Whitcher Wildlife Ltd.
Ecological Consultants.

ROUGHBIRCHWORTH LODGE, OXSPRING.

OS REF: SE 26746 02048.

BIODIVERSITY ENHANCEMENT PLAN.

Ref No: **220277/BEP.**

Date: **20th September 2022.**

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1. INTRODUCTION.

1.1. There are plans to demolish the existing Roughbirchworth Lodge farm buildings and house and to develop the site into a small residential estate.

1.2. Whitcher Wildlife Ltd carried out a Preliminary Ecological Appraisal of the site in November 2017. Additional bat activity and transect surveys were carried out in 2019.

1.3. Whitcher Wildlife Ltd was commissioned in early 2022 to carry out a Preliminary Ecological Appraisal of the site to update the findings of the previous PEA survey. That survey was carried out on 21st March 2022.

1.4. The Local Authority planners have responded to that report and require a Biodiversity Enhancement Plan. This document is designed to satisfy that requirement.

1.5. Appendices I to IV of this report provide additional information on specific species and are designed to assist the reader in understanding the contents of this report.

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2. SURVEY METHODOLOGY.

2.1. The following outlines the requirements of this document as specified in an e-mail to the client.

- *The Biodiversity Enhancement Strategy should include detail on landscaping proposals to be adopted on site and features for use by a range of wildlife such as bat and bird boxes, hedgehog access, etc. The proposed badger mitigation to be incorporated as part of the development should also be detailed.*

2.2. Each species will be dealt with separately in the following sections. Also included is a section that addresses bat mitigation strategy that is necessary now that the 2022 repeat bat surveys have identified Common Pipistrelle day roosts within the buildings on the site.

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3. The Surveyed Area.

3.1. Roughbirchworth Lodge site is shown marked with a red arrow on the aerial photograph below.

3.2. There are open arable fields and improved grassland fields grazed by cattle to the west of the site. To the southwest of the site there is a small number of residential properties with more to the south on the opposite side of Roughbirchworth Lane.

3.3. The Trans Pennine Trail runs along a cutting on the eastern side of the site with further residential areas beyond and beyond that, the B642 Sheffield Road before the ground slopes down to the River Don

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3.4. Description of Habitats Present on the Site.

The following is an extract from the Preliminary Ecological Appraisal report outlining the habitats presently on the site. Appendix I of this report contains annotated maps marked up with the varying habitats that are cross referenced to target notes in Appendix II of this report. The habitats on and adjacent to the site are: -

- Improved Grassland.
- Dense Scrub.
- Scattered Scrub.
- Scattered Trees.
- Tall Ruderal.
- Ephemeral/Short Perennial.
- Bare Ground.
- Species Poor Intact Hedgerow.
- Species Poor Defunct Hedgerow.
- Fence.
- Wall.
- Building.

3.4.1. Improved Grassland.

3.4.1.1. A previous Phase I Habitat survey undertaken of this land found this area to be tall ruderal herb. The PEA survey in 2017 found this area had been grazed short and represented improved grassland. During this survey the site is still assessed as improved grassland but has not been grazed for some time and is growing long with tall ruderal species present, including dock *(Rumex sp.)*, nettle *(Urtica dioica)* and ribwort plantain *(Plantago lanceolata)*.

3.4.1.2. The grass species present include Perennial ryegrass (*Lolium perenne*), false oat grass *(Arrhenatherum elatius)*, cocksfoot *(Dactylis glomerata)*, common couch *(Elytrigia repens)*, Yorkshire Fog *(Holcus lanatus)* and Timothy *(Phleum pratense)*.

3.4.2. Dense Scrub.


3.4.2.1. There are a few areas of dense scrub on the site, the main area being what used to be the garden associated with the farmhouse on the site, and is target noted as T5. This has been left unattended for some years now and has become overgrown with scrub and some tall herbs also. Bramble *(Rubus fruticosus)* is the dominant species in this area with some nettle *(Urtica dioica)*, pendulous sedge *(Carex pendula)*, ash saplings *(Fraxinus excelsior)*, goat willow saplings *(Salix caprea)*, elder *(Sambucus nigra)* and holly *(Ilex aquifolium)*. There are also some ornamental species in this area including Laburnum *(Laburnum sp)*, privet *(Ligustrum sp)*, Bergenia *(Bergenia sp)*, daffodil *(Narcissus pseudonarcissus)* and snowdrop *(Galanthus nivalis)*.

3.4.2.2. Other areas of dense scrub across the site are mostly areas of bramble *(Rubus fruticosus)* and elder *(Sambucus nigra)*.

3.4.3. Scattered Scrub.

There is scattered scrub across the site, mostly around the buildings. This is dominated by bramble *(Rubus fruticosus)* and elder *(Sambucus nigra)* as well as some tree saplings with cleavers *(Galium aparine)*, herb Robert *(Geranium robertianum)* and possible Himalayan balsam *(Impatiens glandulifera Royle)* saplings.

3.4.4. Scattered Trees.

3.4.4.1. There are a number of scattered trees across the south-eastern half of the site. This includes a line of mature trees along either side of the driveway leading to the farm buildings, as well as many mature and semi mature self-seeded trees across the remainder of the site.

3.4.4.2. Sycamore *(Acer pseudoplantus)* is the dominant tree species, along with ash *(Fraxinus excelsior)*, beech *(Fagus sylvatica)*, horse chestnut *(Aesculus*

hippocastanum), copper beech *(Fagus sylvatica purpurea)*, goat willow *(Salix caprea),* apple *(Malus sp)* and weeping ash *(Fraxinus excelsior pendula)*.

3.4.5. Bare Ground.

The driveway onto the site and the area at the front of the main house is a mix of tarmac, concrete and hardstanding driveway and parking area.


3.4.6. Tall Ruderal Herb.

There are two areas where the habitat has been assessed as tall ruderal herb as nettle *(Urtica dioica)* is dominant, although there is also sparse bramble *(Rubus fruticosus)*, cleavers *(Galium aparine)* and cow parsley *(Anthriscus sylvestris)* present.

3.4.7. Ephemeral/Short Perennial.

This is a hard-standing courtyard in the middle of the old farm buildings that has been left unattended for a number of years. The hard standing has become covered with moss and there are tall herbs such as nettle *(Urtica dioica),* rosebay willowherb *(Chamerion angustifolium),* ivy *(Hedera helix),* elder *(Sambucus nigra)* and sapling goat willow *(Salix caprea)* growing around the edges and in the cracks of the concrete, along with some sparse bramble *(Rubus fruticosus).*

3.4.8. Species Poor Intact Hedgerow.

There is one species poor intact hedgerow along the south-eastern boundary of the site. This is a tall hedgerow that is cut back on one side as it is adjacent to a highway footpath. It comprises predominantly holly *(Ilex aquifolium)* with some hawthorn *(Crataegus monogyna),* elder *(Sambucus nigra)* and ornamental conifer.

3.4.9. Species Poor Defunct Hedgerow.

3.4.9.1. There are two species poor hedgerows around the edges of what was once the garden of the farmhouse. This includes one section of holly (*Ilex aquifolium*) hedgerow, which is shown on right in the photograph above, and a small length of privet *(Ligustrum sp)* hedgerow.

3.4.9.2. At the northern end of the site there is a hedgerow which is mainly hawthorn *(Crataegus monogyna)* with some holly (*Ilex aquifolium*) and elder *(Sambucus nigra)* between the end of the site and the adjacent field.

3.4.10. Buildings.

There are a number of buildings within the survey area, which are each shown and described separately in section 3.4. of this report.

3.4.11. Wall.


There is a dry-stone wall that extends along the south-western boundary of the site, as well as some short lengths of small stone walls in and around the site. There is also a high brick wall along the southwest site boundary.

3.4.12. Fence.

Fences form some of the boundaries around the improved grassland at the northwest end of the site including post and wire and timber fences built using old pallets.

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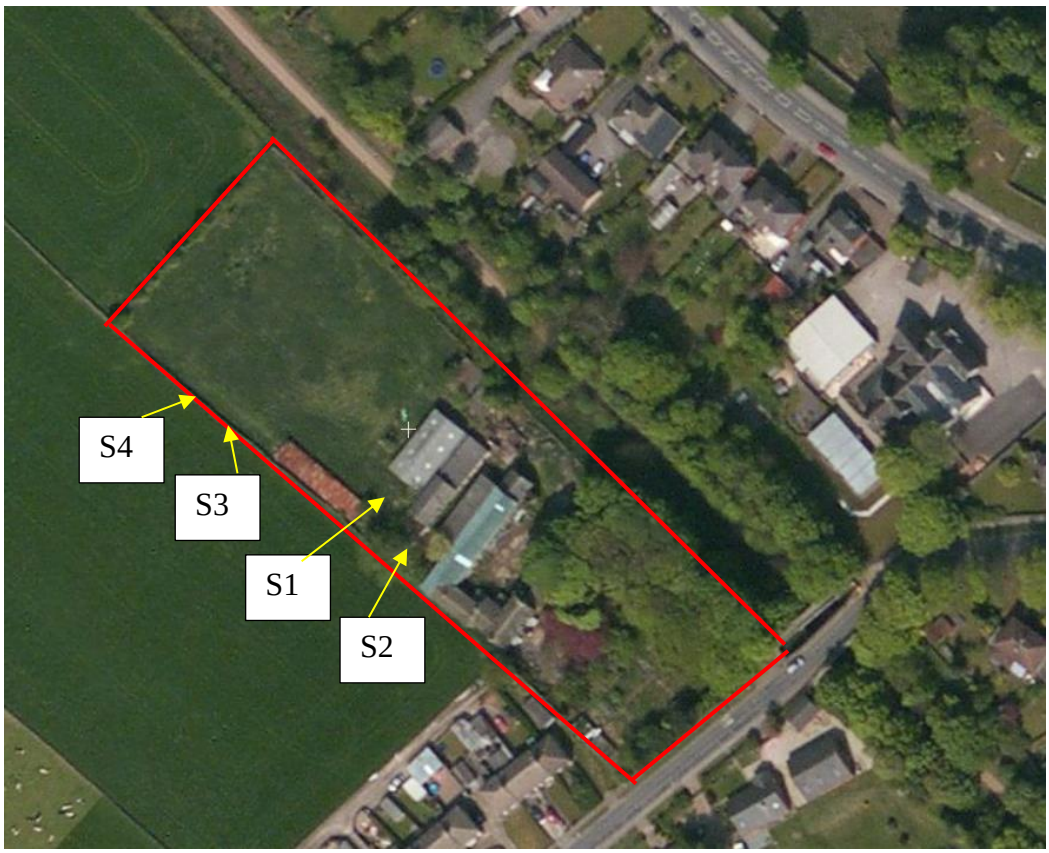
4. BADGER MITIGATION STRATEGY.

