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Macs Farm, Ditchling, East Sussex

Reptile Receptor Site Survey and Management Plan

Report for Tates Brothers Ltd

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Contents

Summary of Key Findings	1
1 Introduction	2
2 Methodology	4
3 Results	7
4 Summary	1
5 Management Plan	2
References	6
Appendix 1: Survey Map	7
Appendix 2: Photographs	9
Appendix 3: Maintenance Schedule	12
Appendix 4: Legislation	14

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Summary of Key Findings

Temple was commissioned by Tates Bros Ltd in April 2022 to undertake a scoping survey on the suitability of using Macs Farm, Ditchling, as a suitable receptor Site for the translocation of reptiles from Mayberry Garden Centre, Portslade and inform any management that could enhance the Site for reptiles. The main findings are as follows:

- The Site contained excellent habitats for reptiles in the form of a mosaic of long-sward grassland, scrub, woodland, ponds, hedgerows, and hibernaculum. The Site is also well connected to excellent habitats in the wider landscape by a network of hedgerows and agricultural pasture.
- A low population of grass snake were confirmed as being present on Site. Incidental records of slow worm also indicate the species are present on Site.
- The high-quality habitats present on Site, and the nature-based activities that the Site is used for, coupled with its safety from development, make it an excellent choice for translocating reptiles to from the donor Site.
- A ten-year management plan is provided in this report which details enhancements for the Sites biodiversity and prescriptions to ensure its ongoing management.

1 Introduction

BACKGROUND TO COMMISSION

1.1 Temple was commissioned by Tates Bros Ltd in April 2022 to undertake a scoping survey on the suitability of using Macs Farm, Ditchling, as a suitable receptor Site for the translocation of reptiles from Mayberry Garden Centre, Portslade, and inform any management that could enhance the Site for reptiles.

1.2 Reptiles will be translocated to Mac's Farm from land adjacent to Mayberry Garden Centre, Old Shoreham Road, West Sussex (Ordnance Survey National Grid Reference TQ 25229 05861). The purpose of the translocation is to facilitate the development of a new car showroom and extension to the existing garden centre.

1.3 The survey covers an area of Mac's Farm that is guaranteed free from developed and contains suitable habitat for reptiles in the form of semi-improved grassland, scrub, woodland, and waterbodies. This area is henceforth known as 'the Site' as shown in the reptile survey map, Appendix 1, Figure 1).

SCOPE OF REPORT

1.4 This report provides an assessment of the status of reptiles on Site, information on their presence or likely absence and their subsequent population size and distribution. Any potential constraints to using the Site as a receptor Site are also discussed.

1.5 This report also includes a 10-year management plan intended to enhance the Site for biodiversity and increase the carrying capacity to support the translocated reptiles.

1.6 The assessment is based on the following sources of information, including those obtained from third parties and the results of surveys:

- a Site walkover; and
- the results of targeted reptile surveys on Site.

1.7 This assessment has been prepared with reference to best practice guidance published by Natural England (formerly English Nature) and as detailed in British Standard 42020:2013 *Biodiversity – Code of Practice for Biodiversity and Development* (BSI, 2013).

1.8 A map showing the locations of the refuges that were deployed and where reptiles were recorded is provided in Appendix 1. Photographs of the habitats onsite are provided in Appendix 2. A 10-year maintenance schedule for the ongoing management and enhancement of the Site is included in Appendix 3.

SITE CONTEXT AND STATUS

1.9 The proposed receptor Site is 2.7 hectares (ha) in size and is centred on Ordnance Survey National Grid reference TQ 33125 15768. The receptor Site is incorporated into a much larger farm which includes a wildlife education centre and a campsite. A non-native, exotic (pet) reptile rescue charity also runs from one of the buildings.

1.10 It is located on the outskirts of Ditchling, East Sussex, within the South Downs National Park. The Site is bordered in all aspects by agricultural pasture, semi-improved grassland, scrub, mature hedgerows, and woodland. The campsite to the north and the east of the Site comprises of areas of wildflower meadow with short sward grassland in between. An allotment lies to the south of the receptor Site and agricultural buildings to the east.

1.11 The Site is in a rural landscape that is 12km north-east of the urban surrounded donor site in Porstalde, East Sussex. The Site is to the north of the South Downs, and within the South Downs National Park. The Site is relatively flat, with a network of fields, ditches and ponds in the vicinity.

