



**PHASE 2, LAND OFF MELIDEN ROAD,
DYSERTH, DENBIGHSHIRE -**

**EXTENDED PHASE 1 HABITAT SURVEY &
BADGER SURVEY**

APRIL 2020

CONFIDENTIAL



ces ecology
consultant ecologists

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Author	SW
Checked	ML
Revised	-

IMPORTANT

This report contains sensitive ecological information regarding a legally protected species which has been subject to persecution in the past and should therefore not enter the public domain.

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EXECUTIVE SUMMARY

- Cheshire Ecological Services Ltd. (CES Ecology) was commissioned to conduct an Extended Phase 1 Habitat and Badger Survey of an area of land off Meliden Road, Meliden, where Phase 2 of the Cysgod Y Graig residential development is proposed.
- The walkover survey was undertaken on 21st April 2020 by CES Senior Ecologist Suzie Whitnall BSc (Hons) MSc ACIEEM.
- The proposed development site totals approximately 1.1 hectares and is situated adjacent to Phase 1 Cysgod Y Graig development site, Dyserth.
- The site comprised poor semi-improved grassland and dense continuous scrub. A defunct hawthorn hedgerow demarcates the southern site boundary and mature trees are present along the northern boundary. The grassland area has been disturbed due to the current construction works including the site compound on Phase 1.
- The site is not designated with any statutory or non-statutory designations for nature conservation and there are no such sites located immediately adjacent to the site. There are three Sites of Special Scientific Interest and three non-statutorily designated Local Wildlife Sites within 1km of the site. No direct impacts on these nationally and county important sites are predicted to result from the development.
- Features of ecological interest identified during the survey consisted of a boundary hedgerow, an area of dense scrub and mature trees. These features are recommended to be retained and incorporated into the development.
- The habitat composition of the site was considered to have potential to support legally protected and Priority wildlife species, including nesting birds, bats, hedgehog and reptile.
- No evidence of badger was recorded on or within 30m of the site, however an active sett is present on the northern boundary of Phase 1. Given the inaccessibility of a large proportion of scrub vegetation on the proposed Phase 2 site, a precautionary approach is recommended if this area of dense/continuous scrub cannot be retained. If this is the case, a badger mitigation strategy method statement is proposed to be implemented during the clearance of scrub vegetation.
- The provision of bird nest boxes and bat boxes within the development is proposed to help achieve net gains in biodiversity, in accordance with planning policy.
- A number of recommendations are made in respect of the protection of nesting birds, bats, reptiles and hedgehog, which may have an association with the site.

1.0 INTRODUCTION

- 1.1 Cheshire Ecological Services Ltd. (CES Ecology) was commissioned to conduct an Extended Phase 1 Habitat and Badger Survey of the Phase 2 area of land off Meliden Road, Dyserth, Denbighshire, where residential development is proposed.
- 1.2 Ecological surveys of the Phase 1 site were undertaken by CES Ecology for Macbryde Homes Ltd in January 2018 and by United Environmental Services (UES) for Denbighshire County Council in 2014 and 2015. UES' surveys included the land within Phase 2.
- 1.3 The purpose of the survey was to gain baseline ecological information of the site in order to assess its current status, to identify any ecological constraints to development that may currently be associated with the development area or surrounding land, and to recommend further survey if necessary.
- 1.4 The survey was conducted by Senior Ecologist Suzie Whitnall BSc (Hons) MSc ACIEEM on 21st April 2020.
- 1.5 Weather conditions at the time of the survey were dry and sunny with a temperature of 17°C.

2.0 SITE DESCRIPTION

- 2.1 The survey was centred on the following OS grid reference: SJ 05405 79393.
- 2.2 The area of land requested to be surveyed totals approximately 1.1 hectares and is hereafter referred to as 'the site'. The site is situated on the north-western outskirts of the village of Dyserth and is located immediately to the south of the A547.
- 2.3 The site is connected to the Cysgod Y Graig Phase 1 development site, which was under construction at the time of this survey.
- 2.4 The site currently comprises a grassland field and dense area of scrub. Phase 1 site's compound was located in the north-east corner of the site.
- 2.5 Land-use in the wider area is comprised of the village of Dyserth, mixed-use farmland, roads, former quarry sites and woodland (refer to Appendix A – Site Location Plan).

3.0 SURVEY METHODS

Desk-based study

- 3.1 The desk-based study comprised consultation with the following consultees:
 - Cofnod - the local biological records centre for North Wales
 - Ordnance Survey – OS mapping of the local and wider area

- 3.2 Cofnod was asked to provide information on statutory and non-statutory nature conservation sites within 1km of the site, and to provide records of protected and Priority species within a 1km radius from the site boundary, within the past 20 years.
- 3.3 Ordnance Survey mapping of the local area was reviewed to search for the presence of habitats and features of potential ecological relevance to this survey, such as ponds.

Extended Phase 1 Habitat Survey

- 3.4 This survey involved the mapping of various habitat types on the site in addition to any habitat features and botanical species of conservation importance. Phase 1 habitat mapping is presented in Appendix B. A thorough walk-over survey was undertaken of the site. The methodology for this survey followed that described by the Joint Nature Conservation Committee (JNCC, 2010).
- 3.5 Priority habitats and species, for which there is a national or local Biodiversity Action Plan (BAP) and those listed under Section 42 of the Natural Environment and Rural Communities Act, 2006 (for Wales), were recorded as such where present. The Section 42 list of Priority habitats and species has now been superseded by the Section 7 list of the Environment (Wales) Act 2016, however, the lists are currently exactly the same and the two should therefore be considered interchangeable.
- 3.6 Preliminary searches were also carried out for protected and Priority species such as badgers, great crested newts (GCN) and bats that may potentially use the site. Scientific names and the national status of vegetative species recorded follow Stace (2019). Scientific and common names stated in the text are also presented in Appendix C.

Badger Survey

- 3.7 A daytime site 'walkover' was conducted as part of the survey to search for evidence of recent badger activity and/or setts on the proposed development site and within 30m of the site boundaries.
- 3.8 The aims of the 'walkover' survey were to:
- To assess the site for signs of badger activity, including setts, commuting routes, foraging signs, and territory marking.
 - To assess the impact that the proposed development may have on any populations of badgers that may be present within or near the site.
 - To recommend any actions that may be required resulting from the above.

Survey Limitations

- 3.9 The observations made during this survey have been used to assess the presence, or potential presence, of protected and/or Priority species within the proposed area of works and to recommend further actions where required. It should however, be noted that this survey serves as a single visit representing a 'snap-shot in time' whereby only the species present at the time of survey were recorded.

