

ECOLOGY REPORT

Trackway on land at Blakemore Farm

Longhope
Glos
GL17 0PH

July 2023

ECOLOGICAL CONSULTANT:
Environmental Methods: H. Brookes
Tel: 07979 966 696
haydn.brookes@hotmail.com

 **Environmental
Methods**
Ecology & Environmental Consultancy

REPORT SUMMARY

1. PROPOSAL

The owner of Blakemore Farm proposes to install a trackway across grassland paddocks currently used for equine grazing. Environmental Methods Consultancy was appointed to survey the site and assess the habitat and potential for use by protected species or species of conservation concern.

2. SITE HABITAT

The Phase 1 habitat survey records that the trackway route crosses neutral semi-improved grassland with some areas of patchy tall ruderals.

Four large ponds lie to the west of the site, with the closest at 16m to the western end of the proposed trackway.

3. SCOPING AND IMPACT ASSESSMENTS

Scoping for protected and notable species was undertaken and potential impacts resulting from the development activities were identified and assessed for the relevant species of conservation concern.

Great crested newts

The adjacent ponds were assessed for their suitability as breeding waterbodies for great crested newts, concluding that they have poor suitability so GCN scoped out.

Badgers – no evidence of use at the proposal site.

Reptiles – The tussocky grassland areas could be used for forage and shelter habitat. Precautionary working methods required during site clearance.

4. RECOMMENDATIONS

- Precautionary working methods during site clearance for reptile and nesting bird protection.
- Biodiversity enhancement – local provenance wildflower planting.

1.0 Introduction

Environmental Methods Consultancy was appointed to conduct a Preliminary Ecological Appraisal of the route of a proposed trackway across pasture fields at Blakemore Farm, Longhope.

A walkover survey was undertaken at optimum time in July 2023 to characterise the habitats and identify any fauna or habitats requiring further assessment or protection as a result of the proposed development.

2.0 Survey objectives

The following scope of assessment was considered appropriate for this site:

- a) Assess the presence of Habitats of Principle Importance (HPIs) and species, particularly those of conservation concern or those protected by law whose disturbance may require legal consent (The Wildlife and Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2017), including evaluation of nearby associated features as relevant ecologically linked habitats.
- b) Determine material considerations for the planning proposal and assess any implications. Provide recommendations where necessary.

3.0 Methodology

3.1 Site walk-over survey

The walkover survey was undertaken by the author during daylight with good visibility. The survey was undertaken in accordance with the following published methodologies:

- Handbook for Phase 1 habitat survey (Joint Nature Conservation Committee, 2010) (noting dominant species; and providing target notes where appropriate to identify particular features/species);
- Guidelines for Preliminary Ecological Appraisal (Institute of Ecology and Environmental Management, 2012);
- Hedgerow Survey Handbook, Defra (2007). A standard procedure for local surveys in the UK. Defra (2007).

During the survey, the following investigations were undertaken in respect of the presence of legally protected species:

- Assessment of suitable habitats for nesting birds;
- A search for signs of badger activity including setts, tracks, snuffle holes and latrines within the application site and up to 50 m outside the application site (where access permitted);
- Assessment of habitat potential for reptiles and amphibians (including great crested newts);
- Assessment of habitat potential for dormice;
- Assessment of trees for bat roosting potential;
- Search for evidence of the presence of invasive plants listed on Schedule 9 of the Wildlife and Countryside Act 1981 and subject to strict legal control.

3.2 Desk top data study

Following the site inspection survey and given the focussed scope of assessment for the site, a full local records centre data search with its associated cost for the owner was deemed unnecessary.

A desk study was undertaken using the Nature on the Map website to establish the presence of statutory conservation sites within 2km of the site as well as establishing whether any European Protected Species (EPS) licences have been granted within 2km of the scheme.

3.3 Constraints

The survey methodology is a walkover survey and assessment. It can only be a snapshot-in-time of habitat features and species that can be seen during the daytime survey. It was considered however that the site conditions and evidence were sufficient to enable a meaningful assessment of the site.

