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Report for: Mr Glyn Hughes

Phase 1 Ecological Survey

Site: Lower Green Farm, Broxwood, HR6 9JG.

Contents

Summary Sheet

Date of Survey:	**28 January 2021**
OS Grid Reference:	**SO 371 549**
Main Findings:	• Location is a traditional orchard and is a habitat of principal importance. • Land is generally of moderate ecological value in its current condition. • Limited potential for bat flight corridors and foraging are concentrated around the boundaries. • Potential bird nesting within and around the boundaries. • No reptiles, amphibians or dormice have been recorded on site.
Conclusions:	• Protected species are present locally and a limited risk of disturbance is possible. • Great Crested Newt Habitat Suitability Index identifies pond as poor. • Timing of work is to be programmed to reduce disturbance to wildlife ie vegetation removal, dust, noise and silt.
Recommendations for Mitigation & Enhancement:	• Ecological clerk of works to be appointed. • Trees are to be protected via BS 5837(2102) and an Arboricultural consultant appointed. (HEC Ltd). • Great Crested Newt Avoidance Plan initiated. • Bats – No external lighting, during construction and post construction of boundaries, sensitive lighting design for internal site required. • Bird and bat boxes are to be incorporated within the development scheme. Insect/bee hotels to be installed. • Amphibian terrestrial and aquatic habitat to be enhanced. • Hibernaculum is to be constructed. • Free access fencing for hedgehogs to be used. • Additional orchard trees, meadow grass and hedgerow is to be planted.

1. Introduction

1.1 Instructions and Objectives

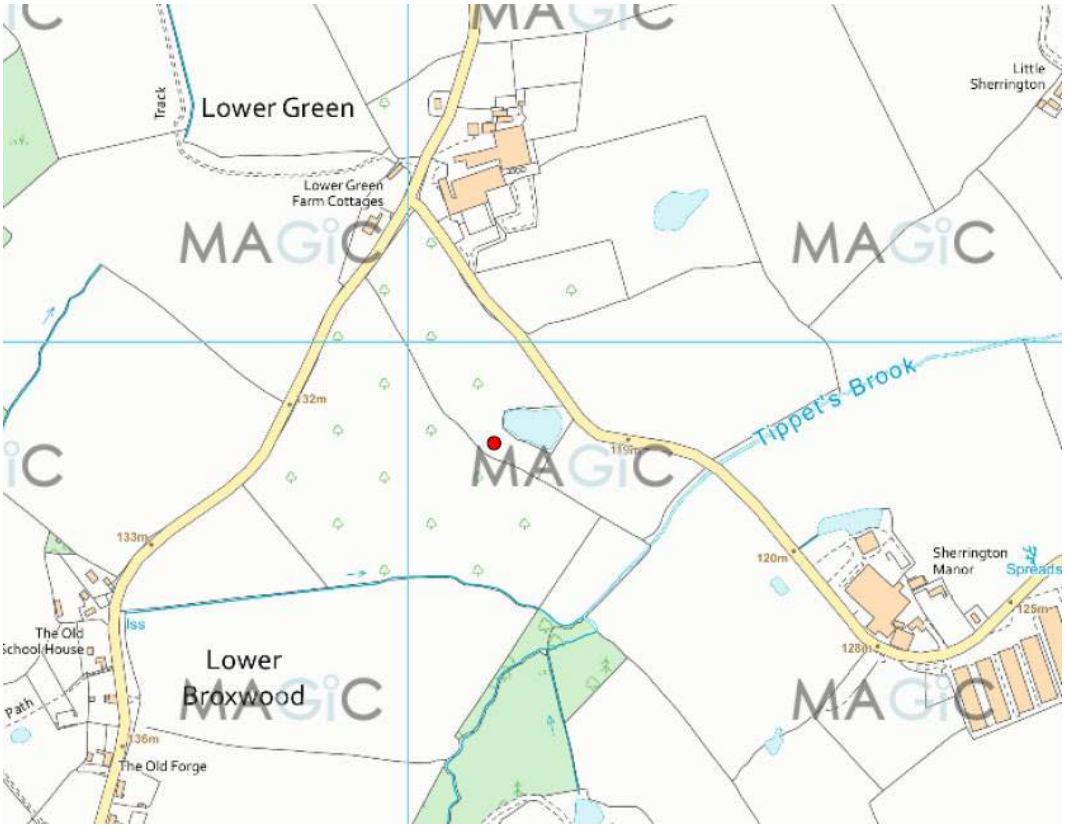
Heritage Environmental Contractors Ltd (HEC Ltd) was commissioned by Mr G. Hughes to undertake a Phase 1 Habitat Survey in support of a planning application for the proposed installation of 3 small holiday lets at Lower Green Farm, Broxwood, Herefordshire.

The desk study, field survey and evaluation are intended to provide information on the general habitat characteristics of the site and its surroundings including the likely presence of legally protected species and habitats encountered within the study area.

2. Methodology

2.1 Study Area

The site is situated outside Broxwood, Herefordshire, and can be located by Ordnance Survey National Grid Reference (OSN GR) SO 371 549 it covers an area of approximately 1 ha. and is currently used as a traditional orchard with grazing underneath.



2.2 Desk Top Study

A desk study was carried out to identify the presence of any statutory or non-statutory sites within 1km of the study area together with records of any known legally protected or rare species.

The site and land within the area was surveyed to the guidelines as in the Handbook for Phase 1 Habitat Survey (JNCC 2010).

Herefordshire Biological Record Centre (HBRC) were consulted to provide data of legally protected species and locally rare species within 1km of the boundary of the study area. Details of any designated sites of importance for nature conservation were also requested.

A search of the National Biodiversity Gateway was carried out at www.nbn.org.uk (Network, 2011).

Google maps was used for aerial views to identify important landscape features around the site.

2.3 Field Survey

A walk-over ecological survey of the study area was undertaken following guidelines for baseline ecological assessment ’95 and as per the Handbook for Phase 1 Habitat Survey (JNCC 2010). The site survey was carried out on 28 January 2021 and the weather conditions were overcast with previous heavy rain in the early morning and a temperature of 8°c.

The Phase 1 habitat survey provides information on the habitats in the study area and assesses the potential for notable fauna to occur in the study area. Local Biodiversity BAP species and habitats potentially capable of supporting these species will be identified.

