Ecological Assessment Report

Baynards Ash Farm, Brickworth Road, Royal Wooton Basset, Wiltshire, SN4 8DT

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Client	Mr Eastgate
Reference	2022-012
Version	1
Date	25/02/2022

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Document History

Version	Date	Revision
1	25/02/2022	Issued to the client.

Disclaimer

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The summary of wildlife legislation provided is for general guidance only and does not in any way provide legal opinion or a definitive statement of the law. For detailed information, the legislation itself should be reviewed and a legal professional consulted.

Smart Ecology cannot be held liable for any information provided by third parties which is referenced within this document. The evidence in this document is based upon the field survey(s) detailed. Due to the changing nature of ecology the list of species present cannot be considered comprehensive and Smart Ecology cannot guarantee that other protected/notable species and habitats are not present.

The ecology of a site is constantly changing and therefore the information provided in this document is only relevant at the time of survey. **If it has been over 12 months since this survey was undertaken advice should be sought on whether an updated survey is necessary.**

The evidence which we have prepared and provided is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

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Non-Technical Summary

Purpose of Report	Smart Ecology was commissioned by Mr Eastgate to undertake an ecological assessment of a site at Baynards Ash Farm, Brickworth Road, Royal Wooton Basset, Wiltshire, SN4 8DT. The purpose of the survey was to inform a planning application for the erection of a single storey residential dwelling and garage.
Methodology	A desk study was carried out, and a daytime preliminary bat roost assessment survey of on-site buildings was undertaken to look for evidence of, and potential for, roosting bats. A check was also made for nesting birds, and a walkover of the site was carried out to look for evidence of, and potential for, protected and notable species.

Species/ Group	Suitability Assessment	Survey & Mitigation Requirements	Timing
Bats	Low (stables) (active period)	**Pre-works inspection** – Although the stables had low suitability for roosting bats, all potential roost features were inspected and there was no evidence of use by roosting bats. Therefore it is concluded that bat roosts are not present and an emergence/ re-entry survey is not considered to be necessary. However, bats can use roosts sporadically, and bats could potentially use features within the stables for roosting subsequent to the preliminary roost assessment survey. Therefore, as a precautionary measure, a bat licensed ecologist must inspect the potential roost features immediately before demolition works commence to check for the presence of roosting bats. Works can only proceed once the ecologist had confirmed that roosting bats are absent. If roosting bats were found to be present then works could only proceed once a mitigation licence had been obtained from Natural England.	No timing restrictions.
Birds	Potential	**Timing of works** – Demolish the buildings outside of the nesting season. If this is not possible then a check must be carried out by an ecologist for active nests no more than 48 hours before demolition works commence. Any active nests then found would have to be left undisturbed until the young had fledged. **Compensatory nest sites** – Provide a compensatory nest site for swallows (see Appendix 3).	Demolish the buildings during the period between October and February inclusive, or an inspection must be carried out by an ecologist.
Other species	Potential	**Reasonable Avoidance Measures (RAMs) -** Implement RAMs to avoid injuring/killing badgers, hedgehogs (and other mammals), amphibians, and reptiles during works (see Appendix 4).	No timing restrictions.

Conclusions	The proposed works would have no impacts on statutory designated sites or ecologically important or protected habitats. Mitigation is required to avoid impacts on roosting bats, nesting birds, badger, hedgehog, amphibians, and reptiles. It is recommended that a compensatory nest site is provided for swallows.

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1 Introduction

1.1 Background

1.1.1 Smart Ecology was commissioned by Mr Eastgate to undertake an ecological assessment of a site at Baynards Ash Farm, Brickworth Road, Royal Wooton Basset, Wiltshire, SN4 8DT (central grid reference SU 0677 8421).

1.1.2 The purpose of the survey was to inform a planning application to Wiltshire Council for the erection of a single storey residential dwelling and garage, which would require the demolition of an existing stables, storage barn, shed and greenhouse, and the removal of approximately 175 m^2 of amenity grassland and shrubs. See Figure 1, Section 9 for a map showing the location of the site and Figure 2, Section 9 for a building layout plan. Refer to Appendix 1 for the proposed site plan.

1.1.3 A desk study was carried out, and a daytime preliminary bat roost assessment survey of on-site buildings was undertaken by an experienced and licensed bat ecologist to look for evidence of, and potential for, roosting bats. A check was also made for nesting birds, and a walkover of the footprint of the proposed buildings and surrounding area was carried out to look for evidence of, and potential for, notable and protected species.

1.1.4 This report has been prepared by Joseph Wilkie, an ecologist at Smart Ecology and a qualifying member of the Chartered Institute of Ecology and Environmental Management (CIEEM), with reference to the Bat Conservation Trusts (BCT) good practice guidelines (Collins, 2016), CIEEM's Guidelines for Ecological Report Writing (CIEEM, 2017), and BS42020 Biodiversity – a code of practice for planning and development (BSI, 2013).

1.2 Aims

1.2.1 The purpose of the survey and report was to:

- Identify any statutory[1] designated sites on or close to the site.
- Provide an ecological baseline for the site including habitats[2] and the presence of, and potential for, legally protected[3], notable[4], and invasive non-native species.
- Identify potential impacts on designated sites, habitats, and species.
- Provide details of further required surveys and/or mitigation.
- Provide recommendations for biodiversity enhancements.

[1] Statutory designated sites are those protected by legislation and include Ramsar, Special Protection Areas (SPA), Special Areas of Conservation (SAC), Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), and Local Nature Reserves (LNR).
[2] Including priority habitats listed under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.
[3] Legally protected species include species afforded protection by the Conservation of Habitats and Species Regulations 2017 (as amended) and the Wildlife and Countryside Act 1981 (as amended).
[4] Notable species include priority species listed under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006, UK red data book species, and Birds of Conservation Concern (BoCC).

1.3 Site Context

1.3.1 The site is located at Baynards Ash Farm, with barns present to the north-east and a residential dwelling with mature gardens located to the north and west. Arable and pasture fields dominate the local landscape, with scattered areas of broadleaved woodland and lowland calcareous grassland also present.

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2 Legislation and Planning Policy

2.1 Legislation

2.1.1 Certain species and habitats are legally protected in the UK by legislation. The key pieces of legislation are:

- The Conservation of Habitats and Species Regulations 2017 (as amended).
- Wildlife and Countryside Act 1981 (as amended).
- Natural Environment and Rural Communities (NERC) Act 2006.
- Protection of Badgers Act 1992.
- Wild Mammals (Protection) Act 1996.
- The Hedgerows Regulations 1997.

2.1.2 The implications of legislation with regard to species are provided in Table 2-1.

2.1.3 Only a brief summary of wildlife legislation is provided here for general guidance and should not be considered a definitive statement of the law. For detailed information the legislation itself should be consulted.

The Conservation of Habitats and Species Regulations 2017 (as amended)

2.1.4 These Regulations transpose the EU Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive) into national law. The Regulations require the designation and protection of European Sites (Special Areas of Conservation (SAC) and Special Protection Areas (SPA) and the protection of European Protected Species (EPS).

2.1.5 A EPS mitigation licence is required if works affect EPS (e.g. bats) or their places of rest or breeding sites. EPS licences are issued by Natural England only after the following three tests have been satisfied:

- The proposed works must be for the purpose of preserving public health or safety or other imperative reasons of overriding public interest.
- There is no satisfactory alternative to the proposed works.
- The proposed works will not be detrimental to the maintenance of the species concerned at a favourable conservation status in their natural range.

2.1.6 **It will be necessary to determine whether any European Sites or EPS may be impacted, either directly or indirectly, by the proposed development.**

Wildlife and Countryside Act 1981 (as amended)

2.1.7 This Act implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Directive) and the EU Directive 79/409/EEC on the conservation of wild birds (Birds Directive).

