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Biodiversity Enhancement Plan

REV01

Land at Langstone Technology Park, Havant, PO9 1SA

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Report Summary

1. The Ecology Co-op was commissioned by AG Langstone B.V. and Trinity Investment Management to outline protection measures for an area of grassland and biodiversity enhancements for a proposed development at Langstone Technology Park.
2. Pre-construction work includes the translocation of an area of grassland supporting orchids which cannot be protected in situ. Full details for the translocation and future management of this grassland are detailed in Section 2.1.
3. Native tree planting is proposed as an enhancement measure for wider wildlife benefits targeting invertebrates that in turn provide value for foraging birds and bats.
4. To provide a net increase in bat roosting habitats, bat boxes are proposed to be installed across trees upon the site's boundaries. New nesting opportunities will also be provided for birds, specifically swifts and house sparrows.
5. Post construction management is detailed in Section 3.

This report has been prepared by The Ecology Co-operation Ltd, with all reasonable skill, care and diligence within the terms of the Contract with the client. This report only becomes the property of the client once payment for it has been received in full.

We disclaim responsibility to the client and others in respect of any matters outside the scope of the above.

This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.



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1 INTRODUCTION

1.1 Purpose of the Report

This document has been produced to demonstrate how a development upon Land at Langstone Technology Park will minimise its impact upon valuable habitats and provide targeted enhancement measures for nesting birds and bats. These enhancement measures have been detailed further to a proposal for:

- The part demolition of Building 1000, installation of a new flank elevation to the east;
- A new elevation to the north of building 4000 as a result of the above;
- The erection of new buildings in flexible B1c, B2 and B8 use in the south west corner of the site with associated parking; and
- The creation of new car parking areas and the rationalisation of existing parking areas.

All of the prescribed measures described within this document will be issued to relevant works contractors to ensure that they are carried out in full. Implementation of this will be overseen by a suitable ecological consultancy, and the works contractor will be given contact details for an ecologist so that any issues can be resolved promptly.

This report was commissioned and produced at the request of AG Langstone B.V. and Trinity Investment Management.

1.2 Background

The Ecology Co-op has been commissioned to outline targeted enhancement measures upon Land at Langstone Technology Park, Havant, P09 1SA.

Surveys have been undertaken at this site by The Ecology Co-op. This included a Phase 1 Habitat survey on 21st March 2019¹ and a bat emergence survey across the eastern end of Building 1000 on the 18th June 2019². These surveys identified the likely absence of roosting bats across the zone of impact upon Building 1000, whilst 4 additional buildings, which will not be impacted, were identified as having 'low' bat roosting potential. It was identified that the buildings had the potential to be used for nesting by house sparrow, starling and gull species.

An area of grassland with higher botanical interest was identified to the south of the gym where orchid species were identified. The initial site survey was undertaken during late winter and the identification of plants species was restricted. During a repeat visit on 18th June 2019 the area had been mown due to its management as amenity grassland and a repeat detailed botanical assessment could not be completed.

¹ The Ecology Co-op (2019). *Phase 1 Habitat and Species Survey – Land at Langstone Technology Park, Havant, P09 1SA*. P3133.

² The Ecology Co-op (2019). *Bat Emergence Survey Report – Land at Langstone Technology Park, Havant P09 1SA*. P3133.



Figure 1. An aerial image showing the location of Land at Langstone Technology Park. The approximate site boundary is outlined in blue. Images produced courtesy of Google maps (Map data ©2019 Google).

