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Nick Smythe
Stileways, West Hill
Wraxall
North Somerset, BS48 1PH

19th May 2023
Our ref: 8244/NS/210223/SR

Dear Nick,

Preliminary Ecological Appraisal Report – Stileways, West Hill, BS48 1PH

Further to being commissioned to undertake an ecological survey of Stileways, West Hill in Wraxall, North Somerset, I am pleased to provide in the Annex below the methods and results of the survey, which was carried out on 14th March 2023. I have also provided an assessment of our findings and recommendations considered necessary to ensure the proposed works comply with legislation and planning policy.

This document acts as a Preliminary Ecological Appraisal Report with the recommendation that an Ecological Impact Assessment is prepared following completion of the further ecological surveys that are recommended within this report.

The survey appraised the suitability of the garage associated with Stileways and the associated garden, for evidence of, or potential to support, protected and notable species. The garage was found to be a confirmed roost, with a small number of droppings associated with lesser horseshoe bat found inside the roof void. The building was also considered to provide opportunities for nesting birds.

A number of mature trees within the site were assessed as offering Low or Moderate potential for roosting bats and the garden and grassland field, in particular the brash and rubble piles, were considered suitable habitat for widespread reptile species such as slow worm.

We have recommended that two dusk emergence and / or pre-dawn re-entry bat surveys, along with a static detector survey, are undertaken of the building to confirm the status of the identified roost and ascertain the presence/likely absence of any other roosts. A tree climbing inspection is also recommended to confirm the suitability of the trees for roosting bats. A licence from Natural England to legally permit loss of the roost(s) as a result of the proposed demolition will be necessary.

A pre-works check for nesting birds has been recommended to be carried out no more than 48hrs prior to demolition of the building and vegetation clearance in order to ensure no nesting birds are disturbed (if works take place March – August inclusive). If any active nests are found to be present, the demolition works will need to be delayed until all young have fledged. A precautionary method of works is also recommended for site clearance to ensure that reptiles are not harmed during the works.

Please do not hesitate to contact me should you have any queries or comments on the enclosed information.

Yours sincerely,

SRichards

Sarah Richards BSc MSc
Ecologist

Preliminary Ecological Appraisal Report
Stileways, Wraxall, BS48 1PH

1.0 Introduction

Clarkson and Woods Ltd were commissioned on 22nd February 2023 to undertake an ecological survey at Stileways, West Hill, Wraxall, North Somerset, BS48 1PH (Figures 1 and 2 below).

The proposals for the Site are understood to include the demolition of the garage within the garden of Stileways and the construction of a new residential dwelling with associated parking and access. No plans have been assessed at the time of writing. The ecological survey assessed the potential of the building and garden to support protected and notable species in order to ensure the proposed works comply with wildlife legislation and planning policy.

Unless the client indicates to the contrary, information on the presence of species will be passed to the county biological records centre in order to augment their records for the area.

This document is a Preliminary Ecological Appraisal Report which provides the results and recommendations following completion of an ecological building inspection and survey of the garden and surrounding land, with the intention that an Ecological Impact Assessment is prepared following completion of the further ecological surveys that are recommended within this report.

Figure 1: Ordnance Survey Map Showing Location of the Site (©2022 Bing Maps)

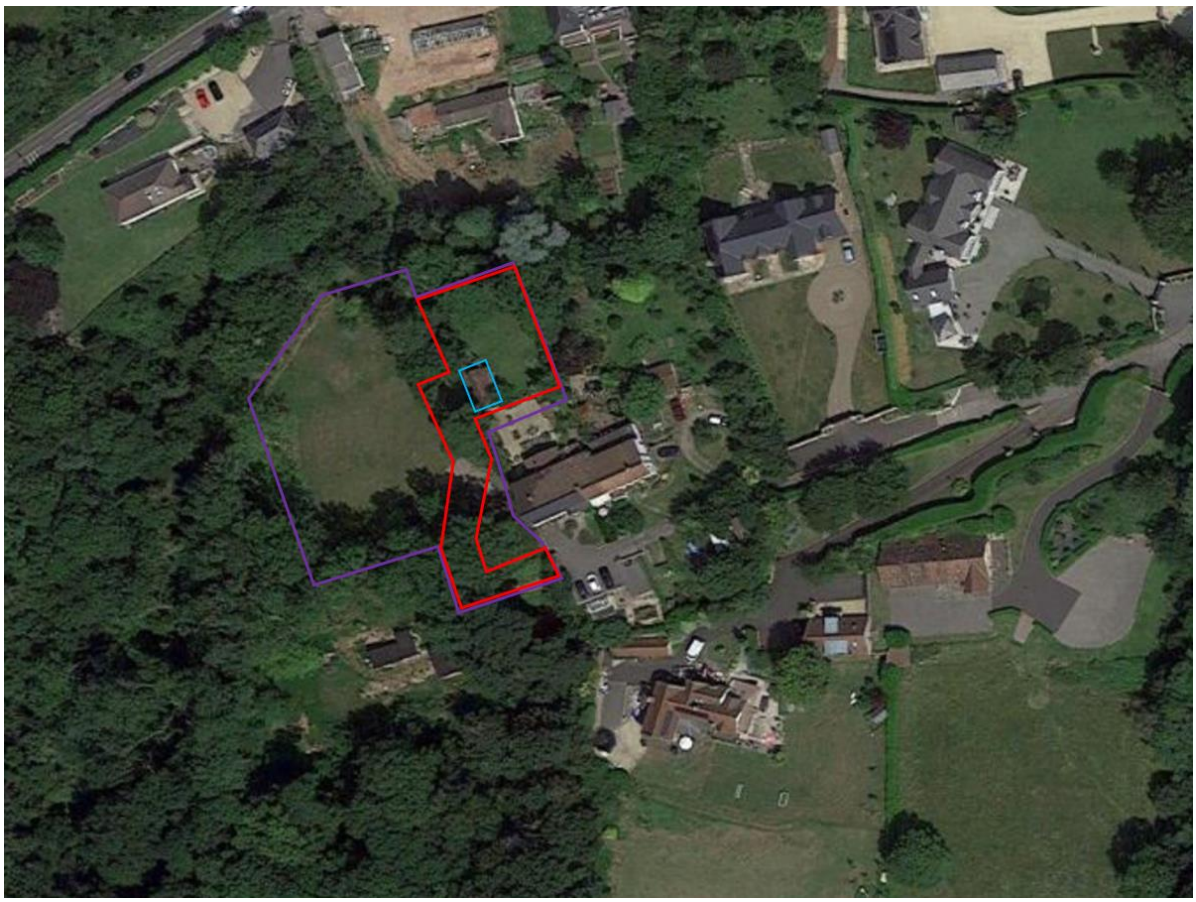


Figure 2: Aerial Photograph of the Site Boundary (red line), the survey area (purple line) and the building surveyed (blue line) (©2022 Google)

2.0 Methodology

Desk Study

The Bristol Regional Environmental Records Centre (BRERC) was consulted for records of protected species and species of conservation concern within 1km of the Site. BRERC was also asked to provide details of locally designated and non-statutory sites for nature conservation within 1km of the Site.

