PRELIMINARY ECOLOGICAL ASSESSMENT

RADLETT HOUSE,

RADLETT PLACE, LONDON NW8 6BT

Commissioned by: **Rundell Associates**

Report Number: ASW/AF/115/27/2023
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EXECUTIVE SUMMARY

1. The main protected species potential present within this application site, at Radlett House, as identified during this ecological investigation, was for: breeding birds only.

2. The trees, hedges and shrubs at this site, all have bird nesting potential, although no active nests were present.

3. There was no bat evidence present within the roof void at the house, upon inspection, since the long loft had no access for bats.

4. There was no external bat roosting potential found at the house, with no suitable present under the roof and ridge tiles especially, since the roof was in a very good condition.

5. The trees at this site were examined for features that may offer bat roosting potential, with none found. A maple had the front garden has a shallow knot hole only in the trunk.

6. There were no other protected species issues present at the application site, other than the above, especially with much of the site being short mown grass lawns and hardstanding.

7. Various key recommendations are set out later in this report, including the removal of non-native invasive plant species, ecological enhancements for the development and relevant best practice guidance being followed at all times by contractors.

8. By following these recommendations, the impact on wildlife will be minimised and all legal obligations will be adhered to by the client.

1. INTRODUCTION

- A Preliminary Ecological Assessment was undertaken at Radlett House, Radlett Place, London NW8 6BT, during November 2023, for: Rundell Associates.

- The national grid reference for this application site is: TQ271838.

- This assessment was required due to the proposed demolition of the existing house and its replacement with a new dwelling.

- The main method used for this assessment, as well as the full results and the recommendations can be found within this report.

- Both this assessment and the report were undertaken and compiled by Mr Andrew S. Waller, Consultant Ecologist, ASW Ecology Ltd.

- Mr Andrew S. Waller MSc BSc (Hons) MCIEEM, Director of ASW Ecology Ltd - has been a Consultant Ecologist since 1997, and has very extensive experience/knowledge of protected wildlife species/issues including bats, for which he is fully licensed to survey throughout England by Natural England for consultancy purposes (Bat Class 2 Licence Registration Number: 2015-15703-CLS-CLS). He also has Natural England survey licences for great crested newts and barn owls. He has been studying bats for 30 years and wildlife in general for 42 years. He is a Full Member of the Chartered Institute of Ecology and Environmental Management (CIEEM) and meets the requirements of being a Suitably Qualified Ecologist.

2. METHODOLOGY

2.1 Preliminary Ecological Assessment

- A daytime based Preliminary Ecological Assessment was undertaken at the application site, on 6/11/2023, by a qualified and experienced Consultant Ecologist.

- The method used for assessing habitat types followed that outlined by the Nature Conservancy Council Phase 1 survey methodology (JNCC, 1993). Please see Section 3.8 for the habitats/features listed from the site and the relevant codes given to these.

- A 2km radius online data search was also undertaken to support this assessment, so to provide species and habitat information for the wider area.

- Weather conditions were very good: part clear (4/8CC), dry, light wind and mild plus visibility was excellent on the visit. During the visit, the application site was assessed for its suitability for various protected wildlife species and habitats. The focus on habitats and protected species potential included on bats and breeding birds in particular. The key methods used for sites in general are listed below:

- **Bats:** The buildings present were assessed for the presence of bat evidence such as crumbly bat droppings, staining from the bat's fur/urine or discarded insect wings. As well as the building being assessed for bat roosting potential eg the presence of crevices under slates, roof tiles, ridge tiles, hanging tiles, lead flashing, wooden cladding and behind fascias/guttering boards.

- **Badgers:** The presence of badgers at this site was assessed by finding potential evidence such as setts, latrines, feeding remains, badger paths and for badger hair on any fences

- **Breeding birds:** the presence of occupied or defunct bird nests was the key objective to find in the building as well as current evidence of breeding. Adults bringing in food for young in the nest was also searched for as were alarm calls by breeding adults.

