

**Whitcher Wildlife Ltd.
Ecological Consultants.**



GREEN ROAD, DODWORTH.

OS REF: SE 314 049.

ECOLOGY SURVEY.

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1. INTRODUCTION.

1.1. There are plans to develop an area of land associated with three residential properties off Green Road in Dodworth, Barnsley.

1.2. Whitcher Wildlife Ltd previously carried out surveys of the site during 2008 and 2012. Due to the previous survey being carried out during 2012 the local authority requested an updated ecology survey of the site.

1.3. Whitcher Wildlife Ltd was commissioned to carry out an updated ecology survey of the site.

1.4. The survey was carried out on the 26th February 2016. This report outlines the findings of the survey and makes appropriate recommendations.

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

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 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.

2.3. 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.

2.4. 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 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.

2.5. 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*.

2.6. 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 edn)* by looking for the following signs:-

- * Holes, cracks or crevices.
- * Bat Droppings.

2.7. 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.

2.8. 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.

2.9. 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.

2.10. 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 Ed.*

2.11. 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.

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

2.13. The survey was carried out by two surveyors.

2.13.1. Steven Whitcher MCIEEM. Since 2002 Steven has gained extensive experience in a professional capacity as an ecological consultant carrying out ecology, protected species and Phase 1 Habitat surveys. Steven's knowledge has been supplemented through the attendance of a variety of courses run by the Chartered Institute of Ecology and Environmental Management (CIEEM), the Bat Conservation Trust (BCT) and the Field Studies Council (FSC) in the relative protected species, plant species and in carrying out Phase 1 Habitat Surveys. Steven holds Natural England Survey Licences in respect of bats, great crested newts, crayfish and barn owls, CCW Survey Licences in respect of bats and great crested newts and an SNH Survey Licence in respect of bats. Steven is also a Registered Consultant with Natural England and is confined spaces trained and qualified in tree climbing and aerial rescue.

2.13.2. Laura Hobbs BSc, MRes, Grad CIEEM. Since 2013 Laura has had experience in a professional capacity carrying out ecology, protected species and phase 1 habitat surveys. Laura holds degrees in Zoology (BSc) and Evolutionary Biology (MRes); Natural England, Scottish Natural Heritage and Natural Resources Wales survey licences for Great Crested Newts and Bats; a Natural England licence for Schedule 1 Birds; and is a Graduate member of CIEEM. Laura has also completed numerous professional courses run by National Biodiversity Network (NBN), Field Studies Council (FSC), Yorkshire Wildlife Trust (YWT), Bat Conservation Trust (BCT), CIEEM and others in relative protected species and phase 1 survey methodologies; and has completed a traineeship with YWT focusing on conservation and survey methods for water voles.

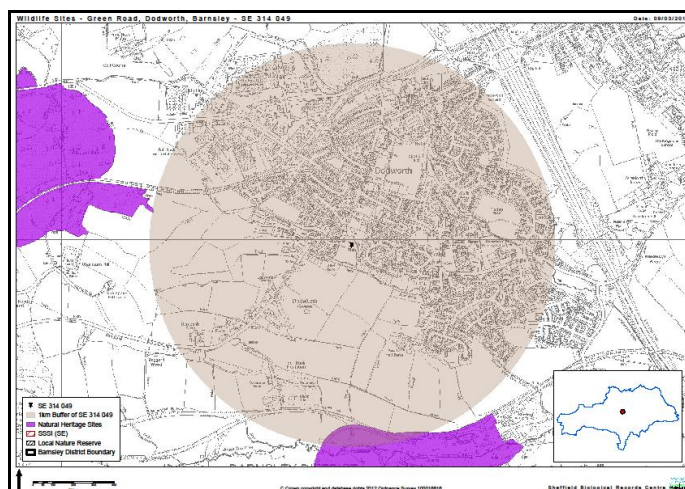
3. SURVEY RESULTS.

3.1. Data Search Results.

3.1.1. In support of the 2012 survey a desktop data search was submitted to Barnsley Biological Records Centre (BBRC). Full results of this data search can be found in Appendix VII.

3.1.2. The 2012 BBRC results display a record of a Pipistrelle bat at Strafford Walk, Dodworth which lies to the east of the site, although no exact location or detail of this record is provided. There are also numerous records of bird species, moss species and a few records of butterfly species near the site. None of the records are specific to the site.

3.1.3. The 2012 BBRC results also show that there are two Natural Heritage sites just within 1km of the site. The first is Falthwaite and Lowe Wood to the south of the site, which holds records of great crested newts, with important plant species also identified. The second is Silkstone Fall Wood to the north, which has records of important plant species and records of brown hare, a UK Species of Principal Importance.



3.1.5. An up to date desktop data search was not submitted to BBRC in support of this survey. However, an up to date search of publicly available records was carried out.

3.1.6. The search identified records of common toads (a UK Species of Principal Importance) and great crested newts at SE 324 034, approximately 2km south of the

site. There are also records of common toads at SE 316 059, approximately 900m north of the site.

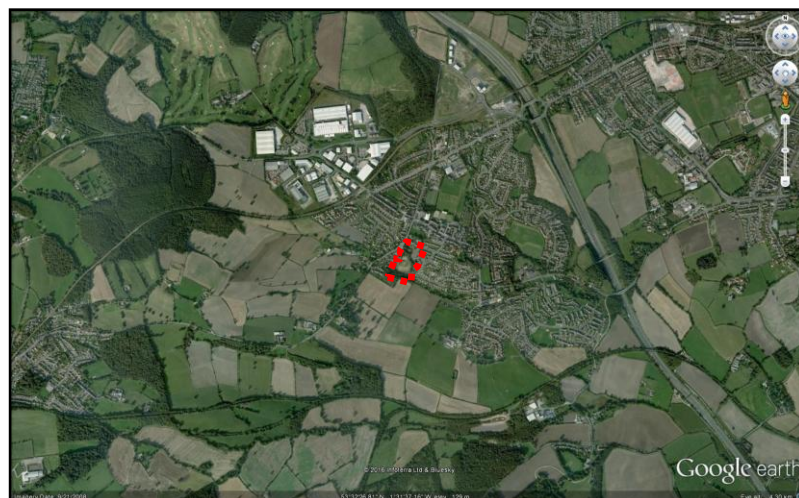
3.1.7. In addition there are records of crayfish, slow worm, grass snake, adder, common lizard, water vole, hedgehog, brown hare, otter, badger, red squirrel and various species of bat within grid square SE30 although there are no specific locations for the records.

3.2. The Surveyed Area.

3.2.1. The surveyed area was an area of land off Green Road in Dodworth, Barnsley, as shown on the plan below.



3.2.2. The land surrounding the site comprises the village of Dodworth to the north and east with areas of open farmland to the south.



3.2.3. This site itself is comprised of three residential properties, associated outbuildings and gardens. Large areas of scrub and grassland, both rough and amenity, are present within the gardens, with numerous large mature trees along the site boundaries.

3.2.4. Two streams are present within the area of the site, the first flowing along the southern boundary of the site, the second between two gardens from north to south across the centre of the site. Large mature and semi-mature trees are present along the banks of both watercourses.

3.2.5. The features of the site do not appear to have changed since the last survey was conducted in 2012.

3.3. Survey Results.

3.3.1. No badger setts or other badger field signs were identified within the surveyed area. Occasional animal paths were identified through areas of grassland and scrub on site, although there is no evidence to suggest these were created by badgers. Adjacent properties own dogs and cats, with a number of pheasants and a likely presence of fox, rabbit and other species within the area of the site, any of which could create these paths.



3.3.2. The two watercourses identified within the surveyed area were found to be consistent with previous surveys of the site.

3.3.3. The watercourse which flows across the site has previously been artificially deepened creating steep earth banks and flows into a culvert to the south of the site. As stated within previous surveys it contains a flow of water during wet periods as it is fed by run-off. At the time of the survey the water level was very low with some areas of standing water and a dry bed.



3.3.4. This watercourse has been assessed to provide no potential habitat for water voles or crayfish due to the inconsistency level of water present. The watercourse will provide a commuting route for otters, although will not be suitable for foraging. No otters or otter field signs were identified during any survey of this site.

3.3.5. The second watercourse flows along the southern boundary of the site, the watercourse contained low levels of water at the time of the survey, although there was evidence that it has recently flooded adjacent land. The watercourse appears to have a fluctuating flow from flooding to becoming dry in places at different times of year. Consequently it has been assessed to not provide any potential for crayfish. The watercourse will not provide any potential for water voles due to fluctuating water levels and the shallow banks which will not provide sufficient burrowing opportunities, although it will provide potential commuting routes for otters, it will not be suitable for foraging. No water vole or otter field signs were identified during any survey on site.



3.3.6. There are numerous large mature and semi-mature trees present along the site boundaries and banks of both watercourses, many of which have been assessed to provide potential habitat for bats, although it was not possible to carry out a thorough inspection of all trees from this ground level survey. The majority of trees will be retained; however there are proposals to remove occasional trees such as one within the eastern boundary of the site along banks of the watercourse. This tree has been assessed to provide medium potential for roosting bats in accordance with BCT Good Practice Guidelines due to the presence of PRF's (potential roosting features) such as broken branches and peeled bark, although no bat field signs were identified at this time.



3.3.7. The three residential buildings and associated outbuildings were inspected for bats and bat field signs, features of these buildings and survey findings have been detailed within 3.4.

3.3.8. A small pipe culvert is present along the eastern boundary of the site, allowing a watercourse to flow through. This was in keeping with the results of previous surveys and has been assessed to provide negligible PRF's for bats.



3.3.9. There are numerous features within the areas surrounding the site, most notably tree lines, woodland areas and watercourses, which will provide suitable features for foraging bats. A thorough assessment of bat foraging potential could not be made during this daytime survey of the site.



3.3.10. One pond was identified to lie within 230m to the south west of the surveyed area. This could not be thoroughly assessed for its potential for great crested newts as it lies on private land outside of the surveyed area. However, it is surrounded by woodland habitat which will provide some suitable terrestrial habitat for great crested newts and is connected to site via hedgerows and tree lines with no significant barriers.



