MPEcology

Preliminary Ecological Assessment (PEA)

Chancery Cottage

Gorsley

April 2022

Document title	PEA – Chancery Cottage, Gorsley
Revision number	0.1

MPEcology

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1 Executive summary

1.1.1 In March 2022, MPEcology were commissioned by Acre Planning Ltd to undertake a Preliminary Ecological Assessment of land at Chancery Cottage in the settlement of Gorsley (hereafter also referred to as 'the site'). Gorsley is located near Newent (Gloucestershire) and sits within the administrative boundary of the Herefordshire County Council (National Grid Reference SO 6776 2552).

1.1.2 A Phase 1 habitat survey of the site following standard methodology (IEA, 1995) was carried out by MPEcology on the 1st April 2022. During the site visit, each distinct habitat type was mapped and target noted according to categories set out by the Joint Nature Conservation Committee (JNCC, 2010). A search for Potential Roost Features (PRFs) for bats was also undertaken during the site visit.

1.1.3 Linton Quarry Site of Special Scientific Interest (SSSI) is the nearest statutory designated site to the land at Chancery Cottage. The site is noted for its geology and is located approximately 67m to the north. A HBRC data search also identified locally designated sites close to the cottage including a pear orchard supporting abundant cowslips approximately 150m to the west. No direct or indirect impact to statutory or non-statutory sites is envisaged through development at Chancery Cottage.

1.1.4 Chancery Cottage sits in a rural location at the southern fringes of Gorsley. The land associated with the cottage is bordered by Linton Road to the north and hedgerows to the east, west and south. The residential property and outbuildings are located at the western side of the site. Remaining parts of the site largely comprise species-poor semi-improved grassland formerly used for grazing.

1.1.5 In terms of protected species, common breeding birds, bats, Dormice, and Great Crested Newts have potential to occur within the site. However, only bats are likely to form a constraint to development.

1.1.6 Bat surveys will be required to investigate the presence of bats roosts. The most urgent of these will involve emergence / roost return surveys of a cherry tree in the north-western boundary that is planned for removal. Surveys of other structures within the site (such as Chancery Cottage and a stone barn to the south) can be undertaken at a later date if further proposals emerge.

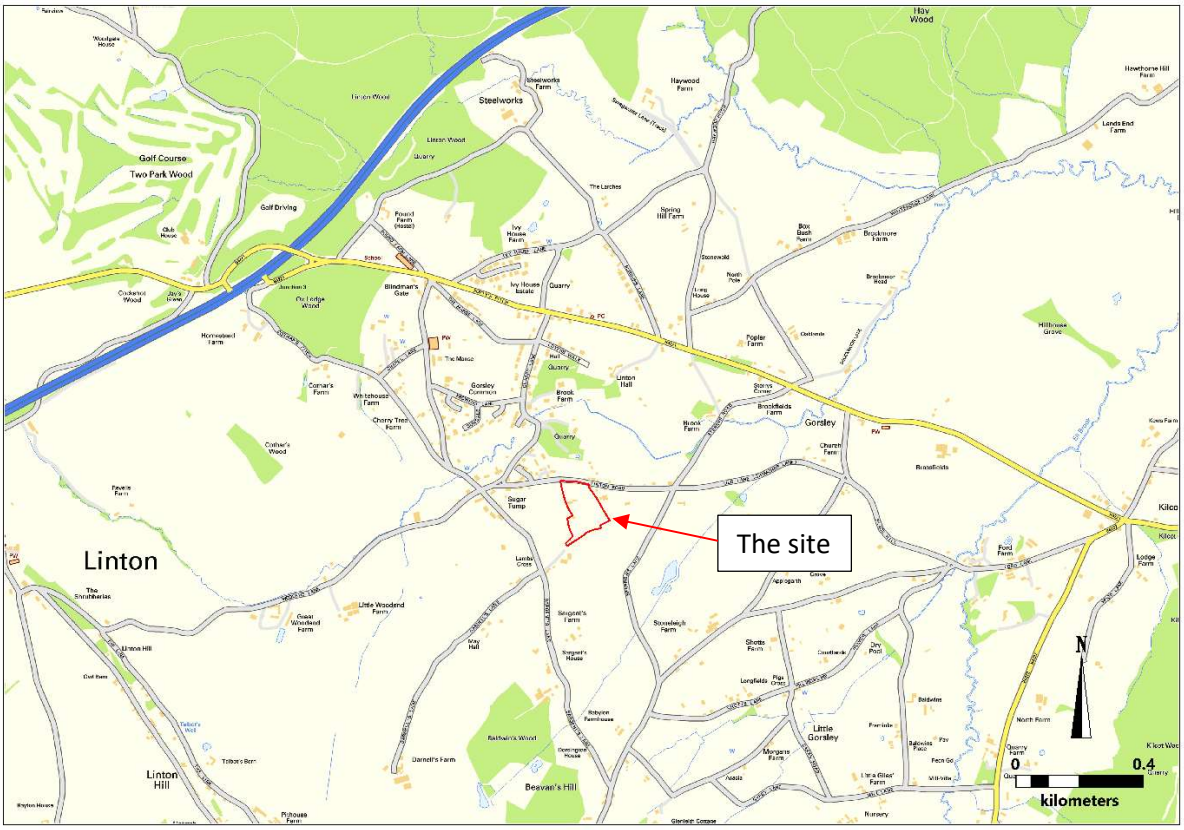
1.1.7 Paragraph 174 of the National Planning Policy Framework introduces a duty to conserve and enhance biodiversity in the planning process. The site offers ample opportunities to introduce enhancement measures offsetting the scale of any future development.