Clarkson and Woods' own database has been consulted for existing records collected within the local area. Freely available online resources such as aerial photography, JNCC information, and www.MAGIC.gov.uk have also been consulted to provide contextual information on the presence/distribution of designated sites and protected and notable habitats and species.

The North Somerset Council Core Strategy (adopted January 2017) and the North Somerset Council Development Management Policies: Sites and Policies Plan Part 1 (adopted July 2016) were consulted for details of planning policies relevant to designated sites, protected species and habitats, and general ecological and environmental protection.

The North Somerset Biodiversity & Trees Planning Document (adopted December 2005) was consulted for information on conservation of priorities species and habitats which may require further consideration and weight within an Ecological Impact Assessment.

Field Survey

The survey was carried out on 14th March 2023 by Paul Kennedy, ACIEEM and Sarah Richards, Qualifying CIEEM. Paul has over 20 years' experience undertaking surveys for bats and holds a licence for the survey of bats in

England (Natural England Level 2 Reg. No. 2015-14471-CLS-CLS). Sarah has over 2 years' experience undertaking ecological surveys and holds an MSc and BSc in relevant subjects. Both surveyors have been assessed under the Clarkson and Woods QA processes as competent to complete the survey.

The building inspection was carried out in accordance with the Bat Conservation Trust's *Bat Surveys Good Practice Guidelines* (2016). The exteriors of the building were examined through the use of ladders, torches and binoculars for potential roosting features (PRFs). Wherever possible, these points were thoroughly investigated using a video fibrescope to determine the likelihood of their occupation and evidence of presence. Other factors taken into consideration included the potential for noise disturbance to the potential roost feature, exposure to the elements, lighting levels, proximity/connectivity to vegetation and water and whether these PRFs led on to cavities further into the structure.

Internally, all accessible roof voids and accessible parts of the building were entered where safe and possible to do so in order to describe their characteristics and to look for PRFs. A one million candle-power torch, ladders and a video fibrescope were used where necessary. Any signs of occupation including urine staining, prey remains, fur rubbing marks and droppings were noted where found. Droppings were compared against reference material to identify likely species, but DNA analysis may be undertaken in certain circumstances to confirm species identification.

Following the inspection, the building was assigned a 'high', 'medium', 'low' or 'negligible' category as a guide to inform any necessary further survey effort as stipulated in the BCT guidelines.

The building and land within the application Site was surveyed for signs of use by nesting birds and any birds seen or heard during the survey were noted. The habitats were also assessed for evidence of, or potential to support, protected and notable species such as badger, reptiles, amphibians, hedgehogs and harvest mouse (amongst others).

At the time of survey, the weather conditions were dry, clear and calm, with an ambient temperature of 9°C.

Certain species have been scoped out on the basis of a lack of suitable habitat within or adjacent to the Site, including otter *Lutra lutra* and water vole *Arvicola amphibius* as no watercourses are present on Site or within nearby contiguous habitat. Great crested newts *Triturus cristatus* have also been scoped out as there are no ponds present within or surrounding the Site, with the nearest ponds shown on OS mapping as being approximately 525m north and 525m south-east of the Site.

Details of the legislative protection afforded to those species which have been identified as occurring or potentially occurring on the Site are given in Appendix A.

Survey limitations

Bats are very small creatures, capable of accessing small spaces and it is possible that these animals, or their signs, might have been missed during the survey if they are normally present opportunistically or in small numbers for a short period of time each year.

Not all features in buildings suitable for use by bats are visible from the ground and there can be no external evidence of use of features by bats; consequently it is only possible to make a best effort when carrying out a survey.

3.0 Desk Study Results

Designated Sites

Four statutory designated sites for nature conservation were identified within the desk study and are summarised in Table 1 below.

Table 1: Summary of Statutory Designated Sites for Nature Conservation

Site Name	Size, Distance and Direction from Site	Reason for Designation	Importance
Severn Estuary Special Area of Conservation (SAC)	73.715ha 4.7km north	Severn Estuary SAC is designated primarily for its Annex I habitats including estuaries, intertidal mudflats and sandflats, reefs (*Sabellaria sp.*), and Atlantic salt meadows. Annex II species river lamprey *Lampetra fluviatilis*, sea lamprey *Petromyzon marinus* and twaite shad *Alosa fallax* are also a primary reason for this designation.	International
Severn Estuary Special Protection Area (SPA)	17.600ha 4.7km north	The Severn Estuary SPA is nationally and internationally important for the breeding, feeding, wintering and migration of rare and vulnerable species of birds. It sustains populations of the Annex I species Bewick's swan *Cygnus columbianus bewickii* and regularly occurring migratory species such as Dunlin *Calidris alpina* and Gadwall *Anas strepera*.	International
Severn Estuary Ramsar Site	16.942ha 4.7km north	Overall the species assemblage qualifies the site as a wetland of international importance under the Ramsar Convention.	International
Tickenham, Nailsea and Kenn Moors Site of Special Scientific Interest (SSSI)	167ha 1.86km south-west	Designated for its extensive ditch habitats which drain agricultural fields of variable ecological value. Notable features include ditch flora and notable invertebrates.	National

Four local or non-statutory designated sites for nature conservation were identified within the desk study and are summarised in Table 2 below.

