



**PRELIMINARY ECOLOGICAL
APPRAISAL
LOONBRAE
CORNERSTONE NURSERY**

2/08/2021

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loonbrae

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Executive Summary

The Client, Cornerstones Nursery, proposes to construct a new childcare facility (The Project) at a site located at Loonbrae, Blairgowrie, hereafter referred to as the Site. Consultation with Perth and Kinross Council identified the need for an Ecological Survey to support the planning application for this Project. This report presents the results of an Ecological Survey at the Site.

The client instructed Gavia Environmental Ltd. to undertake a Preliminary Ecological Appraisal of the Site to assess potential constraints. The survey was undertaken on 21st June 2021.

The Site is mainly composed of areas of bare ground with small areas of amenity grassland and ornamental shrub. The Site is bound around the perimeter by mixed semi-natural woodland and is located within a residential area.

The habitats on the Site are widespread within the local area, with the woodland habitats having the highest ecological value within the Site. It is deemed that this habitat is likely to remain untouched as part of the development.

Two of the onsite buildings, including the small greenhouse and one of the sheds, have been assessed as having bat roost potential. The greenhouse has been assessed as having 'Low' suitability for roosting bats and the shed as having 'moderate'. Therefore, further emergence/re-entry surveys are recommended to confirm the likely absence of roosting bats ahead of demolition if these buildings are to be removed or disturbed.

Additionally, a historical bird's nest was identified, and it is therefore recommended that a pre-commencement check is undertaken to check for any new bird nesting prior to development if undertaken during the breeding bird season.

There are potential reptile/amphibian hibernacula within the log piles along the perimeter of the Site. If large numbers are found, which is unlikely, an ecologist should be contacted for further advice.

No overriding constraints to the development of the Site have been identified. Recommendations have been provided for ecological enhancement measures that could be delivered as part of the proposed development.

1 Introduction

Gavia Environmental Ltd. ('GEL') was commissioned Cornerstone Nursery ('the Client') to undertake a preliminary ecological appraisal at Cornerstones Nursery, Loon Brae ('the Site') (Planning Reference 20/00497/PREAPP), which is located at Grid Reference NO 18357 45257, located within Rattray, Blairgowrie, Perth and Kinross. The client is looking to install a new childcare facility which requires planning consent.

A desk study extended Phase 1 habitat survey, preliminary roost assessment for bats and invasive species survey were undertaken of the Site, the findings of which are presented herein.

This report aims to:

- Identify any ecological constraints to the development of the Site
- Identify the need for further ecological surveys or investigation
- Identify any opportunity for ecological enhancement and biodiversity gains

2 Methodology

2.1 Desk Study

Before the field survey, a desk study was undertaken to provide up-to-date ecological information on statutory designated sites, habitats and European and the U.K. protected species. All relevant legislation in relation to the findings within this report can be found in **Appendix F**. Several databases were interrogated, including:

A search of publicly available information of the National Biodiversity Network (NBN), available for commercial purposes, protects species records from the last ten years in the 2km grid square the Site is situated in.

- Scottish Biodiversity List.
- The Tayside Local Biodiversity Action Plan.
- Scotland's Environment Map for habitats and Local Nature Reserves (LNR).
- Multi-Agency Geographic Information for the Countryside (MAGIC) online database for international statutory designations (Special Protection Areas (SPA), Special Areas of Conservation (SAC) and Ramsar sites within 10km of the Site and national statutory designations (Sites of Special Scientific Interest (SSSI) and National Nature Reserves (NNR) within 3km of the Site.

In addition, Ordnance Survey (O.S.) mapping, the MAGIC database and aerial imagery were used to undertake a desk stop search to identify any waterbodies within 500m of the Site, which may potentially support amphibians.

2.2 Field Survey

2.2.1 Extended Phase 1 Habitat Survey

A Preliminary Ecological Appraisal survey was carried out in fine and dry weather conditions on 21st June 2021 by Senior Ecologist Stuart Anderson ACIEEM.

The survey was carried out following best practice guidance provided by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2017) guidelines for Preliminary Ecological Appraisal (PEA). This survey level includes the documentation of habitats to a recognised standard. It includes recording signs indicating the presence or potential presence of species that could constitute a material consideration in planning terms. This would include mammals, birds, reptiles, amphibians, fish and any above-ground stand of non-native (invasive) plants.

The survey methodology does not constitute a full botanical or protected species survey. Still, it allows a professional judgement to be made as to whether further specialist surveys would be advisable – either concerning the planning application/design stage or subsequently.

Invasive Non-Native Species (inns)

A presence/likely-absence survey was undertaken as part of the extended Phase 1 survey for any above-ground stands of invasive non-native plant species (notably: Japanese knotweed *Reynoutria japonica*, giant hogweed *Heracleum mantegazzianum* and Himalayan balsam *Impatiens glandulifera*). Please note that the recording of INNS does not in any way present a complete and thorough INNS survey, only a presence/absence of the species. Further mitigation will be required to treat any INNS within the Site before development.

Protected Species

As part of the extended Phase 1 survey, as mentioned above, evidence (if present) of any U.K. protected species (mammals, birds, amphibians, reptiles and invertebrates) was noted. Recommendations are made for further detailed protected species surveys (where appropriate).

The Survey effort was focused on prominent features such as trees, hedgerows, buildings or structures and habitat boundaries which all provide shelter and commuting routes for wildlife.