2.1.8 The Act provides protection to a range of animal and plant species. It also requires sites with special wildlife or geological interest to be designated nationally as Sites of Special Scientific Interest (SSSI).

2.1.9 **It will be necessary to consider whether the proposed development would have any direct or indirect impacts on any SSSI or species listed in relevant schedules of the Act.**

Natural Environment and Rural Communities (NERC) Act 2006

2.1.10 Section 40 of this Act places a duty on public authorities to 'have regard' to conserving biodiversity when determining planning applications. Section 41 of the Act requires the Secretary of State to publish a list of species and habitats of principal importance to biodiversity (priority species and habitats). The local planning authority must 'have regard' to conserving these species and habitats when determining a planning application. The development would need to mitigate for any impacts on priority habitats and species.

2.1.11 **The proposed development would need to mitigate for any impacts on priority habitats and species.**

Protection of Badgers Act 1992

2.1.12 This Act provides specific protection for badgers and their setts from harm and disturbance.

2.1.13 **The proposed development would need to mitigate any impacts on badgers and setts.**

Wild Mammals (Protection) Act 1996

2.1.14 This Act makes it an offence to intentionally inflict unnecessary suffering on a wild mammal through mutilation, kicking, beating, nails, impaling, stabbing, burning, stoning, crushing, drowning, dragging, or asphyxiation.

2.1.15 **Care would have to be taken during the construction phase of the proposed development to ensure that unnecessary suffering is not inflicted.**

The Hedgerows Regulations 1997

2.1.16 These Regulations protect most hedgerows from removal unless permissioned by a local planning authority. They also provide historic and ecological criteria for defining important hedgerows. A local planning authority can only refuse permission to remove a hedgerow under the Hedgerows Regulations 1997 if a hedgerow is assessed to be important.

2.1.17 **Proposed developments should aim to retain and protect hedgerows and mitigate for impacts.**

Table 2-1: Implications of legislation with regard to species

Legislation	Species	Legal Implications
The Conservation of Habitats and Species Regulations 2017 (as amended)	• Bats • Hazel dormouse • Otter • Great crested newt	It is illegal to: • Deliberately capture, injure or kill these species. • Deliberately disturb[1] these species. Damage or destroy a breeding site or resting place used by these species.
Wildlife and Countryside Act 1981 (as amended) – sub-sections 9(4) b and c and 9(5) only	• Bats • Hazel dormouse • Otter • Great crested newt	It is illegal to: • Intentionally or recklessly disturb these species while they are occupying a structure or place of shelter or protection. • Intentionally or recklessly obstruct access to a structure or place of shelter or protection.

Legislation	Species	Legal Implications
Wildlife and Countryside Act 1981 (as amended)	• Birds	It is illegal to intentionally: • Kill, injure or take any wild bird. • Take, damage or destroy a wild bird's nest while it is in use or being built. • Take or destroy the eggs of any wild bird. There is additional protection for birds listed on Schedule 1 (S1) of the Act, which includes barn owls, whereby it is an offence to intentionally or recklessly disturb a S1 bird while building a nest or in or near a nest containing eggs or young, and disturb dependent young of a S1 bird.
Wildlife and Countryside Act 1981 (as amended)	• Water vole	It is illegal to: • Intentionally kill, take, or injure water voles. • Intentionally or recklessly damage or destroy a place of shelter or protection. • Intentionally or recklessly disturb water voles while they are occupying a structure or place of shelter or protection. Intentionally or recklessly obstruct access to a structure or place of shelter or protection.
NERC Act 2006	• Priority species	Local planning authorities must '*have regard*' to conserving priority. Priority species include several bat and bird species, hedgehog, common reptile species, and common toad.
Protection of Badgers Act 1992	• Badger	It is illegal to: • Wilfully capture, kill or injure a badger. • Damage, destroy or obstruct access to setts. • Disturb badgers in setts.
Wildlife and Countryside Act 1981 (as amended) – sub-sections 9(1) (partial) and 9(5) only	• Common reptile species	It is illegal to: • Intentionally or recklessly kill or injure common lizard, slow worm, grass snake, and adder.

[1] Disturbance under the Conservation of Habitats and Species Regulations 2017 (as amended) is defined as impairing the ability of an animal to survive, breed, reproduce, rear or nurture their young, hibernate or migrate, or to significantly affect the local distribution or abundance of the species.

2.2 Planning Policy

National Planning Policy Framework (NPPF) 2021

2.2.1 Paragraph 174 states that planning decisions should protect sites of biodiversity value, minimise biodiversity impacts, and contribute to net biodiversity gains.

2.2.2 Paragraph 180 states that planning permission should be refused if significant harm to biodiversity resulting from a development cannot be avoided, adequately mitigated, or, as a last resort, compensated for.

2.2.3 The NPPF emphasises the need to consider biodiversity at a landscape scale, conserving, restoring and enhancing priority habitats and ecological networks, and protecting priority species. The NPPF also specifies the need to protect designated sites from adverse harm and to protect irreplaceable habitats (e.g. ancient woodland and veteran trees).

2.2.4 **The proposed development would need to mitigate for impacts on biodiversity and provide net biodiversity gains where possible.**

Wiltshire Council Core Strategy 2015

2.2.5 The Core Strategy sets out policies for development and land use in Wiltshire. Two policies are relevant to ecology and biodiversity at this site; refer to Table 2-2 for details. Refer to the original document for full wording of these policies.

Table 2-2: Wiltshire Core Strategy policies with relevance to ecology and biodiversity

Policy	Details
Core Policy 50: Biodiversity and Geodiversity	**Protection:** Development proposals must demonstrate how they protect features of nature conservation. There is an expectation that such features shall be retained, buffered, and managed favourably in order to maintain their ecological value, connectivity and functionality in the long-term. Where it has been demonstrated that such features cannot be retained, removal or damage shall only be acceptable in circumstances where the anticipated ecological impacts have been mitigated as far as possible and appropriate compensatory measures can be secured to ensure no net loss of the local biodiversity resource, and secure the integrity of local ecological networks and provision of ecosystem services. All development proposals shall incorporate appropriate measures to avoid and reduce disturbance of sensitive wildlife species and habitats throughout the lifetime of the development. **Biodiversity enhancement:** All development should seek opportunities to enhance biodiversity. **Local Sites:** Sustainable development will avoid direct and indirect impacts upon local sites.
Core Policy 52: Green Infrastructure	Development shall make provision for the retention and enhancement of Wiltshire's green infrastructure network, and shall ensure that suitable links to the network are provided and maintained. Where development is permitted developers will be required to retain and enhance existing on site green infrastructure.

3 Methodology

3.1 Desk Study

3.1.1 A search was conducted for existing information on:

- Statutory and non-statutory designated sites within 1 km of the site.
- SSSI, SAC, SPA, and Ramsar sites Impact Risk Zones.
- Statutory designated sites for bats within 6 km[1] of the site.
- Bat SAC Consultation Zones.
- Priority habitats and ancient woodlands within 100 m of the site.
- Granted EPS mitigation licences within 1 km of the site.
- Habitats within 6 km[2] of the site[2].
- Great crested newts licence returns and pond survey results within 1 km of the site.
- Great Crested Newt Risk Zones.
- Waterbodies within 250 m of the site.

3.1.2 The following websites and document were consulted:

- Multi-Agency Geographic Information Centre (MAGIC)[3].
- Natural England Open Data Geoportal[4].
- Bat SAC Planning Guidance for Wiltshire (Wiltshire Council, 2015).

3.1.3 The search areas are considered sufficient to take into account ecological receptors which could potentially be impacted by the proposed development.

