

# **Preliminary Ecological Appraisal**

Land on Wombwell Road, Hoyland, Barnsley, South Yorkshire, S74 9SJ

Status	lssue	Name	Date
Draft	1	Elen Griffin BSc (Hons), MRSB, Consultant	03/01/2022
Reviewed	1.1	Mel Reid BSc (Hons) MRes MRSB, Consultant	04/01/2022
Final	2	Elen Griffin BSc (Hons), MRSB, Consultant	04/01/2022

## Whitshaw Developments Ltd

Arbtech Consultant's Contact Details:

Elen Griffin BSc (Hons), MRSB Consultant **Tel:** 07842311114 **Email:** elengriffin@arbtech.co.uk Arbtech Consulting Ltd https://arbtech.co.uk

## Limitations and Copyright

Arbtech Consulting Limited has prepared this report for the sole use of the above-named client or their agents in accordance with our General Terms and Conditions, under which our services are performed. It is expressly stated that no other warranty, expressed or implied, is made as to the professional advice included in this report or any other services provided by us. This report may not be relied upon by any other party without the prior and express written agreement of Arbtech Consulting Limited. The conclusions and recommendations contained in this report are based upon information provided by third parties. Information obtained from third parties has not been independently verified by Arbtech Consulting Limited.

© This report is the copyright of Arbtech Consulting Limited. Any unauthorised reproduction or usage by any person other than the addressee is strictly prohibited.

#### **Industry Guidelines and Standards**

This report has been written with due consideration to:

- Chartered Institute of Ecology and Environmental Management (2017). Guidelines for Preliminary Ecological Appraisal. 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2017). Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2020). Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK. 2nd Edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- British Standard 42020 (2013). Biodiversity Code of Practice for Planning and Development.
- British Standard 8683:2021 (2021). Process for Designing and Implementing Biodiversity Net Gain.

#### Proportionality

The work involved in preparing and implementing all ecological surveys, impact assessments and measures for avoidance, mitigation, compensation and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development. Consequently, the decision-maker should only request supporting information and conservation measures that are relevant, necessary and material to the application in question. Similarly, the decision-maker and their consultees should ensure that any comments and advice made over an application are also proportionate.

This approach is enshrined in Government planning guidance, for example, paragraph 174 of the National Planning Policy Framework for England.

The desk studies and field surveys undertaken to provide a Preliminary Ecological Appraisal (PEA) might in some cases be all that is necessary.

(BS 42020, 2013)

## **Executive Summary**

Arbtech Consulting Limited was instructed by Whitshaw Developments Ltd to undertake a Preliminary Ecological Appraisal (PEA) at Land on Wombwell Road Hoyland, Barnsley, South Yorkshire, S74 9SJ (hereafter referred to as "the site"). The survey was required to inform a planning application for the construction of new dwellings on this redundant site (hereafter referred to as "the proposed development").

The following is work you will need to commission to obtain planning permission and to comply with legislation. Further information, along with opportunities for biodiversity enhancement, are outlined in Table 6 of this report.

Feature	Foreseen impacts	<b>Recommendations</b> Measures required to adhere to guidance, legislation and planning policies.
The site is not subject to any statutory or non-statutory designation. Dearne Valley Wetlands (SSSI) was	No impacts to designated sites are anticipated due to the small scale and distance of the proposed development from such sites (where known) as well as the urban location of the site with surrounding physical barriers.	A Construction Environmental Management Plan (CEMP) will be required, outlining best practice measures to minimise the possibility of pollution and tree damage during construction.
identified ~1105m to the north west of the site. The presence of non-statutory designated sites within 2km of the site cannot be established without data from the Local Records		
Centre. Native trees and hedgerows are present around the development site.	No impacts to any notable habitats are anticipated due to the small scale and distance of the proposed development from such habitats as well as the urban location of the site with surrounding physical barriers.	A Construction Environmental Management Plan (CEMP) will be required, outlining best practice measures delineate the construction zone and to minimise the possibility of pollution and tree damage during construction.
Other habitats within the site are common and widespread and have low ecological value. Buddleia a non-native invasive plant species were noted on the site	The loss of common and widespread habitats of low ecological value from the site are considered to be inconsequential. Construction could result in the spread of buddleia to the wider environment.	An invasive species management plan will be required to control and/or eradicate buddleia from the site.

No EPSL, class licence returns or pond data records for great crested newt <i>Triturus cristatus</i> have been returned from magic.gov.uk database within 2km of the site. A review of OS maps and aerial imagery identified no ponds within 500m of the site. The small scattered areas of scrub have potential to support common amphibians.	It is assumed that areas of scrub and some trees will be removed during construction. The loss of such habitats is likely to be inconsequential to local amphibian populations owing to the presence of more extensive habitat locally. However, site clearance could result in the death or injury of amphibians, if present.	Owing to the nature of the proposed development and the low potential for impacts to great crested newts, further surveys are considered to be disproportionate. A precautionary working method will be implemented for common amphibians during construction
The areas of rank grassland and scrub could provide some suitable basking areas for reptiles Habitat connectivity between the site and other areas of value for reptiles are limited by the barriers posed by intervening urban development.	It is assumed that areas of scrub and rank grassland will be removed during construction. The loss of such habitats is likely to be inconsequential to local reptile populations owing to the presence of more extensive habitat locally. However, site clearance could result in the death or injury of reptiles, if present.	Owing to the nature of the proposed development and the low potential for impacts to reptiles, further surveys are considered to be disproportionate. A precautionary working method will be implemented during construction.
Boundary trees and hedgerows could be used by local bat populations for foraging and commuting. These could also be used by bats dispersing from nearby roosts outside of the site.	The proposed development will result in the loss of some young trees. This could reduce the availability of foraging or commuting resources in the locality and could also disrupt dispersal corridors for bats leaving or returning to roosts in the wider area. The proposed development will include the use of lighting which could spill on to bat foraging or commuting habitat and deter bats from using these areas.	A low impact lighting strategy will be adopted for the site during and post- development.
The areas of scrub and grassland could provide some suitable foraging and commuting habitat for hedgehogs.	It is assumed that areas of scrub will be removed during construction. The loss of such habitats could result in a reduction in hedgehog habitat and could result in the fragmentation of the local landscape. Furthermore, construction activities could result in the death or injury of hedgehogs, if present.	A precautionary working method will be implemented during construction.
A number of old birds nests were identified within the boundary trees.	Areas of scrub and some young trees will likely be removed during construction. The loss of such habitats is likely to be inconsequential to	Works should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the trees and vegetation should be undertaken immediately, by qualified ecologist, prior

	to the commencement of work. All active nests will need to be retained
locally.	until the young have fledged.
However, the proposed development could result in the destruction or the	
disturbance and subsequent abandonment of active bird nests.	

## Contents

1.0 Introduction and Context	8
1.1 Background	8
1.2 Site Context	8
1.3 Scope of the Report	8
2.0 Methodology	9
2.1 Desk Study	9
2.2 Field Survey	9
2.3 Limitations	9
3.0 Results and Evaluation	9
3.1 Desk Study Results	9
3.2 Field Survey Results	
4.0 Conclusions, Impacts and Recommendations	14
4.1 Informative Guidelines	
4.2 Evaluation	14
5.0 Bibliography	22
Appendix 1: Proposed Development Plan	25
Appendix 2: Site Location Plan	
Appendix 3: Desk Study Information	Error! Bookmark not defined.
Appendix 4: Habitat Survey Plan	27
Appendix 5: Legislation and Planning Policy	

## **1.0 Introduction and Context**

#### 1.1 Background

Arbtech Consulting Limited was instructed by Whitshaw Developments Ltd to undertake a Preliminary Ecological Appraisal (PEA) at Land on Wombwell Road Hoyland, Barnsley, South Yorkshire, S74 9SJ (hereafter referred to as "the site"). The survey was required to inform a planning application for the construction of new dwellings on this redundant site (hereafter referred to as "the proposed development"). A plan showing the proposed development will be provided in Appendix 1 when available.