3.3.11. The majority of the area surrounding site is dominated by arable fields and built up residential areas which will provide little to no suitable terrestrial habitat for great crested newts. Hedgerows along field boundaries are the only features which will provide some refugia opportunities and connections to areas of suitable habitat. Terrestrial habitat is consequently present although not extensive in this area.

3.3.12. The vegetation on site will provide extensive habitat for nesting birds, primarily within mature trees along boundaries and banks of the watercourses, and within scrub habitat associated within Property 1. Outbuildings associated with each property may also provide some suitable features for nesting birds, although little opportunities were identified within residential buildings.

3.3.13. The site was assessed to have moderate potential for reptiles, due to the presence of rough grassland, scrub and watercourses along with piles of garden waste and other materials. The site is however, isolated from other areas of suitable habitat with little to no connective routes present, limited to occasional hedgerows along field

boundaries to the south only. These findings are in keeping with previous surveys, although no reptiles were identified during any survey of the site.

3.3.14. There is no extensive woodland or scrub habitat with good connectivity to site to provide any potential for dormice. No dormice or dormice field signs were identified during this survey.

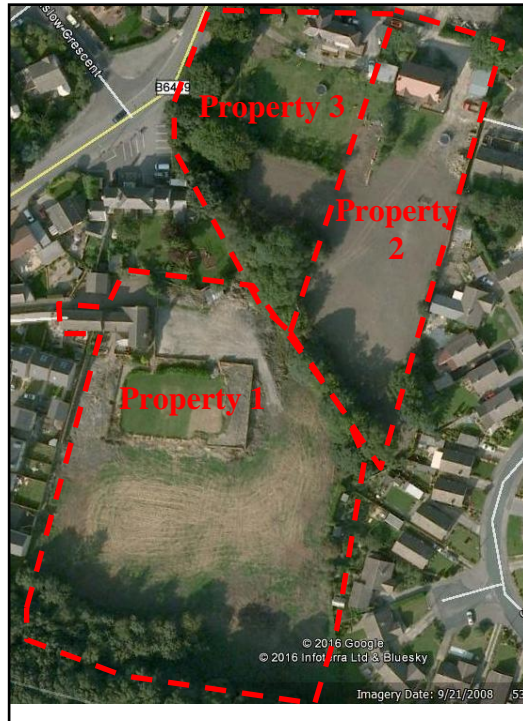
3.3.15. The mature trees on site are not connected to any significant areas of woodland to provide habitat for red squirrels.

3.3.16. Rhododendron was identified within the garden of Property 3 on site. This is a non-native invasive plant species listed on Schedule 9 of the Wildlife and Countryside Act.

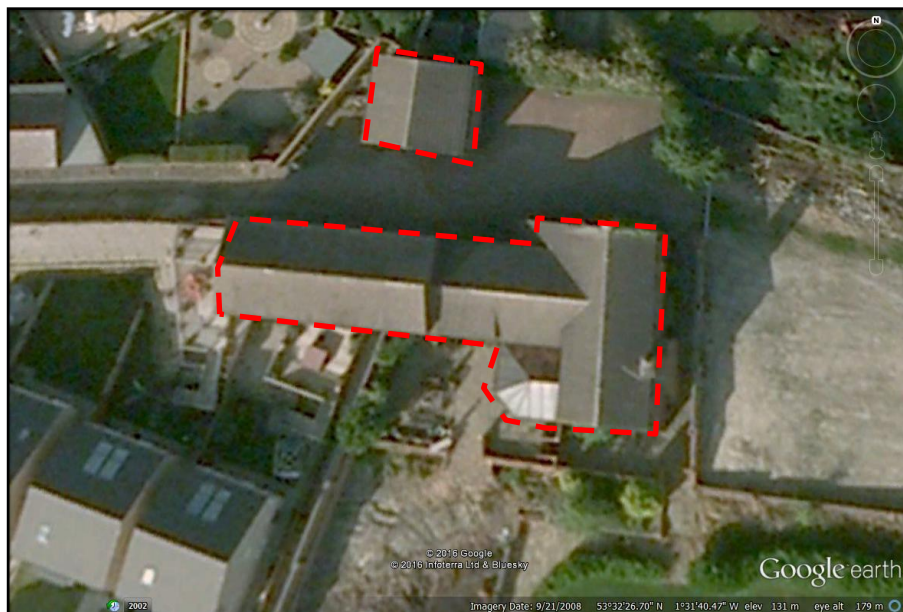


3.4. Building Survey Results.

3.4.1. Three residential properties were included within the surveyed area along with associated outbuildings. These have been detailed below.



3.4.2. Property 1.



3.4.2.1. The main house of Property 1 was a T-shaped two storey brick built house with some cavity and some solid walls. The building runs west to east with an eastern extension running north to south and respectively pitched concrete tiled roofs. A single storey conservatory was present along the south aspect of the house.



3.4.2.2. Externally all ridge tiles were intact and all roof tiles appeared close fitting and in place. The only gaps which could be identified lay along the western gable end where there was missing mortar along the verge.



3.4.2.3. Internally the house featured two loft spaces. The east to west section of the roof featured a trussed design with felt lining beneath tiles. The felt was intact in all areas of the roof with the exception of the west gable end where rips were present.



3.4.2.4. Inside the west gable end, approximately 30 fresh large bat droppings were identified on top of insulation. These are potentially droppings from Brown Long Eared bats.



3.4.2.5. The north to south section of the roof was trussed and felt lined. No bats or bat field signs were identified within this loft space.



3.4.2.6. A two storey brick built outbuilding with cavity walls was associated with this property, lying to the north of the main building.



3.4.2.7. It consisted of an east/west pitched concrete tiled roof which appeared to be intact and well sealed, with one slipped ridge tile, although upon inspection this did not lead into any cavity.



3.4.2.8. Internally the roof was felt lined and well sealed. Mouse droppings were identified although no bats or bat field signs were present.

3.4.2.9. An additional outbuilding was present to the east of the main building. This was a single storey wooden built shed with a curved bitumen roof which was not fully intact. Doors and windows were open with significant gaps in the roof. No evidence of bats were found within this building although an old swallow nest was identified.



3.4.2.10. The gardens of this property consisted of large areas of scrub and rough grassland, with a small area of amenity grassland immediately adjacent to the house surrounded by an ornamental hedgerow.



3.4.3. Property 2.



3.4.3.1. The main house of Property 2 was a two storey brick built building with cavity walls and a north/south pitched tiled roof. Decorative timber beams extended into the eaves and through gable ends of the house.



3.4.3.2. An external inspection of the house found all pointing to be intact, with all roof and ridge tiles tightly fitting. No gaps were visible anywhere within the eaves, alcoves, gable ends or between decorative timber beams and brickwork.



3.4.3.3. The only potential entry point for any bats is underneath roof tiles at the gable ends. Although the likely size of these gaps cannot be determined without further inspection.



3.4.3.4. Internally the roof featured a trussed design with felt lining beneath tiles. The roof appeared to be intact with no obvious gaps or entry points.



3.4.3.5. Bat droppings were identified on top of insulation and stuck to walls of both gable ends, with sparse droppings identified throughout the central loft space. Droppings consisted of those of a small size consistent with Pipistrelles, and some larger droppings of another species.



3.4.3.6. One additional outbuilding was associated with this property; this was a single storey garage with a flat bitumen roof, open in places and currently used for storage. No evidence of bats was identified within this building, although it has been assessed as suitable for nesting birds.



3.4.3.7. The gardens of this property comprised of an area of amenity grassland leading down to the watercourse which was vegetated with mature trees and scrub.



3.4.4. Property 3.



3.4.4.1. The main building associated within Property 3 consisted of a two storey brick built building with cavity walls and a north/south pitched tiled roof. The building consisted of wooden fascias and soffits.



3.4.4.2. An external inspection showed that all ridge and roof tiles were tight fitting, with all brickwork well pointed. All eaves appeared to be well sealed, although the wood appears to be rotten in places allowing potential entry into the eaves.



3.4.4.3. Internally the roof featured a trussed roof design supported by timber purlins, and was lined in only the eastern most section of the house, in line with a previous extension.



3.4.4.4. No bats or other bat field signs were identified within the loft of this building.

3.4.4.5. Three outbuildings were associated with this property. The first a single storey garage with rendered walls and a flat bitumen roof; the second a single storey wooden shed with a flat bitumen roof. Neither of these buildings display roosting potential for bats but may provide some features for nesting birds.



3.4.4.6. The final outbuilding was a single storey glass greenhouse which will not provide any suitable features for roosting bats or nesting birds.



3.4.4.7. The associated gardens of this property consisted of a lawn of amenity grassland with an area of scrub vegetation within the northern corner, bordered by large mature trees within numerous PRF's for bats. A stone wall was present between the site and Green Road.



4. EVALUATION OF FINDINGS.

4.1. The results of this survey suggest that few to no features (not including residential properties) of the site have differed since the previous survey was conducted in 2012.

4.2. The BBRC data search from 2012 identified two Natural Heritage Sites within 1km of the site. Neither lay within close enough proximity to be impacted upon by works. No further designated sites were identified during an updated desktop search of the area surrounding the site.

4.3. No badger setts or other badger field signs were identified within the surveyed area. Animal paths were identified on site, although there is no evidence that these were created by badgers. There will therefore be no impact upon badgers during any proposed works to site.

4.4. Two watercourses were identified on site, neither were assessed to provide potential habitat for water voles or crayfish. There is some potential for the watercourses to be used by otters, however the low levels of water and small size limit this to commuting only with little to no potential for foraging. There will therefore be no impact upon otters, water voles or crayfish during works.

4.5. Bat droppings were identified under the west gable end within the residential building of Property 1. These droppings were large and are potentially from Brown Long Eared Bats, although this cannot be confirmed without further investigation surveys. The droppings were limited to this location, where some felt lining was ripped below tiles. An external inspection showed the only potential entry point to be from missing mortar within the verge at the west gable end. Entry points cannot be confirmed without further investigation surveys. Any works to this building will consequently have an impact upon roosting bats.

4.6. The outbuilding associated within Property 1 displayed no signs of roosting bats, internally or externally. No obvious potential entry points were identified during this survey. The building has therefore been assessed to provide low potential for roosting bats due to the lack of PRF's. Any works to this building is unlikely to have any impact upon bats.

