



Preliminary Ecological Assessment (PEA)

Bluegates Farm

Berkeley

May 2023



Document title PEA – Bluegates Farm , Berkeley
Revision number 0.1

Table of Contents

1	Executive summary	1
2	Introduction	2
2.1	Background.....	2
2.2	Purpose of this document	2
3	Legislation, planning policy and guidance.....	3
3.1	The Conservation of Habitats and Species Regulations 2017	3
3.2	Wildlife and Countryside Act 1981 (as amended).....	3
3.3	The Countryside and Rights of Way Act 2000	3
3.4	National Planning Policy Framework (NPPF) (2021)	4
3.5	Stroud District Local Plan (SDLP).....	4
4	Methodology.....	6
4.1	Desk study.....	6
4.2	Extended phase 1 habitat survey.....	6
4.3	Daytime building inspection for bats.....	6
4.4	Surveyor	6
4.5	Survey limitations	6
5	Baseline Conditions	7
5.1	Statutory Designated Sites.....	7
5.2	Habitats	8
5.3	Desk study.....	12
5.4	Protected, rare or notable plant species	12
5.5	Amphibians.....	12
5.6	Reptiles	12
5.7	Invertebrates.....	13
5.8	Breeding birds.....	13
5.9	Bats.....	13
	[REDACTED]	13
5.11	Other mammals of conservation concern	14
6	Assessment	15
6.1	Proposed development plan.....	15
6.2	Important ecological features	15
6.3	Biodiversity enhancement	16



7	Conclusion	17
8	References	18

Table of Tables

Table 5.1	Phase 1 habitat survey target notes	11
-----------	---	----

1 Executive summary

- 1.1.1 In April 2022, MPEcology were commissioned by Ridge Planning LLP to undertake a Preliminary Ecological Assessment of an agricultural building and its immediate surroundings near Berkeley (hereafter also referred to as ‘the site’). The site is located within the administrative boundary of Stroud District Council (National Grid Reference ST 6640 9805).
- 1.1.2 A Phase 1 habitat survey of the site following standard methodology (IEA, 1995) was carried out by MPEcology on the 4th May 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. Incidental visits to a nearby pond had been undertaken earlier in 2022 for an unrelated project and were helpful in the current assessment. The site was revisited on the 4th May 2023 due to a delay in the planning submission.
- 1.1.3 The Severn Estuary is the nearest statutory designated site to Bluegates Farm, located approximately 1.27km to the west. No direct or indirect impact to any of the statutory designated sites is envisaged by the proposed development.
- 1.1.4 The barn lacked features with potential for bats and no evidence to suggest use was found during the survey.
- 1.1.5 Paragraph 174 of the National Planning Policy Framework introduces a duty to conserve and enhance biodiversity in the planning process. It is recommended that at least two artificial nest boxes are deployed within the converted building (at least one bird box and one bat box).
- 1.1.6 Although a pond occurs within land bordering the proposed development site, it will not be impacted by the development. Given that GCN are present within the pond, it is possible they could occur in the immediate vicinity of the target barn. However, the extent of habitat with potential to provide cover for GCN in the immediate vicinity of the barn was considered limited. This reduces the likelihood that GCN would be affected by proposals.
- 1.1.7 The reasons for a lack of cover in the immediate vicinity of the Dutch Barn was work to convert an adjacent barn (including installation of attenuation crates) which resulted in disturbance locally. Much of the ground surrounding the barn is bare and devoid of vegetation. Protected species may need further consideration if habitat conditions change. Future development will need to proceed under a development licence (GCN District Licence) or following a method statement aimed at minimising risk to GCN.

2 Introduction

2.1 Background

2.1.1 In April 2022, MPEcology were commissioned by Ridge Planning LLP to undertake a Preliminary Ecological Assessment of an agricultural building and its immediate surroundings near Berkeley (hereafter also referred to as ‘the site’). The site is located within the administrative boundary of Stroud District Council (National Grid Reference ST 6640 9805). The site was revisited on the 4th May 2023 due to a delay in the planning submission.

