

# **Biodiversity Enhancement Strategy for Open Space at Millstream Gardens, Eardisley, Herefordshire, HR3 6NR**



**Cotswold Wildlife Surveys**

**January 2024**

**Planning Reference No. APP/W1850/W/20/3262388 for P193762/O –  
Condition No. 11**


## QUALITY CONTROL

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The information in this report has been prepared in accordance with the Chartered Institute of Ecology and Environmental Management's (CIEEM) Code of Professional Conduct. The conclusions and recommendations expressed are reasoned judgements based on the evidence.

Every reasonable attempt has been made to comply with BS42020:2013 *Biodiversity – Code of practice for planning and development*, CIEEM *Guidelines for Ecological Report Writing* (CIEEM, 2017) and Bat Conservation Trust's *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (4<sup>th</sup> edition, Collins, 2023). If there has been deviation from recognised practice, justification/explanation has been given.

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## **SUMMARY**

On 24<sup>th</sup> October 2019, an application for Outline planning was submitted to Herefordshire Council for the erection of up to 18 dwellings (to include 6 affordable homes), associated open space, landscaping and infrastructure, including access road and surface water balancing pond, on open space (Glebe Land) at Millstream Gardens in Eardisley, Herefordshire, HR3 6NR.

Planning permission was subsequently granted at Appeal on 2<sup>nd</sup> December 2021 (Ref. APP/W1850/W/20/3262388).

A condition (No. 11) was placed on the permission as follows:

*Prior to any construction, a detailed scheme and annotated location plan for proposed biodiversity net gain enhancement features including provision for bat roosting and hibernation, bird nesting, hedgehog homes and movement corridors across the site and pollinating insect ‘nesting’ should be supplied to and acknowledged by the local authority and then implemented in full. The approved scheme shall be maintained hereafter as approved unless otherwise agreed in writing by the local planning authority. No external lighting should illuminate any biodiversity net gain feature or adjacent habitat.*

This report provides details of the biodiversity enhancement measures that will be undertaken to allow the above condition to be discharged.



## 1. INTRODUCTION

In support of a planning application for a residential development on the open space at Millstream Gardens in Eardisley, Herefordshire, a Preliminary Ecological Appraisal was undertaken by Ecus Environmental Consultants on 9<sup>th</sup> April 2019. This was updated by Cotswold Wildlife Surveys on 20<sup>th</sup> November 2023.

The site is approximately 1.1 ha in size and comprises poor semi-improved grassland with a wide band of tall ruderal vegetation along the eastern side.

Grasses were represented by Creeping Fescue *Festuca rubra*, Cocksfoot *Dactylis glomerata*, Rough Meadow-grass *Poa trivialis*, False Oatgrass *Arrhenatherum elatius* and Creeping Bent *Agrostis stolonifera*.

Wildflowers present included Creeping Buttercup *Ranunculus repens*, Common Mouse-ear *Cerastium fontanum*, Herb Robert *Geranium robertianum*, White Clover *Trifolium repens*, Daisy *Bellis perennis* and Dandelion *Taraxacum* Section *Vulgaris*.

The tall ruderals consisted of Common Nettle *Urtica dioica*, Broad-leaved and Curled Docks *Rumex obtusifolius* and *R. crispus*, Creeping and Spear Thistles *Cirsium arvense* and *C. vulgare*, Hogweed *Heracleum sphondylium*, Cow Parsley *Anthriscus sylvestris* and Rosebay Willowherb *Chamerion angustifolium*.

An embankment along the eastern boundary supports a species rich double hedgerow of Hawthorn *Crataegus monogyna*, Blackthorn *Prunus spinosa*, Alder Buckthorn *Frangula alnus*, English Elm *Ulmus procera*, Hazel *Corylus avellana*, and Elder *Sambucus nigra*. Mature trees included a Pedunculate Oak *Quercus robur*, Ash *Fraxinus excelsior* and Crack Willows *Salix fragilis*. Bramble *Rubus fruticosus* and Ivy *Hedera helix* formed the understorey.

