

Scheme Of Biodiversity Enhancements

June 2024

Further Red Lumb Farm

Red Lumb

Norden

OL12 7TX

Report prepared by and for

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Introduction

This Biodiversity Action Plan has been compiled in pursuance of condition 10 of the planning application for Further Red Lumb Farm.

The planning condition this report discharges is as follows:

Condition 10

No above ground works shall take place until such a time as a scheme of biodiversity enhancements for the site including, but not limited to, bird boxes, bat bricks and bat boxes to be integrated within the site has been submitted to and approved in writing by the Local Planning Authority. The duly approved scheme shall be implemented in full prior to first occupation of the dwelling and retained thereafter.

I intend to not only satisfy, but to exceed this condition.

Objectives

The purpose of the Scheme is to identify current species present on the site and encourage new wildlife to flourish by the creation of new habitat and nesting, roosting and foraging areas.

A management plan will be implemented on a continual basis and changes will be implemented, where necessary, if objectives are not met.

(See Ecological Monitoring for details)

Site Description

The site previously comprised of a single story bungalow, constructed from breeze block and rendered. The roof was a simple plywood and felt construction and has recently been demolished.

During the demolition, all materials were separated and recycled appropriately. Windows and doors have been given away, felt has been disposed of in a skip, wood has been retained for future use and both block work and concrete base have been retained on site for aggregate use throughout the build and associated works.



The site is accessed via RUPP38 through 2 neighbouring properties. Permission has been sought and granted to use the right of way to transport machinery and building materials to the site from

Mr D Wright - Marked Red

Mr N McDonald - Marked Blue

Lane marked Yellow is owned by Angela Collinge

Ecological Features of Interest

Recent surveys have been conducted and found that many birds use the site.



Eurasian Wren



Canada Goose



Eurasian Magpie



Eurasian Blackbird



Willow Warbler



Great Tit



European Goldfinch



European Starling



Common Chaffinch



White Wagtail



Eurasian Jackdaw



Barn Swallow



House Sparrow



The list here was compiled recently in a 15 minute survey using the Merlin App.

There are nesting lapwings and swallows close to the property.

There are many more species around so any addition of nesting and feeding sites would greatly benefit these birds and encourage a greater diversity of species to visit.

Bats currently forage each evening approximately 100 yards from the building.

Several species of bee and other pollinator already visit the site and make excellent use of plants such as thistles growing nearby.

There is a stream running down the north side of the lane with various scattered shrubs and brambles.

Biodiversity Enhancements

The key biodiversity enhancements anticipated at the site for habitats and species are set out below.

Habitat Enhancements

BIRD BRICKS

Integrated swift bricks would be highly beneficial. Whilst they are not likely to attract swifts in this particular location, they would be incredibly likely to be used by house sparrows or other birds.

Sparrows have suffered significant declines in recent years and as such, appear on the UK Red List of Birds of Conservation Concern.

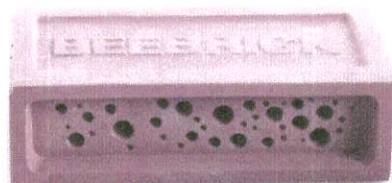
Provision for 5 integrated boxes has been made in the stone frontage of the building. They have been detailed here as bird boxes for illustrative purposes but will be integrated into the stone work. They will be made from cast concrete and will never rot, making them a permanent fixture for years to come. There will also be 3 integrated swift lofts, built into the canopy at the front.

Additional exterior bird boxes will be added around the site which will be species specific to encourage birds observed on site.



BEE BRICKS

Bee habitats will be interspersed both within south facing brickwork and within sunny spots of the gabion retaining wall to the rear of the property which is also south facing. These will house solitary bees and will be placed at a minimum of 1 metre above ground. Provision will be made for a minimum of 10 bee bricks integrated into and around the building.





GABION WALLS

I would like the retaining wall to the rear of the property will be constructed from Gabions, if they are financially viable. Once matured, these will provide a habitat for many plants, small mammals, birds, insects and invertebrates.

In addition to this, they have an incredible ability to store carbon and absorb pollutants from the air, reducing CO2 emissions.

There are many plants and mosses growing on established gabions in nearby Carr Wood. Cuttings of which could be collected to start populating the plant life.

If the gabions are financially prohibitive, I would like to use stone collected from around the farm to form the retaining wall, with bee block integrated into it at regular intervals.