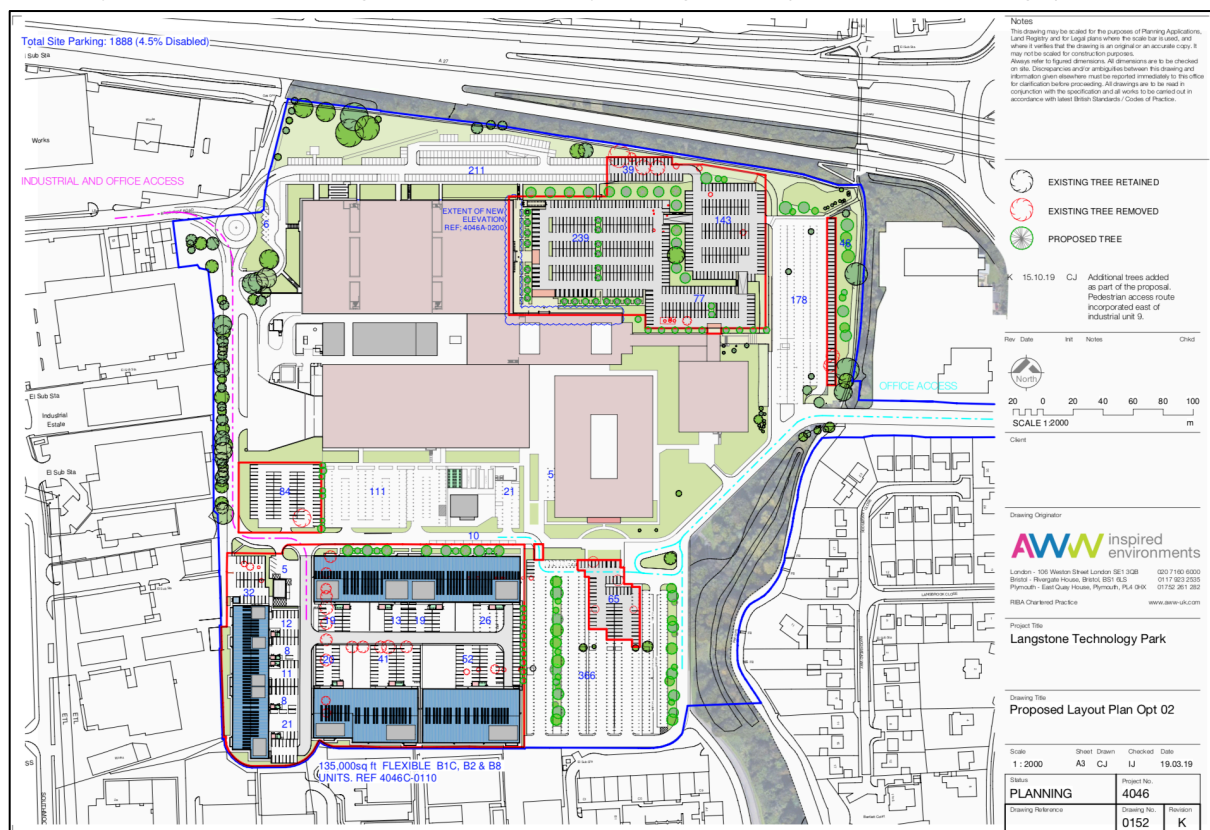


Figure 2. Proposed Layout Plan Opt 02 - Langstone Technology Park produced by AWW Inspired Environments Drawing No. 0152 Rev K. The ownership and application areas are shown with red and blue outlines.



1.3 Policy and Legislation

Legal protection applying to relevant bird, mammal, herpetofauna and invertebrate species and current nature conservation planning policy is outlined in Appendix 1 of this report.

Where possible, this report provides information on how the development proposal will be designed to meet the requirements of both the National Planning Policy Framework (NPPF) and local planning policy. Details of the NPPF is provided in Appendix 1.

2 CONSTRUCTION PHASE MITIGATION MEASURES

2.1 Grassland Translocation

This area of grassland supporting orchids and determined to have higher ecological value cannot be protected in situ and therefore it is recommended to be transplanted. An area of between 20 – 30m² will be translocated to a new location in full sun or semi-shaded within the site. Recommended locations to receive the translocated turf are shown in Figure 3. The most favorable location will be selected to maximize the success of the translocation.