2 Introduction

2.1 Background

2.1.1 In March 2022, MPEcology were commissioned by Acre Planning Ltd to undertake a Preliminary Ecological Assessment of land at Chancery Cottage in the settlement of Gorsley (hereafter also referred to as 'the site'). Gorsley is located near Newent (Gloucestershire) and sits within the administrative boundary of the Herefordshire County Council (National Grid Reference SO 6776 2552).

Figure 1: Location of the site.



2.2 Purpose of this document

2.2.1 The report provides an overview of potential ecological constraints to development at the site.

3 Legislation, planning policy and guidance

3.1 The Conservation of Habitats and Species Regulations 2017

3.1.1 Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora, known as the 'Habitats Directive' and the Birds Directive (Council Directive 2009/147/EC (which codifies Directive 79/409/EEC) for rare, vulnerable and regularly occurring migratory bird species and internationally important wetlands. The requirements of the Habitats Directive and the Birds Directive are transposed into UK legislation by 'The Conservation of Habitats and Species Regulations 2017, commonly known as the 'Habitats Regulations'.

3.1.2 The Habitats Regulations allow for the designation of both Special Protection Areas (SPAs) for birds and Special Areas of Conservation (SACs) for the protection of other species and habitats. These protected areas are collectively known as the Natura 2000 network of sites. Species listed under the Habitats Regulations are known as European Protected Species (EPS) and are afforded a higher level of protection. EPS including Great Crested Newts, Otter and all species of bat are fully protected under UK law making it an offence to kill, injure or disturb EPS and to destroy any place used for rest or shelter.

3.2 Wildlife and Countryside Act 1981 (as amended)

3.2.1 The Wildlife and Countryside Act 1981 (as amended) (WCA) is the principal legislation relating to wildlife protection in the United Kingdom. The Act provides for the designation of Sites of Special Scientific Interest (SSSI), which are selected as the best national examples of habitat types, sites with notable species and sites of geological importance.

3.2.2 Schedules 1-4 of the Act deal with the protection of wild birds. Schedule 5 of the Act details with the protection of other animal species. Full protection is given under Section 9 of the Act to certain animals listed on Schedule 5, including all species of bats. Partial protection under Section 9 is given to certain other species, including all common species of reptile. Schedule 8 of the Wildlife and Countryside Act details protection for plants and fungi. It is an offense to knowingly cause the spread, into the wild, of plants listed on Schedule 9 of the Act.

3.2.3 Special penalties are available for offences related to birds listed on Schedule 1 of the Act and there are additional offences of disturbing these birds at their nests, or their dependent young, as well as the strict protection afforded to birds, their nests and eggs.

3.3 The Countryside and Rights of Way Act 2000

3.3.1 The Countryside and Rights of Way Act 2000 (CRoW Act) primarily deals with the rights of members of the public to access the countryside. The CRoW Act updated and strengthened the legal protection for designated sites (such as SSSIs) as well as certain species. In particular, the CRoW Act strengthened legislation by introducing the offence of 'reckless disturbance'. Section 74 of CRoW Act placed a statutory duty on government departments to have regard to biodiversity conservation and requires the preparation and maintenance of lists of priority species and habitats. Some of the provisions set out in CRoW Act have

been incorporated into amendments to the WCA or have been superceded by the Natural Environment and Rural Communities Act 2006 (NERC 2006).

3.4 National Planning Policy Framework (NPPF) (2021)

3.4.1 The revised National Planning Policy Framework (NPPF) published in 2021 and sets out the framework by which government intends growth to be achieved, whilst protecting the natural and historic environment for future generations. In particular, paragraph 174 relates to conservation and enhancement of the natural environment.

3.4.2 When determining planning applications, the policies and decisions of local planning authorities should contribute to and enhance the natural and local environment by:

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;

c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;

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.

3.4.3 In addition paragraph 180 of the NPPF sets out that 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*.

4 Methodology

4.1 Desk study

4.1.1 A search for existing records of protected or otherwise notable species within 2km of the site was commissioned from the Herefordshire Biological Records Centre (HBRC). Records from the Gloucestershire Centre for Environmental Records (GCER) were not requested. GIS resources of Natural England (NE) were used to identify nearby statutory designated sites.

4.2 Extended phase 1 habitat survey

4.2.1 A Phase 1 habitat survey of the site following standard methodology (IEA, 1995) was carried out by MPEcology on the 1st April 2022. During the site visit, each distinct habitat type was mapped and target noted according to categories set out by the Joint Nature Conservation Committee (JNCC, 2010). Incidental observations of plant and animal species were also made.

4.3 Daytime building inspection for bats

4.3.1 Buildings within the site were subject to a daytime inspection (preliminary roost assessment). During the visit the building was searched by an experienced, licensed bat worker in order to locate evidence of current or past bat roosts, in the form of bats, droppings, staining, feeding signs, and/or remains of bats.