A small ditch ran along the edge of the embankment for about half its length. At the southern end, the ditch had pooled, but the pond identified by Ecus Ecological Consultants in 2019 was not present, and was assumed instead to be the pooled ditch.

Tall ruderals and Bramble scrub formed a margin to the northern side, this bounded by a small water course. Mature Alders *Alnus glutinosa*, Ash and Crack Willows were growing along the edge of the stream, with Mistletoe *Viscum album* also noted.

The tall ruderals and Brambles extended along the western boundary, this marked by a mature hedgerow of similar species to the eastern hedgerow.

A dry ditch ran along the base of the hedgerow, this wet in one small section. Another dry ditch ran along the southern boundary.

Two log piles were noted.

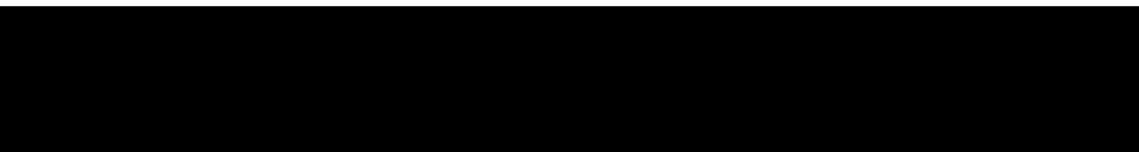
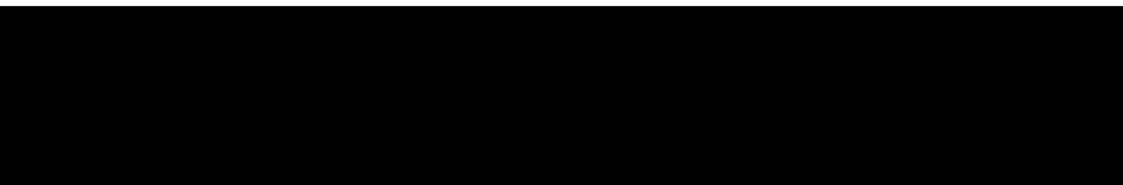
No rare vascular plants were found, and all species recorded are common and widespread.

A number of birds were recorded within the site. These included three Species of High Conservation Concern (RSPB Red list); Mistle Thrush *Turdus viscivorus*, Song Thrush *T. philomelos* and Starling *Sturnus vulgaris*, and one Species of Medium Conservation Concern (RSPB Amber list); Dunnock *Prunella modularis*.

Eight Species of Low Conservation Concern (RSPB Green list) were also noted; Woodpigeon *Columba palumbus*, Pied Wagtail *Motacilla alba yarellii*, Wren *Troglodytes troglodytes*, Blackbird *Turdus merula*, Blackcap *Sylvia atricapilla*, Blue Tit *Cyanistes caeruleus*, Goldfinch *Carduelis carduelis*, and Chaffinch *Fringilla coelebs*.

The majority of these species were using the site for foraging purposes only and likely to be nesting within the wider surrounding area or within adjacent residential gardens or boundary hedgerows.

With no buildings on the site, the only potential bat roost features were cavities in some of the Crack Willows. None of these will be affected by the proposed development. The only bat records within 2.0 km concerned Common Pipistrelles *Pipistrellus pipistrellus*.



There are no records of Otter *Lutra lutra* or Water Vole *Arvicola amphibius* within 1.0 km of the open space, and no signs of their presence were found during the ecological walkovers.

The habitats within the site are sub-optimal for reptiles, and there were no records within 1.0 km. However, it is noted that Grass Snakes *Natrix natrix* are typically associated with water courses, whilst the log piles provide potential refuges.

There are no records of Great Crested Newts (GCN) *Triturus cristatus* within 1.0 km, but Smooth Newts *Lissotriton vulgaris* and Palmate Newts *L. helveticus* have been recorded, the closest 520 m to the southwest.

There were no signs of other protected or important species on the site.