The aim of the PEA was to obtain data on existing ecological conditions, and to conduct a preliminary assessment of the likely significance of ecological impacts on the proposed development. No previous ecology reports have been produced for this site by Arbtech Consulting Ltd or, to the author's knowledge, by any other consultancy.

#### 1.2 Site Context

The site is located at National Grid Reference SE 37131 01343 and has an area of approximately 0.2ha comprising of hard standing, ruderal shrub and native trees. It is surrounded by residential dwellings and amenity grassland.

A site location plan is provided in Appendix 2.

## 1.3 Scope of the Report

This report describes the baseline ecological conditions at the site, evaluates habitats within the survey area in the context of the wider environment and describes the suitability of those habitats for notable or protected species. It identifies possible ecological constraints as a result of the proposed development and summarises the requirements for further surveys and mitigation measures to inform subsequent mitigation proposals, achieve planning or other statutory consent and to comply with wildlife legislation.

To achieve this, the following steps have been taken:

- A desk study has been carried out.
- A field survey has been undertaken to record baseline information on the site and surrounding area including habitat types and their suitability for notable or protected species.
- Invasive plant and animal species (such as those listed on Schedule 9 of the Wildlife & Countryside Act) have been identified.
- Potential impacts on features of value, as a result of the proposed development, have been identified.
- Recommendations for further surveys and mitigation have been made.
- Opportunities for the enhancement of the site for biodiversity have been set out.

## 2.0 Methodology

#### 2.1 Desk Study

The desk study included a 2km radius review of statutory designated sites and notable habitats as well as a 2km radius review of granted European Protected Species Licence (EPSL) and notable species records held on magic.gov.uk database. An assessment of the surrounding landscape structure was also completed using aerial images from Google Earth and OS maps.

#### 2.2 Field Survey

The survey was undertaken by Elen Griffin on 8<sup>th</sup> December 2021.

An extended habitat survey was undertaken, following the methodology set out in *Phase 1 Habitat Survey Methodology* (JNCC, 2010). All land parcels are described and mapped and, where appropriate, target notes provide supplementary information on habitat conditions, features too small to map to scale, species composition, structure and management. During the survey, habitats were assessed for their suitability to support protected species, and field signs indicating their presence recorded. The assessment takes into consideration the

findings of the desk study, the habitat conditions on site and in the context of the surrounding landscape, and the ecology of the protected species.

#### 2.3 Limitations

It should be noted that whilst every effort has been made to describe the baseline conditions within the survey area, and evaluate these features, this report does not provide a complete characterisation of the site. This assessment provides a preliminary view of the likelihood of protected species being present. This is based on suitability of the habitats on the site and in the wider landscape, the ecology and biology of species as currently understood, and the known distribution of species as recovered during the searches of historical biological records.

A biological records data search has not been undertaken. However, given the location of the site, the nature of the habitats present and the assessed suitability of the site for protected or notable species, it is not anticipated that the purchase of biological records data will add any significant weight or alter the conclusions and recommendations outlined in this report.

The survey was completed during the sub-optimal survey period limiting the identification of ground flora species.

These limitations have been taken into account during the evaluation of the site and requirement for further surveys and mitigation.

## 3.0 Results and Evaluation

## 3.1 Desk Study Results

A summary of desk study results is provided below.

## **Designated Sites**

Details of any statutory designated sites within a 2km radius of the site, including their reasons for notification, are provided in Table 1 below. *Table 1: Statutory designated sites within 2km radius of the site* 

Designated	d site	Distance	•	Reasons for notification from Natural England and LRC Name and United Nations Educational, Scientific and Cultural Organisation (UNESCO)
name		site (appı	rox.)	
Dearne	Valley	~1105m	north	The SSSI links different pockets of valuable habitat in the Dearne Valley area between Pool Ings near Royston in the north, a large area between
Wetlands	Site of	west		Worsbrough in the west, and Adwick Washland in the east.
Special	Scientific			
Interest (SS	SSI)			

#### Landscape

A review of aerial photographs (Google Earth) the magic.gov.uk database and OS maps has been undertaken. Collated together, the value of the landscape in terms of biodiversity is described below:

The site is located on the outskirts of Hoyland, a residential area to the south of Barnsley, South Yorkshire. The landscape is dominated by mixed residential and commercial buildings. There are small, scattered woodland copses and tree lines around the area, which could be used by wildlife for shelter, foraging and commuting. Scattered irrigation ditches around the area will provide abundant insect foraging for birds and bats.

## **Notable Habitats**

Notable habitats within 2km are listed in Table 2.

Table 2: Notable habitats within 2km of the site Delete if none identified order closest first

Habitat	Closest distance from site
Hedgerows	Adjacent
Deciduous woodland	~836m south east
Ancient Woodland	~981m north
Good quality semi-improved grassland	~1125m north west

## 3.2 Field Survey Results

The results of the field survey are illustrated in Appendix 3. The weather conditions recorded at the time of the survey are shown in Table 3.

Table 3: Weather conditions during the survey

Date: 08/12/2021		
Temperature	5°C	
Humidity	87%	
Cloud Cover	100%	
Wind	18mph	

Land on Wombwell Road Hoyland, S74 9SJ

Rain None

## **Habitats and Flora**

The following habitats are present within and adjacent to the site:

- Hard standing J4
- Scrub A2
- Native trees A1
- Rank grassland B2.2
- Wall J2.5
- Ruderal shrub -C3

A description and photograph of each habitat is provided in Table 4.

#### Table 4: Description and photographs of habitats within and adjacent to the site

Habitat type	Habitat description	Photograph
Hard Standing	Large areas of hard standing are present throughout the site as the area was once a pub and associated parking area.	

Scrub	Areas of scattered scrub are present throughout the wooded area at the centre of the site. In addition scrub was noted along the northern, eastern and southern boundary of the site. The dominant species within the areas of scrub was identified as bramble <i>Rubus</i> .	
Rank grassland	An area of rank semi-improved grassland was present along the south west boundary of the site, species identified within the grassland included reed canarygrass <i>Phalaris arundinacea</i> and orchard grass <i>Dactylis glomerata</i> .	
Native trees and wall	Scattered native trees are present within the centre of the site along with along the western and southern boundary. Species identified within the site boundary included black alder <i>Alnus glutinosa</i> , American plumb <i>Prunus americana</i> , downy birch <i>Betula pubescens</i> , sycamore <i>Acer pseudoplatanus</i> and a verity of willow <i>Salix</i> species Walls are present along parts of the northern, western and southern boundaries of the site. The walls are constructed of a mixture of brick and stone.	

Ruderal shrub	Areas or mixed ruderal shrub are present throughout the site with a number of species growing through the existing hard standing. Species identified included common yarrow Achillea millefolium, hairy willowherb Epilobium hirsutum, common sowthistle Sonchus oleraceus, common foxglove Digitalis purpurea, nettle Urtica dioica, thistle Cirsium and buddleia.	
---------------	--	--

Buddleia (a non-native invasive plant species) was recorded over numerous areas of the site.