- **Reptiles/Great Crested Newts:** The presence of both groups was assessed by habitat types present and if suitable for species such as great crested newts in their terrestrial phase and for reptiles such as slow-worm, common lizard, adder and grass snake.

2.2 Constraints

- Due to the timing of this assessment, only the Autumn period could be covered. This is a standard constraint for any assessment which can only investigate part of any year.

- As always though, without taking into account any further active surveying or monitoring, this study can only provide a "snapshot" of the presence of wildlife at the site during the period of this study.

- This assessment report is valid for one year only, as per current best practice guidelines for such studies in the UK.

3. ASSESSMENT RESULTS

3.1 Birds

- There were no active bird nests found at the application site, although the shrubs, hedges and trees do have potential for the occasional hidden bird nest to be present during the bird breeding season.

- Bird species seen at the application site or nearby during the visit included great tit, blue tit, jay and magpie.

- It is highly unlikely though that any rare or notable breeding species could be nesting at this site.

- More information on this can be found in the Recommendations section of this report.

3.2 Bats

3.2.1 Building Assessment

Building description:	• House: This is a brick built, large, detached house with pitched roof and with cavity walls noted. Dormer windows present. There are also roof tiles, ridge tiles, no open eaves, chimneys and lead flashing • Shed: Wooden shed with a felt roof
External bat survey	• House: No crevices suitable for bats since the roof is in a very good condition. A shallow crevice is present at the front with no bat roost value. There are also a few minor crevices that are too small for bat entry • Shed: No crevices for bats
Internal bat survey	• House: The loft was boarded out and was dark plus warm at time of visit. No access for bats from the outside. Loft floor clean with no dead insects • Shed: No interest for bats
Bat evidence present	• House: None • Shed: None

Other wildlife evidence present	• House: None • Shed: None
Overall bat roost grading for the buildings	• House: **NIL** • Shed: **NIL**

3.3 Badger

- There were no badger setts present at the application site, with no burrows of any type seen. There was also no badger evidence such as latrines, tracks, footprints or hair present at the grass lawn.

- Badgers are not present in the wider area, as shown in the desk study, so are not expected to be present in the application site.

3.4 Reptiles

- There is no reptile potential present in this application site, with no tall grassland or tall herbs present. There is also no bramble scrub or woodland present for foraging or sheltering by reptile species.

- Reptiles are known to be present in the wider area, as shown from the desk study, such as slow-worm, but would not be expected to be present here.

- The hardstanding and short grass lawn areas are not suitable for reptiles and would leave them too exposed to predators.

- Based on these assessment results, reptiles will not be an issue in relation to the development proposal here.

3.5 Great crested newts

- There is also no great crested newt potential present at the application site, with no tall grassland, no bramble scrub and no tall herbs noted.

- There are no ponds or ditches present at the application site so this protected amphibian species cannot breed here.

- Great crested newts are not known to be present in the wider area, as shown in the desk study and would not be expected at the application site. The short grass lawns and hardstanding areas provides no cover for amphibians so has no potential for newts.

- Therefore, great crested newts will not be an issue in relation to the development proposal.

3.6 Hedgehogs

- Hedgehogs are present in the wider area, as shown in the desk study but there were no field signs such as droppings to suggest they have visited the application site.

- There is some foraging habitat for this species at the site, with grass lawns noted.

- Hedgehogs are a Priority Species in England within the UK Biodiversity Action Plan. Therefore, it is still vital that hedgehogs are not impacted during the proposed development related works. This should include no uncovered hole left during the works, so there is no risk of hedgehogs becoming trapped especially at night.