Table 2: Summary of Local and Non-statutory Designated Sites for Nature Conservation

Site Name	Distance and Direction from Site	Reason for Designation	Importance
Breach Wood (Wraxall and Failand) Site of Nature Conservation Interest (SNCI)	950m north-east	Ancient semi-natural broadleaved woodland.	County
The Sidelands, Wraxall SNCI	916m east	Semi-natural broadleaved woodland, some included on the Ancient Woodland Inventory, and including areas of Priority Habitat Lowland Mixed Deciduous Woodland.	County
Tickenham Hill, Cadbury Camp, Chummock Wood Complex SNCI	640m north-west	Ancient semi-natural and semi-natural broadleaved woodland, unimproved and semi-improved calcareous grassland, with semi-improved neutral grassland and dense scrub. Rich in birds and butterflies.	County

Towerhouse Wood and adjacent fields SNCI	650m south-west	Ancient semi-natural broadleaved woodland, wet woodland and calcareous and other grassland. Includes small area of Priority Habitat Lowland Calcareous Grassland and possible Upland Mixed Ashwoods and Wet Woodland.	County

The Site is located within Band C of the North Somerset and Mendip Bats Special Area of Conservation (SAC) consultation zones, as specified in the supplementary planning document (SPD) 'North Somerset and Mendip Bats Special Area of Conservation (SAC) Guidance on Development (January 2018).

Protected/Notable Species

Badger – BRERC returned records of five badger setts within 1km of the Site, the closest of which is located within 500m of the Site. Three records of badger were also returned, with the closest record located approximately 770m south-east of the Site in 2015.

Bats - BRERC returned seven records of bat roost within 2km of the Site, since 2012. A summary of the bat roosts is provided in Table 3 below. Locations in the table below are approximate due to the sensitivity of the records.

Table 3: Bat roosts within 2km of the Site

Type	No. of individuals	Species	Year	Location
Maternity Roost	Not specified	Lesser horseshoe	2018	1.4km south-west
Day Roost	1	Brown long-eared	2018	470m south-west
Day Roost	2	Common pipistrelle	2018	470m south-west
Roost	55	Lesser horseshoe	2014	1.4km south-west
Roost	1	Myotis sp.	2017	1.3km west
Roost	Droppings found	Long-eared sp.	2017	1.3km west
Roost	Droppings found	Long-eared sp.	2014	1.4km south-west

BRERC also returned 40 records of bats since 2012, including common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, noctule *Nyctalus noctula*, Long-eared sp. *Plecotus sp.*, serotine *Eptesicus serotinus*, lesser horseshoe *Rhinolophus hipposideros*, *Myotis sp.* and Leisler's bat *Nyctalus leisleri*. The closest records were soprano pipistrelle, serotine, *Myotis sp.* and Leisler's bat located 115m south-west of the Site, recorded in 2018.

A search of the MAGIC website revealed six records of EPS bat licences within 2km of the Site, detailed within Table 4 below.

Table 4: Granted EPS licences for bats within 2km of the Site

Licence reference	Species	Date To-From	Impact	Distance and direction from Site
EPSM2011-3351	Common pipistrelle, soprano pipistrelle, brown long-eared	05/09/2011 – 31/10/2013	Destruction of a resting place	1.58km west
EPSM2013-6280	Common pipistrelle, serotine, brown long-eared	04/10/2013 – 30/09/2016	Destruction of a resting place	680m south-west
2019-43453-EPS-MIT 2019-43453-EPS-MIT-1	Brown long-eared, common pipistrelle	15/11/2019 – 30/11/2029	Impact on a breeding site, damage of a breeding and resting place	395m south-west
2019-43703-EPS-MIT	Common pipistrelle, soprano pipistrelle, serotine, greater horseshoe, lesser horseshoe	05/12/2019 – 04/12/2029	Impact on a breeding site and destruction of a breeding site and resting place	2km west
2020-49342-EPS-MIT	Common pipistrelle, brown long-eared	13/10/2020 – 13/10/2030	Impact on a breeding site, destruction of a breeding site and resting place	350m north-west
2020-50468-EPS-MIT	Lesser horseshoe	01/01/2021 – 30/09/2023	Damage of a resting place	1.3km south

A search of Clarkson and Woods' in-house records returned records of two bat roosts within 2km of the Site. This includes a common pipistrelle roost located approximately 1.6km north of the Site, recorded in 2015 and a brown long-eared night roost and feeding perch located approximately 2km west of the Site, recorded in 2019. The search also returned records of common pipistrelle, soprano pipistrelle, noctule, lesser horseshoe, serotine, *Myotis sp*., and brown long-eared located approximately 380m north of the Site in 2020.

Hazel Dormice – BRERC returned 19 records of hazel dormice within 1km of the Site since 2012. The closest records are located approximately 875m south-west of the Site in Towerhead Wood, recorded between 2012 and 2014.

Reptiles – BRERC returned one record of a slow worm *Anguis fragilis* within 1km of the Site since 2012. The record was located approximately 325m east of the Site, recorded in a garden compost in 2019.

Amphibians – BRERC returned no records of amphibians within 1km of the Site since 2012.

Birds – BRERC returned records of 24 individual Schedule 1, Section 41, red- and amber-listed species within 1km of the Site since 2012.

Hedgehogs – BRERC returned one record of a hedgehog *Erinaceus europaeus* within 1km of the Site since 2012. The record was located approximately 665m south-east of the Site, recorded in 2016.

The following policies have been identified within the North Somerset Core Strategy (2017-2022) and the North Somerset Council Development Management Policies: Sites and Policies Plan Part 1 (adopted July 2016), which are considered relevant to the Site.

CS4: Nature Conservation

North Somerset contains outstanding wildlife habitats and species. These include limestone grasslands, traditional orchards, wetlands, rhynes, commons, hedgerows, ancient woodlands and the Severn Estuary. Key species include rare horseshoe bats, otters, wildfowl and wading birds, slow-worms and water voles.