## 2.2 Bats

For bats, two Harlech bat boxes (Fig. 1) will be installed 3.0-4.0 m high on the larger broadleaved trees retained on the site. The boxes will face west so they catch the evening sunshine at a time when bats are starting to warm up prior to emerging.



**Fig. 1 Harlech bat box**

## 2.3 Birds

Since all in-use bird's nests and their contents are protected from damage or destruction, any tree and shrub removal will be undertaken outside the period 1<sup>st</sup> March to 31<sup>st</sup> August inclusive. If this time frame cannot be avoided, a close inspection of the trees and shrubs to be removed will be undertaken by a suitably experienced ecologist prior to clearance.

Work will not be carried out within 5.0 metres of any in-use nest, although this distance could be greater depending on the sensitivity of the species. Any in-use nest will be allowed to fledge before it is disturbed.

Although the trees and boundary hedgerows provide some suitable habitat for nesting, and are being retained, to create opportunities for birds it is proposed to erect two Starling boxes (Fig. 2) and two open-fronted boxes (Fig. 3).

The Starling box is made from recycled LDPE plastic outer with internal FSC Certified OSB nesting chamber. It measures 350 mm x 200 mm x 18 mm and weighs 1.7 kg.

Starlings tend to favour higher nest sites so they will be placed 3.5m or higher above the ground on a tree. Fixing to the tree is easy with three concealed mounting holes in the back of the box (located opposite the entrance hole for easy access). Often this is the only fixing needed, but a further hole is provided at the base for use when necessary.

The easiest way to mount the box is to remove the inner, fix the outer shell onto the tree, wall, etc. then slide the inner roost chamber back into the box and secure it in place.



To check or clean the box it is simply a case of twisting the fastening at the bottom and the wooden nesting chamber slides out.

The boxes will be placed on the mature trees at the rear of the site.



**Figs. 2 & 3 Starling box (L) and Schwegler open-fronted nest box (R)**

The open-fronted boxes are made from woodcrete with a galvanised steel hanger. They measure 150 mm x 200 mm x 200 mm and weigh 2.5 kg.

The boxes can be used by Robins *Erithacus rubecula* and Wrens as well as Pied Wagtails *Motacilla alba* and occasionally Spotted Flycatchers *Muscicapa striata*.

The boxes will be installed at least 2.0 m high on retained trees.

The front panel can be easily removed for cleaning in winter, and this will be the duty of the management company maintaining the public areas.