#### Fauna

An assessment of the suitability of the site for protected or notable species is provided in Table 5.

## Table 5: Assessment of the suitability of the site for protected or notable species

Species	Assessment of suitability	
	No EPSL, class licence returns or pond data records for great crested newt Triturus cristatus have been returned from magic.gov.uk database within 2km of the site.	
Amabibiana	A review of OS maps and aerial imagery identified no ponds within 500m of the site.	
Amphibians	The small scattered areas of scrub have potential to support common amphibians.	
	Habitat connectivity between the site and other areas of value for amphibians are limited by the barriers posed by intervening urban development.	
	The areas of rank grassland and scrub could provide some suitable basking areas for reptiles	
Reptiles	Habitat connectivity between the site and other areas of value for reptiles are limited by the barriers posed by intervening urban development.	
	No EPSL's have been returned from magic.gov.uk database within 2km of the site.	
Bats	The semi-mature trees around the site boundary are likely to provide some suitable foraging and commuting habitat for bats.	
	No evidence of badger or badger activity was identified around the site.	
Badgers Meles meles	The areas of scrub and young trees could provide suitable foraging habitat for badgers.	
	Habitat connectivity between the site and other areas of value for badgers are limited by the barriers posed by intervening urban development.	
Hazel Dormouse Muscardinus avellanarius	The site lies outside of the known range for hazel dormouse and therefore this species is considered likely to be absent from the site.	
	The areas of scrub and grassland could provide some suitable foraging and commuting habitat for hedgehogs.	
Hedgehog Erinaceus europaeus	Habitat connectivity between the site and other areas of value for hedgehogs are limited by the barriers posed by intervening urban development.	

Otter Lutra lutra	There are no riparian habitats on or connecting to the site that could be used by otter. Otter are considered to be likely absent from the site.
Water Vole Arvicola amphibius	There are no riparian habitats on or connecting to the site that could be used by water vole. Water voles are considered to be likely absent from the site.
Birds	A number of old birds nests were identified within the boundary trees. Due to the sites location there was limited suitability for schedule 1 bird species.

## 4.0 Conclusions, Impacts and Recommendations

#### 4.1 Informative Guidelines

A summary of the relevant legislation and planning policies is provided in Appendix 4.

#### Likelihood of the Presence of Protected Species

Where physical evidence of the presence of protected species is indeterminate during the survey, the habitats on site are evaluated as to their likelihood to provide sheltering, roosting, foraging, basking or nesting habitat.

Where this report supports a planning application, the ecological interest of the study area (i.e. the area covered by the desk study and field survey) and the proposed development has also been evaluated in terms of the planning policies relating to biodiversity.

#### 4.2 Evaluation

Taking the desk study and field survey results into account, Table 6 presents an evaluation of the ecological value of the site and also details any ecological constraints identified in relation to the proposed development which will comprise the erection of a number of new dwellings.

## Table 6: Evaluation of the site and any ecological constraints

Ref	Summary of	Foreseen impacts	Recommendations	Biodiversity Enhancements
-	Survey Findings		Measures required to adhere to guidance, legislation and planning policies.	The Local Planning Authority has a duty to ask for enhancements under the NPPF (2021)
Designated sites	The site is not subject to any statutory or non- statutory designation. Dearne Valley Wetlands (SSSI) was identified ~1105m to the north west of the site. The presence of non-statutory designated sites within 2km of the site cannot be established without data from the Local Records Centre.	No impacts to designated sites are anticipated due to the small scale and distance of the proposed development from such sites (where known) as well as the urban location of the site with surrounding physical barriers.	A Construction Environmental Management Plan (CEMP) will be required, outlining best practice measures to minimise the possibility of pollution and tree damage during construction.	None.
Habitats and flora	Native trees and hedgerows are present around the development site. Other habitats within the site are common and widespread and have low ecological value.	No impacts to any notable habitats are anticipated due to the small scale and distance of the proposed development from such habitats as well as the urban location of the site with surrounding physical barriers. The loss of common and widespread habitats of low ecological value from the site are considered to be inconsequential. Construction could result in the spread of buddleia to the wider environment.	A Construction Environmental Management Plan (CEMP) will be required, outlining best practice measures delineate the construction zone and to minimise the possibility of pollution and tree damage during construction. An invasive species management plan will be required to control and/or eradicate buddleia from the site.	<ul> <li>The following habitat creation and enhancement opportunities could be incorporated into the proposed development: <ul> <li>Native tree, hedgerow and shrub planting.</li> <li>Creation of wildflower grassland.</li> <li>The creation of a wildlife pond/enhancement of existing pond for wildlife to include native plant species and no fish.</li> </ul> </li> </ul>

Amphikians	Non-native invasive plant species were noted on the site	It is assumed that areas of comb and come trees	Quing to the poture of the proposed development and the	<ul> <li>A green roof on new buildings.</li> <li>Species-specific enhancement opportunities are detailed later in this table.</li> </ul>
Amphibians	No EPSL, class licence return or pond data records for great crested newt <i>Triturus</i> <i>cristatus</i> have been returned from magic.gov.uk database within 2km of the site. A review of OS maps and aerial imagery identified no ponds within 500m of the site. The small scattered areas of scrub have potential to support common amphibians.	It is assumed that areas of scrub and some trees will be removed during construction. The loss of such habitats is likely to be inconsequential to local amphibian populations owing to the presence of more extensive habitat locally. However, site clearance could result in the death or injury of amphibians, if present.	<ul> <li>Owing to the nature of the proposed development and the low potential for impacts to great crested newts, further surveys are considered to be disproportionate. A precautionary working method will be implemented for common amphibians during construction, including the following measures: <ul> <li>Site clearance will be undertaken outside of the amphibian hibernation season (November to February) insofar as is possible.</li> <li>A toolbox talk will be given to contractors regarding the possible presence of amphibians, including great crested newt, at the site.</li> <li>A staged approach will be adopted for vegetation clearance, whereby the vegetation will be strimmed to 15cm and left overnight to allow any amphibians to disperse. The vegetation can then be cleared to ground level and must be maintained at this level for the duration of construction to deter amphibians from the working area.</li> <li>Any rubble piles will be dismantled by hand and debris and brash will be stored on pallets or removed from the site to prevent amphibians from utilising these areas.</li> <li>Best practice pollution prevention measures will be implemented to minimise impacts to retained habitats that amphibians could use.</li> <li>Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations.</li> </ul> </li> </ul>	<ul> <li>The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for amphibians: <ul> <li>The creation of a wildlife pond/enhancement of existing pond for wildlife to include native plant species and no fish.</li> <li>Creation of amphibian refugia and hibernacula using debris and brash from site clearance.</li> <li>Planting of native scrub and grassland to increase foraging opportunities.</li> </ul> </li> </ul>