4.7. Bat droppings were found within the loft space of the residential building of Property 2. These were focussed at either gable end of the building, with a scattering

of droppings throughout. The majority of droppings were indicative of Pipistrelle bats, with some larger droppings present; an assessment of the species identity could not be made from these droppings. The spread throughout the loft suggests that bats are entering from gable ends and flying around within the loft space. An external inspection of the building could not identify any specific entry point for bats. Any works to this building will impact upon roosting bats.

4.8. Outbuildings associated within Property 2 were assessed to have negligible PRF's for bats. Any works to these buildings will not impact upon bats.

4.9. The residential building associated within Property 3 was assessed to have low potential for roosting bats due to the occasional potential entry points within the building through rotten soffit boards and slipped tiles which may lead into the loft space. No bats or bat field signs were assessed internally or externally during this survey of the building. Works to this building are therefore unlikely to impact upon roosting bats.

4.10. Outbuildings associated within Property 3 were assessed to have negligible PRF's for bats. Any works to these buildings will not impact upon bats.

4.11. The culvert to the south east of site, through which the watercourse which flows across the site runs, was assessed to provide negligible PRF's for bats. Any works to this structure will not impact upon bats.

4.12. Numerous large mature trees were identified around boundaries of the site and along watercourse banks; many of these have significant PRF's for bats although a thorough inspection could not be carried out during this ground survey of the site. Any tree which must be felled during works may have an impact upon roosting bats should they be present.

4.13. The tree lines along the site boundaries and watercourses through site has been assessed to provide moderate habitat for foraging bats due to the presence of large mature trees lines, scrub and watercourses. A thorough assessment of bat foraging activity could not be made during this daytime survey of the site. Any fragmentation of this habitat may impact upon foraging bats.

4.14. One pond was identified to lie within 230m to the south east of site. Although this pond could not be surveyed at this time, as it lies on private land outside of the

surveyed area; it has been identified to lie within an area of suitable terrestrial habitat for great crested newts. However, all ponds within the surrounding area lie within arable fields with terrestrial habitat limited to hedgerows along field boundaries. Great crested newts are known to be present on a Natural Heritage Site which lies 1km away from site, with only one pond identified between this area and the site. This pond lies over 600m away and has very limited and fragmented connective terrestrial habitat. It has therefore been assessed as very unlikely for great crested newts to be present on site, as extensive suitable habitat lies away from site with limited suitable terrestrial and aquatic habitat towards site.

4.15. Vegetation on site was assessed to provide extensive habitat for various species of bird during the nesting season, which extends from March to September each year. The scrub vegetation and hedgerows associated with Property 1, along with trees along site boundaries and banks of the watercourses. The buildings present on site may also provide opportunities for nesting birds, as evidenced by an old swallow nest found within an outbuilding associated within Property 1. Any works to be carried out within the nesting season may impact upon any birds present.

4.16. The site has been assessed to provide moderate potential for reptiles due to the areas of rough grassland, scrub and garden debris present on site. These areas are however, isolated within the wider landscape making it unlikely for reptiles to be present on site.

4.17. The lack of connective woodland routes to site makes this area unsuitable for dormice and red squirrels. Works will therefore have no impact upon these species.

4.18. Rhododendron was identified within the garden of property 3. This is a non-native invasive plant species listed on Schedule 9 of the Wildlife and Countryside Act. Rhododendron is a prolific seed producer and can re-grow vigorously when cut. Any works within the area surrounding this plant may cause the spread of this species.

5. RECOMMENDATIONS.

5.1. Bat roosts were identified within the residential buildings of Properties 1 and 2. Should there be any plans to develop these buildings, there will be a requirement for further surveys in order to accurately identify the species, number and usage of the roost by bats, along with information such as entry and exit points. This information should be obtained via dusk emergence and/or dawn re-entry surveys at the appropriate time of year (ideally May to August inclusive).

5.2. In line with BCT Good Practice guidelines, it is recommended that at least three dusk emergence and/or dawn re-entry surveys are conducted, with at least one of these surveys being a dusk emergence and at least one a dawn re-entry survey, with the final survey potentially comprising a dusk and dawn survey. Further surveys may be required if sufficient information cannot be obtained from these surveys alone. Once information has been gathered, it will be necessary to use this to create suitable roost mitigation and apply for a Natural England EPS licence which will be required to cover the works.

Table 7.3 Recommended minimum number of survey visits for presence/absence surveys to give confidence in a negative result for structures (also recommended for trees but unlikely to give confidence in a negative result).

Low roost suitability	Moderate roost suitability	High roost suitability
One survey visit. One dusk emergence or dawn re-entry survey ^a (structures). No further surveys required (trees).	Two separate survey visits. One dusk emergence and a separate dawn re-entry survey. ^b	Three separate survey visits. At least one dusk emergence and a separate dawn re-entry survey. The third visit could be either dusk or dawn. ^b

^a Structures that have been categorised as low potential can be problematic and the number of surveys required should be judged on a case-by-case basis (see Section 5.2.9). If there is a possibility that quiet calling, late-emerging species are present then a dawn survey may be more appropriate, providing weather conditions are suitable. In some cases, more than one survey may be needed, particularly where there are several buildings in this category.

^b Multiple survey visits should be spread out to sample as much of the recommended survey period (see Table 7.1) as possible; it is recommended that surveys are spaced at least two weeks apart, preferably more. A dawn survey immediately after a dusk one is considered only one visit.

5.3. The residential building of Property 3 has been assessed to have low roost suitability due to the presence of potential entry points. Consequently any works to this building must be preceded by further surveys. In line with BCT Good Practice Guidelines, it is recommended that works are preceded by at least one dusk emergence or one dawn re-entry survey. Should bats be identified during this survey, further surveys will be required in order to gather sufficient information to create roost mitigation and apply for a Natural England EPS licence which will be required to cover the works.

5.4. The outbuilding associated with Property 1 has been assessed to have low roosting potential for bats. Therefore any works to this building must be preceded by at least one dusk emergence or dawn re-entry survey. Should any bats be identified, further surveys will be required as detailed in 5.2.

5.5. Previous reports of the site have recommended that bat roost opportunities are incorporated into the site in the form of: bat boxes, bricks, slates or gaps within soffit boards etc. Further recommendations on what enhancements are appropriate can be made by the undersigned once full development proposals have been received.

5.6. Any trees to be felled must first be surveyed via an aerial bat roost inspection. This will identify any bat field signs of PRF's within the tree and advise on how to proceed. Should a high number of PRF's be identified, a dusk emergence or dawn re-entry survey must be conducted. Should bats be present within the tree, further surveys will be required as detailed in 5.2.

5.7. Should there be plans to remove a large number of trees, or to fragment the potential bat foraging habitat (by leaving gaps of 20m or longer), works must be preceded by bat activity surveys. In line with BCT Good Practice Guidelines, clearance works must be preceded by at least one dusk or dawn transect survey per month (April to October), at least one of which should be a dusk and dawn, or dusk to dawn survey. In addition automated surveys should be carried out comprising the collection of data five consecutive nights once a month (April to October) by static bat detectors appropriately placed.

Table 8.3 Guidelines on the number of bat activity surveys recommended to achieve a reasonable survey effort in relation to habitat suitability.			
Survey type	Low suitability habitat for bats ^a	Moderate suitability habitat for bats	High suitability habitat for bats
Transect/spot count/timed search surveys	One survey visit ^b per season (spring – April/May, summer – June/July/August, autumn – September/October) ^c in appropriate weather conditions for bats Further surveys may be required if these survey visits reveal higher levels of bat activity than predicted by habitat alone	One survey visit ^b per month (April to October) ^c in appropriate weather conditions for bats. At least one of the surveys should comprise dusk and pre-dawn (or dusk to dawn) within one 24-hour period.	Up to two survey visits ^b per month (April to October) ^c in appropriate weather conditions for bats. At least one of the surveys should comprise dusk and pre-dawn (or dusk to dawn) within one 24-hour period.
AND			
Automated/static bat detector surveys ^d	One location per transect, data to be collected on five consecutive nights per season (spring – April/May, summer – June/July/August, autumn – September/October) ^c in appropriate weather conditions for bats	Two locations per transect, data to be collected on five consecutive nights per month (April to October) ^c in appropriate weather conditions for bats	Three locations per transect, data to be collected on five consecutive nights per month (April to October) ^c in appropriate weather conditions for bats

- ^a If the habitat has been classified as having low suitability for bats, an ecologist should make a professional judgement on how to proceed based on all of the evidence available. It may or may not be appropriate for bat activity surveys to be carried out in low suitability habitats. However, caution should be exercised in fringe areas (e.g. some areas of Scotland) where 'low suitability habitat for bats' may be extremely important to local bat populations due to the relative scarcity of better habitats. In such situations, bats are likely to also be more widely dispersed and may use a larger number of sites, therefore survey effort may actually need to be increased to detect use on the proposed site in question.
 - ^b A survey visit should aim to cover all habitats represented in the survey area that could be impacted by the proposed activities. This may consist of a single transect carried out on a single night for small sites (e.g. small housing developments) with low habitat diversity but could range up to multiple transects carried out over one or several nights (depending on number of ecologists) on a larger site (e.g. road schemes) with greater habitat diversity.
 - ^c April, September and October surveys are both weather- and location-dependent. Conditions may become more unsuitable in these months, particularly in Scotland, which may reduce the length of the survey season.
 - ^d Detector locations should be assigned to cover all habitats represented in the survey area that could be impacted by the proposed activities. This could mean a single detector location at a small site with only one habitat represented but could range up to many detector locations on larger sites. Automated/static surveys are particularly useful when assessing collision risk, e.g. detectors can be placed at crossing points on proposed roads or railways.
- Note: Multiple survey visits should be separated by at least two weeks, preferably longer, to observe temporal changes in activity.

5.8. The information gathered during these surveys will allow suitable mitigation to be created.

5.9. Should these areas remain intact with no vegetation clearance to take place it is recommended that precautions are put in place to ensure any foraging bats remain undisturbed during works. This should include lighting facing downwards and noise kept to a minimum during night time works. Once development is complete, it is recommended that no additional lighting is directed towards the tree line, gable ends of residential buildings of Properties 1 and 2, or towards the watercourses in order to allow bats to continue using the site in the same manner pre and post development.