3.7 Invasive plant species

- There were the following non-native invasive plant species present at the application site at the time of the assessment visit:
    - Cherry laurel
    - Rhododendron species
    - Wall cotoneaster

3.8 Habitats present

- The only habitat types present within the overall application site are the following, with the relevant JNCC habitat codes included:

    (a) Amenity grassland – J1.2 – Includes the front and rear short mown grass lawns. Plants include creeping buttercup, lawn daisy, chickweed, ivy, silver birch, a sycamore sapling and a fir species
    (b) Introduced shrubs – J1.4 – Includes various ornamental shrubs, including wall cotoneaster, cherry laurel, a fuscia species and a rhododendron species.
    (c) Hedges – J2.1.2 – Includes the front and rear garden hedges at this property. The hedges are mainly a mix of trees and non-native shrubs, plus yew and box hedges.
    (d) Buildings – J3.6 – Includes the existing house, shed and all associated hardstanding areas.

3.9 Desk study

- A 2km radius online ecological data search was undertaken by us for the application site. This does not replace a full biological records search, which was not selected by the client, but does contain much of the same information and helps support this report. The NBN Gateway (with strict permission) and the MAGIC website were all used. The ASW Ecology database was also used for a data trawl for wildlife records as this has collated records in the UK for 42 years.

- The key summary findings, in no particular order, are listed below in relation to species and habitat records most relevant to the proposed development:

Protected Species Licences	**Bats:** • Bat EPS Mitigation Licence – Common pipistrelle, Soprano pipistrelle – 2010-2012. • Bat EPS Mitigation Licence – Common pipistrelle – 2019-2023. • Bat EPS Mitigation Licence – Common pipistrelle – 2015-2020. • Bat EPS Mitigation Licence – Common pipistrelle, Soprano pipistrelle – 2015-2020. • Bat EPS Mitigation Licence – Common pipistrelle, Soprano pipistrelle – 2012.
Statutory Sites	• Adelaide Local Nature Reserve (LNR) • Belsize Wood Local Nature Reserve (LNR) • St Johns Wood Church Grounds Local Nature Reserve (LNR)
Non-Statutory Sites	• Source Protection Zones merged (Zones 1 and 2)
Protected Species Records	**Amphibians at 2km**: • Smooth newt • Common frog • Common toad

	Mammals at 2km: • Hedgehog **Bats - all recorded at 2km radius**: • Common pipistrelle • Soprano pipistrelle • Nathusius's pipistrelle • Daubenton's bat **Reptiles at 2km**: • Red-eared terrapin • Slow-worm • Aesculapian snake

4. CONCLUSIONS

4.1 Significance of the assessment results

- In summary, the main protected species potential present within this application site, at Radlett House, was for: breeding birds only.

- The trees, hedges and shrubs at this site, all have bird nesting potential, although no active nests were present.

- There was no bat evidence present within the roof void at the house, upon inspection, since the long loft had no access for bats.

- There was no external bat roosting potential found at the house, with no suitable present under the roof and ridge tiles especially, since the roof was in a very good condition.

- The trees at this site were examined for features that may offer bat roosting potential, with none found. A maple had the front garden has a shallow knot hole only in the trunk.

- There were no other protected species issues present at the application site, other than the above, especially with much of the site being short mown grass lawns and hardstanding.

- It will be vital though that the non-native invasive plant species recorded at this property, especially wall cotoneaster, are removed and eradicated as soon as possible by specialist contractors.

- These invasive plant species will damage the site's biodiversity and can spread onto adjacent properties, which could be illegal. Removing such damaging species will count as an ecological enhancement for the future landscaping scheme.

- The cherry laurel and rhododendron stands at this property should also be removed completely where possible and replaced with native trees and shrubs, that will not be invasive and will benefit local wildlife.

- The desk study showed that four bat species are known to be present within 2km from the site. All of these species will roost in trees and will readily roost in buildings too and other structures. These includes crevice roosting species such as common pipistrelle and soprano pipistrelle. Although the very good condition of the house at this property will mean that bats are not expected to be able to roost here and will use nearby houses instead.

- Recommendations can be found in the next chapter of this report, in regards to the key actions that now need to be followed at the application site.