The process will be as follows:

- The proposed area to receive the translocated turf will be turf stripped using a digger to create an area of bare ground. Good ground preparation is essential to the success of the turf translocation.
- The turf to be translocated will be first cut, to reduce the water demand from plants in the sward and then carefully stripped to a depth of 15cm using a digger.
- The lifted turf and associated soil will be laid in the new location upon the area of bare ground created. It will be lightly rolled to ensure the roots make contact with the new substrate.
- The above will be best undertaken between late August and the end of September during mild and wet weather best suited to establishment or during mid-March to early May when the ground has sufficient moisture and there is no requirement for watering.

As part of on-going management, this area of translocated turf should be managed through a reduced cutting regime to allow it to develop into a wildflower area. The sward should be cut (with all cuttings removed and composted) between mid-August and late September every year. Cutting in the spring (March/April) should be included if the sward grows too vigorously. This management will allow the wildflowers present to establish and flower, developing increased ecological value.

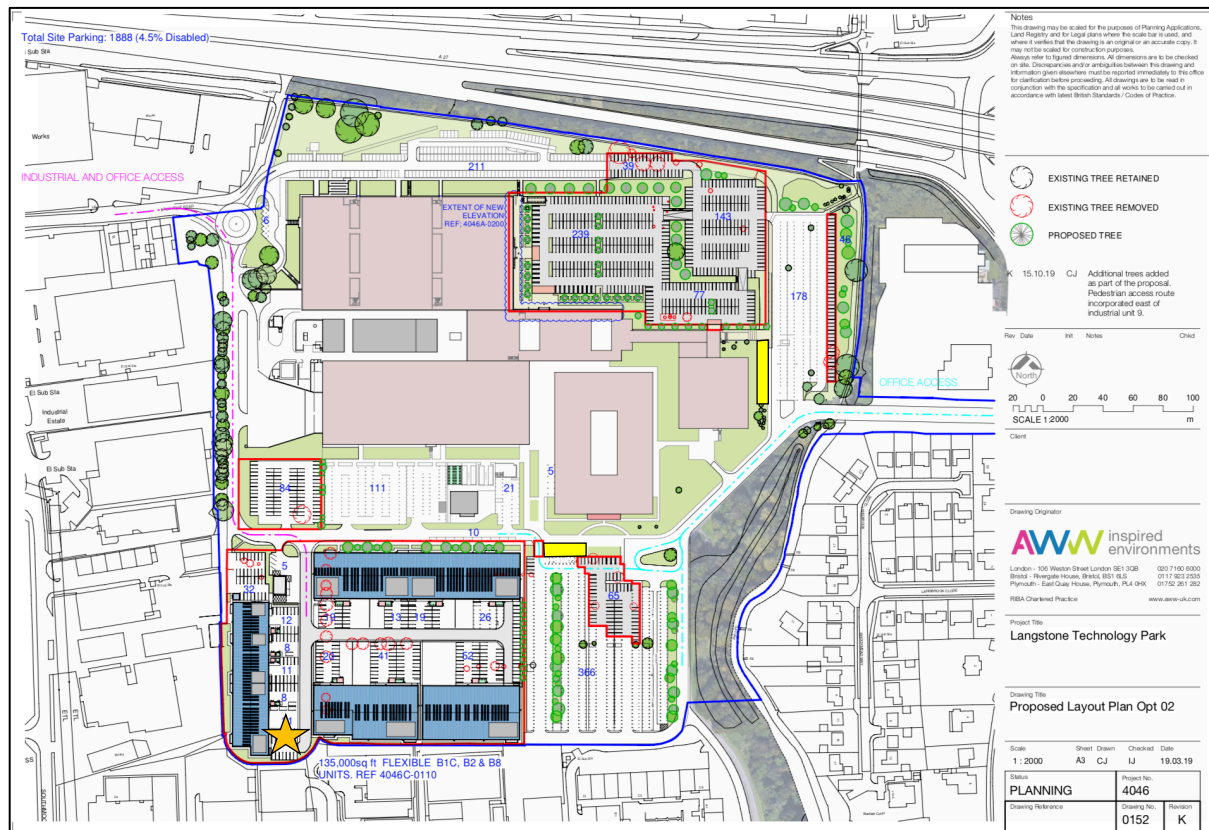


Figure 3. The current location of an area of turf supporting orchids (indicated with a with an orange star) cannot be retained in situ. Two proposed locations for 20-30m² of turf to be translocated (indicated with yellow shading). The most favourable location will be selected to maximize the success of the turf translocation. This is overlaid on the Proposed Layout Plan Opt 02 - Langstone Technology Park produced by AWW Inspired Environments Drawing No. 0152 Rev K.

