

Heyford Airfield

Plot 10 update ecology survey

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1 Summary

- 1.1 This report has been prepared by BSG Ecology Ltd for Dorchester Living to provide an updated survey of the Plot 10 area of Heyford Airfield. An extended Phase 1 habitat survey was undertaken by Dr Peter Shepherd MCIEEM on 6 October 2021. The Plot 10 area comprises close mown grassland with small mixed plantation copses, earth mounds and former RAF buildings.
- 1.2 The Site has not changed since the surveys undertaken in 2017 and 2019 and is considered to be of low ecological value. Badger *Meles meles*, barn owl *Tyto alba* and great crested newt *Triturus cristatus* are considered likely absent, but the POL 2 area supports grassland and scrub habitat that may be used by common lizard *Zootoca vivipara* and grass snake *Natrix helvetica* and it is recommended that appropriate mitigation measures are put in place prior to the start of construction to avoid killing and injuring reptiles. It is also recommended that an updated badger walkover survey be undertaken prior to the start of construction and that suitable nesting bird habitat is removed outside of the breeding bird season.

2 Introduction

- 2.1 This report presents the findings of an extended Phase 1 habitat survey of the Phase 10 area of the former RAF Heyford Airfield (central Ordnance Survey grid reference: SP50652598 – hereafter referred to as ‘the Site’). The survey was commissioned by Dorchester Living to update previous surveys of this part of the airfield in 2017 and 2019 to obtain information in support of a reserved matters planning application for up to 130 new dwellings, an area for green infrastructure and provision of surface water attenuation. Re-development will require the demolition of 7 buildings/structures comprising area POL 2, 268, 276, 279, 392, 416 and 1403.
- 2.2 The survey was undertaken by Dr Peter Shepherd MCIEEM, an experienced botanists and field ecologist on 6 October 2021.

Site description

- 2.3 The Site comprises an area of former airfield grassland, plantation woodland and buildings and associated hardstanding in the southern western corner of Heyford flying field immediately north of Camp Road. The Site is dominated by close mown amenity grassland within which are located a series of isolated former military buildings. There are also underground structures and areas of hardstanding. Associated with disused buildings are small areas of rough grassland and scrub and there are a number of small mixed plantation woodland copses.

Aims of study

- 2.4 The aim of the study was to update the ecological baseline information for the site to inform a reserved matters planning application.

3 Methods

Desk study

- 3.1 An updated detailed desk study has not been undertaken because information on protected species and habitats within the Site has previously been provided through the survey work undertaken to inform the 2017 Environmental Statement that accompanied the Outline Planning Application for the redevelopment of the Site as well as by subsequent on-going monitoring surveys. This data represents the most up to date information on the Site and its immediate surrounds. Monitoring survey work carried out across the airfield by Dorchester Living since 2017, where relevant to the Site, has been reviewed. An updated review of statutory designated sites including Conservation Target Areas has been carried out by reference to the MAGIC website and the Wild Oxfordshire website.

Field survey

- 3.2 An extended Phase 1 habitat survey was undertaken on 6 October 2021. The weather on the day of the survey was dry, with bright sunshine and a very light breeze. The whole of the Site was walked and notes prepared on the habitat types present and evidence of the presence or potential presence of protected species and species of conservation concern.

Building and structure inspection

- 3.3 All buildings and structures within the Site which are to be potentially affected by demolition or refurbishment were subject to daytime inspections to assess their potential to support roosting bats (see Figure 2). Daytime external surveys were carried out following a method which considered relevant industry standard guidance (Collins, 2016). The exterior of all buildings were searched from the ground using a high powered torch and close focusing binoculars (where necessary) for:
- Features which could provide bats with access into roosting spaces or provide roosting spaces (such as gaps under roofing tiles, gaps in ridge tiles, gaps in soffit boxes, gaps under lead flashing and cracks or crevices in the stonework); and
 - Evidence of the presence of bats such as bat droppings on windows, windowsills, walls and the ground, or scratch marks or staining from bat's fur around possible roost access/egress points.
- 3.4 In some instances, internal inspections were also carried out where access was possible. In this case, similar notes to those listed above were made with regard to spaces available for use by bats (such as roof voids or cavities within the building).
- 3.5 Buildings were assigned a category for their potential for roosting bats according to factors such as roosting opportunities, features and habitat connectivity as summarised in Table 1. These categories also apply to the potential for bats to roost in trees and therefore described in combination here.