Preliminary investigations were undertaken to determine whether the site is supporting legally protected species by:

- Searching for signs of bird nests and identifying suitable nesting sites with the recording of mature trees and hedgerows.
- Recording of all birds observed during study area visits.
- Searching for signs of badger activity including setts, tracks, and latrines.
- Searching for signs of otter activity.
- Searching for signs of potential roosting sites and flight lines for bats
- Searching for suitable habitats for breeding populations of great crested newts.
- Searching for suitable habitats for reptiles and general amphibians.
- Searching for signs of dormice.
- Searching for other species and habitats.

2.4 Evaluation and Significance of Impacts

The assessment of the potential impacts of the proposed development needs to consider both on-site impacts as well as those which may occur to adjacent areas of ecological value. Impacts can be permanent or temporary, direct or indirect and can include:

- Direct loss of wildlife habitats;
- Fragmentation and isolation of habitats;
- Disturbance to species

2.4.1 Limitations

Ecological surveys are limited by factors which affect the presence of plants and animals such as the time of year and behaviour, the ecological survey of this site has not produced a complete list of plants and animals. Specific fauna and flora have a narrow period for leaf, flower or fruiting evidence outside this period of their existence can be limited or non-existent. Late spring/early summer is the period when most species show identifiable characteristics. Surveys can also be affected by time of day and weather conditions. For the purpose of this report the time of year will give an accurate indication of likely habitats and species to be found on site.

Please note the absence of a past record does not necessarily mean the absence of a rare species and may be an example of under recording.

HEC Ltd findings are limited to the specific time of the survey, any changes to the site post survey will have a bearing on composition and may affect the site recommendations.

Legal Guidance

The information set out within this report in no way constitutes a legal opinion on the relevant legislation. The opinion of a legal professional should be sought if further advice is required.

3. Results

3.1 Site Location and Setting

The proposed site is situated within the settlement of Lower Green, Broxwood, Herefordshire, the area is part of a mixed farming setup, typical of this part of the county. The proposal is a traditional orchard with a man-made pond, the ground cover is improved grassland, which is very short with heavy poaching and compaction around the entrance and at the base of trees. External of the application the main orchard is found, arable and improved grassland is the dominant land use with small areas of woodland and wooded watercourses present. Tippets Brook is located to the south of the site, during the survey this was in a very fast flow from several heavy rainfall events.

3.2 Desk Study

Data was provided for statutory and non-statutory designated sites and protected species within a 1km radius of the site from HBRC records and maps are to be found in appendix at rear.

HBRC identifies the area as Orchard (Phase 1 habitat) and BAP Priority Habitat.

Designated Sites
SO35/20 Field near lower Broxwood SWS
SO35/25 Sherrington Wood SWS
SO35/29 Tippets Brook SWS

From details provided the relevant ecological data has been reviewed.

HEC Ltd is not aware of any previous surveys conducted on this site.
No ecological surveys associated with the large building projects to the south of the site are on the LPA website and subsequently no information about the general area.

3.2.1 Protected species

Several protected species have been recorded within 1km of the local area of the site. For species list please refer to HBRC records and locations maps in rear appendix.

Bats – This species has been recorded several times within the 1km search area, listings include bats in-flight, roosting, feeding and droppings. The most recent data is for 2014 and includes Brown Long-eared Bat (Plecotus auratus) and Lesser horseshoe bats (Rhinolophus hipposideros) within woodland associated with Tippets Brook to the south. The recordings closest to the site are associated with buildings close to the farmyard, north of the orchard. Common Pipistrelle (Pipistrellus pipistrellus), Long-eared Bat (Plecotus) and Natterer's Bat (Myotis nattereri) were all recorded. The final data is in 2004 close to another parcel of woodland south of the new poultry units at edge of search and includes Brown Long-eared Bat (Plecotus auratus), Lesser horseshoe bats (Rhinolophus hipposideros), Common Pipistrelle (Pipistrellus pipistrellus) and Long-eared Bat spp. (Plecotus). These 3 sites all show similar species and use and will give an accurate record of likely species present within the general area.

Badgers – This species has not been recorded locally.

Dormice – This species has been recorded locally in 2014 in woodland to the south.

Otter – Recorded 2014 in same woodland as dormice.

Birds – A limited amount of data is available for birds within the search area, species include Pyrrhula pyrrhula (Bullfinch), Hirundo rustica (Swallow) Gallinula chloropus (Moorhen) and red listed Cuculus canorus (Cuckoo).

Barn owls (Tyto alba) – Has been recorded associated with same woodland to the south.

Great Crested Newts (Triturus cristatus) – Not recorded, ponds are present within 250m.

Amphibians –The common toad (Bufo bufo) common frog (Rana temporaria) and the Smooth Newt (Lissotriton vulgaris) both have listings 1986 approximately 900m from site.

Reptiles – This species has not been recorded locally.

Invertebrates – No invertebrates have been recorded.

Flora and Fauna – Viscum album (Mistletoe) and Galium uliginosum (Fen Bedstraw) are the only recordings present.

4. Survey

4.1 Site description

The site comprises of approximately 1 ha of traditional orchard with the area affected by the proposal significantly smaller than this. The main part of the site is traditional orchard covering over 3 ha. The ground gently slopes towards a man-made pond in the southern corner of the plot.

Habitat

Traditional Orchard

This is a habitat of principal importance and the trees are undergoing an Arboricultural Impact Assessment BS5837(2012). The trees are of a similar size indicating a similar age/planting time, gaps within the orchard are present and this is particularly true around the lower ground to the south associated with the man-made pond, the ground is heavy clay which compounds the problem of wind rock and poor rooting. The field layer is improved grassland that is extensively used for grazing, the grass species on the day include Lolium perenne (Perennial ryegrass), Agrostis tenuis (Common bent) and Dactylis glomerata (Cocksfoot) with Trifolium repens (Clover), Ranunculaceae repens (Creeping buttercup), Scorzoneroides autumnalis (Autumn hawkbit). Other species recorded within the sward and around the margins were common and include Rumex obtusifolius (Broad-leaved dock), Urtica dioica (Nettle) and Cirsium arvense (Creeping thistle). The grass cover is very short with poaching around the trees and at the gate entrance, this appears to be less of a problem in the orchard on the elevated ground, external of the application. Via personal communication grazing is the main use of the orchard.

Trees and Hedgerow

A mixed native hedge is present around the orchard, external of the application mature Quercus robur (Oak) and Fraxinus excelsior (Ash) are present and significantly removed to require further consideration, trees in the adjoining field are to be protected with an Arboricultural survey BS 5837(2012). Species within the hedgerow include Crataegus monogyna (Hawthorn), Ilex aquifolia (Holly), Prunus spinosa (Blackthorn), Ulmus minor (Elm), Corylus avellana (Hazel), Fraxinus excelsior (Ash) and Sambuca nigra (Elderberry). Hedra helix (ivy) and Rubus fruiticosa (Bramble) is also present. All hedgerows are to remain unaffected by proposal. Grass margins are common with the field layer of the orchard.