5.10. Due to the low potential presence of great crested newts on site, it is recommended that precautionary measures are put in place.

5.11. There is also a low potential for reptiles to be present on site for which precautionary measures should be put in place.

5.12. The following precautions will minimise any risk of amphibians and/or reptiles being harmed or disturbed during works:

- All personnel on site should be briefed on the potential presence of reptiles and amphibians, in particular great crested newts. Toolbox talks have been appended to this report to aid the briefing process.
- At any time should a reptile or great crested newt be identified, all work must cease and professional advice sought.
- Any vegetation clearance to take place should be carried out to a maximum height of 150mm to allow any animals below to move away from site of their own accord unharmed.
- Any piled materials or garden debris such as logs etc. should be removed by hand to allow any animals below to remain unharmed and move away of their own accord.

- Any materials which must be stored on site for long periods (overnight) must be raised from the ground.

5.13. Due to the high potential for nesting birds to be present on site, it is recommended that no vegetation clearance, or works to buildings take place within the nesting season, which extends from March to September each year, weather dependent.

5.14. Any vegetation clearance or building works which must take place during this time must be preceded by a nesting bird survey carried out by a suitably experienced person. Any nests identified must be left undisturbed until the young have fledged.

5.15. It is recommended that no works take place within 7m of the rhododendron plant in order to prevent the spread of an invasive species. Should works be required within this distance, the plant should be managed appropriately, for which professional advice should be sought. 5.15. gives an overview of what rhododendron management might include.

5.16. Rhododendron plants should be cut as close to the ground as possible, and either: chipped and left on site; or removed from site as contaminated waste; this however, will not prevent re-growth. The roots and stumps should also be dug up and removed from site, or chipped and kept in-situ; or they must be treated with a herbicide such as glyphosate applied at the appropriate time of year.

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Checked by:	
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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 manmade 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.

BACKGROUND GREAT CRESTED NEWT INFORMATION.

The great crested newt population has suffered a major decline in Britain over the last century. Numerous ponds have been lost, unmanaged ponds have become silted up and over-shaded, development has destroyed ponds and associated terrestrial habitat and caused fragmentation of populations. The loss of grassland, scrub and woodland has resulted in fewer opportunities for foraging, dispersal and hibernation.

The UK Biodiversity Plan (BAP) contains a great crested newt Species Action Plan (SAP) aimed at maintaining its existing range and population status, as well as increasing the number of populations through re-colonisation.

The great crested newt is listed on Schedule 5 of the Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way Act 2000. The great crested newt is therefore subject to the provisions of Schedule 9, which make it an offence to:

- Intentionally kill, injure or take a great crested newt.
- Possess or control any live or dead specimen or anything derived from a great crested newt.
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by a great crested newt.
- Intentionally or recklessly disturb a great crested newt while it is occupying a structure or place, which it uses for that purpose.

The great crested newt is also listed on Regulation 41 of the Conservation of Habitats and Species Regulations 2010. Regulation 41 makes it an offence to:

- Deliberately capture or kill a great crested newt
- Deliberately disturb a great crested newt.
- Deliberately take or destroy the eggs of a great crested newt.
- Damage or destroy a breeding site or resting place of a great crested newt.

The legislation applies to all life stages of great crested newts.

The maximum fine on conviction of offences under Section 9 and Regulation 41 currently stands at £5,000. The CroW Act 2000 amendment also allows for a custodial sentence of up to six months instead of, or in addition to, a fine. In addition, items, which may constitute evidence of the commission of an offence, may be seized and detained.

In order to understand the potential effects of development it is essential to understand a little of the great crested newt ecology.

Great crested newts breed in ponds and other water bodies. They can begin to migrate to their breeding ponds as early as the first frost-free days in late January with the

majority reaching their breeding ponds by mid March. Timing will be influenced by a number of factors, mainly evening temperatures above 5°C and recent rain.

The peak egg-laying period is from mid-March to mid-May. The newts will lay their eggs individually, mainly on the leaves of submerged plants. The larva hatch after three weeks and then take another 2-3 months to complete larval development. Adult newts generally leave their breeding ponds from late May onwards.

Once the larvae have completed metamorphosis (the transition from aquatic larvae to land-adapted juveniles, called efts), they emerge from the pond. This emergence begins in late August and generally continues until late October. It takes 2-4 years to reach sexual maturity, during which time the newts will be land based.

Adults and immature newts spend the winter in places that afford protection from frost and flooding. This will generally be underground amongst tree roots, in mammal burrows, or under suitable refuges above ground like deadwood or rubble piles. Hibernation may last from October to February.

Whilst on land, outside the hibernation period, great crested newts will forage at night, taking a wide range of invertebrate prey.

From the above, it can be seen that great crested newts spend the majority of their time on land and only visit the ponds for breeding purposes. As a result, surveys need to be timed very carefully. Terrestrial surveys are very inaccurate and the only time that surveys can be truly thorough is in the narrow window of opportunity between March and September.

Great crested newts will travel large distances between ponds and terrestrial refuges. It is recommended that anywhere within 500m of a pond should be treated as potential great crested newt habitat and should be surveyed and evaluated.

An experienced surveyor must carry out the surveys and must be in possession of an appropriate Natural England great crested newt survey licence.

It is essential that great crested newt surveys are planned well in advance of any development and ideally before Planning Consent is sought. Surveys can only be carried out at the appropriate time of year and repeat surveys are essential. The guidelines suggest that between four and six surveys need to be carried out, three of these between mid-March and mid-June.

If great crested newts are to be effected by any development, a thorough assessment of the population is essential followed by the design of a comprehensive mitigation package. Only when this has been done can a licence application be submitted to Natural England for approval. It takes 30 working days for a licence application to be determined and the period of time that mitigation measures take can be measured in months. It is therefore essential to plan well in advance of development commencing.

Appendix III. 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 1981 states 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 IV.

REPTILES - GRASS SNAKE AND ADDER INFORMATION.

The grass snake (*Natrix natrix*) and the adder (*Vipera berus*) are the two most common snakes to be found in the UK. Adders are found all over Britain while the grass snake becomes rarer towards the north and are rarely found in Scotland.

The grass snake is usually around 120cm long, live in a variety of rough habitats and lay their eggs in warm rotting vegetation. The background colour is dark green and the body is marked with vertical black bars and spots that run along its sides. There is generally a dark collar marking.

The adder is the only native species that is venomous but this is rarely harmful to humans. Adult adders are generally up to 66cm long. Background colouration is a light shade of grey or brown with a black zigzag marking along the length of the back. As with all reptiles, colouration varies and becomes duller as sloughing (skin shedding) approaches.

Both snakes hibernate, spending the winter in burrows or under logs protected from the cold and predators. Maintaining the right body temperature is vital to reptiles' survival. In the morning, they find a warm basking site to heat up their bodies, then later they may move back into the shade because they do not sweat and have to be careful not to overheat. During hot summers, adders will try to move to damper, cooler sites.

Both snakes are protected under schedule 5 of the Wildlife and Countryside Act 1981. They received greater protection following reviews of the schedules published in 1988 and 1991. This means they are protected against intentional or recklessly killing and injuring and against sale or transporting for sale.

Appendix V. REPTILES - LIZARD INFORMATION.

The common or viviparous lizard (*Lacerta vivipara*) is one of three species of lizard that occur in the UK. They have a dry scaly skin and are variable in colour ranging from brown or yellow-brown to almost green with varying patterns of spots or stripes. The typical length of an adult is 150mm, including the tail.

Common lizards hibernate over the winter, emerging from February onwards depending upon the weather. They begin to mate in April and May and the young are born in late July or August. The lizard gives birth to live young, hence the term viviparous, meaning live bearing.

The lizards draw their body warmth from the sun and consequently spend long periods basking in the sun. They are commonly seen on road and railway embankments and on walls where they sit for long periods soaking up the heat of the sun before going to find food.

They occupy a wide range of habitats including woodland, marshes, heathland, moors, sand dunes, hedgerows and bogs.

Common lizards hunt insects, spiders, snails and earthworms. They stun their prey by shaking it and then swallow it whole.

At night, and when startled, they will shelter beneath logs or stones or under other refuges that may be available.

Common lizards are protected under schedule 5 of the Wildlife and Countryside Act 1981 (they received greater protection following reviews of the schedules published in 1988 and 1991) and Schedule 2 of The Conservation of Habitats and Species Regulations 2010 (as amended) making it a European Protected Species.

Common lizards should not be confused with the somewhat larger sand lizard (*Lacerta agilis*). These are typically 190mm long and stockier than the common lizard. Their markings are distinctly different being considerably more colourful. Sand lizards are confined to moorland and coastal sand dunes where they lay their eggs in the warm sand. The range of the sand lizard in the UK is therefore very limited. Sand lizards are a European protected species.

The third species of lizard is the slow worm (*Anguis fragilis*), which is frequently mis-identified as a snake. The firm body of the slow worm is distinctly cylindrical in shape and the tiny smooth scales result in a very smooth, shiny appearance. Colouration is typically a uniform grey to brown although there is a wide variation from straw coloured to almost black and some animals have very fine stripes or a zig-zag along the centre of the back. The typical length of an adult is 400mm.

Slow worms can be found in a wide variety of habitats throughout Britain and is the most likely reptile to be found in urban and suburban environments.

Slow worms hibernate over the winter, emerging from March onwards depending upon the weather. They begin to mate in April and May and six to twelve young are born in August or September.

Their favourite food is slugs but they will also eat insects and spiders.

Slow worms are hard to find. They will bask in the sun but they quickly and quietly move into cover when disturbed and do not generally attract attention as they retreat from a basking spot.

Slow worms are also protected under schedule 5 of the Wildlife and Countryside Act 1981. They received greater protection following reviews of the schedules published in 1988 and 1991. This means they are protected against intentional or recklessly killing and injuring and against sale or transporting for sale.

Appendix VI. SCHEDULE 9 INVASIVE PLANT SPECIES.