The biodiversity of North Somerset will be maintained and enhanced by:

1) *Seeking to meet local and national Biodiversity Action Plan targets taking account of climate change and the need for habitats and species to adapt to it;*
2) *Seeking to ensure that new development is designed to maximise benefits to biodiversity, incorporating, safeguarding and enhancing natural habitats and features and adding to them where possible, particularly networks of habitats. A net loss of biodiversity interest should be avoided, and a net gain achieved where possible;*
3) *Seeking to protect, connect and enhance important habitats, particularly designated sites, ancient woodlands and veteran trees;*
4) *Promoting the enhancement of existing and provision of new green infrastructure of value to wildlife;*
5) *Promoting native tree planting and well targeted woodland creation, and encouraging retention of trees, with a view to enhancing biodiversity.*

CS9: Green Infrastructure

The existing network of green infrastructure will be safeguarded, improved and enhanced by further provision, linking in to existing provision where appropriate, ensuring it is a multi-functional, accessible network which promotes healthy lifestyles, maintains and improves biodiversity and landscape character and contributes to climate change objectives.

Priority will be given to:

[…] • the protection and planting of trees in woodlands and urban areas, particularly native trees, for public amenity and climate change mitigation and benefits to biodiversity, health and recreation;

[…] • the protection and enhancement of biodiversity;

[…]• the continued development of a network of green spaces, water bodies, paths and cycleways and bridleways in and around the urban areas, recognising the value of sustainable drainage systems for green infrastructure;

• the management, maintenance, upgrading and extension of the public rights of way network including improved connectivity to areas of green infrastructure within and outside North Somerset;

• the provision of strategically significant green spaces in association with all areas of development.

DM8: Nature Conservation

Development proposals must take account of their impact on local biodiversity and identify appropriate mitigation measures to safeguard or enhance attributes of ecological importance.

Where appropriate, proposals should seek to conserve the local natural environment by retaining, protecting, enhancing and linking existing wildlife habitats; by incorporating retained habitats sensitively into the development through appropriate design; and by ensuring that such retained and enhanced habitats are managed appropriately. Where necessary, longer term management will be achieved through suitable planning conditions.

Sites of International and National Importance *Development which would have an adverse impact on identified sites of international importance (which include Special Areas of Conservation (SACs), Special Protection Areas (SPA) and Ramsar sites) will not be permitted.*

The North Somerset and Mendip Bats SAC consultation area is defined on the Policies Map. The consultation will identify the potential impact of the proposed development in respect of, for example, bat navigation and foraging habitats and identify appropriate mitigation measures through site design and lighting strategies.

The Severn Estuary SAC, SPA and Ramsar site is defined on the Policies Map. Any proposals that could affect the sensitive bird species and other habitats and species of the Estuary will need to carry out adequate surveys and assessments of the cumulative, in-combination and offsite impacts (drainage, disturbance, runoff, impacts on managed realignment etc.) of the scheme.

Development within or in proximity to a Site of Special Scientific Interest (SSSI) or National Nature Reserve that is likely to have a direct or indirect adverse affect on its biodiversity or geological interest would not normally be permitted.

Local Nature Reserves and Local Sites *Planning permission will not normally be granted for development that would result in loss in extent or otherwise have a significant adverse effect on Local Nature Reserves or Local Sites (locally designated Wildlife Sites and Geological Sites), unless the harm can be mitigated by appropriate measures.*

Legally Protected Species and Habitats and Species of Principal Importance in England – Priority Habitats and Species *Development which could harm, directly or indirectly, species, which are legally protected, or species and habitats that have been identified as Species or Habitats of Principal Importance in England (also known as Section 41 or 'Priority' species and habitats) will not be permitted unless the harm can be avoided or mitigated by appropriate measures.*

Development proposals should ensure that, where appropriate, provision is made for:

• any lighting scheme to avoid adverse impacts on light averse wildlife;
• retention of native woodland, native trees (to include veteran trees), native hedgerows, watercourses, ponds, rhynes, other wetland habitats such as reedbeds, botanically diverse grasslands, traditional orchards, geological features, and other major natural features, habitats or wildlife corridors, and their protection during construction work;
• protection of ecosystem resources, to include water quality;
• compensatory provision, within the site itself, or immediate vicinity if practicable, of at least equivalent biodiversity value, where the loss of habitats or features of importance to wild flora and fauna is unavoidable;
• incorporation of habitat features of value to wildlife within the development (to include within building design) and including those which meet the needs of local species (e.g. provision of nesting features for swifts, swallows, house sparrows, bats);
• appropriate long term management of retained and newly created features of importance to wildlife;
• provision of monitoring of key species to evaluate impact of site management;
• planting of locally appropriate native species of local origin wherever possible; and
• measures to link habitats within the development and also that link into adjoining wildlife corridor networks.

Ecological mitigation measures provided within the development *Where development proposals may impact legally protected and notable species and habitats, they will need to be accompanied by an up to date ecological survey assessment as part of the submitted application. This will include:*

• site context information provided by a local records data search of designated sites, legally protected and notable species in proximity;
• a description of the biodiversity interest of the site, to include current land use; and including, where applicable, regard for any Strategic Nature Areas;

• the nature and extent of the impact on legally protected species and habitats, Section 41 species and habitats/or other notable species of the proposed development or change of use of land; and the measures that may be needed to avoid, mitigate or compensate the identified impacts;
• the steps to be taken to retain, protect, enhance, link and, where appropriate, create and manage the biodiversity interest over the longer term; which may include monitoring;
• where necessary effective lighting design to avoid artificial light spill to wildlife habitats/corridors to avoid impacts on light averse wildlife.

The following species is listed within the North Somerset Biodiversity and Trees Planning Document (adopted December 2005), which is considered relevant to the Site:

- Greater horseshoe bat *Rhinolophus ferrumequinum*

4.0 Survey Results

The Site comprised a single storey garage located in the rear garden of the main house at Stileways, and a grassland field adjacent to the west of the garden. Six mature trees were located within the garden and adjacent field.

Building
The building comprised concrete blockwork walls which were rendered, and had a single pitched, double Roman tiled roof. A wooden framed lean to was present on the northern aspect with hanging clay tiles covering this structure (see Photograph 1), and a wooden framed covered porch was present on the eastern aspect, approximately 1m in width. An apple tree was growing through the roof structure of the covered porch on the eastern aspect (see Photograph 2).

Externally, the building was in relatively good condition. Double wooden doors were present on the southern aspect of the building which were intact and tightly fitting. Wooden cladding (weatherboarding) was present above the double doors (see Photograph 3). A window and a wooden stable style door were located on the eastern aspect. The window comprised a wooden frame and was intact and tightly fitting. The door also comprised a wooden frame, with small gaps present along the top of the doorframe. An intact, tightly fitted single window with a wooden frame was located on the northern aspect covered by the lean-to.