Reptiles	The areas of rank grassland and scrub could provide some suitable basking areas for reptiles Habitat connectivity between the site and other areas of value for reptiles are limited by the barriers posed by intervening urban development.	It is assumed that areas of scrub and rank grassland will be removed during construction. The loss of such habitats is likely to be inconsequential to local reptile populations owing to the presence of more extensive habitat locally. However, site clearance could result in the death or injury of reptiles, if present.	<ul> <li>vegetated area along the site boundaries or in retained habitats away from disturbance.</li> <li>In the unlikely event that a great crested newt is identified, works must cease and advise must be sought from a suitably qualified ecologist.</li> <li>Owing to the nature of the proposed development and the low potential for impacts to reptiles, further surveys are considered to be disproportionate. A precautionary working method will be implemented during construction, including the following measures: <ul> <li>Site clearance will be undertaken outside of the reptile hibernation season (November to February) insofar as is possible.</li> <li>A toolbox talk will be given to contractors regarding the possible presence of reptiles at the site.</li> <li>A staged approach will be adopted for vegetation clearance, whereby the vegetation and this level for the duration of construction to deter reptiles to disperse. The vegetation can then be cleared to ground level and must be maintained at this level for the duration of construction to deter reptiles from the working area.</li> <li>Any rubble piles will be dismantled by hand and debris and brash will be stored on pallets or removed from the site to prevent reptiles from utilising these areas.</li> <li>Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations.</li> <li>In the unlikely event that a potiene of bats is</li> </ul></li></ul>	<ul> <li>The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for reptiles: <ul> <li>The creation of a wildlife pond/enhancement of existing pond for wildlife to include native plant species and no fish.</li> <li>Creation of reptile refugia and hibernacula using debris and brash from site clearance.</li> <li>Planting of native scrub and grassland to increase foraging opportunities.</li> <li>The creation of basking areas such as rock piles or areas of cleared ground with shelter nearby.</li> </ul> </li> <li>The installation of a minimum of</li> </ul>
Roosting Bats	The trees surrounding the site are considered to have negligible value for roosting bats due to a lack of potential roost features.	Bats are very unlikely to be roosting within the trees around the site and as such, there are not anticipated to be any impacts on bats in this location as a result of the proposed development.	In the unlikely event that a bat or evidence of bats is discovered during the development all work must stop and a bat licensed ecologist contacted for further advice.	<ul> <li>The installation of a minimum of four bat boxes on trees around the site boundaries or on the new dwellings will provide additional roosting habitat for bats e.g.</li> <li>2F Schwegler Bat Box (trees)</li> </ul>

				• 1FF Schwegler Bat Box
				(trees)
				• 2FN Schwegler Bat Box
				(trees)
				Beaumaris Bat Box
				(buildings)
				Vivara Pro Woodstone Bat
				Box (buildings)
				Or a similar alternative brand.
				Bat boxes should be positioned 3-
				5m above ground level facing in a south or south-westerly direction
				with a clear flight path to and from
				the entrance, away from artificial
				light.
				Alternatively, bat boxes could be
				incorporated into new buildings on
				the site e.g.
				Habibat Bat Box
				Schwegler 1FR Bat Tubes
				Bat tubes should be inserted into
				the fabric of the building during
				construction, positioned 3-5m
				above ground level facing in a south
				or south-westerly direction with a clear flight path to and from the
				entrance and facing landscapes
				areas, away from artificial light.
Foraging	Boundary trees	The proposed development will result in the loss	A low impact lighting strategy will be adopted for the site	The following habitat creation and
and	and hedgerows	of some young trees. This could reduce the	during and post-development, which will include the	enhancement opportunities could
Commuting	could be used by	availability of foraging or commuting resources in	following measures:	be incorporated into the proposed
Bats	local bat	the locality and could also disrupt dispersal	• Use narrow spectrum light sources to lower the	development which would be
	populations for	corridors for bats leaving or returning to roosts in	range of species affected by lighting.	beneficial for foraging bats:
	foraging and	the wider area.		• The creation of a wildlife
	commuting. These			pond/enhancement of
	could also be used	The proposed development will include the use	light.	existing pond.
	by bats dispersing	of lighting which could spill on to bat foraging or	Avoid white and blue wavelengths of the light	• Planting of native tree,
	from nearby roosts	commuting habitat and deter bats from using	spectrum to reduce insect attraction and where	shrub and hedgerows to
	outside of the site.	these areas.	white light sources are required in order to manage	

			the blue shortwave length content they should be of a warm / neutral colour temperature <4,200	increase foraging opportunities.
			<ul> <li>kelvin.</li> <li>Not use bare bulbs and any light pointing upwards. The spread of light will be kept in line with or below the horizontal.</li> </ul>	
			Light spill will be reduced via the use of low-level lighting used in conjunction with hoods, cowls, louvers and shields. Lights will also be directional to ensure that light is directed to the intended areas only.	
			External lighting will be on PIR sensors that are sensitive to large objects only (so that they are not triggered by passing bats) and will be set to the shortest time duration to reduce the amount of time the lights are on.	
			Wall lights and security lights will be 'dimmable' and set to the lowest light intensity settings. There are several products on the market that allow the control of the light intensity and the duration that the lights are on. All lighting on the developed site will make use of the most up to date technology available.	
Badger	The areas of scrub and young trees could provide suitable foraging habitat for badgers. Habitat connectivity between the site and other areas of value for badgers are limited by the barriers posed by	No impacts are anticipated on badgers as a result of the proposed development.	None.	<ul> <li>The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for badgers:</li> <li>Planting fruit bearing trees and species-rich grassland to increase foraging opportunities.</li> </ul>
	intervening urban development.			

111	The size is such it.	No increase and entitients of an increase of the	News	Nava
Hazel dormouse Hedgehog	The site is outside of the known range for dormice and therefore this species is considered likely to be absent from the site. The areas of scrub	No impacts are anticipated on hazel dormice as a result of the proposed development.	None. A precautionary working method will be implemented	None. The following habitat creation and
	and grassland could provide some suitable foraging and commuting habitat for hedgehogs.	during construction. The loss of such habitats could result in a reduction in hedgehog habitat and could result in the fragmentation of the local landscape. Furthermore, construction activities could result in the death or injury of hedgehogs, if present.	<ul> <li>during construction, including the following measures:</li> <li>A toolbox talk will be given to contractors regarding the possible presence of hedgehogs at the site.</li> <li>If any hedgehogs are found in the working area these should be moved by hand to a vegetated area along the site boundaries or in retained habitats away from disturbance.</li> <li>Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape.</li> <li>The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to retained habitats which hedgehogs could use.</li> <li>Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations.</li> <li>In the unlikely event that a hedgehog is identified, works must cease and advise must be sought from a suitably qualified ecologist.</li> </ul>	<ul> <li>enhancement opportunities could be incorporated into the proposed development which would be beneficial for hedgehogs: <ul> <li>Planting fruit bearing trees and species-rich grassland to increase foraging opportunities.</li> <li>Creation of brash piles or installation of hedgehog houses in shady areas.</li> <li>Installation of gaps under boundary fencing to enable hedgehogs to move freely through the site.</li> </ul> </li> </ul>
Otter	No suitable habitat for otter.	No impacts are anticipated on otters as a result of the proposed development.	None.	None.
Water vole	No suitable habitat for water vole.	No impacts are anticipated on water vole as a result of the proposed development.	None.	None.
Birds	A number of old birds nests were identified within the boundary trees.	Areas of scrub and some young trees will likely be removed during construction. The loss of such habitats is likely to be inconsequential to local bird populations owing to the presence of more extensive habitat locally.	Works should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the trees and vegetation should be undertaken immediately, by qualified ecologist, prior to the	The installation of a minimum of six bird boxes on trees around the site boundaries or on the new dwellings will provide additional nesting habitat for birds e.g.