Table 1: Buildings and trees: suitability for roosting bats (adapted from Collins (2016))

Suitability	Description of roosting habitat
Negligible	Negligible habitat features likely to be used by roosting bats.
Low	A building or tree with one or more potential roost sites that could be used by individual bats opportunistically. Unlikely to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation).
Moderate	A building or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status.
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.

Potential Roost Feature in trees survey

- 3.6 A ground based assessment was undertaken for all trees within the Site to identify any Potential Roost Features (PRF) in trees. The only trees on Site are located within the mixed plantation copses. No individual trees are present. During the survey, trees were assessed from the ground, using binoculars and a high-powered torch as necessary.
- 3.7 Information was recorded for each tree deemed to have potential to support bats. this included tree species; description and aspect of PRF(s) such as woodpecker holes, rot holes, splits or cracks, dead limbs, ivy cover and/or flaking bark and trunk diameter at chest height.
- 3.8 Where trees with PRFs were noted their locations were mapped (Figure 1) and photographs were taken of suitable features. In addition, a search was made for evidence of the use of these features by bats, such as characteristic staining, scratch marks and droppings. Trees with PRFs were categorised according to Collins, 2016.

Consideration of potential limitations to methods

- 3.9 The update Phase 1 habitat survey was undertaken in early October which is outside the optimum survey period for botanical survey (May-August), although seed heads and flowering plants were still visible. In addition the grass sward across most of the Site is regularly cut as an amenity grassland. Despite these limitations it is considered that sufficient information was obtained to classify and assess the grassland and other habitats present on the Site. There were no access restrictions to most of the Site although the underground structures were not accessible with no obvious point of access.

4 Results and Recommendations

Desk Study and previous surveys

- 4.1 There are no statutory designated sites within the Site.
- 4.2 The Ardley and Heyford Conservation Target Area (CTA) has been designated since the Environmental Statement was prepared and is located adjacent to the northern boundary of the Site. To date, as this is a new CTA, specific area information on the current extent of existing habitat or creation and restoration targets for habitats have not been published, but broad objectives promoting the conservation restoration and creation of calcareous grassland, hedgerows and the conservation of ground nesting birds and great crested newts are included in the CTA.
- 4.3 In 2017 and 2019 the phase 1 habitat survey recorded the following habitats within the Site: amenity grassland, poor semi-improved grassland, plantation woodland, buildings and hardstanding. No evidence of use by protected species was recorded in 2017 or 2019.
- 4.4 Within the wider airfield north and east of the Site protected species records include great crested newt, common lizard, grass snake, various species of bat, barn owl and other nesting birds and badger.

Habitats

- 4.5 The distribution of habitat types is presented in Figure 1.

Amenity grassland

- 4.6 The Site is dominated by close mown amenity grassland supporting a limited range of grasses and forbs (flowering plants excluding grasses and sedges). Grasses include; red fescue *Festuca rubra*, cock's-foot grass *Dactylis glomerata*, false oat grass *Arrhenatherum elatius*, small timothy *Pheleum bertolonii* and perennial rye grass *Lolium perenne*. A suite of forbs are present but none is more than occasional or locally frequent within the sward and include; white clover *Trifolium repens*, selfheal *Prunella vulgaris*, common cats ear *Hypochaeris radicata*, yarrow *Achillea millefolium*, creeping buttercup *Ranunculus repens* and creeping cinquefoil *Potentilla reptans*. On the steeper banks of the mound over structure 392 the sward is slightly more diverse with additional species including lady's bedstraw *Galium verum*, red clover *Trifolium pratense*, ribwort plantain *Plantago lanceolata* and in one location, field scabious *Knautia arvensis*.

Plantation woodland

- 4.7 There are five small mixed plantation copses located in the western half of the Site to the south and west of the storage area known as POL 2 that is located in the centre of the Site. The woodlands are dominated by young to semi-mature Scots pine *Pinus sylvestris*, but also includes a variety of deciduous tree and shrub species including beech *Fagus sylvatica*, sycamore *Acer pseudoplatanus* and ash *Fraxinus excelsior*. Shrubs include elder *Sambucus nigra*. The ground flora is a combination of grassland, ivy *Hedera helix* and bramble *Rubus fruticosus*. The climber old man beard *Clematis vitalba* is also present. The woodland parcels have a limited diversity of structure (such as understorey scrub) being of plantation origin.