The single pitched, double Roman tiled roof comprised several missing and slipped tiles, whilst the ridge was covered with a single ridge tile at the northern end of the building. The remaining ridge was open and provided potential access to bats roosting between the tiles and felt. The open ridge allowed access for water to run between the tiles and the felt below, and lichen and moss growth was evident on the felt under the tiles, reflecting damp conditions which reduced the suitability for crevice roosting bats.

Missing tiles were noted under the ridge line in the centre of the western aspect, and a small number of slipped and missing tiles were recorded along the bottom row of tiles on the western aspect. A number of lifted tiles were present surrounding the gap in the covered porch where the apple tree was growing through the roof on the eastern aspect. Some missing tiles were also noted below the ridge line at the southern gable end of the eastern aspect.

Decorative string lights were present around the southern gable end, however it was not confirmed whether these lights were in working order. No other external lighting was on the building.

Internally, the building comprised a single room used for storage and was very cluttered (see Photograph 5), with a roof void above. The doors and windows were mostly tightly fitted, with the exception of small gaps above the stable door on the eastern aspect. A large gap was present in the brickwork on the northern aspect which extended into the roof void above and allowed access for bats and birds.

The roof void was boarded with no insulation and was lined with breathable roof membrane (BRM) with rafters and a central ridge beam. The void was accessible from outside via an open doorway on the northern aspect and gaps were present along the eaves on the western and eastern aspects (see Photograph 6). The wooden cladding on the southern aspect was largely unlined, apart from a small section of BRM covering the top three boards, and therefore was largely unsuitable for crevice roosting bats (see Photograph 7). The roof void was very light and the access points created unstable internal conditions (particularly temperature), limiting the suitability for day roosting bats.

Access into the roof void from the garage below was through an open gap in the boarding. There was no loft hatch present and as such this provided unimpeded access between the roof void and the garage below.

Six bat droppings were identified at the southern end of the roof void which were attributed to lesser horseshoe bat. It was considered that the roof void is used as an occasional night roost by one lesser horseshoe, based on the size, structure, and conditions within the void as well as the droppings found.

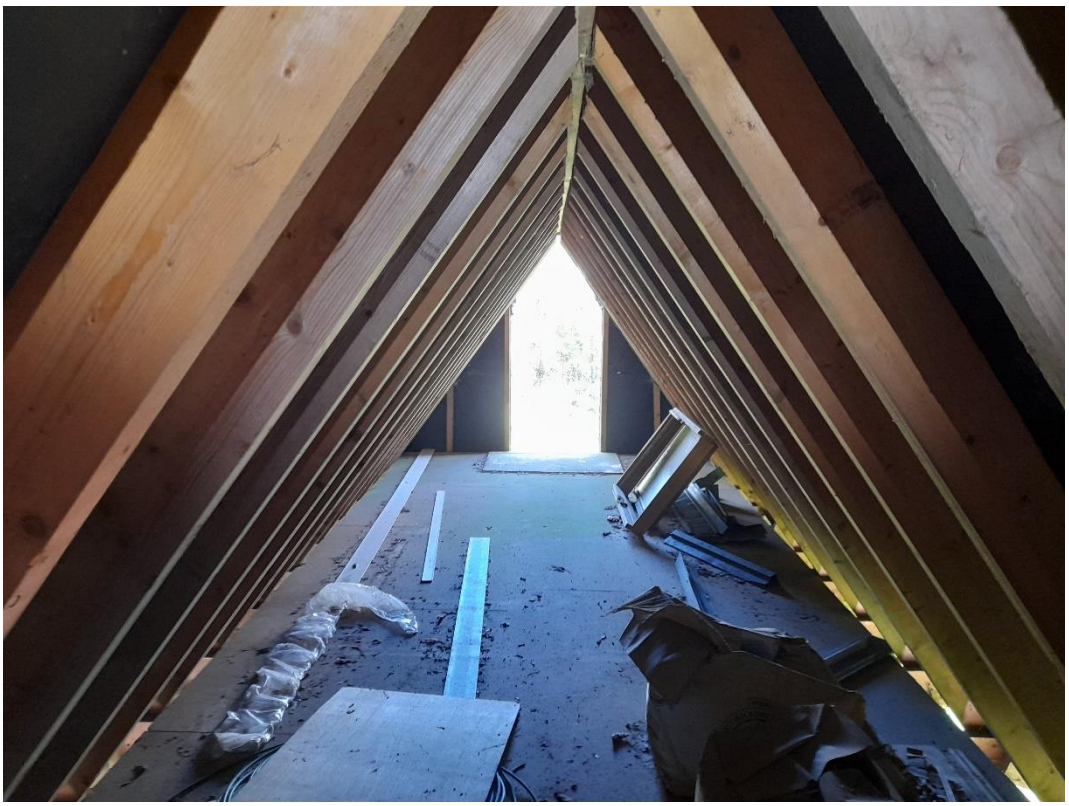
Photograph 1: Northern aspect of the garage showing the lean to and access into the roof void via the open doorway above.

Photograph 2: Eastern aspect of garage with an apple tree growing through the covered porch.

Photograph 3: Southern aspect of the garage with wooden cladding above the double doors.

Photograph 4: Western aspect of the garage. Single ridge tile present at the northern end and missing tiles present below the ridge in the centre of the roof and in the southern corner at the bottom of the roof.

Photograph 5: Internal view of garage.



Photograph 6: Roof void open at northern end, with gaps at the eaves along the western and eastern aspects.

Photograph 7: Gaps in wooden cladding at southern end of the roof void.

Photograph 8: Evidence of a bat dropping within the roof void.

Trees

Several trees were present within the Site. The apple tree growing through the roof of the building contained multiple potential roosting features including lifted bark, rot holes and splits in the branches. None of the features appeared to lead to deep cavities beyond, and the tree was considered to have low potential for roosting bats.

Three mature trees were located along the northern garden boundary. A large mature walnut tree was present to the west. This tree contained a split in the main stem approximately 5m high and had flaking bark and dead limbs, with a union joint on the northern aspect approximately 7-8m high. An ash tree was located at the eastern corner of the northern boundary. This tree contained a wound at approximately 8m high on the southern aspect, where a limb had previously snapped off. Both trees were considered to offer low bat roost potential.