However, the proposed development could	commencement of work. All active nests will need to be	Schwegler No 17 Swift
result in the destruction or the disturbance and	retained until the young have fledged.	Nest Box (buildings)
subsequent abandonment of active bird nests.		<ul> <li>Schwegler 1SP Sparrow</li> </ul>
		Terrace (buildings)
		<ul> <li>Schwegler 1B Nest Boxes</li> </ul>
		(trees)
		<ul> <li>Schwegler 2H Robin Boxes</li> </ul>
		(trees)
		<ul> <li>Woodstone Nest Box</li> </ul>
		(buildings or trees)
		Or a similar alternative brand.
		Tree boxes should be positioned
		approximately 3m above ground
		level where they will be sheltered
		from prevailing wind, rain and
		strong sunlight. Small-hole boxes
		are best placed approximately 1-3m
		above ground on an area of the tree
		trunk where foliage will not obscure
		the entrance hole.
		Swift and sparrow boxes should be
		positioned at the eaves of a building
		and can be incorporated into the
		fabric of the building during
		construction.

## 5.0 Bibliography

- Biggs, J., Ewald, N., Valentini, A., Gaboriaud, C., Dejean, T., Griffiths, R., Foster, J., Wilkinson, J., Arnell, A., Brotherton, P., Williams, P. and Dunn, F. (2014). Using eDNA to Develop a National Citizen Science-based Monitoring Programme for the Great Crested Newt (*Triturus cristatus*). Biological Conservation. 183. 10.1016/j.biocon.2014.11.029.
- Bright, P., Morris, P., Mitchell-Jones, T. and Wroot, S. (2006). The Dormouse Conservation Handbook Second Edition.
- British Standard 42020 (2013). Biodiversity Code of Practice for Planning and Development.
- British Standard 8683:2021 (2021). Process for Designing and Implementing Biodiversity Net Gain.
- Chanin, P. (2003). Ecology of the European Otter. Conserving Natura 2000 Rivers Ecology Series No. 10. Natural England, Peterborough.
- Chartered Institute of Ecology and Environmental Management (2017). Guidelines for Preliminary Ecological Appraisal. 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2017). Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2020). Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK. 2nd Edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- Collins, J. (2016). Bat Surveys for Professional Ecologists —Good Practice Guidelines, 3<sup>rd</sup> edition, Bat Conservation Trust, London.
- Defra (2007). Hedgerow Survey Handbook. A Standard Procedure for Local Surveys in the UK. Defra, London.
- Eaton, M.A., Aebischer, N.J., Brown, A.F., Hearn R.D., Lock, L., Musgrove, A.J., Noble, D.G., Stroud, D.A. and Gregory, R.D. (2015). Birds of Conservation Concern 4: the population status of birds in the United Kingdom, Channel Islands and Isle of Man. British Birds 108, 708–746
- Edgar, P., Foster, J. and Baker, J (2010). Reptile Habitat Management Handbook. Amphibian and Reptile Conservation, Bournemouth http://downloads.gigl.org.uk/website/Reptile%20Habitat%20Management%20Handbook.pdf
- Garland, L. & Markham, S. (2008) Is Important Bat Foraging and Commuting Habitat Legally Protected? <a href="http://biodiversitybydesign.co.uk/cmsAdmin/uploads/protection-for-bat-habitat-sep-2007.pdf">http://biodiversitybydesign.co.uk/cmsAdmin/uploads/protection-for-bat-habitat-sep-2007.pdf</a>
- Gent, T. and Gibson, S. (2003). Herpetofauna Workers' Manual. JNCC, Peterborough.
- Gilbert, G., Gibbons, D.W., and Evans, J. (1998) Bird Monitoring Methods: A Manual of Techniques for UK Key Species. The Royal Society for the protection of Birds, Sandy, Bedfordshire, England.

- Google Earth (2020) accessed on 03/01/2022.
- Harris, S., Cresswell, P. and Jefferies, D.J. (1989). Surveying badgers. Mammal Society, London.
- HMSO: Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 https://www.legislation.gov.uk/uksi/2019/579/contents/made
- HMSO: Countryside & Rights of Way Act (2000) http://jncc.defra.gov.uk/page-1378
- HMSO: Natural Environmental and Rural Communities Act (2006) http://www.legislation.gov.uk/ukpga/2006/16/contents
- HMSO: The Protection of Badgers Act 1992 (as amended) http://www.legislation.gov.uk/ukpga/1992/51/contents
- HMSO: Wildlife and Countryside Act 1981 (as amended 01.04.1996) http://jncc.defra.gov.uk/page-1377
- Institution of Lighting Professionals (2018). Guidance Note 08/18 Bats and Artificial Lighting in the UK. Bats and the Built Environment Series Publication: http://www.bats.org.uk/news.php/406/new\_guidance\_on\_bats\_and\_lighting.
- JNCC (2004). Bat Workers Manual, 3rd Edition. http://jncc.defra.gov.uk/page-2861
- Joint Nature Conservation Committee (2010). Handbook for Phase 1 habitat survey a technique for environmental audit. http://jncc.defra.gov.uk/PDF/pub10\_handbookforphase1habitatsurvey.pdf
- Langton, T., Beckett, C. and Foster, J (2001). Great Crested Newt Conservation Handbook. Froglife. Suffolk. http://www.froglife.org/wp-content/uploads/2013/06/GCN-Conservation-Handbook\_compressed.pdf
- Magic database (2020). <u>http://www.magic.gov.uk/MagicMap.aspx</u> accessed on 03/01/2022.
- Mitchell-Jones, A.J. (2004). Bat Mitigation Guidelines. English Nature, Peterborough.
- National Planning Policy Framework (2021). <u>https://www.gov.uk/government/publications/national-planning-policy-framework--2</u>
- Natural England (2005). Organising Surveys to Determine Site Quality for Invertebrates: A Framework Guide for Ecologists. Natural England, Peterborough.
- Natural England (2007). Badgers and Development a Guide to Best Practice and Licensing. Natural England. Bristol. http://www.wildlifeco.co.uk/wp-content/uploads/2014/03/badgers-and-development.pdf
- Oldham R.S., Keeble J., Swan M.J.S. and Jeffcote M. (2000). Evaluating the Suitability of Habitat for the Great Crested Newt (*Triturus cristatus*). Herpetological Journal 10(4), 143-155. <u>https://www.thebhs.org/publications/the-herpetological-journal/volume-10-number-4-october-2000/1617-03-evaluating-the-suitability-of-habitat-for-the-great-crested-newt-triturus-cristatus/file
  </u>
- Panks, S., White., N., Newsome, A., Potter, J., Heydon, M., Mayhew, E., Alvarez, M., Russell, T., Scott, S.J., Heaver, M., Scott, S.H., Treweek, J., Butcher, B. and Stone, D. (2021).
   Biodiversity Metric 3.0: Auditing and Accounting for Biodiversity Technical Supplement. Natural England.
- Strachan, R., Moorhouse, T. and Gelling, M. (2011). Water Vole Conservation Handbook. Third Edition. Wildlife Conservation Research Unit, Oxford.
- UK Habitat Classification Working Group (2018). UK Habitat Classification User Manual at <a href="http://ecountability.co.uk/ukhabworkinggroup-ukhab">http://ecountability.co.uk/ukhabworkinggroup-ukhab</a>

• Wray, S., Wells, D., Long, E. and Mitchell-Jones, T (2010). Valuing Bats in Ecological Impact Assessment. IEEM In-Practice. Number 70 (December 2010). Pp. 23-25.

## Appendix 1: Proposed Development Plan

Not available at the time of writing this report.