3.10 The eastern area of the site comprised very dense scrub, and as such access into this area was limited and full inspection was not possible and is unlikely ever to be possible unless/until the vegetation is cut. Consequently, a precautionary approach to the removal of this scrub area has been recommended to account for this limitation.

4.0 RESULTS

Desk-based Study

- 4.1 Cofnod highlighted the presence of three statutorily designated nature conservation sites present within 1km of the site (Refer to Appendix 1: Site location plan):
- Graig Fawr Site of Special Scientific Interest (SSSI): located at its closest point approximately 800m to the north-east of the site beyond the village of Dyserth.
 - Maes Hiraddug SSSI: located at its closest point approximately 650m to the east of the site beyond the village of Dyserth. This SSSI site incorporates North Wales Wildlife Trust Reserve Maes Hiraddug.
 - Moel Hiraddug a Bryn Gop SSSI: located at its closest point approximately 800m to the south-east of the site beyond the village of Dyserth.
- 4.2 Cofnod highlighted the presence of three non-statutorily designated nature conservation site present within 1km of the site (Refer to Appendix 1: Site location plan):
- Carreg Heilyn Wildlife Site (WS) (ref: D023): located at its closest point approximately 300m to the east of the site beyond the village of Dyserth.
 - Prestatyn-Dyserth Walkway WS (ref: D020): located at its closest point approximately 560m to the north-east of the site beyond the village of Dyserth and the A547.
 - Moel Hiraddug WS (ref: D025): located approximately 760m to the south-east of the site beyond the village of Dyserth.
- 4.3 Cofnod also highlighted the presence of eight ancient woodland sites within the search area (including restored ancient woodland and plantations on ancient woodland sites), none of which occur within the site or immediately adjacent to it; the closest is approximately 250m to the south-west of the site.
- 4.4 Cofnod highlighted the presence of the following protected species occurring within approximately 1km of the proposed development site since 2000:

Table 1: Cofnod Species data results

Scientific name	Common name	Designations
<i>Acanthis cabaret</i>	Lesser Redpoll	S7, UKBR, WBR, LBAP
<i>Accipiter gentilis</i>	Goshawk	CITES, WCA1.1, WCA9, LBAP[CON]
<i>Acronicta psi</i>	Grey Dagger	S7
<i>Agrochola lychnidis</i>	Beaded Chestnut	S7, LBAP[GWY]
<i>Alauda arvensis</i>	Skylark	BDir2.2, S7, UKBR, WBA, LBAP
<i>Anas platyrhynchos</i>	Mallard	BDir2.1, UKBA, WBA
<i>Anguis fragilis</i>	Slow-worm	Bern, S7, WCA5, LBAP

<i>Apamea remissa</i>	Dusky Brocade	S7
<i>Apus apus</i>	Swift	UKBA, WBA
<i>Arctia caja</i>	Garden Tiger	S7
<i>Aricia agestis</i>	Brown Argus	LBAP
<i>Caradrina morpheus</i>	Mottled Rustic	S7
<i>Chiasmia clathrata</i>	Latticed Heath	S7
<i>Chiroptera</i>	Unknown Bat	EPS, S7, WCA5, LBAP
<i>Coenonympha pamphilus</i>	Small Heath	RD1(UK)NT, S7
<i>Delichon urbicum</i>	House Martin	Bern, UKBA, WBA
<i>Emberiza citrinella</i>	Yellowhammer	WCA1.1, UKBR
<i>Emberiza schoeniclus</i>	Reed Bunting	Bern, S7, UKBA, WBA, LBAP
<i>Erinaceus europaeus</i>	Hedgehog	Bern, S7
<i>Erynnis tages</i>	Dingy Skipper	RD1(UK)VU, S7
<i>Falco peregrinus</i>	Peregrine	BDir1, Bern, CITES, WCA1.1
<i>Falco tinnunculus</i>	Kestrel	Bern, CITES, S7, UKBA, WBR, LBAP
<i>Fringilla montifringilla</i>	Brambling	WCA1.1
<i>Hepialus humuli</i>	Ghost Moth	S7
<i>Hipparchia semele</i>	Grayling	RD1(UK)VU, S7
<i>Hirundo rustica</i>	Swallow	Bern, WBA
<i>Hoplodrina blanda</i>	Rustic	S7
<i>Hyacinthoides non-scripta</i>	Bluebell	WCA8
<i>Lasiommata megera</i>	Wall	RD1(UK)NT, S7
<i>Linaria cannabina</i>	Linnet	WCA1.1, UKBR
<i>Lullula arborea</i>	Woodlark	BDir1, S7, WCA1.1
<i>Melanthia procellata</i>	Pretty Chalk Carpet	S7
<i>Meles meles</i>	Badger	Bern, PBA, LBAP
<i>Mustela putorius</i>	Polecat	WCA1.1
<i>Myotis daubentonii</i>	Daubenton's Bat	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP
<i>Natrix natrix</i>	Grass Snake	Bern, S7, LBAP
<i>Nyctalus noctula</i>	Noctule Bat	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP
<i>Oenanthe oenanthe</i>	Wheatear	Bern, WBA
<i>Passer domesticus</i>	House Sparrow	S7, UKBR, WBA
<i>Passer montanus</i>	Tree Sparrow	S7, UKBR, WBR, LBAP
<i>Phylloscopus trochilus</i>	Willow warbler	WCA1.1, WBA
<i>Poecile montana</i>	Willow tit	WCA1.1, UKBR
<i>Pipistrellus pipistrellus</i>	Common Pipistrelle	Bern, Bonn, EPS, HDir, RD2(UK), RD2(UK), S7, WCA5, LBAP
<i>Pipistrellus pygmaeus</i>	Soprano Pipistrelle	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP
<i>Plebejus argus</i>	Silver-studded Blue	RD1(UK)VU, S7, WCA5, LBAP
<i>Plecotus auritus</i>	Brown Long-eared Bat	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP
<i>Prunella modularis</i>	Dunnock	BAP, Bern, RD2(UK), S7, UKBA
<i>Pyrrhula pyrrhula</i>	Bullfinch	BAP, S7, UKBA, WBR, LBAP

<i>Rhinolophus hipposideros</i>	Lesser Horseshoe Bat	Bern, EPS, HDir, RD2(UK), S7, WCA5, LBAP
<i>Satyrium w-album</i>	White-letter Hairstreak	RD1(UK)EN, S7, WCA5
<i>Scotopteryx chenopodiata</i>	Shaded broad-bar	S7
<i>Sturnus vulgaris</i>	Starling	BAP, BDir2.2, Bern, RD2(UK), S7, UKBR, WBR
<i>Sylvia borin</i>	Garden Warbler	WBA
<i>Sylvia curruca</i>	Lesser Whitethroat	LBAP
<i>Turdus philomelos</i>	Song Thrush	BAP, BDir2.2, Bern, RD2(UK), S7, UKBR, WBA, LBAP
<i>Tyto alba</i>	Barn Owl	Bern, CITES, RD2(UK), WBA, WCA1.1, WCA9, LBAP
<i>Vanellus vanellus</i>	Lapwing	BDir2.2, S7, UKBR, WBR, LBAP
<i>Zootoca vivipara</i>	Common Lizard	Bern, S7, WCA5, LBAP

