



Ampney Park

Preliminary Ecology Appraisal

May 2021

Client: Simon Morray-Jones

Architects Ltd

Report Ref: SEB2428_01 Author: Kate Hayward

MCIEEM

www.seasonsecology.co.uk



Non-Technical Summary

Site Location	Ampney Park Grounds, Ampney Crucis, Cirencester (central grid reference: SP 06456 01901).		
Scope of Works	Preliminary Ecology Appraisal comprising an extended Phase 1 habitat survey and preliminary bat roost assessment and survey, supplemented with a desk study.		
Survey Methods	Phase 1 habitat survey undertaken with reference to JNCC (2010). Preliminary bat roost assessment and survey undertaken with reference to BCT (2016).		
Personnel	Kate Hayward MCIEEM and Callum Pearson Qualifying CIEEM.		
Site Description and Suitability Assessment	Ampney Park lies in a rural, village location approximately 2.5km to the east of Cirencester. The estate is around 23 hectares in size and contains buildings, formal gardens, grasslands, scattered trees, woodland and water bodies, including the Ampney Brook and ponds/lakes.		
	The site features a high diversity of habitats, including four Priority Habitats (Rivers and Streams, Wood-Pasture and Parkland, Lowland Mixed Deciduous Woodland and Hedgerow).		
	The habitats on site are suitable to support good populations and diversity of protected species, including roosting, foraging and commuting bats, nesting birds, common and widespread species of reptiles, amphibians and small mammals, great crested newt, water vole, otter, badger and dormouse.		
	Habitats have been evaluated as High, Moderate or Low Ecological Value, to assist in informing future development proposals.		
The Proposal	At the time of the survey there were no specific proposals for the grounds of Ampney Park. However, the survey will inform any future development proposals and future management of the grounds.		
Recommendations	A detailed desk study is recommended to provide further information on local wildlife and habitats within 2km of the site.		
	For any development proposal, an Ecology Appraisal should be undertaken focused on the specific area to be affected.		
	Guidance has been provided on the likely scope of further surveys depending on the habitats to be affected.		
	General protection measures and suggestions for biodiversity enhancements have been made.		



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1.1 Background

- 1.1.1 In March 2021, Seasons Ecology was instructed by Simon Morray-Jones Architects Ltd, on behalf of their client, to undertake a Preliminary Ecology Appraisal of the grounds of Ampney Park (central grid reference: SP 06456 01901). The Preliminary Ecology Appraisal consisted of an extended Phase 1 habitat survey and a preliminary bat roost assessment and survey, supplemented with a desk study.
- 1.1.2 At the time of the survey there were no specific proposals for the grounds. However, the survey will inform any future development proposals and future management of the grounds.

1.2 Scope and Objectives of Survey

- 1.2.1 The survey was undertaken to identify and record the habitats on site and to assess the potential of the site to support protected/notable species. The purpose of the survey is to make known any ecological constraints or considerations that may be relevant to future development proposals and management of the grounds.
- 1.2.2 This report is based on the findings of a survey undertaken on 8th April 2021.
- 1.2.3 The report is supported by the following:
 - Annex 1: Summary of Legislation and Planning Policy.
 - Annex 2: Phase 1 Habitat Map.
 - Annex 3: Constraints Plan.
 - Annex 4: Site Photographs.

1.3 Personnel

- 1.3.1 The survey was led by Kate Hayward MCIEEM. Kate is an experienced surveyor and ecological consultant and full member of the Chartered Institute of Ecology and Environmental Management (MCIEEM). Kate has over 20 years' experience as a professional consultant advising on development projects and protected species and habitats, including acting as the named ecologist on European Protected Species licences. Kate is a level 2 licensed bat surveyor (Class Licence Registration Number: 2015-12244-CLS-CLS).
- 1.3.2 The survey was assisted by Callum Pearson, a surveyor and ecological consultant and qualifying member of CIEEM. Callum has experience as a professional consultant advising on development projects and in surveying protected species.

2. Legislation and Planning Policy

	21 Legislation and Flamming Folloy
2.1.1	This report has been compiled with reference to relevant legislation and national planning policies, which protect wildlife. Annex 1 provides a brief summary of this legislation and policy.

3.1 Methods

- 3.1.1 A web-based desk study was undertaken in April 2021 prior to the survey to provide local information that may be relevant. The following online resources were consulted:
 - The Multi-Agency Geographic Information for the Countryside (MAGIC) website¹, to obtain information on statutory site designations within 2km of the site, 4km in respect to bats, and details of any European Protected Species licences issued within 2km; and
 - Google Maps², to view aerial photographs, maps and mapnik data, to assess the ecological context of the site.
- 3.1.2 There is no known pre-existing survey information for the site.

3.2 Results

Statutory Designated Sites

- 3.2.1 There are no statutory site designations within 2km of the site, the closest being Barnsley Warren Site of Special Scientific Interest (SSSI), located approximately 2.8km to the north of the site.
- 3.2.2 There are no statutory site designations for bats within 4km of the site.
- 3.2.3 The site itself is not covered by any designations, but it does lie within Impact Risk Zones (IRZs) for nearby SSSIs. This requires the Local Planning Authority to consult with Natural England on certain types of development proposals. In this case, the IRZs relate to aviation, livestock and general combustion processes; therefore, consultation is not required.

European Protected Species Licences

- 3.2.4 There are five European Protected Species licences that have been issued for locations within 2km of the site; four are for bats and one is for great crested newt *Triturus cristatus*:
 - One location is for great crested newt, approximately 0.4km to the north of the site.
 - One location is for brown long-eared *Plecotus auritus*, common pipistrelle *Pipistrellus pipistrellus*, Natterer's *Myotis nattereri* and soprano pipistrelle *Pipistrellus pygmaeus*, approximately 0.9km to the north-west of the site.
 - One location is for common pipistrelle, approximately 1km to the north-west of the site.
 - One location is for common pipistrelle and Natterer's, approximately 1.5km to the southeast of the site.
 - One location is for common pipistrelle and brown long-eared, approximately 1.9km to the south-east of the site.

¹ http://www.magic.gov.uk/MagicMap.aspx

² http://acme.com/planimeter/

Great Crested Newt Pond Surveys 2017-2019

3.2.5 Referring to the Natural England 2017-2019 great crested newt pond surveys, there are two ponds within 2km of the site included in the surveys, which were concluded to be absent of this species. One of these ponds is a water body located in the north-west of the site.