4.2 Impact assessment

In the absence of any mitigation measures, the following potential impact status identified from the proposed development related works at the application site are currently considered to be:

- **Reptiles:** Without any mitigation, there is no risk of reptiles being injured or killed, during the proposed works within the application site. **Potential impact level: Nil**

- **Great crested newts:** Without any mitigation, there is no risk of newts being injured or killed, during the proposed works within the application site. **Potential impact level: Nil**

- **Bats:** Without any mitigation, bats would not be at risk of being disturbed, injured or killed by the development works, with no bat roost being destroyed. **Potential impact level: Nil**

- **Badgers:** Without any mitigation, there is no possibility that any badgers could be disturbed by any future development related works at the application site. There is no risk of any badger tunnels being collapsed or any setts being damaged in any way. **Potential impact level: Nil**

- **Nesting birds:** Without any mitigation, potential nesting bird species could be impacted by the proposed works. Bird nests may be present within the shrubs, ivy cover, hedges and trees, during the works and could be disturbed or accidentally damaged or destroyed. However, this risk will of course be eliminated by mitigation options such as a breeding bird watching brief and the correct timing of the stated works. **Potential impact level: Low/Moderate**

4.3 Summary of the legal protection of relevant wildlife in the UK (Simplified summary only of the legislation – please see other texts for full details)

4.3.1 THE LEGAL PROTECTION OF REPTILES IN ENGLAND AND WALES

In the UK, reptiles are legally protected from intentional killing and injuring, as well as against sale too under the Wildlife and Countryside Act 1981 (as amended). The offences stated may be absolute, intentional, deliberate or reckless (English Nature, 2004).

This means that reasonable steps must always be taken to avoid killing or injuring all reptiles if they are known to be present within the development footprint. A criminal conviction for injuring or killing reptiles could result in large fines being imposed, imprisonment and/or seizure of the equipment involved.

4.3.2 THE LEGAL PROTECTION OF BATS IN ENGLAND AND WALES

Introduction

All species of bats in England and Wales are protected by law. Their legal protection derives from two sources:

- the strict species protection provisions of the EU Habitats Directive as implemented in England and Wales by Part 3 of the Conservation of Habitats and Species Regulations 2017 (the **"2017 Regulations, amended by the 2019 Regulations due to Britain leaving the EU"**); and

- Part 1 of the Wildlife and Countryside Act 1981 (as amended).

Conservation of Habitats and Species Regulations 2017 ("2017 Regulations", as amended by the 2019 Regulations)

The 2017 Regulations came into force on 30th November 2017, amended by the 2019 Regulations. They replace the previously applicable regulations (Conservation (Natural Habitats, &c) Regulations 1994 and the 2010 Regulations) in relation to England and Wales. The 2017 Regulations are the principal means by which the EU Habitats Directive is transposed in England and Wales.

The Regulations contain a number of Parts which set out the protection to be afforded to "European Protected Species" ("EPS"), which includes all species of British bats. The list also includes other species which are rare on a European scale, such as great crested newts, otters and dormice.

Under the 2017 Regulations both bats themselves and their "breeding sites and resting places" (most commonly their roosts) are protected.

It is a criminal offence to do the following (note that this is not an exhaustive list of all offences but rather a list of offences which will be of most relevance to developers):

a. to damage or destroy a breeding site or resting place of a bat (even if bats are not present at the time);

b. to deliberately capture, injure or kill a wild bat;

c. to intentionally or recklessly disturb a bat in its roost or to deliberately disturb a group of bats, in particular:

   i. any disturbance of bats which is likely to impair their ability to survive, to breed or reproduce, or to rear or nurture their young; or

   ii. any disturbance of bats which is likely to impair their ability to hibernate or migrate; or

   iii. any disturbance of bats which is likely to affect significantly the local distribution or abundance of the species to which they belong;

d. to have in one's possession or to control or to transport or to sell or exchange or offer to sell or exchange any live or dead bat or part of a bat which has been taken from the wild; or any part of, or anything derived from, a bat or any part of a bat; and

e. to intentionally or recklessly obstruct access to a bat roost.