1.12 The Site has been chosen as a receptor site following a scoping survey in March 2022 (Temple Group Ltd) due to the mosaic of high-quality reptile habitats including long sward grassland 'islands', scrub vegetation, mature hedgerows, and woodland. Compost piles are also present, and hibernacula have been created for educational purposes. The Site is well connected to other high-quality habitats including semi-improved grassland, hedgerows, and woodland.

RELEVANT LEGISLATION AND PLANNING POLICY

1.13 The following key pieces of nature conservation legislation are relevant to this assessment. A more detailed description of this legislation is provided in Appendix 4.

- The Conservation of Habitats and Species Regulations 2017 (as amended);
- The Wildlife and Countryside Act 1981 (as amended);

- Natural Environment and Rural Communities Act 2006; and
- The Environment Act 2021.

1.14 The National Planning Policy Framework (Ministry of Housing, Communities and Local Government, 2021) and The Environment Act 2021 requires local authorities to avoid and minimise impacts on biodiversity and to provide net gains in biodiversity when taking planning decisions. In addition, in England, under Section 40 of the Natural Environment and Rural Communities Act 2006, all public bodies are required to have regard to biodiversity conservation when carrying out their function.

2 Methodology

SITE WALKOVER

2.1 A site walkover was conducted on 11 March 2022 by Orlando Methuen-Campbell BSc (Hons) FdSc, a senior ecologist with five years' experience in reptile surveys and mitigation. The survey comprised of walking the different areas of Mac's Farm to assess habitats that are suitable for reptiles and determine the best area to establish a receptor site.

2.2 The site walkover was also used to assess enhancement opportunities and discuss reptile habitat creation with the landowner.

PRESENCE/ABSENCE SURVEY

2.3 The reptile survey was set up by Orlando Campbell, an ecologist and experienced reptile surveyor, on 19 April 2022. Assistance was provided by Chris Rhodes, an assistant ecologist.

2.4 The survey protocol followed accepted standards for reptile surveys as set out in Hill et al. (2005). The survey involved a combination of visually searching for reptiles (direct observation) and the use of artificial refugia.

2.5 A total of 48 artificial refugia were placed around the Site within areas of suitable reptile habitat. The refugia remained on Site for seven days prior to the survey commencing to allow them to 'bed in'. Refugia comprised individual (approximately) 0.5m x 0.5m pieces of roofing felt and were laid out at approximately 5 – 10m intervals. The locations of refugia are presented in the Reptile Survey Map in Appendix 1.

2.6 A total of seven survey visits were carried out during April and May 2022. Refugia were checked during appropriate weather conditions: temperatures between 10°C and 20°C, with intermittent or hazy sunshine and little or no wind (Natural England, 2011). The optimum time of day varied according to weather conditions.

POPULATION SIZE ESTIMATE

2.7 A population size estimate was made for the Site. The assessment of reptile population size is based on guidance from HGBI (Herpetofauna Groups of Britain and Ireland) guidelines (1998). The reptile population size was assigned to one of three categories, based on the peak count of individuals for each species (adults) across all the visits - see Table 2.1 below.

Table 2.1: Population score (HGBI, 1998).

Species	Low Population	Good Population	High Population
Slow worm	< 50/ha	> 50/ha	> 100/ha
Common lizard	< 20/ha	> 40/ha	> 80/ha
Grass snake	< 2 / ha	2 – 4 / ha	> 4 / ha
Adder	< 2 / ha	2 – 4 / ha	> 4 / ha

DATA VALIDITY AND LIMITATIONS

2.18 It is important to note that even where data are held, a lack of records for a defined geographical area does not necessarily mean that there is a lack of ecological interest; the area may be simply under-recorded.

2.19 It should be noted that seven visits were carried out at the Site to complete the presence/absence survey. A more formal population assessment requires 20 survey visits under accepted guidance (Froglife, 1999). The population size of reptiles within the Site has been estimated from the data for the seven visits and the effect of the reduced number of survey visits on the survey data was offset by increasing refugia density across the Site for the survey.