## **2.4 Other wildlife**

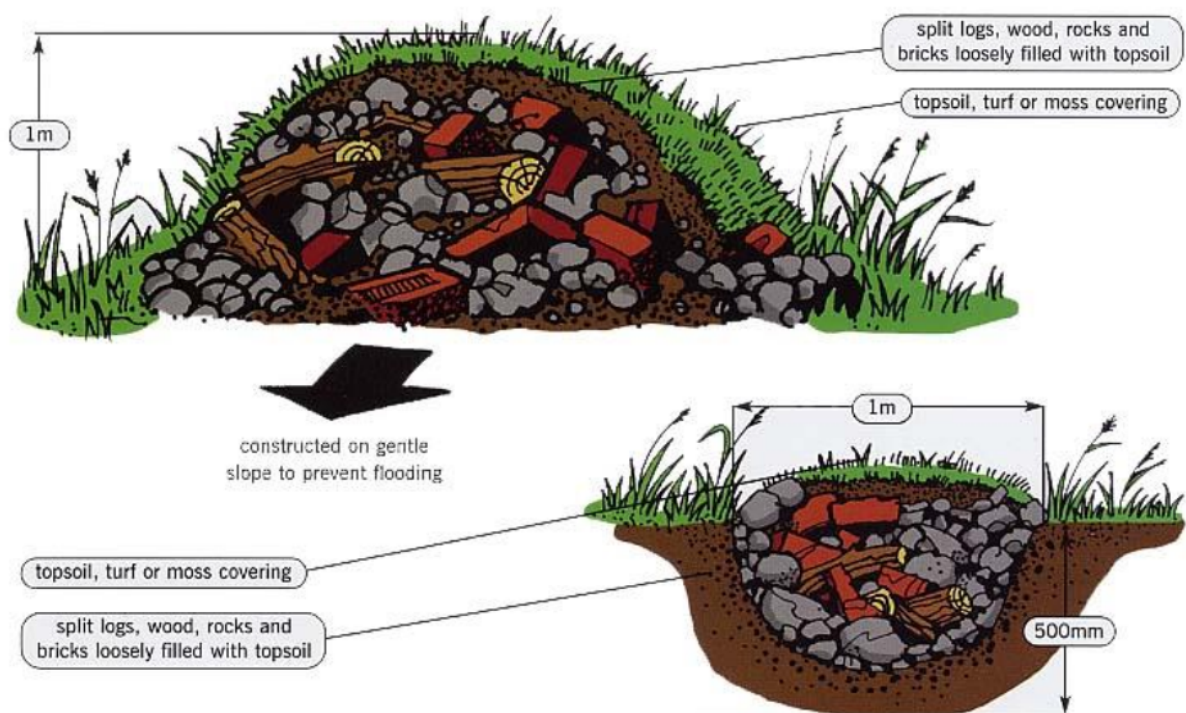
Two Hedgehog Houses (Fig. 4) will also be placed in the bottoms of the eastern boundary hedgerow and will be covered with dried leaves, twigs and other vegetation. This shelter features a sturdy steel frame covered with a waterproof felt lining, made from FSC certified timber.

In addition, gaps measuring approximately 150 mm wide by 150 mm high will be incorporated in garden fences in the corners of the gardens to allow Hedgehogs, and other small mammals, to move around the site and access the wider countryside.

Two hibernacula (Fig. 5) at least 2.0 m long will be installed along the eastern and southern boundaries next to the attenuation pond for common amphibians, invertebrates and small animals. These will also provide a receptor site for any small mammals or amphibians encountered during site clearance works.



**Fig. 4 Hedgehog House**



**Fig. 5 Examples of hibernacula**

Three insect boxes will be erected on trees along the northern boundary. Examples of suitable boxes are shown in Figs. 6 and 7 overleaf. These will provide homes for a wide variety of species.

The residents of the new dwellings will also plant flowers, shrubs and trees in their gardens, and these too will attract many insects, in particular bees, butterflies, moths and hoverflies.





**Figs. 6 & 7 Examples of insect boxes**

The locations of the bird and bat boxes, Hedgehog homes, insect boxes and hibernacula are shown in Fig. 8 overleaf.

**Fig. 8 Locations of bat, bird & insect boxes, Hedgehog homes & hibernacula**



- Starling box □ Open-fronted box □  
 Harlech bat box □ Hedgehog home ⌒  
 Hibernacula ★ Insect boxes △

### 3. RELEVANT LEGISLATION

#### 3.1 *Bats*

In England, Scotland and Wales, all bat species are fully protected under the Wildlife and Countryside Act 1981 (WCA) (as amended), through inclusion in Schedule 5. In England and Wales this Act has been amended by the Countryside and Rights of Way Act 2000 (CRoW) and the Natural Environment and Rural Communities Act 2006 (NERC), which add an extra offence, makes species offences arrestable, increases the time limits for some prosecutions, and increases penalties.

All bats are also included in Schedule 2 of the Conservation (Natural Habitats, & c.) Regulations (the Habitats Regulations), which defines ‘European protected species of animals’. In England this is the Conservation of Habitats and Species Regulations 2010, in Scotland the Habitat Regulations 1994 (as amended), and in Northern Ireland the Conservation Regulations 1995.

All bats are also protected under the Bern Convention Appendix II, the Bonn Convention Appendix II, and the Wild Mammals (Protection) Act 1996.