2.2.1.1 Mammals – Bats (Preliminary Roost Assessment)

All accessible buildings onsite were inspected and assessed for their potential to support roosting bats, with due consideration for the Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2016). Trees anticipated to be impacted by the Site's development were also assessed for their potential to support roosting bats. Complete survey methods and results are provided in **Appendix D**.

2.2.1.2 Mammals – Excluding Bats

The walkover survey recorded evidence of all mammals with particular focus on species listed in Schedule 2 of the Habitat Directive (European Protected Species), Schedule 5 of the Wildlife & Countryside Act 1981 (U.K. Protected Species), and the Scottish Biodiversity List/Local Biodiversity Action Plan; and Badger Protection Act, 1992.

The walkover followed the methodologies for mammals (MacDonald *et al.*, 1998). The following field signs were recorded (if present):

- Faeces;
- Footprints;
- Hair, especially at restricted passageways through undergrowth or fences;
- Scratch posts;
- Tracks;
- Shelters, dens, dreys, setts, burrows; and
- Feeding signs (gnawed cones, fish remains, etc.).

2.2.1.3 Birds

Evidence of or the potential for birds to utilise the Site were noted.

2.2.1.4 Reptiles and Amphibians

No formal search was undertaken for reptiles or amphibians; however, the surveyor searched for habitats that may support European protected reptile and amphibian species (e.g. great crested newts and common lizard) included on Annex II and IV of E.C. Council Directive

92/43/EEC Conservation of Natural Habitats and Wild Fauna and Flora (the Habitats Directive). These included ponds and refugia such as log piles and under litter debris.

A desktop search was undertaken to identify ponds within 500m of the Site, potentially supporting breeding great crested newts *Triturus cristatus*, using Ordnance Survey (O.S.) mapping, the MAGIC database and aerial photography.

2.2.1.5 Invertebrates

Evidence of/or the potential for notable, rare or protected invertebrates was noted, particularly where a mosaic of bare ground and flowering plants exist.

2.3 Limitations

There were no specific limitations to the desk study; however, the survey was conducted from the ground. As such, the building and mature trees onsite could only be assessed from ground level regarding the potential to support protected species, such as bats. As the survey was carried out in June, much of the tree was not able to be viewed to be being obscured by leaves.

3 Results

3.1 Baseline Ecological Conditions

3.1.1 Site Context

The Site is in Rattray, Blairgowrie, within a residential area. The Site is bound to the north, west and south by residential housing and to the east by Davie Park, a large area of amenity grassland. The A93 is located roughly 100m to the west, with the River Ericht located further to the southwest.

3.1.2 Designated Sites

No statutory designations are covering any part of the Site. Seven statutory designations were identified within the search radii and are described in Table 1 below. No national nature reserves (NNRs) are located with 10km of the Site, and No local nature reserves (LNRs) are located within 5km of the Site.

Table 1: Statutory designations within search radii

Designation Name	Distance + Direction from Site	Qualifying features
International Designations within 10km		
Forest of Clunie SPA	c. 3.8km northwest	The Site is an important breeding ground for several bird species and is one of the largest for both Hen harrier and Osprey. Other qualifying features include significant populations of short-eared owls and Merlin.
River Tay SAC	c. 0.2km southwest	The River Tay is designated for River lamprey, Brook lamprey, otter, sea lamprey, Atlantic salmon and Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels.
Craighall Gorge SAC	c. 2.4km north	Mixed woodland on base-rich soils associated with rocky slopes known as Tilio-Acerion forests.
Dunkeld - Blairgowrie Lochs SAC	c. 3.7km west	Blairgowrie Loch is designated for Otter, Slender Naias, Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels and very wet mires often identified by an unstable `quaking` surface.
National Designations within 3km		
Ardblair And Myreside Fens SSSI	c. 1.6km west	The Site contains a wide range of vegetation types, including alder/willow carr, species-rich sedge swamp dominated by bottle sedge <i>Carex rostrata</i> , and unimproved grassland. This habitat diversity is reflected in many higher plant species, including several rarities, notably the nationally scarce coralroot orchid <i>Corallorhiza trifida</i> . Moss of Ardblair is the only rich-fen basin mire in the district containing greater tussock sedge <i>Carex paniculata</i> .
Craighall Gorge SSSI	c. 2.4km north	The Site is one of a series of wooded gorges in Perth and Kinross cut into Old Red Sandstone rocks south of the Highland Boundary Fault. It is important for its upland mixed ash woodland, vascular plants and lichens.
Hare Myre, Monk Myre and Stormont Loch SSSI	c. 2.8km south	The Site is important for its open water transition fens, the assemblage of rare vascular plant species, wintering greylag goose population and geomorphology.

3.1.3 Ancient Woodland

There is no ancient woodland covering any part of the Site or immediately adjacent land. It should be noted that a Tree Preservation Order (TPO) is presently covering the Site- further details can be found within the Tree Survey Report (Julian A Morris, July 2021). No ancient or veteran trees were identified on Site by the Tree Survey.

3.1.4 Habitats and Flora

Habitats recorded onsite were classified in line with current Phase 1 Habitat survey guidance (JNCC, 2016 and illustrated within the Habitats Plan in **Appendix A**. Within the text, species Latin names (following Stace, 2019) are included the first instance only. Approximate areas for each habitat are shown in Table 2 below.