Poor semi-improved grassland

- 4.8 Within the centre of the Site is a fenced area of buildings, underground structures and hardstanding known as POL 2. It is used for storage of various building materials. The grassland in this area is not managed and is dominated by tall coarse grasses such as false oat grass and cock's-foot grass with frequent hogweed *Heracleum sphondylium*, creeping thistle *Cirsium arvense*, nettle *Urtica dioica* and bristly ox-tongue *Helminthotheca echioides*.

Scrub

- 4.9 Scrub includes grey willow *Salix cinerea*, dog rose *Rosa canina*, ash and elder. There is also the occasional patch of dense scrub dominated by bramble or elder.

Tall ruderal

- 4.10 Tall ruderal habitat occurs in a mosaic with scrub and poor semi-improved grassland in area POL 2 around the derelict structure 1402 and the edges of the plantation woodland. It is dominated by nettle *Urtica dioica*, with hogweed and creeping thistle.

Marsh

- 4.11 At the edge of building POL 2.1 and within a sump in building 1403 are two very small (< 10 m²) areas of marshy vegetation dominated by greater reedmace *Typha latifolia*.

Buildings and structures

- 4.12 There are 11 buildings and structures within the Site which are described in Table 2 with reference to their potential to support roosting bats and their location is shown on (Figure 2). To the east of POL 2 is a large mound covering an underground structure (structure number 392). The top and banks of this mound are also dominated by close mown amenity grassland. Within POL 2 area building POL 2.1 is also an underground structure, but it is open to the elements and partially flooded. All other buildings/structures occur above ground.

Protected and Notable Species

- 4.13 No direct evidence of the presence of protected species was recorded during the survey. However, parts of the Site have the potential to be used by species known to occur on the wider airfield area.
- 4.14 No evidence of use by badger was noted during the survey and it is considered to be likely absent from the Site, although it is possible badger may forage on the Site and move through it. It is recommended that a walkover survey to check for the presence of badger setts is undertaken prior to the start of construction.
- 4.15 No evidence of the presence of reptiles was noted during the survey, however the rough grassland and scrub habitats associated with the POL 2 area and the margins of the woodland copses provides suitable habitat for basking and hibernating reptiles. It is recommended that prior to construction destructive searches of suitable habitat within POL 2 are undertaken between March and September and any captured animals are released into areas on the north east side of the airfield with known reptile populations are present.
- 4.16 There are no ponds within the Site. The two small areas of marsh do not hold water into the summer months and are therefore not considered suitable as breeding ponds for amphibians including great crested newt. The nearest pond to the Site to the east is 190m from the eastern boundary but there are no records for great crested newt from this pond. As such it is considered that this species is likely absent from the Site. The nearest known breeding population is just over 1km from the site.
- 4.17 There are a number of buildings and structures with the Site but none are considered likely to support roosting bats (see Table 2). Bats are likely to forage over the Site in particular within the wooded copses and over POL2 area.

Table 2: Description of buildings and structures

Building Reference	Description of features	Suitability for roosting bats
POL 2.1	Single storey flat-roofed brick building that housed pumping machinery. Concrete roof is covered by bitumen roof felt. No cracks or crevices and open structure inside the building is open to the weather and draughty.	Negligible
POL 2.2	Underground concrete structure partially flooded with shallow water and open to the elements at the northern and southern entrances. No cervices within the structures as it is constructed from thick, smooth concrete.	Negligible
POL 2.3	Single storey single brick thick walls with flat concrete roof covered with bitumen roofing felt. No crevices and the interior is open to draughts and light as doors and windows are open.	Negligible
POL 2.4	Single storey single brick thick walls with flat concrete roof covered with bitumen roofing felt. No crevices and the interior is open to draughts and light as doors and windows are open.	Negligible
POL 2.5	Open sided wooden structure with corrugated metal roof. No roosting opportunities.	Negligible
POL 2.6	Wooden open fronted shed with corrugated metal roof providing cover for pumping machinery	Negligible
276	Electrical transformer station enclosed by concrete walls with no roof	Negligible
279	Large concrete hanger with large concrete lined interior space	Negligible
205	Single story office building with pitched roof covered with corrugated metal sheeting in good condition. Barge boards are present at the gable ends and fascia boarding is located behind the guttering on the side elevations of the building. There is a small number of very small gaps behind the barge and fascia board, but these were covered in cobwebs and no evidence of use by bats was observed.	Negligible
392	Underground structure with no access for bats	Negligible
1403	Water pumping facility comprised on single brick walls, with one small section is a plastic corrugated roof. Otherwise open to the elements.	Negligible