2.20 Even following accepted guidance, reptile population estimates are difficult to establish using standard surveys, and an accurate picture of reptile populations is only possible through techniques such as mark recapture. As the population estimate may not reflect

the actual numbers of reptiles on the Site, the recommendations within Section 5 of this report have been designed to ensure that mitigation is adequate for higher numbers of reptiles being present on the Site than estimated from the survey data.

3 Results

Site Walkover

3.1 The Site walkover concluded that the majority of Mac's Farm had optimal habitat for reptiles in the form of a mosaic of semi-improved grassland, scrub, mature hedgerows, woodland, and ponds. Artificial hibernacula, previously built for education purposes, were also present as were log piles. An allotment and vegetable garden were situated to the south of the Site that had an array of foraging and breeding opportunities for reptiles including several compost piles.

3.2 The central field, as shown within the red line boundary in Appendix 1, was selected as the primary area to translocate reptiles to, due to its mosaic of high-quality habitats and its connectivity to habitats in the wider landscape. Public access is guided through the field by mowing short footpaths, therefore keeping footfall low in the wild areas. A public right of away runs to the east of the site, further guiding footfall away from the receptor area. Chickens are kept away from the Site in separate fenced off pens that are kept away from field margins and therefore not a predation risk.

Reptile Survey

3.3 Just one species of reptile, grass snake, was confirmed to be present on Site. Grass snakes were found under mats 19 and 29, near to the pond and to the west of the site, on the 4th and 7th visit respectively.

3.4 Incidental records of adult female slow worms, utilising compost piles, were also recorded and photographed by the landowner during the survey period.

Population Estimate

3.5 The peak count of one sub-adult grass snake was recorded on 6 May 2022 within approximately 2.7ha of suitable habitat. This suggests a density of two per hectare and qualifies as a low population using HGBI guidelines (1998). The incidental record of slow worms also indicate that they are likely to be present in low pop

Table 3.1: Summary of reptile survey results

Date	Species	Weather (Temp: Celsius, Wind: Beaufort, Cloud Cover: Oktas)	Total Number	Peak Count Number of Adults
25/04/2022	N/A	10°, No rain, Wind 2, Cloud cover 5	0	0
29/04/2022	N/A	12°, No rain, Wind 3, Cloud Cover 2	0	0
03/05/2022	N/A	14°, No rain, Wind 3, Cloud cover 8	0	0
06/05/2022	Grass Snake	17°, No rain, Wind 1, Cloud cover 1	1	1
09/05/2022	N/A	16°, No rain, Wind 1, Cloud cover 0	0	0
13/05/2022	N/A	13°, No rain, Wind 3, Cloud cover 2	0	0
19/05/2022	Grass Snake	15°, No rain, Wind 3, Cloud Cover 7	1	1

4 Summary

4.1 A low population of grass snake was recorded on the Site during the survey. Incidental records of slow worm also identified a potential low population utilising the Site. Both species are likely to be present on the site in low populations.

4.2 The Site is the optimal receptor Site for reptiles translocated from Mayberry Garden centre due to the high-quality habits onsite and adjacent to the Site that will allow introduced populations to thrive in the local area, as opposed to the urban habitats surrounding the donor Site that restrict their breeding opportunities.

4.3 The high-quality habitat, yet low numbers of reptiles found, are likely to be explained from recent changes to land use from agricultural to leisure/amenity as the Site was used for rearing chickens in 2018.

4.4 Although only a two observations of grass snake were made during the surveys, and an incidental sighting of slow worm, the high-quality habitats onsite and the low impact land management present optimal opportunities to reptile populations to thrive onsite. The Site is also well connected to optimal breeding and foraging habitats in the wider landscape. Furthermore, the biodiversity enhancement activities currently underway and the 'working with nature' approach of the Site further reinforce its suitability as a reptile receptor site.

4.5 Further enhancement opportunities are available on Site to ensure the long-term suitability of the Site for reptiles and to secure the ongoing reptile conservation-based land management.

4.6 The prescriptions in the management plan provided in Section 5 of this report will increase the Site carrying capacity to support the extant reptile population and the translocated reptiles from Mayberry Garden Centre.

5 Management Plan

CONSERVATION OBJECTIVES

5.1 The aim of this management plan is to ensure that the mitigation hierarchy of avoidance, mitigation, compensation, enhancement, and restoration is implemented with regards to the reptiles being translocated from the donor Site.