The maximum penalty that can be imposed for the above offences is (as at May 2010) a fine of up to £5,000, and/or up to six months imprisonment. The offences can be committed by individuals or by bodies corporate. Where a body corporate has committed the offence, the directors or officers of the company may also be prosecuted if the offence has been committed with their consent or connivance, or is attributable to their neglect.

Wildlife and Countryside Act 1981 ("WCA 1981")

The WCA 1981 protects a wide range of animals, plants and habitats in the UK. All British bat species are afforded protection under Part 1 of the WCA 1981, in addition to the protection they have under the 2019 Regulations.

As regards England and Wales the following offences apply to protect bats under the W&CA 1981:

a. to intentionally or recklessly disturb any bat while it is occupying a structure of place which it uses for shelter or protection (s9(4)(b) WCA 1981);

b. to intentionally or recklessly obstruct access to any structure or place which any bat uses for shelter or protection (s9(4)© WCA 1981);

c. attempting either of the above (s18(1) WCA 1981).

The maximum penalty that can be imposed for the above offences is (as at May 2010) a fine of up to £5,000, and/or up to six months imprisonment. The offences can be committed by individuals or by bodies corporate. Where a body corporate has committed the offence, the directors or officers of that company may also be prosecuted if the offence has been committed with their consent or connivance or is attributable to their neglect (s69(1) WCA 1981).

4.3.3 THE LEGAL PROTECTION OF BIRDS IN ENGLAND AND WALES

All birds have the following legal protection (although there are exceptions for game birds, some waterfowl and designated pest species). This is listed below.

All birds, their eggs and nests are protected by law under the Wildlife and Countryside Act 1981 (as amended). It is an offence to kill, injure or take any wild bird, or to take or destroy their eggs. It is also illegal to take, damage or destroy the nest of any wild bird while it is in use or being built (RSPB, 2001). No provisions can be made for the destruction of occupied bird nests, eggs, or young for development purposes, and no licences are available for this purpose.

Certain rare and/or vulnerable bird species such black redstart, barn owl, red kite, peregrine and hobby are specially protected under Schedule 1, and have the following additional legal protection:

- It is an offence to intentionally (or recklessly, in England and Wales only) disturb any wild bird listed on Schedule 1 whilst it is nest building or is at (or near) a nest with eggs or young; or disturb the dependent young of such a bird.

4.3.4 THE LEGAL PROTECTION OF GREAT CRESTED NEWTS IN ENGLAND AND WALES

Great crested newts have strong legal protection under both British and European legislation. This is briefly summarised below:

Great crested newts are legally protected under provisions within the Wildlife and Countryside Act 1981 (as amended), the Conservation Regulations 2010 and the Countryside and Rights of Way Act 2000. Taken together, it is illegal to:

- **Intentionally or deliberately capture or kill, or intentionally injure great crested newts.**
- **Deliberately disturb great crested newts or intentionally or recklessly disturb them in a place used for shelter or protection.**
- **Damage or destroy a breeding site or resting place.**
- **Intentionally or recklessly damage, destroy or obstruct access to a place used for shelter or protection.**
- **Possess a great crested newt, or any part of it, unless acquired lawfully.**
- **Sell, barter, exchange or transport or offer for sale great crested newts or parts of them.**

The maximum penalty that can be imposed for the above offences is (as at May 2010) a fine of up to £5,000, and/or up to six months imprisonment. The offences can be committed by individuals or by bodies corporate.

4.3.5 THE LEGAL PROTECTION OF BADGERS IN ENGLAND AND WALES

In the UK, the Protection of Badgers Act 1992, is the most relevant to this mammal species. Under this legislation, it is illegal to injure, kill or take any badger or attempt to do so without a special licence. It is also illegal to dig for a badger, and to damage, destroy or obstruct access

to any part of a badger sett, or to allow a dog to enter the sett, or to disturb a badger whilst it is occupying a sett.

Certain offences can be caused by reckless, intentional or wilful behaviour, and the Act should always be read in detail for the exact wording.

Penalties for such offences can be severe, and can include fines of up to £5,000 per offence eg per badger sett or per badger, and/or up to six months imprisonment.