Figure 1: Location of the site.



© Crown copyright and database rights. Ordnance Survey [2023].

2.2 Purpose of this document

2.2.1 The purpose of the report is to provide 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 offence 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 superseded 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.*

3.5 Stroud District Local Plan (SDLP)

3.5.1 The SDLP was adopted and published in November 2015 and is intended to provide a planning framework which ensures development is sustainable. The plan establishes broad principles about acceptable levels of development in both the towns and the countryside and creates a policy framework that sets the scene for future planning decisions. In

particular, it determines how, where and when various kinds of development will be distributed around the District. The Development Strategy is articulated through a number of “Core Policies”.

3.5.2 The following policy was considered relevant to the project:

Strategic Objective SO6: Our District’s distinctive qualities conserving and enhancing Stroud District’s distinctive qualities, based on landscape, townscape and biodiversity.

The Local Plan seeks to minimise the impact of development on biodiversity and sensitive landscapes by prioritising development on sites that lie outside the Cotswolds AONB or the protected landscapes of the River Severn estuary. Making the most of brownfield land will limit adverse effect on wildlife and habitats; while well-planned new development on both brownfield and greenfield locations will offer opportunities to design-in rich new habitat and wildlife areas.

Core Policy CP14 sets out a ‘checklist’ for high quality, sustainable design and development and highlights the Council’s expectation that all forms of new development—from strategic schemes to domestic extensions—will be designed and constructed to high standards, so that it is an asset to our environment. Policies ES6–ES9, ES11, ES13 and ES14 have particular regard to landscape character, green space and biodiversity, stressing the need to avoid harm and erosion, as well as identifying opportunities to enhance and reinforce the quality and quantity of what we already have.

Delivery Policy ES6 Providing for biodiversity and geodiversity

New Development and the Natural Environment All new development will be required to conserve and enhance the natural environment, including all sites of biodiversity or geodiversity value (whether or not they have statutory protection) and all legally protected or priority habitats and species. The Council will support development that enhances existing sites and features of nature conservation value (including wildlife corridors and geological exposures) that contribute to the priorities established through the Local Nature Partnership. Consideration of the ecological networks in the District that may be affected by development should take account of the Gloucestershire Nature Map, river systems and any locally agreed Nature Improvement Areas, which represent priority places for the conservation and enhancement of the natural environment. In this respect, all developments should also enable and not reduce species’ ability to move through the environment in response to predicted climate change, and to prevent isolation of significant populations of species.

The District will have a number of undesignated sites, which may nevertheless have rare species or valuable habitats. Where a site is indicated to have such an interest, the applicant should observe the precautionary principle and the Council will seek to ensure that the intrinsic value of the site for biodiversity and any community interest is enhanced or, at least, maintained. Where an impact cannot be avoided or mitigated (including post-development management and monitoring), compensatory measures will be sought. The Council may, in exceptional circumstances, allow for biodiversity offsets, to prevent loss of biodiversity at the District level.

4 Methodology

4.1 Desk study

- 4.1.1 A search for existing records of protected or otherwise notable species within 1.5km of the site was commissioned from the Gloucestershire Centre for Environmental Records (GCER) and 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 4th May 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. Incidental visits to a nearby pond had been undertaken earlier in 2022 for an unrelated project and were helpful in the current assessment. The site was revisited on the 4th May 2023 due to a delay in the planning submission.

4.3 Daytime building inspection for bats

- 4.3.2 The target building at Bluegates Farm was subject to a daytime inspection on the 4th May 2022. During the visit the building was searched by an experienced, licenced 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. A further check was undertaken on the 4th May 2023.

4.4 Surveyor

- 4.4.1 The surveyor and author of this report was [REDACTED] 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 licenced bat and great crested newt surveyor.