The above legislation can be summarised thus (Mitchell-Jones and McLeish, 2004):

- *Intentionally or deliberately kill, injure or capture (or take) bats;*
- *Deliberately disturb bats (whether in a roost or not);*
- *Recklessly disturb roosting bats or obstruct access to their roosts;*
- *Damage or destroy roosts;*
- *Possess or transport a bat or any part of a part of a bat, unless acquired legally;*
- *Sell (or offer for sale) or exchange bats, or parts of bats.*

The word ‘roost’ is not used in the legislation, but is used here for simplicity. The actual wording is ‘any structure or place which any wild animal...uses for shelter or protection’ (WCA), or ‘breeding site or resting place’ (Habitats Regulations).

As bats generally have both a winter and a summer roost, the legislation is clear that all roosts are protected whether bats are in residence at the time or not.

#### 3.2 *Badgers*

Badgers are protected in Britain by the Protection of Badgers Act 1992. The purpose of this Act is to protect the animals from deliberate cruelty and from the incidental effects of lawful activities which could cause them harm. Under this legislation it is an offence to:

- Wilfully kill, injure, take, possess or cruelly ill-treat a Badger, or attempt to do so;
- Interfere with a sett by damaging or destroying it;
- Obstruct access to, or any entrance of, a Badger sett;
- Disturb a Badger when it is occupying a sett.



Note that if any of the above resulted from a person being *reckless*, even if they had no intention of committing the offence, their action would still be considered an offence. A person is not guilty of an offence if it can be shown that the act was '*the incidental result of a lawful operation and could not have been reasonably avoided*'; only a court can decide what is 'reasonable' in any set of circumstances.

Penalties for offences under this legislation can be up to six months in prison and a fine of up to £5,000 for each offence.

A Badger sett is defined in the Act as '*any structure or place which displays signs indicating current use by a Badger*'. This can include culverts, pipes and holes under sheds, piles of boulders, old mines and quarries, etc.

'Current use' does not simply mean 'current occupation' and for licensing purposes it is defined as '*any sett within an occupied Badger territory regardless of when it may have last been used*'. A sett therefore, in an occupied territory, is classified as in current use even if it is only used seasonally or occasionally by Badgers, and is afforded the same protection in law.

### **3.3 Birds**

In Britain, all wild birds, their nests and eggs are protected under the Wildlife & Countryside Act 1981(as amended), with the Countryside and Rights of Way Act 2000 extending this protection.

There are penalties for:

- ❑ *Killing, injuring or capturing them, or attempting any of these*
- ❑ *Taking or damaging the nest whilst in use*
- ❑ *Taking or destroying the eggs*

Schedule 1 species carry special penalties and it is an offence to even disturb these near the nest.

### **3.4 Reptiles**

All common reptiles (Common Lizard *Zootoca vivipara*, Grass Snake, Slow-worm *Anguis fragilis* and Adder *Vipera berus*) are afforded legal protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) largely as a consequence of a national decline in numbers associated with persecution and habitat loss.

Under the terms of the Act it is illegal to intentionally kill or injure a reptile.

### **3.5 Great Crested Newts**

Great Crested Newts are protected under Schedule 5 of the Wildlife & Countryside Act (1981) as amended, and Schedule 2 of the Conservation of Habitats and Species Regulations 2010. As a result of their rarity across Europe, they are also protected under Annexes IIa and IVa of the Habitats and Species Directive, and under the Berne Convention (the Convention on the Conservation of European Wildlife and Natural Habitats).

The above legislation can be summarised thus (Langton *et al*, 2001):

- ❑ *Intentionally or deliberately capture or kill, or intentionally injure Great Crested Newts;*
- ❑ *Deliberately disturb Great Crested Newts or intentionally or recklessly disturb them in a place used for shelter or protection;*
- ❑ *Damage or destroy a breeding or resting place;*
- ❑ *Intentionally or recklessly damage, destroy or obstruct access to a place used for shelter or protection;*
- ❑ *Possess a Great Crested Newt, or any part of it, unless acquired lawfully;*
- ❑ *Sell, barter, exchange or offer for sale Great Crested Newts or parts of them.*



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