Whitcher Wildlife Ltd.
Ecological Consultants.

PARK VIEW, BRIERLEY.

OS REF: SE 417 111.

EXTENDED PHASE I HABITAT SURVEY.

Ref No:- **170355.**

Date:- **28th March 2017.**

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1. INTRODUCTION.

1.1. Plans are being drawn up for a residential development on a site off Park View, Brierley. The residential development includes fourteen residential dwellings with associated gardens and driveways. The proposed site layout has been provided within Appendix VIII.

1.2. Whitcher Wildlife Ltd has been commissioned to carry out an Extended Phase I Habitat Survey of the site to establish whether there are any issues that may affect the proposed works.

1.3. The site survey was carried out on 27th March 2017 and this report outlines the findings of that survey and makes appropriate recommendations.

1.4. Appendix I to II of this report provides additional information on specific species and is designed to assist the reader in understanding the contents of this report.

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2. SURVEY METHODOLOGY.

2.1. Prior to visiting the site the survey area was cross referenced to maps and aerial photographs to give a general idea of the habitats and potential issues within the area and to identify potential access and walking routes.

2.2. The survey area was walked where access was agreed and public rights of way were used where no access was agreed. All habitats within and immediately around the survey area were documented and the dominant species within that habitat listed in line with the JNCC Handbook for Phase 1 Habitat surveys.

2.3. The survey area and immediate surrounding area was thoroughly searched for evidence of badger (*Meles meles*) activity by looking for the following signs in line with Harris S, Cresswell P and Jefferies D (1989). *Surveying Badgers*. Mammal Society:-

* Badger setts.
* Badger latrines or dung pits.
* Badger snuffle holes and evidence of foraging.
* Badger paths.
* Badger prints in areas of soft mud.
* Badger hairs caught on fencing.

2.4. The survey area was searched for watercourses and where found all watercourses within the survey area and for approximately 50m in each direction were thoroughly searched for evidence of water vole (*Arvicola amphibius*) activity by looking for the following signs, in line with Rob Strachan, Tom Moorhouse and Merryl Gelling (2011). *Water Vole Handbook: Third Edition*:-

* Water vole burrows.
* Water vole faeces and latrines.
* Water vole feeding stations.
* Water vole runs.
* Water vole prints in areas of soft mud.
* Water vole lawns.
* Predator field signs.

2.5. The survey area was searched for watercourses and where found all watercourses within the survey area and for approximately 50m in each direction were thoroughly searched for evidence of otter (*Lutra lutra*) activity by looking for the following signs in line with the P Chanin (2003). *Monitoring the Otter* and *Conserving Natura 2000 Rivers: Monitoring Series No10 Guidelines:-*

* Otter prints in soft mud.
* Otter spraints.
* Otter Holts.

2.6. The survey area was searched for watercourses and waterbodies. Where found, and where safe to enter the water, all were thoroughly searched for the presence of crayfish, for approximately 50m in each direction of the site, by searching under rocks and logs. Where stated, crayfish traps were also deployed into the watercourse. All survey work was carried out in accordance with the *Conserving Natural 2000 Rivers Monitoring Series No 1, Protocol for Monitoring the White Clawed Crayfish*.

2.7. The survey area was searched for mature trees and derelict buildings and where found these were checked for potential bat roosting sites in line with Collins, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition)* by looking for the following signs:-

* Holes, cracks or crevices.
* Bat Droppings.

2.8. The land immediately adjacent to the survey area was assessed for bat roosting potential and bat foraging potential. Connective routes and flight lines were also assessed whilst on site and using maps of the area.

2.9. The area within 500m of the survey site was cross referenced to maps to highlight all ponds close to the site. Where possible, all ponds identified were accessed using agreed access or public rights of way to assess the potential for great crested newts (*Triturus cristatus*) to be present.

2.10. The survey area was assessed for the potential for reptiles and suitable reptile habitats. Where applicable the area was also searched for the presence of reptiles.

2.11. Where appropriate, the habitat within and surrounding the survey area was searched for species such as hazel, oak, honeysuckle, bramble and other species which may provide potential habitat for hazel dormice (*Muscardinus avellanarius*). Field signs such as feeding remains and nests were also searched for where possible,

in line with P Bright, P Morris and T Mitchell-Jones *The Dormouse Conservation Handbook 2nd Edition*.

2.12. Where appropriate, the area within and surrounding the survey area was assessed for its potential to house habitat for red squirrels. Field signs of red squirrels were searched for at least every 50m, looking for any dreys, feeding signs or sightings of red squirrels.