4.5 Survey limitations

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

5 Baseline Conditions

5.1 Statutory Designated Sites

5.1.2 The Severn Estuary Site of Special Scientific Interest (SSSI) is the nearest statutory designated site to Bluegates Farm, located approximately 1.27km to the north-west. The next closest site identified was Lydney Cliff SSSI (a geological site 3.5km to the north). Biodiversity interest of the Severn Estuary is also recognised through site designation as follows:

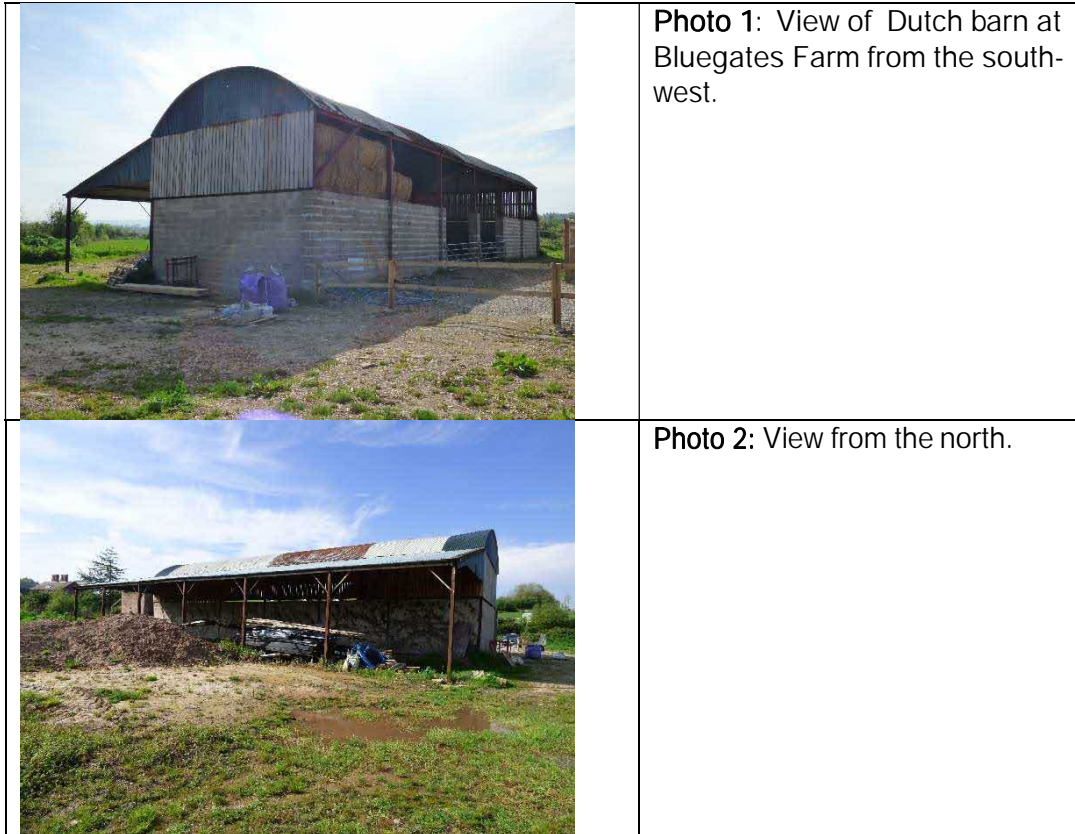
- **Severn Estuary Special Protection Area (SPA)** - An estuary with a large tidal range supporting extensive intertidal mud and sand-flats, rocky platforms and islands. The estuary supports over-wintering or on-passage bird populations of European importance including: Bewick's Swan (*Cygnus columbianus bewickii*); Curlew (*Numenius arquata*); Dunlin (*Calidris alpina alpina*); Pintail (*Anas acuta*); Redshank (*Tringa totanus*); Shelduck (*Tadorna tadorna*); and Ringed Plover (*Charadrius hiaticula*). In addition, the site qualifies as a wetland of international importance for regularly supporting an assemblage of at least 20,000 waterfowl;
- **Severn Estuary Ramsar** - An estuary supporting over-wintering birds, feeding and nursery grounds for a diverse assemblage of fish, as well as providing passage to spawning rivers for migratory fish including Salmon (*Salmo salar*), Sea Trout (*Salmo trutta*), Sea lamprey (*Petromyzon marinus*), Twaite Shad (*Alosa fallax*) and Eel (*Anguilla Anguilla*); and
- **Severn Estuary Special Area of Conservation (SAC)** –Annex I habitats forming a primary reason for site selection: 1130 Estuaries; 1140 Mudflats and sandflats not covered by seawater at low tide; and 1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritima*). Annex I habitats present as a qualifying feature: 1110 Sandbanks which are slightly covered by sea water all the time; and 1170 Reefs. Annex II species that are a primary reason for site selection: 1095 Sea lamprey (*Petromyzon marinus*); 1099 River lamprey (*Lampetra fluviatilis*); and 1103 Twaite shad (*Alosa fallax*).