4.4 Daytime inspection of trees

4.4.1 A search for potential roost features (PRFs) on trees within the site was also undertaken.

4.4.2 The search included a visual inspection from ground level followed by physical inspection of accessible features for evidence including droppings, staining, grease or claw marks, odour, sound or presence of bats or the remains of dead bats.

4.4.3 Trees were assigned to a category from 1* to 3 based on criteria set out by the Bat Conservation Trust (Collins, 2016):

Table 1. Bat roost categorisation of trees.

Category	Description
1* (High)	Trees with multiple, highly suitable features capable of supporting larger roosts.
1 (Moderate)	Trees with definite bat potential, supporting fewer suitable features than 1* trees, or with potential for use by single bats.
2 (Low)	Trees with no obvious potential but the tree is of a size and age that elevated surveys may results in cracks or crevices being found; or the tree supports some features which may have limited potential to support bats.
3 (Negligible)	Trees with no potential to support bats.

4.5 Surveyor

4.5.1 The surveyor and author of this report was Matthew Pickard (BSc., MSc.), an ecologist with over 20 years environmental consultancy experience, a Chartered Environmentalist (CEnv), full member of the Chartered Institute of Ecology and Environmental Management (MCIEEM) and a licensed bat and great crested newt surveyor.

4.6 Survey limitations

4.6.1 Seasonal timing was not considered to be a constraint to preliminary ecological assessment of the site.

5 Baseline Conditions

5.1 Statutory Designated Sites

5.1.1 Linton Quarry Site of Special Scientific Interest (SSSI) is the nearest statutory designated site to the land at Chancery Cottage. Statutory designated sites within 5km included:

- **Linton Quarry SSSI** – a site noted for its Silurian period geological exposures and located 67m to the north;
- **Aston Ingham Meadows SSSI** – unimproved neutral meadows supporting green-winged orchid (*Orchis morio*) and adder's-tongue (*Ophioglossum vulgatum*), located approximately 1.56km to the south-east;
- **Dymock Woods SSSI** – a site noted for its mature sessile oak (*Quercus petraea*) woodland, located approximately 2.84km to the north-east;
- **May Hill SSSI** – noted for its acid grassland and heath is located approximately 3.78km to the south; and
- **Kempley Daffodil Meadow SSSI** – unimproved neutral grassland supporting an outstanding abundance of wild daffodil (*Narcissus pseudonarcissus*). The meadows are located approximately 4.47km to the north.

5.1.2 No direct or indirect impact to any of the statutory designated sites is envisaged by the proposed development.

5.2 Local Wildlife Sites

5.2.1 The HBRC data search also identified the presence of locally designated sites within 2km, the closest being:

- **Linton Quarry** – noted for its geological interest (67m north);
- **Lilly Hall Orchards –** pear orchards with abundant cowslips (*Primula veris*) located approximately 150m to the west);
- **Green's Quarry –** noted for its geological interest (335m to the north);
- **Withymoor and Baldwin's Wood** – a partly cleared ancient woodland site with similarities to parkland (370m to the south); and
- **Queen's Wood, Dymock** – noted for its woodland habitat (730m to the north).

5.2.2 No direct or indirect impact to the LWS is envisaged through development at Chancery Cottage.

5.3 Habitats

5.3.1 Chancery Cottage sits in a rural location at the southern fringes of Gorsley. The land associated with the cottage is bordered by Linton Road to the north and hedgerows to the east, west and south. The residential property and outbuildings are located at the western side of the site. Remaining parts of the site largely comprise species-poor semi-improved grassland formerly used for grazing.

Trees

5.3.2 Ornamental trees are present to the south of the cottage and occasional fruit trees are found in a field to the north. A single Apple (*Malus domestica*) was also noted near a field boundary to the south.

	**Photo 1**: Ornamental tree cover associated with Chancery Cottage (TN19) including a pine (*Pinus nigra*), spruce (*Picea* sp).
	**Photo 2**: Fruit trees at the northern end of the site (TN2, 5 & 6).

Field boundaries

5.3.3 Managed and unmanaged hedgerows were present within the site.

	**Photo 3:** A largely unmanaged hedgerow dominated by Hazel (*Corylus avellana*) at the north-western boundary (TN17).
	**Photo 4**: The majority of field boundaries associated with the site comprised clipped hedgerows (TN12).

Amenity grassland

5.3.4 Mown amenity grassland was associated with the garden of Chancery.

	**Photo 5**: Mown amenity grassland at Chancery Cottage.

Species poor-semi-improved grassland

5.3.5 Fields within the site had not been grazed in recent years and supported a species-poor semi-improved sward dominated by Red Fescue (*Festuca rubra*), Common Bent (*Agrostis capillaris*) and Sweet Vernal-grass (*Anthoxanthum odoratum*) as well as Yorkshire-fog (*Holcus lanatus*), Cock's-foot (*Dactylis glomerata*) and Perennial Ryegrass (*Lolium perenne*).

Herbs were generally sparse but included occasional patches of Wild Daffodil (*Narcissus pseudonarcissus ssp pseudonarcissus*) near field boundaries. Occasional plants of White Clover (*Trifolium repens*), Common Sorrel (*Rumex acetosa*), Meadow Buttercup (*Ranunculus acris*) and Lesser Celandine (*Ficaria verna*) were also noted.