2.13. All surveys were carried out in line with the Chartered Institute of Ecological and Environmental Management (CIEEM) survey standards and advice.

2.14. This survey was carried out by Lewis Wright BSc Grad CIEEM. BSc Environmental Conservation covered all aspects within the ecology sector including fauna and flora identification, environmental legislation and ecological monitoring. Post- university Lewis has worked within environmental roles for various environmental organisations, including Lincolnshire Wildlife Trust, Hull City Council and Yorkshire Water. Lewis has extensive experience of environmental management on a range of habitat types. Lewis has worked within professional consultancy carrying out the following ecological surveys; phase 1 habitat, bat, badger, great crested newt, barn owl and water vole. Lewis currently holds Natural England licences for bats, barn owls and great crested newts and Scottish Natural Heritage and Natural Resources for Wales licenses for bats and great crested newts.

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3. SURVEY RESULTS.

3.1. Data Search Results.

3.1.1. A data search request was submitted to the South Yorkshire Bat Group, Barnsley Biological Record Centre and the South Yorkshire Badger Group. No relevant data was provided by the Barnsley Biological Record Centre or the South Yorkshire Badger Group. The data search provided by the South Yorkshire Bat Group showed records of common pipistrelle bat, soprano pipistrelle bat, leislers bat and brown long eared bat within 2km of the site. The data search also provided records of the following bat roosts within Brierley;

- Vespertillionidae bat roost at Monument Drive, approximately 1km west of the site.
- Common Pipistrelle bat roost at 19 Common Road, approximately 50m south of the site.
- Common Pipistrelle bat roost at Park Road, approximately 50m west of the site.

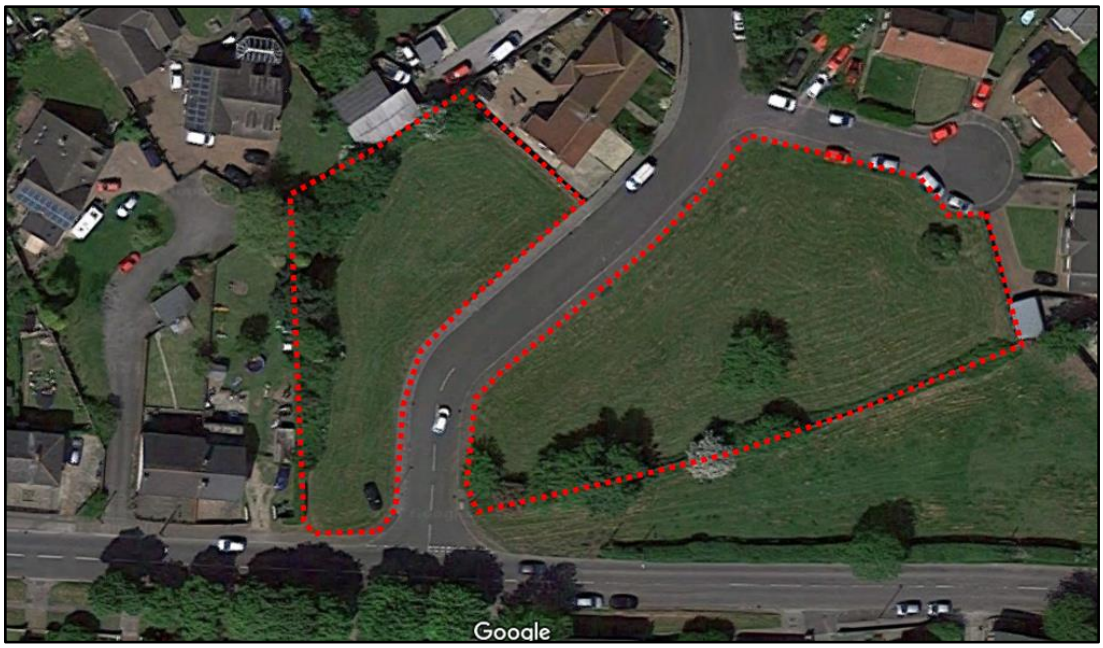
3.1.2. The data search showed there are no designated sites within 2km of the site.