Pond

A man-made pond is present within the orchard, it is deep with steep sides, the margins are very narrow and fenced off from the field, the roadside margin shows more diversity as it is wider. No aquatic vegetation was present due to grazing pressure from mallard ducks and time of years. Grass species are similar to the orchard with Juncus effusus (Soft rush), Chamaenerion angustifolium (Rosebay willow herb), Ranunculus flammula (Lesser Spearwort), Rumex obtusifolius (Dock), Urtica dioica (Nettle) and Galium aparine (Goosegrass) all present. Scrub species include Ulex spp. (Gorse), Salix caprea (Goat willow) and Alder (Alnus glutinosa).

Adjacent habitats

The adjacent land is dominated by mixed agricultural use, typical of this part of the county, arable and improved grassland is the dominant land uses. The wider area has blocks of mixed woodland which provide valuable habitat for a variety of protected species. The Tippet brook is found along the southern border of the adjacent field, its margin is fence off and at the time of survey was in very fast flow following several heavy rain events.

4.2 Protected Species

Badgers – Badger activity was not recorded on the day of survey. 30m beyond the boundary was also assessed where possible and no activity observed. A large rabbit population is present along roadside boundary.

Bats - A full bat survey was not carried out. The trees present are of a size and age that do not offer any roosting opportunities, mature trees are present external of the application that may offer opportunities, as they are removed from site, they will not require further consideration. The hedges on site will provide flight lines as does the Tippet brook corridor, woodland blocks are present in the wider area. No structures are affected or will require removal.

Dormouse – A nut check was unable to be carried out, site has suitable native hedgerows and has some limited connectivity to optimum habitat. No hedgerows are to be affected.

Otters – Not observed or any features that might indicate use or support this species. No signs were observed along the Tippet Brook, although levels were high and may have hidden any signs.

Amphibians – Not observed, the site has suitable cover around the pond and along the hedgerow, the orchard is tightly grazed reducing cover.

Great Crested Newts - A daytime survey was carried out and not observed. The water body has narrow margins with very steep banks, the pond is very deep (personal communication) and is generally used for commercial fowling from July to February. The ground cover within the orchard is very short offering very little cover, suitable cover is generally found around the margins. The Tippet Brook was in very fast flow and can be considered a potential barrier to movement when in this condition. A second pond is present in the arable field opposite and upon inspection was nothing more than standing water after heavy rain, it was very shallow with crop present under water and no aquatic vegetation present, this feature is not suitable for this species as only temporary after rain.

Great Crested Newt Habitat Suitability Index

Calculator

	Pond Name	*Duck pond 1*		
	Grid Ref	*SO 371 549*		
SI No	SI Description		SI Value	
1	Geographic location		1	
2	Pond area		0.2	
3	Pond permanence		0.9	
4	Water quality		0.33	
5	Shade		1	
6	Waterfowl effect		0.01	
7	Fish presence		0.67	
8	Pond Density		0.65	
9	Terrestrial habitat		0.67	
10	Macropyhyte cover		0.3	
HSI Score			**0.37**	
Pond suitability (see below)				

Categorisation of HSI Score

HIS Score	**Pond Suitability**
< 0.50	Poor
0.50 - 0.59	Below average
0.60 - 0.69	Average
0.70 - 0.79	Good
> 0.80	Excellent

Reptiles – Not observed, the site has some suitable cover around the margins of the pond and around the hedgerow bases, the general orchard has limited habitat due to grazing pressure.

Birds – The site has mature fruit trees, hedging and aquatic margins offering foraging and nesting potential for a variety of species. Birds recorded on the day include Anas platyrhynchos (Mallard), Gallinago gallinago (Snipe), Phasianus colchicus (Pheasant), Phylloscopus collybita (Chiffchaff), Turdus merula (Black bird), Erithacus rubecula (Robin), Pica pica (Magpie) and Columba palumbus (Pigeon).

Invertebrates- The site has limited opportunities due to the short grass. The trees have very limited opportunities due to age and condition, a Gnorimus nobilis (Noble Chafer) fras check was carried out and sadly not present. The pond provides valuable aquatic habitat.

5. Site Evaluation

5.1 Habitat

The proposal is part of a larger traditional orchard which is a habitat of Principal Importance, the location of the units has been selected after an Arboricultural Survey BS 5837(2012) has identified areas that have no tree root protection zone and the effect upon any orchard trees has been removed. Most importantly no trees will be removed or adversely effected.

The ground cover is very short due to continued grazing pressure and heavily poached around the trees and in entrance gates. The lower section of the field has a man-made pond with a narrow margin which is fenced off from grazing, in its current condition it offers very limited habitat of any scale to protected species, it is proposed that this area is to be extended up the bank and sown with species rich wildflower mix which will offer significant additional terrestrial habitat, this area can be allowed over time to develop into a “rough area” with limited management. The application will require the grazing animals to be removed from around them, this will allow the general area to be resown with a wildflower mix, this can then be managed specifically for the wildflower sward and be beneficial to numerous species.The reduction of grazing pressure will be directly beneficial to the trees, removing actual physical damage to the aerial canopy and indirectly with the reduction of compaction of the root zones around the tree and resulting poaching, this is probably a more detrimental force on the trees than actual browsing of the lower canopy.

The pond is used annually for commercial fowling with all the pressures to the vegetive margins and water quality that occurs, this is clearly not possible with holiday lets in close proximity, the removal of this activity within the pond will be beneficial to the water quality and the vegetation that surrounds the margins. To the south of the pond is a wire fence line, this is to be planted up with a new mixed native hedgerow which will provide valuable cover and increase connectivity across the short grassland, the new hedge line will increase connectivity to significant features in the wider area ie woodland. This area around the pond has the lowest tree cover, a programme of new planting will also take place with gaps planted up and will provide valuable canopy closure for bats and birds and will help contribute to varying the age structure of the entire orchard, something which is essential to ensure continued protection of this type of habitat.