Ecological Context

- 3.2.6 Ampney Park lies in a rural, village location approximately 2.5km to the east of Cirencester. The estate is around 23 hectares in size and contains buildings, formal gardens, grasslands, scattered trees, woodland and water bodies, including the Ampney Brook.
- 3.2.7 A church and associated grounds lie immediately to the east and beyond are low density residential dwellings within the village of Ampney Crucis. The main A417 London Road borders the estate to the south.
- 3.2.8 The wider countryside is predominantly arable and improved fields divided by mature hedgerows with occasional trees and patches of woodland, including Merrillhill Copse, Sidelands Copse, and Underacre.
- 3.2.9 The Ampney Brook flows through the site in the south and west and there are four water bodies on site. There are five further water bodies evident within 500m of the site. The closest is located approximately 280m to the north-east of the site. Three water bodies are located approximately 300m, 310m and 480m to the north-west of the site and one is located approximately 450m to the east of the site.

4.1 Methods

Extended Phase 1 Habitat Survey

4.1.1 A systematic walkover of the site was undertaken on 8th April 2021. Notes were taken on the habitats present, and their suitability to support protected and notable species. Any incidental evidence of protected and notable species was noted. The survey was carried out with reference to JNCC (2010)³.

Preliminary Bat Roost Assessment and Survey

- 4.1.2 A preliminary bat roost assessment and survey was undertaken of any buildings/structures on site to assess their suitability to support roosting bats. Structures were observed for potential roosting features (for example cracks in stonework or gaps within roof tiles). Trees on site were also assessed for their suitability to roosting bats. This was undertaken from the ground, visually searching for the presence of potential bat roosting features, such as rot holes, split limbs, woodpecker holes, lifted/flaking bark and ivy cover.
- 4.1.3 Based on these factors the buildings/structures and trees on site are assessed as having *Negligible, Low, Moderate* or *High* roosting potential (with reference to the guidance in BCT, 2016⁴).
- 4.1.4 The main buildings on site; the Main House and ancillary buildings, including the Stables and Grooms Flat, Stable Cottage, Stone Barn, Indoor Horse Arena and Grounds Building, were the subject of a separate Preliminary Bat Roost Assessment and Survey⁵ and were not included in this survey.
- 4.1.5 Survey methods refer to Collins (2016).

Constraints to Survey

4.1.6 The survey is not able to record flora or fauna that may appear on the site at other times of the year and were therefore not evident at the time of the survey.

³ Joint Nature Conservation Committee (JNCC) (2010) Handbook for Phase I Habitat Survey – a Technique for Environmental Audit. JNCC Peterborough.

⁴ Bat Conservation Trust (BCT) (2016) *Bat Surveys for Professional Ecologists. Good Practice Guidelines.* Bat Conservation Trust. Third Edition.

⁵ Seasons Ecology (2021) *Ampney Park. Preliminary Bat Roost Assessment and Survey,* April 2021 (reference SEB2429_01).

4.2 Site/Habitats Descriptions

- 4.2.1 The grounds are approximately 23 hectares in size and comprises the following habitats: buildings/structures; grassland, including sheep-grazed and former horse-grazed pastures and amenity grassland; formal gardens; woodland; scattered mature trees; water bodies; and a number of compost, brash and log piles. Water bodies include the Ampney Brook and connecting streams and four ponds/lakes. The grounds also contain a tennis court and outdoor horse arena, gravelled vehicle parking areas and tarmac access roads through the grounds.
- 4.2.2 The distribution and extent of habitats are shown on the Phase 1 habitat map at Annex 2. Site photographs are provided at Annex 3.

Buildings/Structures

- 4.2.3 There are six buildings/structures within the grounds (excluding the Main House and ancillary buildings). They are numbered Buildings B1 B6.
- 4.2.4 Two stone structures are in the west of the site, adjacent to the Ampney Brook sluice, numbered Buildings B1 and B2. Building B1 is constructed of Cotswold stone with a stone-tiled, pitched roof. Several gaps and cracks are present within the stonework and between stone roof tiles. The building has window openings on the single-storey elevations, with no glass. There is no roof void, the internal area being open to the roof. Horizontal wooden beams span the internal area at the roofline.
- 4.2.5 Building B2 is located approximately 5m to the east of Building B1. It is also constructed of Cotswold stone, but the roof is missing. There are gaps and cracks within the stonework.
- 4.2.6 Building B3 is a stone structure located within the formal gardens. It has a stone-tiled, pitched roof which feature several gaps under tiles. There is no roof void, with the internal area being open to the roof. Horizontal wooden beams span the internal area at the roofline.
- 4.2.7 Buildings B4 and B5 are wooden stables with flat, corrugated, felt roofs. The two stables are open to the east.
- 4.2.8 Building B6 is a disused barn, of steel-frame construction with a shallow, pitched, corrugated metal roof. It is situated on an area of hard-standing. The structure is entirely open on all sides.

Grassland

Sheep and Horse-Grazed Pasture

- 4.2.9 Approximately 13 hectares of sheep-grazed pasture is located in the north of the site. The pasture is bounded by a drystone wall to the north and east, which features a number of gaps and crevices (Target Note 1). Woodland forms the west boundary and wooden fencing and treeline forms the south boundary.
- 4.2.10 Dominant grasses include Yorkshire-fog *Holcus lanatus*, cock's-foot *Dactylis glomerata*, red fescue *Festuca rubra*, bent-grasses *Agrostis* species and sheep's fescue *Festuca ovina*, with a low herb content, comprising thistles *Cirsium* species, docks *Rumex* species, common nettle *Urtica dioica*, lesser celandine *Ficaria verna*, common hogweed *Heracleum sphondylium*, lord-and-ladies *Arum maculatum* and ground-ivy *Glechoma hederacea*.
- 4.2.11 Large mature trees are scattered across the pasture and a copse is located in the approximate centre of the field.

- 4.2.12 Several paddocks divided by wooden post and rail fencing is located to the west of an Indoor Horse Arena. They occupy approximately two hectares. Rye-grasses *Lolium* species are dominant with a low herb content, comprising daisy, cut-leaved crane's-bill *Geranium dissectum*, speedwells *Veronica* species and daffodil *Narcissus* species. A low number of isolated, mature oak *Quercus* species are scattered across the paddocks.
- 4.2.13 A drystone wall, featuring a number of gaps and crevices within the stone, borders the paddocks to the east (Target Note 2).
 - Amenity Grassland
- 4.2.14 Well-maintained amenity grassland dominates the formal gardens near to the Main House. East of the gardens is a well-maintained bowls/croquet lawn.

