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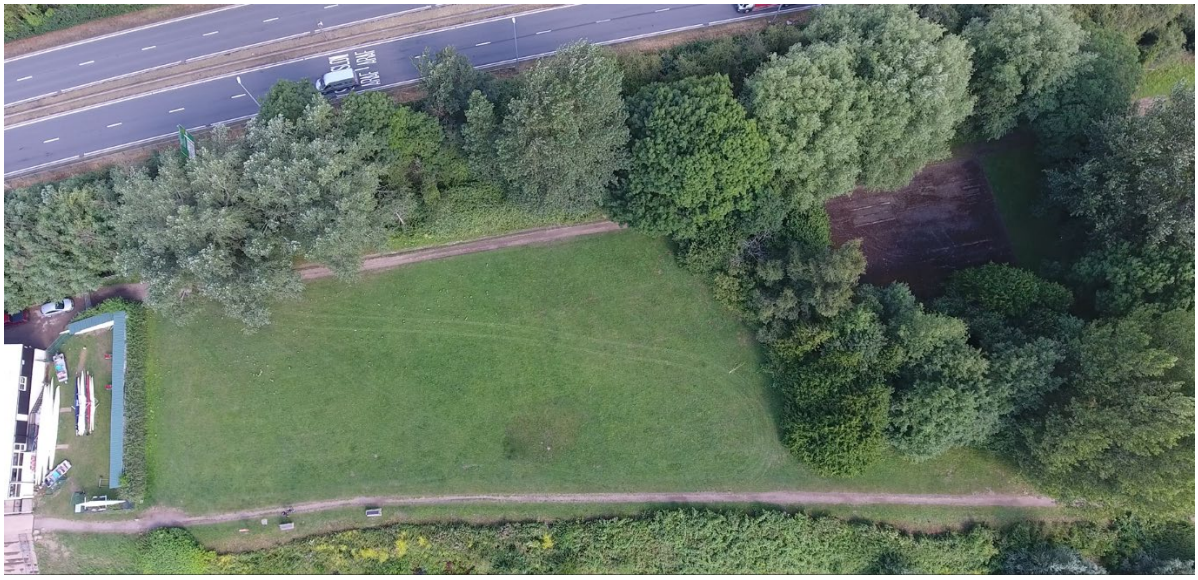

Preliminary Ecological Appraisal Report

Commissioned by: Monmouth Town Council

Author: Cllr Steve Wadley

Site Name: The Town Field, Dixton, Monmouth

Version: V1

Date: 5th July 2023

Monmouth Town Council

Document Control:

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1 Summary

Note: This is a summary of the findings. Please read the entire report for full details.

Purpose of report - Base line survey to establish the habitat type and to inform future management of the field and margins.

Description of scheme - The Town Council wish to enhance biodiversity at the field.

Methodology - A PEA was undertaken consisting of a field survey undertaken in good weather following the Chartered Institute of Ecology and Environmental Management (CIEEM) Preliminary Ecological Appraisal (2013) guidelines and standard Phase 1 Habitat Survey protocol (JNCC, 2010).

Conclusion – The Town Field itself is species poor except for the field margins which have increased number of plant species particularly along the east and west margins and along the north margin where the former skate park is situated.

The riverbank to the east of the field is moderately overgrown and has high potential for nesting birds and foraging / commuting mammals due to extensive growth of Bramble, Willow and Willowherb.
The margins of the field hold potential connectivity for foraging and commuting Dormouse, Birds, Otter, Hedgehogs and Bats.

2 Introduction

1.1 This survey and report were led by Cllr Steve Wadley of Monmouth Town Council. Cllr Wadley is an experienced ecologist and specialises in wildlife conservation, research and commercial survey work in Wales and England.

Licenses Held:
Natural England (NE) class 19 & 20 bat survey licence (Number 2016-20666-CLS-CLS)
Natural Resources Wales (NRW) bat licence (SO85928/1)
Natural Resources Wales VBRV (Trainer)

1.2 This report was commissioned by Monmouth Town Council

1.3 The purpose of this report is to:

- Assess the current ecological value of the field.
- Provide advice on future management of the field grassland and borders to enhance biodiversity.