3.1.3. The data searches are not included within this report but can be provided on request.

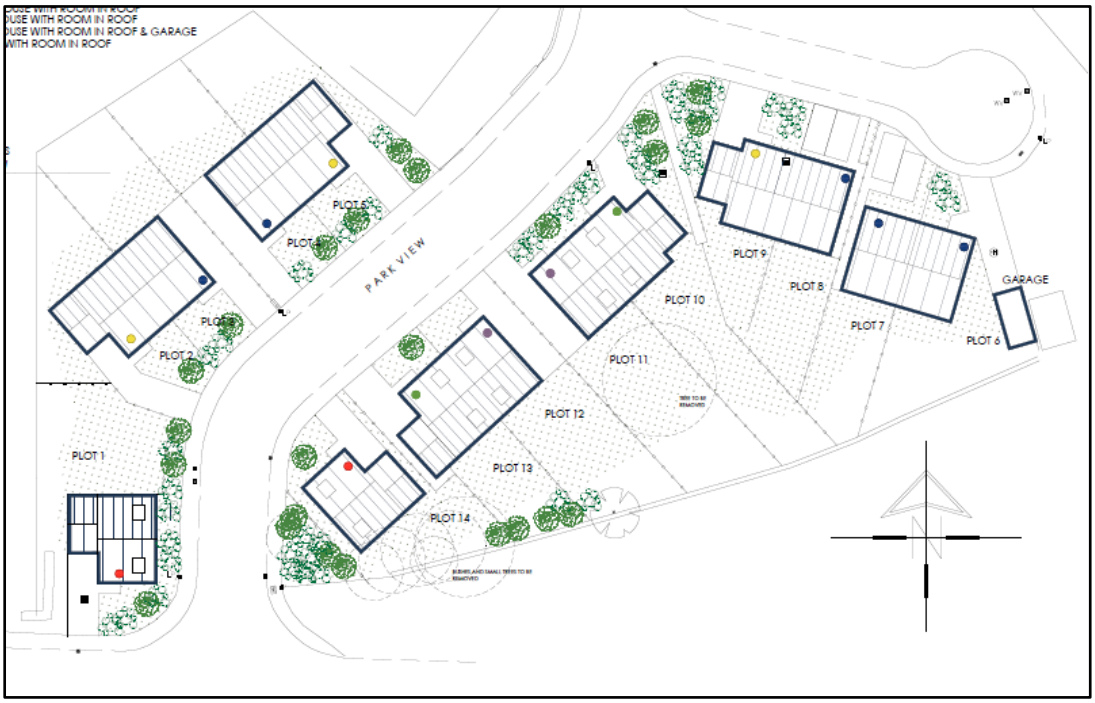
3.2. The Surveyed Area.

3.2.1. The surveyed area covered the entire proposed development area, which is predominantly two large areas of grassland separated by Park View road and surrounded by residential dwellings and a grazed pasture field.

3.2.2. The plan below shows the surveyed area within the red dashed lines.



3.2.3. The plan below shows the proposed development layout.



3.3. Description of Habitats.

Appendix IV of this report contains an annotated map marked up with the varying habitats that are cross referenced to target notes in Appendix VII of this report. The habitats on and adjacent to the site are:-

- Poor Semi Improved Grassland
- Scattered Scrub.
- Dense Scrub.
- Scattered Trees.
- Tall Ruderal
- Wall

3.3.1. Poor Semi Improved Grassland.

3.3.1.1. The majority of the site includes poor semi improved grassland. The areas of grassland are located on both the eastern and western side of the Park View Road. The grassland is subjected to frequent mowing and council management practices. The grassland is dominated by few flora species, including; perennial rye grass (*Lolium perenne*), Yorkshire fog grass (*Holcus lanatus*), cocksfoot grass (*Dactylis glomerate*), creeping buttercup (*Ranunculus repens*) and dandelion (*Taraxacum spp*).

3.3.1.2. The photographs below show the two areas of grassland either side of Park View road.







3.3.2. Scattered Scrub.

3.3.2.1. A strip of scattered scrub is located along the southern site boundary. The scattered scrub contains numerous gaps and is bordered by scattered deciduous trees. The scattered scrub is dominated by bramble (*Rubus fruticosus*), nettle (*Urtica dioica*), guilder rose (*Viburnum opulus*), ash (*Fraxinus excelsior*), sycamore (*Acer pseudoplantus*) and elder (*Sambucus nigra*).

3.3.2.2. The adjacent photograph shows an area of scattered scrub.



3.3.3. Dense Scrub.

3.3.3.1. Dense scrub is located along the western site boundary, between the area of grassland on the western side of Park View Road and the adjacent residential gardens. The dense scrub is dominated by bramble (*Rubus fruticosus*), nettle (*Urtica dioica*), guilder rose (*Viburnum opulus*) and hawthorn (*Crataegus monogyna*).