	**Photo 6**: Species-poor semi-improved grassland with Wild Daffodil at Chancery Cottage.

Tall herbs and rough grassland

5.3.6 Uncut vegetation associated with buildings supported a mix of tall herbs and rough grassland.

	**Photo 7**: Tall herbs and rough grassland adjacent to outbuildings.

Pond

5.3.7 A small ornamental pond was found in the garden to the west of Chancery Cottage.

	**Photo 8**: A very small ornamental pond (1m x 50cm) was noted within the garden of Chancery Cottage.

Buildings

5.3.8 A range of buildings were associated with the site including a residential property, sheds and a stone barn.

	**Photo 9**: Chancery Cottage.
	**Photo 10**: Outbuildings at the site.

	**Photo 11**: Stone barn at the southern end of the site (TN18).

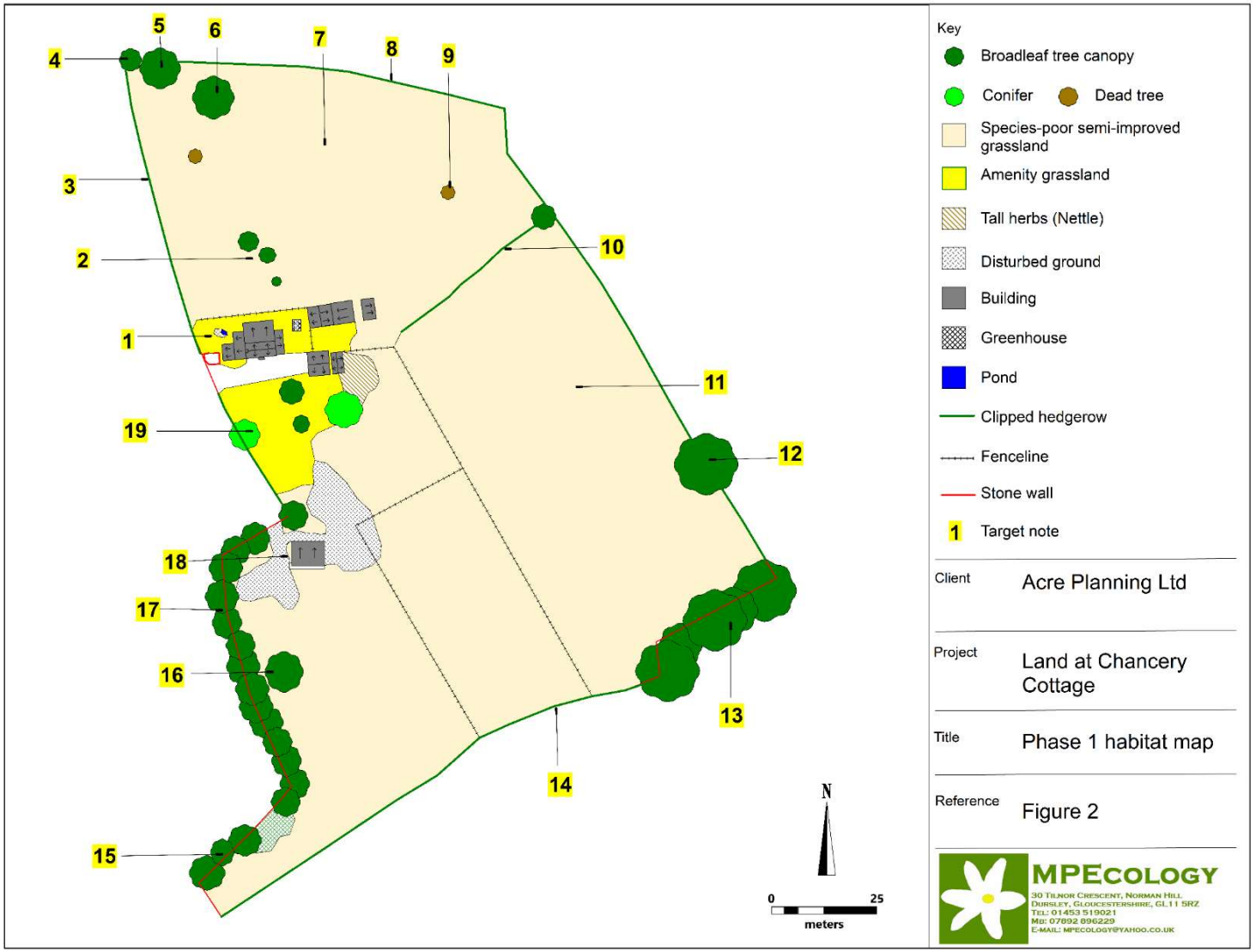


Table 5.1 Phase 1 habitat survey target notes

Target note (TN)	Description
1	Chancery Cottage and immediate surroundings. The residential property sits at the western end of the site and was largely surrounded by mown amenity grassland. A driveway to the south connected to a small garage. Other outbuildings were noted immediately to the east.
2	Fruit trees. Three small fruit trees including a nearly dead Plum and two Apple trees were present immediately north of the cottage. The trees attained a diameter at breast height (DBH) of approximately 30cm. One of the Apple trees had collapsed. The plum tree (southernmost of the trees) supported features (woodpecker holes) with potential for roosting bats.
3	Field boundary. Trackside hedge at the western boundary comprising Hawthorn (*Crataegus monogyna*), Holly (*Ilex aquifolium*), Hazel, Blackthorn (*Prunus spinosa*), Elm (*Ulmus* sp) and Ash (*Fraxinus excelsior*). Wild Daffodils were associated. The hedgerow supported 6 woody species per 30m and would be considered important under the Hedgerow Regulations 1997.
4	Pear. A Pear (*Pyrus communis*) was noted from the hedgerow at the site entrance
5&6	Cherry. Two Cherry (*Prunus avium* var.) trees with a DBH of 65-70cm were noted at the northern end of the site. Splits and crevices were found in one of the trees (TN6) and it was considered to offer potential for roosting bats. However, endoscope survey of features failed to find any current evidence of use. A dead tree to the south (between TN2 and TN5 did not offer any potential for bats.
7	Grassland. Species-poor semi-improved grassland with anthills and occasional patches of Wild Daffodil.
8	Field boundary. A clipped roadside hedgerow supporting 5 woody species per 30m. The hedgerow is likely to be considered important under the Hedgerow Regulations 1997.
9	Cherry. A dead cherry with a DBH of approximately 30cm. The tree was not considered likely to be used by roosting bats.
10	Field boundary. A clipped hedgerow with a large Hawthorn tree at its eastern end. The hedge supported Hawthorn, Holly, Hazel and Dogrose (*Rosa canina agg*). Nettle and Hedge-garlic (*Alliaria petiolata*) were noted from the ground flora. The hedgerow was not considered likely to be important under the Hedgerow Regulations 1997.
11	Grassland. Species-poor semi-improved grassland with anthills.
12	Tree. A mature Ash (80cm DBH) was noted immediately outside the south-eastern boundary of the site. The nearby hedgerow was clipped and supported Blackthorn, Hawthorn, Holly and Dogrose as well as Bramble. The hedgerow was not considered likely to be important under the Hedgerow Regulations 1997.