BAT BOXES

With a healthy local bat population already in existence near to the property, it is hoped that with the inclusion of a bat box, they could be encouraged to inhabit the site. They currently forage just 100 metres away at the bottom gate so I'm extremely hopeful that they can be encouraged to nest in the building with the inclusion of bat boxes. One positioned West facing to provide a summer maternity roost and one positioned North facing to provide a winter hibernation roost.



TREE & SHRUB PLANTING

Tree and shrub planting within the site is recommended as part of the landscaping plan. Tree and shrub species will be comprised only of native species. Hawthorn and Blackthorn grow particularly well in this area and there are a few 3 or 4 year old shrubs which could be moved to form an excellent beginning of a hedge. Once established, they'll provide a nesting area for blackbirds, thrushes, blue tits, bullfinches, linnets and more - there are more than 60 species of birds that can take advantage of hedges.



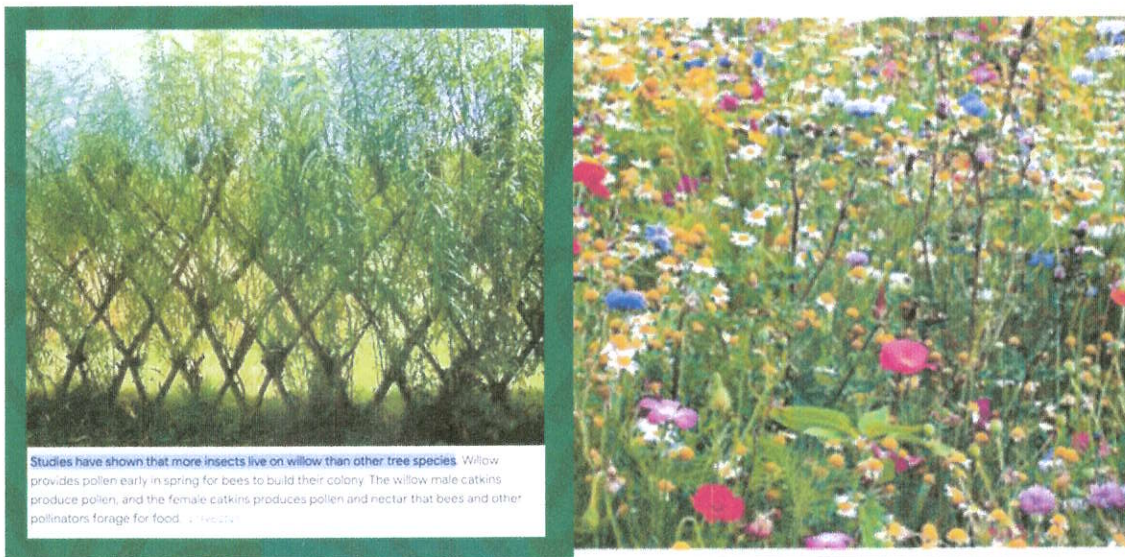
The existing shrubs will be interspersed with new plants to form a hedgerow, providing an essential nesting habitat for birds.

Another bonus - Bees love them too!

WILLOW

Studies have shown that more insects live on willow than other tree species.

They also provide pollen for bees.



A neighbour from the other side of the road agreed for me to take cuttings from her willows to grow here. I currently have 20 whips in water, hoping they'll take root. No transportation was needed to obtain the plants and the chance of them growing on site is excellent.

WILDFLOWERS

Wildflowers will be planted in the following areas.

- Front of house inside the walled garden area
- On top of and within the gabion retaining wall to the rear of the property
- Parts of the green roof
- Both sides of the lane from the bottom gate
- On the banking opposite the house

The purpose of these wildflowers is to provide additional habitat for insects, particularly bees, butterflies and other pollinators.

The seeds used will be bee and butterfly mixes from Bee Bombs.

https://www.beebombs.com/how-to-beebomb?gad_source=1&gclid=Cj0KCQjwvb-zBhCmARIsAAfUI2u3cU1CfcBKWLAwbd4306E9-hvPzC58_CnVGjFr6BQ01Bddw7ZRhtMaAr8OEALw_wcB

I also plan to re seed my mowing meadows in 2026 with a Grazing Meadow Wildflower Mix. This will cover approximately 15 acres (10 to the Western side and 5 to the Eastern side of