Traditional Orchards and associated habitat are a national and local Habitat of Principal Importance (Priority Habitat Index) Any loss or detrimental impact is contrary to: Conservation of Habitats and Species Regulations (2017); National Planning Policy Framework (2019), Core Strategy policies LD1-4, SS1, SS2 and SS6; and the council’s legal duty of care under the NERC Act 2006. This proposal has used this as the starting point for the application.
No loss of any trees with additional planting within a long-term management programme is paramount in leading this application. Rather than being viewed as detrimental to the orchard it actually helps achieve the long-term survival of this habitat, currently it has no protection and will continue to decline and eventually become redundant over an extended period. Traditional orchards in the county need to be protected, enhanced and put into long term management program, a county wide approach will help create and restore the network of traditional orchard and help increase the possibility for various species, including the Noble chafer beetle.

The discharge of water will be dealt with in the Design Statement and follow best practice and sustainable drainage guidelines. Currently the proposal is to use the large field to the south, this area is improved grassland and will not result in any loss of habitat or potentially disturb protected species. The mature trees within the hedge line have also been covered by the Arboricultural survey BS 5837(2012) and any drainage fields will be set out outside any root protection zones, as the field is very large this is easily achieved.

5.2 Mammals

Bats – The orchard trees provide no/little roosting opportunities due to type and age of tree, however as they mature and move into the veteran stage of lifecycle, they will provide valuable opportunities. Currently sections of the orchard are sparse especially around the application, the additional tree planting proposed will help ensure flight lines are restored. The pond is to remain unchanged and will have additional rough habitat created, the whole area is to be over sown with a species rich grassland mix. This will provide valuable foraging habitat, along with the new hedge line from the pond area connectivity will be enhanced.

The general area is of very high value to bats and this should be given full consideration. No external lighting is to be used on any boundary or site margins, if external lighting is to be used on the property a sensitive scheme needs to be initiated with the use of directional beams, PiR sensors and low wattage as a minimum. Dark Sky Principle will be strictly adhered to.

Badgers – No evidence of badgers using the proposed site has been found, this site offers potential for this transitory species, as a general precaution the ecological clerk of work should carry out a walk over prior to any site work.

Dormice –A nut check was unable to be carried out, dormice have been recorded in the 1 km search associated with optimum broadleaved woodland habitat. The proposal will not have a detrimental effect upon this area. The project does not require the removal of any hedgerows or habitat that could be potentially used by this species. The planting of an additional hedgerow linking the two existing mature hedgerows will be directly beneficial to this species.

Otters – The Tippet Brook in the adjacent field will have good connectivity to wooded margins and other water courses in north Herefordshire. This part of the field is fenced off, providing good habitat as it is removed from grazing pressure, this area is to remain unchanged and removed from the application reducing any effect upon this species.

Hedgehogs - The site has suitable habitat for this species, no solid fencing is to be installed and the planting of additional mixed native hedging will be directly beneficial to this species. Consideration should be given to the installation of a hedgehog nest box.

5.3 Birds

The area has excellent opportunities for numerous bird species. The orchard and pond represent valuable food sources for numerous bird species, both summer and winter visitors. The siting of the holiday lets does not result in the loss of any habitat for birds. The additional orchard planting, new hedgerow, increase in ponds rough margin and the sowing of additional species rich grass will all directly benefit bird. Additional bird boxes should be incorporated into the scheme.

5.4 Amphibians

The grass area the holiday lets are situated on represent very little opportunities for the amphibians, the pond is to remain unchanged, the additional margins and the new hedge line will all be beneficial. The general amphibian population is unlikely to be adversely affected this small proposal.

Great Crested Newts – The site currently has limited potential for terrestrial habitat, the pond margins are narrow and tight, the expansion of these margins will be beneficial. The pond is currently used for commercial fowling, the removal of this activity will allow the margins to develop and significantly increase the water quality. Great Crested Newt Habitat Suitability Index identifies the pond as POOR, with this in mind it would be beneficial for the construction phase to operate under a Great Crested Newt Avoidance Plan, this will ensure the the project operates to the highest standard of construction. Measures introduced within the application will help the pond moveout of the “Poor” category and become more favourable to this species. The actual units are situated upon grazed improved grassland, the loss of these small sections will have little effect upon this species. The closest pond with access was surveyed and was nothing more than a wet feature after rain. Other ponds were to the south the other side of the Tippets Brook, these were close to the large new poultry unit and as no mention within planning applications it was assumed not an issue. No recorded populations locally. This species is unlikely to be affected.

5.5 Reptiles

Reptiles require a “heathland” type habitat, with varied structure to flourish. Warmth is a key factor, as is shelter from predators. The narrow pond margin offers some cover, as this is to be increased it will provide additional habitat and hunting opportunities. The current grass cover is very short grazed, the introduction of a species rich grass sward and associated management will increase diversity and cover. Grass snakes may visit this site via the margins, but the lack of current cover reduces this for this species with a large range.

5.6 Invertebrates

The orchard and pond both offer opportunities for various species, both these features are to remain unchanged and enhanced, the new hedge and species rich grass will also increase habitat for invertebrates. Gnorimus nobilis (Noble Chafer) is a species that is dependant upon rotten wood within mature fruit trees, as the orchard develops this habitat will increase, it is also vital to have an ongoing planting regime as the general orchard has a similar age structure and new opportunities for the future need to be developed now. Construction of habitat piles around the pond margins will help local populations increase.

Legislation

Badgers

The Protection of Badgers Act 1992 makes it illegal to kill, injure or capture badgers or deliberately or recklessly interfere with a badger sett which includes damaging a sett, obstructing access to a sett, and disturbing a badger while it is occupying a sett.

Bats

All species of bats and their breeding sites or resting places are protected under the Conservation of Habitats and Species Regulation 2010 and the Wildlife and Countryside Protection act 1981(amended). The deliberate capture, disturbance, injury or killing of bats is prohibited as is damaging, destroying or obstructing access to any place used by bats for shelter or breeding, whether they are present or not. Reckless disturbance or obstruction of access to a roost are also a criminal offence.

Birds

The Wildlife and Countryside Protection act 1981(amended) provides the legal protection of wild birds. All nesting birds and their nests eggs and young are protected from killing, injury, taking or selling.

Great Crested Newts

The Great Crested Newt is protected under Schedule 5 of the Wildlife and Countryside Protection act 1981 (amended) and are protected under the Conservation of Habitats and Species Regulation 2010. They are protected from deliberate killing, injury or capture with their habitat, including breeding site, resting place or any structure or place used for shelter or protection also protected against damage or destruction .it is also illegal to disturb great Crested Newts and their eggs are protected from taking or destroying.

Otters

The otter is a European protected species (EPS) and is also fully protected under Schedule 5 of the Wildlife and Countryside Act 1981. They are protected from deliberate killing, injury or capture with their habitat, including breeding site, resting place or any structure or place used for shelter or protection also protected against damage or destruction.

