



**POWICK PAVILION
POWICK
WORCESTERSHIRE**

Update Preliminary Ecological Appraisal

**Report to
Glazzard Architects**

Project number 2010/168 B v1

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SUMMARY

In December 2017, Worcestershire Wildlife Consultancy was commissioned by Glazzard Architects to undertake an update Preliminary Ecological Appraisal at Powick Pavilion, Powick, Worcestershire. This was to update the original report undertaken in 2010.

- The site has historically been used as a sports facility and is dominated by improved grassland consisting mainly of perennial rye-grass (*Lolium perenne*). The development would result in the loss of some of this habitat. However, it is considered to be common and widespread with low ecological value.
- There appear to be no obvious and immediate issues for the development with regard to any protected species and no further dedicated surveys are recommended. However, in the unlikely event that any protected species listed in Section 2 are found on the site during the works then all works must **cease immediately** and the advice of a suitably qualified ecologist must be sought.

It should be noted that if more than twelve months elapse between this appraisal and the commencement of any development then a further survey appraisal should be undertaken at an appropriate time to determine the status of any protected species which may have taken up residence during the intervening period.

1. INTRODUCTION

1.1 Commissioning Brief

In December 2017, Worcestershire Wildlife Consultancy was commissioned by Glazzard Architects to undertake an update Preliminary Ecological Appraisal at Powick Pavilion, Powick, Worcestershire. This was to update the original report undertaken in 2010.

The appraisal was requested to accompany a planning application and ensure compliance with National and European legislation. The main aims of the appraisal are to identify the key ecological issues, constraints and potential impacts and where appropriate recommend further surveys and suitable avoidance or mitigation measures.

1.2 Summary of the Proposed Development

The development will include the construction of a new pavilion in the south-western corner of the site, car-parking for 40 cars and a new youth pitch to replace one of the full-sized football pitches.

It is our understanding that none of the trees, hedgerows or shrubs will be affected during the course of the development.

1.3 Site Location

The site is situated south-west of Worcester in Powick at NGR SO820510.

1.4 Scope of the Appraisal

The ecological appraisal focussed on the following points:

- Determining the potential of the area of the proposed works to support protected species of which account must be taken prior to and during the planned works in accordance with the Wildlife and Countryside Act 1981 (as amended), the Conservation of Habitats and Species Regulations 2017 and the Protection of Badgers Act 1992.
- The appraisal also aimed to identify habitats and species recognised within the local Biodiversity Action Plan (BAP Habitats).

The appraisal recommendations are also guided by the relevant legislation:

- The Natural Environment and Rural Communities Act (NERC), 2006 states: "Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity".

Furthermore, the appraisal recommendations are guided by the National Planning Policy Framework¹ (NPPF), where the policies in paragraphs 18 to 219, taken as a whole, constitute the Government's view of what sustainable development in England means in practice for the planning system. The following paragraphs of the NPPF are of particular relevance:

¹ National Planning Policy Framework published on 27th March 2012

- Paragraph 8 on the roles of planning in relation to sustainable development states ‘These roles should not be undertaken in isolation... therefore to achieve sustainable development economic, social and environmental gains should be sought jointly and simultaneously through the planning system’.

With regard to paragraph 117, in order to minimise impacts on biodiversity and geodiversity, planning policies should:

- plan for biodiversity at a landscape-scale across local authority boundaries;
- promote the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species populations, linked to national and local targets, and identify suitable indicators for monitoring biodiversity in the plan;
- where Nature Improvement Areas are identified in Local Plans, consider specifying the types of development that may be appropriate in these areas.

With reference to paragraph 118, when determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the following principals:

- if significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- development proposals where the primary objective is to conserve or enhance biodiversity should be permitted;
- opportunities to incorporate biodiversity in and around developments should be encouraged;
- planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss.

1.5 Desk Study

A search for statutory sites of ecological significance within a 1km radius was undertaken using the Multi Agency Geographic Information for the Countryside (MAGIC) website

<http://magic.defra.gov.uk/>

1.6 Constraints

The comprehensiveness of any ecological appraisal may be limited by the season in which the site visit(s) is undertaken. To confirm the presence or absence of all protected species usually requires multiple visits at suitable times of the year. However, the appraisal does provide a “snapshot” of the ecological interest recorded on the day of the visit and highlights areas where further survey work may be required.