1. Schedule 9 of the Wildlife and Countryside Act 1981 contains a list of invasive species of plant. 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.

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

Common Name	Latin Name
Alexanders, Perfoliate	<i>Smyrniium perfoliatum</i>
Algae, Red	<i>Grateloupia luxurians</i>
Archangel, Variegated Yellow	<i>Lamiastrum galeobdolon subsp. Argentatum</i>
Azalea, Yellow	<i>Rhododendron luteum</i>
Balsam, Himalayan	<i>Impatiens glandulifera</i>
Cotoneaster	<i>Cotoneaster horizontalis</i>
Cotoneaster, Entire Leaved	<i>Cotoneaster integrifolius</i>
Cotoneaster, Himalayan	<i>Cotoneaster simonsii</i>
Cotoneaster, Hollyberry	<i>Cotoneaster bullatus</i>
Cotoneaster, Small Leaved	<i>Cotoneaster microphyllus</i>
Creeper, False Virginia	<i>Parthenocissus inserta</i>
Creeper, Virginia	<i>Parthenocissus quinquefolia</i>
Dewplant, Purple	<i>Disphyma crassifolium</i>
Fanwort (Carolina Water-Shield)	<i>Cabomba caroliniana</i>
Fern, Water	<i>Azolla filiculoides</i>
Fig, Hottentot	<i>Carpobrotus edulis</i>
Garlic, Three-cornered	<i>Allium triquetrum</i>
Hogweed, Giant	<i>Heracleum mantegazzianum</i>
Hyacinth, Water	<i>Eichhornia crassipes</i>
Kelp, Giant	<i>Macrocystis pyrifera</i>
Kelp, Giant	<i>Macrocystis angustifolia</i>
Kelp, Giant	<i>Macrocystis intergrifolia</i>
Kelp, Giant	<i>Macrocystis laevis</i>
Kelp, Japanese	<i>Laminarial japonica</i>
Knotweed, Giant	<i>Fallopia sachalinensis</i>

Knotweed, Hybrid	<i>Fallopia japonica x Fallopia sachalinensis</i>
Knotweed, Japanese	<i>Fallopia japonica</i>
Leek, Few-flowered	<i>Allium paradoxum</i>
Lettuce, Water	<i>Pistia stratiotes</i>
Montbretia	<i>Crocoshmia x crocosmiiflora</i>
Parrot's Feather	<i>Myriophyllum aquaticum</i>
Pennywort, Floating	<i>Hydrocotyle ranunculoides</i>
Potato, Duck	<i>Sagittaria latifolia</i>
Primrose, Floating Water	<i>Ludwigia peploides</i>
Primrose, Water	<i>Ludwigia grandiflora</i>
Primrose, Water	<i>Ludwigia uruguayensis</i>
Rhododendron	<i>Rhododendron ponticum</i>
Rhododendron	<i>Rhododendron ponticum x Rhododendron maximum</i>
Rhubarb, Giant	<i>Gunnera tinctoria</i>
Rose, Japanese	<i>Rosa rugosa</i>
Salvinia, Giant	<i>Salvinia molesta</i>
Seafingers, Green	<i>Codium fragile</i>
Seaweed, Californian Red	<i>Pilea californica</i>
Seaweed, Hooked Asparagus	<i>Asparagopsis armata</i>
Seaweed, Japanese	<i>Sargassum muticum</i>
Seaweeds, Laver (except native species)	<i>Porphyra spp except</i>
	<i>p. amethystea</i>
	<i>p. leucosticte</i>
	<i>p. linearis</i>
	<i>p. miniata</i>
	<i>p. purpurea</i>
	<i>p. umbilicalis</i>
Stonecrop, Australian Swamp (New Zealand Pygmyweed)	<i>Crassula helmsii</i>
Wakame	<i>Undaria pinnatifida</i>
Waterweed, Curly	<i>Lagarosiphon major</i>
Waterweeds	<i>All species of the genus Elodea</i>

3. 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.

4. 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.

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

5.1. Mechanical control includes cultivation, hoeing, pulling, cutting, raking dredging or other methods to uproot or cut weeds.

5.2. Where this method is used all plant material must be considered “controlled waste” and must be disposed properly.

5.3. Chemical control uses approved herbicides.

5.4. Natural control uses pests and diseases of the target weed to weaken it and prevent it from becoming a nuisance.

5.5. Environmental control works by altering the environment to make it less suitable for weed growth, for example by increasing or decreasing water velocity.

Appendix VII. DESK TOP DATA SEARCH RESULTS.

Grid Ref	Location Name	Date	Location	Group	Scientific Name	Common Name
SE3104	Stafford Walk Dodworth, Barnsley MDC	10/07/2006		terrestrial mammal	Pipistrellus pipistrellus	Pipistrelle
SE305048		01/03/1998	Dodworth	bird	Emberiza citrinella	Yellowhammer
SE305048		01/03/1998	Dodworth	bird	Passer domesticus	House Sparrow
SE3004	SE30C-1	26/05/2007	'BARNSELY MBC'	bird	Cuculus canorus	Cuckoo
SE3004	SE30C-1	26/05/2007	'BARNSELY MBC'	bird	Emberiza citrinella	Yellowhammer
SE3104	SE30C-3	26/05/2007	'BARNSELY MBC'	bird	Emberiza citrinella	Yellowhammer
SE3105	SE30C-4	26/05/2007	'BARNSELY MBC'	bird	Emberiza citrinella	Yellowhammer
SE3004	SE30C-1	26/05/2007	'BARNSELY MBC'	bird	Passer domesticus	House Sparrow
SE3104	SE30C-3	26/05/2007	'BARNSELY MBC'	bird	Passer domesticus	House Sparrow
SE3105	SE30C-4	26/05/2007	'BARNSELY MBC'	bird	Passer domesticus	House Sparrow
SE3004	SE30C-1	26/05/2007	'BARNSELY MBC'	bird	Passer montanus	Tree Sparrow
SE3104	SE30C-3	26/05/2007	'BARNSELY MBC'	bird	Perdix perdix	Grey Partridge
SE3104	SE30C-3	26/05/2007	'BARNSELY MBC'	bird	Vanellus vanellus	Lapwing
SE318050	Barnsley	27/01/2008	'BARNSELY MBC'	bird	Passer domesticus	House Sparrow
SE323047	Barnsley	27/01/2008	'BARNSELY MBC'	bird	Passer domesticus	House Sparrow
SE317051	Barnsley	27/01/2008	'BARNSELY MBC'	bird	Passer domesticus	House Sparrow
SE318048	Barnsley	27/01/2008	'BARNSELY MBC'	bird	Passer domesticus	House Sparrow
SE307044		06/04/1998	Dodworth Green	bird	Picus viridis	Green Woodpecker
SE3105	our garden	28/05/2005	Dodworth	bird	Turdus merula	Common Blackbird
SE3105	SE30C-4	26/05/2007	'BARNSELY MBC'	bird	Alauda arvensis	Skylark
SE3004	SE30C-1	26/05/2007	'BARNSELY MBC'	bird	Carduelis cannabina	Linnet
SE3105	SE30C-4	26/05/2007	'BARNSELY MBC'	bird	Carduelis cannabina	Linnet
SE3004	SE30C-1	26/05/2007	'BARNSELY MBC'	bird	Carduelis carduelis	Goldfinch
SE3104	SE30C-3	26/05/2007	'BARNSELY MBC'	bird	Carduelis carduelis	Goldfinch
SE3105	SE30C-4	26/05/2007	'BARNSELY MBC'	bird	Carduelis carduelis	Goldfinch