NB: All species names and designation provided by Cofnod

Designations key:

UKBR - RSPB UK Birds Red List (not based on IUCN criteria)
WBR - RSPB Welsh Birds Red List (not based on IUCN criteria)
LBAP - Local Biodiversity Action Plan species for Denbighshire
WBA - RSPB Welsh Birds Amber List (not based on IUCN criteria)
LI - Locally Important within the listed area
RD2(UK) - Red Data Book listing for the UK not based on IUCN guidelines
RD1(UK)NT - Red Data Book listing for the UK based on IUCN guidelines (near threatened)
RD1(UK)VU - Red Data Book listing for the UK based on IUCN guidelines (vulnerable)
INNS - Invasive Non-native Species
WCA9 - Wildlife & Countryside Act 1981 Schedule 9 (Non-native animals and plants which are established in the wild)
Bern – Bern Convention on the Conservation of European Wildlife and Natural Habitats
UKBA - RSPB UK Birds Amber List (not based on IUCN criteria)
BDir1 – EU Birds Directive Annex 1
BDir2.2 – EU Birds Directive Annex 2.2
CITES – Convention on International Trade in Endangered Species of Wild Fauna and Flora
WCA1.1 - Wildlife & Countryside Act 1981 Schedule 1.1 (Birds which are protected at all times)
PBA - Protection of Badgers Act 1992
BAP - UK Biodiversity Action Plan

- 4.5 A number of other species records were provided but have not been included in this report as it is considered highly unlikely that they would be associated with the site on the basis of a lack of suitable supporting habitat. For example, numerous records of wildfowl and wader birds were provided. A significant number of these records appear to originate from Maes Hiraddug SSSI and North Wales Wildlife Trust reserve. The site does not comprise any aquatic or wetland habitat suitable to support such species away from the SSSI.

Fieldwork

- 4.6 Features of interest recorded on the site during this survey are described in the Target Notes (TN) below. All numbered Target Notes correspond with the Phase 1 Habitat Map (refer to Appendix B). Species lists for each area and photographic plates are presented within Appendices C and D, respectively.

Target Notes

TN1 – Dense area of scrub – potential habitat for nesting birds and badgers (Plates 4-7)

TN2 – Native hedgerow (Plate 9)

TN3 – Site compound (Plate 3)

5.0 DISCUSSION

Designated Sites

- 5.1 Cofnod indicated that there are three SSSIs within 1km of the site; namely Graig Fawr SSSI, Maes Hiraddug SSSI and Moel Hiraddug a Bryn Gop SSSI; all of which are separated from the site by built environs, including the village of Dyserth and with no obvious routes of habitat connectivity to the site. As such, no direct impacts on these nationally important sites are predicted to result from the development. Indirect impacts such as increased levels of footfall are possible if/where public access to SSSIs is permitted, however given the relatively small scale of the proposed development, in relation to the existing size/population of Dyserth and neighbouring villages, any such impacts are likely to be not-significant.
- 5.2 Similarly, given the small scale of the development and distance from the site to the three Wildlife Sites and eight ancient woodlands within 1km, no direct or indirect impacts are anticipated.

Habitats

5.3 Poor semi-improved neutral grassland (Plates 1 – 3)

The western section of the site forms part of the grassland field associated with Phase 1, which was under construction at the time of the walkover survey.

The area of poor semi-improved grassland totals approximately 0.7 hectare. Heras fencing had been installed around the majority of this area of grassland and the Phase 1 compound established in the north-western corner. Within the fenced area the ground had been disturbed with a short sward height of less than 10cm, patches of bare ground and a large mound of sand. A small section of grassland along the northern and eastern boundary remained outside the fencing. Here, the tussocky grassland had a higher sward height of 30cm.

The grassland comprised grass species such as smooth meadow grass, bent sp, Yorkshire fog, meadow foxtail, sweet vernal grass and tussocks of cock's foot. Herbaceous plant species included ribwort plantain, broad-leaved dock, creeping buttercup, meadow buttercup, dandelion, common ragwort, common nettle, cleavers, and field woodrush. Botanical diversity was generally low and consequently the habitat type 'poor semi-improved neutral grassland' was recorded.

5.4 Dense/ continuous scrub (Plates 4-7)

The eastern section of the site comprised an area of dense continuous scrub, totalling approximately 0.4 of a hectare.

The scrub comprised a band of blackthorn, elder, hawthorn and holly along the field boundary, grading into dense bramble to the south-west and bracken to the north-west. This stand of dense and continuous scrub was impenetrable in places and could not be inspected at close quarters. Expanses of dense scrub such as that present to the east

of the site are generally of high value to wildlife; providing valuable feeding, breeding and shelter habitat to a range of species. The recommendation is therefore made that this habitat be retained where possible.

5.5 Scattered trees (Plate 7)

A number of mature trees including ash and sycamore were present along the north-eastern boundary of the site. A group of semi-mature cherry trees were also present within the bramble scrub area.

5.6 Hedgerow (Plate 9)

Hedgerow 1 - A defunct hawthorn hedgerow was present along the south-western boundary of the grassland section. It was approximately 85m in length with a height of 2m and width of 1.5m. Other occasional hedgerow species include bramble and ivy. Ground flora was of a similar composition to the surrounding grassland. This hedgerow qualifies as Priority habitat but is considered unlikely to qualify as Important under the ecological criteria of the Hedgerow Regulations (1997) due to a lack of species diversity and associated features. The recommendation is made that the hedgerow should be retained and incorporated into the development.

Features of Ecological Interest

5.7 The on-site hedgerow is considered unlikely to qualify as Important under the Hedgerow Regulations 1997, however it does qualify as Priority habitat. This hedgerow should ideally be retained and incorporated into the development. The retained hedgerow should be enhanced and gaps planted with woody species native to the local area, such as hawthorn, blackthorn, hazel, alder, elder, holly, rowan and elm. The hedgerow should be managed for wildlife conservation; being allowed to achieve and retain a height of at least 2m and 1.5m in width. Retained hedgerows and their root systems should be sufficiently protected during the construction phase.

5.8 The mature tree along the north-eastern boundary are likely to be retained. Any works close to these retained trees should be mindful of root protection areas. If any trees are to be removed they should be replaced with native local species.