Formal Gardens

- 4.2.15 Located mainly to the south of the Main House are formal gardens, covering an area of approximately 4.5ha. The gardens are made up of lawns, gravel and stone paving and stone retaining walls with ornamental flower beds, well-managed ornamental shrubs and hedging and sculptures.
- 4.2.16 An ornamental water feature (fountain) is located in a courtyard to the east of the Main House. Woodland
- 4.2.17 Woodland is located in the north-west of the site and within the sheep-grazed pasture. It also forms the west and south boundaries of the site. Woodland borders the Ampney Brook and its associated network of streams and woodland surrounds some of the ponds/lakes.
- 4.2.18 A woodland copse (W1) is located within the sheep-grazed pasture and is approximately 0.5 hectares in size, containing trees of mixed age and species. Species include cypress *Cupresses* species, Scot's pine *Pinus sylvestris*, silver birch *Betula pendula*, oak and cherry *Prunus* species. The shrub understorey is dominated with young hazel *Corylus avellana* with patches of dense bramble *Rubus fruticosus* agg. and a cotoneaster *Cotoneaster* species (Target Note 3). Leaf litter covers the floor with sparse common nettle, herb-Robert *Geranium robertianum*, lords-and-ladies and cleavers *Galium aparine*.
- 4.2.19 Forming the west boundary of the site is woodland (W2), approximately 2.3 hectares in size, and the location of one of the on-site ponds and the northern section of Ampney Brook within the site. This woodland comprises trees of mixed age and species, including alder *Alnus glutinosa* overhanging the brook and pond, beech *Fagus sylvatica*, oak, silver birch and hazel. The shrub understorey is dominated with young sycamore *Acer pseudoplatanus* and hazel. The canopy is less dense, allowing a more diverse ground flora than the copse (W1). Dog's mercury *Mercurialis perennis*, lord-and-ladies, cleavers and ivy are present. Several large, felled trees lie on the ground.
- 4.2.20 Forming the south boundary of the site is woodland (W3), approximately 4 hectares in size. A pond, lake and a section of the Ampney Brook are located with this woodland. Mature trees are dominant, including alder, willow *Salix* species, beech, oak, ash *Fraxinus excelsior*, yew, holly *Ilex aquifolium*, cypress species and Scot's pine, with large patches of cherry laurel *Prunus laurocerasus*. The shrub understorey is sparse, but ornamental species grow near the water bodies. The ground flora is sparse in the south, but woodland flora and species of damp conditions grow near the water bodies, along with ornamental/non-native, planted species, including English bluebell *Hyacinthoides non-scripta*, Spanish bluebell *Hyacinthoides hispanica*, snake's-head fritillary *Fritillaria meleagris*, butterbur *Petasites* species, Western skunk cabbage *Lysichiton americanus* (Target Note 4), marsh-marigold *Caltha palustris*, bracken

Pteridium aquilinum and harts-tongue fern *Asplenium scolopendrium*. Bounding the woodland to the south is a drystone wall.

Scattered Mature Trees

- 4.2.21 Mature, mixed species trees are scattered across the site. Four mature horse chestnut *Aesculus hippocastanum* are located along the north boundary of the sheep-grazed pasture (Target Note 5). The trees feature large hollows, missing limbs and split branches.
- 4.2.22 Within woodland W3, adjacent to the Ampney Brook in the south-east of the site, are two standing deadwood trees (Target Note 6), one of which features several woodpecker holes. Nearby is a large, mature ash which features hollows and split branches.
- 4.2.23 Located within the paddocks are two isolated mature oaks (Target Note 7). They feature a number of hollows and missing limbs.

Water Bodies

Ampney Brook

- 4.2.24 The Ampney Brook flows from the south of the site westwards along the south boundary (Section A), through a sluice (Section B), and then flows northwards along the western boundary of the site (Section C). There are a number of streams and ponds/lakes diverting off from the main brook throughout the site.
- 4.2.25 Section A of the Ampney Brook flows along the south boundary of the site through woodland W3. The channel at this section is relatively straight, deep and slow-flowing with a channel width of approximately 5m. The banks along this section vary from steep to shallow and are grass-covered with woodland ground flora, including hart's-tongue fern and sedges, including pendulous sedge *Carex pendula*. Mature alder line the brook in the north. Silt forms the channel bed substrate. Aquatic vegetation is limited. Adjacent habitats are woodland (W3) and two lakes.
- 4.2.26 Section B of the Ampney Brook flows northwards from Section A, passing through a sluice adjacent to Buildings B1 and B2. The brook along this section is slow-flowing and relatively straight with a channel width of approximately 1m and channel bed substrate of stone. The banks of the brook at this section are steep and constructed of stone with adjacent habitats of well-maintained amenity grassland with herbs including hairy bittercress *Cardamine hirsuta*, dandelion *Taraxacum* species, common daisy *Bellis perennis*, lesser celandine, docks, primrose, blue wood anemone *Anemone nemorosa* and Spanish bluebell.
- 4.2.27 At Section C, the Ampney Brook splits into two channels which both flow northwards parallel to each other along the western boundary of the site. The western channel is approximately 5m wide, fast-flowing, deep and straight. Several shallow streams flow off this channel forming a small network of channels and pools within the woodland (W2). Aquatic vegetation is limited. The channel bed substrate is silt. The left (west) bank becomes steep and vegetated with harts-tongue and shield ferns *Polystichum* species, and several large tree trunks with numerous gaps and crevices. The right bank (east) is shallow and vegetated with woodland flora.
- 4.2.28 The eastern channel along this Section C, is narrow, approximately 1m-3m wide and fast-flowing, shallow and meandering. Occasional patches of fool's water-cress *Apium nodiflorum* is present. The channel substrate is silt. The banks are vegetated with woodland and marginal species including yellow iris *Iris pseudacorus*, water mint *Mentha aquatica* and soft-rush *Juncus effusus*, with a tree line of overhanging mature trees, predominantly alder. Several large, felled trees cross the channel along this section.

Ponds/Lakes

- 4.2.29 There are two ponds and two lakes located on site. These are numbered Ponds P1 and P2 and Lakes 1 and 2.
- 4.2.30 Pond P1 is located within woodland W2 and is approximately 0.12 hectares (1,200m²) in size and appears over 1m deep at its centre. There is extensive submerged fool's water-cress with water mint, soft-rush and yellow iris along the margins. Large, mature trees overhang the pond and a layer of pondweed covers approximately 20% of the water's surface. Mallard *Anas platyrhynchos* was present at the time of the survey.
- 4.2.31 Pond P2 is located along the northern boundary of the sheep-grazed pasture and is approximately 0.006 hectares (60m²) in size. The pond is shallow, appearing less than 50cm deep, and features a mature, overhanging willow with part of its root system exposed. The banks are gently shelving and poached by sheep. There was no aquatic vegetation evident at the time of the survey.
- 4.2.32 Lake 1 is located in the north of woodland W3 and is approximately 0.08 hectares (810m²) in size. It appears over 1m deep at its centre. The banks of the lake are shallow and vegetated with well-maintained amenity grassland and woodland flora such as daffodils, English bluebell and snake's-head fritillary, with a small patch of bur-reed *Sparganium* species. A low number of mature trees overhang the lake and pondweed covers approximately 10% of the surface area.
- 4.2.33 Lake 2 is located in the south of the site, within woodland W3. It is approximately 0.77 hectares (7,700m2) in size and appears up to 2m deep in places. The banks of the lake are shallow and predominately grass-covered with occasional patches of marginal vegetation, ornamental planting and woodland ground flora, including cow parsley *Anthriscus sylvestris* and wood spurge *Euphorbia amygdaloides*. A small section of the southern bank is constructed of stone. A patch of common reed *Phragmites australis* grows at the western margin of the lake. Mature trees and cherry laurel shrubs overhang and partially shade the lake. The lake features an island approximately 0.08 hectares (800m²) in size. The island is tree-covered with brash and log piles. Mallard and moorhen *Gallinula chloropus* were present on the lake at the time of the survey.