5. RECOMMENDATIONS

5.1 Best practice guidelines – bats and development

- As a standard precaution only as per any development related site, the future demolition contractors should be fully aware of the legal protection of bats and what to do if an unexpected bat is found or suspected at the site during all works at the house.

- This is especially relevant during any soft stripping works, where external features may be removed by hand, such as roof tiles, ridge tiles, slates, fascias, soffit boxes, brickwork, wooden cladding, roofing felt and lead flashing, for example.

- Bats and their evidence such as droppings can unexpectedly be present under such features and be completely hidden until accidentally uncovered.

- **If any new bat evidence such as crumbly droppings composed of insect remains or an actual bat is seen, during the building related works, then such work must stop and a licensed bat consultant contacted immediately for urgent advice.**

- Usually, late summer/early autumn e.g. late August/September/October or early spring e.g. April/early May, are ideally the best times to work on such structures, as this avoids both the main bat breeding season and the winter hibernation period.

- **However, since no bat evidence and no bat roosts have been found at the building at this application site, there are no bat related constraints in regards to when the development works can commence.**

5.2 Best practice guidelines – Breeding birds and development

- As per any development related site, the general advice is that no vegetation eg trees, shrubs, hedges and bushes should be removed during the bird nesting season as all bird nests are fully protected by law, and this includes whilst a nest is being built by the adult birds.

- This includes both buildings and bird boxes, where nesting birds have been shown to be present including feral pigeons in lofts.

- If any nests are present within the boundaries of the proposed development footprint during the clearance phase, then these must be left alone until the young birds have fully fledged from the nest and no further breeding attempts are to take place.

- The main bird nesting season in the UK, currently runs mainly from mid-January to September, but sometimes birds can start breeding before or after this period eg birds have been found by us nesting in early January at other sites due to milder winters.

- Therefore, September to mid-December are the best months for such vegetation clearance works.

- Although it is possible for a consultant ecologist to physically search any buildings and vegetation at a site to ensure no hidden nests are present beforehand.

5.3 Vegetation management at the application site

- It will be important that the short mown grass lawns at the application site continue to be managed as very short as it is now.

- This would remove any possibility of reptiles using any new unmanaged tall vegetation for shelter or foraging purposes, then possibly entering the development footprint by accident. This is a reasonable step to avoid any possible impact on these species.

- This pro-active approach should continue especially up to the end of the development phase.

5.4 Ecological enhancements for the development scheme

The following recommendations are for the client to install where appropriate, in regards to enhancing the biodiversity of the site, post-development for wildlife:

5.4.1 Bat boxes

- It would be possible to install 3-4x bat boxes at the site boundaries, for bats to use for roosting purposes.

- The bat box model proposed would be the 2F Schwegler Bat Box and this is a high quality bat box which will be used by a number of different bat species, including for the bat species recorded here. This box is made of woodcrete and is a long lasting box.

- The bat boxes can be located onto any trees if possible, so there is a better chance of them being used by bats. Or onto buildings if needed.

- Bat boxes should be installed at least 5-6 metres up a tree trunk, facing mainly South-east or South-west but also with 1x box facing West or North, so different microclimates are available and with enough space for bats to fly under the box easily. No artificial lighting must illuminate any of the installed bat boxes as this would deter bats from using the boxes.

- The NHBS is a good ecological equipment supplier and this bat box model can be purchased from them. The web link for this bat box is:

  http://www.nhbs.com/title/158629/2f-schwegler-bat-box-general-purpose

5.4.2 Wildlife friendly planting

- It would be highly advantageous that wildlife friendly planting can be introduced to any new landscaping scheme, by the use of night scented plants, which will attract insects which bats, for example, will prey on.

- Native plants should always be chosen ideally since these species will have the most benefits to wildlife. But the occasional non-invasive hybrid or exotic would be fine.

- Suitable border plant species can include corn flower, field poppies, mallow, evening primrose, ox-eye daisy, primrose and yarrow.