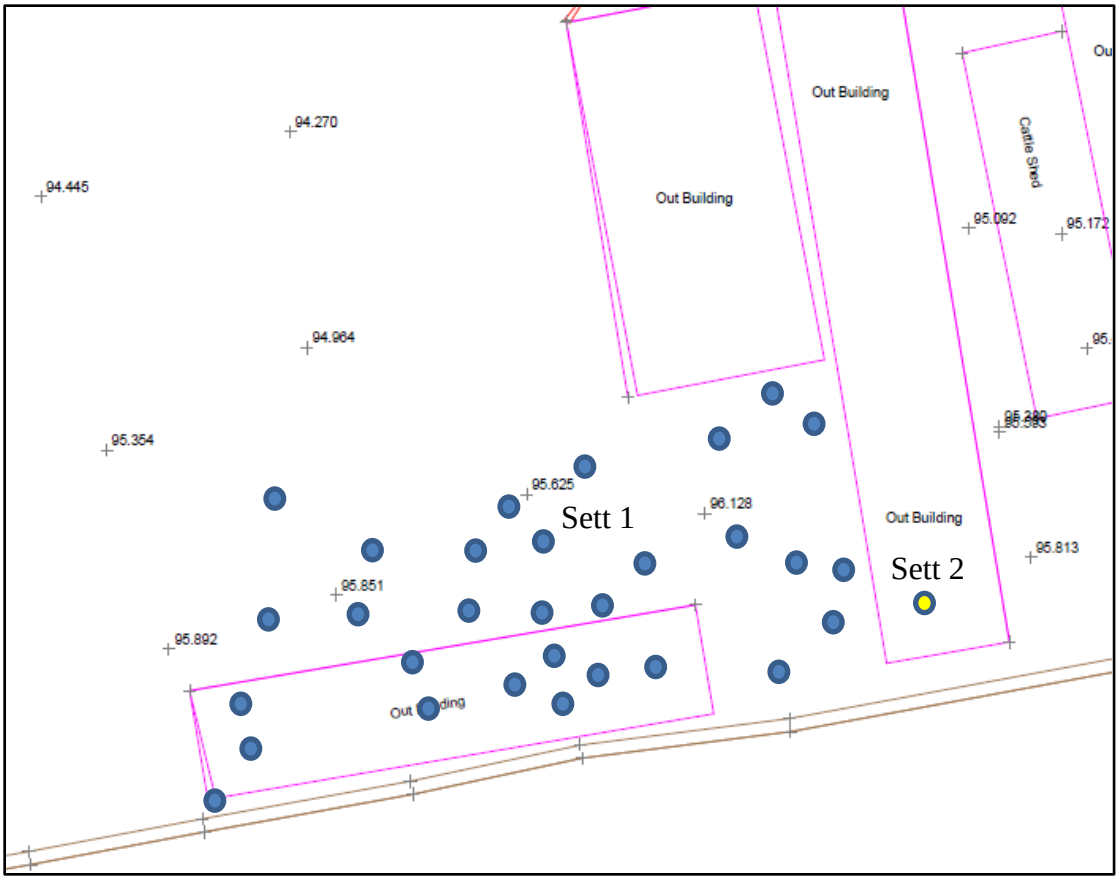
4.1. BACKGROUND SURVEY RESULTS.

The full site is shown outlined in red below and all this area was included within the survey area. Four badger setts were identified on the site. The locations of the setts are as shown on the aerial photograph above marked as S1, S2, S3 and S4.



4.1.1. Sett S1.

4.1.1.1. A total of thirty sett entrances were identified in the corner of the grassland field and in the buildings along the side of that field. The drawing below is a small section of the topographical drawing for the site and the sett entrances are shown on that drawing. The blue circles represent entrances to Sett 1.



4.1.1.2. Two of the sett entrances are located under bramble behind the field barn (B11) with an accumulation of spoil against the back wall of the building.

4.1.1.3. Two of the sett entrances are located under elder and nettles between the back stone wall of the end farm building (B7) and the south-western end of the dilapidated field shelters (B12). These are shown in the two photographs below.

4.1.1.4. A number of sett entrances are inside or in the doorways of the dilapidated field shelter (B12). Some of these are easy to see, others are beneath and behind accumulated frames inside the building.

4.1.1.5. There were badger hairs, badger prints and dung pits in the buildings as well. A badger skeleton was identified inside B12 which was there during the 2017 surveys. Out of the back of this bay of the field shelter there was a well-worn path over the stone boundary wall and into the adjacent field.

4.1.1.6. Numerous sett entrances are in the open ground in front of the field shelter B12 with some shown below.

4.1.1.7. This sett has considerably grown in size since the survey in 2017 with twenty more entrances found, mainly in the area outside B12. There are well-worn paths leading to and from the building with some of the sett entrances having very freshly excavated spoil.

4.1.2. Sett S2.

Sett 2 is shown on the same plan as S1 above. It comprises one sett entrance in the floor of the adjacent farm building (B7), as shown in the photograph below. Fresh badger hairs and badger prints were identified in the fine dust on the floor around the entrance. Two dung pits were identified inside the building, although the dung was not fresh. There were also large amounts of spoil on the floor of the building, although this was not fresh. The extent of the tunnel beneath this sett entrance is unknown and that is why this has been labelled as a separate sett. However, it is very possible that the sett tunnels of Sett 1 connect to this entrance.

4.1.3. Sett S3.

One animal hole with a grassed over spoil heap was identified under the south-western stone boundary wall of the site. This has not been used for some time because the entrance is blocked with vegetation.

4.1.4. Sett S4.

A second animal hole with a grassed over spoil heap was identified further along the south-western stone boundary wall of the site. There were well-worn paths leading to this hole.

4.1.5. Badger paths were identified around the farm buildings and across the site including into the fields to the south and west and onto the Trans Pennine Trail to the northeast.

4.1.6. All of the above badger setts will be destroyed as a result of the proposed development.

4.2. BADGER MITIGATION.

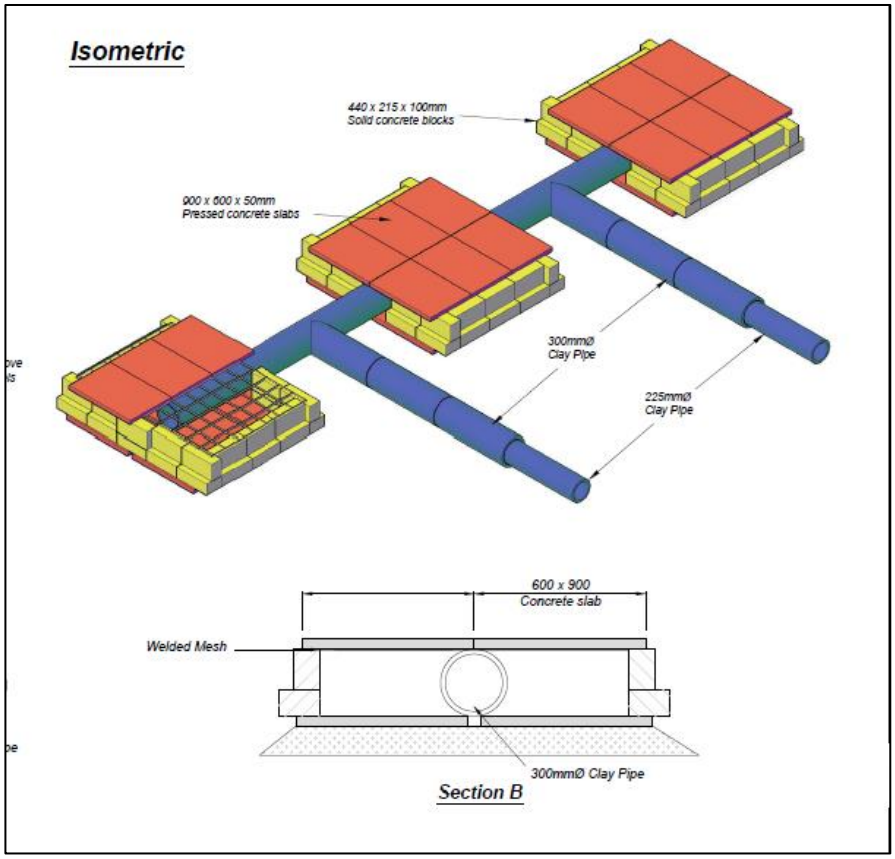
4.2.1. Because Sett S1 is a main breeding sett, it will be necessary to provide a replacement artificial sett prior to any disturbance to the existing setts.

4.2.2. It has been agreed that an area in the northeast corner of the site will be allocated as a wildlife area and that area will include the provision of an artificial badger sett. This is where the adjacent Trans Pennine Trail will provide a wildlife corridor to the wider area of the clan foraging territory.

4.2.3. At a very early stage of the development, the ecologists will construct an artificial sett in this corner of the site. The design of artificial sett will be a well tried and tested design, developed and used by Whitcher Wildlife Ltd over a long period of time. That design is as shown on the drawing below.

4.2.4. The artificial sett needs to be constructed well in advance of the closure of the existing setts because the granting of an exclusion licence from Natural England will be conditional on evidence being provided that badgers have found and used the artificial sett. No Natural England licence is required to cover the new sett construction so this should enable an early commencement.

4.2.5. It will also be desirable to provide the artificial sett before development starts in the north western end of the site so there remains free access from the existing setts to the artificial sett.



4.2.6. On completion of the artificial sett, a secure fence will be erected around that corner of the site to prevent any human activity around the sett while allowing sufficient space underneath the fence for badgers to freely pass. A locked access gate will be required to enable monitoring and maintenance activities.

4.2.7. The wildlife corner will immediately be planted with well-established native plant species that will provide a dense screen around the sett. That should include a perimeter hedgerow of evergreen species, in particular holly.

4.2.8. Once planted in this way, human disturbance must be kept to an absolute minimum to prevent disturbance of the badgers at a time when it will be essential for them to settle into the new sett.

4.2.9. Once Full Planning Consent has been granted, it will be necessary to apply for a Natural England licence to close down the badger setts. Badger sett closures are generally only licensed for the period between 1st July and 30th November to avoid the breeding season and it is recommended that the artificial sett is constructed at least six months prior to commencing the sett closures.

4.2.10. On receipt of the Natural England badger exclusion licence the ecologist will fit one-way gates to all sett entrances and mesh will be laid around those gates to prevent the badgers digging around those gates. The one way exclusion gates will be monitored every three days until twenty-one days have elapsed without any movement of badger through those gates.

4.2.11. Once the ecologist is satisfied that the exclusion is complete and there are no badgers remaining in the natural setts, these can be carefully excavated and destroyed under the direct supervision of the ecologist.