5.2 The objectives of this management plan are to ensure:

- Maintain favourable conservation status of reptiles;
- Avoid any unnecessary harm to reptiles;
- Compensate for the loss of reptile habitat through habitat creation; and
- Enhance the reptile receptor Site by implementing appropriate vegetation management.

RECEPTOR SITE ENHANCEMENT

5.3 The receptor Site at Mac's Farm will be enhanced and managed for the benefit of reptiles and other wildlife.

5.4 Management will aim to achieve both a good mosaic of habitats and those with good structure i.e., with a graded edge. This will be achieved by implementing vegetation management and a mowing regime to create defined edges that provide basking opportunities for reptiles and greater diversity of plants and invertebrates for foraging.

5.5 Further habitats will be created by installing hibernacula well as utilising the current hibernaculum opportunities.

5.6 Connectivity will be maintained and enhanced to allow reptiles to disperse and utilise the adjoining habitats.

Grassland/Wildflower meadows

5.7 A wildflower meadow will be created around the perimeter of the Site, with further wildflower 'islands' scattered throughout the Site to provide basking and foraging opportunities for reptiles.

5.8 The wildflower meadow will be created naturally by allowing the vegetation in these areas to grow, with a twice-yearly mowing regime. Grass will be cut to 50mm once in early April and again in late September after plants have flowered. Paths through the grassland will be cut short regularly to guid pedestrian footfall and keep public off the wildflower areas.

5.9 A wildflower seed mix will be used to further aid the establishment of plant diversity in these areas if natural germination does not occur. Seed mixes should be of local provenance where possible and should include a range of native species. The Hedgerow and Light Shade Seed Mix from British Wildflower Seeds (www.britishwildflowerseeds.co.uk) or Emorsgate's EH1 – Hedgerow Mixture (www.wildseed.co.uk) would be suitable. The chosen mix shall be composed of 20% native wildflowers and 80% slow growing grasses. The seed mix shall be hand sown in autumn or spring.

5.10 Wildflower areas will be watered during periods of drought, as required.

5.11 Grass cuttings will be disposed of onsite in designated compost piles.

Scrub and Woodland Management

5.12 Two scalloped edges will be created on the edge of the woodland to the north-east of the receptor Site to increase basking opportunities for reptiles by creating a graded edge.

Pond

5.13 The pond to the north of the receptor Site provides opportunities for grass snakes and amphibians and invertebrates that in turn provide foraging opportunities for other reptiles.

5.14 The pond is in good condition and requires no immediate management. Vegetation surrounded the pond will be inspected annually and any encroaching substantial vegetation will be cut back to the bank.

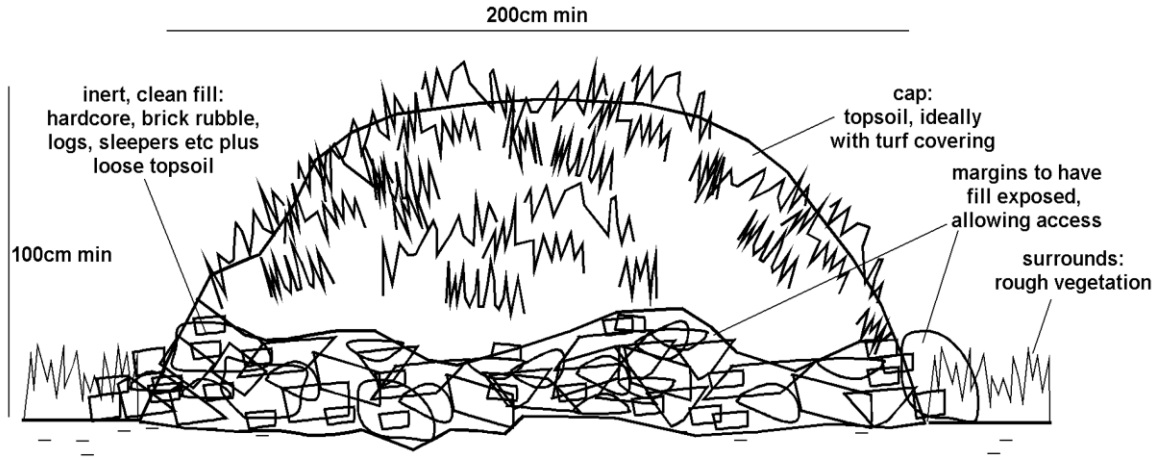
Hibernaculum

5.15 Three hibernacula will be created on the Site, using materials collected from the sites where possible. The hibernaculum design mimics the artificial and natural conditions

that reptiles have been found to be using. The hibernaculum design will be based on the following principles and Figure 1 below.