13	Mature trees. The south-eastern end of the site was bordered and overhung by mature trees of Oak (*Quercus robur*) and Ash as well as Holly and Hawthorn.

14	Field boundary. A largely unmanaged hedgerow bordered a footpath/lane at the southern boundary of the site. Mature trees of Oak were noted lining the northern side of the footpath outside of the site. The hedgerow was leggy and gappy, supporting Hawthorn and Holly with Ash, Hazel and Dogrose. The hedgerow was considered likely to be important under the Hedgerow Regulations 1997.
15	Field boundary. An unmanaged hedgerow at the south-western boundary often dominated by Bramble supported a small colony of Snowdrops (*Galanthus nivalis*). Grassland near this shaded area supported Tall Fescue (*Schedonorus arundinacea*).
16	Apple. A lone Apple near the south-western boundary of the site attained a DBH of 30cm but did not support any features with potential for roosting bats.
17	Field boundary. A tall and leggy of Hazel dominated hedgerow was noted. Other woody species included Hawthorn, Elm, Holly, Elder (*Sambucus nigra*) and Ash. The ground flora included Ramsons (*Allium ursinum*), False-brome (*Brachypodium sylvaticum*), Soft-shield Fern (*Polystichum setiferum*) and Cuckoo-pint (*Arum maculatum*). Wild Daffodils were also noted near to building to the north. The hedgerow was considered likely to be important under the Hedgerow Regulations 1997.
18	Agricultural building. A stone barn with potential for roosting bats. Internally, two dead Hairy-footed Flower-bees (*Anthophora plumipes*) were noted from a windowsill.
19	Ornamental trees. Planted trees including a small Magnolia, Pine and Spruce were noted to the south of Chancery Cottage.

5.4 Desk study

5.4.1 A HBRC data search based on a 2km buffer of the site returned over 583 records of rare or protected species. Analysis of the HBRC records is included in the categories below:

5.5 Protected, rare or notable plant species

5.5.1 The HBRC data search returned notable plant records including Bluebell (*Hyacinthoides non-scripta*), Wild Daffodil, Broad-leaved Helleborine (*Epipactis helleborine*), Marsh Helleborine (*Epipactis palustris*), Common Spotted-orchid (*Dactylorhiza fuchsii*), Broadleaved Cottongrass (*Eriophorum latifolium*), Snowdrop (*Galanthus nivalis*), Wood Spurge (*Euphorbia amygdaloides*), Green-winged Orchid (*Orchis morio*), Greater Butterfly-orchid (*Platanthera chlorantha*), Cowslip (*Primula veris*), and Mistletoe (*Viscum album*).

5.5.2 No protected plant species were found during the survey or would be expected from the proposed development area. Wild Daffodil was noted from various locations within the site.

5.6 Amphibians

5.6.1 The study area falls within an area of suitability (Nature Space green zone[1]) for Great Crested Newts (*Triturus cristatus*). HBRC data returned records Great Crested Newts from a garden pond just over 100m to the west. Addition records within 2km were returned for Palmate Newt (*Lissotriton helveticus*), Smooth Newt (*Lissotriton vulgaris*) and Common Frog (*Rana temporaria*). Wide-ranging species such as Common Toad (*Bufo bufo*) may also be expected to occur.

5.7 Reptiles

5.7.1 The data search did not return any reptile records. However, wide-ranging species such as Grass Snake (*Natrix helvetica*) may occur at boundary features.