3.1.4 Data were not obtained from the Local Records Centre as it was considered that a data search would not provide any significant additional information to inform the assessment.

3.2 Field Survey

Personnel

3.2.1 The survey was carried out by Joseph Wilkie; see Table 3-1 for details of the surveyor's experience and qualifications.

Table 3-1: Surveyor information

Surveyor	Natural England Survey Licences	Experience
Joseph Wilkie BSc, Qualifying member of CIEEM	Bats level 1 (2021-54618)	Three years' experience in ecological consultancy. BSc Environmental Resource Management (Plymouth University – 1st).

[1] 6 km is the largest known bat Core Sustenance Zone (CSZ) (Collins, 2016).
[2] To inform an assessment of the suitability of habitats for commuting and foraging bats.
[3] https://magic.defra.gov.uk/MagicMap.aspx (accessed February 2022).
[4] https://naturalengland-defra.opendata.arcgis.com (accessed February 2022).

Survey Weather Conditions

3.2.2 The survey was undertaken on the 4th of February 2022. See Table 3-2 for details of weather conditions during the survey.

Table 3-2: Survey weather conditions

Variable	Weather Conditions
Cloud cover	5 %
Temperature	5°C
Wind	Light wind (BWS 4)
Precipitation	None

Site Walkover

3.2.3 A walkover of the area surrounding the buildings was carried out to identify evidence of, and potential for, legally protected, notable and invasive non-native species. Any evidence of, and potential for, such species was recorded. Specifically, the site was surveyed for evidence of, and potential for, the species/groups detailed in Table 3-3.

Table 3-3: Typical habitat requirements and field signs for surveyed species/groups

Species/ Group	Typical Habitat Requirements	Field Signs
Bats	Roost in buildings, trees, other structures, and underground sites. Foraging and commuting habitat include watercourses, waterbodies, hedgerows, tree-lines, scrub, woodland, pasture, and meadows.	Direct sighting, carcasses, droppings, urine, grease marks, feeding remains, squeaking.
Birds	Woodland, trees, scrub, hedgerows, moorland, heathland, wetlands, cavities within buildings, waterbodies, grassland.	Direct sightings, nests, droppings, feathers, eggs.
Badger	Woodland, dense scrub, hedgerows, moorland, grassland, field edges.	Direct sightings, setts, hair, footprints, dung, latrine pits, paths.
Hazel dormouse	Deciduous and mixed woodland (especially coppice managed with a successional stage of vegetation). Also hedgerows, conifer plantations, and dense scrub.	Direct sighting, nests, gnawed nuts.
Otter	Holts in tree cavities, roots, rabbit burrows and bank-side rocks. Rivers, wetland, wet ditches, drains, ponds, lakes, coastal and marshland.	Direct sightings, anal jelly, spraint (dung), footprints, paths/tracks through vegetation, feeding remains, slides into and out of the water, couches (above ground resting places), holt entrances (below ground shelters).
Water vole	Vegetated banks on slow moving watercourses, reed beds, ponds, lakes, marshland, upland.	Direct sightings, latrines, droppings, feeding stations, burrows, feeding remains, lawns, nests, footprints.

Species/ Group	Typical Habitat Requirements	Field Signs
Brown hare	Open farmland, grassland, woodland edges. Favours a mosaic of arable (cereal crops), grassland (with long areas for shelter) and hedgerows. Hare forms (resting places) may be in a grass tussock or behind a rock to give some protection. Hayfields provide better habitat than silage grassland as leverets are vulnerable to earlier cutting.	Direct sightings, footprints, droppings, forms, paths (tracks),
Hedgehog	Grassland, heathland, moorland, farmland, woodland, gardens	Direct sightings, footprints, droppings.
Polecat	Woodland, riverbank, marsh and farmland with hedgerows and small woods. Generalist species with wide ranges. Feed on rabbits, small rodents, birds, insects, frogs when gathered to spawn in the spring. Dens often in rabbit burrows in summer and move to farmyards (hay bales, under sheds, rubbish tips) in winter.	Direct sightings, footprints, droppings.
Harvest mouse	Long tussocky grassland, cereals, roadside verges, reedbeds, hedgerows, farmland and around woodland edges. Feed on seeds, berries, insects, cereal grains, also moss, roots and fungi. Nests found in dense vegetation (grasses, rushes, cereals, grassy hedgerows, ditches and brambles).	Direct sighting, nests.
Amphibians	Waterbodies for breeding. Terrestrial habitat includes most semi-natural environments including rough grassland, marsh, scrub, woodland, hedgerows, brownfield and low-intensity farmland. Tree stumps, mammal burrows, stone piles, log piles, compost heaps for shelter and hibernation.	Direct sightings, eggs attached to vegetation in waterbodies.
Reptiles	Mosaic of habitats with potential for shelter and basking including rough grassland, scattered scrub, hedgerows, heathland, moorland, woodland glades, wetland, gardens and brownfield. Tree stumps, mammal burrows, stone piles, log piles, compost heaps for shelter and hibernation.	Direct sightings, sloughed skin.
Invertebrates	Diverse range of habitats including mature trees, deadwood, flower-rich grassland, tussocky grassland, waterbodies, wetlands, scrub, hedgerows and brownfield sites.	Direct sightings.
Fish	Running and standing water.	Direct sightings.

Species/ Group	Typical Habitat Requirements	Field Signs
Plants	Waterbodies, woodland, grassland, hedgerow bases.	Direct sightings.
Invasive non-native species	All habitats.	Direct sightings.

Preliminary Roost Assessment

Habitat Assessment

3.2.4 Aerial photographs and maps[1] were consulted to permit an assessment of the suitability of habitats and landscape features in the vicinity of the site for commuting and foraging bats. Additionally, habitats immediately surrounding the site were assessed during the survey for their suitability for commuting and foraging bats. An assessment of habitat suitability was made with reference to the BCT good practice guidelines (Collins, 2016); see Table 3-4.

Table 3-4: Habitat suitability assessment criteria

Suitability	Description
Negligible	Negligible habitat features on site likely to be used by commuting or foraging bats.
Low	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.

Building Survey

3.2.5 On-site buildings were surveyed for evidence of, and potential for, roosting bats following the methodology outlined in the BCT good practice guidelines (Collins, 2016). A detailed external and internal inspection was undertaken using a high-powered torch (Clulite 1 million candle power) and close focusing (8.5 x 21) binoculars. Possible entry/exit locations for bats, potential roost sites, and the presence or evidence of bats (e.g. carcasses, droppings, urine, grease marks, feeding remains, squeaking etc.) were noted.

3.2.6 An assessment was made of the suitability of the buildings for roosting bats with reference to the BCT good practice guidelines (Collins, 2016); see Table 3-5.

[1] Aerial photographs viewed on Google Earth. Mapping viewed included OS 1:25,000 and Vector Map Local accessed via the MAGIC website (accessed February 2022).

Table 3-5: Bat roost suitability assessment criteria and required surveys

Suitability	Description	Number of Surveys Required[2]
Negligible	Negligible suitability for roosting bats.	None
Low	1 + potential roost sites that may be used by individual bats opportunistically. However, these potential roost sites do not provide suitable conditions[1] or have suitable surrounding habitat to be used on a regular basis or by larger numbers of bats.	One
Moderate	1 + potential roost sites with suitable conditions[1] and surrounding habitat but unlikely to support high conservation status roosts.	Two
High	1 + potential roost sites with good conditions[1] and surrounding habitat, that are obviously suitable for use by large number of bats regularly.	Three
Confirmed bat roost	1 + roost sites.	Two (minimum)

[1] Conditions include size, protection, shelter, temperature, humidity, height above ground, light levels and disturbance levels.
[2] Recommended number of emergence/re-entry surveys required by the BCT good practice guidelines (Colins, 2016) to provide confidence that bats are absent from the building/structure, or to characterise confirmed roosts.