5.9 The area of scrub in the eastern section of the site is of particular ecological interest in a site level context. Current layout plans indicate that this area is likely to be lost to facilitate the development. As a minimum, consideration should be given to retaining an area of scrub, possibly along the eastern boundary between the proposed development and current residential housing. If this is not possible, native shrub and tree planting should be incorporated into the development to mitigate the losses.

5.10 The habitat composition of the site has the potential to support legally protected and Priority wildlife species. It was not within the scope of this survey to carry out detailed searches for protected species. However, the data provided by Cofnod has been reviewed and the potential for the study site to support the following species is discussed below:

- Badger
- Barn owl

- Bats
- Birds
- GCN
- Hedgehog
- Invertebrates
- Reptiles

Legislation relating to each species discussed in this report is presented in Appendix E – Legislation. No other legally protected species are considered likely to be associated with the proposed development site due to a lack of suitable habitat on, and surrounding the site.

5.11 Badgers

Badgers and their setts are protected under British law. Therefore, surveys are required to check for the presence of badgers and their setts if they are likely to be disturbed for any reason. Statutory guidance indicates that a licence may be required if potentially disturbing works are to take place within 30m of a badger sett.

Cofnod provided several records of badger within 1km radius of the site. Notably, the main badger sett to the north of Phase 1, which contains eight active holes. This sett has been retained and has been fenced off as part of the Phase 1 development.

During the survey, no badger setts were identified on site, or within 30m of the site where observations could be made. However, the dense areas of blackthorn scrub and bramble scrub in the eastern section of the site could not be fully inspected for badger entrance holes, and is considered to be of moderate suitability for badger sett-building. Mammals paths were recorded within the area of bracken; however, no other field signs such as dung pits or badger hairs were found. Although the grassland area is suitable habitat for foraging badgers, the heras fence prohibits access. Rabbits are prevalent within this area and on the site.

Given the close proximity to an active main sett and suitable habitat connectivity to the area of scrub within the site, the likelihood that a badger sett is present in this area of dense/continuous scrub cannot be discounted, e.g. an outlier sett. Ideally this area of scrub would be retained, however if this is not possible then it is recommended that the scrub clearance work proceeds under a Badger Mitigation Strategy. The proposed badger mitigation strategy is present below, which may be secured under a suitably worded planning condition/s:

Badger Mitigation Strategy – Method Statement

Post Construction

- Prior to the commencement of the scrub clearance works, an appropriately experienced badger ecologist shall be appointed by the developer or their agent/contractor to ensure that this Badger Mitigation Strategy is successfully implemented.

- No more than one week in advance of the commencement of site clearance works, the scrub area shall be subject to a walkover inspection, where possible, by the appointed ecologist to check for the potential presence of any new badger setts that may have been created on or within 30m of the site since the date of this CES Extended Phase 1 Habitat Survey.
- A badger toolbox talk will be presented to any contractors undertaking the site clearance by the appointed ecologist prior to the clearance works. A copy of this badger mitigation strategy will be kept on site at all times until the development is complete.
- Initial scrub clearance will be carried out using hand tools only, allowing the appointed ecologist to check areas of scrub that were inaccessible at the time of this CES Extended Phase 1 Habitat Survey. The ecologist will inspect the area, as access becomes possible, for the potential presence of badger setts which may have been covered by the scrub.
- In the event that any setts are discovered, this method statement will have to be reviewed and the mitigation strategy amended accordingly. A licence to disturb badger setts may be required from Natural Resources Wales. Note: the time constraints relating the licence applications and scheduling of licenced works could have implications to the development timetable.
- **If no setts are present**, once confirmed by the appointed ecologist, the remaining scrub vegetation may be removed/cleared.

During Construction

- Within the working areas of the entire Phase 2 site, no trenches or excavations will be left open overnight. They will be backfilled or covered with boards or fitted with a means of escape for any badger (or other animal) which may become trapped within. Any pipes will be stored with caps in place to prevent entry by badgers.
- If at any point during the construction phase new badger setts are established on site or within 30m, the appointed ecologist shall be contacted immediately for advice.

5.12 Barn owl

Barn owls receive special protection under Schedule 1 of the Wildlife & Countryside Act, 1981 (as amended). In addition to the protection afforded to all wild birds under Section 1 of the Act, species listed on Schedule 1 also receive special legal protection when breeding; making it an offence to intentionally or recklessly disturb any wild barn owl whilst it is at or near a nest containing eggs or young, or disturb the dependent young of such a bird. Barn owls are also a Local Biodiversity Action Plan species for Denbighshire.

Cofnod provided two records of barn owl from within the search area, the closest being 147m north-east of the site.

The site does not offer this species with any suitable roost/nest sites; there are no buildings on site and all trees do not support sufficiently sized roost features, such as cavities or holes.

Grassland habitat was, at the time of survey, considered to offer suitable but not optimal foraging habitat for barn owl (i.e. Type 2, Shawyer 2011), on account of the homogenous, short sward and a general lack of a litter layer. It is considered that whilst this species may utilise the site as a foraging resource, due to its relatively small size (1.1Ha) in the context of the range of individual barn owls from their nest and roost sites (generally accepted to be 3km during summer and 5km in winter), adverse development impacts on the local population of this species is considered likely low-level.

No further survey in respect of barn owl is currently considered necessary.

5.13 Bats

All British species of bat are protected under both European and British law. Surveys are required to check for their presence in areas where bats or their roosts are likely to be disturbed for any reason.

Bats are known to roost in buildings and mature trees, where they rest, give birth, raise young and hibernate. Buildings provide a choice of safe, dry places and can present a whole range of potential roost sites such as within wall cavities, eaves or roofs.

Cofnod highlighted the presence of common pipistrelle, soprano pipistrelle, brown long-eared bat, noctule, lesser horseshoe, Daubenton's and unidentified bat species occurring within the search area. No records originate from the site, with the closest records 147m north-east with bat passes detected during an activity survey.

There are no buildings on site and none of the trees within the site were observed to contain features potentially suitable to support bat roosting (e.g. holes, cracks or fissures). All trees on site are of 'Negligible' suitability to support bat roosting.

The boundary hedgerow and area of scrub provides bats with some suitable commuting and foraging opportunities in the local area, categorised as being 'Moderate' suitability in accordance with BCT Guidelines (2016). The boundary hedgerow is likely to be retained, and should be enhanced as discussed in paragraph 5.6. The area of scrub will likely be lost to facilitate the development. It is recommended that a band of trees/scrub should be retained / planted along the eastern boundary, to retain a corridor for wildlife. Light spillage should be kept to an absolute minimum.