Table 2: Phase 1 Habitat Areas

Phase 1 Habitat	Area (ha)	% of Total Site Area (0.68ha)
Broadleaved woodland – semi-natural	0.1224	0.54
Bare ground	0.0620	0.27
Buildings	0.0203	0.09
Amenity grassland	0.0191	0.08
Introduced (ornamental) shrub	0.0046	0.02
Total	0.2284	100

3.1.4.1 Mixed Woodland -Semi-natural

The Site perimeter is bound on all sides by a mix of both broadleaved and coniferous woodland. A dense woodland area is found to the north of the Site, with large mature trees found on both the east and west sides of the Site adjacent to the surrounding properties. A less dense line in trees is found along the southern boundary wall of the Site.

A variety of species is present. The densely wooded area to the north consists of sizeable mature canopy species, including dense mature/early mature sycamore *Acer pseudoplatanus* ash *Fraxinus excelsior*, English oak *Quercus robur* with beech *Fagus sylvatica* and occasional elm *Ulmus sp.* With some of these species being outside of the site boundary.

The trees along the eastern, southern, and western perimeter of the Site are composed of species of beech, yew *Taxus baccata*, Western Red cedar *Thuja plicata*., Scots pine *Pinus sylvestris*, Lawson Cypress *Chamaecyparis lawsoniana* and silver birch *Betula pendula*.

Other notable species on Site include plum *Prunus domestica*, hazel *Corylus avellana* and pear *Pyrus communis*. A Bhutan Pine *Pinus wallichiana* was direct to the western side of the main building.

The understory contains less mature trees with species including goat/grey willow *Salix caprea/cinerea*, common willow *Salix viminalis*, elder *Sambucus nigra*, the garden species cotoneaster *Cotoneaster spp.*, broom *Cytisus scoparius* and non-native rhododendron *Rhododendron sp.*

The exposed areas of the wall to the north of the Site under the main woodland canopy is dominated by large areas of ivy *Hedera helix* with some common lilac *Syringa vulgaris* present to the northwest. Much of the understory of the tress on Site consists of bare ground with an area of cherry laurel *Prunus laurocerasus* located in the southwest corner, with only some areas of the ornamental scrub present.

3.1.4.2 Amenity grassland

A small area of sown amenity grassland containing common species is found to the east of the main building surrounding the wooden greenhouse on Site. Species present including perennial ryegrass *Lolium perenne*, Red Fescue *Festuca rubra*, white clover *Trifolium repens* and common daisy *Bellis perennis*.

Although to be impacted by the proposed development, this area is of low ecological value and will therefore not be considered further in this report.

3.1.4.3 Ornamental (Introduced) shrub

Ornamental planting was recorded near the main house, with ornamental garden plants being present. Species include *cotoneaster sp.*, common lilac, and Japanese maple *Acer palmatum*

Limited areas of the ornamental shrub are not considered ecological importance and are not considered further within this report.

3.1.4.4 Buildings

The main building is located at the centre of the Site is a stone-built, two-storey building primarily used as a children's nursery. The building is pebble-dashed and painted white and is well sealed with no apparent holes or opening present. The roof comprises slat with lead flashing. Further detail is provided within Preliminary Roost Assessment in **Appendix D**.

In addition, a small greenhouse is present, as are two sheds, one next to the house to the north and another by the southern perimeter wall. All are made of wood, with the northern shed and greenhouse having a felt roof. The shed to the south of the Site has a slate roof.

The buildings are considered concerning protected species (bats and nesting birds) further on in this report.

3.1.4.5 Bare ground

Much of the Site is dominated by compacted bare ground due to the nature of the Site being a children's nursery. There is little in diverse plant species found with only small pockets of recolonised vegetation present. Only small pockets of common species are found, including dandelion *Taraxacum agg.*, herb-Robert *Geranium robertianum*, silver birch and goat willow saplings, common ragwort *Senecio jacobaea*, colt's-foot *Tussilago farfara*, rosebay willowherb *Chamerion angustifolium*.

Due to the high percentage of bare ground present and the low species diversity, this habitat does not have any intrinsic ecological interest within itself but may provide suitable foraging edge habitat for bats. The habitat itself will not be considered further within this report.

3.1.5 Fauna

3.1.5.1 Mammals -Bats

The desk study returned one record of common pipistrelle *Pipistrellus pipistrellus*, six records of soprano pipistrelle *Pipistrellus pygmaeus*, three records of brown long-eared bat *Plecotus auritus* and one record of and Daubenton's bat *Myotis daubentonii* of bats within 2km of the Site. These records confirm that bats are present in the area.

The nearby River Ercht is likely to offer suitable linear habitats for foraging and commuting. In addition, the woodland area bordering the Site and the border with the park to the east is likely to provide foraging and potential roost sites for bats. A Preliminary Roost Assessment (PRA) of the Site is available in **Appendix D**.

Preliminary Roost Assessment (PRA) - Buildings

The onsite buildings have been assessed for their potential to support roosting bats. The shed to the south is likely to have moderate potential to support roosting bats.

Preliminary Roost Assessment- Trees

All established trees scheduled for removal were inspected from the ground during a preliminary ground-level assessment to determine bat roost potential. All trees inspected were considered to have 'Negligible' potential for roosting bats due to either being immature or no obvious roost features being present.

3.1.5.2 Mammals (excluding bats)

Riparian Mammals: Otter *Lutra lutra* and Water vole *Arvicola amphibious*

The desk study returned no records of otter and one record of water vole. No evidence of either species utilising the Site was recorded during the survey.