4. Survey results

4.1 Site location

OS grid ref: SO 6984 1879

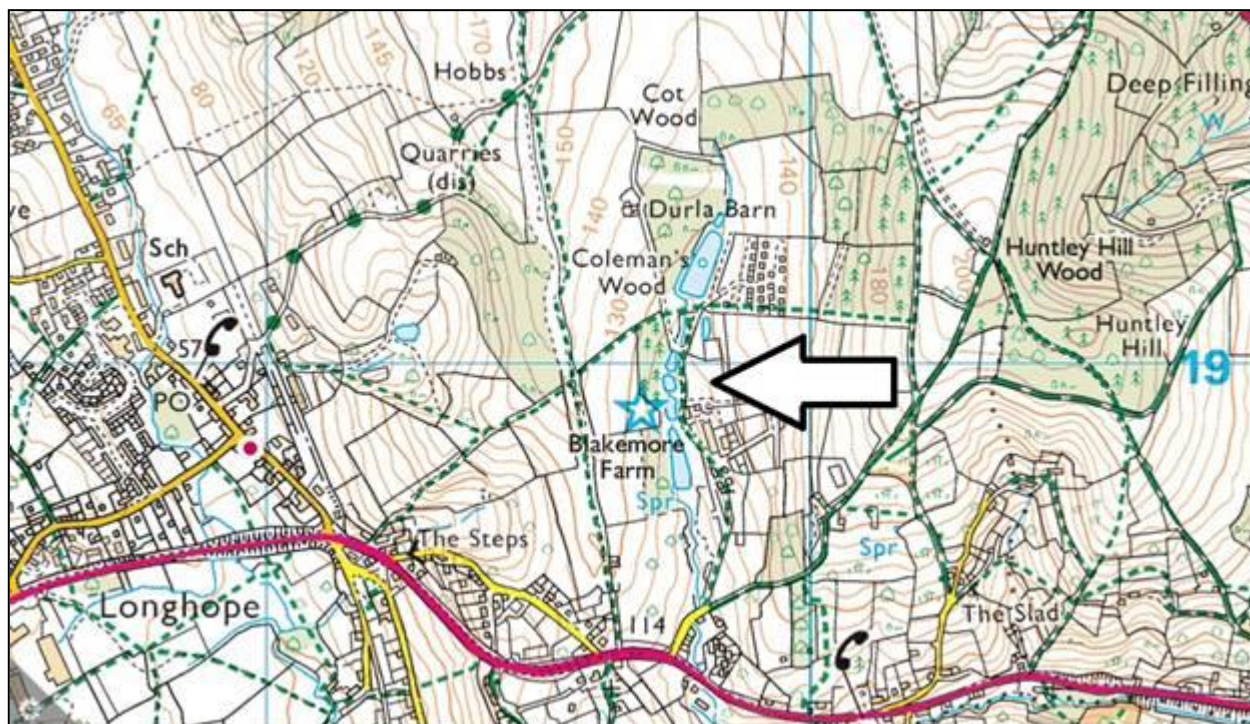


Figure 1 – 2021 Ordnance Survey map (site indicated)