- 4.18 As all the buildings present are of negligible suitability for bats, no further surveys for roosting bats are considered necessary. In terms of foraging bats, the surveys carried out in 2017 identified the more valuable areas within the wider development and suitable mitigation and enhancement has been committed to. No trees with PRFs were noted within the plantation woodlands, which comprise young to semi-mature trees.
- 4.19 The wooded copses and the scrubby areas within POL2 area are likely to support a range of common breeding birds. None of the buildings showed any evidence of being used by barn owl. The short grassland on Site is likely to be of very limited value to breeding birds given its current management (amenity grassland). The areas of rough grassland are likely to be too limited in size and are associated with buildings and are therefore unlikely to be used by species such as skylark. It is recommended that woodland and scrub vegetation be removed outside of the breeding bird season (March to August inclusive) or if this is not possible that prior to vegetation removal a bird survey is undertaken by a suitably qualified ecologist to confirm no breeding birds are present.

5 Conclusions

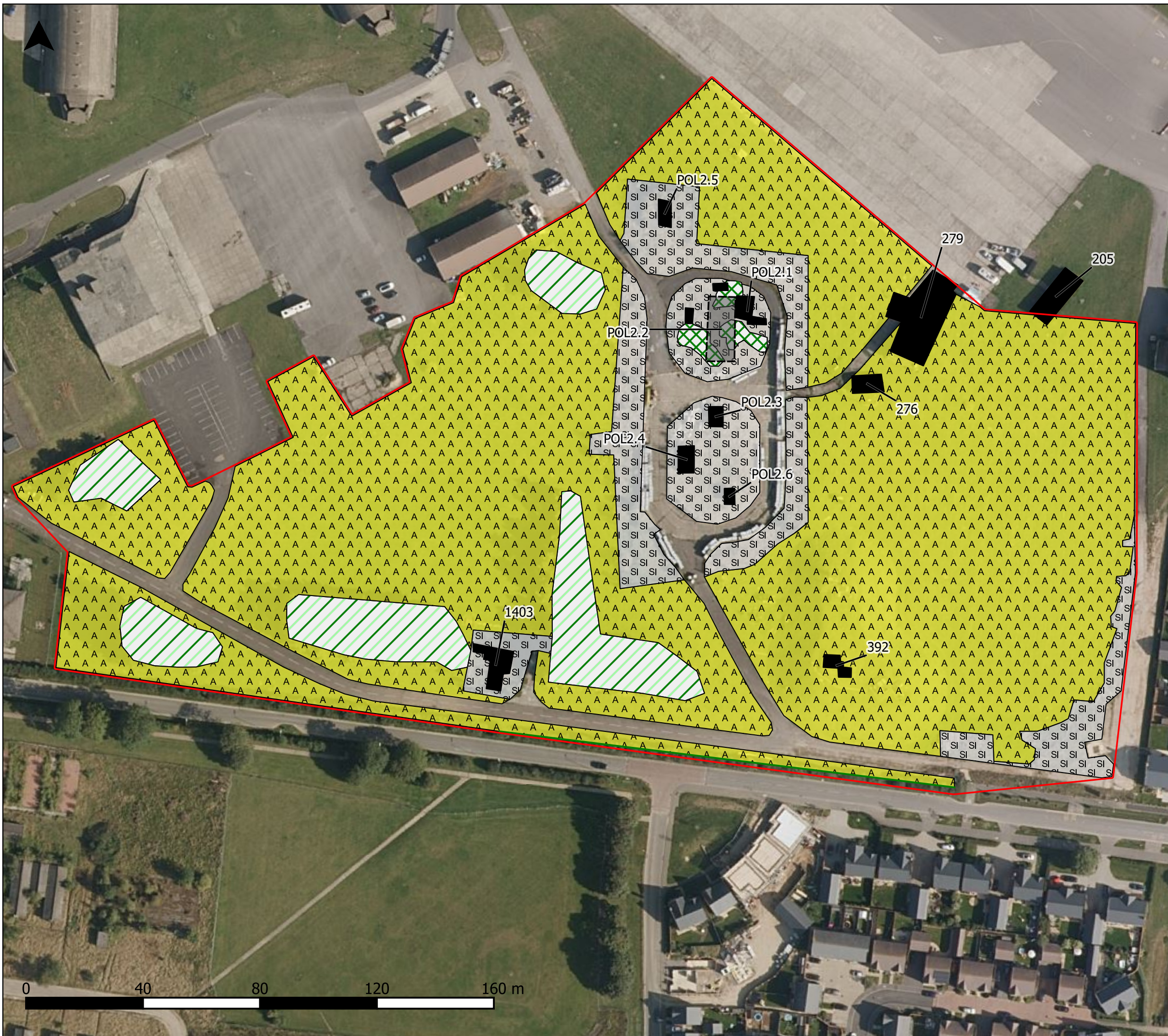
- 5.1 The Site has changed little since the phase 1 habitat surveys in 2017 and 2019. It is dominated by mown amenity grassland with wooded copses. None of the buildings provide suitable habitat for roosting bats and badger and great crested newt are considered likely absent from the Site. Common lizard and grass snake may be present in small areas of rough unmanaged grassland in the POL 2 area. Appropriate mitigation measures have been set out including clearance of vegetation outside the nesting bird season to avoid damaging active nests and for the clearance of the rough grassland to avoid killing or injuring reptiles if present. An additional pre-construction badger survey is also recommended to identify any new setts.