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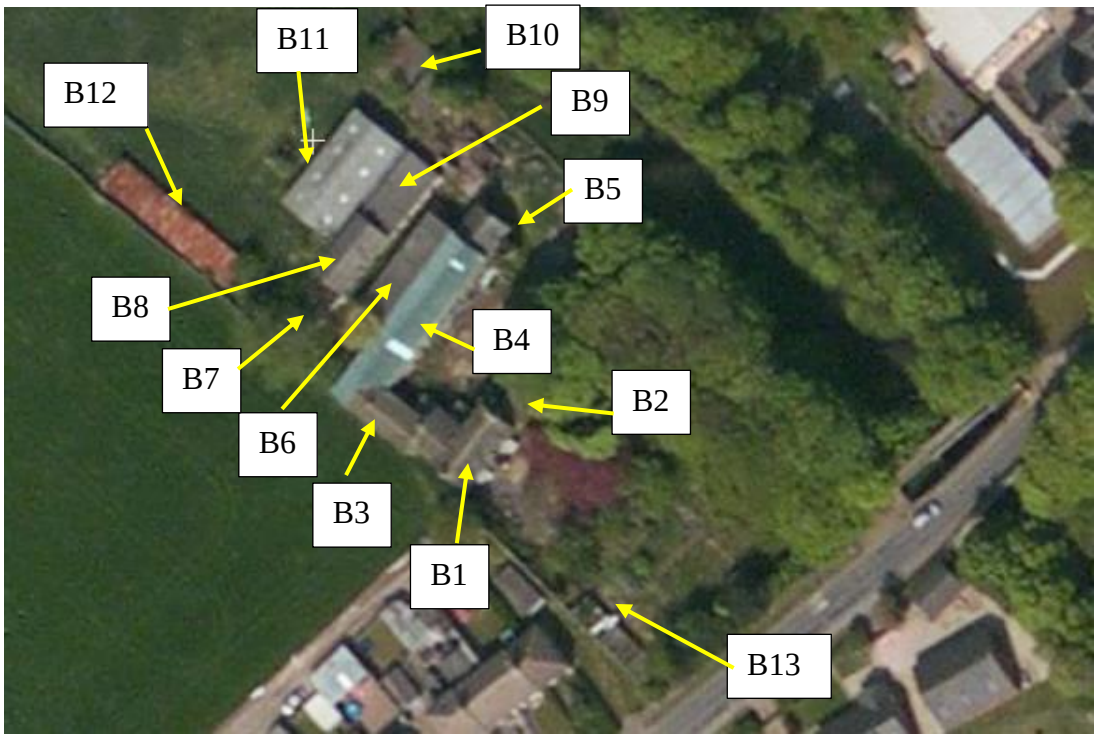
5. BAT MITIGATION STRATEGY.

5.1. BACKGROUND SURVEY RESULTS.

A visual inspection and assessment was carried out on all of the farm buildings that may be affected by the proposed works. Each building has been given a label on the aerial photograph below and each building is reported against that reference number.



5.1.1. B1 - The Farmhouse.

5.1.1.1. The farmhouse is a two storey high stone “L” shaped building with stone covered pitched roofs. There is a small, single storey shed extension on the end of the building with the brick boundary wall beyond.

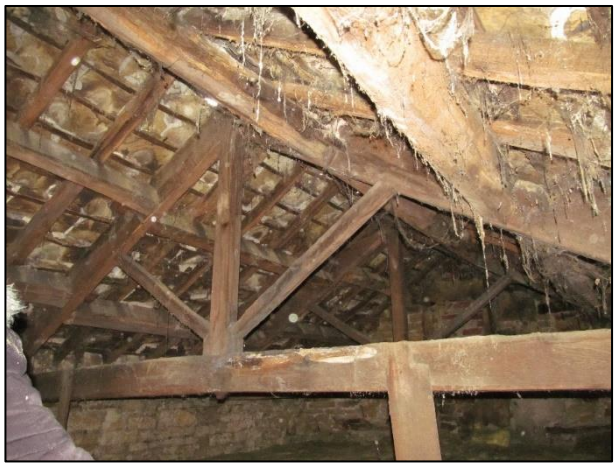
5.1.1.2. On the northwest side of the building there is the other leg of the “L”. This side of the farmhouse has rendered walls. The lean-to, single storey porch on the back of the building is derelict and the roof has collapsed in.

5.1.1.3. The pitched roofs of the building are supported on a heavy king post timber support frame covered with stone slates with no felt lining. There are gaps between the stone slates and there are gaps between the roof slates and the walls around the eaves.

5.1.1.4. The building has been vandalised and most of the windows and doors are missing or broken.

5.1.1.5. There is a cellar under the building with a stone floor and walls. The cellar is well sealed.

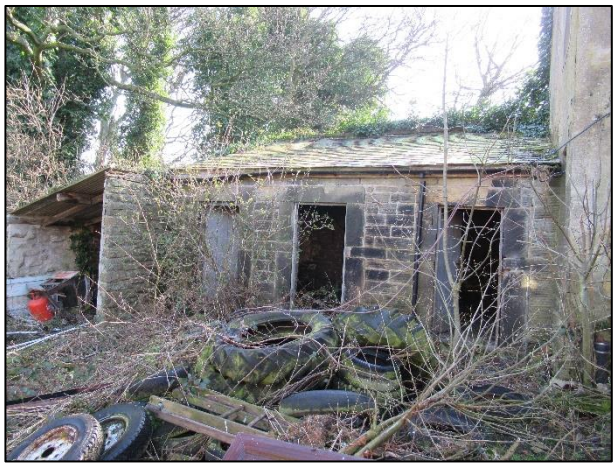
5.1.1.6. No bat field signs were found within the loft space and the entire area was covered in dense cobwebs. This building is assessed to have a **low** potential for roosting bats.



5.1.2. B2 - Farmhouse Extension and Log Shed.

5.1.2.1. On the north-eastern end of the house there is a separate stone building largely covered with dense ivy. From this side all that can be seen is a tall stone wall with a door in it. Inside this door there is a small, single storey, lean-to that is within a larger, lean-to, log shed.

5.1.2.2. Looking from the back side, this is a taller stone lean-to with a single sloping slate roof. There are three doors in the back wall, one leads to the main log shed with the lower building inside while the other doors lead into what appear to be small storage sheds or old toilets. There is also a further single storey, open shed on the end of this that is completely covered in dense ivy at the back.



5.1.2.3. The photograph below looks into the log shed and shows the low, lean-to building previously accessed from the other side of the building. The walls are all pointed and sealed and there is a felt lining under the roof slates. There are gaps between the tops of the walls and the slates that provide some opportunity for roosting bats, but no bat field signs were found. This building is assessed to have a **low** potential for roosting bats.

5.1.3. B3 - Farm Cottage

5.1.3.1. At the top end of the yard behind the main farmhouse there is a further stone-built farm cottage with a pitched roof covered with stone roof slates and with a small, lean-to building in front.

5.1.3.2. The external stone walls of the main building are well pointed and in good condition although there appear to be gaps around the eaves that bats could access. The lean to has been vandalised and part of the external stonework has been removed leaving gaps in what is left of the wall.

5.1.3.3. The building has been vandalised and most of the windows and doors are missing or broken.

5.1.3.4. This building is in poor condition with gaping holes in the roof, which limited safe access inside. However, it could be seen that there is a loft space with large areas of the first floor ceiling missing showing that there is no lining under the tiles.
3.6.1.3.5. This building is assessed to have a **low** potential for roosting bats.

5.1.4. B4 – Farm Cottages.

5.1.4.1. Down the north-eastern side of this yard there is a long stone building. This will originally have been a combination of farm workers cottages with arched barn access between that will have been used for access by coaches and/or farm carts. These were all converted to farm workers cottages at some point in time


5.1.4.2. The stone of the walls is generally in good condition with no open joints or gaps. However, the window and door frames are rotten, and some are completely missing allowing access for bats and birds into the buildings.

5.1.4.3. At some point in the past, a corrugated tin roof has been built to cover the entire building. This is mainly in place with a missing section of corrugated sheet on the front of the building.

5.1.4.4. Some of the window and door frames on the back side of this building have been blocked with breeze block walls on the outside of the window and door frames.

5.1.4.5. Access inside these buildings was limited as they were full of accumulated junk and debris from fallen ceilings and it was not possible to access any of the loft spaces. However, the photograph below looks up from the ground floor of one of the buildings and shows the blue underside of the corrugated tin roof with the remains of a slate lathed ceiling also visible.

5.1.4.6. The southwest two cottages have a cellar and access was possible to the end cellar. The cellar is stone with a stone arched ceiling. There was a window at one end with small holes due to missing glass panes.

5.1.4.7. It was not possible to safely access this building to carry out a comprehensive survey. However, the building is in a poor condition and with the corrugated tin roof is assessed to have **low** potential for crevice dwelling bats only.

5.1.5. B5 – Small Cottage.

5.1.5.1. On the end of the long block of cottages there is another smaller cottage with stone walls and a pitched, slate covered roof.

5.1.5.2. The stonework of the walls is well pointed although on the front wall there is a crack and gaps in the pointing. There are gaps around the eaves of the building. However, this cottage was built after the adjacent block of cottages and the walls abut each other and this leaves gaps between the buildings.

5.1.5.3. The slates of the roof are generally all in place except around the eaves where there are missing and slipped slates.

5.1.5.4. Internally there is a small loft space, although it was unsafe to access the loft. The first floor ceiling was in poor condition with areas of plaster missing showing the lats behind the plaster board. However, it could not be seen if there was a lining under the roof slates.

5.1.5.5. This building is assessed to have a **moderate** potential for roosting bats.

5.1.6. B6 - Timber Lean-to Shelter.

5.1.6.1. Along the north-western side of B4 there is a timber lean-to shelter, as shown below.

5.1.6.2. This building provides no opportunities for roosting bats because the design is totally unsuitable.

5.1.7. B7 – Farm Building.

5.1.7.1. This building comprises two bays created by an existing stone wall on the north-western side and the southern side and adding a modern blockwork wall on the south and south-eastern sides and a single sloping roof covered with corrugated metal sheets.

5.1.7.2. It is within the end bay of this building that there was an animal hole in the floor with badger hairs and prints in the loose soil. It is not known whether this is part of the main sett, S1 or is a separate outlying sett, S2.

5.1.7.3. There are no holes in the walls of this building and the corrugated sheet roof is totally unsuitable for roosting bats.

5.1.7.4. This building is assessed to have no potential for roosting bats.

5.1.8. B8 – Farm Building.

5.1.8.1. This is a large stone building on the northern end of B7, with a pitched roof that has been replaced with corrugated sheets at some point in time.

5.1.8.2. Externally the stone walls appear to be in good condition although there are occasional voids that provide opportunities for bats to enter the external walls.