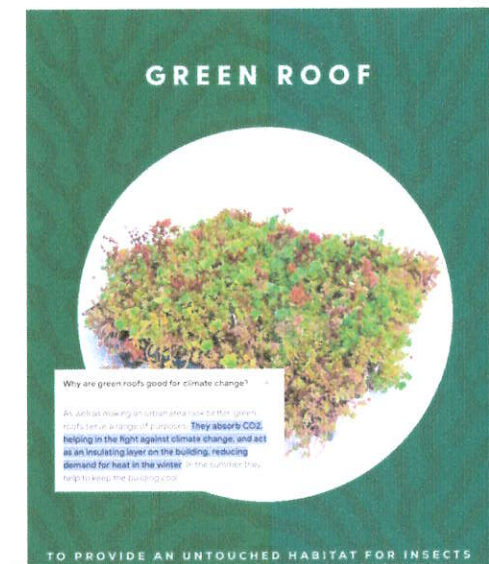
the farm) and will be fenced off from February until mowing in July/August then baled and used on site as winter forage for my cows.

GREEN ROOF

A green roof will provide insulation for the building, reducing the need for heating in the cold weather and cooling in the hot weather. Green Roofs absorb CO₂.

Carefully selected plants will provide a habitat for insects and an abundant food source for birds. I'd like to take my time planting the green roof, using partially established sedums to commence the process and adding to the roof over time with locally foraged plants to provide a species appropriate habitat.

I have observed many species of bee, butterfly and bird feeding on thistles which grow nearby so I'd like to introduce those to the space. I also have foxgloves, poppies and other wild plants growing which many bees and moths utilise. Ragwort is an extremely important source of nectar and pollen for many species including butterflies and bees and is the exclusive habitat of the cinnabar caterpillar. With so much ragwort destroyed in the area, the inclusion of this deadly plant out of reach of animals on the roof would be highly beneficial to insect life.

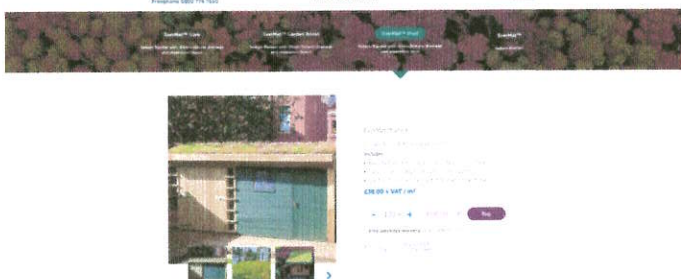


Rather than buying in pre populated green roof sheets which may be attractive but of no interest to local birds and insects, I would prefer to collect and grow food sources that they already use well.

I'd also like to include some small water collection trays on the roof if they're permissible.

If this is not acceptable, I'd like to use the EverMat Shed, a lightweight sedum blanket from Green Roofs Direct. 100 square metres of this will result in 500kg of CO₂ absorption by the roof on an annual basis.

<https://www.greenroofsdirect.com/products/evermat-ultralight>



POND AREA / AREAS

Due to the fact that there are 60 acres of farmland here, I'd be very keen to introduce not just one pond, but several. Having spoken to Mike Cummings, a family friend, I had hoped that we would be in an opportunity area to develop a habitat for Greater Crested Newts.

Unfortunately, we're not!

He has, however, agreed to come to site to advise me about creating a natural pond to encourage greater biodiversity on site.

In addition to pond areas away from the dwelling, which animals will have access to, I'd like to create a fenced off livestock free pond for exclusive wildlife use.

Ponds outside of the fenced off area will be enclosed on three of the four sides to prevent erosion, whilst allowing animals to access the water.

All this, as well as being fantastic for biodiversity. Ponds support an extraordinary two thirds of all freshwater species, and creating clean new ponds is one of the simplest and most effective ways to protect freshwater wildlife.



Five environmental benefits of a pond

- Water conservation. Lawns and soil-based plants require watering. ...
- Less mowing, fewer pollutants. ...
- Fewer pesticides and fertilisers. ...
- Supports local wildlife. ...
- Creates environmental awareness.

Species Enhancement

The proposed habitat and landscape features would provide enhancements for the species groups set out below.

Birds

The development will not destroy any bird habitat but machinery and building activities may discourage them from using the area temporarily.

Provision has been made for 5 bird boxes, and 3 swift lofts to be integrated into the stonework and canopy on the south face of the building.

Additionally, traditional wooden nest boxes will be installed around the site. They will provide nesting areas and vital roosting spaces for birds during the cold winter months.

Bird Box Specifications.

The integrated bird boxes will be constructed from concrete, making their lifespan indefinite.

<https://www.greenandblue.co.uk/products/sparrowblock-sparrow-nest-box>

Three Swift lofts will also be integrated into the canopy on the south side of the building.