2.2 Native Tree Planting

The landscaping plan will incorporate a variety of trees with only native trees sourced from UK stock to be planted. This will create new habitat that is favourable for a variety of birds and invertebrates. As a minimum all trees to be felled should be replaced in minimum ratio of 1:1. The following native species are recommended for planting:

- Pedunculate oak *Quercus robur*
- Rowan *Sorbus aucuparia*
- Hazel *Corylus avellane*
- Wild cherry *Prunus avium*
- Bird Cherry *Prunus padus*
- Hawthorn *Crataegus monogyna*
- Blackthorn *Prunus spinosa*
- Dogwood *Cornus sanguinea*
- Guelder rose *Viburnum opulus*
- Wayfaring tree *Viburnum lantana*
- Spindle *Euonymus europaeus*



Given the arrival of ash dieback, it is not recommended that any ash saplings are planted anywhere on the site.

2.3 Enhancements for Bats

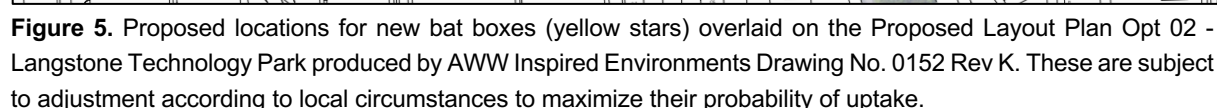
To encourage tree-roosting bats, five bat boxes will be hung on suitable trees upon the site. Boxes comprised of Woodcrete are recommended because they are long-lasting compared to wooden bat boxes, which may degrade within a few years. The following bat boxes are recommended:

- Two large multi chamber woodstone bat boxes; and
- Three Vivara pro woodstone bat box (See Figure 4).

The bat boxes will be located on mature and semi-mature trees which will be retained within the woodland parcel at the eastern boundary of the site. Figure 5 shows proposed approximate positions for the five bat boxes. The boxes should be hung by a suitably qualified ecologist to ensure that their positioning is most suitable, but generally locations above 3.5 metres in the most south easterly facing aspect of a tree is best.



Figure 4. Left - Large Multi Chamber Woodstone Bat Box. Middle – Vivara Pro WoodStone Bat Box.



Enhancements for nesting birds are proposed for the site, specifically targeting swifts, given records for this species were returned by Hampshire Biological Information Centre (HBIC)¹ and house sparrows.

Six new nesting opportunities will be provided for swifts. A recommended box is WoodStone swift nest boxes (see Figure 6). These boxes can be installed upon an existing building across the site. They should be positioned at a minimum of 5 meters above the ground with clear unobstructed access to the entrance. They should be located within a shaded area out of direct sunlight. Figure 7 indicates



proposed locations.