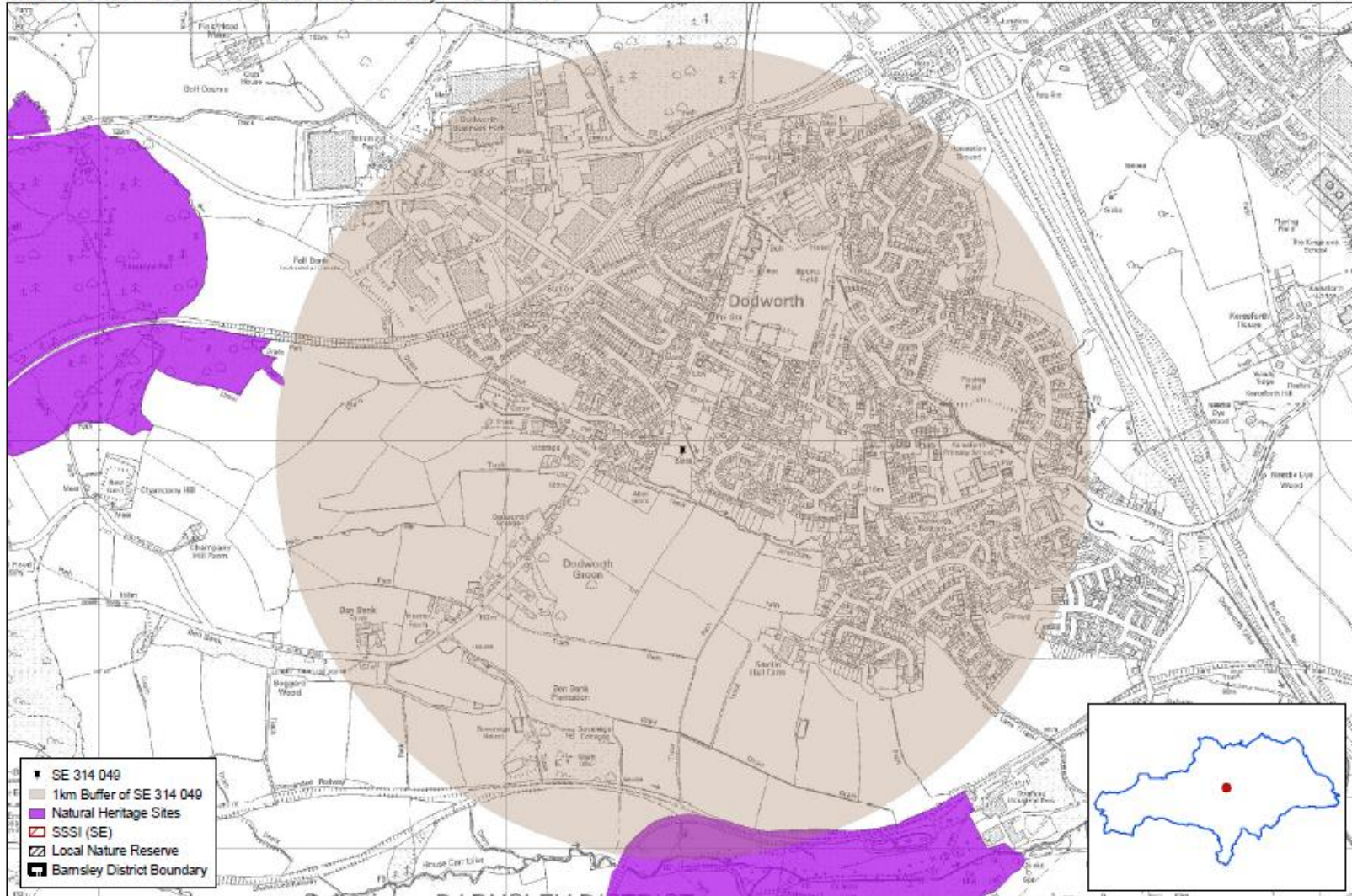
SE3004	SE30C-1	26/05/2007	'BARNESLEY MBC'	bird	Columba oenas	Stock Dove
SE3104	SE30C-3	26/05/2007	'BARNESLEY MBC'	bird	Columba oenas	Stock Dove
SE3004	SE30C-1	26/05/2007	'BARNESLEY MBC'	bird	Delichon urbica	House Martin
SE3104	SE30C-3	26/05/2007	'BARNESLEY MBC'	bird	Delichon urbica	House Martin
SE3004	SE30C-1	26/05/2007	'BARNESLEY MBC'	bird	Hirundo rustica	Swallow
SE3104	SE30C-3	26/05/2007	'BARNESLEY MBC'	bird	Hirundo rustica	Swallow
SE3104	SE30C-3	26/05/2007	'BARNESLEY MBC'	bird	Phylloscopus trochilus	Willow Warbler
SE3105	SE30C-4	26/05/2007	'BARNESLEY MBC'	bird	Phylloscopus trochilus	Willow Warbler
SE3004	SE30C-1	26/05/2007	'BARNESLEY MBC'	bird	Picus viridis	Green Woodpecker
SE3105	SE30C-4	26/05/2007	'BARNESLEY MBC'	bird	Picus viridis	Green Woodpecker
SE3004	SE30C-1	26/05/2007	'BARNESLEY MBC'	bird	Prunella modularis	Dunnock
SE3104	SE30C-3	26/05/2007	'BARNESLEY MBC'	bird	Prunella modularis	Dunnock
SE3105	SE30C-4	26/05/2007	'BARNESLEY MBC'	bird	Prunella modularis	Dunnock
SE3104	SE30C-3	26/05/2007	'BARNESLEY MBC'	bird	Pyrrhula pyrrhula	Bullfinch
SE3004	SE30C-1	26/05/2007	'BARNESLEY MBC'	bird	Pyrrhula pyrrhula	Bullfinch
SE3105	SE30C-4	26/05/2007	'BARNESLEY MBC'	bird	Pyrrhula pyrrhula	Bullfinch
SE3004	SE30C-1	26/05/2007	'BARNESLEY MBC'	bird	Sturnus vulgaris	Starling
SE3104	SE30C-3	26/05/2007	'BARNESLEY MBC'	bird	Sturnus vulgaris	Starling
SE3105	SE30C-4	26/05/2007	'BARNESLEY MBC'	bird	Sturnus vulgaris	Starling
SE3104	SE30C-3	26/05/2007	'BARNESLEY MBC'	bird	Turdus merula	Blackbird
SE3004	SE30C-1	26/05/2007	'BARNESLEY MBC'	bird	Turdus merula	Blackbird
SE3105	SE30C-4	26/05/2007	'BARNESLEY MBC'	bird	Turdus merula	Blackbird
SE3004	SE30C-1	26/05/2007	'BARNESLEY MBC'	bird	Turdus philomelos	Song Thrush
SE3104	SE30C-3	26/05/2007	'BARNESLEY MBC'	bird	Turdus philomelos	Song Thrush
SE3105	SE30C-4	26/05/2007	'BARNESLEY MBC'	bird	Turdus philomelos	Song Thrush
SE3004	SE30C-1	26/05/2007	'BARNESLEY MBC'	bird	Turdus viscivorus	Mistle Thrush
SE3104	SE30C-3	26/05/2007	'BARNESLEY MBC'	bird	Turdus viscivorus	Mistle Thrush
SE3105	SE30C-4	26/05/2007	'BARNESLEY MBC'	bird	Turdus viscivorus	Mistle Thrush
SE318050	Barnsley	27/01/2008	'BARNESLEY MBC'	bird	Sturnus vulgaris	Starling
SE317051	Barnsley	27/01/2008	'BARNESLEY MBC'	bird	Sturnus vulgaris	Starling
SE318048	Barnsley	27/01/2008	'BARNESLEY MBC'	bird	Sturnus vulgaris	Starling

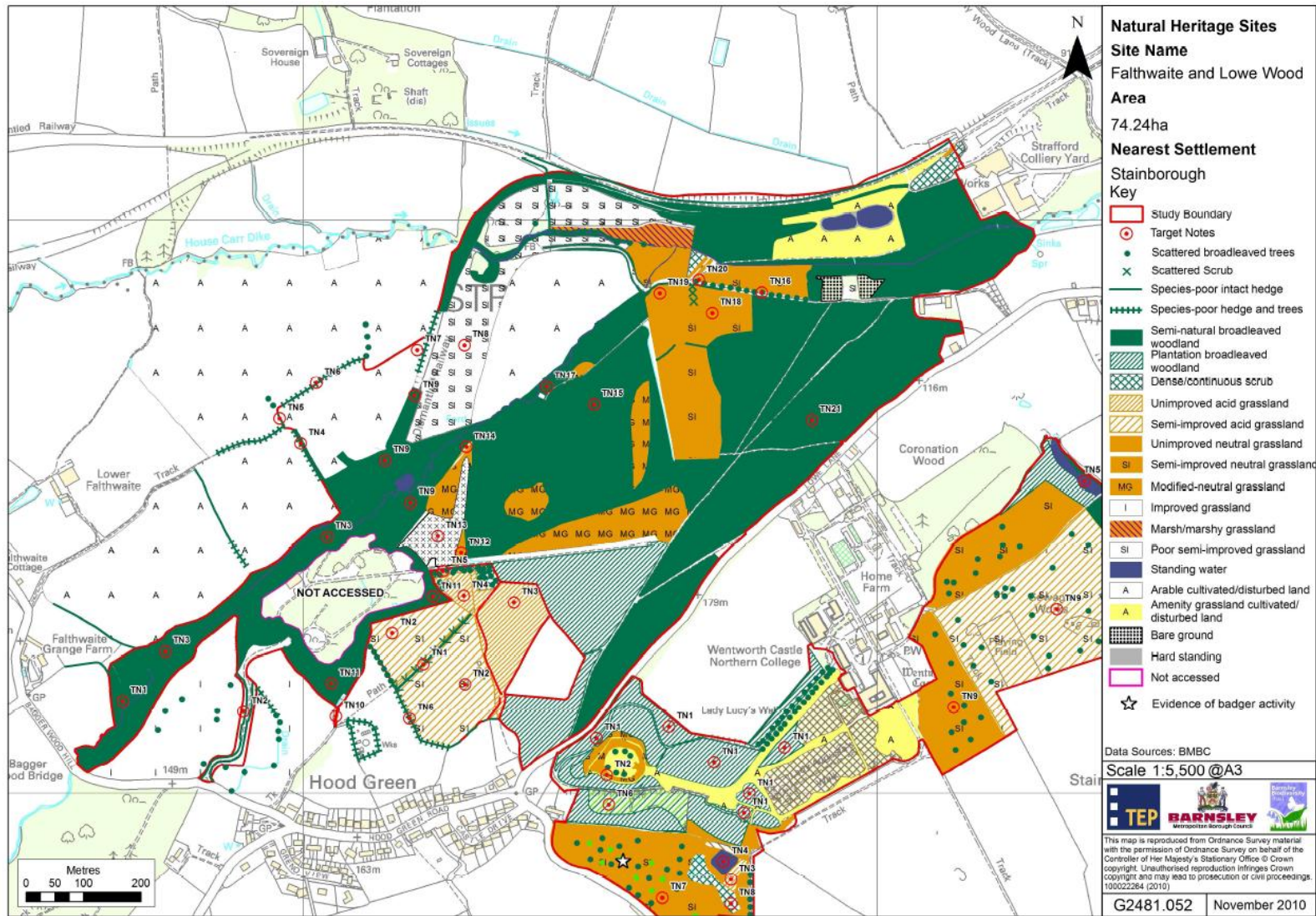
SE318050	Barnsley	27/01/2008	'BARNSELY MBC'	bird	Turdus merula	Blackbird
SE323047	Barnsley	27/01/2008	'BARNSELY MBC'	bird	Turdus merula	Blackbird
SE317051	Barnsley	27/01/2008	'BARNSELY MBC'	bird	Turdus merula	Blackbird
SE318048	Barnsley	27/01/2008	'BARNSELY MBC'	bird	Turdus merula	Blackbird
SE305044		01/03/1998	Dodworth	bird	Dendrocopos major	Great Spotted Woodpecker
SE3105		21/03/2007	Dodworth	liverwort	Lophocolea bidentata	Lophocolea bidentata
SE3105		21/03/2007	Dodworth	moss	Amblystegium serpens	Amblystegium serpens
SE3105		21/03/2007	Dodworth	moss	Aulacomnium androgynum	Bud-headed Groove-moss
SE3105		21/03/2007	Dodworth	moss	Aulacomnium palustre	Bog Groove-moss
SE3105		21/03/2007	Dodworth	moss	Barbula convoluta	Lesser Bird's-claw Beard-moss
SE3105		21/03/2007	Dodworth	moss	Barbula cylindrica	Barbula cylindrica
SE3105		21/03/2007	Dodworth	moss	Barbula hornschurchiana	Barbula hornschurchiana
SE3105		21/03/2007	Dodworth	moss	Barbula unguiculata	Bird's-claw Beard-moss
SE3105		21/03/2007	Dodworth	moss	Brachythecium albicans	Brachythecium albicans
SE3105		21/03/2007	Dodworth	moss	Brachythecium rutabulum	Brachythecium rutabulum
SE3105		21/03/2007	Dodworth	moss	Bryum capillare	Capillary Thread-moss
SE3105		21/03/2007	Dodworth	moss	Bryum ruderales	Pea Bryum
SE3105		21/03/2007	Dodworth	moss	Calliergon cuspidatum	Calliergon cuspidatum
SE3105		21/03/2007	Dodworth	moss	Campylopus introflexus	Heath Star Moss
SE3105		21/03/2007	Dodworth	moss	Ceratodon purpureus	Redshank
SE3105		21/03/2007	Dodworth	moss	Dicranella staphylina	Dicranella staphylina
SE3105		21/03/2007	Dodworth	moss	Dicranum scoparium	Broom Fork-moss
SE3105		21/03/2007	Dodworth	moss	Eurhynchium praelongum	Eurhynchium praelongum
SE3105		21/03/2007	Dodworth	moss	Funaria hygrometrica	Common Cord-moss
SE3105		21/03/2007	Dodworth	moss	Hypnum cupressiforme var. cupressiforme	Cypress-leaved Plait-moss
SE3105		21/03/2007	Dodworth	moss	Hypnum jutlandicum	Hypnum jutlandicum
SE3105		21/03/2007	Dodworth	moss	Orthotrichum affine	Wood Bristle-moss
SE3105		21/03/2007	Dodworth	moss	Orthotrichum anomalum	Anomalous Bristle-moss