3.2.7 During the survey, the interior and exterior of the buildings were also checked for evidence of, and potential for, nesting birds (e.g. droppings, feathers, nesting material etc.).

Hibernation Assessment

3.2.8 An assessment of the suitability of buildings for hibernating bats was undertaken, which considered the following aspects (Middleton, 2019):

- Presence and suitability of potential roost features.
- Temperature and humidity conditions likely to be present during the hibernation period (i.e. between November and February).
- The suitability of habitat in the local landscape for bats.
- Presence of known roosts within, or close to, the buildings.

3.2.9 Refer to Table 3-6 for the hibernation suitability assessment criteria.

Table 3-6: Hibernation assessment criteria (adapted from Middleton, 2019)

Suitability	Description
Negligible	Negligible suitability for roosting bats.
Low	Limited number of external features, many features shallow (e.g. less than 10 cm deep). The features would not typically be regarded as providing the protection from weather or favourable temperature and humidity conditions required during the winter period. OR External and/or internal features present which offer full protection from the weather, however the surrounding habitat offers negligible/low suitability for bats. OR No roosts exist in the structure or nearby over the active period.
Moderate	External and/or internal features present which larger numbers of bats could occupy. The features offer full protection from the weather and there is potential for suitable temperature and humidity conditions. The site is well connected to moderate or high suitability habitat.

Suitability	Description
High	External and/or internal features present which offer a 'classic' hibernation setting (e.g. stable temperature, humid conditions, underground site). The site is well connected to moderate or high suitability habitat.

3.3 Limitations

3.3.1 Bats and bat droppings may not be found during surveys as these often remain in inaccessible locations such as under tiles, between tiles and felt, or within crevices and cavities. Additionally, the survey was conducted during the hibernation period when bats are unlikely to be active and so evidence of bats deposited on the exterior of the buildings/structures during the bat active period may have been removed by weathering. However, it was still possible to note whether there were any suitable features that could be used by roosting bats.

3.3.2 The survey was undertaken outside of the bird nesting season and therefore nesting activity would not have been apparent. Additionally, nests are often hidden away in areas that are not viewable. However, it was still possible to identify any visible evidence of old nests and features with potential for use by nesting birds.

3.3.3 Due to the timing of the survey invasive non-native plants species may not have been apparent. Therefore, the absence of invasive non-native plant species should not be assumed even if these species were not recorded during the survey, and the client should remain aware of the possibility that invasive non-native plant species could occur on the site.

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4 Results

4.1 Desk Study

Statutory Designated Sites

4.1.1 One statutory designated site is located within 1 km of the site. See Table 4-1 for details.

4.1.2 The site is not located within a relevant Impact Risk Zone.

Table 4-1: Statutory designated sites within 1 km

Site	Approximate Distance from Site (m)	Designation	Description
Jubilee Lake	285	LNR	The site is rich in bird life and contains wetland habitats, ancient woodlands and grass areas.

Statutory Designated Sites for Bats

4.1.3 No statutory designated sites which include bats as a reason for their designation are located within 6 km of the site.

Bat SAC Consultation Zones

4.1.4 The site is not located within a SAC Consultation Zone.

EPS Mitigation Licences

4.1.5 No EPS mitigation licences have been granted within 1 km of the site.

Priority Habitats and Ancient Woodlands

4.1.6 No priority habitats or ancient woodlands are mapped on or within 100 m of the site.

Great Crested Newt Licence Returns and Pond Survey Results

4.1.7 There are no records of great crested newt licence returns or pond survey results within 1 km of the site.

Great Crested Newt Risk Zones

4.1.8 The site is located within an amber risk zone. Amber risk zones contain main population centres for GCN and comprise important connecting habitat that aids natural dispersal.

Waterbodies

4.1.9 No waterbodies are mapped within 250 m of the site.

RDFTRON

4.2 Field Survey - Habitats

4.2.1 Refer to Figure 4-1 for illustrative photographs of the area within and close to the footprint of the proposed new residential building. The area comprised hardstanding, amenity grassland, an immature cherry tree, and a small amount of shrub planting (raspberries).



Figure 4-1: Photographs of area within and close to the footprint of the proposed new building

4.3 Field Survey - Species

Birds

4.3.1 Old nesting material was present on top of the eastern and southern walls of the stables, and one swallow nest was present within the interior.

4.3.2 Birds could freely access the interior of the storage barn and there was potential for nesting on roof support timber (e.g. by swallows). However, there was no evidence that the building has been used for nesting.

Bats

Habitat Assessment

4.3.3 With reference to Collins (2016), it is assessed that habitats within the local landscape have **moderate suitability** for foraging and commuting bats; see Table 4-2 for details of the assessment. The presence of moderately suitable habitats in the local landscape indicates a higher likelihood that bats may roost in buildings close to these habitats where suitable roosting opportunities are available.

Table 4-2: Habitat assessment results

Habitat and Environmental Context	Suitability Assessment Descriptions[1]		Description	Suitability[1]
General location	H	Rural	Rural location.	**H**
	M	Suburban/intensive farmland		
	L	Dense urban		
Foraging habitat within 50 m	H	Well connected, high quality habitat (e.g. broadleaved woodland, tree-line watercourses, grazed parkland)	Mature garden surrounded by pasture fields with hedgerows.	**M**
	M	Connected habitat (e.g. trees, scrub, grassland, water)		
	L	Isolated habitat (e.g. lone tree, small scrub patch)		
Foraging habitat within 2 km	H	Well connected, high quality habitat (e.g. broadleaved woodland, tree-line watercourses, grazed parkland)	Predominantly farmland with hedgerow/tree line boundaries. Scattered deciduous woodlands (including ancient woodlands), lowland calcareous grassland and lowland meadow habitats. M4 motorway fragments landscape.	**M**
	M	Connected habitat (e.g. trees, scrub, grassland, water)		
	L	Isolated habitat (e.g. lone tree, small scrub patch)		
Foraging habitat within 2 - 6 km	H	Well connected, high quality habitat (e.g. broadleaved woodland, tree-line watercourses, grazed parkland)	Further scattered deciduous woodland (including ancient woodland) and grassland habitats. Extensive pasture and arable habitat.	**M**
	M	Connected habitat (e.g. trees, scrub, grassland, water)		
	L	Isolated habitat (e.g. lone tree, small scrub patch)		
Commuting habitat	H	Continuous, high quality, well connected habitat (e.g. river valleys, hedgerows, tree lines, woodland edge)	Continuous connectivity to foraging habitat via hedgerows/tree lines.	**M**
	M	Continuous connected habitat (e.g. tree lines, linked back gardens)		
	L	Isolated habitats (e.g. gappy hedgerow, unvegetated stream)		
Overall Habitat Assessment Result			Features in the local landscape are assessed to have moderate suitability for foraging and commuting bats.	**MODERATE**

[1] H = High; M = Moderate; L = Low

Building Survey

4.3.4 The stables and storage barn were surveyed. See Figure 2, Section 9 for a building layout plan and refer to Table 4-3 and Table 4-4 for the results of the preliminary roost assessment survey of these buildings.

4.3.5 A greenhouse and a timber-framed and clad shed were also present (see Figure 4-2). The greenhouse had negligible suitability for roosting bats. There were no external potential roost features on the shed, and no features which could permit bats access to the interior; therefore this building was also assessed to have negligible suitability for roosting bats.