Detailed plans relating to the works are not outlined in this report. Note that the lack of detail regarding the proposed works limits the scope of recommendations that can be made, particularly in relation to avoidance and mitigation measures.

2. METHODOLOGY

Alan Shepherd of Worcestershire Wildlife Consultancy undertook the update appraisal on 19th December 2017. At 10.10hrs the weather was bright but overcast with 80% cloud cover and an air temperature of 2.2° C.

Table 1: Methodology

Phase 1 habitat survey	The aim of the Phase 1 survey is to provide a description of the semi-natural vegetation of a particular site and is made in accordance with the JNCC Phase 1 Habitat Survey methodology (JNCC, 1990). Where necessary, the condition of habitat is described and full plant lists collated to provide greater detail, which helps when identifying the conservation significance of a particular habitat. The appraisal also aimed to identify invasive plants listed on Schedule 9 of the Wildlife & Countryside Act that could have implications for works on site. Where appropriate, maps are provided in other formats, such as annotated aerial photographs.
Badgers	The site is assessed for suitable habitats that may support badgers (<i>Meles meles</i>). Where relevant habitat occurs, evidence of badgers including setts, latrines, tracks, snuffle holes, padding or guard hairs is recorded.
Bats	The site is assessed for suitable habitats that may support bats. For example, buildings are assessed for holes in soffits, missing tiles and gaps in the masonry whilst trees are assessed for features such as cracks and holes.
Birds	The site is assessed for suitable habitats that may support birds in terms of feeding, nesting and roosting. Where relevant habitat occurs, evidence identifying the presence of birds including nests, droppings, pellets and feathers is recorded.
Dormice	The site is assessed for suitable habitats that may support dormice (<i>Muscardinus avellanarius</i>) including woodland and hedgerows. Where relevant habitat occurs evidence of dormice including nests and gnawed nuts is recorded.
Great crested newts	During the site visit the potential of the site to support great-crested newts (<i>Triturus cristatus</i>) is assessed; this includes looking for potential breeding sites such as ponds, disused swimming pools and other water-bodies. The appraisal also focuses on the potential for this species to find refuge in places such as log piles, rubble and compost heaps. Where still water-bodies occur a Habitat Suitability Index (HSI) is calculated. This is a standard appraisal method developed specifically to evaluate the habitat suitability for great crested newts (Oldham <i>et al.</i> 2000). A series of factors must be considered. Each factor is assessed along suitability guidelines and allocated a value of between 0.1 (highly unsuitable) to 1.0 (highly suitable). The geometric mean of these values provides an overall suitability value for the site. Although this is no substitute for a dedicated survey the suitability value informs the decision on whether to undertake a dedicated survey.
Otters	The area under appraisal is searched for suitable habitat along water-bodies, recording where appropriate, evidence pertaining to the presence of otters (<i>Lutra lutra</i>) in the form of holts, spraints, anal jelly, tracks and feeding remains.
Reptiles	The site is assessed for suitable habitats that may support reptiles. Slow-worms (<i>Anguis fragilis</i>) and common lizards (<i>Zootoca vivipara</i>) inhabit a variety of habitats, such as rough grassland, heathland and woodland edge where there are suitable opportunities for maintaining their body temperature and finding

	suitable prey. Grass snakes (<i>Natrix natrix</i>) are normally associated with water-bodies but they have a wide home range of up to 2km ² and can occur anywhere within that range, particularly in grassy sites as the common name implies. Where relevant habitat occurs, evidence identifying the presence of reptiles, particularly tracks and sloughed skin is recorded.
Water Voles	The area under appraisal is searched for suitable habitat along water-bodies, recording where appropriate, evidence pertaining to the presence of water voles (<i>Arvicola amphibius</i>) in the form of burrows, latrines, runs, footprints and distinctive “feeding lawns”.
White-clawed crayfish	The area under appraisal is searched for suitable habitats that may support white-clawed crayfish (<i>Austropotamobius pallipes</i>). This typically includes freshwater streams and rivers but may also include still water-bodies.

3. RESULTS, APPRAISAL & RECOMMENDATIONS

3.1 Desk study

There are no statutory sites of nature conservation importance within 1km of the site².