5.8 Invertebrates

5.8.1 The only invertebrate records returned by the data search were moths and butterflies. A range of invertebrate species would be expected to occur within habitat associated with the site (particularly trees, hedgerows and the waterbodies).

5.8.2 The only species identified during the site visit were Hairy-footed Flower-bees and a Buff-tailed Bumblebee (*Bombus terrestris*).

5.9 Breeding birds

5.9.1 Evidence to suggest Swallows (*Hirundo rustica*) nest within out buildings was found. Trees, hedgerows and buildings are likely to be used by a range of other common breeding bird species.

5.9.2 Swallow is a green-listed bird species of conservation concern (Stanbury et al, 2021).

5.10 Bats

5.10.1 Herefordshire supports a diverse bat fauna and a range of bat species would be expected to occur locally. HBRC data included records for Common Pipistrelle (*Pipistrellus pipistrellus)*, Soprano Pipistrelle (*Pipistrellus pygmaeus),* Brown Long-eared (*Plecotus auritus*), Natterer's (*Myotis nattereri*), Noctule (*Nyctalus noctula*), and Lesser Horseshoe (*Rhinolophus hipposideros*). Others almost certainly also occur.

5.10.2 No evidence to suggest use by bats was found in any of the buildings associated with the site except for a stone barn to the south of the site where a single bat dropping was discovered. However, features with potential for roosting were noted in two trees as well as buildings. Further detail is provided in Appendix 1.

[1] https://naturespaceuk.com/gismaps/impact-risk-map/

	
Photo 12: Dying cherry tree with woodpecker holes (TN2 of Figure 2).	**Photo 13**: Stone barn with multiple crevices features associated with missing mortar (TN18).

5.11 Badgers

5.11.1 No evidence to suggest use of the site by Badgers (*Meles meles*) was found during the field visit.

5.12 Other mammals of conservation concern

5.12.1 The data search returned records for Hedgehog (*Erinaceus europaeus*) and Dormouse (*Muscardinus avellanarius*). Except for field boundaries, habitat associated with the site was not considered likely to offer significant opportunities for these species.

6 Assessment

6.1 Proposed development plan

6.1.1 Development proposals involve the construction of two new residential dwellings at the north-western end of the site. Other potential future activity may include refurbishment of Chancery Cottage and conversion of a stone barn to residential accommodation.

6.2 Important ecological features

Habitats

6.2.1 Habitats within the site are common and widespread. In terms of biodiversity, the most significant features are boundary hedgerows and the semi-improved grassland resource. Trees within the site, particularly deadwood habitat, also add to the biodiversity resource.

6.2.2 **Boundary hedgerow** – a short section of roadside hedgerow will require removal to provide access to the new development. A new boundary hedgerow enclosing the new development would offset loss of the existing hedgerow and significantly increase the overall resource.

6.2.3 **Grassland** – existing grassland within the site has been neglected. The loss of approximately 0.1ha to the new development is easily offset by more sympathetic management (extensive grazing regime with no fertiliser application) within the remain 1.3ha.

6.2.4 **Trees** – a single cherry (TN6 of Figure 2) would be lost to the new development. Notwithstanding surveys to confirm presence or absence of protected species (bats), loss of the tree would be offset by tree planting to create orchard habitat in the northern field.

6.2.5 **Deadwood habitat** - A proposed residential property at the northern end of the site would require removal of a cherry tree. Retention of the trunk and relocating it to a new part of the site would ensure continuity of deadwood habitat. It is recommended that the trunk is reinstated in an upright position by digging a 1m deep hole, positioning and packing soil around the relocated bole.

6.2.6 Few invertebrates possess the necessary gut enzymes to break down cellulose and lignin, instead relying on secondary digestible materials created by fungi and micro-organisms. Typically, the heartwood of trees is first attacked by white or brown rot fungi and the resultant material eaten by invertebrates such as beetle larvae. The disintegration of the heartwood provides cavities used by bats and birds leading to an accumulation of powdery media which collects in hollows to form a soil-like wood mould (Ancient Tree Forum, 2022). Ultimately all deadwood is recycled, the presence of live woody species at varying ages is important for continuity of habitat. In essence, newly planted trees offer future opportunities (perhaps decades after planting) but it is only old trees in varying states of decay that offer immediate potential habitat for species such as deadwood invertebrates and bats.

Protected species

Birds

6.2.7 All nesting birds are afforded protection under the Wildlife and Countryside Act 1981 (as amended). It is an offence to disturb nesting birds. Any site clearance or building renovation will need to consider the possibility of nesting birds and timing of any clearance should avoid the breeding season (March to August).

Bats

6.2.8 Emergence or roost return surveys will be required to ensure the absence of roosting bats from parts of the site impacted by development. This would include:

- **Cherry tree (TN6)** – high potential for bats. Three emergence / roost return surveys prior to removal. If confirmed as a bat roost, a European Protected Species licence would be required before this was possible;
- **Chancery Cottage (TN1)** – low potential for bats. Features at the western edge of Chancery Cottage could not be discounted as possible bat roosts. A single emergence / roost return survey is recommended prior to any works affecting the roof of the property;
- **Stone barn (TN18)** – high potential for bats. It is recommended that three emergence / roost return surveys are undertaken prior to any future works affecting the structure.