The nearby River Ericht is likely to support both species with the marginal woodland in the area providing opportunities for otter holts; however, several roads, including the A93 and residential housing, separate the Site from the river and are likely to be a barrier to dispersal.

Pine marten *Martes martes*

The desk study returned no records of pine marten, and no evidence of pine marten utilising the Site was recorded during the Phase 1 survey.

Although the Site does contain suitable prey species habitat, such as red squirrel, the Sites residential setting and limited habitat availability indicate that the Site is unlikely to support this species.

Red squirrel *Sciurus vulgaris*

The desk study returned 379 records of red squirrels within 2km of the Site, showing that they are commonly found in the area. No dreys or feeding signs were noted during the initial survey, but suitable habitat for red squirrels is present on the margins of the Site, particularly to the north. Additionally, no signs of grey squirrel *Sciurus carolinensis* were noted during the survey.

Badger *Meles meles*

The desk study returned no records of badger. The wooded area to the north of the Site may provide suitable habitat for badgers on Site. No field signs or sett entrances were found during the initial survey. Due to the nature of the Site, with high levels of disturbance from the nursery and compacted ground, it is considered unlikely to support this species. The surrounding area, though, including the parkland to the east, does provide suitable foraging habitat for badgers.

3.1.5.3 Birds

The desk study returned 657 records from 54 species, including 225 records from 27 BoCC Amber list of U.K. Species of Principle importance. No records of schedule one species were found. The species list is available in **Appendix C**.

An old birds nest, roughly 30cm in size, was recorded within a Scots pine tree on Site (Target note 3). The base of the tree and the trunk were examined for evidence of feeding to determine potential species. It was observed for around 1 hour to determine if a bird returned. Neither feeding signs nor activity was seen, and it was determined to be inactive. No evidence of Schedule 1 birds was recorded at the Site, including barn owls within the onsite buildings.

Species seen/heard during the survey include wren *Troglodytes troglodytes*, wood pigeon *Columba palumbus*, robin *Erithacus rubecula*, blackbird *Turdus merula* great tit *Parus major*, chaffinch *Fringilla coelebs* and chiffchaff *Phylloscopus collybita*.

3.1.5.4 Reptiles and Amphibians

The desk study returned one record of smooth newt *Lissotriton vulgaris* and one common frog, *Rana temporaria*. Additionally, two records of common lizard *Zootoca vivipara* were noted within the search area.

The Site provides suitable habitat for hibernacula for both amphibians and reptiles and suitable basking areas for reptiles. There are several log piles on the Site, particularly a large pile to the north of the Site (Target Note 1).

Great crested newt *Triturus cristatus*

Despite spending much of their annual lifecycle within the terrestrial environment, great crested newts are dependent upon the presence of suitable aquatic breeding habitats for a population to persist. No potential breeding ponds were identified onsite during the site survey, and none appear to be present within 250m of the Site, based on O.S. mapping. Due to this, the Site is unlikely to be suitable for great crested newts.

3.1.5.5 Invertebrates

The desk study returned 283 records for 59 species of invertebrates; however, no records of any protected or notable species were returned.

The habitats on Site, including areas of ornamental shrub, common lilac and numerous insect hotels and piles of wood etc., provide habitat niches for invertebrates; however, no notable species were recorded during the initial survey.

3.1.5.6 Invasive Plant Species

No invasive species were noted during the survey, and the nearest records of any invasive species were two records of Japanese knotweed located roughly 400m to the southwest of the Site across the River Ericht as such invasive non-native species are not considered to be a constraint on this Site and will not be considered further.

4 Discussions and Recommendations

4.1 Designated sites

Due to the distance of all SPA/SACs being more significant than 2km from the Site, besides the River Tay SAC and the Ardblair and Myreside Fens SSSI, it is considered that the proposed works to install the new childcare facility will not negatively affect their respective designations/notifications.

The Ardblair and Myreside Fens SSSI, although within 1.6km of the Site, is notified for its habitat/vegetation diversity and as such, it will not be impacted by the works taking place at Loonbrae.

The River Tay SAC is the closest designated Site at 0.2km. As it is designated from aquatic constraints and there is no direct connectivity with the Site either directly through a watercourse or indirectly due to being separated by residential housing, it is not considered a constraint for the proposed works Loonbrae.

4.1.1 Habitats and Flora

4.1.1.1 Mixed Woodland Semi-natural

It is understood that much of the woodland habitat on the Site will remain and is unlikely to be impacted by the proposed construction work as, for the most part, it lies to the north of the Site and around the perimeter. Tree Constraints Plan (Tree Survey Report, Julian A Morris, June 2021) confirms no ancient or veteran trees on Site, although a Bhutan pine was noted.

Given the woodland location concerning the proposed development, it is unlikely to have detrimental effects on this habitat. The habitat itself has value as part of the green corridor and creates connectivity to other habitats within the further environment.

A reinstatement plan is to be put in place to mitigate any potential vegetation losses through tree planting and re-seeding. Native plants should be used over ornamental species. If the felling of any large trees is required, the trunk should be cut and placed in log piles to provide habitat for a wide range of faunal species. A check should be carried out for any potential bat roost features before the tree is felled to ensure none are present.

4.1.2 Fauna

4.1.2.1 Bats

The man buildings and sheds located on Site are not likely to be demolished to allow for the construction of the new childcare facility. However, the small greenhouse shed is likely to be demolished to make way for the Site's development. The greenhouse has been assessed as having 'Low' suitability for roosting bats following best practice guidelines. Furthermore, the surrounding buildings and habitats are likely to support foraging and commuting bats.