Planning policy indicates that development should seek to achieve net gains in biodiversity. The provision of bat boxes within residential developments is one means of helping achieve this. It is recommended that bat boxes are either installed on retained suitably mature trees or integrated within the new houses. Suggestions include:

- Habitat box boxes to be integrated in to the new house
- Schwegler 1FN or 1FF (or equivalent) to be installed on trees.

No further survey effort in respect of bats is currently considered necessary. However, the recommendation is made that low level and directional lighting be used to reduce levels of light spillage onto hedgerow, enhanced boundaries, and off-site habitats.

5.14 Birds

All species of wild bird, their nest and eggs are protected under Section 1 of the *Wildlife and Countryside Act*, 1981 (as amended).

Cofnod provided records of numerous species of bird occurring within the search area. As discussed in paragraph 4.5, the site does not comprise any aquatic or wetland habitat suitable to support species of wader, wildfowl or other water birds and as such these species are not discussed further.

There are no buildings on site, and as such the site is of no value to swift, swallow or house martin for nesting.

The area of scrub and boundary hedgerow offer common passerine species with highly suitable nesting habitat, including the Priority species listed above. However, the site itself is considered to be too small to be of local significance or higher as breeding resource, and does not have significant potential support any Schedule 1 listed species during the breeding season.

Development impacts on kestrel are considered to be low for similar reasons to those discussed for barn owl, i.e. no suitable nesting opportunities and loss of only a relatively small area of suitable foraging habitat. With regards to ground nesting species, the site's relatively small size, large area of scrub, and the presence of current construction activities makes it unsuitable for use by such species, including skylark.

As such, breeding bird surveys to assess the current ornithological value of the site are not considered necessary to support the planning application.

All scrub and woody vegetation on site has the potential to be used by birds for nesting. It is therefore recommended that in order to reduce the risk of encountering nesting birds during site clearance works, once planning permission has been granted, all woody vegetation (including bramble scrub) that is due to be affected should be removed or reduced in height to less than 10cm during the winter months (prior to 1st March) as a measure to discourage birds from nesting – and importantly, in line with the recommended Badger Mitigation Strategy (para. 5.11)

If this is not possible and vegetation is required to be removed between 1st March and 31st August in any year, surveys to check for the presence of nesting birds will first be required. Should any active nests be found (highly likely), the appointed ecologist should establish an exclusion zone around the nest site until the nesting attempt has been confirmed to no longer be active.

Planning policy indicates that development should seek to achieve net gains in biodiversity. The provision of bird nest boxes within residential developments is one means of helping achieve this. The provision of bird nest boxes for species of conservation concern, such as house sparrow and starling, would be most appropriate

given that they are known to occur in the local area and they readily utilise nest boxes. In this instance, one nest box for every four houses developed is considered to be an appropriate amount.

5.15 Great crested newt

GCN are protected under both European and British law. Adult GCN predominantly live terrestrially, but utilise ponds for breeding purposes during the spring and summer months. Statutory guidance indicates that a survey may be necessary to check for the presence of GCN if background information on distribution suggests that they may be present. Detailed indicators include:

- Any historical records for GCN on the site, or in the general area
- A pond on or near the site (within around 500m), even if it holds water only seasonally. Note that muddy, cattle-poached, heavily vegetated or shady ponds, ditches and temporary flooded hollows can be used by GCN
- Sites with refuges (such as piles of logs or rubble), grassland, scrub, woodland, or hedgerows within 500m of a pond

Cofnod did not provide any records of great crested newt from within the search area, and no ponds have been identified within 250m of the site boundary. The closest pond is located approximately 650m to the north-east of the site (refer to Appendix A: Site Location Plan). The potential presence of great crested newt within the site therefore considered to be highly unlikely and no further survey effort in respect of this species is considered necessary.

Best practice measures for the protection of the other lesser protected amphibian species such as common frog are recommended to be implemented. These are detailed in the reptile section (i.e. best practice measures for herpetofauna).

5.16 Hedgehog

Hedgehog is a UK BAP Priority species and is listed on Section 7 of the Environment (Wales) Act, 2016. Cofnod provided records of hedgehog within the search area.

The grassland field offers foraging habitat to hedgehog and the on-site hedgerow and scrub offer suitable sheltering opportunities. Care should therefore be taken during site preparation/clearance to ensure that hedgehogs are not harmed during these operations. The establishment of protective barriers around retained hedgerow will help mitigate this risk.

During the construction phase no excavations should be left open overnight and if this is not possible, spoil ramps should be provided to provide a means of escape. All excavations left open overnight should first be checked for the presence of animals prior to works recommencing.

Close-board timber fencing has become the typical boundary feature used in most new residential developments but it has been identified as one of the main reasons why hedgehog numbers have declined sharply in recent years; hedgehogs are no longer able to access land they once used when secure fencing is erected in their path. The recommendation is therefore made that if timber fencing is to be used around gardens,

then holes should be provided within the bases of new fencing measuring 13x13cm to allow hedgehogs access to each new garden.

5.17 Invertebrates

Cofnod provided numerous records of butterflies and moths from within the search area, including Priority species. Most of these species require habitats with structural diversity, coarse grasses and/or flowering plants. Whilst the grassland field is of low botanical value, the dense/continuous scrub is likely to provide some butterfly species (and other invertebrates) with suitable habitat.

As recommended in para 5.9, as a minimum, consideration should be given to retaining an area of scrub, possibly along the eastern boundary between the proposed development and current residential housing. If this is not possible, native shrub and tree planting should be incorporated into the development to mitigate the losses.

5.18 Reptiles

All six species of British reptile are protected against intentional killing, injury or sale under Schedule 5 of the *Wildlife and Countryside Act*, 1981. The sand lizard and smooth snake are afforded a higher degree of protection under European law, which, amongst other things, makes it an offence to damage, destroy or obstruct their places of shelter or disturb these species in such a place. However, the distribution of these species is limited, and is largely restricted to a few southern counties in England, with the exception of some coastal sites in Merseyside and North Wales which support populations of sand lizard. The distribution of the remaining 'common' species (i.e. adder, grass snake, slow worm and common lizard) is widespread.

With some variation between species, reptiles prefer undisturbed habitats with open areas for basking and warmth, and more vegetated areas for shelter and feeding. They shelter and hibernate in crevices underground, such as within old mammal burrows, cracks within concrete bases and within spoil/rubble mounds.

Cofnod provided records of common lizard, grass snake and slow worm within the search area; slow worm records originate from garden locations to the south of Dyserth and grass snake and common lizard records originate from locations to the east of Dyserth. No reptile records originate from, or from adjacent to the site, however, the presence of these species in the local area has been confirmed.

The site is considered likely to be unused by grass snakes due to lack of nearby wetland habitat, however slow worms and common lizards could potentially occur within the site; the most suitable areas for this species being along the area of scrub to the east of the site and scrub / field boundary. The grassland offers poor suitability to slow worm and common lizard due to its short homogenous sward, lack of shelter sites and current construction disturbance. As such, slow worms and common lizards are reasonably likely to be absent from this section of the site.