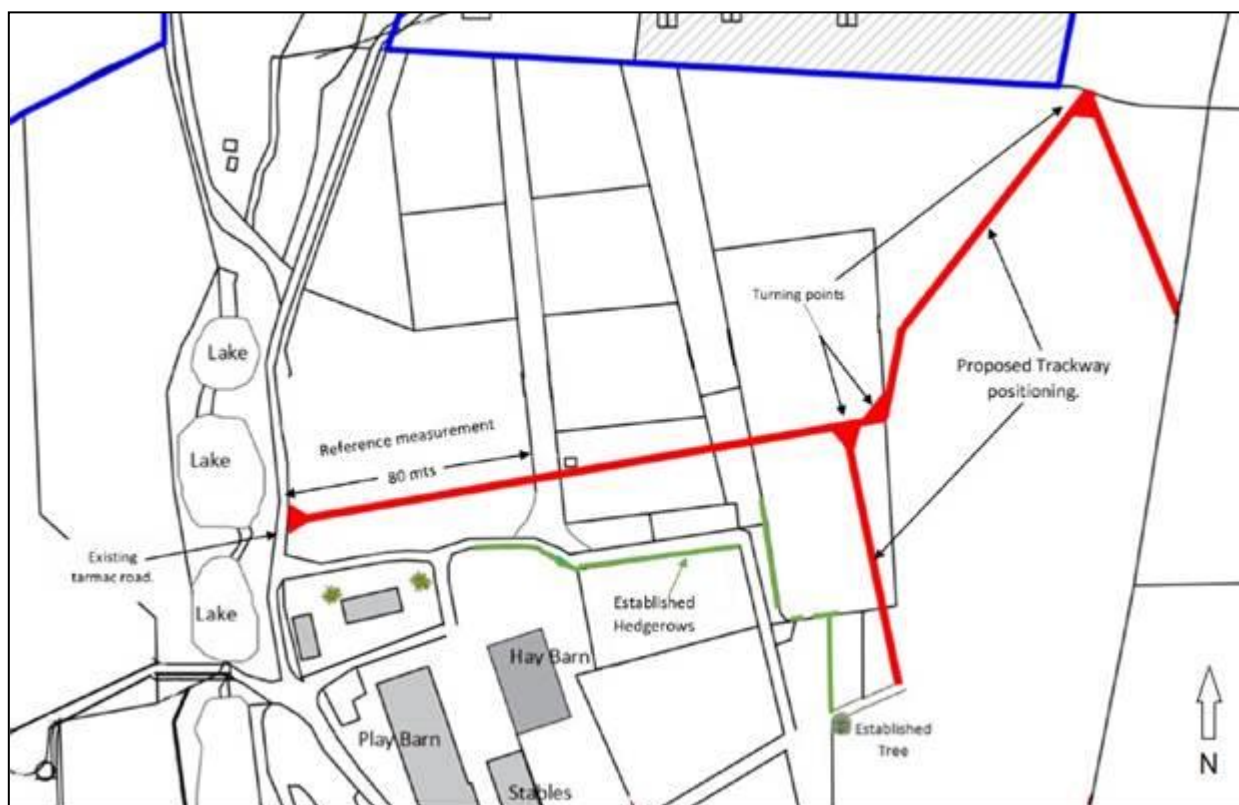


Figure 2 – Plan showing trackway route and site areas

4.2 Desk top data search results

4.2.1 Relevant species records within 500m of the site

- Two records within the search radius – kestrel and goshawk at 490m to the west.

4.2.2 Relevant designated sites within search radius

SAC

Wye Valley & Forest of Dean Bat Sites, component at 165m distant

SSSIs

Blaisdon Hall at 1800m

Locally designated sites

None present

4.3 Site description

For description purposes, the site can be referred to in two main areas; the lower west paddock and the upper east field.

4.3.1 West paddock

This is a 0.35ha paddock comprising tussocky grassland with tall ruderals. The far western edge is overgrown with bramble, hazel and alder scrub.

The grassland is species-poor semi-improved, comprising cock's foot, creeping buttercup, creeping bent, Yorkshire fog and perennial rye grass. The tall ruderals are mostly greater and rosebay willowherb, dock and nettles.



Photo 1 – General west paddock view looking south



Photo 2 – Paddock edge looking east



Photo 3 – East field view looking east



Photo 4 – East field view looking west

4.3.2 East field

The majority of the trackway will pass through this field, shown in **photos 3 & 4** above. It has long been used for horse grazing with areas of poached ground and a tightly grazed sward.

The grassland survey was carried out at optimum time of year, but due to the tightly grazed sward it is acknowledged that some species may have been missed. The following vegetative species inventory was recorded:

Field vegetative community		
Common name	Scientific name	DAFOR
Perennial rye grass	<i>Lolium perenne</i>	F
Cocksfoot	<i>Dactylis glomerata</i>	F
Sweet vernal grass	<i>Anthoxanthum odoratum</i>	O
Meadow buttercup	<i>Ranunculus acris</i>	F
Yorkshire fog	<i>Holcus lanatus</i>	F
Ribwort plantain	<i>Plantago lanceolata</i>	F
White clover	<i>Trifolium repens</i>	F
Red clover	<i>Trifolium pratense</i>	O
Common dandelion	<i>Taraxacum officinale</i>	O
Ragwort	<i>Jacobaea vulgaris</i>	R
Broad leafed dock	<i>Rumex obtusifolius</i>	O
Common mouse ear	<i>Cerastium fontanum</i>	R
Common bird's foot trefoil	<i>Lotus corniculatus</i>	R
Self heal	<i>Prunella vulgaris</i>	R
Black knapweed	<i>Centaurea nigra</i>	

The field comprises neutral semi-improved grassland. Whilst not of SINC quality and of no particular conservation concern, the loss of the trackway area of this grassland merits a degree of compensation.