5.1.3 No direct or indirect impact to any of the statutory designated sites is envisaged by the proposed development. The potential for indirect impact to sites of European significance including the Severn Estuary SPA, SAC and Ramsar site due to increased recreational visits or habitat loss through development at Bluegates Farm is considered de minimis.

5.1.4 The GCER data search also identified the presence of Whitcliff Park Local Wildlife Site (LWS) approximately 580m south of Bluegates Farm. The LWS is noted for its wood pasture, veteran trees and saproxylic (deadwood) invertebrates. No direct or indirect impact to the LWS is envisaged through development at Bluegates Farm.

5.2 Habitats

- 5.2.1 The target building at Bluegates Farm was a steel-framed Dutch barn with blockwork walls and a lean-to attached to the northern side. The roof of the barn was of corrugated tin. The wider landscape was dominated by improved stock-grazed fields and arable land of the Severn Vale. Surrounding habitats to the target building were mapped within a 25m buffer.



Trees

- 5.2.2 The site lacked trees although Willow (*Salix caprea/cinerea*) were noted to the west of the barn and a small area of scrubby field boundary supported young Elms to the south-east.

Scrub

- 5.2.3 Bramble was associated with a fenceline to the west of the barn and a stand of Bramble, Elm and Elder to the south-east.

Improved grassland

- 5.2.4 A field to the west of the barn supported an improved grassland ley and field to the south, a cattle-grazed grassland of improved character.

Tall herbs and improved grassland

- 5.2.5 Intermittently managed / neglected vegetation immediately to the east and south-east comprised a mix of rank grassland interspersed by Nettle (*Urtica dioica*) and Creeping Thistle.

Bare ground / Ephemeral and short perennials

- 5.2.6 Much of the land immediately surrounding the target barn comprised heavily trafficked bare ground, temporary storage (construction materials) or areas subject to regular disturbance supporting opportunistic ephemerals such as Knotgrass (*Polygonum aviculare*).

Pond

- 5.2.7 A field pond located 50m to the east of the barn supported submerged plants of Common Water-crowfoot (*Ranunculus aquatilis*) and Ivy-leaved Duckweed (*Lemna trisulca*) as well as floating and marginal cover of Floating Sweet-grass (*Glyceria fluitans*). An island was dominated by young willows.