- Herbs can also be very good for insects and include borage, coriander, marjoram, fennel, lavender, rosemary and thyme.

- Trees, shrubs and climbers suitable for insects, so to benefit bats, include rowan, dog rose, elder, gorse, guilder rose, hawthorn, blackthorn, silver birch, English oak, hazel, honeysuckle, ivy and jasmine. Further information can be provided on the above.

5.4.3 Bats and lighting

- It will be important that dark corridors are allowed for bats at night along the site boundaries. This will mean that bats, can use local gardens and greenspaces, especially whilst commuting between sites. This can be ensured by the use of dark buffer zones.

- Artificial lighting can cause a vacuum effect at greenspaces and at other sites, where such artificial light will pull flying insects at night away from areas where bats feed. So adjacent darker areas will have less insects for bats to survive on and that negatively affects the life cycles of the insect species present (BCT, 2018).

- The future lighting scheme must be bat friendly and adhere to best practice on this aspect. There must be no UV elements to the new lighting and no metal halide or fluorescent sources used (BCT, 2018).

- Additionally, a warm white spectrum should be used, with no blue light components. LED luminaires should also be used, as this has a reduced impact on bats.

- In regards to any future lighting, it would be beneficial for both insect populations and for bats, any new security lighting is set on motion sensors and with short timers (1 minute).

- Light spillage must also be curtailed, with reduced glare and light spillage with lighting near to windows.

- Such lighting within dwellings can be recessed. Lighting must be directed to where it is required only and baffles or hoods should be used to achieve this.

- Screening by vegetation such as new trees, bushes and shrubs can also be used to mitigate the effects of any new lighting scheme.

- The following latest best practice guidance note must be read and followed, in regards to how lighting affects bats and how to mitigate this at a site:

  https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/

5.4.4 Bird nest boxes

- Bird boxes can be installed at the site and 1-2x suitable bird box models are recommended below.

- The 1B Schwegler Nest Box would be a good model to have installed at the site. This model would benefit blue and great tits especially.

- New bird nesting boxes should be installed as widely spaced apart as possible. The exact number of boxes will need to be appropriate for the size of the application site as nest boxes should not be located close together. But between 2-3 boxes would be suitable, with the trees or buildings if need be, being the most suitable locations. The NHBS is a good ecological equipment supplier and this nest box model can be purchased from them. The web link for this bat box is:

  http://www.nhbs.com/1b-schwegler-nest-box

- In general, bird boxes should be spaced widely apart, away from any bird feeders, quite high up a tree or building (ideally at least 5 metres up from ground level but higher in urban areas ideally), facing North to East only and away from cats.

- Further appropriate bird box models are available including for house sparrows, starlings, robins and wrens. Advice can be given by the ecologist on these different models for the new builds. The NHBS is the best supplier for these bird boxes.

5.4.5 Insect nest boxes

- Insect nesting boxes can also be provided in the new landscape scheme. Such bug boxes should be installed in a warm and dry place at the site, near to vegetation. Such boxes will benefit lacewings, solitary wasps, ladybirds and other species.

- Suitable models from the NHBS include the following, with one of each box being appropriate:

  - Schwegler Clay and Reed Insect Nest –

  https://www.nhbs.com/equipment/nest-boxes-habitats-and-feeders?hPP=30&idx=titles&p=0&hFR%5Bsubjects_equipment.lvl1%5D%5B0%5D=Nest%20Boxes%2C%20Habitats%20and%20Feeders%20%3E%20Insect%20Boxes&is_v=1&qtview=181090

  - Solitary beehive –

  https://www.nhbs.com/equipment/nest-boxes-habitats-and-feeders?hPP=30&idx=titles&p=0&hFR%5Bsubjects_equipment.lvl1%5D%5B0%5D=Nest%20Boxes%2C%20Habitats%20and%20Feeders%20%3E%20Insect%20Boxes&is_v=1&qtview=186142

5.4.6 Hedgehog doorways in fence panels

- It is also proposed that pre-fabricated holes in boundary fence panels are permitted at regular intervals at the property, so that hedgehogs are able to commute within the local landscape, without any blockages in their pathways.