- Hibernacula should be positioned in sheltered south-facing locations, above the water table, in areas that will not flood or regularly freeze in winter (e.g., frost hollows) and where they will remain undisturbed;
- Minimum dimensions should be 2m length x 1m width x 1m height. The optimum dimensions are 4m length x 2m width x 1m height;
- On free-draining soils, hibernacula should be located below ground level by excavating an area *c.*50cm deep and infilling with appropriate material;
- Use a mixture of inert materials such as topsoil, rubble/hardcore, bricks (engineering bricks are very good), timber/logs etc. Contaminated soil/materials should be avoided. Materials that will decompose should not be placed below heavier materials, to reduce the risk of collapse. Combine materials so that the larger spaces are filled with finer materials; and
- Hibernacula should be capped with soil and turfed, leaving gaps at ground level so that great crested newts can easily access the hibernacula.

Figure 5.1: Hibernaculum Design (Great Crested Newt Mitigation Guidelines, (2001).



5.16 At least two log piles will also be created in the receptor Site. Material will be sourced from within the Site woodland where possible.

5.17 Hibernacula and log piles will be inspected annually and repaired/restocked as required. The hibernacula will be kept away from any agricultural machinery or vehicles.

MAINTENANCE AND MONITORING

5.18 Wildflower margins and islands will be inspected annually and maintained using the mowing regime and re-seeding principles listed above.

5.19 Hibernacula and log piles will be inspected each summer and re-stocked as above.

5.20 The pond will be inspected bi-annually, and any substantial encroaching vegetation will be cut back to the bank.

5.21 A full ten-year maintenance and monitoring schedule is shown in Appendix 3.

References

British Standards Institution (BSI) (2013). *Biodiversity. Code of practice for planning and development: 42020*. BSI, London.

English Nature (2004) *Reptiles: guidelines for developers.* Peterborough: English Nature.

Froglife (1999) *Reptile Survey, an introduction to planning, conducting, and interpreting surveys for snake and lizard conservation*. Froglife Advice Sheet 10. Halesworth: Froglife.

Herpetofauna Groups of Britain and Ireland (1998). *Evaluating local mitigation/translocation programmes: Maintaining standards.* Unpublished HGBI advisory notes for Amphibian and Reptile Groups (ARGs) Halesworth: HGBI c/o Froglife.