² ² Information from MAGIC website

3.2 Protected/notable species and habitats

Table 2: Protected/notable species appraisal

Species	Habitats/features	Evidence	Likelihood of presence	Potential impact	Recommendations Further survey required? (Yes/No) / Avoidance / mitigation / enhancement measures
BADGERS	The topography is flat and unsuitable for badgers to excavate a sett.	None. Some burrows in the south-eastern corner were made by rabbits (<i>Oryctolagus cuniculus</i>).	None	None	No

Species	Habitats/features	Evidence	Likelihood of presence	Potential impact	Recommendations Further survey required? (Yes/No) / Avoidance / mitigation / enhancement measures
BATS	<p>The container does not offer any opportunities for roosting.</p> <p>There are several large oaks on the boundaries that have some suitability for roosting bats. However, it is our understanding that the proposed work will not directly affect the trees.</p> <p>The site is suitable as part of a commuting and foraging area for local bats.</p>	None.	<p>Low for roosting</p> <p>Low for foraging</p>	No impact as long as the trees are not affected	<p>No but if the large trees are to be affected then it is strongly recommended that that they are surveyed for roosting bats.</p> <p>Any lighting scheme should be developed to avoid disturbing commuting and/or foraging bats. See Table 4.</p>

Species	Habitats/features	Evidence	Likelihood of presence	Potential impact	Recommendations Further survey required? (Yes/No) / Avoidance / mitigation / enhancement measures
BIRDS	<p>There is limited nesting habitat in the proposed area of the development.</p> <p>There is some nesting habitat in the surrounding hedges and trees but it is our understanding that these will not be affected by the proposed development.</p>	<p>Blackbird (<i>Turdus merula</i>), redwing (<i>T. pilaris</i>) fieldfare (<i>T. iliacus</i>), robin (<i>Erithacus rubecula</i>) and dunnock (<i>Prunella modularis</i>) were seen on the day of the visit.</p>	<p>High. Birds are certain to be present to during the nesting season (late February to late August).</p>	<p>High if works affecting the surrounding hedges and trees are undertaken during the nesting season. Otherwise very low.</p>	<p>All birds are protected under Section 1 of the Wildlife and Countryside Act 1981 (as amended). It is therefore generally unlawful to intentionally kill or injure a bird, damage or destroy an occupied nest or take or destroy eggs other than in exceptional prescribed circumstances.</p> <p>Therefore development operations should take care to avoid the risk of harm to birds and their nests, especially during late February – late August. Removal of suitable nesting habitat should be undertaken outside this period but if this is not possible then a suitably qualified ecologist should be engaged to check for nesting birds and to provide advice on the most appropriate way to proceed.</p>
DORMICE	None	None	None	None	None

Species	Habitats/features	Evidence	Likelihood of presence	Potential impact	Recommendations Further survey required? (Yes/No) / Avoidance / mitigation / enhancement measures
GREAT CRESTED NEWTS	No static waterbodies on the site or immediately next to it. From Ordnance Survey maps and aerial photographs there do not appear to be any waterbodies within 500m of the site that are not beyond major barriers.	None	None	None	None
OTTERS, WATER VOLES & WHITE-CLAWED CRAYFISH	There are no running watercourses on or immediately adjacent to the site.	None.	None	None.	None

Species	Habitats/features	Evidence	Likelihood of presence	Potential impact	Recommendations Further survey required? (Yes/No) / Avoidance / mitigation / enhancement measures
REPTILES	The site is hostile for reptiles.	None	None	None	None

Table 3: Habitat/features appraisal

Habitat/Feature	Description	Local BAP ³ habitat Y/N	Evaluation and potential impact	Recommendations Avoidance / mitigation / enhancement measures
IMPROVED GRASSLAND	The site is dominated by amenity turf, consisting mainly of perennial rye-grass (<i>Lolium perenne</i>) with frequent white clover (<i>Trifolium repens</i>) and creeping buttercup (<i>Ranunculus repens</i>), occasional ribwort plantain (<i>Plantago lanceolata</i>) and dandelion (<i>Taraxacum officinale</i> agg).	N	The development would result in the loss of some of this habitat. However, it is considered to be common and	None

³ Biodiversity Action Plan

Habitat/Feature	Description	Local BAP ³ habitat Y/N	Evaluation and potential impact	Recommendations Avoidance / mitigation / enhancement measures
			widespread with low ecological value.	