5.1.8.3. The building is open with doors and windows missing, providing access inside the building.

5.1.8.4. At the southern end, the building is open to the underside of the roof as shown above. At the northern end of the building there is an internal ceiling over the ground floor with a separated loft space upon accessible from the southern end room, as shown below.


5.1.8.5. No bats or bat field signs were identified inside or outside of the building, but the building was assessed to have **low** potential for roosting bats.

5.1.9. B9 Modern Farm Building.

5.1.9.1. B9 is a relatively new building on the northern end of B8 constructed with concrete and breeze block walls and with a single sloping roof covered with corrugated sheets.

5.1.9.2. This building is assessed as unsuitable for roosting bats and no bats or bat field signs were identified.

5.1.10. B10 - Pig Sties.

5.1.10.1. Two rows of single skin, brick, pig sties, completely open with no doors or windows and with a single sloping corrugated sheet roof.

5.1.10.2. Photograph showing the open nature of the inside of the pig sties. These buildings are totally unsuitable for roosting bats.

5.1.11. B11 – New Field Barn.

This is a modern Dutch style of barn. It has a metal frame with a corrugated sheet roof. The lower walls are block walls with timber panelling above. The building is totally unsuitable for roosting bats.


5.1.12. B12 – Field Shelter.

This is a series of derelict timber and corrugated sheet field shelters in the field at the western end of the site. The buildings are totally unsuitable for roosting bats but do contain Badger Sett S1 and provide opportunities for nesting birds.

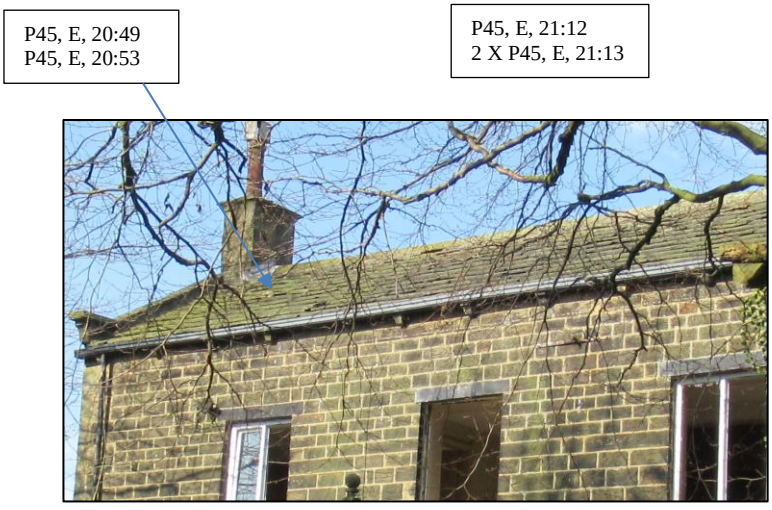

5.1.13. B13 – Greenhouses.

This is a row of derelict greenhouses against the southern boundary wall in the front garden of the house. These are totally unsuitable for roosting bats but provide opportunities for nesting birds.

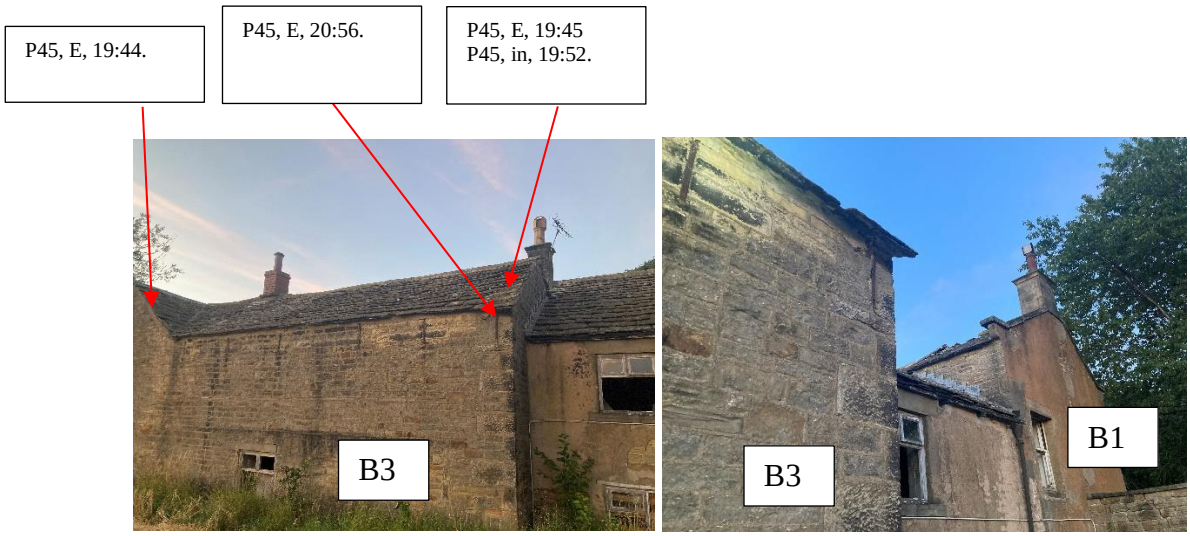
5.1.14. The following is the summary of the results from the dusk emergence survey carried out in August 2022.

5.1.14.1. A reasonable level of Common Pipistrelle foraging activity was identified round the site with some bats approaching from the northwest to forage between the buildings. Eight Common Pipistrelles were seen to emerge from the south-western aspect of the house. One Noctule passed overhead.

5.1.14.2. The photograph below looks at the southern aspect of the main house, B1 from where five Common Pipistrelles emerged.

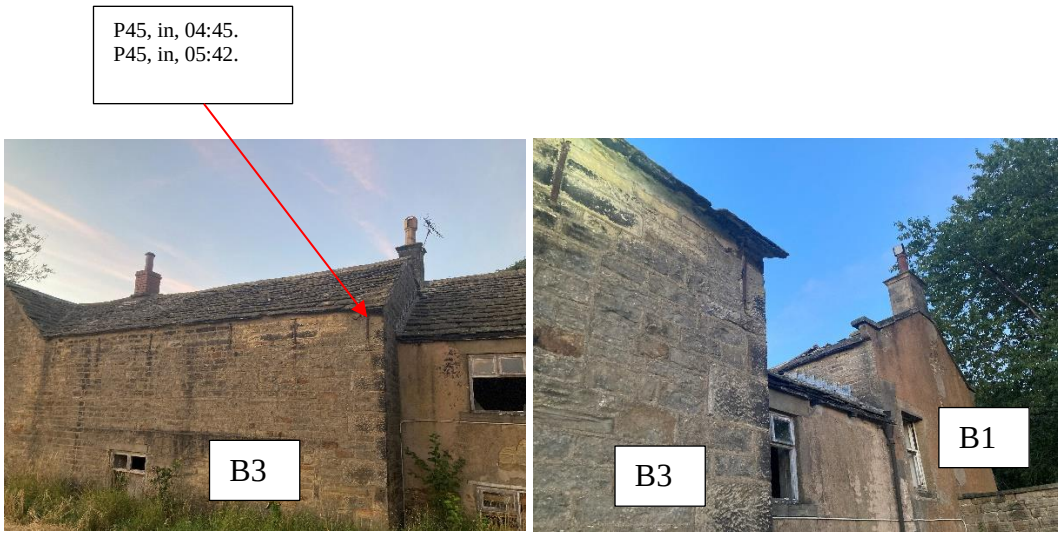


5.1.14.3. The following show the western aspect of the House and adjoining buildings from where four Common Pipistrelles emerged.



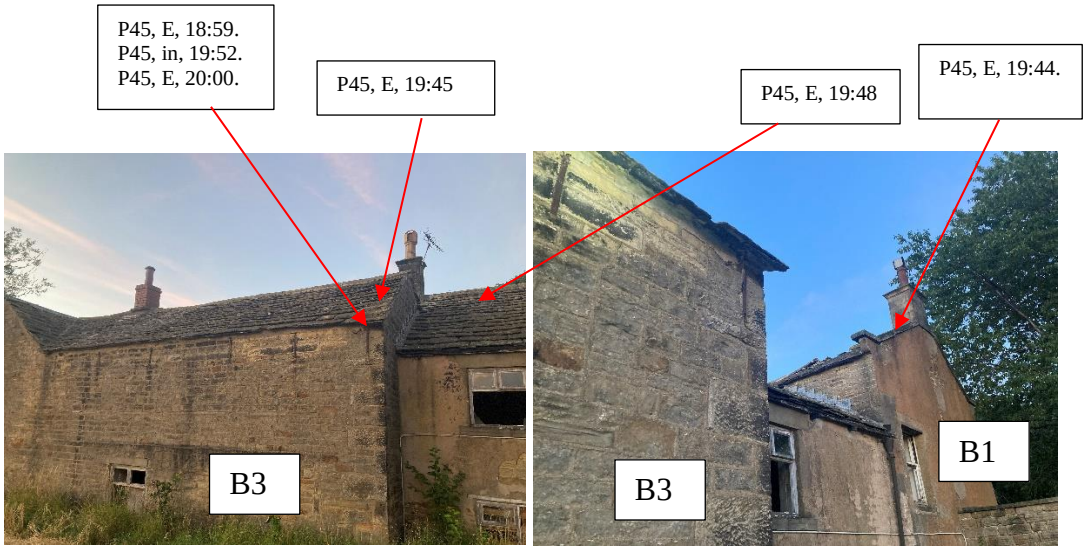
5.1.15.1. The following is the summary of the results from the dawn survey carried out in August 2022.

5.1.15.2. A fairly low level of Common Pipistrelle foraging activity was identified round the site. Two Common Pipistrelles were seen to roost in the western eaves of the house and two under the timber lean-to, B6.



5.1.16. The following is the summary of the results from the dusk emergence survey carried out in September 2022.

5.1.16.1. A low level of bat activity was observed over the site. The main area of activity was along the western side of the site facing the adjacent field and this is where bats were seen to emerge and to enter roosts. The photographs below show the western sides of buildings B1 and B3 and where the bats emerged (E) and entered (in). Five Common Pipistrelles emerged and one returned into a roost.