Compost, Brash and Log Piles

4.2.34 Compost, brash and log piles (Target Note 8) are present across the site, including within woodland, adjacent to the pasture grassland, on the island of Lake 2, near to Buildings B1 and B2 and adjacent to Building B6.

4.3 Suitability to Protected/Notable Species

- 4.3.1 The grounds of Ampney Park contain buildings/structures; grassland, including sheep-grazed and former horse-grazed pastures and amenity grassland; formal gardens; woodland; scattered mature trees; water bodies; and a number of compost, brash and log piles. Water bodies include the Ampney Brook and connecting streams and four ponds/lakes.
- 4.3.2 The site has suitability to the following protected/notable species:
 - Flora At least one non-native, invasive species was identified on site. Western skunk
 cabbage is present within woodland W3 and while it is not listed on Schedule 9 of the
 Wildlife and Countryside Act 1981 for England and Wales, it is banned for sale in the UK
 and large efforts to remove the invasive species from UK woodlands have been
 undertaken.

A cotoneaster species grows in woodland W1. Several cotoneaster species are considered to be invasive in the UK. Schedule 9 of the Wildlife & Countryside Act aims to control the spread of specific cotoneaster species, making it illegal to distribute, or allow their spread into the wild.

The site in general has high floristic diversity, attributable to the mosaic of habitats and mix of woodland, grassland, ornamental and wetland species.

Bats – Building B1 is assessed as Moderate suitability to roosting bats, supporting potential
roosting features and accesses, including open windows, cracks and gaps within the
stonework and under stone roof tiles and the presence of wooden beams spanning the
internal area suitable for horseshoe bats with suitable access provided by open windows.

Similarly, Building B2 features gaps in stonework which provide potential roosting features for crevice-dwelling species of bat, but lacks a roof. Building B2 is assessed as *Low* suitability to roosting bats.

Building B3 supports a low number of bat roosting features in the form of gaps underneath the stone roof tiles. The open side of the building's front aspect and wooden beams internally also provide a wide open access and perching feature for horseshoe bats. Building B3 is therefore assessed as *Low* suitability to roosting bats.

Buildings B4, B5 and B6 are all constructed of unsuitable material for roosting bats, containing no roof voids or potential roosting features. All three buildings are therefore assessed as *Negligible* suitability to roosting bats.

The four mature horse chestnut trees located in the north-west corner of the sheep-grazed pasture (Target Note 5), and the two standing deadwood trees and mature ash (Target Note 6) all feature a moderate number of potential bat roosting features in the form of large hollows, missing limbs and split branches. These trees are assessed as *Moderate* suitability for roosting bats.

The two isolated mature oaks located within the field of semi-improved grassland (Target Note 7) feature a low number of hollows and missing limbs. These trees are assessed as *Low* suitability to roosting bats given the presence of a low number of potential bat roosting features.

The habitats across the site support high-quality bat foraging and commuting habitats, which are well-connected to the surrounding habitats of pastural fields and patches of woodland. Referring to the desk study, there are five records for brown long-eared, common pipistrelle, Natterer's and soprano pipistrelle located between 0.9km and 1.9km

from the site. The site provides high-quality roosting, foraging and commuting habitat for these species. The close proximity of Buildings B1, B2 and B3 to such habitats increases the likelihood of bats utilising them.

 Reptiles and amphibians – The habitats across the site, particularly along the woodland edges, within the Formal Gardens where there are gaps and cracks within the retaining stone walls and stone paving, the piles of brash, compost and logs, and the bounding drystone walls, provide suitable refuge and foraging habitats for common and widespread species of reptiles and amphibians.

With consideration to the potential for great crested newt to utilise the site, there are four water bodies on site which offer aquatic habitat for this species. A further five water bodies are located within 500m of the site. All five ponds are located to the north and east of the site, where there are no intervening barriers present between the site and the ponds for any migrating great crested newt, with fields of pastoral land and woodland which are well connected to the site via hedgerows and tree belts. Furthermore, there is one record for great crested newt for a location approximately 0.4km to the north. Therefore, it is considered that there is potential for great crested newt to utilise aquatic and terrestrial habitats on site.

- Nesting birds No evidence of nesting birds was observed during the survey, however a
 moderate level of bird activity was observed during the survey, including red kite Milvus
 milvus, common buzzard Buteo buteo, great spotted woodpecker Dendrocopos major,
 jackdaw Corvus monedula, magpie Pica pica, rook Corvus frugilegus, great tit Parus major,
 blue tit Cyanistes caeruleus, red-legged partridge Alectoris rufa, treecreeper Certhia
 familiaris, grey heron, mallard and moorhen. The red kite is classified in the UK as Green
 under the Birds of Conservation Concern 4 and protected in the UK under the Wildlife and
 Countryside Act, 1981. The habitats on site provide a large area of high-quality nesting and
 foraging habitat for birds.
- Water vole and otter The site supports suitable habitats for water vole and otter, including the Ampney Brook and connecting streams, ponds and lakes. Foodplants for water vole grow along the banks, such as bur-reed and yellow iris. Possible signs of water vole was recorded along the banks of Lake 2 in the form of characteristically 45 degree-angled cut stems of pendulous sedge (Target Note 9), however no further obvious evidence for water vole (such as burrows, tracks or latrines) where observed at the time of the survey. The Ampney Brook and its associated network of streams across the site feature shallow and steep banks and areas of lush riparian vegetation, which provide suitable refuge and foraging habitats for water vole.
- There was no evidence of otters recorded on site at the time of the survey, such as holts, slides, lay-ups or spraint. The Ampney Brook and its associated networks of streams, and the larger ponds and lakes on site feature banks with areas containing large exposed root systems of overhanging trees and tree stumps which offer suitable locations for holts and tree lines and adjacent woodland which provide foraging and commuting cover. Given the size of the water bodies and Ampney Brook on site, it is considered likely that a fish population is present, providing a resource for otter on site. The Ampney Brook is also a tributary of the River Thames, where an established population of otter is known. It is therefore considered that there is potential for otter to utilise the habitats on site for refuge, foraging and commuting to wider sections of Ampney Brook and beyond to the River Thames.