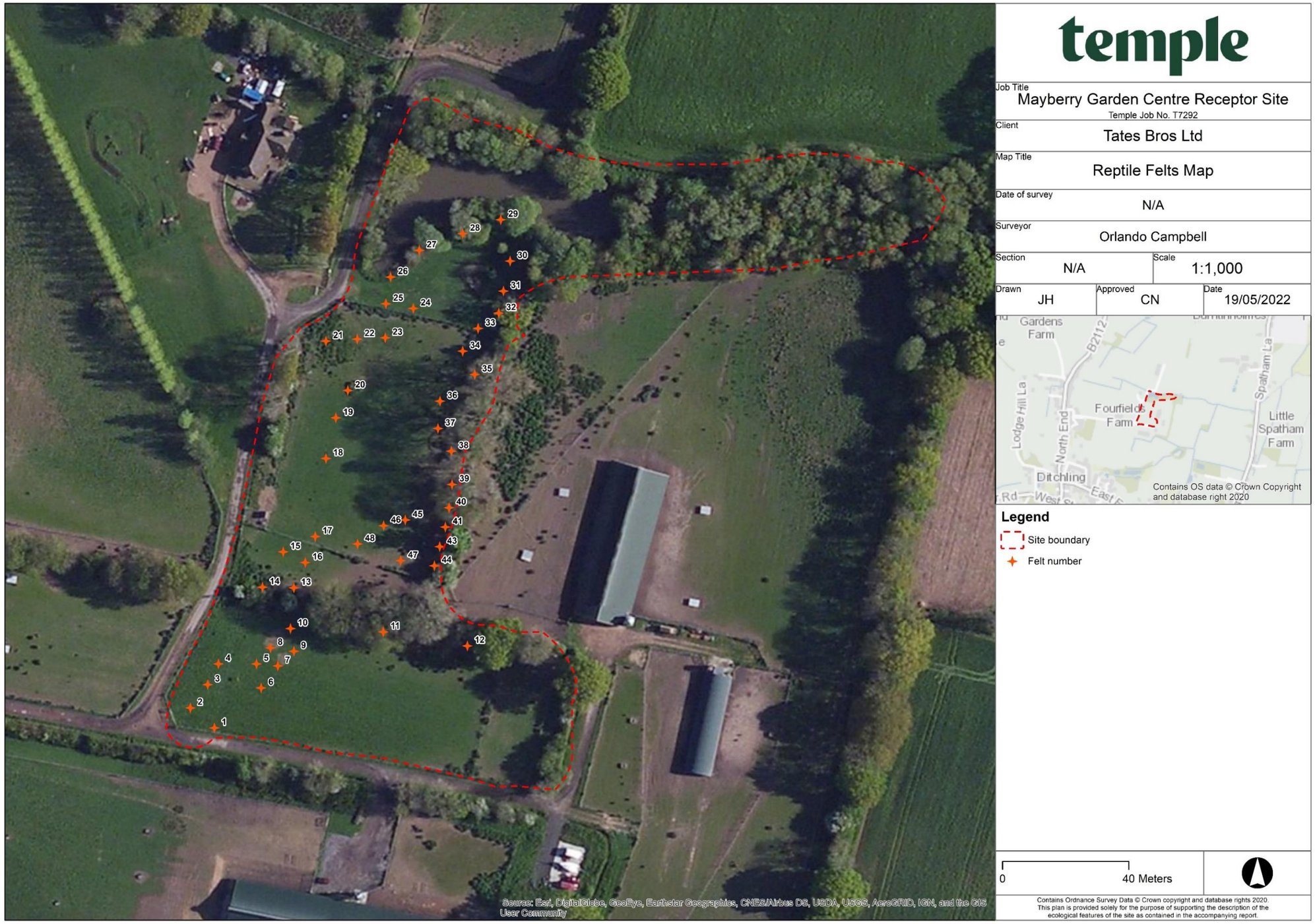
Hill, D., Fasham, M., Tucker, G., Shewry, M. & Shaw, P. (2005) *Handbook of Biodiversity methods; Survey, Evaluation and Monitoring.* Cambridge University Press, Cambridge.

Langton, T.E.S., Beckett, C.L., and Foster, J.P. (2001) *Great Crested Newt Conservation. Handbook*. Froglife, Halesworth. @

Ministry of Housing, Communities and Local Government (2019). *National Planning Policy Framework.* DCLG. London.

Appendix 1: Survey Map

Figure 1: Site context map



Appendix 2: Photographs

Photograph 1 The western section of the receptor side overlooking long-sward grassland to be established as a wildflower area



Photograph 2 The allotment to the south of the Site and long-sward grassland buffer



Photograph 3 Wildflower meadow being established to the north of the Site with mowed paths to guide pedestrian footfall.



Photograph 4 Information board on the receptor Site to help guide footfall and keep wildlife areas free from disturbance.



Appendix 3: Maintenance Schedule

Appendix 3: Ten Year Management Schedule – Macs Farm Receptor Site

Management Prescription	Year									
	1	2	3	4	5	6	7	8	9	10
Create three hibernacula onsite (one per year) in areas south facing and away from machinery and vehicles	✓	✓	✓							
Create two log piles in scrub edge and repeat this task every year for 4 years.	✓			✓				✓		
Mow the wildflower grassland edges and islands twice annually (April and September)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mow the paths through the Site monthly to guide footfall	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Add wildflower seed mix if required (April or September, following mowing)		✓		✓		✓		✓		✓
Clear encroaching vegetation from pond edge.					✓					✓
Check hibernacula for damage/wear and repair as required.		✓	✓	✓	✓	✓	✓	✓	✓	✓
Check log piles for movement and restack as required.		✓	✓	✓	✓	✓	✓	✓	✓	✓
Review management schedule and update accordingly										✓

Appendix 4: Legislation

Important Notice: This section contains details of legislation applicable in England and Wales only (i.e., not including Scotland, the Isle of Man, Northern Ireland, the Republic of Ireland or the Channel Islands) and is provided for general guidance only. While every effort has been made to represent the current (at the time of writing) situation with respect to the UK's position outside of the EU and to ensure accuracy throughout, this section should not be relied upon as a definitive statement of the law.