5.2. BAT MITIGATION.

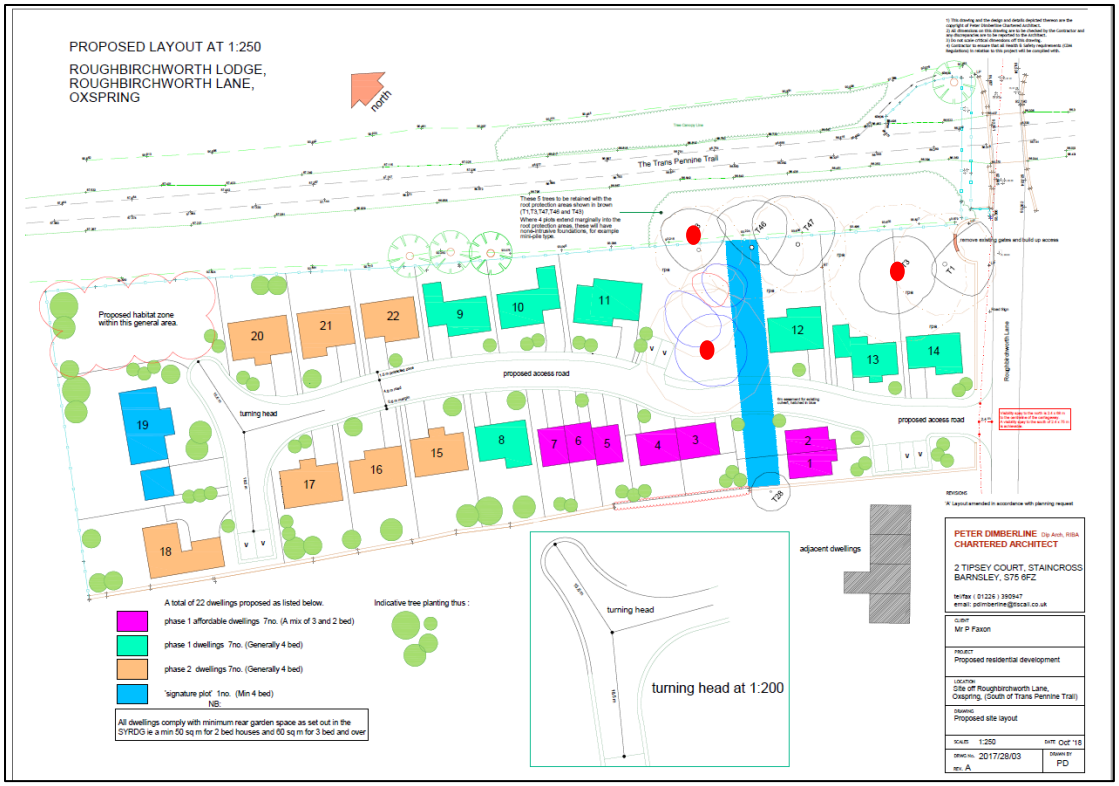
5.2.1. Before any works are undertaken on any of the buildings, three bat boxes will be erected on retained trees around the site.

5.2.2. The bat boxes will be Miramare Woodstone bat boxes as shown below or equivalent.

CJ-914490119

Miramare Woodstone Bat Box

5.2.3. The locations for the three bat boxes will be as shown below by the red circles. Each box will be securely fastened to the main trunk of each tree at least 5m up the tree.



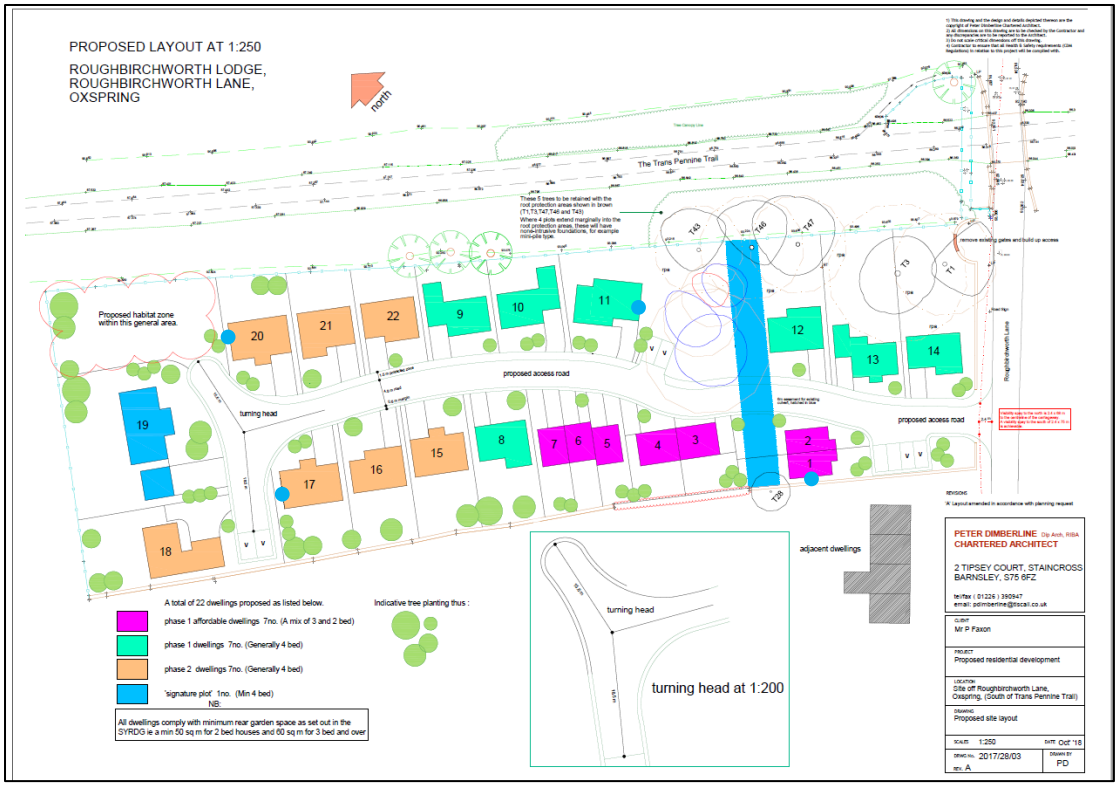
5.2.4. On receipt of planning consent, a bat licence application will be prepared and submitted to Natural England for approval. No works can be undertaken on Buildings B1, B3, B4 and B6 until that licence has been granted. Works can commence on the other buildings before the licence has been received.

5.2.5. The licence will specify the times at which works can commence on the buildings but this will be between October and March when bats are expected to have moved to their hibernation roosts.

5.2.6. Initial works to demolish Buildings B1, B3, B4 and B6 will be undertaken under the direct supervision of the ecologist who will be present directly on site to ensure no bats are harmed. Any bats found will be carefully relocated by the ecologist to the three bat boxes provided for the purpose.

5.2.7. Once the ecologist is satisfied no bats remain in the buildings, they will release the buildings for demolition to continue.

5.2.8. During the construction of the new dwellings on the site, an additional four integrated bat bricks will be built into gable end walls of four plots, as shown by the blue circles on the site plan below.



5.2.9. These will be Habibat boxes as shown below or equivalent colour matched to the brick or stone finish of the wall and will be installed high in the gable end walls of the houses.

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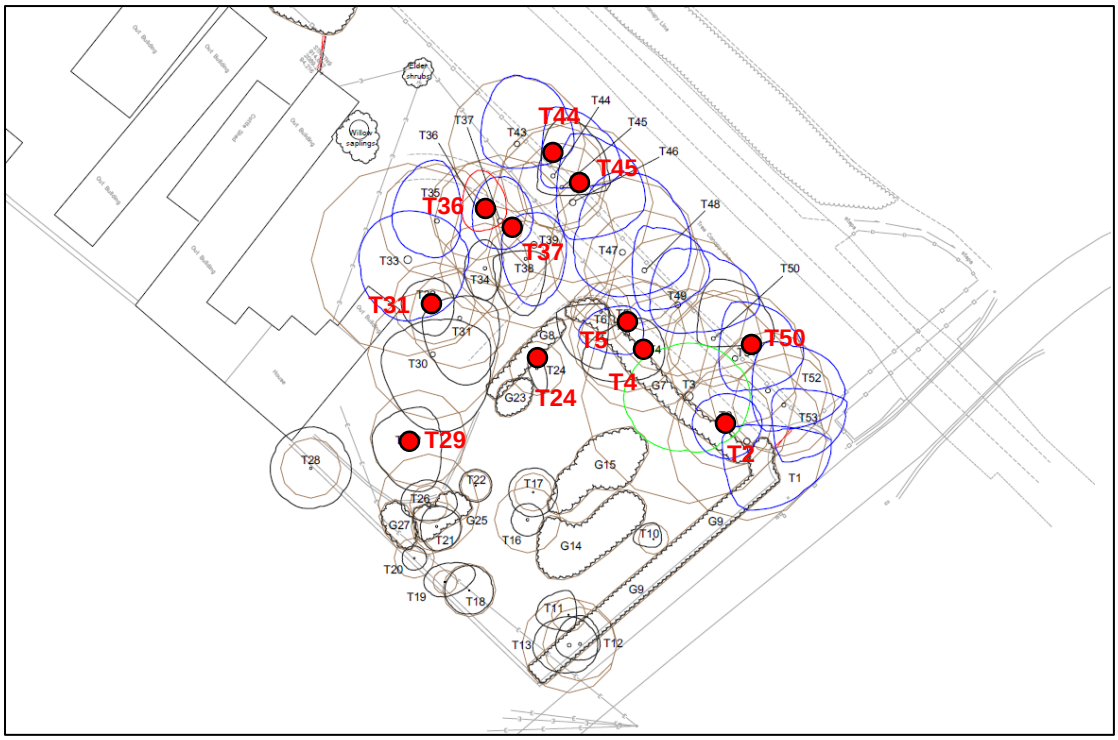
6. BATS IN TREES.

6.1. Background Information.

6.1.1. An aerial assessment of several of the trees on site was carried out by two licenced surveyors trained in tree climbing on 15th April 2019 and again on 18th August 2022. The surveys covered eleven trees that had been previously identified to provide potential roosting opportunities for bats.

6.1.2. The plan below shows the locations of the trees covered by both surveys. The references used for the trees are in line with the tree report prepared for the site.



6.1.3. T2 is a semi mature, horse chestnut, located towards the eastern corner of the site. The tree was assessed during the surveys and no Potential Roost Features (PRF) where identified. The tree was therefore assessed as providing a negligible potential to support roosting bats.

6.1.4. T4 is a mature sycamore located on the access road to the east of the surveyed area. The tree was assessed during the surveys and one PRF was identified.

6.1.4.1. PRF 1 was identified as a breakout on the small branch approximately 4m up the main trunk. The PRF was inspected during both surveys and no bats or other bat field signs were identified. Overall, the tree was identified to provide a low potential to support roosting bats.

6.1.4.2. The tree was identified to form part of a large rookery with active nests identified high in the canopy of the tree.

6.1.5. T5 is a mature beech tree located along the road to the east of the surveyed area immediately adjacent to T4. One PRF was identified around the tree during both surveys.

6.1.5.1. PRF 1 was identified as a split branch and area of rot located 3-4m up the main trunk. The PRF was inspected, and no bats or other bat field signs were identified during either survey. Overall, the tree was assessed as providing a negligible potential to support roosting bats.

6.1.6. T24 is a semi mature laburnum located at the side of the access road. One PRF was identified around the tree during the surveys.