Before the demolition of this greenhouse, it is recommended that one dusk emergence or dawn re-entry survey is undertaken to establish the likely absence of roosting bats. Additionally, suppose the other buildings on Site are to be impacted. In that case, it is recommended that the green slate-roofed shed has two activity surveys carried out to establish the presence of roosting bats.

It should be noted that should the presence of roosting bats be recorded during the surveys, an additional survey will be required for the shed, and two surveys would be required for the greenhouse to inform a Protected Species licence for bats to permit lawful demolition of the buildings.

As the Site is largely unlit, new artificial lighting of retained woodland habitats during the construction and operational phases may lead to adverse disturbance impacts to bats and other nocturnal wildlife, reducing use and diversity in these areas. A sensitive external lighting

scheme should be developed in consultation with a bat ecologist to avoid/minimise light spill onto existing and created habitats suitable for bats.

New bat roosting features (bat boxes) could be integrated within new buildings and mounted onto retained mature trees to enhance opportunities at the Site for bats.

4.1.2.2 Birds

As historical evidence of nesting birds has been noted during the survey (target note 3) with an old birds' nest found within a Scots pine on Site, it is recommended that if demolition is carried out during the bird nesting season (March to August inclusive), a nesting bird check is carried out by a suitably experienced ecologist immediately before demolitions works. It is not possible to licence the destruction of active bird nests for development purposes (Wildlife and Countryside Act 1981 as amended). If an active bird nest is found during works, a suitable exclusion zone must be put in place until the young have fledged; otherwise, a licence will need to be obtained to remove and destroy a nest.

Given the likelihood of the woodland habitat on Site supporting a range of widespread garden birds, to enhance opportunities at the Site for birds, new nesting opportunities could be provided at the Site through bird boxes integrated into buildings and mounted onto mature trees.

4.1.2.3 Reptiles and Amphibians

Although no evidence of reptiles or amphibians was found during the survey, there are potential hibernacula onsite to support them. The following recommendations should be put to ensure that there is no impact upon reptiles or amphibians during the proposed works. The precautions should include:

- Vegetation clearance should be cleared to no lower than 150mm above ground level to the undisturbed ground. Ideally, a two-stage strimming process should be carried out, the first to a length of 30cm, the second 10cm. All cut material should be removed between the two strimmings.
- Any debris moved from the ground must be carefully lifted and not dragged along the ground to prevent harm to any reptiles that may be sheltering beneath.
- Work must cease if site personnel find a large number (5+) of reptiles and contact a qualified ecologist for further advice.

4.2 Summary of Recommendations

Based on the ecological constraints identified above, Table 3 summarises recommendations for further work necessary to determine the need for, and scope of, any avoidance, mitigation, and compensation measures to address potential adverse effects of development.

Table 3: Summary of recommendations

Feature	Further Work/Investigation	Timescale
Bats	One dusk emergence or dawn re-entry survey during the active bat period (Greenhouse) One dusk emergence and one dawn re-entry survey will be done two weeks apart during the bat activity period (Shed).	May-August
Nesting birds	Timing of demolition outside of nesting season OR pre-demolition check	Before demolition
Reptiles and Amphibians	Pre-works checks and careful removal of hibernacula. Contact an ecologist if large number is found.	Before demolition

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Appendices

Appendix A Habitat Plan

See the accompanying PDF with the report.