Table 4: Additional recommendations

Number	Additional recommendation
1	Nesting opportunities for house sparrows, swifts and house martins can be provided in the form of sparrow terraces, swift boxes and house martin cups on the exterior walls of a new building. All these species have undergone a decline in recent years (Red List in the case of house sparrows, Amber List in the case of swifts and house martins). These nesting features should be installed under the eaves of a building at minimum heights of 2m and face in a north to south-east direction. Examples are provided in Appendix 3.
2	Roosting opportunities for local bats can be incorporated into a new building through the installation of bat boxes under the eaves on the exterior walls (e.g. Schwegler 1WQ/1FF bat box) . Bat boxes (e.g. Schwegler 2FN) can also be installed on medium- large trees. Bat boxes should be installed at minimum heights of 2.5m, facing away from external illumination and should ideally face in a south-east or south-west orientation. Examples are provided in Appendix 3. It is strongly recommended that any lighting to be incorporated in the site should be low-powered (i.e. lux level of 3 or less), downward-pointing and/or mounted at a low level (e.g. standard bollard height) to minimise the level of impact from lighting on bats. The best types of lighting for use are narrow spectrum lights with no UV content, warm white LED or low pressure sodium.



4. CONCLUSIONS & RECOMMENDATIONS

- There has been no significant change to the site since the previous visit in 2010. The site has historically been used as a sports facility and is dominated by improved grassland consisting mainly of perennial rye-grass (*Lolium perenne*). The development would result in the loss of some of this habitat. However, it is considered to be common and widespread with low ecological value.
- There appear to be no obvious and immediate issues for the development with regard to any protected species and no further dedicated surveys are recommended. However, in the unlikely event that any protected species listed in Section 2 are found on the site during the works then all works must **cease immediately** and the advice of a suitably qualified ecologist must be sought.

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Worcestershire Biodiversity Action Plan:

http://www.worcestershire.gov.uk/info/20252/environmental_policy/1155/biodiversity_action_plan

Worcestershire Wildlife Consultancy 2010. Powick Pavilion Phase 1 Habitat Survey and Protected Species Assessment 2010/168 Report to Glazzard Architects.

Appendix 1: Site Photographs



Plate 1. Entrance gate



Plate 2. Existing container



Plate 3. View northwards within container



Plate 4. Sward



Plate 5. Field maples



Plate 6. View westwards



Plate 7. View westwards with football pitch in foreground



Plate 8. Existing container



Plate 9. Rabbit burrow on south-western boundary

Appendix 2: Wildlife Legislation

Badgers

Under the ***Protection of Badgers Act 1992*** it is illegal to:

- wilfully kill, injure, take, possess or cruelly treat a badger – or attempt to do so
- intentionally or recklessly damage, destroy or obstruct access to a badger sett (whether or not there is a badger in it at the time)
- disturb a badger while it is occupying a sett
- sell, keep or mark a healthy badger or possess any dead badger or part thereof.

Bats

Under the ***Wildlife and Countryside Act 1981 (as amended)*** and ***the Conservation of Habitats and Species Regulations 2017*** it is illegal to:

- intentionally or deliberately kill, injure or capture bats
- intentionally, deliberately or recklessly* disturb bats
- intentionally, deliberately or recklessly* damage, destroy or obstruct any place used for shelter or protection, ie bat roosts (even if they are not currently occupied)
- possess, sell or transport a bat, or anything derived from it.

Dormice

Dormice and their habitat are fully protected under the ***Wildlife and Countryside Act 1981 (as amended)*** and the ***Conservation of Habitats and Species Regulations 2017***, making it illegal to:

- intentionally or deliberately kill, injure or capture dormice
- intentionally, deliberately or recklessly* disturb dormice
- intentionally, deliberately or recklessly* damage, destroy or obstruct breeding or resting sites or places used for shelter or protection (whether occupied or not)
- possess or transport a dormouse (or any part thereof) unless under licence
- sell or exchange dormice.

Otters

Otters and their habitat are fully protected under the ***Wildlife and Countryside Act 1981 (as amended)*** and the ***Conservation of Habitats and Species Regulations 2017***. It is illegal to:

- intentionally or deliberately kill, injure or capture otters
- intentionally or recklessly* disturb otters
- intentionally or recklessly* damage, destroy or obstruct breeding or resting sites or places used for shelter or protection (holts, couches etc) – whether occupied or not
- possess or transport an otter (or any part thereof) unless under licence
- sell or exchange otters.

Water Vole

Water voles are protected under the ***Wildlife and Countryside Act 1981 (Amendment 1998)***, making it illegal to:

- intentionally or deliberately kill, injure or capture water voles
- intentionally or recklessly* disturb voles

- intentionally or recklessly* disturb, destroy or obstruct access to any place that water voles use for shelter or protection (whether occupied or not);
- possess or transport a water vole (or any part thereof) unless under licence
- sell or exchange water voles..