- Small mammals The habitats on site, particularly the woodlands, provide a large area of
 foraging, commuting and refuge habitats for common and widespread species of small
 mammals. Rabbit droppings and burrows were observed along the banks of Ampney Brook
 at Section C (Target Note 10).
 - The woodlands across the site offer suitable habitat for dormouse *Muscardinus avellanarius*, supporting a shrub understorey of predominantly native species, including hazel. Furthermore, the woodlands on site are well-connected to surrounding woodlands, including Merrillhill Copse, Sidelands Copse, and Underacre, which are all within 1km of the site. It is therefore considered that there is potential for dormouse to utilise the habitats on site.
- Badger There was no confirmed evidence of badger activity (hair or prints for example)
 and no badger setts were found on site or within 30m of the site. The woodlands across
 the site and pastures, comprising a number of scattered mature fruit trees, provides highquality foraging and refuge habitat for badger.
- White-clawed crayfish Sections of the Ampney Brook across the site has a depth of less
 than 50cm along its length which make it suitable for white-clawed crayfish which inhabit
 freshwater streams with a depth of less than 1m. Furthermore, several other
 characteristics of the stream such as heterogenous flow patterns along the watercourse,
 rocky substrate for refuge and areas of soft banks for burrowing, are suitable for this
 species. However, the highest densities of this species in the UK have been found in chalk
 streams, unlike the stream on site. It is therefore considered that there is very low
 likelihood for white-clawed crayfish to be present on site.
- Invertebrates The site is suitable to support a high range and abundance of invertebrate species owing to its large size, habitat diversity and mosaic of habitats, including the presence of aquatic habitats, mature trees and deadwood, and the high quantity of ornamental species present.

4.4 Priority Habitats

- 4.4.1 UK Biodiversity Action Plan (BAP) Priority Habitats are present on site. The Ampney Brook on site fulfils the criteria of the Rivers and Stream habitat via its habitat type, characterised by its geology of Great Oolite limestone and association with an abundance of *Ranunculus* species and *Callitriche* species. Furthermore, the presence of bullhead *Cottus gobio* and brook lamprey *Lampetra planeri* have been recorded⁶, which are two species cited under Annex II of the EC Habitat and Species Directive (92/43/EEC) and named in the UK BAP.
- 4.4.2 The general site fulfils the criteria for the Wood-Pasture and Parkland habitat owing to the presence of a number of large, mature trees which have significant hollows and decaying or dead timber, consisting of oak, beech, alder, birch, hazel, sweet chestnut and Scot's Pine; long established presence of grazing livestock; open grassland; designed landscapes; and the presence of hole nesting birds and woodpecker.
- 4.4.3 Woodlands W2 and W3 both fulfil the criteria for Lowland Mixed Deciduous Woodland, owing to the sub-communities present within the habitat comprising National Vegetation Classification W10a, oak/birch woods with hazel and horse chestnut and a shrub understorey

⁶ Vaughan Lewis, Windrush AEC (2004). *Habitat Advisory Visit, Ampney Brook*. https://www.wildtrout.org/assets/reports/2004AmpneyBrook.pdf

	of hazel and alder with bramble and bracken; and W10c, oak with beech and ash with a hazel
	of hazel and alder with bramble and bracken; and W10c, oak with beech and ash with a hazel understorey and ivy ground layer.
4.4.4	A holly hedge bounds the outdoor horse arena to the south (Target Note 11) and fulfils the criteria for the Hedgerow UK BAP Priority Habitat as it is over 20m long (approximately 60m in length), less than 5m wide, and consists predominately of one native, woody species (holly).

- 5.1.1 The site features a high diversity of habitats, including four Priority Habitats (Rivers and Streams, Wood-Pasture and Parkland, Lowland Mixed Deciduous Woodland and Hedgerow), and buildings/structures, grasslands, formal gardens, woodland, scattered mature trees and water bodies. Woodland, scattered mature trees and Ampney Brook offer elements of permanence, naturalness and fragility and have intrinsic value.
- 5.1.2 The diversity of habitats on site have potential to support good populations and diversity of protected species, including roosting, foraging and commuting bats, nesting and foraging birds, common and widespread species of reptiles, amphibians and small mammals, great crested newt, water vole and otter, badger and dormouse.
- 5.1.3 Habitats have been evaluated as High, Moderate or Low Ecological Value (shown on the Constraints Plan in Annex 3), which will need to be taken into consideration for any future proposals:
 - <u>High Ecological Value</u> habitats are recommended for retention and protection in the longterm, likely requiring further protected species surveys and consideration within any future proposals for the site. This includes woodlands W1, W2 and W3, Ampney Brook and associated streams, Buildings B1, B2 and B3, scattered mature trees, Ponds P1 and P2 and Lakes 1 and 2.
 - Moderate Ecological Value habitats also likely to require further protected species surveys
 but to a lesser extent and contribute a moderate number of ecological constraints to any
 future proposal for the site. This includes the sheep and horse-grazed pastures with their
 associated linear features of tree lines and bounding drystone walls and scattered mature
 trees.
 - <u>Low Ecological Value</u> habitats are unlikely to require further protected species surveys, subject to the type and scale of any future proposals, and contribute little to no ecological constraints to any future proposals for the site. This includes the formal gardens, amenity grassland and Buildings B4, B5 and B6.

6. Recommendations

6.1 Detailed Desk Study

- 6.1.1 The site is assessed to have suitability to support a number of protected species, including great crested newt, dormouse, badger, water vole and otter, and nesting birds. Therefore, it is recommended initially that a detailed desk study is undertaken with a request made to Gloucestershire Environmental Records Centre for records for protected species occurring with a 2km radius of the site.
- 6.1.2 For any future proposals for the grounds, the Detailed Desk Study combined with this sitewide report, will assist in scoping the requirement for further surveys.

6.2 Further Surveys

- 6.2.1 For any future development proposals within the grounds of Ampney Park, an Ecology Appraisal focused on the known area to be affected should be undertaken, to inform specific considerations to habitats and species. The scope of subsequent protected species surveys should be determined with consideration to the results of the Detailed Desk Study, the results and evaluation of the Ecological Appraisal and the proximity of High, Moderate and Low Ecological Value habitats.
- 6.2.2 With consideration to great crested newt, for any development affecting suitable terrestrial habitats located within 500m of the ponds and lakes on site, presence/absence surveys for this species should be undertaken.
- 6.2.3 For the purposes of future management of the grounds, protected species surveys would inform appropriate sensitive prescriptions, methods and timings of management.
- 6.2.4 Table 1 below summarises the potential scope of further surveys for habitats.