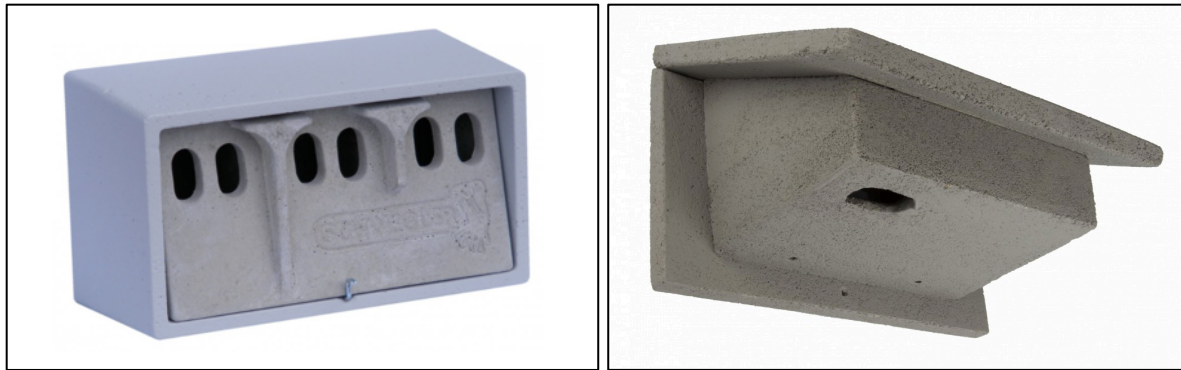


Figure 6. Left - 1SP Schwegler Sparrow Terrace. Right - the WoodStone swift box.