Appendix B Desk Study Information

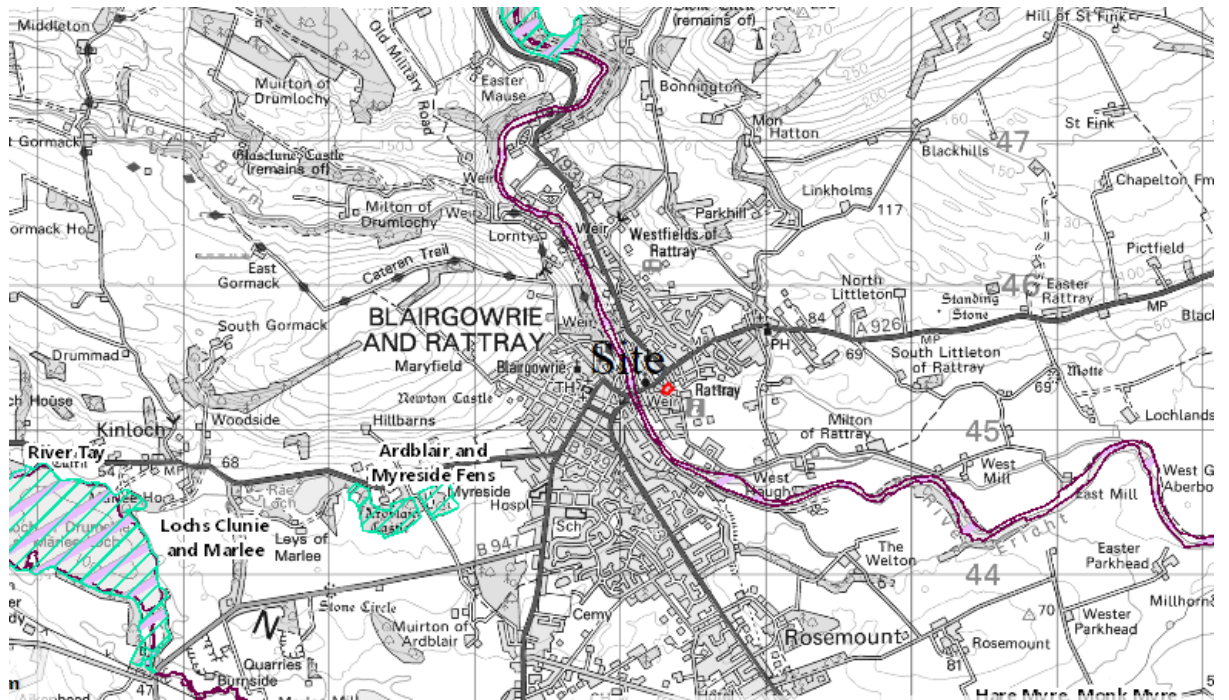


Figure 1: Designations in proximity to the Site (Source: Magic Map)

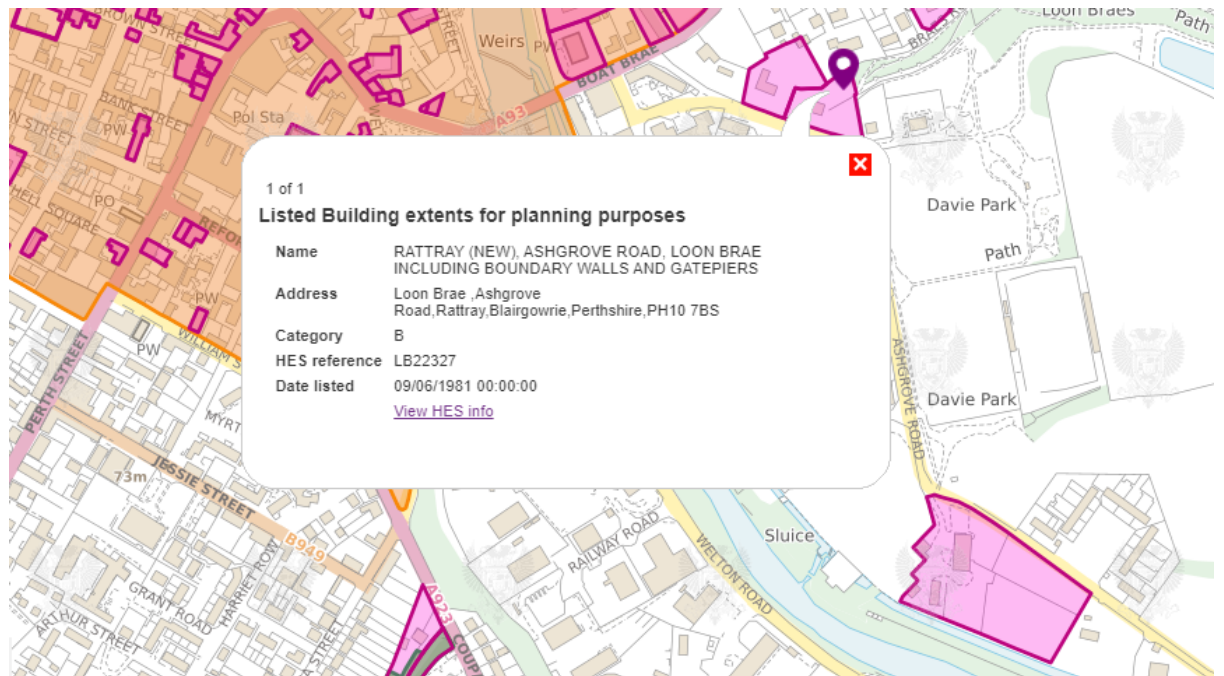


Figure 2: Tree Protection Orders on Site (Source: Perth and Kinross Council)

Appendix C Site Photographs



Photo 1. Main building onsite.



Photo 2. Large mixed woodland surrounding the Site.



Photo 3. Understorey of woodland to the north of Site.



Photo 4. Ornamental (introduced) shrub onsite.



Photo 5. Bare ground across the majority of the Site.



Photo 6. The small area of amenity grassland.



Photo 7. Potential reptile/amphibian hibernacula
(Target note 1).



Photo 8. Old birds' nest in a Scots pine tree
(Target note 3)

Appendix D Bird Species List results from NBN database

Bird Species	Latin Name	Records returned	Protections
Dunnock	<i>Prunella modularis</i>	49	U.K. Species of Principal Importance & BoCC Amber List Species
House Sparrow	<i>Passer domesticus</i>	46	U.K. Species of Principal Importance & BoCC Red List Species
Common Starling	<i>Sturnus vulgaris</i>	43	U.K. Species of Principal Importance & BoCC Red List Species
Song Thrush	<i>Turdus philomelos</i>	14	U.K. Species of Principal Importance & BoCC Red List Species
Mute Swan	<i>Cygnus olor</i>	8	BoCC Amber List Species
Eurasian Tree Sparrow	<i>Passer montanus</i>	8	U.K. Species of Principal Importance & BoCC Red List Species
Eurasian oystercatcher	<i>Haematopus ostralegus</i>	7	BoCC Amber List Species
Tawny owl	<i>Strix aluco</i>	7	BoCC Amber List Species
Greylag goose	<i>Anser anser</i>	6	BoCC Amber List Species & Schedule 1 Species
Black-headed gull	<i>Chroicocephalus ridibundus</i>	5	BoCC Amber List Species
Dipper	<i>Cinclus cinclus</i>	5	BoCC Amber List Species
Yellowhammer	<i>Emberiza citrinella</i>	4	U.K. Species of Principal Importance & BoCC Red List Species
Pink-footed goose	<i>Anser brachyrhynchus</i>	3	BoCC Amber List Species
Spotted flycatcher	<i>Muscicapa striata</i>	3	U.K. Species of Principal Importance & BoCC Red List Species
Stock dove	<i>Columba oenas</i>	2	BoCC Amber List Species
Common kestrel	<i>Falco tinnunculus</i>	2	BoCC Amber List Species
Grey partridge	<i>Perdix perdix</i>	2	U.K. Species of Principal Importance & BoCC Red List Species
Eurasian bullfinch	<i>Pyrrhula pyrrhula</i>	2	U.K. Species of Principal Importance & BoCC Amber List Species
Lesser redpoll	<i>Carduelis cabaret</i>	1	U.K. Species of Principal Importance & BoCC Red List Species
Meadow pipit	<i>Anthus pratensis</i>	1	BoCC Amber List Species
Merlin	<i>Falco columbarius</i>	1	BoCC Red List Species & Schedule 1 Species
Common gull	<i>Larus canus</i>	1	BoCC Amber List Species