Table 1. Further Surveys, Ampney Park Grounds

Habitat	Ecological Value	Species	Surveys	Timing for surveys
Buildings/structures, B1-B3 and drystone walls	High	Roosting bats	Emergence/re-entry surveys	May to September
		Nesting birds	Nesting bird check	Required if works proposed for March to August only
Grassland	Moderate	Great crested newt	Presence/absence surveys if works located within 500m of ponds/lakes	Mid-April to mid-June
Formal Gardens	Low	Great crested newt	Presence/absence surveys if works located within 500m of ponds/lakes	Mid-April to mid-June
Woodland	High	Nesting birds	Nesting bird check	Required if works proposed for March to August only
		Great crested newt	Presence/absence surveys if works located within 500m of ponds/lakes	Mid-April to mid-June
		Water vole and otter	Presence/absence survey if works within 30m of Ampney Brook and lakes/ponds	April to October
		Dormouse	Presence/absence survey (nest tube survey)	Survey should commence in April with monthly checks to October/November

Habitat	Ecological Value	Species	Surveys	Timing for surveys
Scattered mature trees	High	Nesting birds	Nesting bird check	If works proposed for March to August only
		Great crested newt	Presence/absence surveys if works located within 500m of ponds/lakes	Mid-April to mid-June
Ampney Brook	High	Water vole and otter	Presence/absence survey	April to October
Ponds/Lakes	High	Great crested newt	Presence/absence survey	Mid-April to mid-June
		Water vole and otter	Presence/absence survey	April to October

6.3 General Protection Measures

- 6.3.1 The following general protection measures are recommended:
 - Where possible, all native shrub and semi-mature and mature trees on site should be retained and where required protected during any construction works. Where native shrub or tree removal is essential, appropriate compensation planting should be undertaken so that the habitat/resource on site is maintained.
 - For all vegetation management or removal, works should be undertaken outside of the nesting bird season, which is generally from 1st March to 31st August, or following a preworks check from a suitably experienced Ecological Clerk of Works.
 - To protect native flora and to prevent further spread of invasive species, cotoneaster species growing in Woodland W1 and western skunk cabbage located near the Ampney Brook in Woodland W2, should be removed by hand and disposed of appropriately.
 - Dismantling of any of the piles of brash, logs, and compost across the site should be undertaken by hand by an Ecological Clerk of Works and should occur between March and October to avoid the reptile and amphibian hibernation season.
 - It is recommended that any future proposals should avoid altogether the woodlands W1, W2 and W3, owing to their assessed high value to protected/notable species and being important habitats in their own right.
 - A 10m wide corridor should be maintained along the Ampney Brook where no development should occur, other than the restoration of existing buildings (Buildings B1 and B2, for example).

6.4 Biodiversity Enhancements

- 6.4.1 Biodiversity enhancements will need to be incorporated into any future development proposals within the grounds, based on the results of surveys. The following enhancements may be recommended:
 - Provision of bat roosting opportunities across the site. Built-in bat boxes could be considered for any new or replacement buildings and bat boxes could be placed on trees on site.
 - Provision of bird nesting opportunities across the site.
 - Any new tree planting should include a mix of fruit trees, including apple, pear *Pyrus* species and cherry *Prunus* species. This will enhance the foraging resource on site for badger, birds and invertebrates, which in turn will enhance foraging resources for bats.
 - To replace refuge habitat if brash and log piles are removed, log/rock piles could be recreated within undisturbed, less intensively managed areas of the grounds, to provide refuges for reptiles, amphibians and small mammals.
 - A wildflower meadow could be created to replace part or all of the existing paddocks, to provide resources for pollinators, which in turn will enhance foraging for bats and birds.
 - Climbing plants, such as honeysuckle Lonicera species, which are night-scented, will attract
 night-flying invertebrates and enhance foraging for bats.

Annex 1: Legislation and Planning Policy

A summary of relevant legislation and national policy is provided below. For each individual case, it is advised to consult the relevant documents in full and obtain legal advice, where appropriate.

There are several UK legislation tools, which are listed below. European legislation has not been included as it is incorporated in UK legislation by domestic provisions.

Conservation of Habitats and Species Regulations 2017 (as amended)

In 1992, the Habitats Directive (Council Directive 92/43/EEC)⁷ came into force. This provides for the creation of a network of protected wildlife sites across the European Union, known as 'Natura 2000'. This network consists of designated sites, including Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Birds Directive (Council Directive 79/409/EEC)⁸. These sites form part of a series of measures aimed at conserving important and threatened habitats and species.

The Conservation of Habitats and Species Regulations 2017 commonly known as 'the Habitat Regulations' transpose the Habitats Directive into national law and set out the provisions for the protection and management of species and habitats of European importance, including Natura 2000 sites. The Regulations have been amended in England in relation to candidate SACs and SPAs. These are sites submitted by the Government for consideration as part of the Natura 2000 network, and are also now defined as European Sites. All European Sites are of national importance and have been notified as SSSIs.

Wildlife and Countryside Act 1981, as Amended in Quinquennial Review and by the Countryside and Rights of Way Act 2000⁹

The Wildlife and Countryside Act 1981¹⁰ provides the foundation for much of the statutory wildlife protection in the UK. Part I deals with the protection of plants, birds and other animals and Part II deals with the designation of SSSIs.

The following broad areas are covered by the Act:

Nature Conservation - Protecting those sites which are National Nature Reserves (NNR) and SSSIs.

Wildlife - Listing endangered or rare species in need of protection and creating offences for killing, disturbing or injuring such species. The disturbance of any nesting bird during the breeding season is also noted as an offence.

The Act also makes it an offence to cause to grow in the wild certain plant species or to release certain fauna into the wild. The Act is enforced by local authorities.

⁷ European Commission (1992). Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora. European Commission, Brussels.

⁸ European Commission (1979). Council Directive 79/409/EEC on the conservation of wild birds, European Commission, Brussels.

⁹ Secretary of State, 2000. The Countryside and Rights of Way Act. Her Majesty's Stationery Office.

¹⁰ Secretary of State, 1981. Wildlife and Countryside Act. Her Majesty's Stationery Office.

Countryside and Rights of Way Act, 2000

The Countryside and Rights of Way Act 2000 provides a new statutory right of access to the countryside and improves upon the rights of way system, providing stronger protection for both wildlife and countryside.

Part III of the Act - Nature Conservation and Wildlife Protection: A number of measures to promote and enhance wildlife conservation are detailed, including improving protection for Sites of Special Scientific Interest (SSSIs) and increasing penalties for deliberate damage to SSSIs. The Act affords statutory protection to Ramsar Sites which are wetlands designated under the International Convention on Wetlands.

National Planning Policy Framework, 2012

The National Planning Policy Framework (NPPF) was published in March 2012 and came into immediate effect superseding all existing Planning Policy Guidance (PPGs) and Planning Policy Statements (PPSs). It sets out the Government's requirements for the planning system and how these are expected to be addressed. The NPPF is a material consideration for the purposes of planning decision-making.