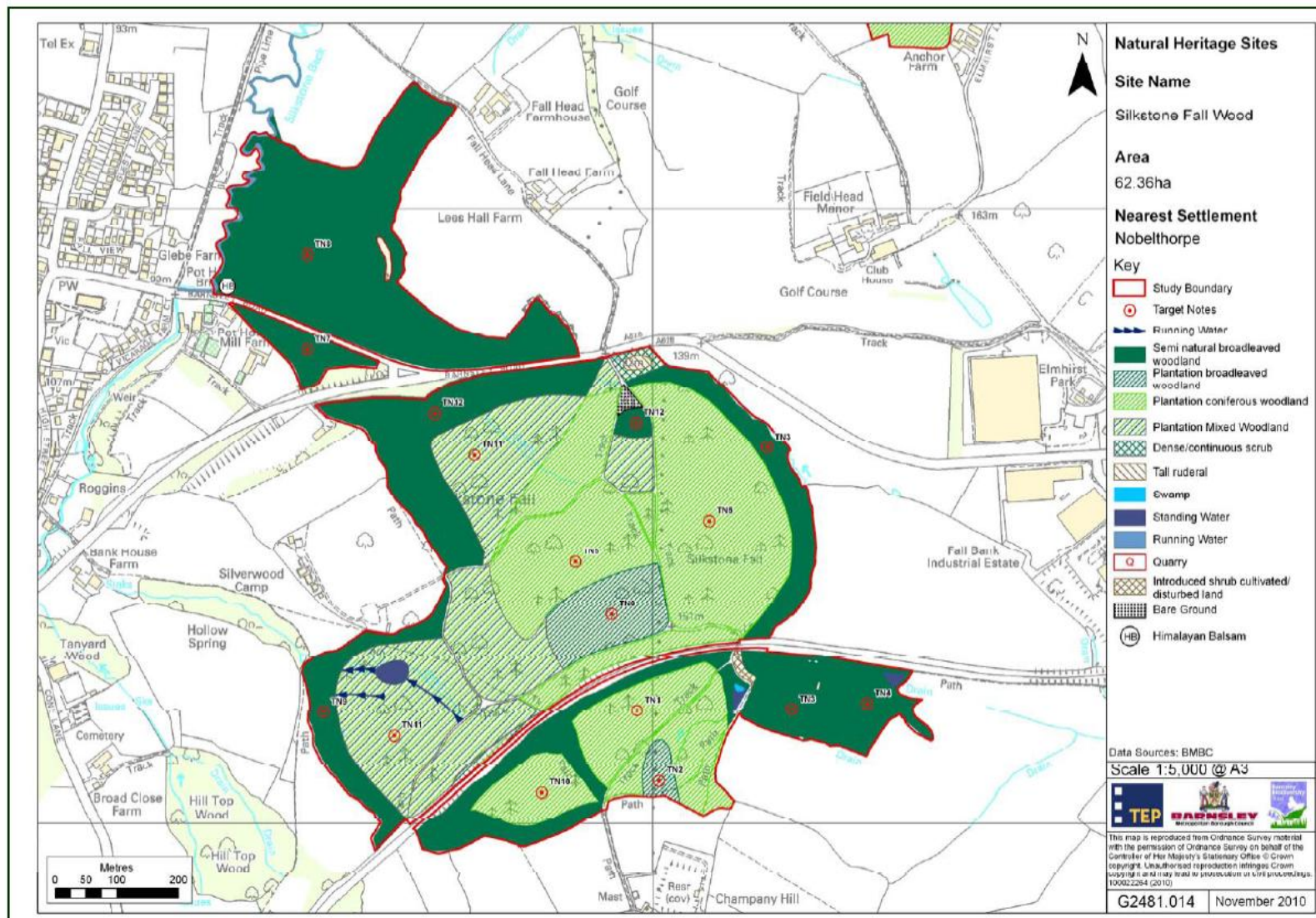
SE3105		21/03/2007	Dodworth	moss	<i>Orthotrichum diaphanum</i>	White-tipped Bristle-moss
SE3105		21/03/2007	Dodworth	moss	<i>Plagiothecium undulatum</i>	<i>Plagiothecium undulatum</i>
SE3105		21/03/2007	Dodworth	moss	<i>Pohlia nutans</i>	Nodding Thread-moss
SE3105		21/03/2007	Dodworth	moss	<i>Polytrichum formosum</i>	Bank Haircap
SE3105		21/03/2007	Dodworth	moss	<i>Polytrichum juniperinum</i>	Juniper Haircap
SE3105		21/03/2007	Dodworth	moss	<i>Polytrichum piliferum</i>	Bristly Haircap
SE3105		21/03/2007	Dodworth	moss	<i>Pottia truncata</i>	<i>Pottia truncata</i>
SE3105		21/03/2007	Dodworth	moss	<i>Pseudoscleropodium purum</i>	<i>Pseudoscleropodium purum</i>
SE3105		21/03/2007	Dodworth	moss	<i>Rhytidiadelphus squarrosus</i>	Springy Turf-moss
SE3105		21/03/2007	Dodworth	moss	<i>Schistidium apocarpum</i>	<i>Schistidium apocarpum</i>
SE3105		21/03/2007	Dodworth	moss	<i>Thuidium tamariscinum</i>	<i>Thuidium tamariscinum</i>
SE3105		21/03/2007	Dodworth	moss	<i>Tortula muralis</i>	Wall Screw-moss
SE3105		21/03/2007	Dodworth	moss	<i>Ulota crispa</i> var. <i>norvegica</i>	<i>Ulota crispa</i> var. <i>norvegica</i>
SE3004	SE30C-1	26/05/2007	'BARNESLEY MBC'	bird	<i>Aegithalos caudatus</i>	Long-Tailed Tit
SE3105	SE30C-4	26/05/2007	'BARNESLEY MBC'	bird	<i>Aegithalos caudatus</i>	Long-Tailed Tit
SE3004	SE30C-1	26/05/2007	'BARNESLEY MBC'	bird	<i>Alectoris rufa</i>	Red-Legged Partridge
SE3004	SE30C-1	26/05/2007	'BARNESLEY MBC'	bird	<i>Anas platyrhynchos</i>	Mallard
SE3104	SE30C-3	26/05/2007	'BARNESLEY MBC'	bird	<i>Apus apus</i>	Swift
SE3105	SE30C-4	26/05/2007	'BARNESLEY MBC'	bird	<i>Apus apus</i>	Swift
SE3004	SE30C-1	26/05/2007	'BARNESLEY MBC'	bird	<i>Branta canadensis</i>	Canada Goose
SE3004	SE30C-1	26/05/2007	'BARNESLEY MBC'	bird	<i>Carduelis chloris</i>	Greenfinch
SE3104	SE30C-3	26/05/2007	'BARNESLEY MBC'	bird	<i>Carduelis chloris</i>	Greenfinch
SE3105	SE30C-4	26/05/2007	'BARNESLEY MBC'	bird	<i>Carduelis chloris</i>	Greenfinch
SE3104	SE30C-3	26/05/2007	'BARNESLEY MBC'	bird	<i>Certhia familiaris</i>	Treecreeper
SE3004	SE30C-1	26/05/2007	'BARNESLEY MBC'	bird	<i>Columba palumbus</i>	Woodpigeon
SE3104	SE30C-3	26/05/2007	'BARNESLEY MBC'	bird	<i>Columba palumbus</i>	Woodpigeon
SE3105	SE30C-4	26/05/2007	'BARNESLEY MBC'	bird	<i>Columba palumbus</i>	Woodpigeon
SE3104	SE30C-3	26/05/2007	'BARNESLEY MBC'	bird	<i>Corvus corone</i> subsp. <i>corone</i>	Carrion Crow
SE3004	SE30C-1	26/05/2007	'BARNESLEY MBC'	bird	<i>Corvus corone</i> subsp. <i>corone</i>	Carrion Crow