3.3.3.2. The photograph below shows an area of dense scrub along the site boundary.



3.3.4. Scattered Deciduous Trees.

3.3.4.1. Scattered Deciduous Trees are located along both the western and south eastern site boundaries. The trees vary in size and age from mature to saplings and included; ash (*Fraxinus excelsior*), sycamore (*Acer pseudoplantus*), elder (*Sambucus nigra*), cherry (*Prunus spp*) and golden chain tree (*Laburnum spp).*

3.3.4.2. The photograph below shows some of the scattered trees.



3.3.5. Tall Ruderal.

3.3.5.1. Tall ruderal vegetation is located along a section of the northern site boundary and south eastern site boundary. The strip of tall ruderal vegetation is approximately 1m in width and is dominated by nettle (*Urtica dioica*), hedge bindweed (*Calystegia sperium*), cleavers (*Gallium aparine*), burdock (*Arctium lappa*) and hogweed (*Heracluem spp*).

3.3.5.2. The adjacent photograph shows an area of tall ruderal along the southern eastern site boundary.



3.3.6. Wall.

3.3.6.1. A brick wall separates the south-eastern site boundary and the adjacent grass field which is currently being used for grazing.

3.4. Description of Fauna.

3.4.1. No badger setts or badger field signs were identified during this survey. The surveyed area provides low value badger foraging habitat due to the majority of the site comprising of frequently mown grassland within a relatively built up area of Brierley.

3.4.2. No watercourses are located within or adjacent to the surveyed area; therefore, there is no suitable water vole, otter or crayfish habitat within the proposed development site.

3.4.3. No ponds were identified within 500m of the survey area whilst on site or on an Ordnance Survey Map of the area. Therefore, there is no habitat for great crested newts within the survey area.

3.4.5. No buildings are located within the surveyed area; therefore, the site does not include buildings which are potentially suitable for roosting bats.

3.4.6. A number of relatively large deciduous trees are located within the surveyed area although none of the trees contain characteristics suitable for roosting bats.

3.3.7. The strips of scrub and scattered trees along the site boundaries provide suitable bat foraging and commuting habitat. Most the site comprises open grassland separated by a road which provides unfavorable bat foraging and commuting habitat. The site is relatively isolated, with the only connective habitat suitable for foraging and commuting bats being the surrounding residential gardens and grazing field to the south east of the site. The site has been providing low suitability for foraging and commuting bats in line with the Bat Conservation Trust Guidelines.

3.4.8. The areas of scrub and scattered trees located along the site boundaries provide ideal habitat for nesting birds. No active nests were identified during this survey although this survey was undertaken the start of the nesting bird season which extends between March and September each year. House sparrow and starling both of which are species of principle of importance under Section 41 of the Natural Environment and Rural Communities Act 2004 (NERC) were identified on site during this survey.

3.4.9. The site has been assessed as unsuitable for reptiles due to the majority of the site comprising short open grassland within a residential area. The grassland is subjected to frequent mowing and disturbance. Frequent mowing and high levels of disturbance makes the area unfavorable for reptiles. The narrow strips of scrub and scattered trees along the site boundaries are isolated and not linked to suitable reptile habitat within the surrounding landscape.

3.4.10. The site displays no features that would provide a suitable habitat for hazel dormice or red squirrel and there are no records for either species within this area of South Yorkshire.

3.4.11. No invasive species of plant listed under Schedule 9 of The Wildlife and Countryside Act 1981 were identified within the surveyed area, although this survey was undertaken at a time of year were many invasive species die back and become difficult to identify.

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4. EVALUATION OF FINDINGS.

4.1. There are no designated sites within close proximity of the surveyed area. Therefore, the proposed development will not impact on any designated sites.

4.2. The site contains no habitats of principle importance under Section 41 of the Natural Environment and Rural Communities Act 2006 (NERC). The proposed development will have no potential impact on habitats of principle importance.

4.3. The majority of the site includes short semi improved grassland which is subjected to frequent mowing and council management practices, including herbicide spraying. The grassland provides low ecological value due to level of existing disturbance and few flora species present. The area of grassland was assessed during the beginning on Spring. However, there is confidence that this assessment will not change if assessed during the optimum survey period.

4.4. The proposed development will include removing scattered trees and scrub both of which provide suitable habitat for a range of species. If the proposed development does not include incorporating the existing scrub and trees into the development, there will an impact on a range of species including nesting birds and foraging bats.