## Appendix 2: Site Location Plan





## Appendix 3: Habitat Survey Plan

## **Appendix 4: Legislation and Planning Policy**

#### LEGAL PROTECTION

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 came into force when Britain left the European Union on 31st January 2020. It covered amendments relevant to this survey to:

Wildlife and Countryside Act 1981: England and Wales (x1 amendment)

Conservation of Habitats and Species Regulations 2017 (x29 amendments)

#### National and European Legislation Afforded to Habitats

#### International Statutory Designations

Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) are sites of European importance and are designated under the EC Habitats Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (the Habitats Directive) and the EC Birds Directive 2009/147/EC on the conservation of wild birds respectively. Both form part of the wider Natura 2000 network across Europe.

Under the Habitats Directive Article 3 requires the establishment of a network of important conservation sites (SACs) across Europe. Over 1.000 animal and plant species, as well as 200 habitat types, listed in the directive's annexes are protected in various ways:

Annex II species (about 900): core areas of their habitat are designated as sites of Community importance (SCIs) and included in the Natura 2000 network. These sites must be managed in accordance with the ecological needs of the species.

Annex IV species (over 400, including many annex II species): a strict protection regime must be applied across their entire natural range within the EU, both within and outside Natura 2000 sites.

Annex V species (over 90): Member States must ensure that their exploitation and taking in the wild is compatible with maintaining them in a favourable conservation status.

SPAs are classified under Article 2 of the Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds both for rare bird species (as listed on Annex I) and for important migratory species.

SACs and SPAs up to 12 nautical miles from the coast (i.e. 'territorial waters') are afforded protection in the UK under the Conservation of Habitats and Species Regulations 2017 which consolidate all amendments made to the Conservation (Natural Habitats, &c.) Regulations 1994.

The Conservation of Offshore Marine Habitats and Species Regulations 2017 consolidate and update the Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007. The 2017 Regulations introduce amendments which transfer responsibility for European nature conservation in the Welsh offshore region to Welsh Ministers. This gives Welsh Ministers similar powers in Welsh offshore waters to those currently exercised by Scottish Ministers in Scottish offshore waters. These regulations transpose into national law Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (Habitats Directive), and elements of Council Directive 2009/147/EC on the conservation of wild birds (Wild Birds Directive) in the

UK offshore area. They came into force on 30th November 2017. These regulations apply to the UK's offshore marine area which covers waters beyond 12 nautical miles, within British Fishery Limits and the seabed within the UK Continental Shelf Designated Area. The Conservation of Habitats and Species Regulations 2017 form the legal basis for the implementation of the Habitats and Birds Directives in terrestrial areas and territorial waters out to 12nm in England and Wales (including the inshore marine area) and to a limited extent in Scotland and Northern Ireland. Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. The Convention covers all aspects of wetland conservation and recognises the importance of wetland ecosystems in relation to global biodiversity conservation. The Convention refers to wetlands as *"areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres". However, they may also include riparian and coastal zones. Ramsar sites are statutorily protected under the Wildlife & Countryside Act 1981 (as amended 01.04.1996) with further protection provided by the Countryside and Rights of Way (CROW) Act 2000. Policy statements have been issued by the Government in England and Wales highlighting the special status of Ramsar sites. The Government in England and Wales has issued policy statements which ensure that Ramsar sites are afforded the same protection as areas designated under the EC Birds and Habitats Directives as part of the Natura 2000 network (e.g. SACs & SPAs). Further provisions for the protection and management of SSSIs have been introduced by the Nature Conservation (Scotland) Act 2004.* 

#### National Statutory Designations

Sites of Special Scientific Interest (SSSI) are designated by nature conservation agencies in order to conserve key flora, fauna, geological or physio-geographical features within the UK. The original designations were under the National Parks and Access to the Countryside Act 1949 but SSSIs were then re-designated under the Wildlife & Countryside Act 1981 (as amended). As well as reinforcing other national designations (including National Nature Reserves), the system also provides statutory protection for terrestrial and coastal sites which are important within the European Natura 2000 network and globally.

#### Local Statutory Designations

Local authorities in consultation with the relevant nature conservation agency can declare Local Nature Reserves (LNRs) under the National Parks and Access to the Countryside Act 1949. LNRs are designated for flora, fauna or geological interest and are managed locally to retain these features and provide research, education and recreational opportunities.

#### Non-Statutory Designations

All non-statutorily designated sites are referred to as Local Wildlife Sites (LWS) and can be designated by the local authority for supporting local conservation interest. Combined with statutory designation, these sites are considered within Local Development Frameworks under the Town and Country Planning system and are a material consideration during the determination of planning applications. The protection afforded to these sites varies depending on the local authority involved.

Regionally Important Geological Sites (RIGs) are the most important geological and geomorphological areas outside of statutory designations. These sites are also a material consideration during the determination of planning applications.

#### **The Hedgerow Regulations 1997**

The Hedgerow Regulations 1997 are designed to protect 'important' countryside hedgerows. Importance is defined by whether the hedgerow (a) has existed for 30 years or more; or (b) satisfies at least one of the criteria listed in Part II of Schedule 1 of the Regulations.

Under the Regulations, it is against the law to remove or destroy hedgerows on or adjacent to common land, village greens, SSSIs (including all terrestrial SACs, NNRs and SPAs), LNRs, land used for agriculture or forestry and land used for the keeping or breeding of horses, ponies or donkeys without the permission of the local authority. Hedgerows 'within or marking the boundary of the curtilage of a dwelling-house' are excluded.

#### National and European Legislation Afforded to Species

#### The Habitats Directive

The EC Habitats Directive aims to promote the maintenance of biodiversity by requiring Member States to take measures to maintain or restore wild species listed on the Annexes to the Directive at a favourable conservation status, introducing robust protection for those species of European importance. The Directive is transposed into UK law by The Conservation of Habitats and Species Regulations 2017 (the Conservation Regulations) and the Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended). This has been amended by the **Conservation of Habitats and Species Regulations (amendment) (EU Exit) Regulations (2019)** which continue the same provision for European protected species, licensing requirements and protected sites after the UK leaves the EU.

The following notes are relevant for all species protected under the EC Habitats Directive:

In the Directive, the term 'deliberate' is interpreted as being somewhat wider than intentional and may be thought of as including an element of recklessness.

The Habitats Regulations do not define the act of 'migration' and, therefore, as a precaution, it is recommended that short distance movement of animals for e.g. foraging, breeding or dispersal purposes are also considered.

In order to obtain a European Protected Species Licence (EPSL), the application must demonstrate that it meets all of the following three 'tests':

- The action(s) are necessary for the purpose of preserving public health or safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequence of primary importance for the environment;
- There is no satisfactory alternative; and
- The action authorised will not be detrimental to the maintenance of the species concerned at a favourable conservation status in their natural range.

## The Wildlife and Countryside Act (WCA) 1981 (as amended)

The Wildlife and Countryside Act (WCA) 1981 (as amended) implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention 1979, implemented 1982) and implements the species protection requirements of EC Birds Directive 2009/147/EC on the conservation of wild birds in Great Britain (the birds Directive). The WCA 1981 has been subject to a number of amendments, the most important of which are through the Countryside and Rights of Way (CRoW) Act (2000). Other legislative Acts affording protection to wildlife and their habitats include:

- Deer Act 1991
- Natural Environment & Rural Communities (NERC) Act 2006
- Protection of Badgers Act 1992
- Wild Mammals (Protection) Act 1996

## Badgers

Badgers *Meles meles* are protected under The Protection of Badgers Act 1992 which makes it an offence to:

- Wilfully kill, injure, take, or attempt to kill, injure or take a badger
- Cruelly ill-treat a badger, including use of tongs and digging
- Possess or control a dead badger or any part thereof
- Intentionally or recklessly damage, destroy or obstruct access to a badger sett or any part thereof
- Intentionally or recklessly disturb a badger when it is occupying a badger sett
- Intentionally or recklessly cause a dog to enter a badger sett
- Sell or offers for sale, possesses or has under his control, a live badger

#### Effects on development works:

A development licence will be required from the relevant countryside agency (i.e. Natural England, Natural Resources Wales, Scottish Natural Heritage) for any development works likely to affect an active badger sett, or to disturb badgers whilst they occupy a sett. Guidance has been issued by the countryside agencies to define what would constitute a licensable activity. It is no possible to obtain a licence to translocate badgers.