6.2.9 The introduction of lighting in any future development has the potential to affect bats by displacing them from foraging habitat. The provision of lighting (in any future development) should be designed to reduce potential light spill to adjacent habitats. Any external security lighting should be limited to directional, low lux lighting units triggered by motion or PIR (Passive Infrared) sensors which do not cast light within a wide area. Luminaires creating warm white (<2700 kelvin) rather than white light should be used.

Great Crested Newts

6.2.10 No ponds with potential to support breeding Great Crested Newts are present within the site. HBRC records suggest a pond approximately 100m to the west supports newts. Amphibians use waterbodies for breeding but then leave and forage within terrestrial habitat including rough grassland and woodland.

6.2.11 As a European Protected Species (EPS), the presence of Great Crested Newts (GCN) in a pond close to a development site poses a potential constraint to development.

6.2.12 A primary consideration would be whether intended works are likely to have a material effect on GCN (a European Protected Species). The Conservation of Habitats and Species Regulations 2010 (as amended) or 'Habitats Regulations' implement Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (the Habitats Directive) into national legislation. Article 12 of the Habitats Directive contains prohibitions which aim to protect EPS. Under Article 12(1) prohibitions include deliberate capture or killing, deliberate disturbance, deliberately taking or destroying eggs, and the deterioration or destruction of a breeding site or resting place.

6.2.13 Regulation 41 of the Habitat Regulations defines 'disturbance' (of an EPS) as:

"*impairing the ability to survive, breed, reproduce or rear/nurture young, or hibernate/migrate", or; "significantly affecting the local distribution or abundance of the species*".

6.2.14 Adult GCN tend to avoid breeding within ponds with high numbers of waterfowl or fish as the presence of these animals leads to predation of eggs and larvae. Adult newts will travel overland for distances of up to 1km although realistically, most newts will be concentrated in suitable habitat within 150m of breeding ponds.

6.2.15 Construction of new properties at the northern end of the site would create point source impacts within grassland habitat that could be used by newts but would not form a significant obstruction to the movement of GCN in the wider landscape or affect the local distribution or abundance of the species. The rapid risk assessment tool embedded in Natural England's Great Crested Newt Method Statement (excel) suggests that loss or damage of 0.1ha of land within 100-250m of a breeding pond is highly unlikely to result in an offence.

6.2.16 In addition, mitigation during construction could be used to remove the potential impacts associated with for instance, foundation excavation or site clearance. Seasonal timing of construction could be undertaken to avoid periods when GCN are likely to be on the move and grazing prior to site clearance would discourage newts from residing within the impact zone. Likewise, careful storage of materials (e.g. on pallets) could be used to reduce the chance of inadvertently creating artificial refugia.

Other protected species

6.2.17 Data search records identified the presence of dormice in the local area.

6.2.18 Dormice may occur along unmanaged hedgerows including habitat at the northern boundary of the site. The potential to affect Dormice by removing a short section of hedgerow to create a new access point is highly unlikely and is not considered licensable. The new access point would not create a significant barrier to movement and would be mitigated by additional hedgerow planting. Newly planted hedgerows should comprise native species.

6.3 Biodiversity enhancement

6.3.1 Paragraph 174 of the National Planning Policy Framework introduces a duty to conserve and enhance biodiversity in the planning process. The site offers ample opportunities to introduce enhancement measures offsetting the scale of any future development.

7 Conclusion

7.1.1 The land associated with Chancery Cottage supported a range of commonly occurring habitats. Protected species potentially associated with the site included bats and amphibians.

7.1.2 Further survey will be required to determine if protected species (particularly bats) form a constraint to future development at the site. Bat surveys will be required to investigate the presence of bats roosts. The most urgent of these will involve emergence / roost return surveys of a cherry tree in the north-western boundary that is planned for removal. Surveys of other structures within the site (such as Chancery Cottage and a stone barn to the south) can be undertaken at a later date if further proposals emerge.

7.1.3 Field boundaries and existing tree cover is not significantly affected by proposals and adverse impact on species such as dormice is not envisaged.