Figure 4-2: Photographs of the greenhouse and shed

Table 4-3: Building survey results (Stables)

General Photographs



Eastern elevation



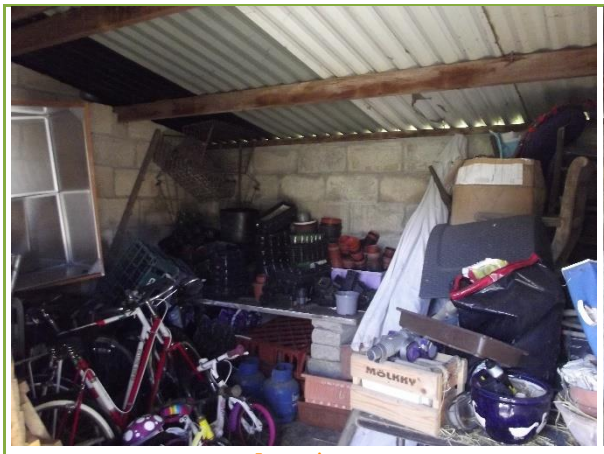
Northern elevation



Southern elevation



Western elevation



Interior



Interior

General Description	**Current use**	Storage, formerly stables.
	Number of storeys	Single storey.
	Age	Unknown.
External Description	**Elevation construction**	Blockwork.
	Roof type	Double pitched 'L' shape.
	Roof material	Corrugated metal sheeting.
	Roof ridge orientation	Longer section approximately north to south, shorter section approximately east to west.
	Bargeboards/ fascias/soffits	None.
	Windows/doors	Wooden framed.
	Lead flashing	None.
External Artificial Lighting	• Switch controlled lighting in yard to the east of the building.	
External Potential Roost Features (See Appendix 2 for photographs)	• Gaps between wall tops and roof sheets on eastern elevation (P1).	
Internal Description	**Presence and extent of cobwebs**	Abundant cobweb cover on roof supports, at wall tops, and in the corners of rooms.
	Roof construction	Machine cut timber rafters.
	Roof lining	None.
	Elevation construction	Blockwork.
	Natural light levels	Relatively light.
	Exposure to weather	Sheltered.
	Level of disturbance	Moderate human disturbance.
	Flight space	Uncluttered.
Internal Artificial Lighting	• Switch controlled lights present throughout.	

Internal Potential Roost Features (See Appendix 2 for photographs)	• Roof support timbers. • Gaps between wall tops and roof supports and roof sheets (P2). • Gaps between roof support timbers and walls (P3).
Potential Access Points to Interior	• Gap between ends of roof sheets and timber roof supports on southern and western elevations. • Gaps between wall tops and roof sheets on the eastern elevation.
Evidence of Bats	• None.

Table 4-4: Building survey results (Storage Barn)

General Photographs



Northern and eastern elevations



Southern elevation



Interior



Interior

General Description	**Current use**	Storage.
	Number of storeys	One.
	Age	Unknown.
External Description	**Elevation construction**	Corrugated metal sheets and wood.
	Roof type	Double pitched.
	Roof material	Corrugated metal sheeting.
	Roof ridge orientation	Approximately north to south.

	Bargeboards/ fascias/soffits	None.
	Windows/doors	None. Open on northern and eastern elevations.
	Lead flashing	None present.
External Artificial Lighting	• Switch controlled lighting in yard to the north of the building.	
External Potential Roost Features	• None.	
Internal Description	Presence and extent of cobwebs	None.
	Roof construction	Machine cut timber.
	Roof lining	None.
	Elevation construction	Metal sheeting and low blockwork base.
	Natural light levels	Light.
	Exposure to weather	Open and exposed.
	Level of disturbance	Moderate human disturbance.
	Flight space	Open.
Internal Artificial Lighting	• None.	
Internal Potential Roost Features	• Timber frame and roof supports.	
Potential Access Points to Interior	• Open on eastern and northern elevations.	
Evidence of Bats	• None.	

Badger

4.3.6 No badger setts were present on or within at least 30 m of the site. Badgers could forage and disperse through areas close to the buildings.

Other Mammals

4.3.7 Small area of suitable foraging and dispersal habitat on the site, and hedgehogs may forage and disperse close to the buildings.

Amphibians

4.3.8 No ponds were located on or within 250 m of the site. The short sward grassland provided a small extent of suitable terrestrial foraging and dispersal habitat, and there was some potential for foraging and refuge at the base of shrubs.

4.3.9 Gardens and pasture fields in the vicinity of the site provide low value suitable foraging and dispersal habitat for amphibians.

Reptiles

4.3.10 The short sward grassland provided negligible suitability for foraging, but could occasionally be used for dispersal. If the grassland was permitted to develop into a long sward then the suitability of this habitat for reptiles would be increased. The base of shrubs provided a small extent of suitable foraging and refuge habitat.

4.3.11 Gardens and pasture fields in the vicinity of the site provide low value suitable foraging and dispersal habitat for reptiles.

Invasive Non-Native Species

4.3.12 No invasive non-native species were noted on or in the vicinity of the site. However, see Limitations (Section 3.4).

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5 Evaluation

5.1 Statutory Designated Sites

5.1.1 Jubilee Lake LNR is located approximately 285 m to the south of the site. No impacts on this statutory designated site are anticipated due to the distance between the designated site and proposed development site and because of the small scale of the proposed development.

5.2 Habitats and Ancient Woodlands

5.2.1 No impacts are anticipated on priority habitats and ancient woodlands due to their distance from the site and because of the small scale of the proposed development.

5.2.2 No ecologically valuable habitats would be impacted by the proposed development.

5.3 Bats

Suitability Assessment

5.3.1 Habitats in the local landscape have moderate suitability for foraging and commuting bats, which indicates a higher likelihood that bats may roost in buildings close to these habitats where suitable roosting opportunities are available.

Stables

5.3.2 The building was assessed to have **low suitability** for roosting bats during the active season with a small number of potential roost features present that may be used by individual bats opportunistically. However, the potential roost features were fully inspected and there was no evidence of use by roosting bats.

5.3.3 The building was assessed to have **negligible suitability for hibernation**, with potential roost features present that are not considered likely to provide protection from weather or favourable temperature and humidity conditions during the winter period.

Storage Barn

5.3.4 No evidence of, or potential for, roosting bats was identified, and the barn is assessed to have **negligible suitability** for roosting bats.

Impact Assessment

Stables

5.3.5 Although the building was assessed to have low suitability for roosting bats, all potential roost features were inspected and no evidence of use by roosting bats was identified. Therefore, it is considered that demolition of this building is unlikely to have any impacts on roosting bats.

Storage Barn

5.3.6 The building was assessed to have negligible suitability for roosting bats, and it is considered that demolition of this building is highly unlikely to have any impacts on roosting bats.

5.4 Birds

Suitability Assessment

Stables

5.4.1 The building has been used by nesting birds, including swallows.

Storage Barn

5.4.2 There was potential for nesting within interior of the building, including by swallows.

Impact Assessment

Stables & Storage Barn

5.4.3 If the buildings are demolished during the nesting season (which is typically March to August inclusive, extended to the end of September for swallows which could nest within the buildings) then there is potential for killing/injury of birds, and destruction of eggs and active nests.

5.4.4 Demolition of the stables would result in the loss of a swallow nesting site.

5.5 Other Species

Suitability Assessment

5.5.1 Habitats within the footprint of the proposed building could potentially be used for dispersal and foraging by badgers, hedgehogs, amphibians, and reptiles.

Impact Assessment

5.5.2 There is a risk of killing or injuring badgers, hedgehog, amphibians and reptiles if they become trapped in any open excavations or pipework during works.

5.5.3 There is also a risk of injuring or killing amphibians and reptiles during site clearance of shrubs and if waste or materials are stored inappropriately during works.