1.4 The survey was carried out on 5th July 2023 and is centred on grid reference SO 51354 13052

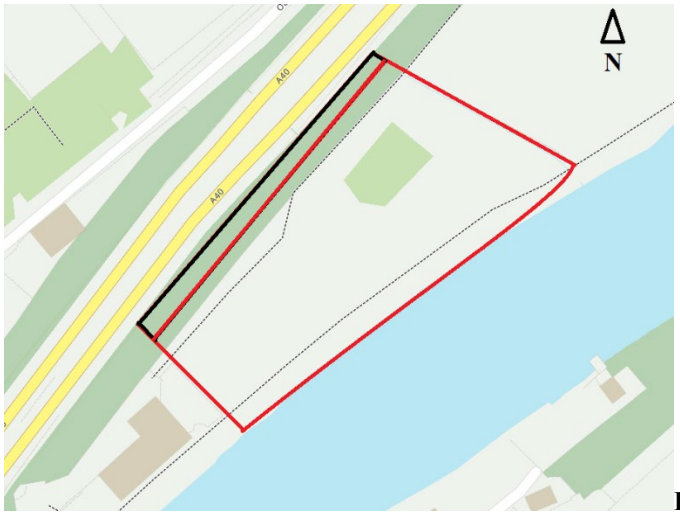

Figure 1 – Survey site location.
Contains Ordnance Survey data © Crown copyright and database right.

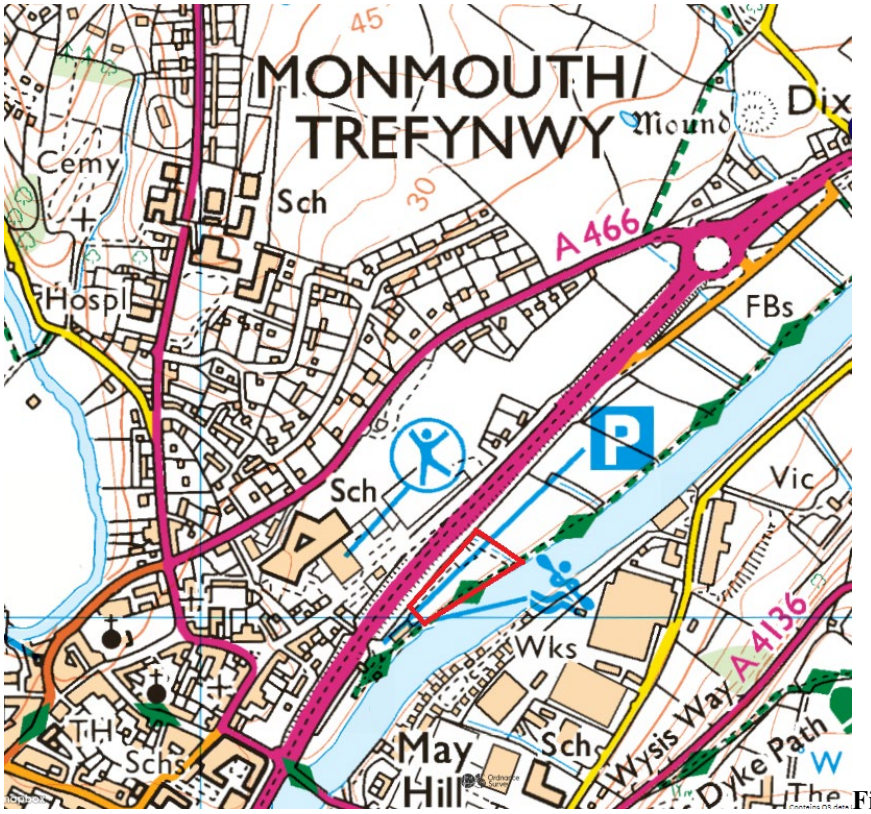

Figure 2 - Location

Figure 3 – Photo courtesy of Steve Wadley

1.5 The proposed project includes enhancement of the site for biodiversity.

3 Methodology

The methodology used for the PEA consisted of:

3.1 Phase 1 Habitat Survey

Field survey was carried out following standard Phase 1 Habitat Survey protocol (JNCC, 2010) and the Chartered Institute of Ecology and Environmental Management (CIEEM) Preliminary Ecological Appraisal (2013) guidelines. The site was surveyed in accordance with the guidelines set out by JNCC (2010) in the Handbook for Phase 1 habitat. All plants were identified using *The Wild Flower Key* (Rose, F. 2006) and *Collins Complete Guide to Trees* (Johnson) An assessment was made of all areas of vegetation within the site based on the standardised Phase 1 survey methodology. This involved a walkover survey to identify broad vegetation types,

which were then classified against Phase 1 habitat types where appropriate. A list of characteristic plant species was also compiled, and any invasive species encountered as an incidental result of the survey are noted.

3.2 Species Survey

3.2.1 Bats

Assessment of potential for roosting bats within the survey area was carried out in accordance with Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edition) The Bat Conservation Trust London. An assessment was made of the suitability of buildings and trees on the site and around the site boundary to support roosting bats based on the presence of features such as loose or missing roof tiles or lifted lead flashing for buildings and holes, cracks, splits, loose bark and ivy cladding for trees. An assessment was made of the suitability of the site and the surrounding habitat to support foraging and/or commuting bat species.

3.2.2 Birds

Assessment of potential for nesting birds within the survey area was carried out and included assessment of any buildings, hedgerows, scrub, ruderal plants and trees on site. (BTO/JNCC/RSPB Breeding Bird Survey Instructions). The survey also noted any old bird's nests or current nests present within the site boundary.

3.2.3 Dormouse

Assessment of potential for Dormouse within the survey area was carried out following recommendations within "The dormouse conservation handbook Second edition by Paul Bright, Pat Morris and Tony Mitchell-Jones". English Nature. The assessment for the potential of the site to support dormouse was based on an assessment of habitat features that may indicate that dormice are present on the study area. This includes the presence of food sources such as common hazel (*Corylus avellana*) Bramble (*Rubus fruticosus*) and honeysuckle (*Lonicera periclymenum*). Additionally, the species requires a continuum of food supply so that habitat structure, diversity and connectivity to adjacent areas of woodland/scrub are important features for determining the potential presence of dormice.

3.2.4 Otter

Assessment of potential for Otters within the survey area was carried out following recommendations set out in "Otters and Development (CIEEM).

3.2.4 Zone of Influence

The zone of Influence is the area encompassing all predicted negative ecological effects from the proposed scheme and is informed by the habitats present within the site and the nature of the proposals. For the Phase 1 habitat survey the area within the site boundary was deemed appropriate.

4 Results

4.1 Survey Constraints (incl. equipment)

No survey constraints were noted.

4.2 Field Survey

Date	05/07/2023	Notes
Weather	Fair	
Cloud Cover	60%	
Temperature	20°C	
Wind Speed	10mph	
Name		
Steve Wadley		

4.3 Habitat

The habitat consists of a small field and is predominantly managed grassland with boundaries of hedgerow to the south, tree line and a wooden boundary fence to the west, tree line to the north and riverbank to the east.
The field is species poor and consist of around 12 species of plant in the field itself (see annex 1. species list)
The boundaries of the field are of greater ecological value and consist of a Hawthorn hedgerow to the south, mature tree line and scrub area to the west, mature trees and scrub to the north and riverbank with vegetative growth to the east.
The field is flat and is currently used for dog walking and recreational use. A well-used footpath runs along the east side of the field.

Ecological connectivity from key sustenance zones such as the Wye Valley Woodlands and River Wye SAC to the field is of high potential. Connectivity is gained via hedgerows, tree lines, and the river Wye.

4.4 Trees

There are several large mature and over-mature trees on site including Ash, Poplar, Willow, Hazel, Elder, Blackthorn, Damson, Turkish Hazel and Sycamore.
To the west of the field is a line of |Poplar, Ash and Willow trees, to the north of the field is a line of Poplar, Hawthorn Ash, Blackthorn, Damson and Elder trees, to the east of the field, along the riverbank is low numbers of Willow and Hawthorn trees. At the north end of the field is a group of trees near the former skate park.