Three large mature trees were present adjacent to the western garden fence including an ash to the north and two sycamore trees to the north and south of the garage. The sycamore to the south of the garage was considered to have moderate bat roost potential. The tree contained some dead limbs and several rot holes within the main stem (see Photograph 12). A nuthatch was observed potentially nesting within the tree.

Photograph 9: Apple tree with low bat roosting potential.

Photograph 10: Northern boundary of garden with a walnut tree (left), pine tree (centre) and ash tree (right).


Photograph 11 and 12: Sycamore to south of the garage with moderate bat roost potential.

Grassland

The garden was north facing and comprised amenity grassland dominated by fescue grass *Festuca sp.*, with dandelion *Taraxacum officinalis*, lesser celandine *Ficaria verna*, creeping buttercup *Ranuncuus repens*, spear thistle *Cirsium vulgare*, dock *Rumex sp.*, ragwort *Jacobaea vulgaris*, ground ivy *Glechoma hederacea*, snowdrop *Galanthus nivalis* and bluebell *Hyacinthoides non-scripta*. The sward was approximately 5-10cm tall at the time of survey and was well managed. Shrubs and trees were present along the north, east and western boundaries. A gravelled patio area was present adjacent to the south, connected to the main house.

The field to the west of the garden comprised a likely modified grassland sward, comprising Yorkshire fog *Holcus lanatus*, dandelion, ragwort, creeping buttercup, dock, speedwell *Veronica sp.*, spear thistle, barren strawberry *Potentilla sterilis*, lords and ladies *Arum maculatum*, willowherb *Epilobium sp.*, rush *Juncus sp*., and bramble *Rubus fruticosus*. The sward was approximately 5-15cm tall at the time of survey with signs of recent management and a bare earth access track along the eastern edge of the field. The northern and western boundaries of the field comprised woodland edge, and a narrow band of ash and English oak trees with brash and rubble piles was present along the southern boundary.

Photograph 13: Access track along the eastern edge of the grassland field.

Photograph 14: Brash pile within the grassland field suitable for reptile species.

No evidence of any other protected/notable species were noted during the survey. The grassland and rubble and brash piles provided suitable habitat for widespread reptile species such as slow worm *Anguis fragilis* which may be present on Site. The grassland and surrounding habitats are also suitable for foraging and hibernating hedgehog *Erinaceus europaeus*. Hazel dormouse *Muscardinus avellanarius* may also be present in the surrounding woodland habitat, particularly as there are records of this species nearby, although the habitats within the redline boundary provide limited suitability for nesting and foraging dormice given the small extent.

Evaluation

Roosting bats – The building was found to be a **confirmed roost** through the presence of a small number of bat droppings, likely made by lesser horseshoe bat. Based on the construction and conditions of the building, as well the droppings found, it was considered likely that the building is used by a single lesser horseshoe bat as an occasional night roost, although further detailed surveys would be required to ascertain this. The building offered **Low** potential for single crevice dwelling bats under the tiles. The building was considered to offer low to negligible hibernation potential for bats.

Several mature trees within the Site were considered to offer **Low** potential for roosting bats, and a sycamore tree located to the south of the garage was considered to offer **Moderate** potential for roosting bats.

Foraging and commuting bats – The mature trees to the north and west of the garage likely provide a commuting corridor for bats within the local landscape and provide connectivity to the west and south of the Site. The Site is well connected to woodland parcels in the surrounding area which are of high quality for bats. The grassland and trees are likely to provide suitable foraging opportunities for bats commuting through the landscape, although they are relatively small in extent and only likely to form a part of a wider network of foraging and commuting habitat. As such foraging and commuting bats are considered to be of **Site** ecological importance within the Site.

Nesting birds – The building was considered suitable for certain nesting bird species which occupy buildings, however no nests were identified during the survey. The shrubs and trees within the garden and grassland field were considered to provide suitable nesting and foraging habitat for birds, and a nuthatch was observed displaying signs of nesting within a large sycamore tree to the south of the garage. Overall, the Site is likely to be of **Site** importance to nesting birds.

Reptiles – The habitats within the garden and adjacent grassland field, particularly rubble piles within the grassland field offer potential shelter, basking and foraging opportunities for widespread reptile species such as slow worm. The ecological importance of this is not known at present but would most likely be of **Site** importance given the relatively small size of the suitable habitat present.

Hedgehog and Hazel Dormouse – The grassland within the field and garden, as well as the shrubs and surrounding woodland habitat may support foraging and nesting hedgehog. The surrounding woodland may also support dormouse, which have been recorded within the wider landscape. The value of the Site to these species is unknown at present but is likely to be of at least **Site** importance if they occur within the locality.

5.0 Recommendations

Bats

The building was found to be a **confirmed** bat roost, likely an occasional night roost for a single lesser horseshoe bat on current evidence. The building was also considered to offer **Low** suitability to support crevice roosting bats. In accordance with the BCT guidelines, it is recommended that a minimum of two dusk emergence and / or pre-dawn re-entry surveys of the garage are conducted. In addition, a static detector survey is also recommended within the building for a period of five consecutive nights to record overnight bat activity within the structure and determine the status of the confirmed roost. These surveys can only be conducted between May and August/September inclusive.

The mature trees within the Site offered **Low** potential for roosting bats, with one sycamore tree located to the south of the garage offering **Moderate** potential for roosting bats. To confirm whether this tree is likely to be used by roosting bats, it is recommended that a tree climbing inspection is undertaken to examine the potential roost features in more detail.

A licence from Natural England to legally permit loss of the roost(s) will be necessary, subject to mitigation such as provision of alternative roost habitat appropriate for the species and type of roost affected. Such roost habitat may comprise bat boxes, new crevice roost features in the new building and/or night roost habitat in an open structure. These can be designed on completion of the further surveys.

The proposals, including landscaping proposals for the Site, should be designed with input from the project ecologist to ensure features/species are included to benefit bats and other wildlife. Should new external lighting by proposed for the Site, a sensitive lighting strategy should also be designed with ecological input to ensure that lighting impacts are avoided/minimised. Bats and most other wildlife are negatively affected by night-time light pollution so this will need to be carefully considered at the outset of the scheme design.