4.5. No badger setts or badger field signs were identified during this survey. The site provides limited suitability for foraging badgers as the majority of the site includes short grassland within a residential development. The proposed development will have no potential impact on badgers.

4.6. No watercourses are located within or adjacent to the site; therefore, the site contains no suitable water vole, otter or crayfish habitat. The proposed development will have no potential impact on water vole, otter or crayfish.

4.7. No ponds were identified within 500m of the survey area whilst on site or on an Ordnance Survey Map of the area. Therefore, there will be no impact on great crested newts during the proposed works.

4.8. No buildings are located within the surveyed area; therefore, the proposed development will have no potential impact on roosting bats within buildings.

4.9. No trees which contain characteristics suitable for roosting bats are located within the surveyed area; therefore, the proposed development will have no potential impact on roosting bats within trees.

4.10. The site has been assessed as providing low suitability for commuting and foraging bats in line with the Bat Conservation Trust Guidelines. The site has been classified as low due to the suitable bat foraging and commuting habitat along the site boundaries but the relatively isolated location of the site and large area of open grassland. The proposed development will potentially remove the areas of scrub and impact on foraging and commuting bats, although the potential impact will be minimal as bats are likely to forage and commute above the existing gardens within the residential area.

4.11. The areas of scrub and scattered trees located within the surveyed area provide an ideal habitat for nesting birds during the nesting bird season, which extends between March and September each year. House sparrow and starling both of which are species of principle importance under Section 41 of the Natural Environment and Rural Communities Act 2006 (NERC) were identified on site, although these species were not identified as nesting on the site during this survey. The proposed development will involve removing areas of vegetation suitable for nesting birds. If the vegetation clearance is to be undertaken during the nesting bird season there will be a potential impact on nesting birds, if they are present.

4.12. The surveyed area has been assessed as unsuitable for reptiles. The majority of the site includes short grassland which is subjected to high levels of disturbance caused by frequent mowing. The strips of scrub and trees are narrow and not linked to suitable reptile habitat within the surrounding landscape. The proposed development will have no potential impact on reptiles.

4.13. The site is not suitable for hazel dormice or red squirrel and there are no records of hazel dormice or red squirrel within this region of South Yorkshire. The proposed development will cause no potential impact on hazel dormice or red squirrel.

4.14. No invasive species of plant listed under Schedule 9 of The Wildlife and Countryside Act 1981 were identified within the surveyed area although this survey was undertaken at a time of year in which many invasive species die back and become difficult to identify. The proposed development will not cause the spread of any invasive plant species if they are not present on site.

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5. RECOMMENDATIONS.

5.1. Where appropriate, it is recommended the scattered trees located along the site boundaries are incorporated into the development and no affected by the works. The tree root zones should also be protected during any works. It is further recommended the areas of scrub located along the boundaries should be retained where possible, as these areas provide suitable habitat for a range of wildlife species.

5.2. It is recommended the development incorporates the existing boundaries including the scattered trees and strips of scrub. It is further recommended any street lighting due to be installed is low level lighting such as bollards and pointed downwards. If the development involves completely removing the scrub and scattered along the site boundary it is recommended bat activity surveys are undertaken.

5.3. It is recommended any vegetation clearance work is undertaken outside the nesting bird season. If vegetation work is to undertaken during the nesting bird season it is recommended a nesting bird survey is undertaken immediately prior to works by an experienced ecologist. If any active nests are identified, they must remain unaffected until the young have fully fledged the nest.

5.4. There are opportunities for ecological enhancements to be incorporated into the development of the site. These should include:

- The planting of native deciduous trees and native mixed hedgerows with high biodiversity value such as including oak (*Quercus robur*), beech (*Fagus sylvatica*) and hawthorn (*Crataegus monogyna*).
- Bird nesting opportunities could be incorporated such as the erection of nest boxes within the existing trees and proposed residential dwellings.
- It is recommended wildflowers strips are incorporated into the development such as along the proposed driveways or along the proposed access road.

5.5. Appendix V provide examples of bird nesting opportunities which should be erected within the existing mature trees and residential dwellings.

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Prepared by:	
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Checked by:	
Steven Whitcher, MCIEEM.	Date: 31st March 2017.

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APPENDIX I. BAT INFORMATION.

It is necessary to understand a little about bats, their basic nature, ecology and legal protection in order to evaluate the findings of this report.