4.4 Habitats plan

The following plan is based on the proposed site plan and shows the relevant habitats at the site with Phase 1 descriptions.



Figure 3 – Phase 1 habitats plan showing the habitat features that the trackway will pass through

5.0 Scoping and impact assessments

With reference to the plans submitted with the proposal, the only ecological considerations for the site are the adjacent pond with relevance to possible breeding use by great crested newts, common reptiles, badgers and breeding birds. These are considered in turn as follows:

European Protected Species

The following species and their habitats are protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended).

5.1 Great crested newts

5.1.1 Ecology and habitat evaluation

Like all British amphibians, great crested newts rely on waterbodies for breeding but otherwise they spend much of their lives on land. Most adult great crested newts migrate to their breeding ponds by mid-March.

The females lay their eggs on pond vegetation mid-March to mid-May then gradually leave the pond. The larvae hatch and develop, later to emerge from ponds as land-adapted juveniles around mid-August.

Adults and immature newts spend the winter in places that afford protection from frost and flooding, often underground amongst tree roots, in burrows, or above ground under suitable refuges like deadwood or rubble piles. Hibernation lasts generally from October to February.*

*Great Crested Newt Mitigation Guidelines, *English Nature (2001)*.

5.1.2 Nearby ponds

Four ponds that were created within the past ten years lie adjacent to the west of the proposal site (at the far left of the aerial plan view at figure 4 above). They are all stocked with carp for use as fishing ponds.

The proposed development will have no impact on the ponds themselves. Whilst the presence of carp essentially omits the potential for the pond's use as breeding waterbodies, a Habitat Suitability Index assessment is included below for completeness.



Photo 5 – Pond nearest to the proposal site



Photo 6 – Another example pond view

Using the Habitat Suitability Index assessment (Oldham HSI method) the ponds are assessed as having poor potential to support breeding GCNs.

Suitability index	Score
SI1 - Location	1
SI2 - Pond area	1
SI3 - Pond drying	0.9
SI4 - Water quality	0.33
SI4 - Shade	1
SI6 - Fowl	0.67
SI7 - Fish	0.01
SI8 - Ponds	1
SI9 - Terrestrial habitat	0.67
SI10 - Macrophytes	0.3
HSI	0.45
Suitability	Poor
Predicted presence	3%

5.1.3 Scoping conclusion

It is highly unlikely that GCN would be present at the proposal site. No further considerations for this species are necessary.

5.2 Dormice

5.2.1 Habitat evaluation

Dormice are arboreal and prefer habitat with a contiguous mix of ground/mid-storey woody vegetation, optimally of hazel, bramble and other seed/fruit bearing woody species within which to forage, breed and hibernate. This should be of sufficient area and in particular linked to wider areas of similarly high quality supporting habitat.

The area of bramble and scrub at the far western edge of the trackway route provides the only habitat with any potential for use by dormice. An approximately 5m width of this vegetation will need to be removed.

Whilst dormice are known to be present in the ancient woodlands of the local area, the area of vegetation at the site is very limited in size, and isolated with no connectivity to any other suitable habitat off-site.

There is therefore negligible potential for this species to be present.

Non-European protected species

5.3 Badgers

5.3.1 Habitat evaluation

No evidence of badgers using the site was recorded, including setts, tracks or any signs. Therefore no impacts to badgers are anticipated.

5.4 Common reptiles

5.4.1 Habitat evaluation

The tussocky grassland within the west paddock provides potential forage and shelter habitat for common reptiles – in this case slow worm and possibly grass snake given the presence of the nearby ponds.

5.4.2 Impact assessment

If present, these animals could be harmed or killed during the works to create the trackway. Therefore precautionary methods of working are recommended.

5.5 Breeding birds

The bramble and scrub at the far western edge of the trackway route provides potential bird nesting habitat. All wild birds, their nests and eggs are protected by law while nesting.

If birds are actively nesting during removal of the vegetation the birds would be harmed or disturbed and offences potentially committed.

Therefore, suitable precautions are recommended below.