The area of scrub will likely be lost to facilitate the development, however the adjacent area to the south which will be retained offers better quality habitat for these species with a mosaic of habitats including scrub, bare ground and tussocky grassland compared to the homogenised scrub habitat on site.

The area of scrub on site is considered to be difficult to survey, as such a precautionary approach is recommended. Best practice measures for the protection of reptiles (namely slow worm and common lizard) and common amphibian species (such as common frog) are recommended to be implemented. Reptiles and amphibians are collectively referred to as herptiles. The herptile best practice measures are as follows:

- Maintain the grassland sward to less than 10cm in height to dissuade animals from sheltering within the development areas
- Establishment of heras-type fencing around retained hedgerows to prevent inadvertent damage to any retained habitats suitable for herptiles and therefore reduce the risk of killing or injury to these species.
- The appointed ecologist should be contacted for advice on the best way to proceed should any reptiles be discovered on site.
- Any common frogs or common toads discovered on site should be released within the ecological exclusion area within the Phase 1 site – i.e. surrounding the badger sett.
- In the highly unlikely event that great crested newts are discovered on site, works should stop with immediate effect and the appointed ecologist be contacted immediately for advice.

6.0 SUMMARY RECOMMENDATIONS TABLE

	Species potentially associated with the site/s?	Further survey effort required?	Survey timing	Recommendations
Badger	Yes	Yes	Any time of year	The badger mitigation measures method statement should be strictly adhered to. This involves walkover survey/inspection as/when the dense scrub is cleared.
Barn owl	No	No	-	No further survey effort is required in respect of this species.
Bats	Yes	No	-	The development should avoid causing light-spillage onto retained boundary hedgerow. Bat boxes are recommended to be incorporated into the new dwellings.
Birds	Yes	Potentially: Nesting bird surveys will be required <u>if</u> vegetation	March - August	Vegetation removal works should take place outside of the bird breeding season (i.e. October – February). A

		removal works are to take place between March & August inclusive.		survey will not be required if potentially disturbing works are undertaken during this period.
Great crested newt & amphibians	No	No	-	-
Hedgehog	Yes	Pre-start walkover checks should be undertaken.	-	All open excavations should be covered overnight. If this is not possible than ramps should be provided as a means of escape.
Invertebrates	Unlikely (to be in significant levels of use)	No	-	-
Reptiles	Unlikely	No	-	Best practice measures for the protection for herptiles are recommended. This includes maintaining the grassland sward in the working areas to <10cm and appropriate protection of retained hedgerows and the pit.
Hedgerow	On site	No		Appropriate protection and gapping-up of retained hedgerows, and creation of a species-rich compensatory hedgerow around the ecological exclusion zone.

7.0 REFERENCES

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Appendices

Appendix A: Site Location Plan



Legend

- Proposed development site boundary
- Indicative location of ponds/waterbodies
- Indicative location of Sites of Special Scientific Interest (SSSI)
- Indicative location of North Wales Wildlife Trust (NWWT) Reserve
- Indicative location of Wildlife Sites
- Indicative location of ancient woodland

Project:	Dyserth Phase 2 , Denbighshire
Map:	Site Location Plan
CES Ref:	CES/1391/04-20/SW
Scale:	Not to scale / Indicative
Date	April 2020

Aerial Image sourced from Google Earth Pro January 2020










CES Ecology
 Bickley Hall Farm
 Bickley
 Malpas
 Cheshire
 SY14 8EF



Appendix B: Extended Phase 1 Habitat Survey Map & Key



Legend

-  Proposed development site boundary
-  A2.1 Dense/continuous scrub
-  A3.1 Scattered broad-leaved trees
-  B6 Poor semi-improved grassland
-  C1.1 Continuous bracken
-  J2.2. Defunct hedge - species poor
-  J2.4 Fence
-  J5 Other habitat - site compound
-  Target notes

Project:	Dyserth Phase 2 , Denbighshire
Map:	Extended Phase 1 Habitat Map
CES Ref:	CES/1391/04-20/SW
Scale:	Not to scale / Indicative
Date	April 2020

Aerial Image sourced from Google Earth Pro
January 2020

CES Ecology
 Bickley Hall Farm
 Bickley
 Malpas
 Cheshire
 SY14 8EF



Appendix C: Species Lists

Species present in the poor semi-improved grassland

Scientific name	Common name
<i>Agrostis sp</i>	Bent
<i>Alopecurus pratensis</i>	Meadow foxtail
<i>Anthoxanthum odoratum</i>	Sweet vernal-grass
<i>Dactylis glomerata</i>	Cock's-foot
<i>Galium aparine</i>	Cleavers
<i>Heracleum sphondylium</i>	Hogweed
<i>Holcus lanatus</i>	Yorkshire-fog
<i>Jacobaea vulgaris</i>	Common ragwort
<i>Luzula campestris</i>	Field woodrush
<i>Plantago lanceolata</i>	Ribwort plantain
<i>Poa pratensis</i>	Smooth meadow grass
<i>Ranunculus acris</i>	Meadow buttercup
<i>Ranunculus repens</i>	Creeping buttercup
<i>Rumex obtusifolius</i>	Broad-leaved dock
<i>Taxacrum officinale agg.</i>	Dandelion
<i>Urtica dioica</i>	Common nettle

Species present in areas of dense/continuous scrub

Scientific name	Common name
<i>Arum maculatum</i>	Lords & ladies
<i>Buddleja davidii</i>	Butterfly-bush
<i>Crataegus monogyna</i>	Common hawthorn
<i>Galium aparine</i>	Cleavers
<i>Heracleum sphondylium</i>	Common hogweed
<i>Ilex aquifolium</i>	Holly
<i>Prunus spinosa</i>	Blackthorn
<i>Pteridium aquilinum</i>	Bracken
<i>Rubus fruticosus</i>	Bramble
<i>Sambucus nigra</i>	Elder
<i>Urtica dioica</i>	Common nettle

Species present in areas of scattered trees

Scientific name	Common name
<i>Acer pseudoplatanus</i>	Sycamore
<i>Fraxinus excelsior</i>	Ash
<i>Prunus sp.</i>	Cherry sp.
<i>Sambucus nigra</i>	Elder

Species present in Hedgerow 1

Scientific name	Common name
<i>Crataegus monogyna</i>	Common hawthorn
<i>Hedera helix</i>	Ivy
<i>Rubus fruticosus</i>	Bramble

N.B. These species lists represent those species identified during the survey. Those species which were not in growth or could not be identified due to the growth stage are not included. Exotic species (such as garden escapes) may also have been omitted from the above lists. However, it is considered that the information gathered during the survey was sufficient to provide an accurate assessment of the site.