Birds

The demolition of the garage as well as vegetation clearance (such as the removal of trees) should take place outside the bird nesting season (usually March to August inclusive). If this is not possible, a nesting bird check will be required by a suitably qualified ecologist no more than 48 hours prior to demolition, in order to rule out their presence. If any nesting birds are found to be present, the demolition/vegetation clearance works will need to be delayed in that area (an exclusion zone will be required around the nest) until all young have fledged (as advised by the ecologist).

Reptiles

The habitat within the garden and adjacent grassland field provides suitable habitat for reptiles and it is considered likely that reptiles are present within the Site. Due to the small area of habitat likely to be affected by the proposals, it is recommended that a precautionary approach is undertaken, with reptiles assumed present within the Site and site clearance completed following a precautionary and sensitive method of works to prevent any harm to reptiles.

Ecological Impact Assessment (EcIA)

It is recommended that an EcIA is prepared following completion of the recommended further surveys. The EcIA will assess the potential for impacts on protected and notable species and will provide detailed mitigation measures where necessary to ensure that any potential impacts are not significant.

6.0 Summary

This document acts as a Preliminary Ecological Appraisal Report and it is recommended that an Ecological Impact Assessment is prepared following completion of the further ecological surveys that have been recommended. The EcIA will assess the potential for impacts on protected and notable species and will provide detailed mitigation measures where necessary to ensure that any potential impacts are appropriately mitigated/compensated for.

The garage at Stileways was found to be a confirmed roost, which is likely to be an occasional night roost for a single lesser horseshoe bat based on current evidence. It was considered to be of 'Low' suitability for crevice roosting bats according to the BCT guidelines. The building was also found to provide opportunities for nesting birds. A number of mature trees were considered to offer Low to Moderate potential for roosting bats and the mosaic of grassland, shrubs and rubble/brash piles were considered to provide suitable habitat for widespread reptile species such as slow worm.

It is recommended that further bat surveys are undertaken to confirm the presence or likely absence of roosting bats. A licence from Natural England to legally permit loss of the roost(s) will be necessary to demolish the garage, subject to mitigation.

It is also recommended that a tree climbing inspection is undertaken to confirm whether this tree is likely to be used by roosting bats.

A pre-demolition check for nesting birds has been recommended no more than 48hrs prior to demolition in order to ensure no nesting birds are disturbed by the proposed works (if works take place March – August inclusive). If any nesting birds are found to be present, the demolition works will need to be delayed until all young have fledged.

A precautionary method of works is recommended for site clearance to ensure that any reptiles present within the Site are protected from harm.

The final Site design and landscape proposals will need to be assessed by an ecologist to determine the risk of harm to other protected/notable species including hedgehog and dormice, and determine any appropriate measures to avoid or minimise such risk. The inclusion of suitable habitats and species to benefit local wildlife should also be agreed with an ecologist and form part of the proposals for the Site.

APPENDIX A: WILDLIFE LEGISLATION & SPECIES INFORMATION

BATS

All 17 species of bat known to breed in England and Wales, and their roost sites, are protected under the Conservation of Habitats and Species Regulations 2017, known as the 'Habitats Regulations'. This makes it an offence to deliberately kill or injure a bat, or to deliberately disturb a bat such that its ability to hibernate, breed or rear young, or such that the species' distribution, were significantly affected. It is also an offence to damage or destroy any breeding site or resting place. Intentional or reckless disturbance of bats in their resting places, and damage to or obstruction of resting places are also offences under the Wildlife and Countryside Act 1981 (as amended). Under UK law a bat roost is "any structure or place which any wild [bat]...uses for shelter or protection". As bats tend to reuse the same roosts, legal opinion is that the roost is protected whether or not the bats are present at the time. Penalties for offences against bats or their roosts include fines of up to £5,000 and/or up to six months in prison.

As a result, development works which are likely to involve the loss of or alteration to roost sites, or which could result in killing of or injury to bats, need to take place under licence. Works which could disturb bats may also be licensable, though this needs to be assessed on a case by case basis, as bats' sensitivity to disturbance varies depending on normal background levels, and the definition of disturbance offences under the Habitats Regulations is complex. In practice this means that works involving modification or loss of roosts (typically in buildings, trees or underground sites) or significant disturbance to bats in roosts are likely to be licensable.

Licences can be obtained from Natural England or the Welsh Government to permit works that would otherwise be illegal, provided it can be demonstrated that the proposed works are needed to protect public health or safety, or for other reasons of overriding public interest including social and economic reasons. It is also necessary to demonstrate that there is no satisfactory alternative to the proposed works, and that the conservation status of bats in the area will be maintained. Appropriate mitigation and post-construction monitoring are therefore a requirement of all licences.

BIRDS

All British birds, their nests and eggs (with certain exceptions) are protected under the Wildlife & Countryside Act 1981 (as amended) which makes it an offence to: intentionally kill, injure or take a wild bird; intentionally take, damage or destroy nests which are in use or being built; intentionally take or destroy birds' eggs; or possess live or dead wild birds or eggs. A number of species receive additional protection through inclusion on Schedule 1 of the Wildlife and Countryside Act; for these it is also an offence to intentionally or recklessly disturb birds while nest building, or at a nest containing eggs or young, or to disturb the dependant young of such a bird. Penalties for offences against bird species include fines of up to £5,000 and/or up to six months in prison.

General licences for control of some bird species are issued by Natural England and Natural Resources Wales in order to prevent damage or disease, or to preserve public health or public safety, but it is not possible to obtain a licence for control of birds or removal of eggs/nests for development purposes. Consequently if nesting birds are present on a development site when works are programmed to start it is usually necessary to delay works, at least in the areas supporting nests, until any chicks have fledged and left the nest. It is usually possible, once chicks have hatched, for an experienced ecologist to predict approximately when they are likely to fledge, in order to inform programming of works on site.

REPTILES

All six native reptile species receive protection under the Wildlife and Countryside Act 1981 (as amended). The four more common species (common lizard Zootoca vivipara, slow-worm Anguis fragilis, adder Vipera berus and grass snake *Natrix helvetica)* receive partial protection which makes it an offence to intentionally kill or injure a reptile. The two other reptile species (smooth snake Coronella austriaca and sand lizard Lacerta agilis), both of which are rare with very restricted UK ranges receive full protection under the Conservation of Habitats and Species Regulations 2017. Penalties for offences against reptile species include fines of up to £5,000 and/or up to six months in prison.