6.0 Recommendations

6.1 Non-licensed precautionary working methods to protect common reptiles

To ensure that any reptiles that may be present at the site aren't harmed during site vegetation clearance works, precautionary working methods are recommended. These are specified in detail at **Appendix 1**.

6.2 Nesting bird protection

Bramble and scrub removal should be undertaken outside of the breeding bird season (March to mid-August inclusive). If this is not possible then a breeding bird check will need to be undertaken by a suitably experienced ecologist no more than 48hrs before vegetation clearance.

If any active bird nesting is found, the area to be removed and 5m of vegetation either side will remain undisturbed until the young are confirmed by the ecologist to have fledged.

6.3 Biodiversity enhancement

For any new development, national planning policy seeks to reverse the current decline in wildlife habitats by implementing opportunities for biodiversity enhancement. The following permanent enhancement will therefore be incorporated into this development, which is proportionate and suitable for the characteristics of the site and scale of development.

- ❖ **Local provenance wildflower scheme** will be incorporated into this development. Full details are provided at **Appendix 2**.

7.0 References

- Handbook for Phase 1 Habitat Survey - Joint Nature Conservation Committee. 2010.
- Badgers and Development IN75 – A Guide to Best Practice and Licensing, Natural England
- Great Crested Newt Mitigation Guidelines, English Nature
- Amphibian Identification, *Amphibian and Reptile Conservation & Fred Holmes (2014)*
- Institute of Ecology and Environmental Management (2012). Guidelines for preliminary ecological appraisal. Institute for Ecology and Environmental Management. <http://ieem.net/>
- Institute of Environmental Assessment (1995). Guidelines for Baseline Ecological Assessment. E and FN Spon, London.
- Natural England website: www.gov.uk
- Legislation.gov.uk website: www.legislation.gov.uk

8.0 Surveyor

Haydn Brookes BSc (Hons) MCIEH

- Ten years' experience of conservation field study and ecological consultancy surveying, including training for Phase 1 habitat and botanical surveys, SSSI impact assessments, dormice, reptile, badger and bat surveys;
- Committee member of Gloucestershire Bat Group (Chairman 2018, Underground Secretary 2014-18 and Bat Care Coordinator);
- Natural Resources Wales bat licence to disturb and take (science, education and conservation) **no. S085825/1**;
- Natural England Volunteer Bat Roost Visitor licence registration number **2016-15125-CLS-CLS**;
- Natural England Level 2 Bat Class Survey Licence registration number **2016-15126-CLS-CLS**;
- Local authority Environmental Protection and Licensing Officer/Manager 2000 to 2015;
- Fully EBLV vaccinated with experience of handling many bat species. Registered bat carer.

Haydn Brookes BSc (Hons) CMCIEH



07979 966 696

haydn.brookes@hotmail.com

APPENDIX 1

Precautionary working methods to protect reptiles during site clearance

All common British reptiles are legally protected against any reckless or deliberate harm. A precautionary approach is therefore recommended to minimise the risk of injuring or killing reptiles and offences being committed.

a) Timing of works

As a precaution, vegetation clearance, removal of topsoil and the removal of any items stored on the ground will ideally **take place between April and October** inclusive when any reptiles would be fully active and out of vulnerable hibernation.

b) Vegetation and ground clearance

Any ground cover vegetation within the work area of the development should be cut in two stages to approximately 150 mm height and cuttings removed. This cut will take place in one direction towards suitable adjacent habitat (hedgerow or long vegetation that will remain for example) in order to give any animals a chance to leave the area.

A further vegetation cut will be carried out following the initial cut to reduce the vegetation to ground level and cuttings removed as above. Where possible, vegetation will be maintained at a height of less than 75mm throughout the course of the works. If appropriate, leaf blowers are an effective tool for clearing cut vegetation and can minimise the risk of injury to any reptiles.