6.1.6.1. PRF1 was identified as a rotten area in the top of the trunk, approximately 1.5m above the ground. The rotten area extended into the trunk with fresh nesting material in the bottom of the void, assessed as being an old wren's nest.

6.1.6.2. Overall, the tree was assessed as providing a negligible potential for roosting bats.

6.1.7. T29 is a mature ash tree located in the centre of the existing driveway at the eastern end of the site. Three PRF were identified around the tree during the surveys.

6.1.7.1. PRF1 was identified as a large knot holes located 3m up the main trunk of the tree. The void was approximately 300mm deep leading straight into the trunk of the tree. No bats or other bat field signs were identified within the PRF during either survey.

6.1.7.2. PRF2 was identified as a breakout in the top of the trunk. The void was identified to be approximately 200mm long, 50mm wide and 50mm deep. No bats or other bat field signs were identified within the PRF during either survey.

6.1.7.3. PRF3 was identified to be a large area of rot located 2.5m up the main trunk. The rot links two knot holes on either side of the tree creating a large void. No bats or other bat field signs were identified within the PRF during either survey.

6.1.7.4. Overall, the tree was assessed to provide a low potential to support roosting bats although no bat field signs were identified during this survey.

6.1.8. T31 is a semi mature sycamore tree located adjacent to the existing buildings at the eastern end of the site. A thorough climbing survey of the tree was not possible during either survey due to the dense ivy growing on the entirety of the tree.

6.1.9. T36 is a semi mature sycamore tree located adjacent to the access road at the eastern end of the site. One PRF was identified around the tree during the surveys.

6.1.9.1. PRF1 was identified as an extensive area of rot extending throughout the entire trunk of the tree. Openings were identified at ground level and at the top of the trunk although a thorough inspection of the void was not possible during this survey due to the poor state of the tree limiting climbed access. Overall, the tree was identified as providing a low potential to support roosting bats.

6.1.10. T37 is a semi mature sycamore located adjacent to the access road to the east of the site next to T36. One PRF was identified around the tree during the surveys.

6.1.10.1. PRF1 was identified as a knot/woodpecker hole located in a branch in the canopy of the tree. The PRF was approximately 75mm in diameter and extended 100mm into the branch with fresh tooth marks around the opening, thought to be squirrel activity. No bats or bat field signs were identified within the PRF during either survey of the site.

6.1.10.2. Overall, the tree was assessed as providing a low potential to support roosting bats.

6.1.11. T44 is a semi mature sycamore tree located adjacent to the access track at the eastern end of the site. A thorough climbing survey of the tree was not possible during either survey due to the dense ivy growing on the entire tree.

6.1.12. T45 is a semi mature sycamore tree located adjacent to the access track, next to T44, at the eastern end of the site. A thorough climbing survey of the tree was not possible during either survey due to the dense ivy growing on the entire tree.

6.1.13. T50 is a semi mature sycamore tree located on the access track in the northeast corner of the site. One PRF was identified in the tree during both surveys.

6.1.13.1. PRF1 was identified to be a broken branch located 4m up the trunk of the tree. The branch displayed no significant void, and no bats or bat field signs were identified. Overall, the tree was assessed to provide a negligible potential to support roosting bats.

6.1.14. During the dusk emergence and dawn surveys of the buildings on site, no bat activity has been identified around any of the above trees to indicate roosting bats.

6.1.15. The following table lists the trees surveyed and the potential for roosting bats in line with the Bat Conservation Trust Good Practice Guidelines.

Tree Reference No	Potential for Roosting Bats.
T2	Negligible
T4	Low
T5	Negligible
T24	Negligible
T29	Low
T31	Low
T36	Low
T37	Low
T44	Low
T45	Low
T50	Negligible

6.2. Mitigation for Bats in Trees.

All trees that have been assessed to have a low potential for roosting bats will be sectionally felled and all timber left on the ground for a period of 24 hours before chipping or disposal to enable any bats present to escape without harm.

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7. BIRD MITIGATION STRATEGY.

7.1. Background Information.

7.1.1. The vegetation on site and the buildings on the site are ideal habitat for nesting birds between March and September, during the nesting season.

7.1.2. Nests were found in Building 4 with one see on a first floor window cill from outside. Another nest was found inside a ground floor room and this nest appears to be these years.

7.1.3. Bird nests were found in Building 5 with two swallow cups on a beam in the first floor room.

7.1.4. Due to the unsafe nature of a number of the buildings many nests could have been missed as most buildings have potential for nesting birds. Abundant bird activity was identified across the site.

7.1.5. There is an old and long-standing rookery in the mature trees at the eastern side of the site. The majority of these trees will be retained.

7.1.6. It has been suggested that the field at the north western end of the site may be suitable winter-feeding habitat for Golden Plover. There are only seven records of golden plover in the data search results and all are on higher ground around 2km to the southwest of the site and dated 2013. This field is limited in size and has recently been used for grazing horses, which would deter plovers from feeding on the site. Additionally, there is an abundance of other suitable habitat in the surrounding area.

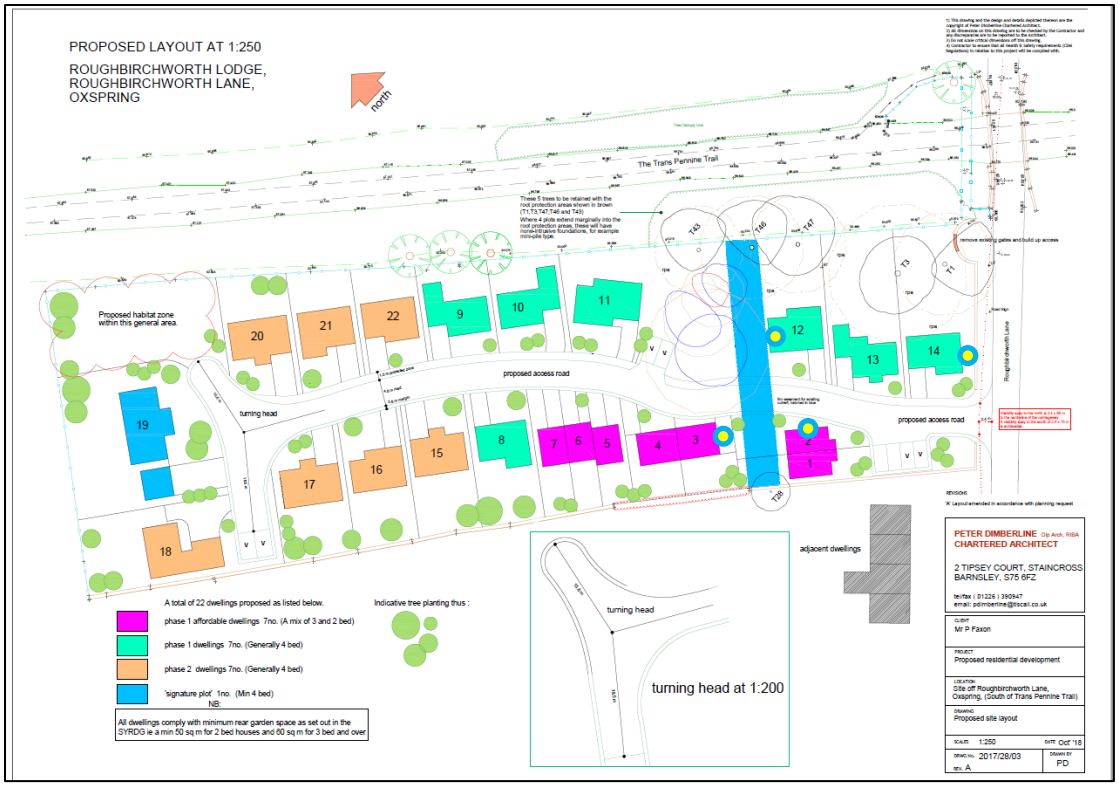
7.2. Bird Mitigation.

7.2.1. As far as is possible, all vegetation clearance and all demolition of buildings will be carried out outside the nesting bird season, which extends from March to September each year.

7.2.2. Any vegetation clearance works or demolition during the nesting season will be preceded by a nesting bird survey carried out by a suitable experienced ecologist no more than three days before works commence and any nests found will be left disturbed until the young have fledged.

7.2.3. Four integrated swift nest boxes will be installed high in gable end walls of the new dwellings on the site and will be as shown below or equivalent.

7.2.4. The site plan below shows the locations marked with a blue and yellow circle


PROPOSED LAYOUT AT 1:250
ROUGHBIRCHWORTH LODGE,
ROUGHBIRCHWORTH LANE,
OXSPRING
north
The Trans Pennine Trail
These 5 trees to be retained with the root protection areas shown in brown (T1,T3,T47,T46 and T43)
Where 4 plots extend marginally into the root protection areas, these will have none-intrusive foundations, for example minipile type.
Remove existing gates and build up access
Proposed habitat zone within this general area
proposed access road
turning head
adjacent dwellings
turning head at 1:200
A total of 22 dwellings proposed as listed below.
phase 1 affordable dwellings 7no. (A mix of 3 and 2 bed)
phase 1 dwellings 7no. (Generally 4 bed)
phase 2 dwellings 7no. (Generally 4 bed)
'signature plot' 1no. (Min 4 bed)
NB.
All dwellings comply with minimum rear garden space as set out in the SYRDG ie a min 50 sq m for 2 bed houses and 60 sq m for 3 bed and over
Indicative tree planting thus :
PETER DIMBERLINE Dip Arch, RIBA
CHARTERED ARCHITECT
2 TIPSEY COURT, STAINCROSS
BARNSLEY, S75 6FZ
tel/fax (01226) 390947
email: pdimberline@tiscali.co.uk
Mr P Paxon
Proposed residential development
Site off Roughbirchworth Lane,
Oxspring, (South of Trans Pennine Trail)
Proposed site layout
1:250
Oct '18
2017/28/03
A
PD

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8. HIMALAYAN BALSAM.

8.1. Background Information.

8.1.1. During the original survey, small seedlings were identified **(T7)** between B6 and B7 which are likely Himalayan Balsam. However, the seedlings were very small and identification could not be definite.

8.1.2. At the request of the local Authority, a further Himalayan balsam survey was undertaken at a time when the plant was in bloom. The plant was found along the access track through the farm in the areas marked in blue on the following plan.

8.1.3. The following photographs below show the areas shaded in yellow above and the Himalayan balsam growing in those areas.


8.1.4. The Himalayan balsam is localised along the access track and does not occur away from that track or in the field beyond the farm.

8.2. Himalayan Balsam Mitigation.

8.2.1. Himalayan balsam is an annual plant that propagates through seeds. Therefore once the plants seed in late summer and early autumn they die back and new plants grow the following year from the seeds scattered the previous year.

8.2.2. Himalayan balsam is therefore best controlled by preventing the plants from seeding by cutting back or pulling the plants before they can produce seeds.