Appendix D: Photographic Plates



Plate 1. Looking north at the poor semi-improved grassland area, within heras fencing.



Plate 2. Looking north at the boundary of grassland and scrub outside the heras fencing.



Plate 3. Looking north-west at Phase 1 and site compound.



Plate 4. View of bramble and blackthorn scrub from the southern boundary.



Plate 5. View of the bramble scrub from eastern boundary.



Plate 6. View of the bramble scrub from the northern boundary.



Plate 7. Continuous bracken and scattered trees at the north-east of the site.



Plate 8. Native hawthorn hedgerow along the southern boundary of the site.

Appendix E: Legislation

Species/Habitat	Protected by:	UK BAP	Local BAP
Badger	<i>Protection of Badgers Act, 1992</i>	No	Yes
Barn owl	Schedule 1, Part 1 of the <i>Wildlife and Countryside Act, 1981</i>	No	Yes
Bats	Regulation 42 of <i>The Conservation of Habitats and Species Regulations, 2017</i> Section 9 of the <i>Wildlife and Countryside Act, 1981</i> (as amended) Section 7 of the <i>Environment (Wales) Act 2016</i>	Dependent on species	Dependent on species
Butterflies & Moths	Section 7 of the <i>Environment (Wales) Act 2016</i>	Dependent on species	Dependent on species
Great crested newt	Regulation 42 of <i>The Conservation of Habitats and Species (Amendment) Regulations, 2017</i> Section 9 of the <i>Wildlife and Countryside Act, 1981</i> (as amended) Section 7 of the <i>Environment (Wales) Act 2016</i>	Yes	Yes
Hedgehogs	Section 7 of the <i>Environment (Wales) Act 2016</i>	Yes	No
Hedgerows	<i>The Hedgerows Regulations, 1997</i>	Yes	Yes
Nesting birds	Section 1 of the <i>Wildlife and Countryside Act, 1981</i>	Dependent on species	Dependent on species
Northern Brown Argus	Section 9 of the <i>Wildlife and Countryside Act, 1981</i> (as amended)	No	No
White-letter hairstreak	Section 9 of the <i>Wildlife and Countryside Act, 1981</i> (as amended) Section 7 of the <i>Environment (Wales) Act 2016</i>	Yes	No
'Widespread' reptiles	Provisions 1 and 5 of Section 9 of the <i>Wildlife and Countryside Act, 1981</i> (as amended) Section 7 of the <i>Environment (Wales) Act 2016</i>	Yes	Dependent on species

The Conservation of Habitats and Species Regulations, 2017

European protected species are listed on Schedule 2 of the *Conservation of Habitats and Species Regulations 2010*. Those species listed on Schedule 2 are protected under Regulation 41, which refers to the protection of wild animals of a European Protected Species. The following is a summary of the offences listed under Regulation 41, however, the *Conservation Regulations* should always be referred to for the exact and current wording:

Under Regulation 41 of the *Conservation of Habitats and Species Regulations, 2010* it is an offence to –

- deliberately capture or kill a wild animal of a European protected species;
- deliberately disturb wild animals, in particular any disturbance which is likely:
 - to impair their ability to survive, to breed or reproduce, or to rear or nurture their young; or
 - to impair their ability, in the case of animals of a hibernating or migratory species, to hibernate or migrate;

- to affect significantly the local distribution or abundance of the species to which they belong
- deliberately take or destroy the eggs of such an animal; or
- damage or destroy a breeding site or resting place of such an animal.
- keep, transport, sell or exchange, or offer for sale or exchange, any live or dead wild animal of a European protected species, or any part of, or anything derived from, such an animal.

Wildlife and Countryside Act, 1981 (as amended)

British protected species of animal are listed on Schedule 5 of the *Wildlife and Countryside Act, 1981 (as amended)*. Those species listed on Schedule 5 are protected under Part 1, Section 9, which refers to the protection of certain wild animals. The following is a summary of the offences listed under Section 9; however the Act should always be referred to for the exact and current wording:

Under Section 9 of the *Wildlife and Countryside Act, 1981 (as amended)* if any person –

- intentionally kills, injures or takes any wild animal included in Schedule 5;
- has in his possession or control any live or dead wild animal included in Schedule 5 or any part of, or anything derived from such an animal;
- intentionally or recklessly damages or destroys, or obstructs access to, any structure or place which any wild animal included in Schedule 5 uses for shelter or protection;
- disturbs any such animal included in Schedule 5 while it is occupying a structure or place which it uses for that purpose;
- sells, offers or exposes for sale, or has in his possession or transports for the purpose of sale, any live or dead wild animal included in Schedule 5, or any part of, or anything derived from, such an animal; or,
- publishes or causes to be published any advertisement likely to be understood as conveying that he buys or sells, or intends to buy or sell, any of those things, he shall be guilty of an offence.

Wildlife and Countryside Act, 1981 (as amended) - Birds

All species of wild bird, their nests and eggs are protected under Section 1 of the *Wildlife and Countryside Act, 1981 (as amended)*; therefore surveys are required to check for their presence where they are likely to be disturbed for any reason.

The following is a summary of the offences listed under Section 1; however the Act should always be referred to for the exact and current wording:

Under Section 1 of the *Wildlife and Countryside Act, 1981 (as amended)*, if any person:

- Intentionally kills, injures or takes any wild bird;
- Intentionally takes, damages or destroys the nest of any wild bird while that nest is in use or being built;
- Intentionally takes or destroys an egg or any wild bird, he shall be guilty of an offence;
- Has in his possession or control any live or dead wild bird or any part of, or anything derived from, such a bird; or

- Has in his possession or control an egg of any wild bird or any part of such an egg, he shall be guilty of an offence.

Schedule 1 (Part 1 and Part 2) of the *Wildlife and Countryside Act, 1981* (as amended) lists bird species that receive special attention under Section 1. Any person convicted of an offence listed above, in respect of a bird included in Schedule 1 or any part of, or anything derived from, such a bird; the nest of such a bird; or an egg of such a bird or any part of such an egg, shall be liable to a special penalty.

Also, 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 dependent young of such a bird, he shall be guilty of an offence and liable to a special penalty.

Schedules 1, 2, 3 and 4 of the *Wildlife and Countryside Act, 1981* (as amended) list different species of bird and different Parts of Section 1 of the Act refer to different offences which may be committed in relation to the varying Schedules. The following is a summary of the type of protection offered to species of wild bird listed on each of the Schedules, however the Act itself should always be referred to for the exact and current wording and full species lists:

Schedule 1: Birds which are protected by special penalties:

Part 1: At all times.