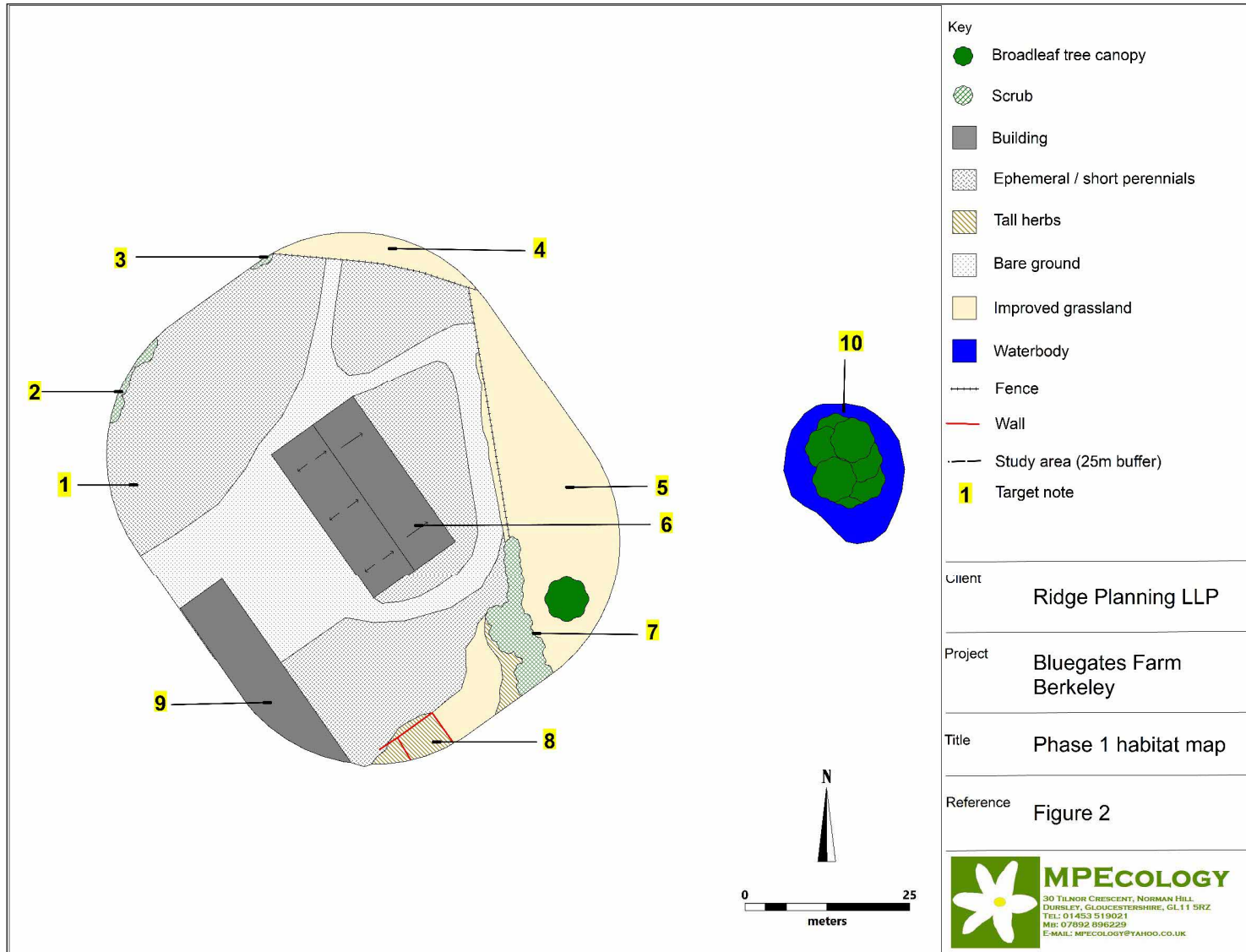


Table 5.1 Phase 1 habitat survey target notes

Target note (TN)	Description
1	Ephemeral/short perennial vegetation. Disturbed bare ground with very occasional opportunistic ruderal plants.
2	Tree/Scrub. Willow (<i>Salix cinerea</i>) at boundary interspersed with Bramble (<i>Rubus fruticosus</i>).
3	Bramble. Field boundary with a bramble at fenceline.
4	Improved grassland. Improved grassland field / ley.
5	Improved grassland. Unmanaged and intermittently disturbed grassland with ruderals. The vegetation was dominated by a mix of Perennial Ryegrass (<i>Lolium perenne</i>), Common Couch (<i>Elytrigia repens</i>), Cock's-foot (<i>Dactylis glomerata</i>), Rough Meadow-grass (<i>Poa trivialis</i>) and Creeping-bent (<i>Agrostis stolonifera</i>) with Dandelion (<i>Taraxacum officinale</i> agg.) and patchy cover of Nettle (<i>Urtica dioica</i>), Creeping Thistle (<i>Cirsium arvense</i>).
6	Building. Steel-framed Dutch Barn with corrugated tin-roofed lean-to attached to the northern side.
7	Scrub. Field boundary supporting a small clump of young Elm (<i>Ulmus</i> sp), Elder and Bramble.
8	Walls. Remains of Bluegates Farmhouse comprising roofless brick walls surrounded by tall herbs and rank grassland.
9	Building. Former agricultural buildings undergoing conversion to residential.
10	Waterbody. A donut-shaped field pond with island supporting small willows. Common Water-crowfoot (<i>Ranunculus aquatilis</i>) was noted as well as marginal cover of Floating Sweet-grass (<i>Glyceria fluitans</i>). Amphibian surveys for an unrelated project identified the presence of Great Crested Newts in the 2022 survey season.