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6 Further Actions

6.1 Surveys and Mitigation

6.1.1 Details of required surveys and/or mitigation are provided in Table 6-1.

Table 6-1: Survey and mitigation requirements

Species/ Group	Suitability Assessment	Survey & Mitigation Requirements	Timing
Bats	Low (stables) (active period)	**Pre-works inspection -** Although the stables had low suitability for roosting bats, all potential roost features were inspected and there was no evidence of use by roosting bats. Therefore it is concluded that bat roosts are not present and an emergence/ re-entry survey is not considered to be necessary. However, bats can use roosts sporadically, and bats could potentially use features within the stables for roosting subsequent to the preliminary roost assessment survey. Therefore, as a precautionary measure, a bat licensed ecologist must inspect the potential roost features immediately before demolition works commence to check for the presence of roosting bats. Works can only proceed once the ecologist had confirmed that roosting bats are absent. If roosting bats were found to be present then works could only proceed once a mitigation licence had been obtained from Natural England.	No timing restrictions.
Birds	Potential	**Timing of works -** Demolish the buildings outside of the nesting season. If this is not possible then a check must be carried out by an ecologist for active nests no more than 48 hours before demolition works commence. Any active nests then found would have to be left undisturbed until the young had fledged. **Compensatory nest sites -** Provide a compensatory nest site for swallows (see Appendix 3).	Demolish the buildings during the period between October and February inclusive, or an inspection must be carried out by an ecologist.
Other species	Potential	**Reasonable Avoidance Measures (RAMs) -** Implement RAMs to avoid injuring/killing badgers, hedgehogs (and other mammals), amphibians, and reptiles during works (see Appendix 4).	No timing restrictions.

6.2 Biodiversity Enhancements

6.2.1 In line with the NPPF and local planning policy, details of opportunities to permit a biodiversity enhancement are provided in Table 6-2.

Table 6-2: Opportunities for biodiversity enhancement

Opportunity	Details
Provision of bird nest boxes	It is recommended that additional nesting habitat is provided for birds. This could include the installation of at least two nest boxes integrated into the fabric of the proposed new buildings (e.g. Build-in Woodstone Half Open Box, WoodStone Build-in Swift Nest Box B, and/or Vivara Pro WoodStone House Sparrow Nest Box). Alternatively/additionally, at least two nest boxes could be installed on the exterior walls of the proposed new building and/or on nearby trees (e.g. Schwegler 1SP sparrow terrace [building only], Schwegler 1B nest box, 3S Schwegler starling nest box, and/or 2GR Schwegler nest box). Nest boxes must be installed at least 3 above ground level, ideally facing between the north and east. Birds must have a clear flight path to and from the boxes.
Provision of bat boxes	One or more bat boxes could be installed on or within the external elevations of the proposed new buildings. Ideally these should be integrated boxes which are built into the walls (e.g. 1FR Schwegler bat tube, Vivara Pro Build-in Woodstone bat tube, Ibstock Enclosed bat box). Alternatively, boxes could be mounted on the external walls (e.g. Beaumaris Woodstone bat box, 1FF Schwegler bat box) or on trees (e.g., Low Profile WoodStone bat box, 1FF Schwegler bat box, Vivara Pro WoodStone bat box). Bat boxes must be installed at least 3 m above ground level, ideally facing to the south, south-west and/or south-east, located away from windows and other artificial light sources, and with a clear flight path to and from the entrance.

7 Local Records Centre Submission

A record of evidence of protected or notable species recorded on the site during the survey is provided in Table 7-1. These records will be sent to the Local Records Centre.

Site Name	Baynards Ash Farm, Brickworth Road, Royal Wooton Basset, Wiltshire, SN4 8DT	**Survey by**	Joseph Wilkie
Grid Reference	SU 0677 8421	**Position**	Ecologist
Provided By	Smart Ecology Ltd.	**Survey Date**	04/02/2022

Table 7-1: LRC Submission

Common Name	Scientific Name	Comment
Swallow	*Hirundo rustica*	One swallow nest present on roof supports within the stables.

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8 References

British Standards Institute (BSI) (2013). *BS4202 Biodiversity – A code of practice for planning and development*. BSI, London.

CIEEM (2017). *Guidelines for Ecological Report Writing – Second Edition.* Chartered Institute of Ecology and Environmental Management, Winchester.

Collins, J. (2016). *Bat Surveys for Professional Ecologists – Good Practice Guidelines, 3rd edition*. Bat Conservation Trust, London.

Middleton, N. (2019). *Assessing Sites for Hibernation Potential. A Practical Approach, including a Proposed Method & Supporting Notes.*

Wiltshire Council (2015). *Bat Special Areas of Conservation (SAC) - Planning Guidance for Wiltshire.* Wiltshire Council, Trowbridge.

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9 Figures

Figure 1 – Location Map

Figure 2 – Building Layout Plan

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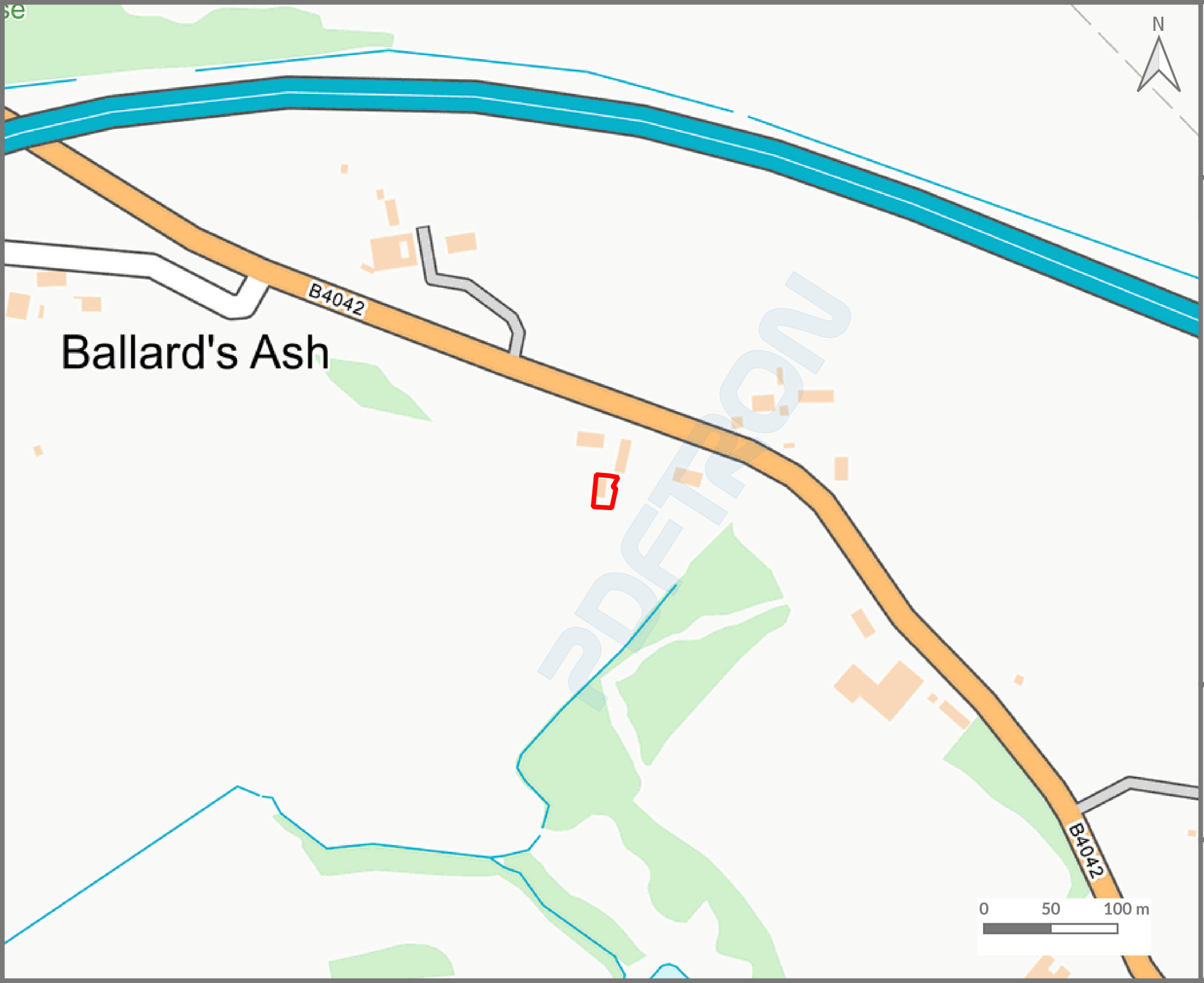