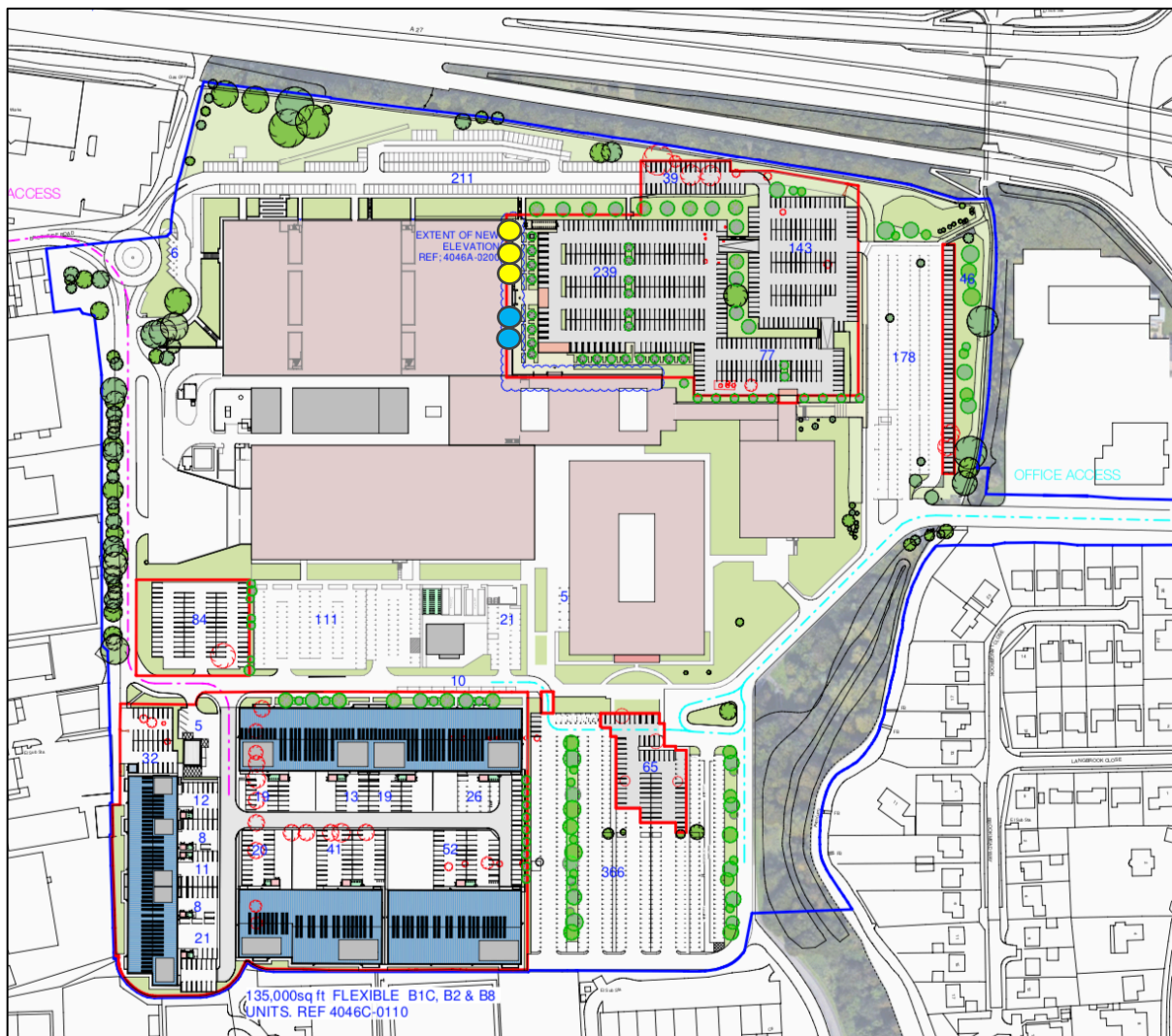


Figure 7. Proposed locations for the WoodStone swift boxes (yellow dots indicate two boxes) and Schwegler 1SP sparrow terrace (blue dots), overlaid on the Proposed Layout Plan Opt 02 - Langstone Technology Park produced by AWW Inspired Environments Drawing No. 0152 Rev K. S. These are subject to adjustment according to local circumstances to maximize their probability of uptake.



3 POST CONSTRUCTION MANAGEMENT

3.1 Management Plan Operations

All planted trees should only be cut outside the bird nesting season (1st March to 31st August) and where possible shouldn't be cut until February, so that valuable winter food associated with fruiting trees is retained for over-wintering birds.

Any trees which fail to establish will be replaced on a like for like basis.

Bat and bird boxes on trees would be inspected yearly to check they had not become detached or damaged each year. Any damaged boxes will be replaced like for like and any detached boxes reinstalled.

Woodland, trees and shrubs should be checked yearly for signs of disease. If disease is identified, then advice should be sought from an arboriculturalist regarding the appropriate method of treatment.

Should you need any further advice on the information provided above, please do not hesitate to contact The Ecology Co-op.



APPENDIX 1 – LEGISLATION AND POLICY

Introduction

The following text is intended for general guidance only and does not constitute comprehensive professional legal advice. It provides a summary of the current legal protection afforded to wildlife in general and certain species. It includes current national planning policy relevant to nature conservation.

The ‘Birds Directive’, ‘Habitats Directive’ and ‘Natura 2000 Sites’.

The Council Directive 79/409/EEC on the Conservation of Wild Birds (“the Birds Directive”) sets a framework for the protection of wild birds. Under the directive, several provisions are made including the designation and protection of ‘Special Protection Areas’ (SPAs) – areas which support important bird populations, and the legal protection of rare or vulnerable species.

The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (the “Habitats Directive”) directs member states of the EU to take measures to maintain favourable conservation status of important habitats and species. This requires the designation of a series of sites which contain important populations of species listed on Annex II of the directive. Together with ‘Special Areas of Conservation’ (SPAs), designated under the Birds Directive, SACs form a network across Europe of protected areas known as the ‘Natura 2000’.

Annex IV lists species in need of more strict protection, these are known as “European Protected Species (EPS)”. All bat species, common dormice *Muscardinus avellana*, otter *Lutra lutra* and great crested newts *Triturus cristatus* are examples of EPS that are regularly encountered during development projects.

The ‘Habitats Regulations’

The Conservation of Habitats and Species Regulations 2010 (the Habitats Regulations”) is the principle means of transposing the Habitats Directive and the Birds Directive, and updates the Conservation (Natural Habitats, &c.) Regulations 1994 (“the 1994 regulations”) in England and Wales.

‘Natura 2000’ sites receive the highest level of protection under this regulation which requires that any activity within the zone of influence of these sites would be subject to a Habitats Regulations Assessment (HRA) by the competent authority (e.g. planning authority), leading to an Appropriate Assessment (AA) in cases where ‘likely significant effects on the integrity of the site are identified.