18 species of bat currently reside in Britain, 17 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 shortage of food, caused by pesticides, as insects are their sole diet, and habitat change.

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.

Bats are protected under the Wildlife and Countryside Act 1981, Regulation 41 of The Conservation of Habitats and Species Regulations 2010, and the Countryside & Rights of Way Act 2000.

It is an offence to intentionally or recklessly kill, injure or capture or disturb bats or to damage, destroy or obstruct access to any place used by bats for shelter or protection.

A breeding or resting site of any bat is known as a bat roost. A bat roost is therefore any structure a bat uses for shelter or protection. Because bats tend to use the same roosts each year, legal opinion is that the roost site is protected whether or not the bats are present at that time.

Bat roosts can be identified by looking for:-

- Suitable holes, cracks and crevices.
- Bat droppings.
- Prey remains.
- By carrying out night observations using a bat detector.

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

The person applying for that licence has to be suitably qualified and experienced in bat matters. That person is then responsible for ensuring that the measures contained in the licence are carried out.

Appendix II. NESTING BIRD INFORMATION.

It is necessary to understand a little about the legal protection offered to nesting birds in order to evaluate the findings of this report.

Part 1.-(1) Of the Wildlife and Countryside Act 1981states that:-

If any person intentionally:-

(a) kills, injures or takes any wild bird;
(b) takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or
(c) 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:-

(a) 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
(b) disturbs dependant 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".

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, scrub and buildings but others are ground nesting.

The best way to avoid this issue is to plan for vegetation clearance to be carried out outside the bird-nesting season.

Appendix III. Examples of Bird Nest Boxes for trees.



The Vivara Pro WoodStone® range of nest boxes have been designed and developed as part of the professional Vivara Pro range. Unlike a traditional wooden nest box, these boxes will not rot away or deteriorate. Every WoodStone® nest box is guaranteed for 10 years and is constructed from a mix of concrete and wood fibres, WoodStone® nest boxes safeguard against attacks from predators including woodpeckers, cats and squirrels. The material insulates the nest which creates a more consistent internal temperature than an ordinary wooden box. This is especially important during the breeding season and ensures that young birds have a greater chance of survival. Nesting sites have become rare for cavity nesting birds due to changes in woodland management practices, so you can provide much-needed space for rearing chicks and birds that are roosting overwinter with these durable, long-lasting nest boxes.

We recommend using aluminium nails to hang due to the weight of the nest box and to limit any damage caused to trees.

These 28mm hole nest boxes will be used by Tree Sparrows, Blue Tits, Coal Tits and Great Tits and they are available in brown or green to complement both natural woodland and garden settings.

The best height for your nest box is between 1.5 m and 3 m high, and should be sited higher if your area has a particularly high cat population.

The Vivara Pro WoodStone® 28 mm Nest Box has a removable front panel for easy cleaning. Although birds will clean their own nest boxes before each breeding season, cleaning the boxes out at the end of each breeding season may encourage them to be used again in future years, as it reduces parasites.The nesting time of birds varies from species to species so we suggest you wait until October when the last of the birds will have left before cleaning. The nest may come out easily but if there are any deposits scrape them out, minding the dust as you go. We recommend using hot water rather than chemicals to remove any parasites that remain. Take care when opening your nest box as other species such as bats, wasps and bumblebees may have started to use the nest.

Vivara Pro WoodStone 32mm Nest Box



The Vivara Pro WoodStone® range of nest boxes have been designed and developed as part of the professional Vivara Pro range. Unlike a traditional wooden nest box, these boxes will not rot away or deteriorate. Every WoodStone® nest box is guaranteed for 10 years and is constructed from a mix of concrete and wood fibres, WoodStone® nest boxes safeguard against attacks from predators including woodpeckers, cats and squirrels. The material insulates the nest which creates a more consistent internal temperature than an ordinary wooden box. This is especially important during the breeding season and ensures that young birds have a greater chance of survival. Nesting sites have become rare for cavity nesting birds due to changes in woodland management practices, so you can provide much-needed space for rearing chicks and birds that are roosting overwinter with these durable, long-lasting nest boxes.

We recommend using aluminium nails to hang due to the weight of the nest box and to limit any damage caused to trees.

These 32mm hole nest boxes will be used by Blue Tits Great Tits, Coal Tits, Pied Flycatchers, Nuthatches, Tree Sparrows and House Sparrows and they are available in brown or green to complement both natural woodland and garden settings.

The best height for your nest box is between 1.5 m and 3 m high, and should be sited higher if your area has a particularly high cat population.