Figure 1 - Location Map

Baynards Ash Farm,
Brickworth Road,
Royal Wooton Basset,
Wiltshire,
SN4 8DT

Site Boundary

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Date:	01/02/2022
Drawn by:	Joseph Wilkie
Checked by:	Robert Dunn

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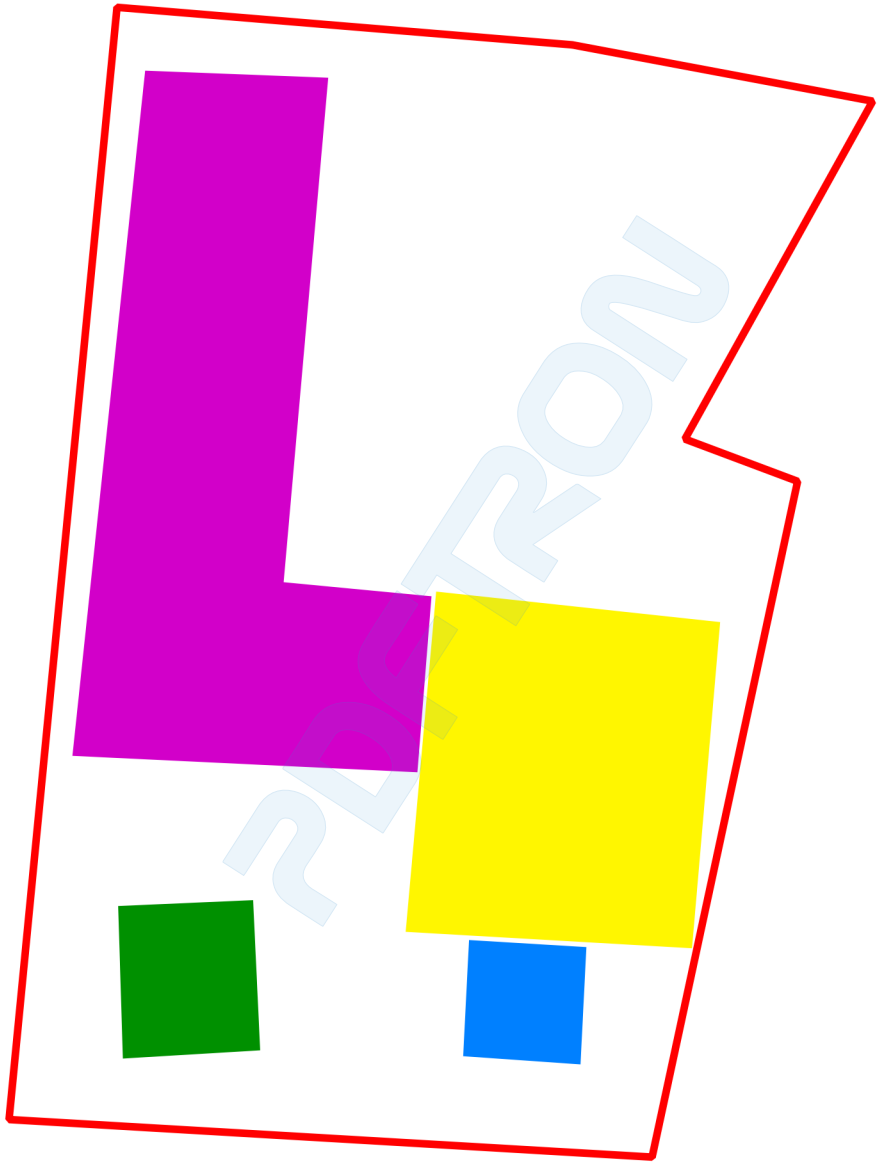


Figure 2 - Building Layout Plan

Baynards Ash Farm,
Brickworth Road,
Royal Wooton Basset,
Wiltshire,
SN4 8DT

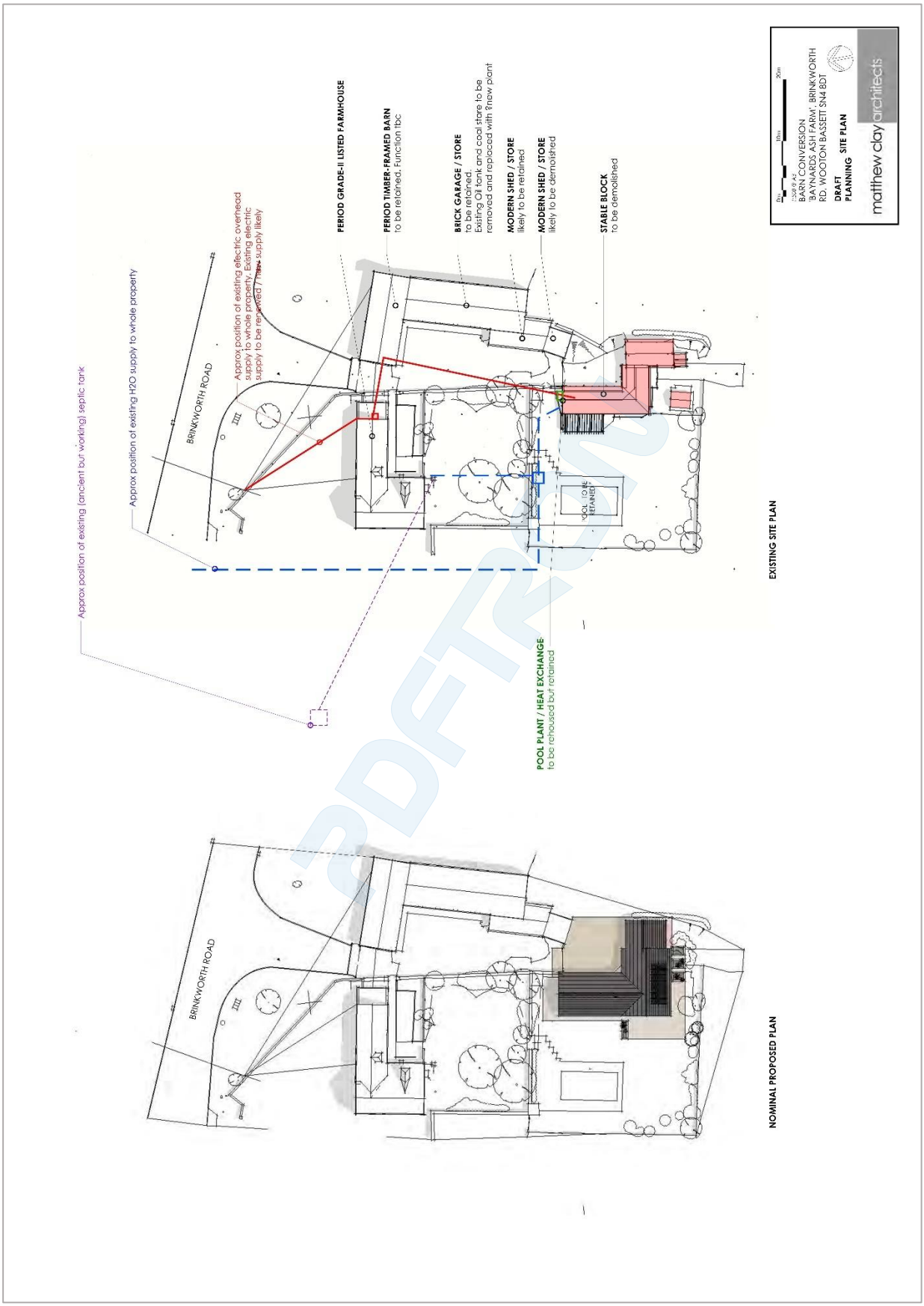
Not to scale. Indicitive positions only.