Birds

All wild birds (i.e. resident, visiting and introduced species) in the UK are protected by law under the ***Wildlife and Countryside Act 1981 (as amended)***, making it illegal to:

- kill, injure or take any wild bird
- take, damage or destroy the nest of any wild bird while it is being built or in use
- take or destroy the eggs of any wild bird
- possess or control (e.g. for exhibition or sale) any wild bird or egg unless obtained legally.

Birds that receive special protection

Species listed in ***Schedule 1*** of the ***Wildlife and Countryside Act 1981(as amended)*** , such as the barn owl and peregrine falcon, receive special protection. In addition to the above legislation, it is also illegal to *intentionally or recklessly** disturb any bird listed on ***Schedule 1*** while it is nest-building, or at or near a nest containing eggs or young, or to disturb any of its dependent young. Disturbance could occur, for example, through noise caused by construction works in close proximity to the nest. * The term “recklessly” applies in England and Wales following the ***CRoW Act 2000***.

White-clawed crayfish

Under the ***Wildlife and Countryside Act 1981 (as amended)*** it is illegal to *intentionally take (i.e. capture), sell, barter or exchange* white-clawed crayfish.

Great crested newt

Great crested newts and their habitat are *fully protected* under the ***Wildlife and Countryside Act 1981 (as amended)***, and ***Conservation of Habitats and Species Regulations 2017***. It is illegal to:

- intentionally or deliberately capture, kill or injure great crested newts
 - intentionally, deliberately or recklessly* damage, destroy or obstruct access to any place used for shelter or protection, including resting or breeding places (occupied or not)
 - deliberately, intentionally or recklessly* disturb great crested newts when in a place of shelter
 - sell, barter, exchange or transport or offer for sale great crested newts or parts of them.
- The legislation covers all life stages: eggs, larvae, juveniles and adults.

Widespread Amphibians

In England, Scotland and Wales the common frog, common toad, smooth newt and palmate newt are all protected against sale, trade etc under the ***Wildlife and Countryside Act 1981 (as amended)***.

Widespread reptiles

All native British reptiles are protected against intentional killing and injury under the ***Wildlife and Countryside Act 1981 (as amended)***. ***In England, Scotland and Wales***, slow-worm, common lizard, adder and grass snake are also protected against killing, injury and

sale, barter or exchange, but their habitats or places of shelter are not specifically protected.

Invertebrates

Certain invertebrate species are covered by the ***Wildlife and Countryside Act 1981 (as amended)*** and given full protection against killing and injury, damage and/or destruction of their place of shelter, or taking. Other species are protected against sale only. For those species receiving *full protection*, it is illegal to:

- intentionally kill, injure or capture
- intentionally or recklessly* disturb
- intentionally or recklessly* damage, destroy or obstruct places of shelter or protection, including breeding sites (occupied or not)
- possess or transport an animal (or any part thereof) unless under licence
- sell or exchange animals.

* The term “recklessly” was added as an amendment to the ***Wildlife and Countryside Act 1981*** as a result of the ***CRoW Act 2000*** – this applies to England and Wales only.

Plants

The ***Wildlife and Countryside Act 1981 (as amended)*** makes it an offence for any person who is not “authorised” to intentionally uproot any wild plant. An “authorised” person can be the owner or occupier of the land on which the action is taken, or anybody authorised by them; or any person authorised in writing by the local authority for the area within which the action is taken. In addition, the ***Wildlife and Countryside Act 1981 (as amended)*** also includes, within ***Schedule 8***, in the order of 60 plant species that it is illegal for any person to intentionally pick, uproot or destroy. It also makes it an offence to offer wild bluebell (*Hyacinthoides non-scripta*) bulbs for sale.