For European Protected Species, Regulation 41 makes it a criminal offence to;

- Deliberately capture, injure or kill any such animal;
- Deliberately disturb wild animals of such species;
- Deliberately take or destroy their eggs (where relevant);
- Damage or destroy a *breeding or resting place* of such an animal;
- Possess, control, sell or exchange any live or dead animal or plant, of such species;
- Deliberately pick, collect, cut, uproot or destroy a wild plant of such species.

The Habitats Directive and Habitats Regulations provide for the derogation from these prohibitions for specific reasons provided certain conditions are met. An EPS licensing regime allows operations that would otherwise be unlawful acts to be carried out lawfully. Natural England is the licensing Authority



and, in order to grant a license, ensures that three statutory conditions (sometimes referred to as the 'three derogation tests') are met:

- A licence can be granted for the purposes of "preserving public health or safety or for other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment" (Regulation 53 (2) (e).
- A licence can be granted if "there are no satisfactory alternatives" to the proposed action.
- A licence shall not be granted unless the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.

Wildlife and Countryside Act (1981) as amended.

The Wildlife and Countryside Act (1981)³ remains one of the most important pieces of wildlife legislation in the UK. There are various schedules to the Act protecting birds (Schedule 1), other animals including insects (Schedule 5), plants (Schedule 8), and control of invasive non-native species (Schedule 9).

Under the Wildlife and Countryside Act (WCA) 1981, all wild birds (with the exception of those listed on Schedule 2), their eggs and nests are protected by law and it is an offence to:

- Take, damage or destroy the nest of any wild bird while it is in use or being built.
- Take or destroy the egg of any wild bird.
- Disturb any bird listed on Schedule 1, while it is nest building, or at a nest with eggs or young, or disturb the dependant young of any such bird.

Schedule 5 lists all non-avian animals receiving protection to a varied degree. At its strongest, the Act makes it an offence to intentionally kill, injure or take any wild animal listed on Schedule 5, and prohibits interference with places used for shelter or protection, or intentionally disturb animals while occupying such places. Examples of species with *full protection* include all EPS, common reptile species, water vole *Arvicola amphibius*, white-clawed crayfish *Austropotamobius pallipes* and Roman snail *Helix pomatia*. Other species are protected from sale, barter or exchange only, such as white letter hairstreak *Satyrrium w-album*.

The Act makes it an offence to intentionally pick, uproot or destroy any plant or seed, and sell or possess any plant listed on Schedule 8. It is also an offence to intentionally uproot any wild plant not listed on Schedule 8 unless authorised [by the land owner]. Species on Schedules 5 and 8 are reviewed every 5 years when species can be added or removed.

Measures for the prevention of spreading non-native species which may be detrimental to native wildlife is included in the Act, which prohibits the release of animals or planting of plants into the wild of species listed on Schedule 9 (for example Japanese knotweed *Fallopia japonica*, Himalayan balsam *Impatiens glandifera*, New Zealand Pygmyweed *Crassula helmsii*).

The Wildlife and Countryside Act 1981 (as amended) also prohibits certain inhumane methods of traps and devices for the capture or killing of wild animals and certain additional methods such as fixed trap, poisoning with gas or smoke, or spot-lighting with vehicles for killing species listed on Schedule 6 of the Act (this includes all bat species, badger, otter, polecat, dormice, hedgehog and red squirrel).

Natural Environment and Rural Communities (NERC) Act (2006)

³ Wildlife and Countryside Act (WCA) (1981). HMSO London.



The NERC Act (2006)⁴ places a statutory duty under Section 40 on all public bodies, including planning authorities, to take, or promote the taking by others, steps to further the conservation of *habitats and species of principal importance for the conservation of biodiversity* in England (commonly referred to as the 'Biodiversity Duty'). This duty extends to all public bodies the biodiversity duty of Section 74 of the Countryside and Rights of Way (CROW) Act 2000, which placed a duty only on Government and Ministers. Section 41 lists the habitats and species of principle importance. This includes a wide range of species from mosses, vascular plants, invertebrates through to mammals and birds. It originates from the priority species listed under the UK Biodiversity Action Plan (UK BAP) with some omissions and additions.