- The new doorway should measure 13cms x 13cms in terms of width and length so hedgehogs can fit through.

- The following web link from the Wildlife Trusts provides very useful information on creating new hedgehog doorways:

  https://www.wildlifetrusts.org/actions/how-create-hedgehog-hole

5.4.7 Removal of non-native invasive plant species from the application site

- The wall cotoneaster, cherry laurel and ornamental rhododendron stands should all be removed from the site since such species are very invasive. Removal should be undertaken by following best practice guidance at all times and by trained, specialist contractors.

- **The wall cotoneaster must be removed by experienced contractors as this is a very invasive plant species that will colonise other gardens and land.**

- Within the new landscaping scheme, no non-native invasive plant species must be installed at any time.

- Further information and advice can be given by the ecologist on the plant species that are to be proposed within the future landscaping.

6. REFERENCES

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APPENDIX 1:

PHOTOGRAPHS A-L

(All photos are dated from 6/11/2023)

Photograph A
The short mown grass lawns had low ecological value

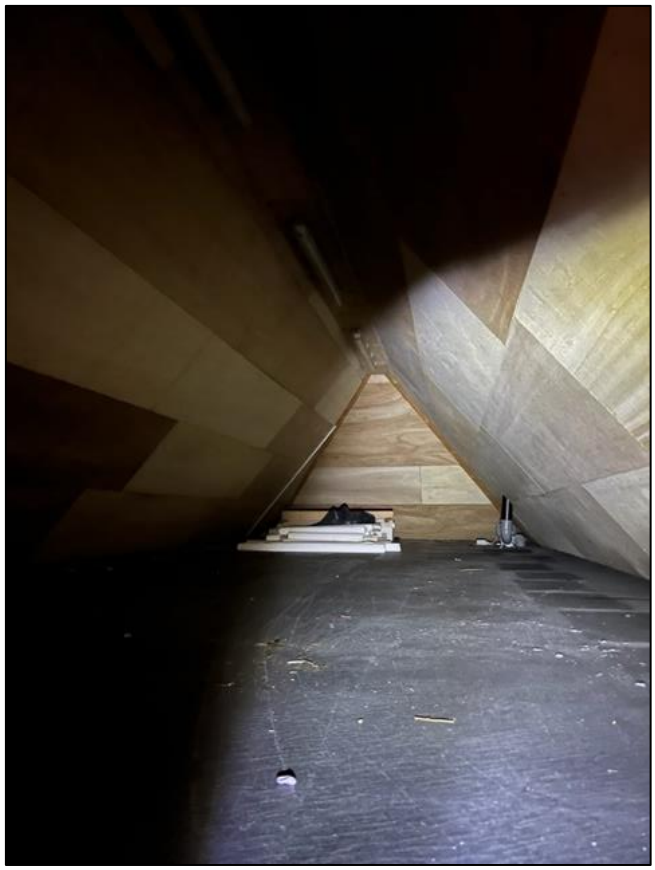
Photograph B
The boundary hedges had very good bird nesting potential

Photograph C
Further hedges and trees were also good for nesting birds

Photograph D
The dense ivy cover at the rear garden would be used by nesting birds

Photograph E
Knot hole in front garden tree

Photograph F
The wall cotoneaster at the front garden must be removed as this is a very invasive non-native shrub species that will spread to adjoining gardens



Photograph G
The house loft had no bat evidence

Photograph H
The house had no bat roosting potential overall, given its very good condition

Photograph I
The flat roof at the rear had no crevices for bat access

Photograph J
There were no suitable crevices for bats under the roof tiles at the house

Photograph K
The roof tiles were tight fitted, with no resulting crevices

Photograph L
There were a few minor crevices at the house front, but these were either far too shallow or were too tiny for bat access, upon inspection

APPENDIX 2:

MAP A – PHASE 1 HABITAT MAP WITH TARGET NOTES