5.3 Desk study

5.3.1 A GCER data search based on a 1km buffer of the site returned over 44 records of rare or protected species. These included 9 records of amphibians, 32 records of birds, 1 insect records, and 2 records of terrestrial mammals. Analysis of the GCER records is included in the categories below:

5.4 Protected, rare or notable plant species

5.4.1 No protected plant species were found during the survey or would be expected from the proposed development area.

5.5 Amphibians

5.5.1 The study area falls within an area where Great Crested Newts (*Triturus cristatus*) are likely to occur (Nature Space red zone¹). GCER data within 1km of the site included Great Crested Newt, Smooth Newt (*Lissotriton vulgaris*) and Common Toad (*Bufo bufo*). Common Frog (*Rana temporaria*) would also be expected to occur.

5.5.2 The nearest waterbody to the site is a pond approximately 50m to the east. By chance, the pond has been surveyed (by the author) for an unrelated project and Great Crested Newts had been found using the waterbody. A peak count of 9 male and 8 female Great Crested Newts were bottle-trapped on the 22/23 March 2022 (a total of 6 visits were undertaken between March and June 2022 and none of the other visits reached this peak of 17 newts).



Photo 3: Pond in field east of the target barn.

5.6 Reptiles

5.6.1 Wide-ranging species such as Grass Snake (*Natrix helvetica*) may use nearby boundary features including ditches but were not considered likely with habitat associated with the site.

¹ <https://naturespaceuk.com/gismaps/impact-risk-map/>

5.7 Invertebrates

- 5.7.1 Habitat associated with the site is likely to support a suite of common invertebrate species. GCER returned a record for Small Heath (*Coenonympha pamphilus*) butterfly locally.

5.8 Breeding birds

- 5.8.1 A pair of Great Tits (*Parus major*) were noted nesting between two steel beams at the northern end of the building in 2022. However, no evidence to suggest historical use of the building was found during the survey.

- 5.8.1 GCER returned records of 32 species of bird, most associated with the Severn Estuary (except for species such as Dunnock (*Prunella modularis*), Starling (*Sturnus vulgaris*), Song Thrush (*Turdus philomelos*) and Barn Owl (*Tyto alba*)). The site or its immediate surroundings were not considered likely to provide habitat of significant importance for breeding or over-wintering birds.

5.9 Bats

- 5.9.2 Gloucestershire supports a diverse bat fauna and a range of bat species would be expected to occur locally. GCER data reviewed for an adjacent property (Woodlands Farm) included records for Noctule (*Nyctalus noctula*), Nathusius Pipistrelle (*Pipistrellus nathusii*), Common Pipistrelle (*Pipistrellus pipistrellus*), Soprano Pipistrelle (*Pipistrellus pygmaeus*) and a species of Myotis.

- 5.9.3 Bat surveys undertaken at Woodlands Farm in 2021 recorded Common Pipistrelle, Soprano Pipistrelle, Noctule and a species of Myotis but no evidence of roosting bats was detected.

- 5.9.4 The target barn at Bluegates Farm offered no potential for roosting bats.

5.11 Other mammals of conservation concern

- 5.11.1 GCER returned records for Hedgehog (*Erinaceus europaeus*) and Brown Hare (*Lepus europaeus*). Habitat associated with the site was considered likely to offer negligible opportunities for Brown Hare although Hedgehog may occasionally use habitat for foraging.