Protection of Badgers Act (1992)

The Badger *Meles meles* is afforded specific legal protection in Britain under the Protection of Badgers Act (1992)⁵, and Schedule 6 of the Wildlife and Countryside Act 1981 (as amended) (see above).

Under this legislation, it is a criminal offence to:

- intentionally kill, injure, take, possess, or cruelly ill-treat, a Badger, or to attempt to do so;
- interfere with a sett, by damaging or destroying it;
- to obstruct access to, or any entrance of, a Badger sett; or
- to disturb a Badger when it is occupying a sett.

A licence may be obtained from Natural England to permit certain prohibited actions for a number of defined reasons including interference of a sett for the purpose of development, provided that a certain number of conditions are met. Note that licenses are not normally granted for works affecting badgers between the end of November and the start of July.

National Planning Policy Framework

The National Planning Policy Framework (NPPF 2019)⁶ sets out the Government's view on how planners should balance nature conservation with development and helps ensure that Government meets its biodiversity commitments regarding the operation of the planning system.

Paragraph 174b, which states that council policies should “promote the conservation, restoration and enhancement 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”. In accordance with the NPPF, it is important that developments should contribute to and enhance the natural and local environment by:

- Minimising impacts on existing biodiversity and habitats,
- Providing net gains in biodiversity and habitats, wherever possible,
- establishing coherent ecological networks that are more resilient to current and future pressures.

⁴ Natural Environment and Rural Communities Act (2006). HMSO London.

⁵ Protection of Badgers Act (1992). HMSO London.

⁶ HM Government (2019). National Planning Policy Framework. Department for Communities and Local Government. Available online at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf.



UK Post-2010 Biodiversity Framework

The UK Biodiversity Action Plan (UK BAP), published in 1994, was the UK's response to the commitments of the Rio Convention on Biological Diversity (1992). The UK BAP was replaced by the UK Post-2010 Biodiversity Framework. This framework covers the period 2011 to 2020 and forms the UK government's response to the new strategic plan of the United Nations Convention on Biodiversity (CBD) published in 2010. This promotes a focus on individual countries delivering target for protection for biodiversity through their own strategies.

The most recent biodiversity strategy for England, 'Biodiversity 2020: A strategy for England's wildlife and ecosystem services' was published by Defra (2011)⁷, and a progress update was provided in July 2013 (Defra 2013)⁸.

'Biodiversity 2020' builds on the Natural Environment White Paper for England – 'The Natural Choice', published on 7 June 2011, and sets out the strategic direction for biodiversity policy for the next decade.

Biodiversity 2020 deliberately avoids setting specific targets and actions for local areas because Government believes that local people and organisations are best placed to decide how to implement the strategy in the most appropriate way for their area or situation.

Birds of Conservation Concern (BoCC)

In 1996, the UK's leading non-governmental bird conservation organisations reviewed the conservation status of all bird species in the UK against a series of criteria relating to their population size, trends and relative importance to global conservation. The lists, known as the 'Red', 'Amber' and 'Green' lists (in order of decreasing concern) are used to inform key conservation policy and decisions. The lists are reviewed every 5 years and are a useful reference for determining the current importance of a particular site for birds. The most recent review was undertaken in 2015⁹ (Eaton et al, 2015), which provides an up to date assessment of the conservation status of birds in the UK.

⁷ Defra (2011) Biodiversity 2020: A strategy for England's wildlife and ecosystem services. Available at: <https://www.gov.uk/government/publications/biodiversity-2020-a-strategy-for-england-s-wildlife-and-ecosystem-services>.

⁸ Defra (2013) Progress Update. Available at: <https://www.gov.uk/government/publications/biodiversity-2020-simple-guide-and-progress-update-july-2013>.

⁹ Eaton, M., Aebischer, N., Brown, A., Hearn, R., Lock, L., Musgrove, A., Noble, D., Stroud, D., and Gregory, R. (2015) Birds of Conservation Concern 4: the population status of birds in the UK, Channel Islands and Isle of Man. British Birds 108. December 2015. 708–746