Common linnet	<i>Linaria cannabina</i>	1	U.K. Species of Principal Importance & BoCC Red List Species
Grey wagtail	<i>Motacilla cinerea</i>	1	BoCC Red List Species
Willow warbler	<i>Phylloscopus trochilus</i>	1	BoCC Amber List Species
Common redshank	<i>Tringa tetanus</i>	1	BoCC Amber List Species
Northern lapwing	<i>Vanellus vanellus</i>	1	U.K. Species of Principal Importance & BoCC Red List Species
Dunnock	<i>Prunella modularis</i>	49	U.K. Species of Principal Importance & BoCC Amber List Species
House Sparrow	<i>Passer domesticus</i>	46	U.K. Species of Principal Importance & BoCC Red List Species

Appendix E Preliminary Bat Roost Assessment

Methods

The preliminary roost assessment aims to assess the potential for, or any evidence of, the presence of roosting bats associated with specific habitat features. Where the significant potential for roosting is identified, further bat roost surveys are generally necessary to determine the presence or likely absence of a roost and characterise any roost present. The method described below has been followed with due consideration for the current best practice guidelines (Collins, 2016).

Structures

A detailed ground-level inspection of the exterior of structures at the Site was undertaken to (i) identify any Potential Roost Features (PRFs) and potential bat ingress/egress points, and (ii) locate any evidence of bats such as live or dead specimens, droppings, urine splashes, fur-oil staining, feeding remains (e.g. moth wings) and squeaking noises.

Limitations

A full visual inspection of all trees was only done from ground level due to the trees being in full leaf. Due to the survey being done in the summer and the density of some of the mature trees, particularly in the southeast section of the Site, not all of the trees could be observed. The trees currently are not scheduled to be removed, but if so, a furthermore detailed inspection involving a tree limb may be required.

Evaluation

Following the assessments, each structure and tree was assigned one of the following categories in respect of its potential to support roosting bats (adapted from Collins, 2016):

- Negligible – no obvious PRFs
- Low – A structure with one or more PRFs that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions, and suitable surrounding habitat to be used regularly by large numbers of bats. A tree of sufficient size and age contains PRFs but none seen from the ground or features seen only with very limited roost potential.
- Moderate – a structure or tree with one or more PRFs that bats could use due to their size, shelter, protection, conditions and surrounding habitat; but unlikely to support a roost of high conservation status.
- High – a structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for long periods of time due to their size, shelter, protection, conditions, and surrounding habitat.

Results

Building Description	External Evidence /Features	Internal Evidence /Features	Bat Roost Suitability
Small wooden built greenhouse shed with a felt roof and large glass windows on the western side.	<ul style="list-style-type: none"> Small cracks and entry points under the felt roofing where the walls of the seg join the roof are potential entry points for bats. 	<p>Unable to gain internal access, assessment is done externally.</p> <p>A large glass window is present, though, so an assessment was carried out from what could be observed</p>	Low
Single storey wooden build shed with apex and slate roof.	<ul style="list-style-type: none"> A gap in the shed door is large enough to allow the entry of bats. Drilled hole behind the shed for wiring is a potential entry point for bats. The rotted corner of the shed where the drainpipe joins is the potential entry point for bats. 	Unable to gain internal access, assessment is done externally.	Moderate

Photographs



Photo 1. Shed with moderate bat roost potential (Target note 1)



Photo 2. Potential Roost feature - drilled hole for wire behind the shed.



Photo 3. Potential roost feature – rotted roof at drain pipe.



Photo 4. A gap in the shed door.



Photo 5. Wooden greenhouse.

Photo 6. Side window to the greenhouse – some small opening present above under felt roofing.

Appendix F Legislation

The main legislation covering the legal protections given to wildlife and conservation in Scotland is set out below.

Biodiversity

The Habitats Directive is the short name for European Union Council Directive 92/43/EEC on conserving natural habitats and wild fauna and flora.

The Habitats Directive:

was adopted in 1992 and is part of E.U. nature legislation and adds to and amends the Birds Directive.

As well as establishing Natura sites and setting out how they should be protected, the Directive extends to European protected species and other issues.