Reptiles

Common reptile species are protected under the Wildlife and Countryside Protection act 1981(amended). The deliberate capture, killing and injury or being sold. The habitat of these reptiles is not directly protected, however, disturbing or destroying their habitat whilst they are present may lead to an offence.

Dormice

The Dormouse is protected under the Wildlife and Countryside Protection act 1981 (amended) and the conservation of Habitats and species Regulations 2010. The deliberate capture, disturbance, injury or killing of Dormice is prohibited as is damaging, destroying any place used by Dormice for shelter or breeding, whether they are present or not. Reckless disturbance or obstruction of places used for shelter is also a criminal offence.

6. Policy

National Planning Policy Framework (NPPF) (Feb 2019)

174. To protect and enhance biodiversity and geodiversity, plans should:

a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and steppingstones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

175. When determining planning applications, local planning authorities should apply the following principles:

a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;
c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons58 and a suitable compensation strategy exists; and
d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.

176. The following should be given the same protection as habitats sites:
a) potential Special Protection Areas and possible Special Areas of Conservation;
b) listed or proposed Ramsar sites59; and
c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.

177. The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.

The UK Post 2010 Biodiversity Framework

"The purpose of this UK Biodiversity Framework is to set a broad enabling structure for action across the UK between now and 2020:

- To set out a shared vision and priorities for UK-scale activities, in a framework jointly owned by the four countries, and to which their own strategies will contribute.
- To identify priority work at a UK level which will be needed to help deliver the Aichi targets and the EU Biodiversity Strategy.
- To facilitate the aggregation and collation of information on activity and outcomes across all countries of the UK, where the four countries agree this will bring benefits compared to individual country work. iv. To streamline governance arrangements for UK-scale activity."

The tools and works which were previously carried out under the UK Biodiversity Action Plan (UK BAP) remain in place and in use but they are now focused at country level.

Herefordshire Local Plan – Core Strategy 2011 - 2031

LD2 – Biodiversity and geodiversity – requires development proposals to conserve, restore and enhance the biodiversity and geodiversity assets of Herefordshire. This is achieved through the retention and protection of nature conservation sites and habitats, and important species in accordance with their status, prioritising European sites and species.
LD3 – Green infrastructure encourages development proposals to protect, manage and plan for the "preservation of existing and delivery of new green infrastructure" with the aim of fulfilling the three listed criteria; identification and retention of existing green infrastructure corridors and linkages; provision of on-site green infrastructure with enhancement where possible and integration to and connection with the surrounding green infrastructure network.

Protected Species and Lighting (Dark Skies) (DEFRA-NPPF 2013/18)

a) At no time shall any external lighting except in relation to safe use of the approved or existing buildings be installed or operated in association with the approved development and no permanently illuminated external lighting shall be operated at any time, without the written approval of this local planning authority.

b) No external lighting should illuminate any biodiversity enhancement, boundary feature, highway corridors or adjacent habitats.

All lighting installed shall demonstrate compliance with latest best practice guidance relating to lighting and protected species-wildlife available from the Institution of Lighting Professionals

7. Conclusions

An ecological assessment comprising of a desk study and site visit has been conducted at the above site SO 371 549, HBRC confirmed that there are legally protected species of conservation concern within the 1km search of the site.

Further to the assessment of the site and results as identified within this survey it is concluded that there is a minimal risk of disturbance to protected species and loss of terrestrial habitat used by these species. The initiation of a biodiversity enhancement plan alongside the additional orchard replanting will be of significant value to this area.

The site will constitute a “Net gain” and the development of new fauna and flora will constitute enrichment for the area and as time passes it will continue to gain conservational value. The development will allow the creation of new wildlife habitats and will enhance the biodiversity of the site for a long-term gain.

8. Recommendations

The existing trees surveyed via BS5837 Arboricultural Assessment and protection plan initiated.

Planting of additional orchard trees and hedgerows will benefit all local species.

New bird and bat boxes should be incorporated within the new development.

Construction of hibernacula and habitat piles should be made and the erection of bug hotels/insect boxes would also help increase the invertebrate population and increase food sources for other species.

Addition of a hedgehog box should be included with free access through any fencing.

No external lighting should be used on boundaries so that it will not affect the foraging opportunities or flight lines for the transitory bat species, if lighting is used for the property it should be designed and installed using sensitive design techniques.

Ecological clerk of works should carry out a walk over prior to start, a badger and otter check can be carried out at this time.