<https://www.greenandblue.co.uk/products/swiftloft>

In addition, wooden nest boxes will be made from waste products gathered throughout the build and fitting out process and should last between 5 and 10 years.

All bird boxes will be installed at a minimum height of two metres in such a position that the entrance is not exposed to strong winds.

Swallows are prevalent at the site and may nest under the protruding roof areas. If this does not happen spontaneously, artificial swallow nests will be attached to attract them.

Insects & Invertebrates

The formation of a retaining gabion wall (or gabion sections of the retaining wall) will provide a massive habitat for insect and invertebrate life. This will, in turn, provide foraging opportunities for many species of bird.

The inclusion of wildflowers, willows and hedges will provide insects and invertebrates with food sources and will particularly benefit pollinators such as bees, moths and butterflies.

A natural pond will provide much needed foraging opportunities for insect and invertebrate life which will, in turn, encourage birds and bats.

The green roof will also encourage abundant life above the building and will provide food and nesting opportunities for much wildlife.

<https://www.greenroofsdirect.com/products/evermat-ultralight>

The inclusion of Bee Bricks into the building will offer solitary bees a safe place to nest.

<https://www.greenandblue.co.uk/collections/bees>

Bats

The introduction of bat boxes will provide a roosting place and hopefully a safe breeding place for bats. There are already bats nearby so I'm incredibly optimistic that they'll be easily attracted to the site. By locating one box North facing and one box West facing, the bats will be provided with opportunities for roosting, breeding and hibernating.

Bat Box Specification - Bat Boxes will be attached to the building and will be made of ecostyrocure, giving them a long lifespan over decades. They will not be built in to the building as they may need to be relocated at a later date if they are unpopulated.

<https://www.greenwoodsecohabitats.co.uk/shop?lightbox=dataItem-ky1qd6xd>

Ecological Monitoring

In order to monitor the success of this plan, post construction monitoring will be undertaken on a continuous and annual basis, factor dependent.

I have included a schedule in the table below to detail how I plan to do that.

Bird Boxes - These will be checked annually between November and December and any replacements or repairs undertaken during that time. The integrated boxes will be permanent and unable to sustain damage but the wooden boxes around the site will be checked. This timing will ensure that nesting activities are not disturbed. Any unhatched eggs found inside damaged boxes will be destroyed, as it is illegal to retain them.

Insects & Invertebrates - As I learn more about these creatures, I will add to the diversity of habitats and plants provided for their use. Untouched areas will be available and **ABSOLUTELY NO PESTICIDES** will be used anywhere on the farm. I will seek advice from Rochdale Field Naturalists' Society and use this knowledge to survey insect life on an continual basis in the hope of encouraging not only the species currently utilising the area, but encouraging an even more diverse range of visitors.

Bat Boxes - These will be integrated into the building and will be permanent. There will be no need for repairs as they'll be made of ecostyrocrete. However, if they are not observed to be occupied, boxes will be relocated in new locations such as in high trees. Any sick or injured bats found will be referred to the local Wildlife Trust or Bat Group as it is an offence to handle a bat without a licence.

Ecological Feature	Indicator	Assessment	Remedial Works	Timescale	Target
Breeding Birds	Nesting evidence	Check occupancy of nest boxes	Replace damaged or missing boxes. Relocate if there's no nesting activity within 3 years.	Annual.	To provide additional nesting opportunities for bird species on site. At least half of installed nest boxes in use.
Insects & Invertebrates	Presence	Survey insects and invertebrates present. Keep a diary of identified species.	Keep water features filled. Plant a diverse range of plants to use as forage.	Ongoing maintenance Annual identifying.	To increase the foraging opportunities. To encourage new species. To provide breeding opportunities.
Bats	Presence	Survey by watching for presence.	Relocate boxes if no evidence of roosting activity within 3 years.	Annual.	To provide roosting, breeding and hibernating opportunities for bats.

Conclusion

Whilst I realise that the inclusion of so many aspects is not strictly necessary for this Planning Condition, I have a personal wish to increase the biodiversity of my surroundings.

I will take great pleasure in observing the creatures that visit the site. I have recently become a member of Rochdale Field Naturalists' Society and I'm already learning some absolutely fascinating facts which will help me in my endeavours.

This Biodiversity Scheme describes the current position and the proposed plans to increase the ecological value on site. Once the measures have been implemented and areas have matured, the site value for wildlife will be greatly increased.

Long term monitoring has also been proposed to ensure that biodiversity enhancement is successfully achieved.