SE3105	SE30C-4	26/05/2007	'BARNESLEY MBC'	bird	Corvus corone subsp. corone	Carrion Crow
SE3004	SE30C-1	26/05/2007	'BARNESLEY MBC'	bird	Corvus monedula	Jackdaw
SE3104	SE30C-3	26/05/2007	'BARNESLEY MBC'	bird	Corvus monedula	Jackdaw
SE3004	SE30C-1	26/05/2007	'BARNESLEY MBC'	bird	Dendrocopos major	Great Spotted Woodpecker
SE3104	SE30C-3	26/05/2007	'BARNESLEY MBC'	bird	Dendrocopos major	Great Spotted Woodpecker
SE3004	SE30C-1	26/05/2007	'BARNESLEY MBC'	bird	Erithacus rubecula	Robin
SE3104	SE30C-3	26/05/2007	'BARNESLEY MBC'	bird	Erithacus rubecula	Robin
SE3105	SE30C-4	26/05/2007	'BARNESLEY MBC'	bird	Erithacus rubecula	Robin
SE3004	SE30C-1	26/05/2007	'BARNESLEY MBC'	bird	Fringilla coelebs	Chaffinch
SE3104	SE30C-3	26/05/2007	'BARNESLEY MBC'	bird	Fringilla coelebs	Chaffinch
SE3105	SE30C-4	26/05/2007	'BARNESLEY MBC'	bird	Fringilla coelebs	Chaffinch
SE3004	SE30C-1	26/05/2007	'BARNESLEY MBC'	bird	Garrulus glandarius	Jay
SE3105	SE30C-4	26/05/2007	'BARNESLEY MBC'	bird	Garrulus glandarius	Jay
SE3004	SE30C-1	26/05/2007	'BARNESLEY MBC'	bird	Motacilla alba subsp. yarrellii	Pied Wagtail
SE3104	SE30C-3	26/05/2007	'BARNESLEY MBC'	bird	Parus caeruleus	Blue Tit
SE3004	SE30C-1	26/05/2007	'BARNESLEY MBC'	bird	Parus caeruleus	Blue Tit
SE3105	SE30C-4	26/05/2007	'BARNESLEY MBC'	bird	Parus caeruleus	Blue Tit
SE3004	SE30C-1	26/05/2007	'BARNESLEY MBC'	bird	Parus major	Great Tit
SE3104	SE30C-3	26/05/2007	'BARNESLEY MBC'	bird	Parus major	Great Tit
SE3105	SE30C-4	26/05/2007	'BARNESLEY MBC'	bird	Parus major	Great Tit
SE3004	SE30C-1	26/05/2007	'BARNESLEY MBC'	bird	Phasianus colchicus	Pheasant
SE3104	SE30C-3	26/05/2007	'BARNESLEY MBC'	bird	Phasianus colchicus	Pheasant
SE3104	SE30C-3	26/05/2007	'BARNESLEY MBC'	bird	Phylloscopus collybita	Chiffchaff
SE3004	SE30C-1	26/05/2007	'BARNESLEY MBC'	bird	Phylloscopus collybita	Chiffchaff
SE3105	SE30C-4	26/05/2007	'BARNESLEY MBC'	bird	Phylloscopus collybita	Chiffchaff
SE3004	SE30C-1	26/05/2007	'BARNESLEY MBC'	bird	Pica pica	Magpie
SE3104	SE30C-3	26/05/2007	'BARNESLEY MBC'	bird	Pica pica	Magpie
SE3105	SE30C-4	26/05/2007	'BARNESLEY MBC'	bird	Pica pica	Magpie
SE3004	SE30C-1	26/05/2007	'BARNESLEY MBC'	bird	Sitta europaea	Nuthatch

SE3004	SE30C-1	26/05/2007	'BARNESLEY MBC'	bird	<i>Streptopelia decaocto</i>	Collared Dove
SE3104	SE30C-3	26/05/2007	'BARNESLEY MBC'	bird	<i>Streptopelia decaocto</i>	Collared Dove
SE3105	SE30C-4	26/05/2007	'BARNESLEY MBC'	bird	<i>Streptopelia decaocto</i>	Collared Dove
SE3104	SE30C-3	26/05/2007	'BARNESLEY MBC'	bird	<i>Sylvia atricapilla</i>	Blackcap
SE3105	SE30C-4	26/05/2007	'BARNESLEY MBC'	bird	<i>Sylvia atricapilla</i>	Blackcap
SE3004	SE30C-1	26/05/2007	'BARNESLEY MBC'	bird	<i>Sylvia atricapilla</i>	Blackcap
SE3004	SE30C-1	26/05/2007	'BARNESLEY MBC'	bird	<i>Sylvia communis</i>	Common Whitethroat
SE3004	SE30C-1	26/05/2007	'BARNESLEY MBC'	bird	<i>Sylvia curruca</i>	Lesser Whitethroat
SE3104	SE30C-3	26/05/2007	'BARNESLEY MBC'	bird	<i>Sylvia curruca</i>	Lesser Whitethroat
SE3004	SE30C-1	26/05/2007	'BARNESLEY MBC'	bird	<i>Troglodytes troglodytes</i>	Wren
SE3104	SE30C-3	26/05/2007	'BARNESLEY MBC'	bird	<i>Troglodytes troglodytes</i>	Wren
SE3105	SE30C-4	26/05/2007	'BARNESLEY MBC'	bird	<i>Troglodytes troglodytes</i>	Wren
SE3105	Dodworth Tip	25/09/2011	Dodworth	insect - butterfly	<i>Pieris brassicae</i>	Large White
SE3105	Dodworth Tip	25/09/2011	Dodworth	insect - butterfly	<i>Pieris rapae</i>	Small White
SE3105	Dodworth Tip	25/09/2011	Dodworth	insect - butterfly	<i>Polyommatus icarus</i>	Common Blue
SE3104	hedges	28/09/2011	Dodworth	insect - butterfly	<i>Aglais urticae</i>	Small Tortoiseshell







Toolbox Talk : Great Crested Newts

The great crested newt population has suffered a major decline in Britain over the last century. Numerous ponds have been lost, unmanaged ponds have become silted up and over-shaded, development has destroyed ponds and associated terrestrial habitat and caused fragmentation of populations. The loss of grassland, scrub and woodland has resulted in fewer opportunities for foraging, dispersal and hibernation.

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Identification: Great Crested Newts.

Great crested newts are dark, nearly black in colour with a speckled belly, distinctly orange in colour and with orange stripes across their toes. Great crested newts can grow up to 15cm in length.



Identification: Smooth and Palmate Newts.

Smooth newts are predominantly lighter in colour although their colour may vary from sandy coloured to very dark. Smooth newts also have a speckled orange belly but the orange colour fades to pale.



Palmate newts are similar to smooth newts but with a pinker belly and webbed feet.

Habitat.

Great crested newts live predominantly on land but breed in ponds between March and June.

Great crested newts may be found on land almost all year round. They spend the daytime under rocks or logs, in cracks, crevices or holes, or anywhere that is moist and cool and emerge at night to forage. During the winter months great crested newts hibernate deep down away from frost.

When disturbed in terrestrial habitats newts will usually be very sluggish and will take time to move away.

Legislation.

The great crested newt is listed on Schedule 5 of the Wildlife and Countryside Act 1981, recently modified by the Countryside Rights of Way Act 2000. The great crested newt is therefore subject to the provisions of Schedule 9, which make it an offence to:

- Intentionally kill, injure or take a great crested newt.
- Possess or control any live or dead specimen or anything derived from a great crested newt.
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by a great crested newt.
- Intentionally or recklessly disturb a great crested newt while it is occupying a structure or place which it uses for that purpose.

The great crested newt is also listed on Annex II and Annex IV of The Conservation (Natural Habitats & C) Regulations 1994. Regulation 39 makes it an offence to:

- Deliberately capture or kill a great crested newt.
- Deliberately disturb a great crested newt.
- Deliberately take or destroy the eggs of a great crested newt.
- Damage or destroy a breeding site or resting place of a great crested newt.

The legislation applies to all life stages of great crested newts.

The maximum fine on conviction of offences under Section 9 and Regulation 39 currently stands at £5,000. The CroW Act 2000 amendment also allows for a custodial sentence of up to six months instead of, or in addition to, a fine. In addition, items, which may constitute evidence of the commission of an offence, may be seized and detained.

If great crested newts 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 : Reptiles

Whitcher Wildlife Ltd

Ecological Consultants



Identification: Grass Snakes.

The grass snake can be up to 120cm long. It is generally dark green in colour but may occasionally appear grey with vertical black bars and spots that run along its sides. There is usually a yellow marking around the neck.



Other Reptiles.

In addition to the reptiles outlined on this document there are also two other reptile species in Great Britain, the smooth snakes and the sand lizard. These reptiles are a lot less common than the four species covered with the smooth snake being predominantly found on heathland in southern England and the sand lizard found throughout Great Britain in coastal dune areas.

These species are also afforded a higher level of protection because they are European Protected Species.

Identification: Adders.

The adder is the only native species that is venomous but it is rarely harmful to humans. Adult adders are generally up to 66cm long. Back ground colouration is a light shade of grey or brown with a back zig-zag marking along the length of the back. As with all reptiles, colouration varies and becomes duller as sloughing (skin shedding) approaches.



Habitat.

Maintaining the right body temperature is vital to reptiles' survival. In the morning they find a warm basking site to heat up their bodies and then later they may move back into the shade so as not to overheat. Hence, reptiles require a habitat that provides a range of suitable refugia for shelter such as dense vegetation, rubble or log piles, or crevices and open areas for basking such as bare ground, rocks or railway ballast shoulders. During hot summers reptiles may be found in damper, cooler sites. Reptiles hibernate, spending the winter in burrows or under logs protected from the cold and predators.

Identification: Slow Worms.

Slow worms grow to around 45cm in length. The males and females display a marked difference in colour when fully grown. In general the species displays colouring that varies from light brown, dark brown, grey, bronze or brick red with the females often displaying a dark vertebral stripe and both males and females displaying occasional markings on the flanks.



When disturbed in their natural habitat reptiles will usually move away quickly.

Identification: Common Lizards.

Common lizards grow to around 16cm. They are grey brown to dark brown, often with a darker streak that may run the entire length of the spine. A continuous dark band bordered by light yellow or white spots is often seen on either side of the body. The underside of the males is egg yolk yellow to orange spotted with black. Females are yellowish grey.



Legislation.

Reptiles are protected under Schedule 5 of the Wildlife and Countryside Act 1981. They received greater protection following reviews of the schedules published in 1988 and 1991. This means they are protected against intentional or recklessly killing and injuring and against sale or transporting for sale.

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