General location of proposal and ground cover

Appendices

HBRC Recorded Species List

Species Map

BAP Priority Map

BAP Priority Habitat Legend

Phase 1 Habitat Map

Phase 1 Habitat Legend

Designated Sites

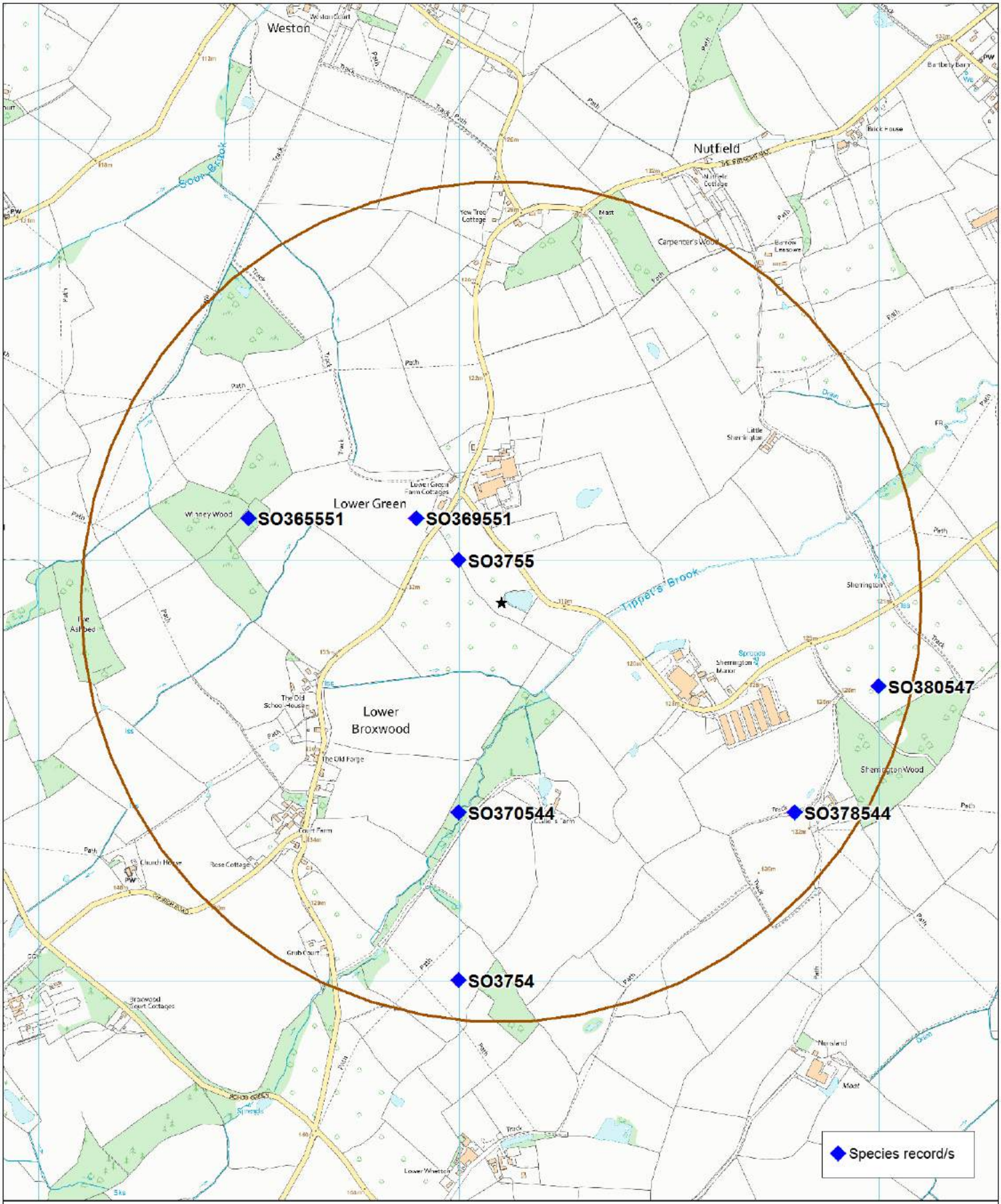
Lower Green Farm SO371549

Records for legally protected and priority species along with those of conservation concern and local importance within 1km

Species		Status, if known	Grid Ref.	Year	Measurement
Barn Owl	*Tyto alba*	BAmb, Bern2, CITESA, HBAPCC, HBAPPS, WCA1i	SO370544	2014	Present Droppings
Brown Long-eared Bat	*Plecotus auritus*	Bern2, CMS_A2, HabRegs2, HBAPCC, HSD4, Sect.41, UKBAP, WCA5/9.4b, WCA5/9.4c, WCA5/9.5a, WCA5/9.5b	SO370544	2014	Present Droppings
European Otter	*Lutra lutra*	Bern2, CITESA, HabRegs2, HBAPCC, HBAPPS, HSD2p, HSD4, Sect.41, UKBAP, WCA5/9.4b, WCA5/9.4c, WCA5/9.5a, WCA5/9.5b	SO370544	2014	Present Droppings
Hazel Dormouse	*Muscardinus avellanarius*	HabRegs2, HBAPCC, HBAPPS, HSD4, Sect.41, UKBAP, WCA5/9.4b, WCA5/9.4c, WCA5/9.5a, WCA5/9.5b	SO370544	2014	Present
Lesser Horseshoe Bat	*Rhinolophus hipposideros*	Bern2, CMS_A2, HabRegs2, HBAPCC, HBAPPS, HSD2p, HSD4, Sect.41, UKBAP, WCA5/9.4b, WCA5/9.4c, WCA5/9.5a, WCA5/9.5b	SO370544	2014	Present
Bullfinch	*Pyrrhula pyrrhula*	BAmb, HBAPCC, HBAPPS, HBAPSR	SO365551	2008	2 Present
Common Pipistrelle	*Pipistrellus pipistrellus*	CMS_A2, HabRegs2, HBAPCC, WCA5/9.4b, WCA5/9.4c, WCA5/9.5a, WCA5/9.5b	SO369551	2007	2 In flight
Long-eared Bat species	*Plecotus*	CMS_A2, HabRegs2, WCA5/9.4b, WCA5/9.4c, WCA5/9.5a, WCA5/9.5b	SO369551	2007	Present Droppings
Long-eared Bat species	*Plecotus*	CMS_A2, HabRegs2, WCA5/9.4b, WCA5/9.4c, WCA5/9.5a, WCA5/9.5b	SO369551	2007	1+ Droppings

Long-eared Bat species	*Plecotus*	CMS_A2, HabRegs2, WCA5/9.4b, WCA5/9.4c, WCA5/9.5a, WCA5/9.5b	SO369551	2007	1 Feeding
Natterer's Bat	*Myotis nattereri*	Bern2, CMS_A2, HabRegs2, HBAPCC, HSD4, WCA5/9.4b, WCA5/9.4c, WCA5/9.5a, WCA5/9.5b	SO369551	2007	2 Feeding
Pipistrelle Bat species	*Pipistrellus*	CMS_A2, HabRegs2, WCA5/9.4b, WCA5/9.4c, WCA5/9.5a, WCA5/9.5b	SO369551	2007	1 Feeding
Unidentified Bat	*Myotis*	CMS_A2, HabRegs2, WCA5/9.4b, WCA5/9.4c, WCA5/9.5a, WCA5/9.5b	SO369551	2007	1 Feeding
Bats	*Chiroptera*		SO378544	2004	Present
Brown Long-Eared Bat	*Plecotus auritus*	Bern2, CMS_A2, HabRegs2, HBAPCC, HSD4, Sect.41, UKBAP, WCA5/9.4b, WCA5/9.4c, WCA5/9.5a, WCA5/9.5b	SO378544	2004	2 In flight
Common Pipistrelle	*Pipistrellus pipistrellus*	CMS_A2, HabRegs2, HBAPCC, WCA5/9.4b, WCA5/9.4c, WCA5/9.5a, WCA5/9.5b	SO378544	2004	Present
Common Pipistrelle	*Pipistrellus pipistrellus*	CMS_A2, HabRegs2, HBAPCC, WCA5/9.4b, WCA5/9.4c, WCA5/9.5a, WCA5/9.5b	SO378544	2004	Present
Common Pipistrelle	*Pipistrellus pipistrellus*	CMS_A2, HabRegs2, HBAPCC, WCA5/9.4b, WCA5/9.4c, WCA5/9.5a, WCA5/9.5b	SO378544	2004	1 In flight
Lesser Horseshoe Bat	*Rhinolophus hipposideros*	Bern2, CMS_A2, HabRegs2, HBAPCC, HBAPPS, HSD2p, HSD4, Sect.41, UKBAP, WCA5/9.4b, WCA5/9.4c, WCA5/9.5a, WCA5/9.5b	SO378544	2004	1 Droppings
Long-eared Bat species	*Plecotus*	CMS_A2, HabRegs2, WCA5/9.4b, WCA5/9.4c, WCA5/9.5a, WCA5/9.5b	SO378544	2004	Present