The Vivara Pro WoodStone® 32 mm Nest Box has a removable front panel for easy cleaning. Although birds will clean their own nest boxes before each breeding season, cleaning the boxes out at the end of each breeding season may encourage them to be used again in future years, as it reduces parasites.The nesting time of birds varies from species to species so we suggest you wait until October when the last of the birds will have left before cleaning. The nest may come out easily but if there are any deposits scrape them out, minding the dust as you go. We recommend using hot water rather than chemicals to remove any parasites that remain. Take care when opening your nest box as other species such as mice, bats, wasps and bumblebees may have started to use the box.

Vivara Pro WoodStone Small Open Nest Box



The Vivara Pro WoodStone® range of nest boxes have been designed and developed as part of the professional Vivara Pro range. Unlike a traditional wooden nest box, these boxes will not rot away or deteriorate. Every WoodStone® nest box is guaranteed for 10 years and is constructed from a mix of concrete and wood fibres, WoodStone® nest boxes safeguard against attacks from predators including woodpeckers, cats and squirrels. The material insulates the nest which creates a more consistent internal temperature than an ordinary wooden box. This is especially important during the breeding season and ensures that young birds have a greater chance of survival. Nesting sites have become rare for cavity nesting birds due to changes in woodland management practices, so you can provide much-needed space for rearing chicks and birds that are roosting overwinter with these durable, long-lasting nest boxes.

We recommend using aluminium nails to hang due to the weight of the nest box and to limit any damage caused to trees.

These open nest boxes will be used by Robins, Wrens (if well hidden), Spotted Flycatchers, Pied and Grey Wagtails, Song Thrushes and Black Redstarts and they are available in brown or green to complement both natural woodland and garden settings. Open nesting species prefer their nest site to be concealed amongst vegetation, so the nest box is more likely to be occupied if it is hidden high on a wall or tree amongst climbing vegetation such as ivy (by Robins and Spotted Flycatchers) and if sited low in dense vegetation for Wrens and Song Thrushes. Please ensure that your nest box is well concealed and sited higher if your area has a particularly high cat population.

The Vivara Pro WoodStone® Open Nest Box has low front panel for easy cleaning. Although birds will clean their own nest boxes before each breeding season, cleaning the boxes out at the end of each breeding season may encourage them to be used again in future years, as it reduces parasites.The nesting time of birds varies from species to species so we suggest you wait until October when the last of the birds will have left before cleaning. The nest may come out easily but if there are any deposits scrape them out, minding the dust as you go. We recommend using hot water rather than chemicals to remove any parasites that remain. Take care when cleaning your nest box as other species such as wasps and bumblebees may have started to use the box.

Vivara Pro WoodStone Starling Nest Box



Starlings (*Sturnus vulgaris*) are one of our best loved garden birds. Many individuals spend the whole year in the UK with more arriving to over-winter here. Starlings are a Red List species due to their decline in recent years both in the UK and over much of Northern Europe. A reduction in natural cavities and changes to building construction mean that Starling nesting sites have become rare so providing new nesting sites is a great way to help this species. Starlings are gregarious birds and prefer to nest in colonies, so grouping several boxes together will encourage occupancy.

This Vivara Pro WoodStone® Starling Nest Box is manufactured from WoodStone®, a mixture of concrete and FSC Certified wood fibres. This durable material is very resistant to rot and also provides increased thermal insulation and protection from predators. WoodStone® is also breathable, ensuring that the nesting chamber maintains the optimum temperature and humidity levels. The WoodStone® Starling Box is covered by a 10 year guarantee.

This nest box has a 45mm diameter entrance hole which makes it ideal for starlings. It should be sited on an external wall or tree at a height of at least 1.5m using an aluminium nail or screw and wall plug (not included). Site near to vegetation if possible as this will provide additional protection and cover.

1SP Schwegler Sparrow Terrace



The Sparrow Terrace has been designed to help redress the balance of falling house sparrow numbers. The current UK population of 6 million pairs is half what it was in 1980 and this is thought to be due to habitat destruction and lack of suitable nesting spaces. Sparrows are social birds and like to nest in company. This terrace provides ideal nesting opportunities for three families. Made of Schwegler's revolutionary wood-concrete mix, this terrace is durable, breathable and will last many decades. It may also occasionally attract tits, redstarts and spotted flycatchers.