The NPPF places a presumption in favour of sustainable development.

The NPPF states that the presence of a legally protected species is a material consideration for a local authority dealing with planning applications for any development that would be likely to result in harm to the species or its habitat. Circular 06/2005: Biodiversity and geological conservation¹¹, prepared in support of the former PPS9, is still relevant and provides more guidance on the application of the law relating to planning and nature conservation.

Biodiversity Action Plans

In 1994, the Government produced the UK Biodiversity Action Plan (BAP)¹², a national strategy for the conservation of biodiversity. Regional and District/Borough BAPs apply the UK BAP at a local level. The 'UK Post-2010 Biodiversity Framework' succeeded the UK BAP in July 2012¹³. The UK BAP lists of priority species and habitats remain, however, important and valuable reference sources. Notably, they have been used to help draw up statutory lists of priorities in England, Scotland, Wales and Northern Ireland. In England, there are 56 habitats of principal importance and 943 species of principal importance.

¹¹ ODPM Circular 06/2005 Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and their Importance within the Planning System. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/7692/147570.pdf

¹² Her Majesty's Stationery Office, 1994. Biodiversity: The UK Action Plan. London.

¹³ JNCC and Defra (on behalf of the Four Countries' Biodiversity Group). 2012. UK Post-2010 Biodiversity Framework. July 2012. Available from: http://jncc.defra.gov.uk/page-6189

Species/speci es group	Legal protection and policy
Flora	A number of plant species are protected under the Wildlife and Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2017 (amended). It is an offence to deliberately pick, collect, cut, uproot or destroy these wild plants. It is also an offence for any purpose to possess, sell or exchange such a plant.
	In addition, a number of plant species are species of principal importance in England (formerly referred to as UK Biodiversity Action Plan (BAP) species), LBAP priority species and/or notable species that are a material consideration in planning.
Bats	Bat species in England and Wales are protected under The Conservation of Habitats and Species Regulations 2017 (as amended) and the Wildlife and Countryside Act 1981 (as amended). Under this legislation it is an offence to: • Deliberately capture, injure or kill bats; • Intentionally or recklessly disturb bats; • Intentionally or recklessly obstruct access to any structure or place which bats use for shelter or protection; and • Deliberately damage or destruction of a breeding site or resting place. Seven of the 18 species of bats occurring in the UK are species of principal importance in England and many are also included in LBAPs.
Badgers	Badgers and their setts are protected under the Protection of Badgers Act 1979. Under this legislation it is illegal to kill, injure or take badgers or to interfere with a badger sett in any way.
Otters	Otters in England and Wales are protected under The Conservation of Habitats and Species regulations 2017 (as amended) and the Wildlife and Countryside Act 1981 (as amended). Under this legislation it is an offence to: • Deliberately capture, injure or kill an otter; • Intentionally or recklessly disturb otter; • Intentionally or recklessly obstruct access to any structure or place which an otter uses for shelter or protection; and • Deliberately damage or destruction of a breeding site or resting place. Otter is a species of principal importance in England.
Water voles	Water voles in England and Wales are protected under the Wildlife and Countryside Act 1981 (as amended). Under this legislation it is an offence to: Deliberately capture, injure or kill a water vole; Intentionally disturb water vole in their breeding or resting places; and Deliberately damage, destroy or obstruct of a breeding site or resting place.
	Water vole is a species of principal importance in England.

Dormice	Dormice in England and Wales are protected under The Conservation of Habitats and Species regulations 2017 (as amended) and the Wildlife and Countryside Act 1981 (as amended). Under this legislation it is an offence to: • Deliberately capture, injure or kill a dormouse; • Intentionally or recklessly disturb dormice; • Intentionally or recklessly obstruct access to any structure or place which a dormouse uses for shelter or protection; and • Deliberately damage or destruction of a breeding site or resting place. Dormouse is a species of principal importance in England.
Other mammals	Several other species of mammals, whilst not afforded specific legal protection, are of note and consideration to such species is necessary in respect to planning in accordance with national and often local policy. Such species are typically identified as species of principal importance in England and/or LBAPs. Species of principal importance in England include brown hare and hedgehog.
Birds	 All wild birds in England and Wales are granted legal protection under the Wildlife & Countryside Act 1981 (as amended). Under this legislation it is an offence to: Kill, injure or take any wild bird; Take, damage or destroy the nest of any wild bird while it is in use or being built; and, Take or destroy the egg of any wild bird. Bird species listed on Schedule 1 of the Act are afforded further protection and it is illegal to disturb such species while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird. A number of bird species are also included as species of principal importance in England and LBAPs.
Reptiles	Smooth snakes and sand lizards in England and Wales are protected under The Conservation of Habitats and Species Regulations 2017 (as amended) and the Wildlife and Countryside Act 1981 (as amended). Under this legislation it is an offence to: • Deliberately capture, injure or kill a smooth snake or sand lizard; • Intentionally or recklessly disturb a smooth snake or sand lizard; • Intentionally or recklessly obstruct access to any structure or place which a smooth snake or sand lizard use for shelter or protection; and • Deliberately damage or destruction of a breeding site or resting place. Widespread species of reptile (slow worm, common lizard, grass snake and adder) are protected against killing, injury and sale. Reptile species are also species of principal importance in England and often LBAP species.
Amphibians	Great crested newts and natterjack toads in England and Wales are protected under The Conservation of Habitats and Species regulations 2017 (as amended) and the Wildlife and Countryside Act 1981 (as amended). Under this legislation it is an offence to:

- Deliberately capture, injure or kill a great crested newt or natterjack toad;
- Intentionally or recklessly disturb a great crested newt or natterjack toad;
- Intentionally or recklessly obstruct access to any structure or place which a great crested newt or natterjack toad use for shelter or protection; and
- Deliberately damage or destruction of a breeding site or resting place.

Great crested newt, pool frog, natterjack toad and common toad are species of principal importance in England. These and other amphibian species are also often included in LBAPs.