Long-eared Bat species	*Plecotus*	CMS_A2, HabRegs2, WCA5/9.4b, WCA5/9.4c, WCA5/9.5a, WCA5/9.5b	SO378544	2004	Present Droppings
Long-eared Bat species	*Plecotus*	CMS_A2, HabRegs2, WCA5/9.4b, WCA5/9.4c, WCA5/9.5a, WCA5/9.5b	SO378544	2004	Present Roosting
Swallow	*Hirundo rustica*	BAmb, Bern2	SO378544	2004	Present Signs
Cuckoo	*Cuculus canorus*	BRed, Sect.41, UKBAP	SO365551	2003	Present Male
Swallow	*Hirundo rustica*	BAmb, Bern2	SO378544	2002	Present Nest
Fen Bedstraw	*Galium uliginosum*	HBAPCC	SO3754	1993	Present
Mistletoe	*Viscum album*	HBAPCC, HBAPPS	SO3755	1991	Present
Common Frog	*Rana temporaria*	HBAPCC, WCA5/9.5a, WCA5/9.5b	SO380547	1986	Present Larvae
Common Toad	*Bufo bufo*	HBAPCC, Sect.41, UKBAP, WCA5/9.5a, WCA5/9.5b	SO380547	1986	Present
Moorhen	*Gallinula chloropus*	CMS_A2	SO380547	1986	Present
Smooth Newt	*Lissotriton vulgaris*	HBAPCC, WCA5/9.5a, WCA5/9.5b	SO380547	1986	Present Larvae



Map showing distribution of records for legally protected and priority species along with those of conservation concern and local importance within 1km of SO371549 Lower Green Farm

NORTH

SCALE 1:12,000

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Map showing BAP Priority habitats
within 1km of SO371549
Lower Green Farm

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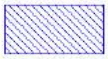
Natural England National Inventories
BAP Priority Habitats


Blanket Bog


Coastal and Floodplain Grazing Marsh


Deciduous Woodland

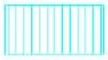

Fen

Lowland Calcareous Grassland


Lowland Dry Acid Grassland

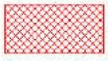

Lowland Heathland

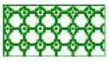

Lowland Meadow


Lowland Raised Bog


Maritime Cliff and Slope


Purple Moor Grass and Rush Pasture


Reedbed


Traditional Orchard


Undetermined Grassland


Upland Hay Meadow

Upland Heathland

Herefordshire Biological Records Centre
BAP Priority Habitats


Ancient and/or species rich hedgerows


Coastal and floodplain grazing marsh


Deciduous Woodland


Fens


Good quality semi-improved grassland


Lowland beech and yew woodland


Lowland calcareous grassland


Lowland dry acid grassland


Lowland heathland


Lowland meadows


Lowland mixed deciduous woodland


Ponds


Purple Moor-Grass & Rush pasture


Reedbeds


Rivers


Traditional Orchard


Upland calcareous grassland


Upland Heathland


Upland Mixed Ashwoods


Upland oak woodland


Wet woodland


Wood-Pasture & Parkland

NORTH

BAP Priority Habitats Map Legend

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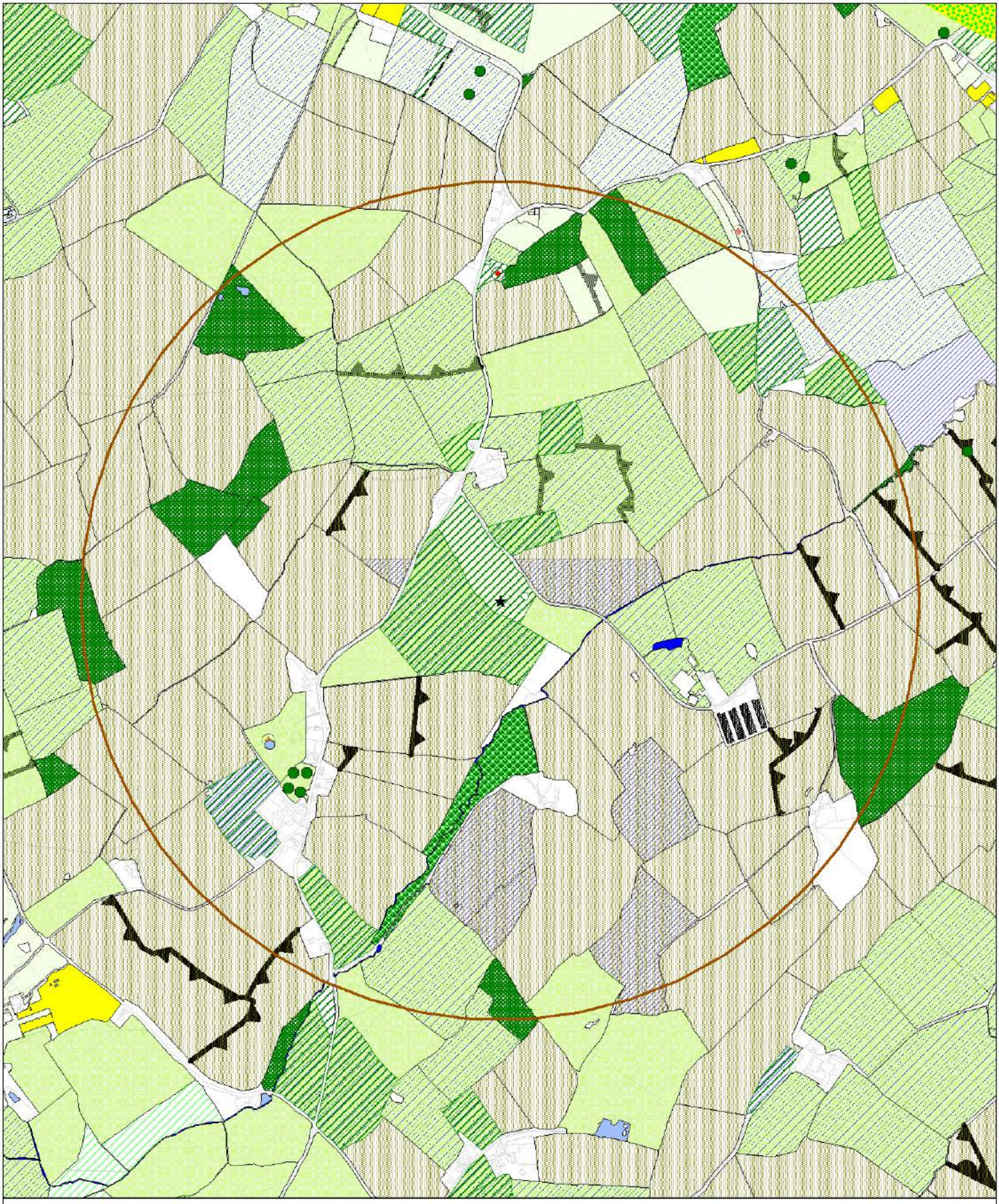