#### Birds

With certain exceptions, all birds, their nests and eggs are protected under Sections 1-8 of the WCA. Among other things, this makes it an offence to:

- Intentionally (or recklessly in Scotland) kill, injure or take any wild bird
- Intentionally (or recklessly in Scotland) take, damage or destroy (or, in Scotland, otherwise interfere with) the nest of any wild bird while it is in use or being built
- Intentionally take or destroy an egg of any wild bird
- Sell, offer or expose for sale, have in his possession or transport for the purpose of sale any wild bird (dead or alive) or bird egg or part thereof.
- Intentionally or recklessly obstruct or prevent any wild bird from using its nest (Scotland only)

Certain species of bird, for example the barn owl, bittern and kingfisher receive additional protection under Schedule 1 of the WCA and Annex 1 of the European Community Directive on the Conservation of Wild Birds (2009/147/EC) and are commonly referred to as "Schedule 1" birds.

This affords them protection against:

- Intentional or reckless disturbance while it is building a nest or is in, on or near a nest containing eggs or young
- Intentional or reckless disturbance of dependent young of such a bird
- In Scotland only, intentional or reckless disturbance whilst lekking
- In Scotland only, intentional or reckless harassment

#### Effects on development works:

Works should be planned to avoid the possibility of killing or injuring any wild bird or damaging or destroying their nests. The most effective way to reduce the likelihood of nest destruction in particular is to undertake work outside the main bird nesting season which typically runs from March to August. Where this is not feasible, it will be necessary to have any areas of suitable habitat thoroughly checked for nests prior to vegetation clearance.

Schedule 1 birds are additionally protected against disturbance during the nesting season. Thus, it will be necessary to ensure that no potentially disturbing works are undertaken in the vicinity of the nest. The most effective way to avoid disturbance is to postpone works until the young have fledged. If this is not feasible, it may be possible to maintain an appropriate buffer zone or standoff around the nest.

#### Amphibians and Reptiles

The sand lizard *Lacerta agilis*, smooth snake *Coronella austriaca*, natterjack toad *Epidalea calamita*, pool frog *Pelophylax lessonae* and great crested newt *Triturus cristatus* receive full protection under Habitats Regulations through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species
- Deliberate disturbance of species in such a way as:
- To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
- To impair their ability to hibernate or migrate
- To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

With the exception of the pool frog, these species are also listed on Schedule 5 of the WCA and they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering or exposing for sale, possession or transporting for purpose of sale.

Other native species of reptiles are protected solely under Schedule 5, Section 9(1) & (5) of the WCA, i.e. the adder *Vipera berus*, grass snake *Natrix natrix*, common lizard *Zootoca vivipara* and slow-worm *Anguis fragilis*. It is prohibited to:

• Intentionally or recklessly kill or injure these species.

#### Effects on development works:

A European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural England, Natural Resources Wales, Scottish Natural Heritage) will be required for works likely to affect the breeding sites or resting places amphibian and reptile species protected under Habitats Regulations. A licence will also be required for operations liable to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licences are to allow derogation from the relevant legislation, but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

Although not licensable, appropriate mitigation measures may also be required to prevent the intentional killing or injury of adder, grass snake, common lizard and slow worm, thus avoiding contravention of the WCA.

#### Water Voles

The water vole Arvicola terrestris is fully protected under Schedule 5 of the WCA. This makes it an offence to:

- Intentionally kill, injure or take (capture) water voles
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection
- Intentionally or recklessly disturb water voles while they are occupying a structure or place used for shelter or protection

#### Effects on development works:

If development works are likely to affect habitats known to support water voles, the relevant countryside agency (i.e. Natural England, Natural Resources Wales, Scottish Natural Heritage) must be consulted. It must be shown that means by which the proposal can be re-designed to avoid contravening the legislation have been fully explored e.g. the use of alternative sites, appropriate timing of works to avoid times of the year in which water voles are most vulnerable, and measures to ensure minimal habitat loss. Conservation licences for the capture and translocation of water voles may be issued by the relevant countryside agency for the purpose of development activities if it can be shown that the activity has been properly planned and executed and thereby contributes to the conservation of the population. The licence will then only be granted to a suitably experienced person if it can be shown that adequate surveys have been undertaken to inform appropriate mitigation measures. Identification and preparation of a suitable receptor site will be necessary prior to the commencement of works.

#### Otters

Otters Lutra lutra are fully protected under the Conservation Regulations through their inclusion on Schedule 2. Regulation 41 prohibits:

• Deliberate killing, injuring or capturing of Schedule 2 species

- Deliberate disturbance of species in such a way as:
- To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
- To impair their ability to hibernate or migrate
- To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

Otters are also currently protected under the WCA through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection

## Effects on development works:

A European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural England, Natural Resources Wales, Scottish Natural Heritage) will be required for works likely to affect otter breeding or resting places (often referred to as holts, couches or dens) or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, and rear young). The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored

## Bats

All species are fully protected by Habitats Regulations 2010 as they are listed on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species (e.g. All bats)
- Deliberate disturbance of bat species in such a way as:
- To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
- To impair their ability to hibernate or migrate
- To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

Bats are afforded the following additional protection through the WCA as they are included on Schedule 5:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection

## Effects on development works:

A European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural England, Natural Resources Wales, Scottish Natural Heritage) will be required for works are likely to affect a bat roost or an operation which are likely to result in an illegal level of disturbance to the species will require an EPSM licence. The licence is to allow derogation from the legislation through the application of appropriate mitigation measures and monitoring.

#### Hazel Dormice

Hazel dormice Muscardinus aveilanarius are fully protected under Habitats Regulations through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species
- Deliberate disturbance of species in such a way as:
- To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
- To impair their ability to hibernate or migrate
- To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

Dormice are also protected under the WCA through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection

## Effects on development works:

Works which are liable to affect a dormice habitat or an operation which are likely to result in an illegal level of disturbance to the species will require a European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural England, Natural Resources Wales (NB: Hazel Dormouse are entirely absent from Scotland)). The licence is to allow derogation from the legislation through the application of appropriate mitigation measures and monitoring.

## White Clawed Crayfish

There is a considerable amount of legislation in place in an attempt to protect the White-clawed crayfish *Austropotamobius pallipes*. This species is listed under the European Union's (EU) Habitat and Species Directive and is listed under Schedule 5 of the Wildlife and Countryside Act (1981). This makes it an offence to:

- Protected against intentional or reckless taking
- Protected against selling, offering or advertising for sale, possessing or transporting for the purpose of sale

It is also classified as Endangered in the IUCN Red List of Endangered Species. As a result of this and other relevant crayfish legislation such as the Prohibition of Keeping of Live Fish (Crayfish)

Order 1996, a series of licences are needed for working with White-clawed and non-native crayfish. These are:

- A licence to handle crayfish (therefore survey work) in England
- A licence for the keeping of crayfish in England and Wales with an exemption for Signal crayfish (England).
- People in the post-code areas listed with crayfish present prior to 1996 do not need to apply for consent for crayfish already established. It does not, however, allow any new stocking of non-native crayfish into waterbodies. Consent for trapping of non-native crayfish for control or consumption is most likely to be granted in Thames and Anglian regions in the areas with "go area" postcodes.
- Harvesting of crayfish is prohibited in much of England and in any part of Scotland and Wales.