Invertebrates

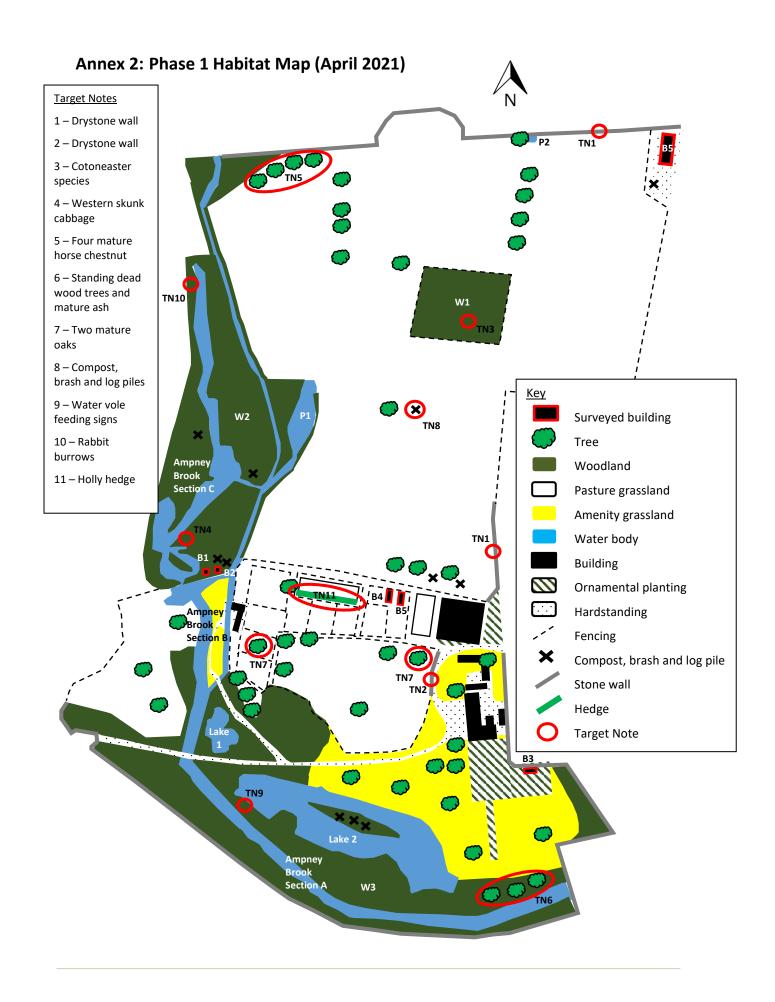
45 species of invertebrate are fully protected under the Wildlife and Countryside Act 1981 (as amended). Under this legislation it is an offence to:

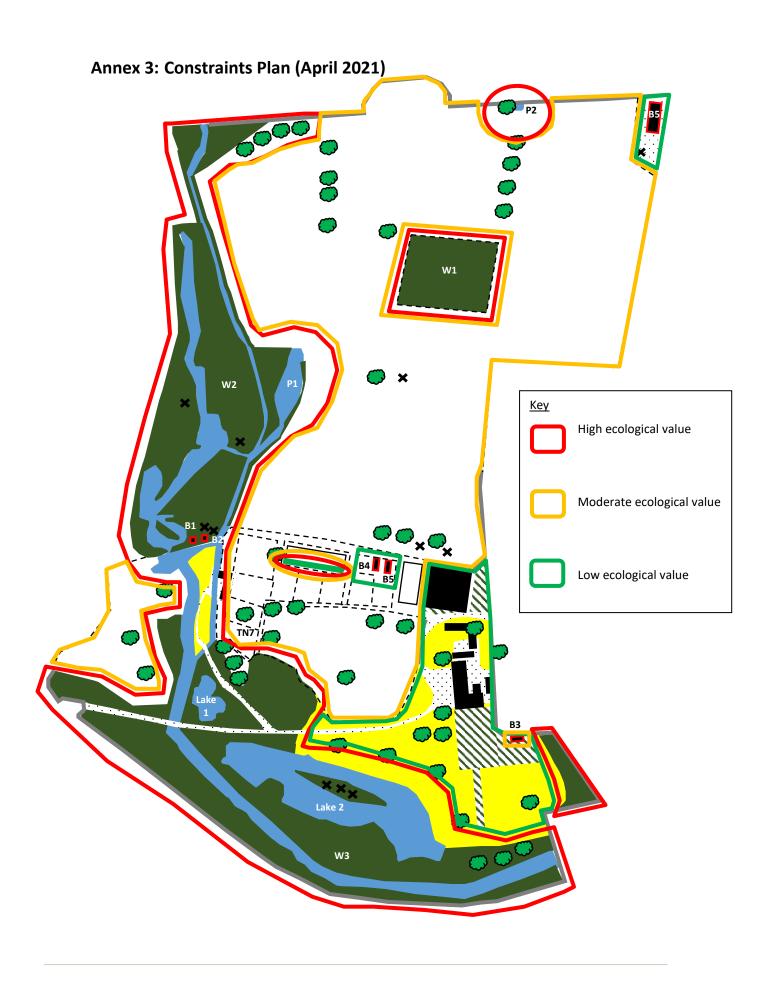
- Intentional kill, injure or take such species;
- Deliberately damage or destruction of a breeding site or resting place used by such species; and,
- Disturb such species when occupying such a structure or place.

A further 24 species are only afforded partial protection (typically only against sale). Stag beetle for instance is only protected against sale.

Eight species and their habitats are also afforded further protection under The Conservation of Habitats and Species Regulations 2017 (as amended).

398 species of invertebrate are included as species of principal importance in England and such species are often also included within LBAPs.





Annex 4: Site Photographs (April 2021)

Photograph 1. View of Buildings B1 (foreground) and B2 (background).



Photograph 2. View of Building B3's south aspect.



Photograph 3. View of Buildings B4 and B5, north-west aspects.



Photograph 4. View of Building B6.



Photograph 5. View of Pond P1 within Woodland W2.



Photograph 6. View of Pond P2 along the north boundary of the sheep-grazed pasture.



Photograph 7. View of Lake 1 within Woodland W3.



Photograph 8. View of Lake 2 within Woodland W3.



Photograph 9. View of the sheep-grazed pasture within the north of the site.



Photograph 10. View of the bounding drystone wall along the east and north boundaries of the site (Target Note 1).



Photograph 11. View of the four mature horse chestnut trees in the north-west of sheep-grazed pasture (Target Note 5).



Photograph 12. View of one of the standing deadwood trees within Woodland W3 (Target Note 6).



Photograph 13. View of standing deadwood tree within Woodland W3 (Target Note 6).



Photograph 14. View of the mature ash within Woodland W3 (Target Note 6).



Photograph 15. View of one of the isolated mature oak within the horse-grazed pasture (Target Note 7).



Photograph 16. View of the other isolated mature oak within the horse-grazed pasture (Target Note 7).



Photograph 17. View of the Ampney Brook in the north-west of the site (Section A).



Photograph 18. View of the Ampney Brook sluice (Section B).



Photograph 19. View of the Ampney Brook in the west of the site (Section A).



Photograph 20. View of the croquet/bowls lawn within the south-east of the site.



Photograph 21. Rabbit burrow to the north-west of the Ampney Brook (Target Note 10).



Photograph 22. View of the formal gardens to the south of the Main House.



Photograph 23. View of the horse-grazed pasture with holly hedge (Target Note 11).



Photograph 24. View of the formal gardens around the Main House.



Photograph 25. View of the central copse (Woodland W1) within the sheep-grazed pasture.