8 References

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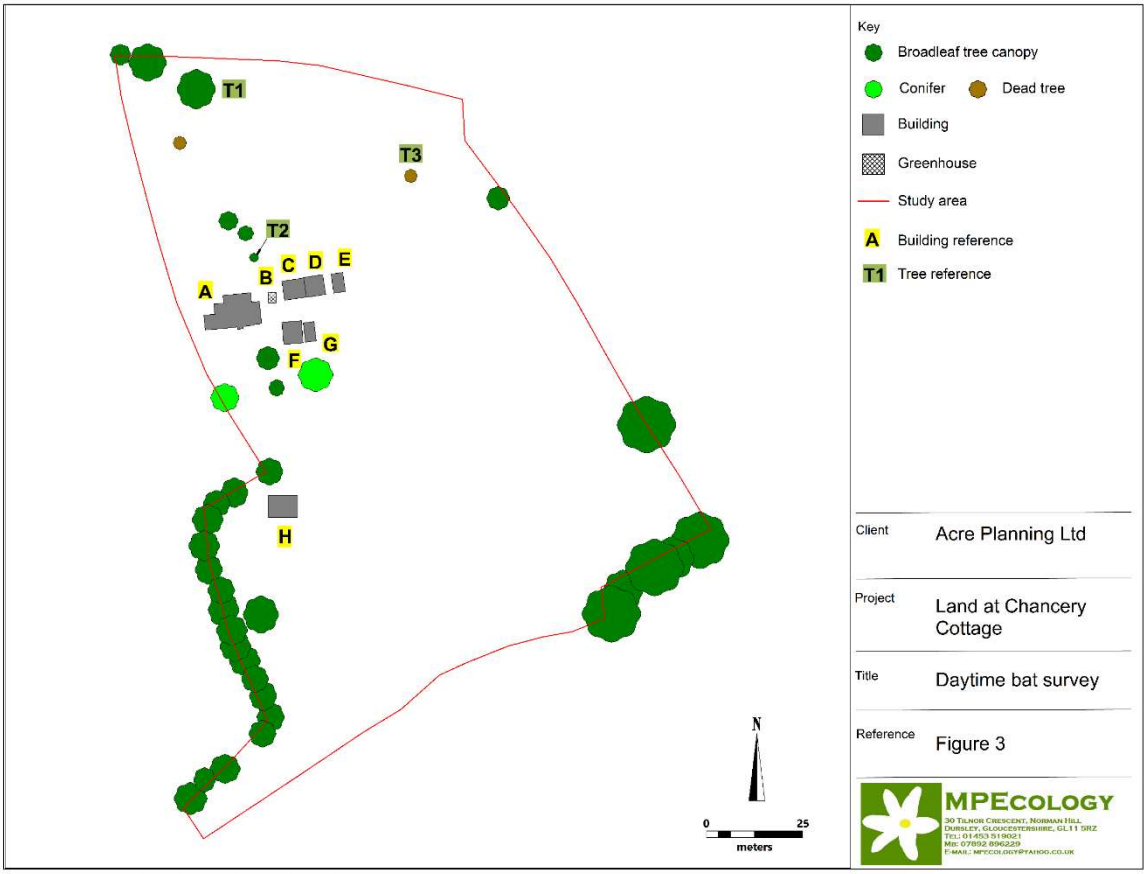
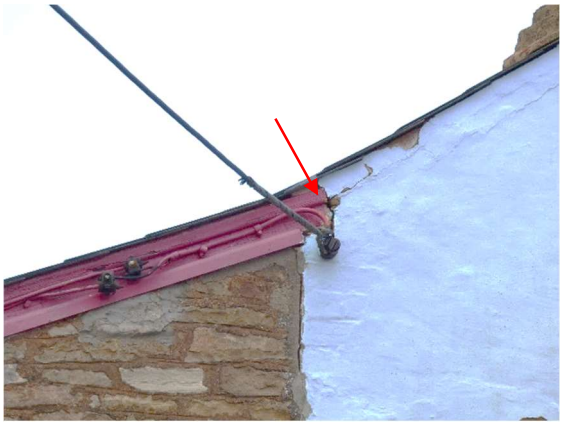
9 Appendices

Appendix 1: Preliminary roost feature assessment



Building A – Low bat potential	
	**Chancery Cottage** – a rendered stone building with brickwork elements and roof finished in slate. No internal roof space suitable for bats.

	**A1** – missing mortar at the roof edge on the south-eastern gable could be inspected. The hole provided access between slates and roofing felt. No evidence of bats was found during endoscope inspection and use by bats was considered unlikely.
	**A2** – a crevice associated with an exposed roof timber on the north-western gable could not be inspected.
	**A3** – a crack between the original cottage and an extension could not be inspected and looked too small for bat access.

Buildings B, C & D – Negligible to low bat potential	
	**Building B** – a glass greenhouse – Negligible bat potential. **Building C** – a timber shed / stable – Low potential as a night roost / feeding perch but no evidence found. **Building D** – a corrugated metal stable– Low potential as a night roost / feeding perch but no evidence found.
	**Building C** – interior view. No evidence to suggest use by bats was found. The remnants of a nest identified historic use by Swallows.
	**Building D** – interior view. No evidence to suggest use by bats was found. The remnants of a nest suggested historic use by a Blackbird (*Turdus merula*).

Building E – Negligible bat potential	
	A collapsing timber structure clad in corrugated tin.
	Missing windows (on two sides) and door make the structure very drafty. No evidence to suggest use by bats was found.
Building F – Negligible bat potential	
	A cement sheet shed. No evidence of bats was found and use by bats was considered unlikely.

Building G – Negligible bat potential	
	A timber garage with cement sheet roof. No evidence of bats was found and use by bats was considered unlikely.
Building H – High bat potential	
	A stone barn with corrugated tin roof.
	Occasional crevices were noted at the wall top.

	Missing mortar led to gaps in the wall matrix at several locations on the south-facing elevation.
	Gaps into the wall were also noted at the east-facing elevation.
	The north facing elevation offered an open flyway through a damaged window shutter as well as gaps into stonework.
	Internally, multiple crevice features were noted in stonework. A single degraded bat dropping was also found (suspected of originating from a Brown long-eared bat).

	**T1** – Cherry with a hollow trunk and crevices – **High bat potential**.
	**T3** – Cherry with woodpecker holes – **High bat potential**.
	**T3** – Dead cherry with flaking bark. The flaking bark was open and exposed and was not considered likely to support roosting bats – **Negligible bat potential**.