The terrace can be fixed on to the surface of a suitable wall or incorporated into the wall. It is suitable for all types of houses in built-up areas, and on industrial and agricultural buildings such as barns, sheds and factories. Due to its weight (15kg), it is not suitable for fences or garden sheds. Ideally place the terrace two metres or more above the ground. Either install on the surface of the wall using the plugs and screws provided, or install directly into the wall (see the images tab for illustrations). Cleaning is advisable but not necessary. The front panel can be removed by turning the screw hook.

The Sparrow Terrace is available in either Stone or Brown.

Appendix IV. ANNOTATED MAP OF THE SURVEY AREA.



Appendix V. TARGET NOTES.

T1: Scattered Trees along the site boundary provides suitable habitat for a range of bird species and foraging and commuting bats.

T2: Dense Scrub along the site boundary provides suitable habitat for a range of bird species and foraging and commuting bats.

T3: Scattered Trees along the site boundary provides suitable habitat for a range of bird species and foraging and commuting bats.

T4: A mature cherry tree provides suitable habitat for nesting birds.

T5: Species Poor Semi Improved Grassland contains very few flora species and has been assessed as having low ecological value.

Appendix VI. SPECIES LISTS.

1. Poor Semi Improved Grassland.

Species.	DAFOR Assessment.
Perennial rye grass (*Lolium perenne*)	D
cocks foot (*Dactylis*)	A
broad leafed dock (*Rumex obtusifolius*)	F
thistle (*Cirsium vulgare*)	O
Yorkshire fog grass (*Holcus lanatus*)	D
dandelion (*Taraxacum officinale*)	D
greater plantain (*Plantago major*)	A
creeping buttercup (*Ranunculus Repens*)	F
White clover (*Trifolium repens*)	F
cow parsley (*Antrhriscus sylvetris*)	O
germander speedwell (*Veronica chamaedrys*)	R
daisy (*Bellis perennis*)	F
bleeding heart (*Lamprocapnos spectabilis*)	R

2. Dense Scrub.

Species.	DAFOR Assessment.
bramble (*Rubus*)	D
nettle (*Urtica dioica*)	D
ivy (*Hedera*)	F
creeping thistle (*Cirsium arvense*)	O
cleavers (*Galium aparine*)	F
hogweed (*Heracleum sp*)	F
guilder rose (*Viburnum opulus*)	R
Hedge bindweed (*Calystegia sepium*)	F
burdock (*Arctium Lappa*)	O

3. Scattered Trees.

Species.	DAFOR Assessment.
ash (*Fraxinus*)	D
sycamore (*Acer pseudoplantus*)	F
silver birch (*Betula pendula*)	O
hawthorn (*Crataegus monogyna*)	O
elder (*Sambucus spp)*	F
Golden chain tree (*Laburnum spp*)	O
Cherry (*Prunus* spp)	D

Toolbox Talk : Nesting Birds

Whitcher Wildlife Ltd

Ecological Consultants

The bird nesting season varies according to the weather each year but generally commences in March, peaks during May and June and continues until September.

A bird's nest is the place in which a bird lays and icubates its eggs. Some species buildin a nest strucutre while other species lay their eggs directly onto the ground or on a rocky ledge. Nests can be constructed from a variety of materials and are usually lined with feathers or fur.

Identification.

Some birds construct nests in an area where it can be seen while others construct nests that are hidden from view and are more difficult to identify.

The photograph to the right shows a Moorhen nest which can easily be seen.





Nests can also be identified from field signs without the necessity to see the nest itself. The presence of a nest can be identified by seeing the adult birds leaving and returning to the nest regularly with food to feed the chicks.

The photograph to the left shows a Wren's nest in overhanging tree roots, which is almost impossible to see.

Care should be taken at any time during the nesting season particularly when regular bird activity is seen or birds can be heard calling.

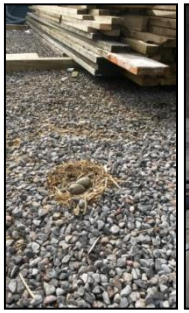




Habitat.

Birds regularly nest in a variety of places with some species nesting in buildings or vegetation and others nesting on the ground or on water. However, birds may nest in any habitat or situation if they identify a suitable nest site.







Legislation.

Part 1.-(1) of the Wildlife and Countryside Act 1981 states that:

If any person intentionally or recklessly:

- 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 or recklessly:

- 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.

If a nest or potential nesting activity is identified during works, stop all works and contact Whitcher Wildlife Ltd directly on 01226 753271 or at info@whitcher-wildlife.co.uk

Appendix VIII. Proposed Site Layout.