6 Assessment

6.1 Proposed development plan

6.1.1 The proposals involve the conversion of the existing agricultural building to residential use.

6.2 Important ecological features

Habitats

6.2.1 No habitats of significant biodiversity value would be lost by redevelopment of the Dutch Barn.

Species

Birds

6.2.2 The structure was considered to offer only limited potential for nesting birds and no potential for species such as Barn Owl (*Tyto alba*). If planning permission is awarded a preconstruction check to confirm the continued absence of nesting birds will be required.

Bats

6.2.3 The Dutch Barn was not considered suitable for roosting bats.

6.2.4 The introduction of lighting has the potential to indirectly affect bats by displacing them from foraging habitat. The provision of lighting in the future development should be limited and mitigated by providing directional, low lux lighting units triggered by motion or PIR (Passive Infrared) sensors which do not cast light within a wide area. It is recommended that luminaires emitting warm (<2700 kelvin) rather blue light are used. Warm white lighting is known to be less disturbing to bats (BCT & ILP, 2018).

Great Crested Newts

6.2.5 The study area falls within an area where Great Crested Newts (*Triturus cristatus*) are likely to occur (Nature Space red zone²). A primary consideration is whether the development would have a material effect on Great Crested Newts (GCN), a European Protected Species (EPS). Article 12 of the Habitats Directive contains prohibitions which aim to protect European Protected Species. 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.

6.2.6 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*".

6.2.7 Although a pond occurs within land bordering the proposed development site, it will not be impacted by the development. Given that GCN are present within the pond, it is possible they could occur in the immediate vicinity of the target barn. However, the extent of

² https://naturespaceuk.com/wp-content/uploads/2022/02/Stroud-District-Council_Impact-Risk-Zones.pdf

habitat with potential to provide cover for GCN in the immediate vicinity of the barn was considered limited. This reduces the likelihood that GCN would be affected by proposals.

6.2.8 The reason for a lack of cover in the immediate vicinity of the Dutch Barn was work to convert an adjacent barn (including installation of surface water attenuation crates) which resulted in disturbance locally. Much of the ground surrounding the barn is bare and devoid of vegetation.

6.2.9 Habitat in its current state is easily checked and unlikely to support GCN. However, any changes to current habitat conditions (such as development of rank grassland and tall herbs) providing cover for GCN may necessitate future EPS licensing. As a minimum, any works associated with conversion of the building would require works to be carried out under a method statement aimed at safeguarding Great Crested Newts from potentially adverse impacts. However, given the location of the proposed development in a 'red zone' for GCN it may be appropriate to carry out works under a District Licence.

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. It is recommended that at least two artificial nest boxes are deployed within the converted building (at least one bird box and one bat box).

7 Conclusion

- 7.1.1 The development site comprised an agricultural building of limited biodiversity value. The proposals involve conversion of the building to residential use.
- 7.1.2 The proposals accord with the duty to conserve and enhance biodiversity brought about by paragraph 174 of the NPPF if enhancement is introduced for nesting birds / roosting bats.
- 7.1.3 Protected species may need further consideration if habitat conditions change. Future development will need to proceed under a development licence (GCN District Licence) or following a method statement aimed at minimising risk to GCN.

8 References

Collins, J. (ed) (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn)*. Bat Conservation Trust, London. ISBN-13 978-1-872745-96-1

Defra (2007) *Hedgerow Survey Handbook*. A standard procedure for local surveys in the UK. Defra, London

Eaton MA, Aebischer N.J., Brown A.F., Hearn, R., Lock, L., Musgrove, A.J., Noble, D.G., Stroud, D., Gregory, R.D. (2015) Birds of Conservation Concern 4: the population status of birds in the United Kingdom, Channel Islands and the Isle of Man. *British Birds* 108: 708-746.

Institute of Environmental Assessment (1995). *Guidelines for Baseline Ecological Assessment*. Chapman and Hall, London.

Joint Nature Conservation Committee (2010). *Handbook for Phase 1 Habitat Survey: a technique for environmental audit*. JNCC, Peterborough.