4.5 Hedgerow

There is a low formal hedgerow to the south of the field and consists of Hawthorn trees.

5 Evaluation

5.1 Habitats

The grassland habitat is of low importance ecologically and is species poor.
The trees and vegetation bordering the field is of moderate – high value for foraging & commuting mammals and nesting birds due to natural food sources and potential wildlife corridors within the borders.
The nearby Wye Valley Woodlands and River Wye SAC provide excellent foraging areas and it is likely that the field & boundary trees are used by a variety of wildlife for foraging, commuting, and nesting. ecological connectivity to the field is high.

The proximity of the river is of great importance as it is well used for foraging and commuting mammals and birds.

5.2 Bats

The site trees hold low potential for roosting bats but high potential for foraging and commuting bats.
There is a nationally important bat roost within 2km, and it is likely that bats from the roost and other roosts nearby will use the field and trees for foraging and commuting.

5.3 Dormice

The site holds moderate potential for Commuting and foraging Dormouse due to the abundance of food sources such as Bramble (Blackberries) Turkish Hazel and Hazel, Damson and Blackthorn (Sloes).

5.4 Breeding Birds

The field margins and tree hold high potential for nesting birds.

5.5 Otter

The riverbank area holds high potential for foraging and commuting otters. The otters may also use the tree line to the north and west as a commuting route.

6 Recommendations for Biodiversity Enhancement.

6.1 Habitats

The grass area is of poor value ecologically and efforts should be made to sensitively manage the grassland to allow for a more diverse habitat. The following is a list of actions which could be used to form a management plan for enhancing the biodiversity.

1) The grass should be cut firstly in July after the flowering plants have seeded. Cutting can then take place if necessary, over the period July – January. Cutting should not be carried out between February and late June.
2) All grass cuttings should be removed from the field and used for compost piles locally if possible. As much of the field as possible should be managed in this way to allow for greater wildflower seed dispersal and establishment of a wildflower meadow.
3) Seeding of the field is recommended using local provenance wildflower seed. This will speed up the re-wilding process.
4) If possible and practicable, field margin areas should be "lightly rotovated" and wildflower seed sown onto the soil in March – April at 2m wide along the north and east side of the field.
5) Plant trees on or around the field which produce fruit which is edible to wildlife such as Crab Apple, Rowan, Wild Cherry, Hawthorn, and Hazel.
6) If possible, restrict access by the public and dogs to the riverbank along the field. This will also improve the safety of the public along the footpath.
7) Erect a sign with information about the management of the field for wildlife.

Hardstanding tarmac area

The former skate park area is primarily tarmac covered and is in the process of being re-claimed by nature. To assist the process and create a diverse habitat, the following suggestions are recommended.

1) Break up sections or all the tarmac to allow plants to take hold within cracks and holes.
2) Spread a thin layer (3-4 inches) of poor-quality topsoil onto the tarmac.
3) Sow wildflower seed of local provenance onto the thin layer of soil.
4) Create a small shallow scrape 2m wide and 6inches deep to hold rainwater.
5) Introduce artificial refuges for amphibians and reptiles using corrugated tin, large logs, or brash piles in strategic areas of the north and east side of the field.

6.2 Bats

It would be very beneficial to install bat rooting boxes into trees around the field, particularly the north tree line. The boxes should be positioned onto the south side of the trees at above 2.5m

6.3 Dormice

It would be very beneficial to install dormouse nesting boxes into margins around the field, the boxes should be positioned around 0.5m above ground level and on the rear of trees facing away from the field.

6.4 Breeding Birds

It would be very beneficial to install bird nesting boxes into trees around the field. The boxes should be positioned at between 1m and 2m on the west side of the trees.

6.5 Otter

Otters may be commuting or foraging along the north tree line. Therefore, it would be beneficial to create a "dark corridor" along the north tree line using any cut vegetation and brash to form a barrier on the field side of the north boundary trees. This brash barrier would also serve to accommodate other mammals such as Hedgehogs, Amphibians, Reptiles and Dormice.