#### Effects on development works:

The relevant countryside agency (i.e. Natural England, Natural Resources Wales, Scottish Natural Heritage) will need to be consulted about development which could impact on a watercourse or wetland known to support white clawed crayfish. Conservation licences for the capture and translocation of crayfish can be issued if it can be shown that the activity has been properly planned and executed and thereby contributes to the conservation of the population. The licence will only be granted to a suitably experienced person if it can be shown that adequate surveys have been undertaken to inform appropriate mitigation measures. Identification and preparation of a suitable receptor site will be necessary prior to the commencement of the works.

#### Wild Mammals (Protection Act) 1996

All wild mammals are protected against intentional acts of cruelty under the above legislation. This makes it an offence to mutilate, kick, beat, nail or otherwise impale, stab, burn, stone, crush, drown, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering.

To avoid possible contravention, due care and attention should be taken when carrying out works (for example operations near burrows or nests) with the potential to affect any wild mammal in this way, regardless of whether they are legally protected through other conservation legislation or not.

## Legislation Afforded to Plants

With certain exceptions, all wild plants are protected under the WCA. This makes it an offence for an 'unauthorised' person to intentionally (or recklessly in Scotland) uproot wild plants. An authorised person can be the owner of the land on which the action is taken, or anybody authorised by them.

Certain rare species of plant, for example some species of orchid, are also fully protected under Schedule 8 of the Wildlife and Countryside Act 1981 (as amended). This prohibits any person from:

- Intentionally (or recklessly in Scotland) picking, uprooting or destruction of any wild Schedule 8 species (or seed or spore attached to any such wild plant in Scotland only)
- Selling, offering or exposing for sale, or possessing or transporting for the purpose of sale, any wild live or dead Schedule 8 plant species or part thereof
- In addition to the UK legislation outlined above, several plant species are fully protected under Schedule 5 of The Conservation of Habitats and Species Regulations 2010. These are species of European importance. Regulation 45 makes it an offence to:
- Deliberately pick, collect, cut, uproot or destroy a wild Schedule 5 species
- Be in possession of, or control, transport, sell or exchange, or offer for sale or exchange any wild live or dead Schedule 5 species or anything derived from such a plant.

## Effects on development works:

A European Protected Species Licence (EPSL) will be required from the relevant countryside agency (i.e. Natural England, Natural Resources Wales, Scottish Natural Heritage) for works which are likely to affect species of planted listed on Schedule 5 of the Conservation or Habitats and Species Regulations 2010. The licence is to allow derogation from the legislation through the application of appropriate mitigation measures and monitoring.

## **Invasive Species**

Part II of Schedule 9 of the WCA lists non-native invasive plant species for which it is a criminal offence in England and Wales to plant or cause to grow in the wild due to their impact on native wildlife. Species included (but not limited to):

- Japanese knotweed Fallopia japonica
- Giant hogweed Heracleum mantegazzianum
- Himalayan balsam Impatiens glandulifera

## Effects on development works:

It is not an offence for plants listed in Part II of Schedule 9 of the WCA 1981 to be present on the development site, however, it is an offence to cause them to spread. Therefore, if any of the species are present on site and construction activities may result in further spread (e.g. earthworks, vehicle movements) then it will be necessary to design and implement appropriate mitigation prior to construction commencing.

## Injurious weeds

Under the Weeds Act 1959 any landowner or occupier may be required prevent the spread of certain 'injurious weeds' including (but not limited to):

- Spear thistle Cirsium vulgare
- Creeping thistle *Cirsium arvense*
- Curled dock Rumex crispus
- Broad-leaved dock *Rumex obtusifolius*
- Common ragwort Senecio jacobaea

## Effects on development works:

It is a criminal offence to fail to comply with a notice requiring such action to be taken. The Ragwort Control Act 2003 establishes a ragwort control code of practice as common ragwort is poisonous to horses and other livestock. This code provides best practice guidelines and is not legally binding.

## NATIONAL PLANNING POLICY (ENGLAND)

## Environment Act 2021

The Environment Act 2021 (EA 2021) received Royal Assent on 9 November 2021 and is expected to become fully mandated within the next couple of years. The Act principally creates a post Brexit framework to protect and enhance the natural environment. Through amendments to the Town and Country Planning Act 1990, the Act will require all planning permissions in England (subject to exemptions which is likely to include householder applications) to be granted subject to a new general pre-commencement condition that requires approval of a biodiversity net gain plan. This will ensure the delivery of a minimum of 10% measurable biodiversity net gain. The principal tool to calculate this will be the Defra Biodiversity 3.0 Metric. Works to enhance habitats can be carried out either onsite or offsite or through the purchase of 'biodiversity credits' from the Secretary of State. However, this flexibility may be removed (subject to regulations) if the onsite habitat is 'irreplaceable'. Both onsite and offsite enhancements must be maintained for at least 30 years after completion of a development (which period may be amended).

#### National Planning Policy Framework 2021

The National Planning Policy Framework promotes sustainable development. The Framework specifies the need for protection of designated sites and priority habitats and species. An emphasis is also made on the need for ecological infrastructure through protection, restoration and re-creation. The protection and recovery of priority species (considered likely to be those listed as species of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006) is also listed as a requirement of planning policy.

In determining a planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from harm; there is appropriate mitigation or compensation where significant harm cannot be avoided; measurable gains in biodiversity in and around developments are incorporated; and planning permission is refused for development resulting in the loss or deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland.

#### The Natural Environment and Rural Communities Act 2006 and the Biodiversity Duty

Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006, requires all public bodies to have regard to biodiversity conservation when carrying out their functions. This is commonly referred to as the 'biodiversity duty'.

Section 41 of the Act requires the Secretary of State to publish a list of habitats and species which are of 'principal importance for the conservation of biodiversity'. This list is intended to assist decision makers such as public bodies in implementing their duty under Section 40 of the Act. Under the Act these habitats and species are regarded as a material consideration in determining planning applications. A developer must show that their protection has been adequately addressed within a development proposal.

#### EUROPEAN PROTECTED SPECIES POLICIES

In December 2016 Natural England officially introduced the four licensing policies throughout England. The four policies seek to achieve better outcomes for European Protected Species (EPS) and reduce unnecessary costs, delays and uncertainty that can be inherent in the current standard EPS licensing system. The policies are summarised as follows:

- Policy 1; provides greater flexibility in exclusion and relocation activities, where there is investment in habitat provision;
- Policy 2; provides greater flexibility in the location of compensatory habitat;
- Policy 3; provides greater flexibility on exclusion measures where this will allow EPS to use temporary habitat; and,
- Policy 4; provides a reduced survey effort in circumstances where the impacts of development can be confidently predicted.

The four policies have been designed to have a net benefit for EPS by improving populations overall and not just protecting individuals within development sites. Most notably Natural England now recognises that the Habitats Regulations legal framework now applies to 'local populations' of EPS and not individuals/site populations.