8.2.3. Commencing in early June, all Himalayan balsam plants will be pulled or cut back. The plants can be left on the ground to die back or disposed of in piles as once pulled they will not produce seed.

8.2.4. Repeat visits should be carried out at two weekly intervals throughout the season and until no further flowering plants remain.

8.2.5. If any plants are allowed to produce seed, the whole exercise will be aborted until the next flowering season.

****

Prepared by:	
Derek Whitcher, BSc, MCIEEM, MCMI	Date: 20th September 2022.

Checked by:	
Ruth Georgiou. BSc, MCIEEM.	Date: 22nd September 2022.

Appendix I. BADGER INFORMATION.

Ecology

Badgers are territorial animals who live in social groups called clans. The territory of these clans can vary in size from 0.2km^2 to 1.5 km^2 with anywhere between two and twenty Badgers present. In areas where two clans meet territorial boundaries become well-defined, marked by a series of dung pits called latrines. In areas with relatively low Badger populations there will be less competition for territory and the number of territorial markings will be low or even non-existent.

Badgers use paths around their territory repeatedly, following a scent trail from previous use; thus, Badger paths become well worn. These paths are important to the Badgers and obstruction to these paths will interfere with the Badger's movement around their territory.

Badger setts are any structure or place which displays signs of current or seasonal use by a Badger. Within a Badger clan territory there can be several Badger setts which are categorised in the following ways:

- ***Main Sett.*** *There will normally be one main sett in a territory. This will generally be the largest sett in the territory, typically with five or more entrances, will be permanently occupied throughout the year and used as the breeding sett.*
- ***Outlying Sett.*** *These are the smallest setts with generally only one or two entrances. They are intermittently occupied and there can be any number in a territory.*
- ***Annex Sett.*** *A sett of intermediate size, located close to the main sett and connected by well-defined paths. These are occupied for prolonged periods and may be used as a second breeding sett if there are two breeding sows in the clan.*
- ***Subsidiary Sett.*** *A sett of intermediate size, similar to an annex sett but located at some distance from the main sett and not connected to the main sett by defined paths.*

Badgers can mate at any time of year but delayed implantation controls the time of birth. Most cubs are born between January and March, but they can be born at any

time between December and June. An average of two to three Badger cubs are born to each sow and will initially be totally dependent on their mother. Cubs do not appear above ground until during April or May when they are 8 – 10 weeks old and are not fully weaned until at least June of each year.

Badgers are omnivorous but their preferred food source is worms and insects. Worms are most abundant in well-grazed pastureland while mixed woodland is a good source of insects and grubs. Badgers have a soft and supple nose with which they snuffle into the ground to find insects. When they do this, they leave distinct round holes known as snuffle holes or grubbings. Badgers easily find worms on the surface of well-grazed pastureland and often leave no visible indications of this foraging.

Surveys

Walkover surveys can be conducted to identify the presence of Badgers within an area. This will identify the presence of any setts, dung pits, paths or foraging activity.

Bait marking techniques can be used to survey Badger territories. This involves feeding Badgers at each sett pellets of different colours over a period of at least two weeks. The colour of pellet found in dung pits and territorial latrines shows what areas each clan of Badgers is occupying.

Legislation

Badgers are protected under Schedule 6 of the Wildlife and Countryside Act (1981) and the Protection of Badgers Act (1992).

This makes it an offence to take, kill or injure a Badger, cruelly ill-treat a badger, use Badger tongs or firearms in the killing or taking (or attempt) of a Badger. It is also an offence to damage, destroy, obstruct access to, or any entrance of, a Badger sett, to cause a dog to enter a Badger sett or disturb a Badger while it is occupying a sett.

Appendix II. BAT INFORMATION.

Ecology

There are currently 18 species of bat residing in Britain, 17 of which of which are known to breed here. They are extremely difficult to identify in the hand and even more so in flight.

All appear to be diminishing in numbers, probably due to habitat change and shortage of food, caused by pesticides, as insects are their sole diet.

As their diet consists solely of insects, bats hibernate during the winter when their food source is at its most scarce. They will spend the winter in hollow trees, caves, mines and the roofs of buildings.

Certain species, particularly the pipistrelle (the commonest and most widespread British bat) can quickly adapt to man-made structures and will readily use these to roost and to rear their young.

Surveys

During walkover surveys, bat roosts can be identified by looking for:

- Suitable holes, cracks and crevices within any building, tree or other structure.
- Bat droppings along walls, window sills, or on the ground.
- Prey remains, such as insect wings.

Further investigations can be made using endoscopes, by carrying out aerial inspections of trees or by conducting bat activity surveys during dusk and dawn over summer months.

Legislation

Bats are protected under Appendix II and III of the Bern Convention (1982), Schedule 5 and 6 of the Wildlife and Countryside Act (1981), Annex IV of the Habitats Directive (some species under Annex II), Annex II of the Conservation of Habitats and Species Regulations (2010) and EUROBATS agreement. Numerous species are also listed under section 41 of the Natural Environment and Rural Communities Act (2006) making them species of principal importance.

All bats and their roosts are therefore protected in the UK. This makes it an offence to kill, injure or take any bat, to interfere with any place used for shelter or protection, or to intentionally disturb any animal occupying such a place.

The UK has designated maternity and hibernacula areas as Special Areas of Conservation (SAC's) under the Habitats Directive. Implementation of the UK Biodiversity Action Plan also includes action for a number of bat species and the habitats which support them.

Where development proposals are likely to affect a bat roost site, a licence is required from Natural England.

Appendix III. NESTING BIRD INFORMATION.

Ecology

The nesting season will vary according to the weather each year but generally commences in March, peaks during May and June and continues until September. It is also worth remembering that some birds nest in trees and scrub, but others are ground nesting or prefer man- made structures or buildings.

Surveys

Nesting bird surveys search for potential nest sites in vegetation, buildings etc. Potential nesting sites are observed over a suitable period of time for bird movements or calling male birds that would indicate the presence of a nest. The presence of a nest can be identified from the field signs without the necessity to see the nest itself, thereby avoiding any disturbance of the nests. The best way to avoid this issue is to plan for vegetation clearance to be carried out outside the bird-nesting season.

Legislation

Nesting birds are protected under The Wildlife and Countryside Act 1981.

Part 1. -(1) Of the Act states that: - If any person intentionally: - kills, injures or takes any wild bird; takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or takes or destroys an egg of any wild bird, he shall be guilty of an offence.

Part 1. -(5) of the Act states that: - If any person intentionally: - disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on, or near a nest containing eggs or young; or disturbs young of such a bird, he shall be guilty of an offence and liable to a special penalty.

The Countryside and Rights of Way Act 2000 amends the above by inserting after “intentionally” the words “or recklessly”.

Appendix IV. INVASIVE PLANT SPECIES INFORMATION.

Ecology

The Government has acknowledged the problems that can be caused by non-native invasive species. In 2008 the Government launched "The Invasive Non-Native Species Framework Strategy for Great Britain". The strategy provides a framework for a more co-ordinated approach to invasive species management. It seeks to create a stronger sense of shared responsibility across government, key organisations, land managers and the public.

The Non-Native Species Secretariat has been established to oversee the implementation of the strategy. Details of the secretariat including risk assessments and action plans for some species are available at www.nonnativespecies.org.

In general, there are four basic methods of controlling weeds: mechanical, chemical, natural and environmental.

- ***Mechanical control*** *includes cultivation, hoeing, pulling, cutting, raking, dredging or other methods to uproot or cut weeds.*
  Where this method is used all plant material must be considered "controlled waste" and must be disposed of properly.
- ***Chemical control*** *uses approved herbicides.*
- ***Natural control*** *uses pests and diseases of the target weed to weaken it and prevent it from becoming a nuisance.*
- ***Environmental control*** *works by altering the environment to make it less suitable for weed growth, for example by increasing or decreasing water velocity.*

Surveys

A site will be searched for invasive plant species growing on site, from mature plants to new shoots. A site will also be searched for dead stems indicating that plants that may have seasonally died back are present.

Legislation

Invasive species listed under Schedule 9 are prohibited from release into the wild. Schedule 9, Section 14(2) prohibits 'planting' or 'causing to grow' in the wild of any plant listed in Part 2 of Schedule 9.

The following is a list of all the species of plant listed under Schedule 9 of The Wildlife and Countryside Act 1981.

Common Name	**Scientific Name**	**England & Wales**	**Scotland**
Alexanders, Perfoliate	*Smyrnium perfoliatum*	✓	
Algae, Red	*Grateloupia luxurians*	✓	
Archangel, Variegated Yellow	*Lamiastrum galeobdolon subsp. Argentatum*	✓	
Azalea, Yellow	*Rhododendron luteum*	✓	
Balsam, Himalayan	*Impatiens glandulifera*	✓	
Cotoneaster	*Cotoneaster horizontalis*	✓	
Cotoneaster, Entire Leaved	*Cotoneaster integrifolius*	✓	
Cotoneaster, Himalayan	*Cotoneaster simonsii*	✓	
Cotoneaster, Hollyberry	*Cotoneaster bullatus*	✓	
Cotoneaster, Small Leaved	*Cotoneaster microphyllus*	✓	
Creeper, False Virginia	*Parthenocissus inserta*	✓	
Creeper, Virginia	*Parthenocissus quinquefolia*	✓	
Dewplant, Purple	*Disphyma crassifolium*	✓	
False-acacia	*Robinia pseudoacacia*		✓
Fanwort	*Cabomba caroliniana*	✓	✓
Fern, Water	*Azolla filiculoides*	✓	✓
Fig, Hottentot	*Carpobrotus edulis*	✓	✓
Garlic, Three-Cornered	*Allium triquetrum*	✓	
Hogweed, Giant	*Heracleum mantegazzianum*	✓	✓
Hyacinth, water	*Eichhornia crassipes*	✓	✓
Kelp, Giant	*Macrocystis angustifolia*	✓	✓
Kelp, Giant	*Macrocystis integrifolia*	✓	✓
Kelp, Giant	*Macrocystis laevis*	✓	✓
Kelp, Giant	*Macrocystis pyrifera*	✓	✓
Kelp, Japanese	*Laminaria japonica*	✓	✓

Knotweed, Giant	*Fallopia sachalinensis*	✓	
Knotweed, Hybrid	*Fallopia japonica x Fallopia sachalinensis*	✓	
Knotweed, Japanese	*Fallopia japonica*	✓	
Knotweed, Japanese	*Polygonum cuspidatum*		✓
Leek, Few-flowered	*Allium paradoxum*	✓	✓
Lettuce, water	*Pistia stratiotes*	✓	✓
Montbretia	*Crocosmia x crocosmiiflora*	✓	
Parrot's-feather	*Myriophyllum aquaticum*	✓	
Pennywort, Floating	*Hydrocotyle ranunculoides*	✓	
Potato, Duck	*Sagittaria latifolia*	✓	
Primrose, Floating Water	*Ludwigia peploides*	✓	
Primrose, Water	*Ludwigia grandiflora*	✓	
Rhododendron	*Rhododendron ponticum*	✓	
Rhubarb, Giant	*Gunnera tinctorial*	✓	
Rose, Japanese	*Rosa rugosa*	✓	
Salvinia, Giant	*Salvinia molesta*	✓	✓
Seafingers, Green	*Codium fragile*	✓	
Seafingers, Green	*Codium fragile tomentosoides*		✓
Seaweed, Californian Red	*Pikea californica*	✓	✓
Seaweed, Hooked Asparagus	*Asparagopsis armata*	✓	✓
Seaweed, Japanese	*Sargassum muticum*	✓	✓
Seaweeds, Laver (except native species)	*Porphyra sp. except -* *P. amethystea* *P. leucosticta* *P. linearis* *P. miniata* *P. purpurea* *P. umbilicalis*	✓	✓
Shallon	*Gaultheria shallon*		✓
Stonecrop, Australian swamp	*Crassula helmsii*	✓	✓
Wakame	*Undaria pinnatifida*	✓	✓
Waterweed, Curly	*Lagarosiphon major*	✓	✓
Waterweeds	*All species of the genus Elodea*	✓	

Toolbox Talk: Badgers

Whitcher Wildlife Ltd

Ecological Consultants

Identification.