6 References

Collins, J. (ed.) (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn)*. The Bat Conservation Trust, London.

7 **Figures**

(overleaf)



- Legend
- Intact hedge - species-poor
 - Mixed woodland - plantation
 - Scrub - dense/continuous
 - Poor semi-improved grassland
 - Cultivated/disturbed land - amenity grassland
 - Buildings
 - Buildings (underground)
 - Plot 10 boundary



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PROJECT TITLE
 HEYFORD PARK - PLOT 10

DRAWING TITLE
 Figure 1: Phase 1 re-survey

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 DRAWN: MSG APPROVED: PS VERSION: 1.0

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Sources: BSG Ecology survey data





- Legend
- Buildings
 - Buildings (underground)
 - Plot 10 boundary



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PROJECT TITLE
 HEYFORD PARK - PLOT 10

DRAWING TITLE
 Figure 2: Buildings

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8 Photographs

<p>Photograph 1: Mown amenity grassland north of POL 2</p>	<p>Photograph 2: Mown amenity grassland south west of POL 2</p>
	
<p>Photograph 3: Plantation woodland with grass ground flora</p>	<p>Photograph 4: Plantation woodland with shrub understorey west of POL 2</p>
	
<p>Photograph 5: Grassland, tall ruderal and scrub within POL 2</p>	<p>Photograph 6: POL 2 showing grassland, scrub and stored materials</p>
	

<p>Photograph 7: Mown amenity grassland north of structure 392</p>	<p>Photograph 8: Mound of structure 392 showing bank erosion</p>
	
<p>Photograph 9: Grassland and scrub associated with structure 1403</p>	<p>Photograph 10: Building POL2.4 in area POL 2</p>
	
<p>Photograph 11: Building POL 2.1 in area POL 2</p>	<p>Photograph 12: Building 279</p>
	

<p>Photograph 13: Structure 276</p>	<p>Photograph 14: Building 205</p>
 A photograph of a tall, rectangular concrete structure with a dark, textured surface. It is situated in a grassy field with some trees and a utility pole in the background under a clear blue sky.	 A photograph of a single-story brick building with a brown corrugated metal roof. Several windows with white frames are visible. A small bush is in the foreground.
<p>Photograph 15: Building 205</p>	<p>Photograph 16: Building 205</p>
 A photograph showing a close-up of the brick wall of Building 205. A black downspout pipe runs vertically along the wall. The sky is blue with some light clouds.	 A photograph of the corner of Building 205, showing the brickwork and a window. A yellow sign with the number '205' is mounted on the wall. A green lawn and another building are visible in the background.
<p>Photograph 17: Building POL 2.1</p>	<p>Photograph 18: Building POL 2.5</p>
 An interior photograph of a long, narrow room with a corrugated metal ceiling and concrete floor. A white pipe runs along the wall, and there are some items on the floor in the distance.	 A photograph of a building partially obscured by dense trees and foliage. A utility wire runs across the top of the frame.