Map showing Phase 1 habitats
within 1km of SO371549
Lower Green Farm

NORTH

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Semi-Natural Broad-Leaved Woodland

Plantation Broad-Leaved Woodland

Semi-Natural Coniferous Woodland

Plantation Coniferous Woodland

Semi-Natural Mixed Woodland

Plantation Mixed Woodland

Dense/Continuous Scrub

Scattered Scrub

Parkland Scattered Broad-Leaved Trees

Parkland Scattered Coniferous Trees

Parkland Scattered Mixed Trees

Recently-Felled Broad-Leaved Woodland

Recently-Felled Conifereous Woodland

Recently-Felled Mixed Woodland

Orchard

Unimproved Acid Grassland

Semi-Improved Acid Grassland

Unimproved Neutral Grassland

Semi-Improved Neutral Grassland

Unimproved Calcareous Grassland

Semi-Improved Calcareous Grassland

Improved Grassland

Marsh/Marshy Grassland

Poor Semi-Improved Grassland

Continuous Bracken

Scattered Bracken

Tall Ruderal

Acid Dry Dwarf Shrub Heath

Wet Dwarf Shrub Heath

Dry Heath/Acid Grassland Mosaic

Swamp

Inundation

Standing Open Water

Running Water

Acid/Neutral Scree

Acid/Neutral Other Exposure

Cave

Quarry

Spoil

Refuse

Arable

Amenity Grassland

Ephemeral/Short Perennial

Intact Hedge Species Rich

Intact Hedge Species Poor

Defunct Hedge Species Poor

Hedge and Trees Species Poor

Fence

Dry Ditch

Boundary Removed

Earth Bank

Caravan Site

Buildings

Bare Ground

Miscellaneous Other Habitat

Target Note

Other Habitat Boundary

Restricted Access

NORTH

Herefordshire Phase 1 Habitat Map Legend

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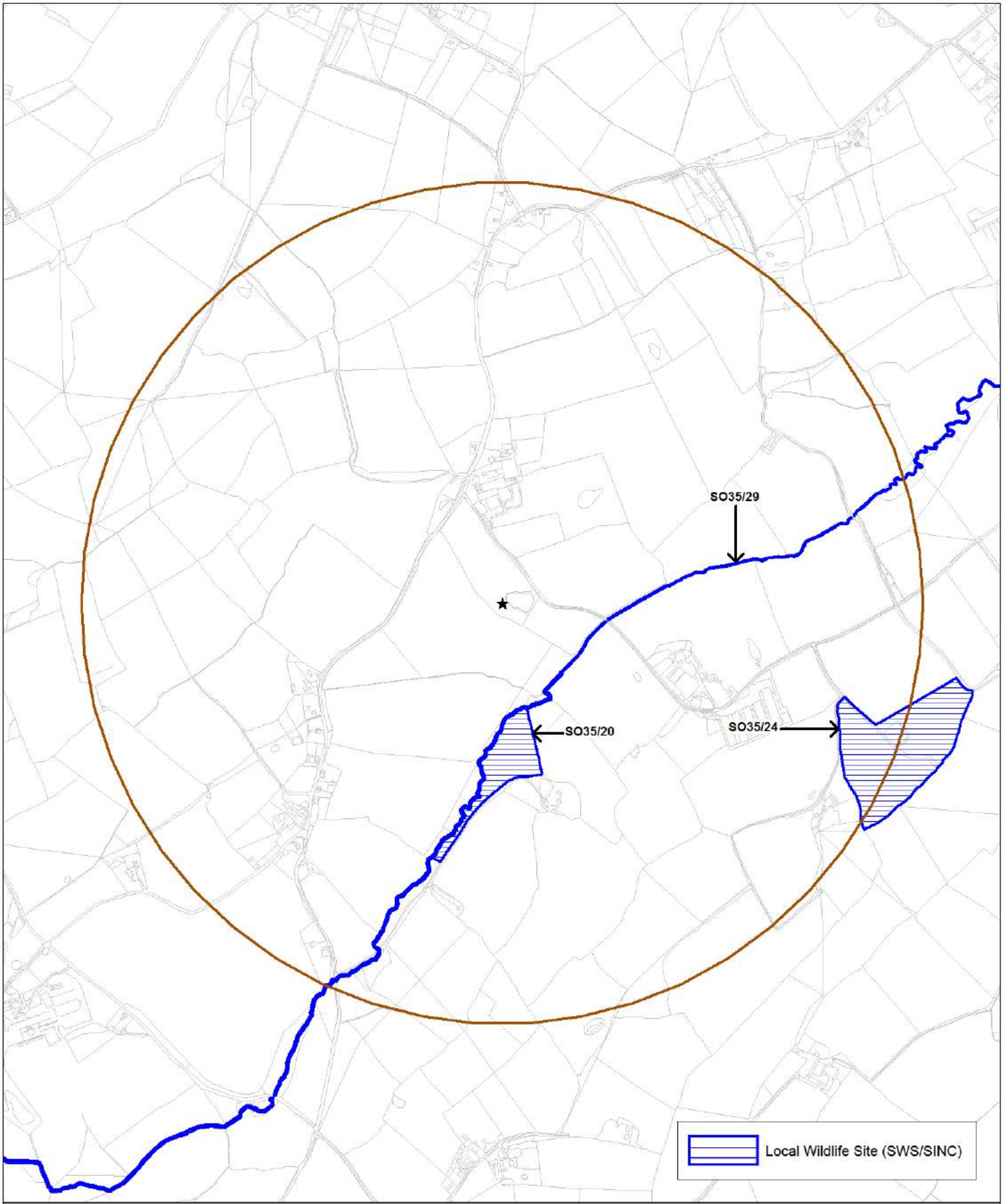

Map showing designated sites
within 1km of SO371549
Lower Green Farm

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