Over the past few years, three important bills have been published which are intended to shape how growing pressures on the environment post-Brexit (post-transition period) are tackled. Both the Agriculture Bill and Fisheries Bill gained Royal Assent in November 2020 and are now the Agriculture Act 2020 and Fisheries Act 2020 respectively; and, more recently, the Environment Bill was passed into law in November 2021, becoming the Environment Act 2021. *N.B. as environment policy is a devolved matter, most of this Act applies to England only.*

A LEGISLATION AFFORDED TO SPECIES

The objective of the EC Habitats Directive[1] is to conserve the various species of plant and animal which are considered rare across Europe. The Directive is transposed into UK law by **The Conservation of Habitats and Species Regulations 2017 (as amended)** and **The 'Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended)**.

Various amendments to the 2017 Regulations in England and Wales have been made through the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. These changes came into effect on the 1 January 2021 following the UK's departure from the EU and the end of the Transition Period. The changes are largely limited to 'operability changes' that will ensure the Regulations can continue to have the same working effect as before.

The Wildlife and Countryside Act 1981 (as amended) is a key piece of national legislation which implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and implements the species protection obligations of Council Directive 2009/147/EC (formerly 79/409/EEC) on the Conservation of Wild Birds (EC Birds Directive) in Great Britain.

[1] Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora

Since the passing of the Wildlife & Countryside Act 1981, various amendments have been made, details of which can be found on www.opsi.gov.uk. Key amendments have been made through the Countryside and Rights of Way (CRoW) Act (2000).

As well as delivering long-term targets to reduce waste and improve resource efficiency and improve air and water quality targets, the **Environment Act 2021** aims to halt the decline of nature by 2030, mandates Biodiversity Net Gain for developments in England and amends the Wildlife and Countryside Act 1981 (as amended) to introduce an additional purpose for granting a protected species license in relation to development which is 'for reasons of overriding public interest'. The Act also introduces the Office for Environmental Protection (OEP), which will be a new public body intended to hold government and public authorities to account, although the government will be able to issue guidance to the OEP on how it enforces policies and legislation.

Some of the key biodiversity elements in the Act that will have a bearing on species protection in the UK include:

- A strengthened biodiversity duty on Local Planning Authorities;
- Biodiversity net gain to ensure developments, including Nationally Significant Infrastructure Projects (NSIP), deliver at least 10% increase in biodiversity;
- Local Nature Recovery Strategies to support a Nature Recovery Network;
- Duty upon Local Authorities to consult on street tree felling;
- Strengthen woodland protection enforcement measures;
- Conservation Covenants;
- Protected Site Strategies and Species Conservation Strategies to support the design and delivery of strategic approaches to deliver better outcomes for nature;
- Introduces the power for the Habitats Regulations to be amended or 'refocused' to 'to deliver creative public policy thinking that delivers results.

This section does not provide further detail on the Environment Act 2021 as, at the time of writing (November 2021), the Act, in its final form, has not been published and it remains to be seen how and when the various elements will be enacted at a national and local level.

Other legislative Acts affording protection to wildlife and their habitats include:

- Salmon and Freshwater Fisheries Act 1975
- Deer Act 1991
- Protection of Badgers Act 1992
- Wild Mammals (Protection) Act 1996

- Countryside and Rights of Way (CRoW) Act 2000
- Natural Environment & Rural Communities (NERC) Act 2006
- The Eels (England and Wales) Regulations 2009
- Environment (Wales) Act 2016

Species and species groups that are protected or otherwise regulated under the aforementioned legislation, and that are most likely to be affected by development activities, include herpetofauna (amphibians and reptiles), badger, bats, birds, dormouse, invasive species, otter, plants, red squirrel, water vole and white clawed crayfish.

