record
Winwick	SJ605926	1	09/10/2012	None	11	Field Record
Arbury Pits	SJ6192	6	02/04/2012	None	2	Field Record
Hermitage Green Lane	SJ6092	4	08/06/2011	None	6	Field Record
Winwick	SJ605926	1	10/12/2012	None	13	Field Record
Winwick	SJ605926	1	08/10/2012	None	9	Field Record
Winwick	SJ605928	2	23/02/2012	None	Present	Field Record
Arbury Pits	SJ6192	6	26/06/2012	None	6	Field Record

RECORD

RECORD

Winwick SJ605926 1 29/11/2012 None 1 Field Record Winwick SJ605926 1 10/12/2012 None 2 Field Record	Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Winwick SJ605926 1 10/12/2012 None 2 Field Record	Winwick	SJ605926	1	29/11/2012	None	1	Field Record
	Winwick	SJ605926	1	10/12/2012	None	2	Field Record

Starling (Sturnus vulgaris) (1,2,4,6,7)

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Willow / Birch Carr, Peel Hall Area - Comp 17	SJ6192	6	02/04/2012	None	2	Field Record
Houghton Green Pool	SJ6193	7	30/05/2011	None	1	Field Record
Houghton Green Pool	SJ6193	7	22/09/2011	None	140	Field Record
Houghton Green Pool	SJ6193	7	27/08/2011	None	3	Field Record
Houghton Green Pool	SJ6193	7	02/02/2011	None	65	Field Record
Arbury Pits	SJ6192	6	21/09/2012	None	32	Field Record
Arbury	SJ6193	7	25/09/2011	None	30	Field Record
Houghton Green Pool	SJ6193	7	11/02/2011	None	90	Field Record
Houghton Green Pool	SJ6193	7	08/09/2011	None	Present	Field Record
Winwick	SJ605928	2	02/03/2012	None	Present	Field Record
Winwick	SJ605926	1	18/11/2012	None	60	Field Record
Winwick	SJ605926	1	08/10/2012	None	30	Field Record
Myddleton Lane , Winwick	SJ6092	4	10/03/2011	None	700	Field Record
Willow / Birch Carr, Peel Hall Area - Comp 17	SJ6192	6	11/01/2012	None	17	Field Record
Willow / Birch Carr, Peel Hall Area - Comp 17	SJ6192	6	22/09/2012	None	180	Field Record
Myddleton Lane	SJ6092	4	29/09/2011	None	140	Field Record
Myddleton Lane	SJ6092	4	27/09/2011	None	200	Field Record
Willow / Birch Carr, Peel Hall Area - Comp 17	SJ6192	6	24/04/2012	None	2	Field Record
Winwick	SJ605926	1	05/02/2012	None	35	Field Record
Winwick	SJ605926	1	26/08/2012	None	220	Field Record

Winwick, Myddleton Lane, Winwick	SJ6092	4	29/01/2011	None	180	Field Record
Winwick	SJ605926	1	11/09/2012	None	650	Field Record
Winwick	SJ605926	1	29/11/2012	None	155	Field Record
Winwick	SJ605926	1	09/10/2012	None	220	Field Record
Winwick	SJ605926	1	10/12/2012	None	220	Field Record
Winwick	SJ605926	1	05/12/2012	None	5	Field Record

INSECT - MOTH

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Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
11 chesterton drive, winwick	SJ6092	1	09/09/2012	None	1	Field Record

TERRESTRIAL MAMMAL

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West European Hedgehog (Erinaceus europaeus) (1)

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Winwick Hospital	SJ6092	1	09/09/2012	Juvenile Male	1	Field Record
Winwick Hospital	SJ6092	1	14/08/2012	Juvenile Male	1	Field Record

Local Sites

Local Wildlife Sites

There are no Local Wildlife Sites within this search area.

Regionally Important Geodiversity Sites

There are no Cheshire Regionally Important Geodiversity Sites within this search area

Statutory Sites

Due to changes to the NBN we are currently unable to provide Statutory Site location maps. You can access these by visiting the NBN Atlas <u>https://spatial.nbnatlas.org</u> or MagicMap <u>http://www.natureonthemap.naturalengland.org.uk/MagicMap.aspx</u> (please be aware of the NBN Atlas guidance for using data <u>https://nbnatlas.org/help/guidance-using-data</u>).

Other Sites of Conservation Interest

There are no Other Sites of Conservation Interest within this search area.