The Wildlife and Countryside Act (W & CA) 1981 (as amended) constitutes an important statute relating to the protection of flora, fauna and the countryside within Great Britain. Part 1 of the Act deals with the protection of wildlife. Most EPS are now covered under the Conservation of Habitats and Species Regulations (as amended); however certain species and activities are still covered by the W & C.A. The W & C.A. also covered possession of species listed in the various schedules. In Scotland, the W & C.A. is amended by The Nature Conservation (Scotland) Act 2004 and The Wildlife and Natural Environment (Scotland) Act 2011.

Wildlife and Natural Environment (Scotland) Act 2011 (commonly known as the WANE Act) "Every public body in Scotland is required to produce a publicly available report, once every three years, on compliance with the biodiversity duty. The report must outline the actions taken to conserve biodiversity further while carrying out a public body's day-to-day functions.

Badgers

Badgers and their setts (tunnels and chambers where they live) are protected under the Protection of Badgers Act 1992 (as amended). It is an offence to;

- Intentionally capture, kill, or injure a badger
- Damage, destroy or block access to their setts
- Disturb badgers in setts
- Treat a badger cruelly
- Deliberately send or intentionally allow a dog into a sett
- Bait or dig for badgers
- Have or sell a badger, or offer a live badger for sale
- Have or possess a dead badger or parts of a badger (if you got it illegally)
- Mark or attach a marking device to a badger

Bats

All bat species found in Scotland are classed as protected species. They receive full protection under the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended). It is an offence to deliberately or recklessly:

- capture, injure or kill a bat

- harass a bat or group of bats
- disturb a bat in a roost (any structure or place it uses for shelter or protection)
- disturb a bat while it is rearing or otherwise caring for its young
- obstruct access to a bat roost or otherwise deny an animal use of a roost
- disturb a bat in a manner or in the circumstances likely to affect the local distribution or abundance of the species significantly
- disturb a bat in a manner or in the circumstances likely to impair its ability to survive, breed or reproduce, or rear or otherwise care for its young

In Scotland, it's an offence to:

- Release an animal to a location outside its native range
- Allow an animal to escape from captivity to a location outside its native range
- Otherwise, cause an animal not in the control of any person to be at a location outside its native range

Nesting Birds

Under the Wildlife and Countryside Act 1981 (as amended), all wild birds, their nests and eggs are protected by law, and it is an offence to;

- Intentionally kill, injure or take any wild bird.
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built.
- Intentionally take or destroy the egg of any wild bird.

Certain species, such as the Barn Owl *Tyto alba*, receive additional protection under Schedule 1, making it an offence to intentionally or recklessly disturb birds and their young at, on or near an active nest.

Otters

The Eurasian otter is the only native U.K. otter species. It's fully protected under sections 9 and 11 of the Wildlife and Countryside Act 1981.

It is an offence to;

Capture, kill, disturb or injure otters (on purpose or by not taking enough care)

Damage or destroy a breeding or resting place (deliberately or by not taking enough care)

Obstruct access to their resting or sheltering places (deliberately or by not taking enough care)

Possess, sell, control or transport live or dead otters, or parts of otters

Water vole

The Water Vole *Arvicola amphibius* is protected under the Wildlife and Countryside Act 1981 (as amended). This makes it an offence to:

- Intentionally kill, injure, or capture a Water Vole
- Possess or control a Water Vole, living or dead, or any part of a Water Vole

- Intentionally or recklessly damage, destroy or obstruct access to any place of shelter, or disturb a Water Vole within such a place
- Sell or offer for sale a Water Vole living or dead, or part of a Water Vole.

Reptiles and Amphibians

The Great Crested Newt *Triturus cristatus* is a protected species under the Conservation of Habitats and Species Regulations 2017 (as amended). This makes it an offence to:

- Kill, capture or disturb a Great Crested Newt
- Take or destroy the eggs of a Great Crested Newt
- Damage or destroy the breeding or resting places of Great Crested Newt.

It also receives additional protection under the Wildlife and Countryside Act 1981 (as amended), making it illegal to possess or control any Great Crested Newt, living or dead.

For other reptiles and amphibians, legal protection varies considerably for different species. Smooth Snake *Coronella austriaca*, Sand Lizard *Lacerta agilis*, and Natterjack Toad *Epidalea calamita* are protected species, and it is an offence to:

- Deliberately kill, capture or disturb these species
- Deliberately take or destroy the eggs of these species
- Damage or destroy the breeding or resting places of these species.

Under the Wildlife and Countryside Act 1981 (as amended), Adder *Viperus berus*, Grass Snake *Natrix natrix/Natrix helvetica*, Common Lizard *Zootoca vivipara* and Slow Worm *Anguis fragilis* are protected from intentional killing or injuring. Additionally, Common Frog *Rana temporaria*, Common Toad *Bufo bufo* and other newt species are prohibited from sale.

Red squirrels

Red squirrels and their dreys (resting places) receive full protection under Schedules 5 and 6 of the Wildlife and Countryside Act 1981 (amended).

Fish

The Salmon and Freshwater Fisheries Act (1975) affords protection to fish and the spawning grounds of fish. Section 4(1) makes it an offence to knowingly permit the introduction of material to a watercourse such that it becomes injurious to fish, the spawn of fish or the spawning grounds of fish. Section 2(5) makes it an offence to disturb spawning fish or the spawn of fish wilfully.

Invasive non-native species

The law on non-native species is covered by Schedule 9 of the Wildlife and Countryside Act 1981 (as amended by the Wildlife and Natural Environment (Scotland) Act 2012).