The Hedgerow Regulations 1997 (Environment Act 1995)

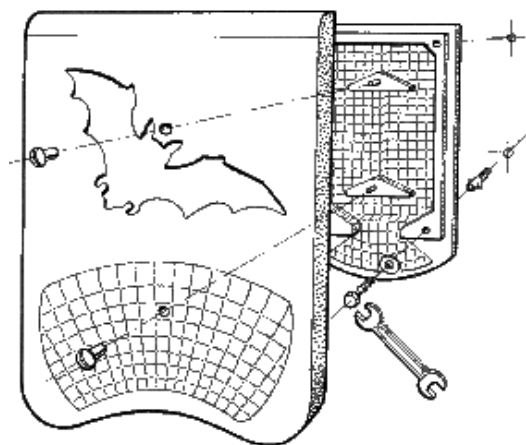
Under the Hedgerows Regulations it is against the law to remove most countryside hedges without first getting the permission of the local district council. These Regulations were introduced to offer protection to 'Important Hedgerows', as defined by the Regulations, in response to concern at the rapid loss of hedgerows in England and Wales. Various criteria specified within the regulations are used to identify important hedgerows for wildlife, landscape or historical reasons.

Appendix 3: Ecological Enhancements

BAT ROOSTING FEATURES



Schwegler 1FF bat box



Schwegler 1WQ Summer & Winter bat box

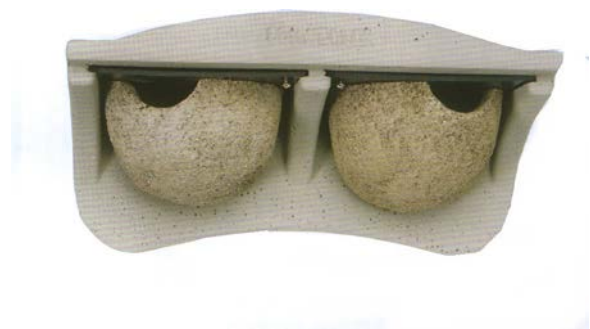
BIRD BOXES



Various designs of swift boxes



House Sparrow terrace box



House Martin terrace box

Appendix 4: Ecological Experience

Alan Shepherd MCIEEM – Senior Ecologist

Alan has worked for Worcestershire Wildlife Consultancy since 1995 and prior to this worked in the conservation sector since the 1970s. He has an extensive knowledge of a wide variety of protected species, with a focus on birds, reptiles and amphibians. Alan regularly undertakes bat, bird, amphibian and reptile surveys and advises on mitigation. Alan also has an extensive botanical knowledge and regularly undertakes extended Phase 1 surveys and prepares ecological management plans.

Alan's main area of expertise is with amphibians and reptiles and he is considered to be a national expert on the slow-worm. He has been the National Herpetofauna Co-ordinator for The Wildlife Trusts, a member of the advisory panel for ARG-UK and spent over 10 years as a member of the national steering committee for the Great Crested Newt Species Recovery Plan. Alan holds Natural England and Natural Resources Wales licences for great crested newts and is a Registered Consultant for the Natural England great crested newt Low Impact Class Licence.

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Worcestershire Wildlife Consultancy provides an independent professional ecological service, encompassing a broad range of ecological knowledge and skills. While maintaining a local focus within the Midlands and Cotswolds, we also operate throughout the UK.

We offer a competitive pragmatic solution based environmental service to the business and development sector, local authorities, public utilities, Natural England and non-governmental organizations (NGOs), as well as individual clients.

Worcestershire Wildlife Consultancy (WWC) has been the consultancy for Worcestershire Wildlife Trust since 1988, providing a wealth of experience to the environmental and ecological sector. All the profits of the ecological Consultancy are donated to Worcestershire Wildlife Trust and used to support its charitable work throughout the County.

Worcestershire Wildlife Consultancy has wide-ranging ecological and environmental expertise and a team of specialist associates allowing us to offer a comprehensive list of ecological services:

- Phase 1 Habitat Surveys
- Protected Species Surveys
- Bat Surveys
- Great Crested Newt Surveys
- Reptile Surveys
- Badger Surveys
- Nesting Bird Surveys
- Breeding Bird Surveys
- Barn Owl surveys
- Otter & Water Vole Surveys
- Dormouse Surveys
- Invertebrate surveys
- Small Mammal Surveys
- Botanical Surveys (incl. NVC – National Vegetation Survey)
- Hedgerow Surveys
- Invasive Weed Surveys
- Protected Species Licence Applications (incl. Bat Low Impact Class licence)
- Ecological Clerk of Works
- Mitigation Advice & Implementation
- Monitoring – Botanical & Wildlife
- BREEAM Assessments (incl. Code for Sustainable Homes)
- Ecological Impact Assessments
- Ecological Planning Advice
- GIS Analysis
- Pond Surveys
- River Corridor Surveys
- Habitat Management Plans
- Habitat Creation/Restoration Advice & Implementation
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