Any stone, brash or log piles should be cleared or first checked by hand to ensure that any reptiles that could be sheltering beneath aren't harmed. If any are encountered during the clearance, they should be allowed to move off to a safe place elsewhere on or adjacent to the site. If necessary an ecologist should be contacted for further advice.

c) Trenches

Any trenches or other excavations will be backfilled before nightfall, or a ramp will be installed to allow any reptiles or amphibians that fall in overnight to easily escape. If trenches are left overnight, they will be checked carefully before back-filling.

d) Discovery of any reptiles

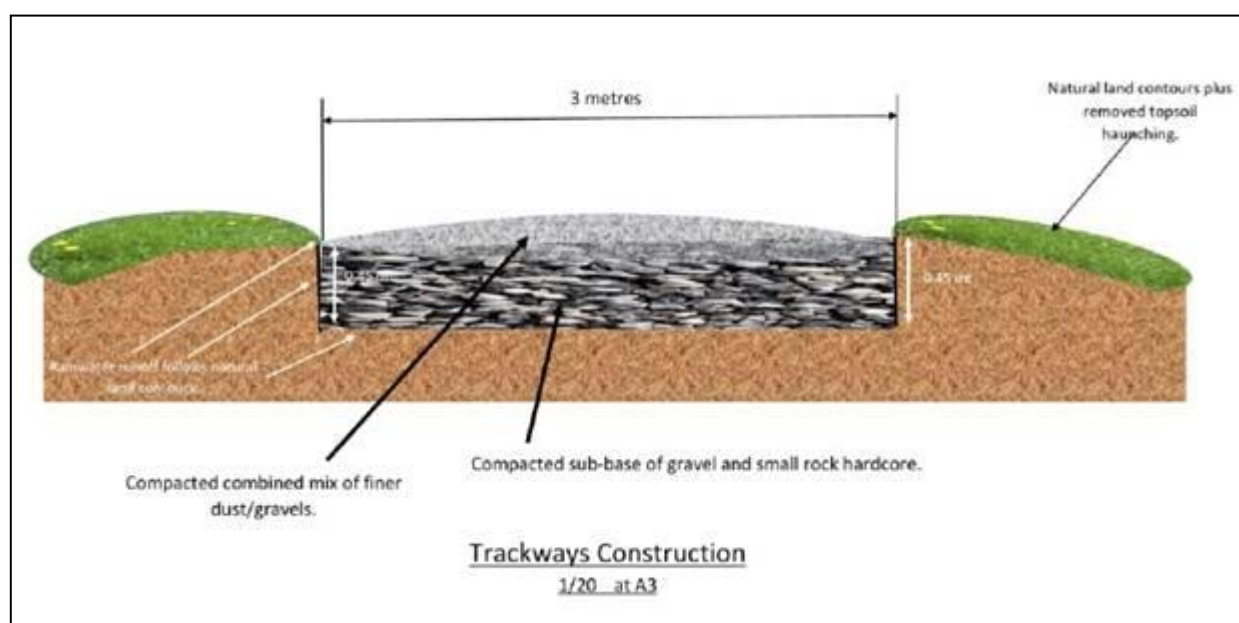
If any reptiles are encountered during the clearance, they should be allowed to move off to a safe place elsewhere on or adjacent to the site. If necessary an ecologist should be contacted for further advice.

Appendix 2

a) Wildflower planting scheme

To compensate for the removal of the semi-improved grassland strip along the course of the trackway, a high quality species-rich wildflower seed mix will be sown along the side haunchings of the trackway.

The diagram below shows the trackway construction method:



The side haunching ground areas will be bare earth following profiling during creation of the trackway. This bare ground is ideal for establishing wildflowers, as there will be less competition from existing vegetation and the soil fertility will be relatively lower.

b) Seed specification

The seed must be of the following specification:

- Mesotrophic grassland category 5 brush harvested seed mix, from the most recent harvest season;
- Local Gloucestershire provenance (available from locally-based EcoHab Wildflowers);

To ensure good seed mix contact with the soil, the seed will be sown while the soil is at least 50-75% bare ground, ideally in late summer/early autumn or early spring.

Wildflower seed mix for loamy soils to be sown at 2.5g/m².

c) Protection from grazing

If the east field area will continue in use for horse grazing during the establishment of the seedlings, it will be important to protect them from grazing for the first year.

An electric fence will therefore be used along the length of the trackway to prevent horses from accessing the seeded areas.

d) Annual maintenance

The cambered nature of the haunchings may not be suitable for mowing, so it can be strimmed to near ground level once each year no earlier than the end of July to allow the plants to set and naturally shed seed.

The cuttings should be raked and removed after strimming to ensure that no enrichment of the soil occurs.