Appendix 1: Summaries of Relevant Policy, Legislation and Other Instruments

This section briefly summarises the legislation, policy and related issues that are relevant to the main text of the report. The following text does not constitute legal or planning advice.

National Planning Policy Framework (England)

The Government issued the National Planning Policy Framework (NPPF) in July 2021. Text excerpts from the NPPF are shown where they may be relevant to planning applications and biodiversity including protected sites, habitats and species.

The Government sets out the three objectives for sustainable development (economy, social and environmental) at paragraphs 8-10 to be delivered through the plan preparation and implementation level and 'are not criteria against which every decision can or should be judged' (paragraph 9). The planning system's environmental objective is 'to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity...' (paragraph 8c).

In conserving and enhancing the natural environment, the NPPF (Paragraph 174) states that 'planning policies and decisions should contribute to and enhance the natural and local environment' by:

- Protecting and enhancing...sites of biodiversity value... '(in a manner commensurate with their statutory status or identified quality in the development plan)'.
- Recognising the wider benefits from natural capital and ecosystem services including trees and woodland.
- Minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.
- Preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability.

In respect of protected sites, at paragraph 175, the NPPF requires local planning authorities to distinguish, at the plan level, '...between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value...take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.' A footnote to paragraph 175 refers to the preferred use of agricultural land of poorer quality if significant development of agricultural land is to take place.

Paragraph 179 refers to how plans should aim to protect and enhance biodiversity. Plans should: 'identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity [a footnote refers to ODPM Circular 06/2005 for further guidance in respect of statutory obligations for biodiversity in the planning system], wildlife corridors and stepping stones that connect them and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation;' and to 'promote the conservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.'

Paragraph 180 advises that, when determining planning applications, '...local planning authorities should apply the following principles:

- if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments) should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of

special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

- development resulting in the loss or deterioration of irreplaceable habitats, (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and
- development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.'

In paragraph 181, the following should be given the same protection as habitats sites:

- potential Special Protection Areas and possible Special Areas of Conservation;
- listed or proposed Ramsar sites; and
- sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.'

In paragraph 182 the NPPF refers back to sustainable development in relation to appropriate assessment and states: 'the presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site'.

In paragraph 183, the NPPF refers to planning policies and decisions taking account of ground conditions and risks arising from land instability and contamination at sites. In relation to risks associated with land remediation account is to be taken of 'potential impacts on the natural environment' that arise from land remediation.

In paragraph 185 the NPPF states that planning policies and decisions should ensure that development is appropriate to the location and take into account likely effects (including cumulative) on the natural environment and, in doing so, they 'should limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation' (paragraph 185c).

Government Circular ODPM 06/2005 Biodiversity and Geological Conservation (England only)

Paragraph 98 of Government Circular 06/2005 advises that "the presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat. Local authorities should consult Natural England before granting planning permission. They should consider attaching appropriate planning conditions or entering into planning obligations under which the developer would take steps to secure the long-term protection of the species. They should also advise developers that they must comply with any statutory species' protection provisions affecting the site concerned..."

Paragraph 99 of Government Circular 06/2005¹ advises that "it is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision. The need to ensure ecological surveys are carried out should therefore only be left to coverage under planning conditions in exceptional circumstances, with the result that the surveys are carried out after planning permission has been granted".

Standing Advice (GOV.UK - England only)

The GOV.UK website provides information regarding protected species and sites in relation to development proposals: 'Local planning authorities should take advice from Natural England or the Environment Agency

¹ ODPM Circular 06/2005. *Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and their Impacts within the Planning System* (2005). HMSO Norwich.

about planning applications for developments that may affect protected species.’ GOV.UK advises that ‘some species have standing advice which you can use to help with planning decisions. For others you should contact Natural England or the Environment Agency for an individual response.’

The standing advice (originally from Natural England and now held and updated on GOV.UK²) provides advice to planners on deciding if there is a ‘reasonable likelihood’ of protected species being present. It also provides advice on survey and mitigation requirements.

When determining an application for development that is covered by standing advice, in accordance with guidance in Government Circular 06/2005, Local planning authorities are required to take the standing advice into account. In paragraph 82 of the aforementioned Circular, it is stated that: ‘The standing advice will be a material consideration in the determination of the planning application in the same way as any advice received from a statutory consultee...it is up to the planning authority to decide the weight to be attached to the standing advice, in the same way as it would decide the weight to be attached to a response from a statutory consultee.’