Badgers are a nocturnal mammal that has a silvery grey back with distinct black and white stripes running from their shoulders to their nose. They are short stocky animals and can grow to approximately 80cm from head to tail.


Badgers are rarely seen during the day therefore the presence of badgers is usually identified from field signs such as setts, prints, paths or dung pits.

Badger prints are very distinctive and will often be found in soft areas of mud. The print has five toes which are almost in a straight line. Where the ground is very soft the print will display claws, but these may not always be visible.

Badgers are animals of habit and therefore they follow set paths throughout their territory leaving the paths very well worn in some areas. Well-worn badger paths may look like public footpaths when very well worn although they may lead under dense areas of vegetation and fences.


Another common badger field sign is the presence of shallow holes scraped in the ground containing dung. These are known as dung pits or, where found in large numbers, as a territorial marking, latrines.

Habitat.

Badgers live in a series of underground tunnels called a “sett”. A badger sett may be anything from a single entrance with a small spoil heap to an extensive area of entrances and large spoil heaps.


Badgers may also use existing features as setts such as culverts, caves, mines or any underground structure that will provide them with shelter.

Legislation.

Badgers and their setts are protected by the Protection of Badgers Act 1992. Under the Act it is illegal to:

- Wilfully kill, injure or take a badger or attempt to do so.
- Cruelly ill-treat a badger.
- Interfere with a sett by doing any of the following:
  - Damaging a badger sett or any part of it.
  - Destroying a badger sett.
  - Obstructing access to a badger sett.
  - Causing a dog to enter a sett.
  - Disturbing a badger while it is occupying a sett.

Penalties for offences under the Act are up to six months in prison and a fine of £5,000 for each offence.

Disturbance to a badger in a sett can be caused by working close to a sett.

If badgers or badger field signs are identified during works, stop all works and contact Whitcher Wildlife Ltd directly on 01226 753271 or at info@whitcher-wildlife.co.uk

Toolbox Talk: Bats

Whitcher Wildlife Ltd

Ecological Consultants

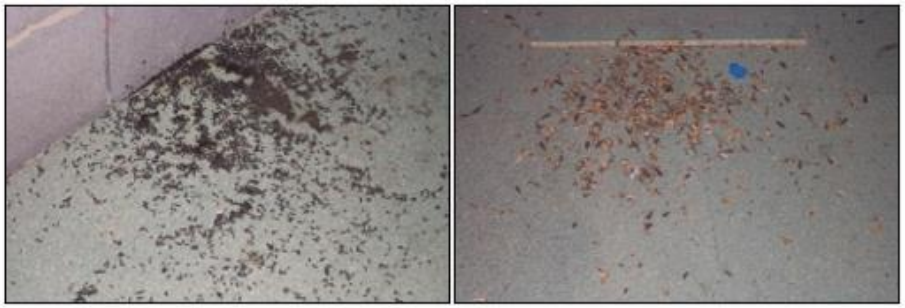
18 species of bat have been recorded in Britain, 17 of which are known to breed here.

Identification.

Some species can be extremely difficult to identify in the hand and even more so in flight.

Species such as the Brown Long Eared bat pictured above can be more easily identified in the hand. Whereas, the Common Pipistrelle and Soprano Pipistrelle are more difficult to identify.

Bats are more easily identified by field signs such as droppings or feeding remains.



Habitat.

Bats are highly specialised creatures and require a relatively narrow range of suitable conditions in order to sustain a viable population. Bats require an abundant supply of flying insect food in places where they can easily be caught and they need safe and reliable roosting sites, particularly during breeding and hibernation.

Bats are heavily dependent on buildings and trees for their roost sites and therefore extremely susceptible to disturbance from human activities. Development schemes can also isolate bat populations and sever roost sites from favoured feeding areas by removing hedgerows or other features used as commuting routes.

Bats are susceptible to disturbance and have been known to abandon roost sites after instances of disturbance. The effects of disturbance are more pronounced at different times of year. Serious disturbance during breeding can result in the breeding females being killed or the abandonment and subsequent starvation of dependant young. Repeated disturbance during winter hibernation can result in the death of adult animals from starvation.

The level of protection afforded to bats in the UK and European legislation reflects the fact that it is now generally accepted that bats have declined substantially, maybe by as much as 60%, over recent years. Most species are declining and vulnerable with all species being protected.

As their diet consists solely of insects, bats hibernate during the winter when their food source is at its most scarce. They will spend the winter in hollow trees, caves, mines and occasionally the roofs of buildings.

Certain species, particularly Pipistrelle, can quickly adapt to manmade structures and will readily use these to roost and to rear their young.

Legislation.

Bats and their roosts are fully protected at all times (whether the bats are currently present or not). This protection comes from the Wildlife & Countryside Act 1981 (updated by the Countryside Rights of Way Act 2000) and the Habitats Regulations 1994. Under this legislation it is an offence to intentionally or recklessly kill, injure, capture or disturb bats or to damage, destroy or obstruct access to any place used by bats for shelter or protection.

Under the Habitats Regulations, where bats may be affected by development proposals, a licence is required from Natural England. Natural England's published guidelines on the licence procedure indicate that if, on the basis of survey information and specialist knowledge of the species concerned, the proposed activity is reasonably likely to result in an offence then a licence is required. If, on the other hand the proposed activity is reasonably unlikely to result in an offence, then a licence is not required.

If bats or bat field signs are identified during works, stop all works and contact Whitcher Wildlife Ltd directly on 01226 753271 or at info@whitcher-wildlife.co.uk

Toolbox Talk: Bats in Trees

Whitcher Wildlife Ltd

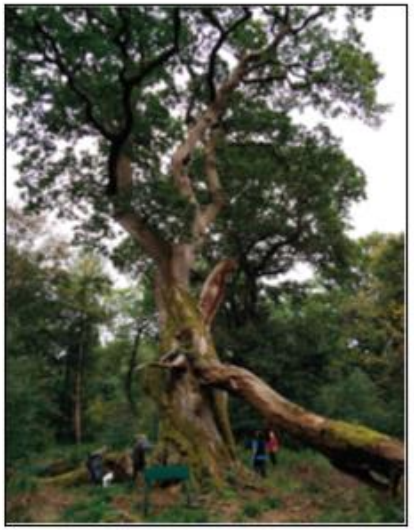
Ecological Consultants

18 species of bat have been recorded in Britain, 17 of which are known to breed here. All UK bat species have been found in and around trees or woodland habitats although the way that different species utilise trees varies with trees or woodland habitat being used for roosting, foraging and navigation.

This document concentrates on the use of trees as bat roosts.

Trees with Bat Roost Potential.

Typically it is thought that bats will only roost in large mature trees. However, all trees that display suitable PRF (Potential Roost Features). may be used by bats, despite the overall size of the tree.



In larger trees PRF may not be visible from ground level due to the foliage of the tree, the location of the PRF or due to the small size of the opening.

PRF (Potential Roost Features).

Bats will utilise an abundance of different features around a tree at different times of year including trunk hollows, knot holes, splits/cracks in branches and sheltered areas of flaking bark with different species typically utilising different features.

Any feature matchbox size and above should be considered suitable for use by bats with the preference being for PRF with a smaller entrance for safety.

Legislation.

Bats and their roosts are fully protected at all times (whether the bats are currently present or not). This protection comes from the Wildlife & Countryside Act 1981 (updated by the Countryside Rights of Way Act 2000) and the Habitats Regulations 1994. Under this legislation it is an offence to intentionally or recklessly kill, injure, capture or disturb bats or to damage, destroy or obstruct access to any place used by bats for shelter or protection.

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If works are required on trees that display suitable PRF further advice should be sought prior to the works commencing. For further advice contact Whitcher Wildlife Ltd directly on 01226 753271 or at info@whitcher-wildlife.co.uk

Toolbox Talk: Himalayan Balsam

Whitcher Wildlife Ltd

Ecological Consultants

Himalayan Balsam was introduced into the UK in the early 19th century as an ornamental garden plant. The plant has since become established in the wild growing in a wide range of habitats, predominantly damp habitats and along watercourses. Himalayan Balsam grows in dense stands and therefore along river banks it can increase the likelihood of flooding during periods of heavy rainfall and can leave the river banks bare and exposed to erosion during the winter.

Identification.

Himalayan Balsam grows to around 2m and has a hollow, brittle stem. The plant stem is green to red early in the season and turns pink to red during the summer.


The plant has leaves up to 15cm long which are finely serrated along the edges and may have a pink mid-rib. The flowers are trumpet shaped and pink.


Habitat and Spreading.

Himalayan Balsam grows in a range of habitats but prefers damp habitats and river corridors. The plant grows in dense stands that out-compete native species. Along river corridors the plant can increase the likelihood of flooding during periods of heavy rainfall and leaves the river banks bare and exposed to erosion during the winter.


Himalayan Balsam spreads solely by seeds, which are small and easily carried by wind or water. The seed heads are approximately 2.5cm long and explode on touch when ripe.

The best form of control of the plant is to prevent it from seeding by cutting back or pulling before it can seed.

Legislation.

Under section 14 and Part II of Schedule 9 of the Wildlife and Countryside Act 1981 it is an offence for it to be planted or otherwise caused to grow in the wild. This includes spreading the species by transferring polluted ground material from one area to the other.

If Himalayan balsam is identified during works, stop all works and contact Whitcher Wildlife Ltd directly on 01226 753271 or at info@whitcher-wildlife.co.uk