Works such as site clearance or topsoil stripping which could result in killing or injury of reptiles could be considered result in an offence unless measures are taken to minimise the risk of this occurring. Any inadvertent impacts on common reptile species despite these mitigation measures being in place would be considered an 'incidental result of an otherwise lawful operation' which 'could not reasonably have been avoided' and therefore not an offence. Works which could affect smooth snakes or sand lizards, or their habitats, would need to take place under licence from Natural England or Natural Resources Wales. However sites supporting smooth snakes or sand lizards are very rarely affected by development proposals.

In practice, mitigation for impacts of development on common reptiles generally comprise one or more of the following techniques: displacement, in which reptiles are encouraged to move to suitable retained habitat by changing the management of areas affected by development; exclusion, where reptile-resistant fencing is provided between a development site and suitable retained habitat allowing reptiles to be trapped from the development footprint and released elsewhere on the site; and translocation, where animals are trapped from a development site and released on another suitable site nearby. Reptile mitigation proposals, particularly those involving translocation of animals, should be agreed in advance with the local planning authority.

DORMICE

Dormice and their nests are protected in England and Wales under the Conservation of Habitats and Species Regulations 2017, known as the 'Habitats Regulations'. This makes it an offence to deliberately kill or injure a dormouse, or to deliberately disturb a dormouse such that its ability to hibernate, breed or rear young, or such that the species' distribution, were significantly affected. It is also an offence to damage or destroy any breeding site or resting place. Intentional or reckless disturbance of dormice in their nests, and damage to or obstruction of nests are also offences under the Wildlife and Countryside Act 1981 (as amended). Penalties for offences against dormice or their nests include fines of up to £5,000 and/or up to six months in prison.

As a result, development works which are likely to involve the loss of nest sites, or which could result in killing of or injury to dormice, need to take place under licence. Works which could disturb dormice may also be licensable, though this is rarely the case unless loss of dormouse habitat is also proposed, and should be assessed on a case by case basis. In practice this means that works involving any removal of habitat (typically woodland, hedgerows, and scrub) supporting dormice are likely to be licensable.

Licences can be obtained from Natural England or the Welsh Government to permit works that would otherwise be illegal, provided it can be demonstrated that the proposed works are needed to protect public health or safety, or for other reasons of overriding public interest including social and economic reasons. It is also necessary to demonstrate that there is no satisfactory alternative to the proposed works, and that the conservation status of dormice in the area will be maintained. Appropriate mitigation and post-construction monitoring are therefore a requirement of all licences.

PLANNING POLICY IN RELATION TO BIODIVERSITY – ENGLAND

The National Planning Policy Framework (NPPF), was published in March 2012 and revised in July 2021. Additional guidance can be found online at http://planningguidance.planningportal.gov.uk/blog/guidance/. The NPPF simplifies and collates a number of previous planning documents and outlines the government's objective towards biodiversity.

The NPPF identifies ways in which the planning system should contribute to and enhance the natural and local environment (Paragraph 174), including:

- (a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- (b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
- (d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- (e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
- (f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate. protecting and enhancing valued landscapes, geological conservation interests and soils;

It also emphasises the importance of conserving biodiversity and areas covered by landscape designations (Paragraph 176):

Great weight should be given to conserving landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty, which have the highest status of protection in relation to landscape and scenic beauty. The conservation of wildlife and cultural heritage are important considerations in all these areas, and should be given great weight in National Parks and the Broads. The scale and extent of development within all these designated areas should be limited, while development within their setting should be sensitively located and designed to avoid or minimise adverse impacts on the designated areas.

When determining planning applications, the NPPF states that local planning authorities should aim to conserve and enhance biodiversity (Paragraph 175) by applying principles including:

- (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 reasons[6] and a suitable compensation strategy exists; and
- (d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

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 sites7; 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.

There is a general presumption in favour of sustainable development within the NPPF. It is noted in Paragraph 182 that this presumption does not apply where the plan or project is likely to have a significant effect on a habitat 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 Natural Environment and Rural Communities Act (2006) states that a public authority must, "in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity; Conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat". DEFRA issued further guidance on implementation of this act in the document; Guidance for Local Authorities on Implementing the Biodiversity Duty (May 2007), which notes that "Conserving biodiversity includes restoring and enhancing species populations and habitats, as well as protecting them".

ECOLOGICAL ENHANCEMENTS

The Natural Environment and Rural Communities Act (2006) states that a public authority must, "in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity; Conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat". DEFRA issued further guidance on implementation of this act in the document; Guidance for Local Authorities on Implementing the Biodiversity Duty (May 2007), which notes that "Conserving biodiversity can include restoring or enhancing a population or habitat"".

In England, the National Planning Policy Framework (NPPF), issued in July 2021, states that the planning system should contribute to "*minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;*. It also states that "*opportunities to incorporate biodiversity in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity".*

UK BIODIVERSITY ACTION PLANS

The UK Biodiversity Action Plan (UK BAP) 2011 is a policy first published in 1994 to protect biodiversity and stems from the 1992 Rio Biodiversity Earth Summit. The policy is continuously revised to combine new and existing conservation initiatives to conserve and enhance species and habitats, promote public awareness and contribute to international conservation efforts. Each plan details the status, threats and unique conservation strategies for the species or habitat concerned, to encourage spread and promote population numbers.

Species or habitats identified as priorities under the UK Biodiversity Action Plan receive some status in the planning process through their identification as Species/Habitats of Principal Importance in England and Wales, under the Natural Environment and Rural Communities (NERC) Act 2006 (as amended).

Current planning guidance in England, the National Planning Policy Framework, does not specifically refer to Species or Habitats of Principal Importance, though it includes guidance for conservation of biodiversity in general. Supplementary guidance is available online at http://planningguidance.planningportal.gov.uk/blog/guidance/ and this guidance indicates that it is '*useful to consider'* the potential effects of a development on the habitats or species on the Natural Environment and Rural Communities Act 2006 section 41 list.