7 Conclusion

The Town Field is presently species poor, and this provides an opportunity to greatly enhance biodiversity in the area. The recommendations listed in section 6 will certainly provide a good base for biodiversity enhancement to the field and surrounding area. The timings of cutting, and removal of the grass cuttings is essential to allow wildflowers to thrive. If this is carried out as recommended, wildflowers will start to establish themselves within 3-5 years. Wildflower seeding of the field and the margins will speed up this process.

Installing bat and bird boxes will greatly enhance the opportunities for roosting and nesting on the site. Creating a dark corridor to the north of the site with brash piles will provide shelter for foraging and commuting mammals as well as further nesting sites for birds. The recommendations in this report are not limited and further enhancements to biodiversity can be actioned.

The field is within the Wye Valley and Forest of Dean SAC, and the river Wye (Lower Wye) SAC therefore it will be appropriate to discuss the recommendations with Monmouthshire County Council biodiversity team who are currently working on a project regarding green corridors and green infrastructure.

8 References

Bat Mitigation Guidelines English Nature. Mitchell-Jones, A.J. (2004)

Bright, P. and Morris P.A. 1989. *A Practical Guide to Dormouse Conservation*. 1993 ed. The Mammal Society: London.

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Joint Nature Conservation Committee. 2017. *Handbook for Phase 1 Habitat Survey*. [PDF] Available from: http://jncc.defra.gov.uk/page-2468 (Accessed: 30/11/2017)

Rose, F. (2006). *The Wild Flower Key* Revised ed. London: Penguin Books Ltd

The Wildlife and Countryside Act 1981 (as amended)

Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019

The dormouse conservation handbook second edition, Paul Bright, Pat Morris and Tony Mitchell-Jones.
Survey Protocols for the British Herpetofauna, David Sewell, Richard A. Griffiths, Trevor J. C. Jim Foster and John W. Wilkinson March 2013

BTO/JNCC/RSPB Breeding Bird Survey Instructions

Surveying for Reptiles, (Frog life 2015)

Surveying Badgers, The Mammal Society, Stephen Harris, Penny Cresswell and Don Jeffries

www.gov.uk/guidance/badgers-surveys-and-mitigation-for-development-projects.

Multi-Agency Geographic Information for the Countryside (MAGIC).

Appendix II - Species list

Field (Including riverbank)
Rye grass
Seedling poplar
Common doc
Daisey
White clover
Common Nettle
Self-heal
Yarrow
Creeping buttercup
Dandelion
Narrow leaf plantain
Tufted hair grass
Himalayan Honeysuckle (Invasive non-native)
Meadowsweet
Nightshade
Bindweed
Comfrey
Hemp Agrimony
Hogweed
Burdock
Creeping thistle
Tansy
Ivy

Hardstanding area
Yorkshire fog grass
Creeping thistle
Bramble
Rosebay willowherb
Elder
Cow parsley
Common Nettle
Broad leaf plantain
Garlic Mustard

Trees
Alder
Ash
Lombardy Poplar
White Poplar
Aspen Poplar
Walnut
Elder
Hazel
Turkish Hazel
Goat willow
Crack willow
Hawthorn
Damson
Blackthorn
Sycamore
Silver birch

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Appendix III: Photographs


a) Field looking north


b) Field looking south

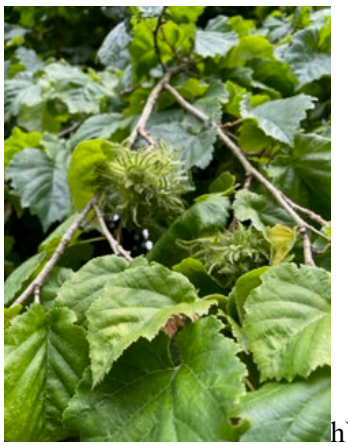

c) Hardstanding at north end


d) Riverbank and river on east side


e) Poplar tree at west side of field.


f) Bramble and berries on the riverbank


g) Blackthorn fruit at north boundary

 h) Turkish Hazel fruit near the hardstanding.