The Environment Act 2021

The Environment Act includes the provision of mandatory biodiversity gain for developments in England; this will be mandated through an amendment to the Town and Country Planning Act 1990. The two-year transition period following Royal Assent (November 2021) means that mandatory biodiversity gain will become law in autumn 2023. This will require:

- The provision of a required percentage of biodiversity gain, currently set nationally to be at 10%
- The use of the national Defra Biodiversity Metric to calculate the biodiversity gain, currently Metric 3.0
- The provision of a biodiversity gain plan to demonstrate how biodiversity gain will be delivered on and or off-site; statutory instruments and regulations are in preparation by Defra and Natural England to provide templates for reporting
- Biodiversity gain will be secured for a fixed period, currently nationally set at 30 years
- Demonstration of how the biodiversity gain will be secured; conservation covenants will be used to deliver this which are in preparation by Defra and Natural England
- A national register of land used for biodiversity gain will be established; this will involve setting up a new biodiversity credits market, the approach for which is in preparation by Defra and Natural England

NB. The policy basis for net gain is already set out in the NPPF. During the transition period, we would expect local planning authorities to increasingly require the measures set out within the Environment Act as part of their development decision making process.

European protected species (Animals)

The Conservation of Habitats and Species Regulations 2017 (as amended) consolidates various amendments that have been made to the original (1994) Regulations which transposed the EC Habitats Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (Council Directive 92/43/EEC) into national law.

“European protected species” (EPS) of animal are those which are shown on Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended). They are subject to the provisions of Regulation 43 of those Regulations. All EPS are also protected under the Wildlife and Countryside Act 1981 (as amended). Taken together, these pieces of legislation make it an offence to:

- a. Intentionally or deliberately capture, injure or kill any wild animal included amongst these species
- b. Possess or control any live or dead specimens or any part of, or anything derived from a these species
- c. deliberately disturb wild animals of any such species

² <https://www.gov.uk/guidance/protected-species-how-to-review-planning-applications#standing-advice-for-protected-species>

- d. deliberately take or destroy the eggs of such an animal, or
- e. intentionally, deliberately or recklessly damage or destroy a breeding site or resting place of such an animal, or obstruct access to such a place

For the purposes of paragraph (c), disturbance of animals includes in particular any disturbance which is likely—

- a. to impair their ability—
 - i. to survive, to breed or reproduce, or to rear or nurture their young, or
 - ii. in the case of animals of a hibernating or migratory species, to hibernate or migrate; or
- b. to affect significantly the local distribution or abundance of the species to which they belong.

Although the law provides strict protection to these species, it also allows this protection to be set aside (derogated) through the issuing of licences. The licences in England are currently determined by Natural England (NE) for development works and by Natural Resources Wales in Wales. In accordance with the requirements of the Regulations (2017, as amended), a licence can only be issued where the following requirements are satisfied:

- a. The proposal is necessary ‘to preserve public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment’
- b. ‘There is no satisfactory alternative’
- c. The proposals ‘will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.’

Definition of breeding sites and resting places

Guidance for all European Protected Species of animal, including bats and great crested newt, regarding the definition of breeding and of breeding and resting places is provided by The European Council (EC) which has prepared specific guidance in respect of the interpretation of various Articles of the EC Habitats Directive.³ Section II.3.4.b) provides definitions and examples of both breeding and resting places at paragraphs 57 and 59 respectively. This guidance states that ‘The provision in Article 12(1)(d) [of the EC Habitats Directive] should therefore be understood as aiming to safeguard the ecological functionality of breeding sites and resting places.’ Further the guidance states: ‘It thus follows from Article 12(1)(d) that such breeding sites and resting places also need to be protected when they are not being used, but where there is a reasonably high probability that the species concerned will return to these sites and places. If for example a certain cave is used every year by a number of bats for hibernation (because the species has the habit of returning to the same winter roost every year), the functionality of this cave as a hibernating site should be protected in summer as well so that the bats can re-use it in winter. On the other hand, if a certain cave is used only occasionally for breeding or resting purposes, it is very likely that the site does not qualify as a breeding site or resting place.’

Birds

All nesting birds are protected under Section 1 of the Wildlife and Countryside Act 1981 (as amended) which makes it an offence to intentionally kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. In addition to this, for some rarer species (listed on Schedule 1 of the Act), it is an offence to disturb them whilst they are nest building or at or near a nest with eggs or young, or to disturb the dependent young of such a bird.