Explanatory notes relating to species protected under The Conservation of Habitats and Species Regulations 2017 (as amended), which includes smooth snake, sand lizard, great crested newt, natterjack toad, all bat species, otter, dormouse and some plant, invertebrate and fish species, are given below. **These should be read in conjunction with the relevant species sections that follow.**

- In the Habitats Directive, the term 'deliberate' is interpreted as being somewhat wider than intentional and may be thought of as including an element of recklessness.
- The Conservation of Habitats and Species Regulations 2017 (as amended) does not define the act of 'migration' and therefore, as a precaution, it is recommended that short distance movement of animals for e.g., foraging, breeding or dispersal purposes are also considered where relevant.
- In order to obtain a mitigation license for species protected under the Conservation of Habitats and Species Regulations 2017 (as amended), the application must demonstrate that it meets all of the following three 'tests': I) the action(s) are necessary for the purpose of preserving public health or safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequence of primary importance for the environment; ii) that there is no satisfactory alternative and iii) that the action authorized will not be detrimental to the maintenance of the species concerned at a favorable conservation status in their natural range.

Herpetofauna (Amphibians and Reptiles)

The sand lizard *Lacerta agilis*, smooth snake *Coronella austriaca*, natterjack toad *Epidalea calamita,* great crested newt *Triturus cristatus* and pool frog *Pelophylax lessonae* receive full protection under The Conservation of Habitats and Species Regulations 2017 (as amended) through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring, or capturing of species listed on Schedule 2
- Deliberate disturbance of any Schedule 2 species as:

- to impair their ability:
  - to survive, breed, or reproduce, or to rear or nurture young;
  - in the case of animals of a hibernating or migratory species, to hibernate or migrate
- to significantly affect the local distribution or abundance of the species

- Deliberate taking or destroying of the eggs of a Schedule 2 species
- Damage or destruction of a breeding Site or resting place
- Keeping, transporting, selling, exchanging, or offering for sale whether live or dead or of any part thereof.

With the exception of the pool frog, these species are also listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) in respect to sub-sections 9 (4) (b) and (c) and 9 (5). The pool frog is afforded protection in respect of sub-sections 9(4) (b) and (c) for England only. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance while in their place of shelter (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering, or exposing for sale, possession or transporting for purpose of sale (excluding pool frog).

Other native species of herpetofauna are protected solely under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended). Species such as the adder *Vipera berus*, grass snake *Natrix natrix* (now reclassified as *Natrix helvetica* in the UK), common lizard *Zootoca vivipara* and slow-worm *Anguis fragilis* are listed in respect to sub-section 9 (1) & (5). For these species, it is prohibited to:

- Intentionally kill or injure these species
- Sell, offer, or expose for sale, possess, or transport for purpose of sale these species, or any part thereof.

Common frog *Rana temporaria*, common toad *Bufo bufo*, smooth newt *Lissotriton vulgaris* and palmate newt *L. helveticus* are listed in respect to sub-section 9 (5) only which affords them protection against sale, offering or exposing for sale, possession, or transport for the purpose of sale.

How is the legislation pertaining to herpetofauna liable to affect development works?

The appropriate licence issued by the relevant countryside agency (e.g., Natural England, Natural Resources Wales) will be required for works liable to affect the breeding Sites or resting places of those amphibian and reptile species protected under The Conservation of

Habitats and Species Regulations 2017 (as amended). A license will also be required for operations liable to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licences are to derogate from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

Although not licensable, appropriate mitigation measures may also be required to prevent the intentional killing or injury of adder, grass snake, common lizard, and slow worm, thus avoiding contravention of the Wildlife and Countryside Act 1981 (as amended).

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- Haywards Heath: Unit 6 Basepoint; John De Mierre House, 20 Bridge Road, Haywards Heath, RH16 1UA. T: +44 (0)20 7394 3700
- Lewes: 3 Upper Stalls, Ilford, Lewes, East Sussex, BN7 3EJ. T: +44 (0) 1273 813739
- Lichfield: 1-2 Trent Park, Eastern Avenue, Lichfield, Staffordshire, WS13 6RN. T: +44 (0)1543 229049
- Manchester: Express Building, 3 George Leigh Street, Manchester, M4 5AD. T: +44 (0)161 509 4900
- Norwich: 60 Thorpe Road, Norwich, Norfolk, NR1 1RY. T: +44 (0)1603 628408
- Wakefield: The Paine Suite, Nostell Business Park, Doncaster Road, Wakefield, WF4 1AB. T: +44 (0)1924 921900