Part 2: During the close season.

Schedule 2: Birds which may be killed or taken:

Part 1: Outside the close season.

Part 2: By authorised persons at all times.

Schedule 3: Birds which may be sold:

Part 1: Alive at all times if ringed and bred in captivity.

Part 2: Dead at all times.

Part 3: Dead from 1st September to 28th February.

Schedule 4: Birds which must be registered and ringed if kept in captivity.

The Environment (Wales) Act, 2016

Section 7 of the *Environment (Wales) Act, 2016* replaces the duty in Section 42 of the *Natural Environment and Rural Communities (NERC), Act, 2006* (as amended). Section 7 comprises a list of species and habitats of principle importance which is the same as the list under the superseded Section 42 of the *NERC Act, 2006*. The *Environment (Wales) Act* itself should be referred to for the exact and current wording however a summary is detailed below:

- The Welsh Ministers will publish, review and revise lists of living organisms and types of habitat in Wales, which they consider are of key significance to sustain and improve biodiversity in relation to Wales;
- They must therefore consider any appropriate evidence, for example as provided in the State of Natural Resources Report, and also engage with any relevant stakeholders;
- The Welsh Ministers must also take all reasonable steps to maintain and enhance the living organisms and types of habitat included in any list published under this section, and encourage others to take such steps.

The Hedgerow Regulations, 1997

Hedgerows are distinctive features in the countryside and are the traditional type of field boundary in many areas of England and Wales. Many of these date back to the original enclosure of the land and so are of historic interest and importance.

Hedgerows (particularly older hedgerows) can contain a diverse mix of species and provide important links between other areas of habitat thus allowing wildlife to disperse. This role that hedgerows play in conserving and enhancing biodiversity is recognised by the UK BAP for this habitat type.

Hedgerows which meet certain criteria are protected by *The Hedgerows Regulations, 1997*. The aim of the Regulations is to protect important hedgerows in the countryside by controlling their removal through a system of notification. Under the Regulations it is against the law to remove or destroy certain hedgerows without permission from the Local Planning Authority (LPA). The criteria used to assess hedgerows relate to the value of a hedgerow from an archaeological, historical, landscape or wildlife perspective. They exclude hedgerows that are less than 30 years old. If a hedgerow is at least 30 years old and qualifies under any one of the criteria, then it is important and LPA approval is required before it can be lawfully removed or destroyed.

Removal of a hedgerow in contravention of the Regulations is a criminal offence, punishable in some cases in the Magistrates Court, by a fine of up to £5,000. For anyone convicted on indictment in the Crown Court, the fine is unlimited.

If a hedgerow is over 30 years old and meets the criteria in the Regulations it is classified as 'important'. A summary of the criteria is set out below, however, *The Hedgerow Regulations, 1997* should be referred to for the exact and current wording:

- Marks a pre-1850 parish or township boundary; or
- Incorporates an archaeological; or
- Is part of, or associated with, an archaeological site; or
- Marks the boundary of, or is associated with, a pre-1600 estate or manor; or
- Forms an integral part of a pre-Parliamentary enclosure field system; or
- Contains certain categories of species of birds, animals or plants listed in the Wildlife and Countryside Act or Joint Nature Conservation Committee (JNCC) publications.
- Includes:
 - At least 7 woody species, on average, in a 30 metre length; or
 - At least 6 woody species, on average, in a 30 metre length and has at least 3 associated features; or
 - At least 6 woody species, on average, in a 30 metre length, including a black-poplar tree, or large-leaved lime, or a small-leaved lime, or wild service-tree; or
 - At least 5 woody species, on average, in a 30 metre length and has at least 4 associated features.
- Runs alongside a bridleway, footpath, road used as a public path, or byway open to all traffic and includes at least 4 woody species, on average, in a 30 metre length and has at least 2 of the associated features listed at (i) to (v) below.

(Note: The number of woody species is reduced by one in the North of England (which does not include Cheshire). The list of 56 woody species comprises mainly shrubs and trees. It generally excludes climbers (such as clematis, honeysuckle and bramble) but includes wild roses)

Associated features:

- (i) A bank or wall supporting the hedgerow;
- (ii) Less than 10% gaps;
- (iii) On average, at least one tree per 50 metres;
- (iv) At least 3 species from a list of 57 woodland plants;
- (v) A ditch;

- (vi) A number of connections with other hedgerows, ponds or woodland; and
- (vii) A parallel hedge within 15 metres.

The Protection of Badgers Act, 1992

The following is a summary of the offences contained in the Act; however the *Protection of Badgers Act, 1992* itself should always be referred to for the exact and current wording.

Under the *Protection of Badgers Act, 1992* a person is guilty of an offence if, except as permitted by or under this Act he:

- wilfully kills, injures or takes, or attempts to kill, injure or take, a badger;
- has in his possession or under his control any dead badger or any part of, or anything derived from, a dead badger;
- cruelly ill-treats a badger;
- uses badger tongs in the course of killing or taking, or attempting to kill or take, a badger;
- digs for a badger; or,
- sells a live badger or offers one for sale or has a live badger in his possession or control.

A person is also guilty of committing an offence under the *Protection of Badgers Act, 1992* if he intentionally or recklessly interferes with a badger sett by doing any of the following things:

- damaging a badger sett or any part of it;
- destroying a badger sett;
- obstructing access to, or any entrance of, a badger sett;
- causing a dog to enter a badger sett; or,
- disturbing a badger when it is occupying a badger sett,

The definition of a badger sett within the meaning of the 1992 Act is given as “any structure or place, which displays signs indicating current use by a badger”. ‘Current’ is not defined in the Act, and may be open to interpretation. Natural England indicates that a sett is in ‘current’ use if it has been occupied at all over the previous 12 months. Whatever the interpretation of ‘current use’ however, it is important to note that a sett is protected whether or not there is a badger actually in residence at the time of inspection.

Natural England Guidelines (which is also referred to in Wales) state that work that disturbs badgers or their setts is illegal if not carried out under licence. Badgers could be disturbed by work near their sett even if there is no direct interference or damage to the sett itself, for example, using very heavy machinery within 30 metres of an active sett. Lighter machinery (particularly for any digging operation) within 20 metres, or light work such as hand digging or scrub clearance within 10 metres of an active sett, all require a licence. There are some activities which can cause disturbance at a far greater distance (such as using explosives or pile driving) and should therefore be given individual consideration. Certain criteria must be met before a licence can be issued to enable otherwise prohibited works to proceed. Such criteria may be subject to change without notice.

Timing of operations should also be considered. If required, site-specific badger disturbance licences are normally only issued between the months of July and October so as to avoid the badger’s breeding season. This aspect should be borne in mind when assessing any possible constraints upon the development timetable.



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