The Conservation of Habitats and Species Regulations 2017 (as amended) places duties on competent authorities (including Local Authorities and National Park Authorities) in relation to wild bird habitat. These provisions relate back to Articles 1, 2 and 3 of the EC Directive on the conservation of wild birds (2009/147/EC, ‘Birds Directive’⁴) (Regulation 10 (3)) requires that the objective is the ‘preservation, maintenance and re-establishment of a sufficient diversity and area of habitat for wild birds in the United Kingdom, including by means of the upkeep, management and creation of such habitat, as appropriate, having regard to the

³ Guidance document on the strict protection of animal species of Community interest under the Habitats Directive 92/43/EEC. (February 2007), EC.

⁴ 2009/147/EC Birds Directive (30 November 2009. European Parliament and the Council of the European Union.

requirements of Article 2 of the new Wild Birds Directive...’ Regulation 10 (7) states: ‘In considering which measures may be appropriate for the purpose of security or contributing to the objective in [Regulation 10 (3)] Paragraph 3, appropriate account must be taken of economic and recreational requirements’.

In relation to the duties placed on competent authorities under the 2017 Regulations, Regulation 10 (8) states: ‘So far as lies within their powers, a competent authority in exercising any function [including in relation to town and country planning] in or in relation to the United Kingdom must use all reasonable endeavours to avoid any pollution or deterioration of habitats of wild birds (except habitats beyond the outer limits of the area to which the new Wild Birds Directive applies).’

Badger

Badger is protected under the Protection of Badgers Act 1992. It is not permitted to wilfully kill, injure, take, possess or cruelly ill-treat a badger, or to attempt to do so; or to intentionally or recklessly interfere with a sett. Sett interference includes disturbing badgers whilst they are occupying a sett, as well as damaging or destroying a sett or obstructing access to it. A badger sett is defined in the legislation as “a structure or place, which displays signs indicating current use by a badger”.

ODPM Circular 06/2005 provides further guidance on statutory obligations towards badger within the planning system. Of particular note is paragraph 124, which states that “The likelihood of disturbing a badger sett, or adversely affecting badgers’ foraging territory, or links between them, or significantly increasing the likelihood of road or rail casualties amongst badger populations, are capable of being material considerations in planning decisions.”

Natural England provides Standing Advice⁵, which is capable of being a material consideration in planning decisions. Natural England recommends mitigation to avoid impacts on badger setts, which includes maintaining or creating new foraging areas and maintaining or creating access (commuting routes) between setts and foraging/watering areas.

Reptiles

All native reptile species receive legal protection in Great Britain under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Viviparous lizard, slow-worm, grass snake and adder are protected against killing, injuring and unlicensed trade only. Sand lizard and smooth snake receive additional protection as “European Protected species” under the provisions of the Conservation of Habitats and Species Regulations 2017 (as amended) and are fully protected under the Wildlife and Countryside Act 1981 (as amended).

All six native species of reptile are included as ‘species of principal importance’ for the purpose of conserving biodiversity under Section 41 (England) of the NERC Act 2006 and Section 7 of the Environment (Wales) Act 2016.

Current Natural England Guidelines for Developers⁶ states that ‘where it is predictable that reptiles are likely to be killed or injured by activities such as site clearance, this could legally constitute intentional killing or injuring.’ Further the guidance states: ‘Normally prohibited activities may not be illegal if ‘the act was the incidental result of a lawful operation and could not reasonably have been avoided’. Natural England ‘would expect reasonable avoidance to include measures such as altering development layouts to avoid key areas, as well as capture and exclusion of reptiles.’

The Natural England Guidelines for Developers state that ‘planning must incorporate two aims where reptiles are present:

- To protect reptiles from any harm that might arise during development work;
- To ensure that sufficient quality, quantity and connectivity of habitat is provided to accommodate the reptile population, either on-site or at an alternative site, with no net loss of local reptile conservation status.’

⁵ <http://www.naturalengland.org.uk/ourwork/planningdevelopment/spatialplanning/standingadvice/specieslinks.aspx>

⁶ English Nature, 2004. *Reptiles: guidelines for developers*. English Nature, Peterborough. <https://webarchive.nationalarchives.gov.uk/20150303064706/http://publications.naturalengland.org.uk/publication/76006>