Date:	01/02/2022
Drawn by:	Joseph Wilkie
Checked by:	Robert Dunn

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Appendix 1 - Proposed Site Plan



Appendix 2 – Building Survey Photographs

Number	Description	Photograph
P1	Example of gaps between wall tops and roof sheets on the eastern elevation.	
P2	Example of gaps between wall tops and roof supports.	
P3	Example of gaps between roof support timbers and walls.	

Appendix 3 – Swallow Mitigation

The proposed demolition of the stables would result in the loss of a swallow nesting site. It is recommended that a compensatory nesting site for swallows is provided.

One or more artificial swallow nests could be installed at least 3 m above ground level in a sheltered position within a new or existing building close to the stables where there is free flight access into the interior. See Figure A3-1 for an example of an artificial swallow nest.



Figure A3-1: Eco Swallow Nest (www.nhbs.com)

Alternatively/additionally, one or more swallow nest boxes could be attached to the exterior of the proposed new building, or an existing building close to the stables. See Figure A3-2 for specifications for a swallow nest box, which must be installed at least 3 m above ground level.

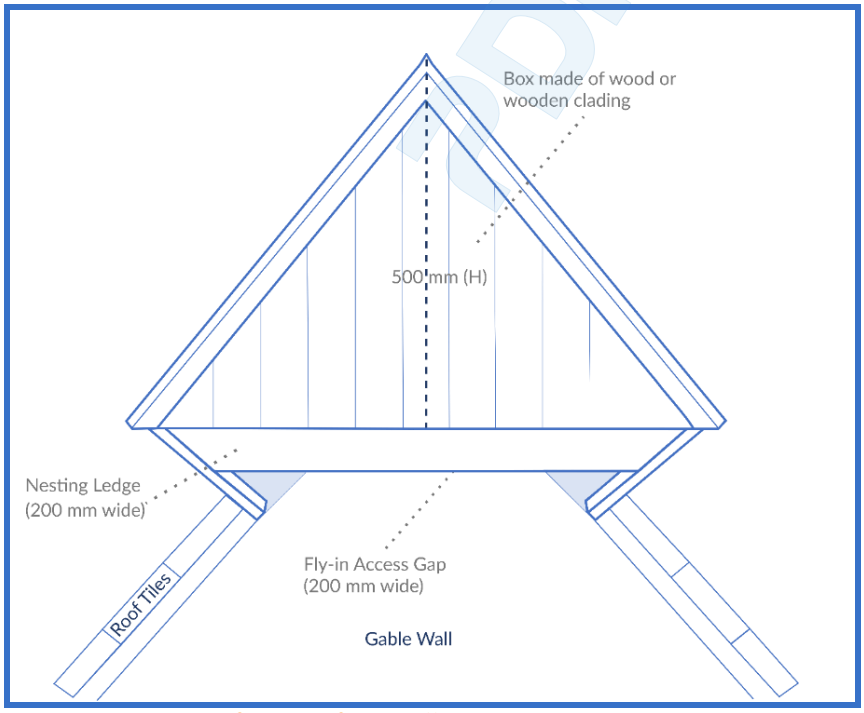


Figure A3-2: Specification for swallow nest box

Appendix 4 - Reasonable Avoidance Measures

The following Reasonable Avoidance Measures (RAMs) must be implemented during works to avoid causing harm to badgers, hedgehogs (and other mammals), amphibians, and reptiles.

The client is responsible for ensuring that these RAMs are implemented by contractors.

(1) Maintain grassland within and close to the footprint of the proposed new building at a short sward prior to the start of works, to maintain its low suitability for amphibians and reptiles.

(2) During construction, any building material must be stored on pallets or hardstanding to deter reptiles and amphibians from sheltering underneath. All waste must be stored in skips or containers and not in piles on the ground.

(3) All excavations must be covered overnight, or a ramp installed with an angle no steeper than 40 degrees, to enable animals to escape. Excavations must be checked every morning to ensure there are no trapped animals; any animals found (other than great crested newt) must be carefully moved outside of the works area by gloved hand or in a suitable container. If a trapped badger is found then it must be left to leave of its own volition.

(4) If a great crested newt is found at any time during works then work must stop immediately, and a licensed ecologist contacted for advice. A guide to newt identification is provided at the end of these RAMs.

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Newt Identification Guide (source: Amphibian and Reptile Conservation Trust)

Smooth newt

Grows to about 10 cm. Both sexes have orange or yellow belly stripe, with rounded black spots. Male has undulating crest running from head to tail tip.





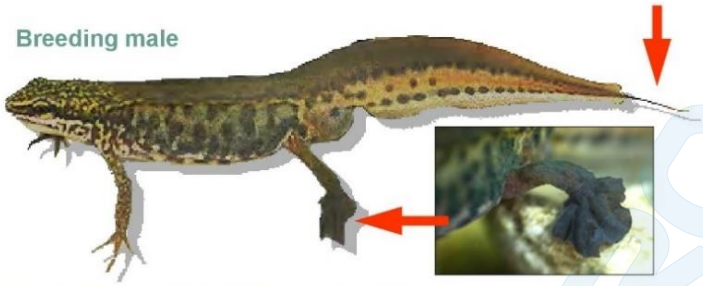


A widespread species which breeds in a variety of water bodies. Often found in garden ponds.

After the 'tadpole' stage, young newts live on land. Most likely to be found from late summer to autumn as they disperse from ponds.

Palmate newt

Grows to 9 cm. Breeding male has ridge running along back, rather than a crest. Dark, webbed hind feet, and tail ends in filament.







There are two pale coloured nodules on the underside of the hind feet of female palmate newts.





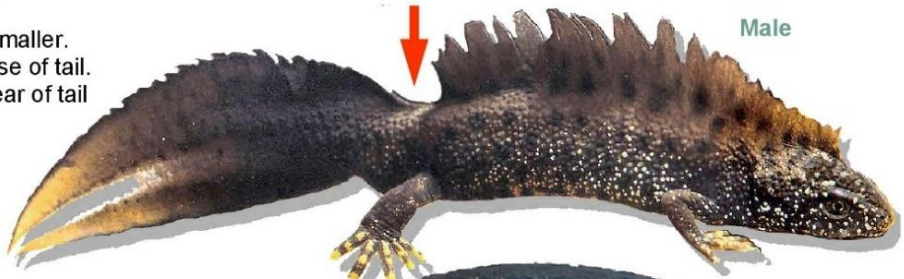
Female looks similar to smooth newt.

Throat of palmate newt has no pigment (looks pink). Throat of smooth newt is off-white and usually spotted.

Great crested newt

Grows to 16 cm, but usually smaller. Crest in male has break at base of tail. Silvery-white stripe towards rear of tail conspicuous.

Both sexes have rough, granular skins and yellow/ orange bellies with irregular black spots.





Juveniles look like smaller versions of the female and may live on land or in the water.

Strictly protected species, requiring a licence to handle or disturb.